2001 Coal Assessment Report for the
Dove Creek Coal Property

Volume 2: Supporting Data

Annex A: Borehole Data

Annex A-1: Logs of Priority Ventures Dove Creek D-1

Annex A-2: Logs of Priority Ventures Dove Creek D-2A

Annex A-3: Logs of Priority Ventures Dove Creek D-3

Annex A-4: Logs of Canadian Collieries (Dunsmuir) Ltd. boreholes CX-105, -107, -109, -110, -111, -113, -114, -117, -118, -120, and -121

Annex A-5: Log of Vancouver Coal Prospecting Company Hodgson Farm V-1

Annex B: Analyses of raw coal samples

Annex C: Coal licence documents

Annex D: Statements of experience and qualifications

#872

Annex A-1: Logs of Priority Ventures Dove Creek D-1

Contents:

Borehole summary sheet of D-1

Core description of D-1

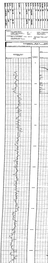
Enclosure A-1: Gamma-Density-Caliper log of D-1

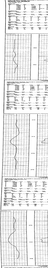
Enclosure A-2: Coalbed Methane (Quad Neutron/Dual Gamma) log of D-1

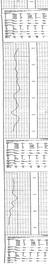
Enclosure A-3: Directional Log of D-1

Report on sealing of drillholes (for D-1)

Report of dangerous occurrence on July 19, 2001, pursuant to *Mines Act*







Enclosure A-3

ROKE DIRECTIONAL SURVEY

LOGGED OPEN AND CASED HOLE

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA

LSD	Company: PRIORITY VENTURES LTD	
SEC	Well: D-1	
TWP	Location: DISTRICT LOT 131 COMOX LAND DISTRICT	SCALES
RGE	Field: A461 NTS 92F11	
W M	Province: BRITISH COLUMBIA	

Unique Well Identifier:

Permanent Datum: GROUND LEVEL Elev: metres	K.B.	m
Log Measured From: GROUND LEVEL m Above Perm. Datum	C.F.	m
Well Depths Measured From: GROUND LEVEL	G.L.	m

Other Services: CBMM, GDC DIR.HDG

Run No.	DIRECTIONAL	
Date	01 AUGUST 2001	
First Reading	355.0	
Last Reading	20.0	
Footage Logged	335.0	
Depth Reached	357.0	
Depth Drilled	360.9	
Casing Rotary	37.0	
Casing Driller		
Fluid Type	AIR/DRILLING MUD	
Liquid Level	26.7	
Min. Diameter	96 mm BIT SIZE	
Rm @ degrees C	OHMM @ C	
Operating Time	06:00 - 14:00	
Truck No.	52	
Recorded By	D. SMITH	
Witnessed By	G. CATHYL-BICKFORD	

#872

ROKE DIRECTIONAL SURVEY

DIR.BLC STATION NUMBER	CABLE DEPTH	SLANT ANGLE	SLANT ANGLE BEARING	STATION NUMBER	CABLE DEPTH	SLANT ANGLE	SLANT ANGLE BEARING
1	020	00.70	N/A	2	040	01.20	251.5
3	060	01.20	240.1	4	080	01.10	243.9
5	100	01.20	246.0	6	120	01.20	257.9
7	140	01.20	244.5	8	160	01.10	241.0
9	180	01.20	245.6	10	200	01.10	247.2
11	220	01.20	240.4	12	240	01.10	239.1
13	260	01.20	255.1	14	280	01.30	245.6
15	300	01.10	254.2	16	320	01.10	215.2
17	340	01.20	253.8	18	355	01.10	241.6

REPEAT SECTION

19	280	01.40	243.0	20	200	01.30	243.9
21	120	01.30	253.4	22	040	01.30	240.3

ALL CABLE DEPTHS ARE MEASURED IN METRES.
ALL SLANT ANGLE AND SLANT BEARING VALUES RECORDED IN DEGREES.

Designed & Printed by Key Graphics Ltd., Courtenay, B.C. www.keygfx.com
CDNX Trading Symbol PVS

Section of DOVE CREEK D-1 surface borehole
Purpose: to prove strata and coal seams down to basement
Exact site: UTM NAD 83 Zone 10U (cell CA) coordinates:

E 350780 metres ±5 metres
N 5507390 metres ±5 metres

Legal description: Lot A, DL 131, Pl. VIP 69323, Comox Dist.

Level at which bore commenced relative to geodetic datum at mean sea level: 91.5 metres ± 1 metre (ground level)

Date of boring: 10 July to 20 July 2001

Drillers: Glen Fyfe and Jim Fyfe, Fyfe Drilling Rig No.1 (open-hole section); Mitch McLellan, Stan Beaupre and Ryan Elliott, Aggressive Drilling Rig No.56 (cored section)

BCGS Sheet	B.H. Reg'd No.
092 F 075	D-1

Sketch map of B.H. location

Area: Comox Coalfield

Cores examined by: Gwyneth Cathyl-Bickford and Vern Slater

Geophysical interpretation by: Gwyneth Cathyl-Bickford

Core & hole sizes:

Depth (m)	Dia. of core (mm)	Nominal Dia. of hole (mm):
0 - 9.6	Open hole	152
9.6 - 36.57	Open hole	144
36.57 - 360.90	59	96

Drilling History:

No difficulties encountered with drilling until basement was entered, at which point an inrush of nitrogen gas with minor methane, salt water and loose magnetite sand was encountered within a sheared band of dacite, probably an intrusion. While standing awaiting geophysical logging, the hole was squeezing and sticky at 235.3 to 236.5 metres (Comox Y Lower coal and its seatearth) and partially bridged at 288.6 metres (in basal Dunsmuir). During reaming of the hole, two closely-associated spontaneous outbursts (both probably from Comox 2 coal bed) yielded gasified mud and fine gassy coal at surface, and filled the reaming assembly with chunks of slickensided and blocky coal. Bottom of hole caved at 357 metres and could not be logged.

Deviations recorded at 20 metre intervals from 20 metres to 340 metres, and at 355 metres. Maximum deviation 1.4 degrees.

Conductor pipe and surface casing cemented in the borehole fr m surface to 36.57 metres.

Method of sealing-off borehole:

Totally filled with neat cement, using high-pressure grouting unit.

Deviation surveys:

By Roke Oil Enterprises Ltd.

Geophysical surveys:

Gamma-density-caliper and quad-neutron logs by Roke Oil Enterprises Ltd., logged by Dave Smith.

Geological synopsis:

Starts in Royston under 7.3 metres of Drift. Top of Browns at 8.55 metres. Top of Puntledge at 24.7 metres. Top of Cowie at 139.35 metres. Top of Cougarsmith at 168.6 metres Top of Dunsmuir at 179.1 metres. *Extensional fault (Dunsmuir over Dunsmuir) at 214.39 metres.* Top of Cumberland at 290.97 metres. Top of Karmutsen at 351.55 metres. Stopped in Karmutsen. Coals from Comox X through Comox 2A Lower were found. Lower coals absent due to non-deposition on basement paleohigh.

Valid test? Yes.

DOVE CREEK D-1

CORE DESCRIPTION

BY: C.G. Cathyl-Bickford, P.Geo.

DATE: July 16, 2001

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
			Top of Box 1			
	-----		DD 85			
	Core #1	Rubber – black; casing plug.	0.13			
		Cement – fine-grained, medium greenish-grey, moderately hard.	0.28			
	------		DD 87			
	Core #2		3.12			
	------		DD 97			
	Core #3		0.82			
			Box 1/2			
			2.28			
	------		DD 107			
	Core #4		2.12			
			Box 2/3			
			0.80			
	------		DD 117			
	Core #5		3.06			
	------		DD 124			
	Core #6	Metal fragments and copper wire – remnants of float valve.	0.10			
		Cement – as above.	0.37			
	-----		DD 127			
	Core #7	**TRENT RIVER FORMATION (PUNTLEDGE MEMBER)** – *continued from overlying open-hole section*				
		Sandstone/siltstone (50:50) – thinly-interbedded, sharp-based, fining-upward bands of very fine- to fine-grained light grey sandstone and dark grey, sandy siltstone; occasional coarse plant debris; sparsely bioturbated; gradational base.	0.51			
		Mudstone/siltstone (60:40) – dark grey, silty mudstone with very thin interbeds of medium grey sandy siltstone; abrupt base.	0.28			
		Sandstone/siltstone (75:25) – medium grey, very fine- to fine-grained silty sandstone with very thin interbeds of dark grey siltstone; moderately to intensely bioturbated throughout; occasional finely-broken plant debris and rare thin bright coal bands; abrupt base.	0.01			
			Box 3/4			
			0.71			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Siltstone/mudstone (50:50) thinly interbedded, dark grey siltstone and mudstone; moderately bioturbated throughout; abrupt base.	0.10			
		Sandstone/siltstone (70:30) dark grey, very fine- to fine-grained sandstone with very thin interbeds of dark grey siltstone; moderately to intensely bioturbated, with abundant finely-broken plant debris; gradational base.	0.20			
	----- Core #8	Sandstone very fine- to fine-grained, medium grey, very silty, intensely bioturbated, with locally-abundant finely-broken plant debris.	1.46 DD 137 0.15			
		Sandstone very fine-grained, medium grey, very silty, moderately bioturbated, with abundant large dark-rimmed burrows and occasional smoothly concentric-ribbed *inoceramids* (as at 46 cm below top); abrupt base.	1.07			
		Siltstone/mudstone (65:35) thinly-interbedded, coarsening-upward, medium grey sandy siltstone and dark grey silty mudstones; moderately bioturbated; abrupt base.	0.13			
		Sandstone/siltstone laminite (80:20) - very thin fining-upward couplets of medium grey, very fine-grained sandstone and dark grey muddy siltstone, with occasional stringers of *shell hash* including some possible *inoceramid* fragments; moderately to intensely bioturbated; gradational base.	0.71 Box 4/5 0.76			
	----- Core #9	Sandstone - very fine- to fine-grained, medium grey, with abundant silty streaks; moderately to intensely bioturbated; occasional *shell fragments*; abrupt base.	0.19 DD 147 0.89			
		Mudstone/sandstone (60:40) - very thinly-interbedded dark grey mudstone and medium grey, very fine-grained sandstone; sparsely bioturbated; gradational base.	0.15			
		Sandstone/siltstone laminite (80:20) - interbedded medium grey, very fine-grained sandstone and dark grey siltstone; sparsely bioturbated; abrupt base.	0.24			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone very fine-grained, medium grey, rippled, with abundant thin wispy intraclasts of dark grey mudstone; moderately bioturbated; erosional base. Possible intraformational conglomerate?	0.09			
		Sandstone/mudstone (80:20) thin to medium fining-upward interbeds of medium grey, silty, very fine- to fine-grained sandstone and dark grey silty mudstone; sparsely bioturbated; abrupt base.	1.01			
		Sandstone/mudstone (70:30) interbedded very fine-grained sandstone and mudstone as above; gradational base.	0.65			
	-----		DD 157			
	Core #10		0.19			
		Sandstone fine-grained, medium grey, with occasional silty and carbonaceous streaks; intensely bioturbated; abrupt base.	0.08			
			Box 5/6			
			0.20			
		Sandstone/mudstone laminite (60:40) very thin to thin fining-upward interbeds of medium grey, very fine-grained sandstone and dark grey mudstone; sparsely to moderately bioturbated, with incipient rubbly fracture but still coherent and undeformed; abrupt base.	0.90			
		Mudstone dark grey, waxy, slight greenish tinge, conchoidal fracture, with large sand-filled burrows at base; probably an ash band.	0.06			
		Sandstone very fine- to fine-grained, medium grey, silty, intensely bioturbated, massive; abrupt base.	0.20			
		Sandstone/mudstone laminite (70:30) thickly interlaminated to thinly interbedded, medium grey, very fine-grained sandstone and dark grey to black mudstone; sparsely to moderately bioturbated; abrupt base.	1.13			
		Sandstone very fine- to fine-grained, silty at top, light to medium grey; moderately bioturbated; gradational base.	0.25			
	------		DD 167			
	Core #11		0.55			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone – medium-grained, medium grey, silty, intensely bioturbated, with some intensely-burrowed coalified plant trash (burrows by xylophagic organisms?); abrupt base.	0.58			
		Sandstone – very fine- to fine-grained, light to medium grey, intensely bioturbated, with occasional carbonaceous wisps; one thick bright coal band with calcite veinlets; gradational base.	0.50 Box 6/7 0.28			
		Sandstone – medium-grained, medium grey, very silty, moderately to intensely bioturbated, with very large dark-rimmed burrows; abrupt base.	0.50			
	----- Core #12	Sandstone/mudstone (90:10) – sparsely to moderately-bioturbated, fine- to medium-grained, medium grey sandstone with thin, moderately-bioturbated interbeds of dark grey silty mudstone; occasional large dark-rimmed burrows; overall this is a fining-upward unit; abrupt base.	0.62 DD 177 0.37			
		Sandstone/siltstone (95:5) – very fine- to fine-grained, medium grey sandstone with thin laminae of dark grey siltstone; sparsely bioturbated; occasional intraclastic bands; core is broken and slightly ground in middle; gradational base.	1.67			
	----- Core #13	Siltstone – dark grey, muddy, with occasional finely-broken plant debris; possibly slightly *bentonitic*; core is broken and disked; core is ground at base.	0.32 DD 184 0.04			
		Sandstone/siltstone (80:20) – very fine- to fine-grained, medium grey, rippled sandstone with very thin flaseroid interbeds of dark grey siltstone; sparsely bioturbated; gradational base.	0.43			
		Sandstone – very fine- to fine-grained, medium grey, with occasional silty streaks; moderately to intensely bioturbated; gradational base.	0.16 Box 7/8 0.09			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #14 ------ Core #15	Sandstone/siltstone/mudstone (65:35:5) very fine- to fine-grained, medium grey sandstone with abundant thin to very-thin fining-upward interbeds of dark grey siltstone and dark grey to black mudstone; sparsely to moderately bioturbated; erosional base.	0.05 DD 187 3.14 DD 197 1.12			
		Sandstone medium to coarse-grained, light to medium grey, with occasional silty streaks and occasional finely-broken plant debris; slumped; abrupt base.	0.15 Box 8/9 0.26			
	----- Core #16	Sandstone/siltstone/mudstone (80:20:0 at top, grading down to 10:60:30 at base) thin to very thin fining-upward interbeds of very fine- to fine-grained sandstone, siltstone and dark grey to black mudstone; an overall coarsening-upward unit owing to upward increase in sand content and gradual disappearance of mudstones; occasional *shell fragments* including some complete valves of robust *pelecypods*; abrupt base.	1.65 DD 207 0.57			
		Sandstone/siltstone (50:50) very thin interbeds of fine-grained, locally-rippled sandstone and dark grey muddy siltstone; sparsely-bioturbated; gradational base.	0.65			
		Mudstone/siltstone/sandstone (40:40:20) very thin fining-upward interbeds of medium grey, very fine-grained, locally-rippled sandstone, dark grey siltstone and dark grey mudstone; sparsely to moderately bioturbated; gradational base.	1.36 Box 9/10 0.11			
	----- Core #17	Sandstone/siltstone (80:20) - very fine- to fine-grained, light to medium grey, wavy-bedded sandstone with occasional very thin, intensely-bioturbated interbeds of dark grey siltstone; gradational base.	0.31 DD 217 0.59			
		Sandstone fine- to medium-grained with occasional silty streaks, but on the whole cleaner than beds above and below; intensely bioturbated at top and base; sparsely bioturbated and yet cleaner in the middle; gradational base.	1.42			

SAMPLES	CORE RUNS/ REC'OV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #18	Sandstone/siltstone (95:5) fine-grained, light grey sandstone with a few laminae of dark grey siltstone; sparsely to moderately bioturbated, becoming locally intensely-bioturbated; occasional *pelecypods*; one possible *bone fragment*, one piece of *Teredolites*-bored coaly mudstone; abrupt base.	1.04 DD 227 0.93 Box 10/11 2.01 DD 237			
	----- Core #19	Sandstone/siltstone (70:30) thin to medium interbeds of very fine- to fine-grained sandstone and siltstone; sparsely to intensely bioturbated, more so towards base; gradational base.	0.39 2.03 Box 11/12 0.66 DD 247			
	----- Core #20	Sandstone very fine- to fine-grained, light grey, silty towards base; intensely bioturbated; occasional *pelecypod shells*; gradational base.	0.45 1.28			
	----- Core #21	Sandstone/siltstone (90:10 at top, becomes 50:50 below) - very thin to thin fining-upward couplets of sharp-based, light to medium grey, very fine-grained sandstone and dark grey siltstone; sparsely bioturbated throughout, with occasional coarse and fine, but poorly-preserved, plant debris; large muddy intraclasts at base; abrupt base.	1.32 DD 257 0.08			
		Mudstone dark grey, slightly waxy; gradational base.	0.06			
	----- Core #22	Sandstone/siltstone/mudstone (90:10:0 at top, grading to 70:20:10 at base) very thin to thin fining-upward interbeds of light to medium grey, very fine-grained sandstone, dark grey siltstone and dark grey mudstone; sparsely to moderately bioturbated, with occasional large, dark-rimmed, oblique burrows; gradational base.	0.60 Box 12/13 2.32 DD 267 0.97			
		Siltstone/sandstone/mudstone (70:30:10) - very thin fining-upward interbeds of dark grey siltstone, medium grey, very fine-grained sandstone and dark grey mudstone; sparsely to moderately bioturbated, with occasional thick-shelled *pelecypods*; gradational base.	1.18 Box 13/14			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
Began log by C.G. Cathyl Bickford and K.V. Slater		Siltstone/sandstone (70:30) – thinly interbedded medium grey siltstone and light grey, very fine- to fine-grained sandstone; sands are sharp-based and fine upward into silts; moderately to intensely bioturbated, with some incipient rubbly fracture; abrupt base.	0.57			
	----- Core #23	Sandstone/siltstone (60:40) – thin to medium fining-upward interbeds of light to medium grey, fine-grained sandstone and medium grey siltstone; moderately to intensely bioturbated; abundant large silty intraclasts in basal 5 cm; occasional thin carbonaceous laminae in basal 20 cm; abrupt base.	0.30 DD 277 0.87			
		Sandstone – fine-grained, light grey, massive, with dark-rimmed burrows near top; gradational base.	0.71			
		Sandstone – fine-grained, light grey, with abundant silty intraclasts; abrupt base.	0.10			
	----- Core #24	Siltstone – dark grey, moderately bioturbated; core locally broken and ground at DD 287; abrupt base.	1.20 DD 287 0.72 Box 14/15 1.53			
		Mudstone – medium grey, intensely bioturbated; bentonitic; abrupt base.	0.03			
		Siltstone – dark grey, as above; core ground at base.	0.91 DD 297			
	----- Core #25	Sandstone – very fine-grained, medium grey, silty; locally sparsely bioturbated; erosional base.	0.39			
		Sandstone/siltstone (60:40 at top, grading down to 20:80 at base) – thinly-interbedded very fine-grained, dark grey sandstone and dark grey siltstone; intensely bioturbated; gradational base.	0.71			
		Siltstone – dark grey, sandy; intensely bioturbated; gradational base.	0.34			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Siltstone dark grey, sandy, moderately bioturbated at top, declining to sparsely below; abrupt base.	0.59 Box 15/16 0.52			
		Sandstone fine-grained, medium grey, intensely bioturbated; abrupt base.	0.06			
	----- Core #26 (cut stick-up)	Siltstone dark grey, very sandy in basal 30 cm; intensely bioturbated; gradational base.	1.79			
		Sandstone fine-grained, light to medium grey, moderately to intensely bioturbated; abrupt base.	1.81			
	----- Core #27	Sandstone/sandstone (70:30) thinly-interbedded, colour-banded couplets of light grey, clean, fine- to medium-grained sandstone and dark grey, silty, carbonaceous, very fine-grained sandstone; sparsely to moderately bioturbated; abrupt base.	0.08 DD 317 0.34 Box 16/17 0.75			
		Sandstone fine-grained, light grey, cleaner than above; sparsely bioturbated; erosional base.	0.52			
	----- Core #28	Sandstone/siltstone (50:50) interbedded very fine-grained medium grey sandstone and dark grey siltstone; intensely bioturbated at top; sparsely to moderately below; abrupt base.	1.49 DD 327 0.27			
		Sandstone/siltstone (70:30) - thinly-interbedded light to medium grey, fine-grained sandstone and dark grey siltstone; intensely bioturbated and churned; churned basal contact.	0.88			
	----- Core #29	Siltstone dark grey, sandy, with large sand-filled burrows at top; core broken and slicked at DD 337; abrupt base.	0.60 Box 17/18 1.25 DD 337 0.30			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #30	Sandstone/siltstone (50:50) - thin to medium interbeds of very fine-grained, medium grey sandstone and medium grey siltstone; intensely to completely bioturbated throughout; locally abundant *shell debris*; abrupt base.	2.82 DD 347 Box 18/19 0.53			
		Sandstone fine- to medium-grained, light to medium grey, becomes silty towards base; with abundant finely-broken carbonised plant debris; moderately to intensely bioturbated; occasional *pelecypod shells*; abrupt base.	1.45			
	----- Core #31	Siltstone/sandstone (60:40) very thin to medium interbeds of dark grey siltstone and very fine-grained, medium grey sandstone; moderately to intensely bioturbated throughout; gradational base.	1.06 DD 357 1.45			
		Siltstone/sandstone (70:30 at top, grading down to 100:0 at base) interbedded siltstone and sandstone as above; occasional *pelecypod shells*; abrupt base.	0.06 Box 19/20 1.56 DD 367			
	----- Core #32		2.44			
		Calcite white, medium-grained, hard; appears to be a healed bedding-plane shear; abrupt base.	0.01			
		----- *Bedding-plane shear zone, probable* -----				
		Siltstone dark grey, very sandy, plane-laminated, rubbly-weathering; abrupt base.	0.19			
	----- Core #33 ----- Core #34	Siltstone/sandstone (80:20 at top, grading down to 70:30 at base) - thin to medium interbeds of very fine-grained light grey sandstone and dark grey sandy siltstone; sparsely to moderately bioturbated; occasional shell debris, including *Inoceramus* fragments; abrupt base.	0.28 Box 20/21 0.15 DD 377 3.08 DD 387 1.19 Box 21/22			
	----- Core #35		1.82 DD 397 0.31			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone/siltstone (50:50) - thin to medium fining-upward interbeds of very fine- to fine-grained, light grey sandstone and dark grey sandy siltstone; sparsely bioturbated; locally abundant *shell debris*; churned basal contact.	0.61			
		Siltstone/sandstone (90:10) dark grey sandy siltstone with occasional thin interbeds of very fine-grained, medium grey sandstone; sparsely to moderately bioturbated; gradational base.	1.70 Box 22/23 0.29 DD 407			
	----- Core #36		1.25			
	----- Core #37	Sandstone very fine-grained, medium grey, very silty, intensely bioturbated, with occasional *shell debris*; gradational base.	1.88 DD 417 0.21			
		Sandstone/mudstone (80:20) very thin interbeds of fine-grained, light grey sandstone and dark grey, very silty mudstone; sparsely to moderately bioturbated; churned basal contact.	0.53			
		Siltstone/sandstone (70:30) thin to medium interbeds of siltstone and very fine-grained sandstone; moderately to intensely bioturbated; gradational base.	0.29 Box 23/24 2.10 DD 427			
	----- Core #38		2.20			
		Sandstone very fine- to fine-grained, medium grey, with large silt-filled burrows at top; abrupt base.	0.16 Box 24/25 0.06			
		Siltstone medium brownish-grey, bentonitic, sheared and broken; abrupt base; probable ash band.	0.01			
	----- Core #39	Siltstone/sandstone (60:40) - thin to medium interbeds of dark grey sandy siltstone and very fine- to fine-grained, medium grey sandstone; sparsely to intensely bioturbated, with occasional *pelecypod shells*; gradational base.	0.32 DD 437 3.06 DD 447			
	----- Core #40		0.74			

SAMPLES	CORE RUNS/ RECOV	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone very fine- to fine-grained, medium grey, silty; moderately bioturbated at top, sparsely below; abrupt base.	0.06 Box 25/26 0.51			
	----- Core #41	Siltstone/sandstone (80:20) thin to medium fining-upward interbeds of medium grey, very fine-grained, sharp-based sandstone and dark grey siltstone; moderately to intensely bioturbated; gradational base.	1.80 DD 457 0.88		139.35	
		TRENT RIVER FORMATION (COWIE MEMBER) Sandstone/siltstone (70:30) thin interbeds of sandstone and siltstone as above, intensely bioturbated; gradational base.	0.23			
		Sandstone/siltstone (90:10) very thin interbeds of very fine- to fine-grained sandstone and siltstone; intensely bioturbated; gradational base.	0.32			
		Sandstone fine-grained, medium grey, very silty, carbonaceous, with abundant finely-broken plant debris; intensely bioturbated; a few rootlets; occasional *Inoceramus* fragments; gradational base.	0.69 Box 26/27 0.34			
	----- Core #42	Sandstone/siltstone (90:10) - very fine-grained, medium grey sandstone with occasional very thin interbeds of laminated, dark grey, carbonaceous siltstone; rare thick bright coal bands; sparsely to moderately bioturbated at top, grading to intensely bioturbated at base; gradational base.	0.74 DD 467 1.70			
	----- Core #43	Sandstone/mudstone (85:15) - light grey, locally-silty, very fine-grained sandstone with occasional thin interbeds of dark grey to brownish-grey silty mudstone; mudstones are sparsely bioturbated, sandstones are sparsely to intensely bioturbated; abrupt base.	1.37 DD 477 0.01			
		Sandstone very fine- to fine-grained, medium grey, silty, moderately to intensely bioturbated; grades down to fine-grained, clean, sparsely bioturbated sandstone at base; abundant very small silty intraclasts near base; abrupt base.	0.26 Box 27/28 0.48			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #44	Sandstone – fine-grained, light to medium grey, with alternating clean and silty beds; locally-abundant carbonised plant debris; moderately to intensely bioturbated; occasional *shell debris*; abrupt base.	2.29 DD 487 1.63 Box 28/29			
	----- Core #45		DD 497 2.61			
		Sandstone/siltstone (95:5) – fine-grained, light grey sandstone with a few very thin interbeds of dark grey, carbonaceous siltstone; moderately to intensely bioturbated; gradational base.	0.20			
	----- Core #46	Sandstone – very fine- to fine-grained, light grey, silty, moderately bioturbated, grading down to medium grey, intensely bioturbated, very sandy siltstone; gradational base.	0.17 Box 29/30 0.08 DD 507 0.95			
	----- Core #47	Sandstone/siltstone/mudstone (60:35:5) – thin to medium interbeds of very fine- to fine-grained light grey sandstone, medium grey sandy siltstone and dark grey silty mudstone; parts readily along bedding; hackly fracturing habit; moderately to intensely bioturbated throughout; occasional *Inoceramus* prisms and *pelecypod fragments*; possible *vertebrate bone fragments*; gradational base.	2.13 DD 517 1.25 Box 30/31 1.15			
	----- Core #48	Sandstone – very fine- to fine-grained, with occasional very thin silty carbonaceous laminae; moderately bioturbated in middle; abrupt base.	0.61 DD 527 0.25			
		Mudstone/siltstone (80:20 at top, grading down to 20:80 at base) – interlaminated to very thinly-interbedded dark grey silty mudstone and medium grey very sandy siltstone; sparsely bioturbated; gradational base.	0.26			
		Sandstone/siltstone (80:20) – thinly-interbedded very fine-grained medium grey sandstone and medium grey siltstone; intensely bioturbated; occasional finely-broken *shell debris*; gradational base.	0.74			

SAMPLES	CORE RUNS/ RECOV	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone/siltstone/mudstone (90:0:10 at top, grading down to 0:50:50 at base) interbedded very fine-grained sandstone, siltstone and mudstone; coarse-grained component is sandstone at top of unit, passing gradually to siltstone at base of unit; fine-grained component is mudstone throughout; moderately bioturbated, with abundant sand-filled burrows; abrupt base.	0.26			
		Sandstone/siltstone/mudstone (85:5:10 at top, grading down to 20:40:40 at base) thin to medium interbeds of very fine- to fine-grained light grey sandstone, medium grey siltstone and dark grey, very silty mudstone; sparsely bioturbated at top and base; intensely bioturbated in middle; abrupt base.	0.68			
		Mudstone/siltstone (70:30) dark grey, very fine mudstone (almost a claystone) and medium grey sandy siltstone; intensely sheared and broken at base.	(0.18)			
		----- *Bedding-plane shear zone, probable* -----				
	----- Core #49	Siltstone/mudstone very thin to thin fining-upward interbeds of medium grey, sandy siltstone and dark grey mudstone; parts readily along bedding; moderately bioturbated at top, increasing to intensely bioturbated at base; slightly sheared at top; very gradational churned base.	0.25 Box 31/32 0.42 DD 537 1.36			
		Siltstone/sandstone (55:45) thinly-interbedded, dark grey siltstone and fine-grained medium grey sandstone; intensely bioturbated and churned throughout; some silty intraclasts; abundant *Inoceramus* shell fossils near base; churned, gradational base.	0.42			
	----- Core #50	Sandstone - medium- to coarse-grained, light clean, clean, thin fining-upward beds; intensely bioturbated near top, with locally-abundant large silty intraclasts; patchy fair to good intergranular porosity except in top 0.32 m which is intensely bioturbated and tight; abrupt base. Sandstone repelled water when first examined - possible very light oil or condensate?	1.30 DD 547 0.16			
		Sandstone coarse- to very coarse-grained, light grey to medium grey, with abundant *shell hash*; fair intergranular porosity; gradational base.	0.35			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone coarse-grained, light to medium grey, with abundant *shell hash* as above; abundant large and small intraclasts of siltstone and black carbonaceous mudstone; gradational base.	0.25 Box 32/33 0.08			
		Intraclastic breccia 5 mm chips and to 210 mm blocks of dark grey siltstone and mudstone, in sparse matrix of coarse- to very coarse-grained *shelly* sand as above; abrupt base.	2.06		168.60	
		TRENT RIVER FORMATION (COUGARSMITH MEMBER)				
	----- Core #51	Siltstone/sandstone (50:50 at top, grading down to 80:20 at base) very thin to thin fining-upward interbeds of dark grey sandy siltstone and very fine-grained medium grey silty sandstone; sparsely to moderately bioturbated; abrupt base.	0.11 DD 557 1.59			
		Sandstone fine-grained, dark grey, bentonitic, intensely bioturbated; slightly sheared and disked; gradational base; an ash band.	0.02			
		Sandstone fine- to medium-grained, dark grey, very silty, intensely bioturbated; ferruginous concretion at base; locally broken and ground; abrupt base.	0.40			
		Mudstone dark grey, silty, laminated; abrupt, churned base.	0.06 Box 33/34 0.07			
	----- Core #52	Siltstone/sandstone/mudstone (75:15:10) - very thin to thin fining-upward interbeds of dark grey siltstone, medium grey, very fine-grained sandstone and dark grey mudstone; moderately to intensely bioturbated; occasional *thick-shelled pelecypod* fragments including locally-abundant *Inoceramus* fragments; core broken and ground just below DD 567; gradational base.	0.81 DD 567 2.75			
	----- Core #53	Mudstone/siltstone (65:35) very thin to thin fining-upward interbeds of dark grey mudstone and medium to dark grey sandy siltstone; trace disseminated pyrite in mudstones; abundant large sand-filled burrows in top 12 cm; sparsely bioturbated; gradational base.	0.34 DD 577 0.31 Box 34/35 0.18			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone - very fine- to fine-grained, light to medium grey, silty and intensely bioturbated at top, sparsely bioturbated below; locally abundant *pelecypod* fragments; abrupt base.	1.11			
	----- Core #54	Mudstone/siltstone (60:40) - thin fining-upward interbeds of dark grey silty mudstone and dark grey sandy siltstone; moderately to intensely bioturbated, with large sand-filled burrows in top 3 cm; gradational base.	1.43 DD 587 0.05			
		Siltstone/sandstone (80:20 at top, grading down to 30:70 at base) - thin fining-upward interbeds of dark grey siltstone and light to medium grey, very fine-grained sandstone; trace glauconite, moderately to intensely bioturbated, with locally abundant *small pelecypods*; base is churned and gradational.	1.22		179.10	
		COMOX FORMATION (DUNSMUIR MEMBER) Sandstone - fine-grained, light grey, cleaner than overlying sands; moderately to intensely bioturbated at top, with very small mud-filled burrows at top; occasional *pelecypods*; gradational base.	0.39			
		Sandstone/mudstone (90:10) - very fine-grained, light to medium grey sandstone with abundant very fine laminae of dark grey mudstone; sparsely bioturbated; abrupt base.	0.02 Box 35/36 0.18			
		Sandstone - very fine-grained, light to medium grey, with occasional finely-broken plant debris; abrupt base.	0.49			
		Siltstone/sandstone (50:50) - thin to medium interbeds of dark grey siltstone and medium grey, very fine- to fine-grained sandstone; intensely bioturbated and churned; abrupt, churned base.	0.47			
	----- Core #55	Sandstone/mudstone (90:10) - fine-grained, light grey sandstone with laminae of dark grey mudstone; microfaulted; mudstone laminae contain abundant finely-broken plant debris; abrupt base; possibly synsedimentary slump-breccia?	0.20 DD 597 0.22			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone fine- to medium-grained, light to medium grey, silty, occasional carbonaceous laminae; locally-abundant thick bright coal bands; bleeding gas 20 minutes after core recovered; salty taste (salt water?); abrupt base.	0.82			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
----- *RLC at 180.91* *RIB at 191.11* -----		Sandstone medium- to coarse-grained, medium grey, quartz-basalt, clean; low-angle crossbedded; fair intergranular porosity; abrupt base.	0.54	0.54	181.25	10° at top 6° in middle
		Sandstone/mudstone (80:20) interlaminated light grey, fine-grained sandstone and dark grey to black silty mudstone; intensely bioturbated at top; microfaulted throughout; abrupt base.	1.20	1.20	182.45	17° at base
----- *RIC at 183.83* -----		Sandstone fine- to medium-grained, medium grey, silty at top, with occasional carbonaceous laminae rich in finely-broken plant debris; occasional silty intraclasts and *shell debris*; poor intergranular porosity; microfaulted and healed; abrupt base.	0.20 Box 36/37 0.09 DD 607 2.17	2.55	185.00	
	---- Core #56					10° to 14°
		Mudstone dark grey, silty; slicked basal contact.	0.12	0.12	185.12	
		Sandstone fine- to medium-grained, medium grey, quartz-basalt, concretionary; a few small muddy intraclasts; steep dip possible sandstone dyke?	0.11	0.11	185.23	34° at top
		Siltstone dark grey, sandy, intensely bioturbated; abrupt base.	0.09	0.09	185.32	
		Mudstone dark grey, silty, laminated, weak, locally broken and ground; sheared and slicked; abrupt base.	0.11	0.16	185.48	
	----- Core #57	Mudstone/sandstone (80:20 at top, grading down to 20:80 at base) - very thinly-interbedded and interlaminated fining-upward sets of dark grey, very silty, slightly carbonaceous mudstone and medium grey, very fine-grained sandstone; sparsely bioturbated; gradational base.	0.53 DD 617 0.25			
		Sandstone/mudstone (95:5)– fine-grained, light to medium grey sandstone with thin laminae and lenses of dark grey to black, carbonaceous mudstone; sparsely bioturbated; gradational base.	0.18			
		Sandstone fine-grained, light to medium grey, planar-laminated; poor to fair intergranular porosity; abrupt base.	0.84 Box 37/38 0.11			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Mudstone/siltstone (90:10) - dark grey, silty mudstone with laminae of medium grey sandy siltstone; separates readily along laminae; occasional poorly preserved plant fragments; gradational base.	0.08			
		Sandstone/mudstone (85:15) - interlaminated very thin-bedded, medium grey, fining-upward, fine-grained sandstone and dark grey carbonaceous mudstone; sparsely bioturbated; gradational base.	0.27			6°
----- RIH at 187.9' -----		Sandstone - fine- to medium-grained, quartz-basalt, medium greenish-grey, clean, planar-laminated at top, massive below, with occasional small carbonised plant fragments; fair intergranular porosity; abrupt, load-casted base.	0.86	0.86	188.17	
		Siltstone/mudstone (50:50) - interlaminated medium grey siltstone and dark grey, slightly carbonaceous mudstone, with occasional large sand-filled burrows; polished base.	0.14	0.14	188.31	
		Mudstone - medium grey, soft, waxy, possibly bentonitic; polished and slightly sheared at base.	0.01	0.01	188.32	
	----- Core #58	Sandstone - very fine-grained at top, grading down to medium-grained at base, silty at top, moderately to intensely bioturbated, with *shelly lag* at base; erosional base.	0.26 DD 627 1.13	1.39	189.71	
		Sandstone - fine-grained, medium grey, clean, with occasional bands of dark grey silty mudstone at top and base; sparsely bioturbated except moderately to locally intensely bioturbated near top and base; gradational base.	0.69	0.69	190.40	
	----- Core #59	Sandstone/mudstone (55:45) - thin to medium interbeds of medium grey, fining-upward, very fine- to fine-grained sandstone and dark grey silty mudstone, with occasional sparsely to moderately bioturbated zones; 5% of sandstone locally coarsens to medium-grained; abrupt base.	0.99 Box 38/39 0.24 DD 637 1.35			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #60	Siltstone/mudstone/sandstone (75:25:5) - very thin to thin fining-upward interbeds of medium grey siltstone, dark grey mudstone and medium grey sandstone; occasional *shell fragments*; sparsely to moderately bioturbated; sands are sharp-based, with occasional ripples and low-angle cross-lamination; abrupt base.	1.74 DD 647 1.14 Box 39/40 1.90 DD 657 0.39			4°
	----- Core #61	Siltstone/sandstone (70:30) thinly interbedded dark grey muddy siltstone and medium grey, very fine-grained sandstone; intensely bioturbated and churned, with occasional large *shell fragments*; hard and strong; gradational base.	1.28			
		Sandstone/siltstone (90:10) thinly-interbedded medium grey, very fine-grained sandstone and dark grey siltstone with occasional carbonaceous streaks; intensely bioturbated; gradational base.	0.53			
		Sandstone fine- to medium-grained, light grey, clean, with scattered large dark-rimmed worm burrows; occasional tiny muddy intraclasts near base; tight; erosional base.	0.40 Box 40/41 0.41		201.14	8°
	----- Core #62	Sandstone - very fine- to fine-grained, medium grey, silty, intensely bioturbated, with occasional thick *pelecypod shell fragments*; gradational base.	0.11 DD 667 1.98	2.09	203.23	
		Sandstone/mudstone (80:20) – thinly interbedded medium grey very fine-grained sandstone and black silty mudstone; moderately to intensely bioturbated; abrupt base.	0.37	0.37	203.60	
		Mudstone/sandstone (80:20, grading down to 100:0) dark grey, slightly carbonaceous silty mudstone with laminae of very fine-grained, medium grey sandstone; occasional large sand-filled burrows and occasional ankerite streaks; gradational base.	0.28	0.28	203.88	
	----- Core #63	Sandstone/mudstone (90:10) - light grey sandstone, very fine-grained at top and coarsening downward to medium- to coarse-grained at base, with thin laminae of black coaly mudstone; abundant large sand-filled burrows near top; abrupt base.	0.44 DD 677 0.28	0.72	204.60	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
----- *RTF at 205.17* -----		Sandstone – medium- to coarse-grained, clean, massive, with occasional finely-broken plant debris; sparsely bioturbated; poor to fair intergranular porosity; possibly some clay plugging; abrupt base.	0.65 Box 41/42 0.15	0.80	205.40	6°
		Mudstone – black, carbonaceous, with occasional thick bright coal bands; gradational base.	0.33	0.33	205.77	
		Mudstone – dark brownish-grey, silty, slightly carbonaceous, with occasional thin ankerite-rimmed bright coal bands; gradational base.	0.26	0.26	206.03	
	Comox X coal bed, net coal 0.01 0.59 m	----- **Roof of Comox X coal bed (horizon only)** ----- Siltstone and COAL – thinly interlaminated dark brown carbonaceous siltstone and ankerite-rimmed bands of bright coal; abrupt base.	0.45	0.45	206.48	
		Mudstone and COAL – thinly interlaminated dark brown, silty carbonaceous mudstone and ankerite-rimmed bright coal bands; abrupt base.	0.13	0.13	206.61	
----- D 1/1/1 -----		COAL – dull banded, stony, hard; polished base. ----- **Floor of Comox X coal bed (horizon only)** -----	0.01	0.01	206.62	
		(Core loss – rock)		(0.51)	207.13	
		Sandstone/mudstone (50:50) – interlaminated light grey coarse-grained sandstone and dark grey carbonaceous mudstone; slightly sheared and broken; gradational base.	0.05	0.05	207.18	
----- *RTF at 207.72* -----	----- Core #64	Sandstone/mudstone (90:10) – light to medium grey, coarse-grained sandstone with 5% to 15% thin wispy laminae of dark grey to black coaly, silty mudstone; some flaser-bedded zones; poor intergranular porosity; sheared and broken at base; occasional crushed and slicked zones throughout.	0.79 DD 687 1.43	2.22	209.40	8° to 11°
		----- *Fault, probable; shear zone dip 42°* -----				
		Sandstone – coarse-grained, medium to dark grey, carbonaceous, moderately bioturbated; gradational base.	0.32	0.32	209.72	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone – coarse-grained, white, clean; intensely bioturbated at top; abrupt base.	0.35	0.35	210.07	26° at top
		Sandstone – medium-grained, light to medium grey, with occasional dark grey, silty, carbonaceous laminae; becomes cleaner towards base; abrupt base.	0.22 Box 42/43 0.24	0.46	210.53	
----- *RIG at 210.77* -----	----- Core #65	Sandstone – coarse-grained, light grey, granitic, clean; core is broken in basal half; (soft-sediment microfaulted?).	0.52 DD 697	0.52	211.05	8°
		(Core loss rock; probably sandstone, as above)		(0.20)	211.25	
		Sandstone coarse-grained, as above; abrupt base.	0.15	0.15	211.40	
		Siltstone – dark grey, hard, slightly carbonaceous; polished base.	0.05	0.05	211.45	
		Mudstone – light brown, intensely sheared and broken; with occasional fine *shell hash*; bentonitic; probable ash band; abrupt base.	0.05	0.05	211.50	
		Mudstone – black, coaly, intensely broken and crushed; powdery.	0.08?	0.06	211.56	
		Mudstone – dark brown, carbonaceous, fissile; occasional thin bright coal bands; broken.	0.02	0.02	211.58	
	Comox X Lower coal bed: net coal 0.03 0.03 m	----- **Roof of Comox X Lower coal bed** ----- COAL – dull and bright, broken and ground.	0.03	0.03	211.61	
		----- **Floor of Comox X Lower coal bed** ----- Mudstone – dark brown, carbonaceous; broken.	0.02	0.02	211.63	
		Siltstone – dark brown, carbonaceous, rooty, ferruginous, dense, with occasional thick bright coal bands; gradational base.	0.37	0.37	212.00	
		Siltstone – dark brown, carbonaceous, sandy, intensely churned and bioturbated, with abundant thin bright coal bands; gradational base.	0.08	0.08	212.08	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone fine-grained, dark brown, carbonaceous, with occasional rootlets; intensely bioturbated.	0.09	0.09	212.17	
		Sandstone medium- to coarse-grained, light grey, with abundant silty carbonaceous laminae and occasional rootlets; gradational base.	0.10	0.10	212.27	
----- *RH at 213.02* *RL at 213.27* -----	----- Core #66	Sandstone medium- to coarse-grained, light grey, clean, with abundant large dark-rimmed burrows in top 40 cm; from 80 to 131 cm below top are abundant *Macaronichnus* burrows; poor to fair intergranular porosity; abundant narrow calcite veinlets near base.	2.05 DD 707 0.02			10°
		Fault breccia coarse white sparry calcite with horses of sandstone as above.	0.05			45°
		----- *Fault, established* -----				
	----- Core #67	Sandstone medium- to coarse-grained, light grey, clean, with occasional *Macaronichnus* burrows near top; basal 240 cm has locally-abundant calcite veinlets; broken and slicked at base.	0.55 Box 43/44 2.43 DD 717 1.81			
		----- *Fault, probable* -----				
		Sandstone medium-grey, light grey, clean, with trace fine-broken plant debris; microfaulted at top; abrupt base.	0.10 Box 44/45 1.10		220.26	
----- *RH at 221.49* -----	----- Core #68 ----- Core #69	Sandstone -- medium-grained at top, coarsening down to coarse-grained, light grey, clean, with low-angle cross-lamination and planar-lamination in top half; trace carbonaceous streaks; *fair intergranular porosity*; erosional base.	0.07 DD 727 3.02 DD 737 0.12 Box 45/46 0.26		223.73	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Siltstone/sandstone (100:0 grading down to 50:50 at base) – dark grey carbonaceous siltstone; coaly at top, with sandy flasers and large sand-filled burrows; increasingly-abundant thin sandstone laminae towards base; gradational base.	0.19	0.19	223.92	
		Sandstone coarse-grained, medium grey, with abundant silty matrix and occasional coal spars; abrupt base.	0.60	0.60	224.52	
		Sandstone/mudstone (90:10 at top, grading down to 10:90 at base) black silty mudstone, carbonaceous at top, with very abundant large sand-filled burrows; may represent a fossil woodground; gradational base.	0.14	0.14	224.66	
		Mudstone dark grey, very silty, grading down to black sandy carbonaceous siltstone; occasional isolated sandy ripples and very thin discontinuous ankerite laminae; possibly anoxic bay-fill; gradational base.	0.40	0.40	225.06	
		Sandstone fine-grained, dark grey, carbonaceous, intensely bioturbated; gradational base.	0.30	0.30	225.36	
		Sandstone fine- to medium-grained, light brownish-grey, ferruginous at top; sparsely to moderately bioturbated, with locally-abundant discontinuous streaks of black coal mudstone; abrupt base.	0.73	0.73	226.09	
	----- Core #70	Sandstone/siltstone/mudstone (40:40:20 at top, grading down to 20/40/40 at base) very thin fining-upward interbeds of light grey fine-grained sandstone, medium grey siltstone and dark grey carbonaceous mudstone; plane-laminated, parting readily along lamination; sparsely bioturbated at top, with possible *fish scales* towards base; abrupt base.	0.36 DD 747 0.34	0.70	226.79	
		Sandstone fine- to medium-grained, light to medium grey, silty, dirty; carbonaceous at top, with abundant thin and thick bright coal bands; very thin- to thin-bedded, sparsely to moderately bioturbated; gradational base.	0.62	0.62	227.41	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone - medium- to coarse-grained at top, coarsening down to very coarse-grained at base; light grey, arkosic, medium to thick-bedded, cleaner than above, with a few thin silty zones and occasional coaly streaks; plane-laminated at top, cross-bedded in middle, massive at base; abrupt base.	0.50 Box 46/67 1.57 DD 757 1.08	3.15	230.56	
	----- Core #71	**----- Roof of Comox Y coal bed -----**				
	Comox Y coal bed: net coal 0.305 0.74 m	Core loss (coal)		(0.10)	230.66	
		COAL - bright banded; core ground at top and base.	0.02	0.02	230.68	
		Mudstone - black, coaly, intensely sheared and broken.	0.04	0.04	230.72	
		COAL - bright banded, slightly sheared; polished at top and base.	0.05	0.05	230.77	
		Mudstone - black, carbonaceous; gradational base.	0.03	0.03	230.80	
		Siltstone - dark grey, carbonaceous at top; slightly sheared; polished base.	0.09	0.09	230.89	
		Siltstone - medium grey, sandy, sheared and brecciated, with calcite veinlets.	0.04	0.04	230.93	
		Mudstone - medium grey, intensely sheared and flaky; probable fault gouge.	0.03	0.03	230.96	
		----- *Fault, probable* -----				
		Mudstone - dark grey, carbonaceous; sheared and broken.	0.04	0.04	231.00	
		Mudstone - black, canneloid, sheared and broken, with ankerite films; polished at top and base.	0.01	0.01	231.01	

D 1/2/1		COAL - dull banded; abrupt base.	0.01	0.01	231.02	
		COAL and shale - interlaminated bright coal and black coaly mudstone; abrupt base.	0.01	0.01	231.03	
		COAL - dull and bright, with ankerite along cleats; ground at base.	0.04	0.04	231.07	

		Mudstone - black, coaly, intensely sheared and powdery; cornflakes.	0.08	0.08	231.15	
		Mudstone - black, carbonaceous, with abundant thin bright coal bands; hockey pucks; core slightly ground.	0.07	0.07	231.22	

D 1/2/2		COAL - bright; abrupt base.	0.04	0.04	231.26	
		COAL - dull and bright, with pyritised fusain layers; abrupt base.	0.02	0.02	231.28	
		COAL - bright banded; ground at base.	0.02	0.02	231.30	
-----		**----- Floor of Comox Y coal bed -----**				

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Mudstone - dark grey, silty, with abundant very thin bright marcasite-rimmed coal bands; grades down to siltstone, medium grey, very sandy; very thin-bedded throughout; core is ground at top; gradational base.	0.51			
		Sandstone - very fine- grained at top, coarsens to medium-grained at base; abundant silty carbonaceous laminae throughout; some load casts at bases of sandstones; sparsely bioturbated; slicked and broken at base.	0.48 Box 47/48 0.18			
		----- *Fault, possible* -----				
	----- Core #72	Sandstone - fine- to medium-grained, light grey, silty, with occasional carbonaceous streaks; abrupt load-casted base.	0.08 DD 767 0.38			
		Intraclastic block? Sandstone/siltstone (70:30) - interlaminated fine-grained, light grey rippled sandstone and medium grey sandy siltstone; steep dips with contorted bedding at base; possibly a slump block; abrupt base.	0.52			
		Sandstone/siltstone (60:40) - thinly-interbedded fine-grained, light grey sandstone and dark grey siltstone with carbonaceous streaks; sands locally rippled; abrupt base.	0.38			
		Sandstone - fine- to medium-grained, medium grey, silty, with powdery ?gypsum along joints; massive; abrupt base.	0.33			
		Sandstone/siltstone (85:15 at top; 50:50 at base) - thin to medium interbeds of fine-grained, medium grey, silty, locally-rippled sandstone and dark grey siltstone; locally abundant finely-broken plant debris; intensely bioturbated at base.	1.40			
	----- Core #73	Mudstone - dark brown, carbonaceous, slightly sheared and broken, with oblique slips.	0.06 DD 777 0.07		235.63	7°

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
-----		----- **Roof of Comox Y Lower coal bed** -----				
D 1/3/1	*Comox Y Lower coal bed: net coal 0.33 0.35 m*	COAL – dull banded.	0.11	0.11	235.74	
		COAL – dull and bright; abrupt base.	0.07	0.07	235.81	
		COAL – dull and bright, with isolated ripples of sandy siltstone; abrupt base.	0.02	0.02	235.83	
		COAL – dull and bright; possible core loss at base.	0.02	0.02	235.85	
		Core loss (coal)		(0.06)	235.91	
-----		Sandstone – fine-grained, dark grey, carbonaceous, rippled, with thin bright coal bands; erosional base?	0.01	0.01	235.92	10°
-----		COAL – dull and bright; possible core loss at base.	0.04	0.04	235.96	
D 1/3/2		COAL and sandstone – interlaminated bright coal and dark grey, coarse-grained, carbonaceous sandstone; abrupt base.	0.02	0.02	235.98	
-----		----- **Floor of Comox Y Lower coal bed** -----				
		Sandstone – coarse-grained, light grey; carbonaceous and rooty in top 5 cm.	0.61 Box 48/49			
		Sandstone – medium- to coarse-grained, grading down to coarse-grained at base; light grey, arkosic; steep-dipping silty streaks at top; brecciated in basal 0.48 m; slicked basal contact with clayey gouge.	1.12			
		----- *Fault, probable* -----				
	----- Core #74	Sandstone – coarse-grained, grading down to very coarse-grained; light grey, arkosic, clean, with occasional *Macaronichnus* burrows; steep-dipping to vertical healed fractures in top 2.5 m; erosional base.	1.08 DD 787 2.07 Box 49/50 0.31			
	----- Core #75	Sandstone – medium-grained, grading down to coarse-grained at base; light grey, arkosic, clean, with occasional thin bands of very fine-grained sandstone showing overall low-angle cross-bedding; abrupt base.	0.60 DD 797 1.45			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone/mudstone (95:5) medium- to coarse-grained, light grey, thin-bedded arkosic sandstone with abundant very thin laminae and streaks of black carbonaceous mudstone containing finely-broken plant debris; abrupt base.	0.32			
		Sandstone/mudstone (90:10) sandstone with mudstone laminae as above, but sands are fine- to medium-grained; very thin-bedded, sparsely bioturbated; gradational base.	0.70			
	----- Core #76	Sandstone medium- to coarse-grained, light grey, arkosic, massive; core is virtually unbroken in box; abrupt base.	0.58 DD 807 0.39 Box 50/51 2.72			
	----- Core #77		DD 817 1.73 Box 51/52 1.27			
	----- Core #78	Sandstone - coarse-grained, grading down to very coarse-grained at base; light grey, clean, arkosic; sparsely bioturbated near base; abrupt base marked by abundant poorly-preserved carbonised plant debris.	0.10 DD 827 1.30			
		Sandstone - coarse- to very coarse-grained, light grey, massive, arkosic; sparsely bioturbated at immediate base; abundant coarse plant debris at base; abrupt base.	0.74			
	----- Core #79	Sandstone coarse- to very coarse-grained, light to medium grey, quartz-basalt, clean, with occasional thin bright coal bands and discontinuous streaks of black coaly mudstone; fair intergranular porosity; abrupt base.	0.95 DD 837 Box 52/53 0.25		254.10	
----- D 1341 -----		Mudstone - dark brown, canneloid, with sand-filled burrows and thick bright coal bands; parts readily from overlying sandstone; frozen basal contact.	0.03		254.13	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
-----		**----- Roof of Comox Z coal bed -----**				
D 1/4/2		COAL - bright; stick.	0.02	0.02	254.15	
		COAL - dull banded; broken.	0.01	0.01	254.16	
		Core loss (coal)		(0.08)	254.24	
		COAL bright banded; broken stick.	0.16	0.16	254.40	9°
-----	*Comox Z coal bed: net coal 1.09-1.57 m*					
D 1/4/3		COAL and siltstone - thinly-interbedded bright coal and black, carbonaceous siltstone; probably a root mass.	0.04	0.04	254.44	
		Siltstone - brown, ferruginous, with occasional thick bright coal bands in basal 2 cm.	0.25	0.25	254.69	15°
		Mudstone -- black, canneloid, slightly sheared and slicked; stick.	0.01	0.01	254.70	
-----	*Birtley composite sample 11784 from 254.10 to 255.72 includes 3 cm of roof material and 2 cm of floor material*					
D 1/4/4		COAL - bright banded, broken; abrupt base.	0.02	0.02	254.72	
		Mudstone – black, canneloid; stick; abrupt base.	0.02	0.02	254.74	
		COAL – bright banded, broken stick.	0.19	0.19	254.93	9°
		COAL -- intensely sheared, soft, cornflakes.	0.02	0.02	254.95	

D 1/5/A *(canister C-5)*		COAL - dull, sheared, cornflakes.	0.03	0.03	254.98	
		Mudstone - black, canneloid, slightly sheared, slicked, parts readily along lamination; polished base.	0.04	0.04	255.02	
		COAL -- dull banded; stick.	0.04	0.04	255.06	
		Mudstone -- dark brown, carbonaceous, with silt-filled burrows; abrupt base.	0.05	0.05	255.11	
		COAL -- dull, sheared, platy flakes, soft.	0.05	0.05	255.16	
		Mudstone – black, coaly, intensely sheared and pulverised, very soft.	0.03	0.03	255.19	
		COAL -- dull and bright, dirty.	0.07	0.07	255.26	
		COAL – dull banded, broken.	0.02	0.02	255.28	
		COAL - intensely sheared, very soft.	0.05	0.05	255.33	

D 1/4/5		COAL - bright banded, slightly sheared; slicked and broken.	0.02	0.02	255.35	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING

D 1 5 B		COAL dull and bright, clean, with oblique slips; abrupt base.	0.11	0.11	255.46	
(Continued)		COAL dull, stony, slightly sheared and slicked, very soft; abrupt base.	0.06	0.06	255.52	
		COAL dull banded, slightly sheared; abrupt base.	0.03	0.03	255.55	
		Core loss (coal)		(0.02)	255.57	
		COAL dull, stony, sheared, cornflakes; abrupt base.	0.04	0.04	255.61	
		Mudstone dark brown, carbonaceous, silty at base; sheared; abrupt base.	0.04	0.04	255.65	
		COAL dull and bright; sheared and slicked.	0.05	0.05	255.70	
-----		----- **Floor of Comox Z coal bed** -----				
D 1 4 6		Mudstone black, canneloid, with thin bright coal bands.	0.02	0.02	255.72	

		Sandstone coarse-grained, black, coaly; gradational base.	0.09	0.09	255.81	
		Sandstone medium-grained, light grey; carbonaceous at top, clean below; abrupt base.	1.07	1.07	256.88	
		Sandstone coarse-grained, light grey; abrupt base.	0.03	2.56	259.44	
	-----		DD 847			
	Core #80		1.79			
			Box 53/54			
			0.74			
		Sandstone medium- to coarse-grained, light grey, clean, with locally-abundant *Macaronichnus* burrows; gradational base.	0.53			
	-----		DD 857			
	Core #81		0.55			
		Sandstone - medium- to coarse-grained, light grey, clean; thin to medium crossbeds; gradational base.	2.06			
		Sandstone medium- to coarse-grained, white, arkosic, clean; microfaulted near base; abrupt base.	0.53			
	-----		DD 867			
	Core #82		0.07			
			Box 54/55			
			0.32			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #83	Sandstone – medium-grained at top, becoming coarse- to very coarse-grained at base; light grey, clean; occasional carbonaceous laminae in top 34 cm; sparsely bioturbated at immediate top; abrupt base.	2.65 DD 877 0.65			
		Sandstone/siltstone (80:20 at top, grading down to 10:90 at base) – interlaminated medium grey, fine-grained silty sandstone and dark grey siltstone; intensely bioturbated; gradational base.	0.36			
		Siltstone/sandstone (95:5 at top, grading to 80:20 at base) – dark grey siltstone with occasional very thin bands of medium grey, very fine-grained pyritic sandstone; abrupt but churned base.	0.51 Box 55/56 0.15			
	----- Core #84	Sandstone – fine-grained, light to medium grey, with abundant carbonaceous streaks; patchy sparse bioturbation; intensely bioturbated at immediate top and base; gradational base.	1.44 DD 887 2.34			
		Sandstone/siltstone (60:40 at top, grading down to 50:50 at base) – interlaminated medium grey, rippled, fine-grained sandstone and dark grey muddy siltstone; sand component grades down to very fine- to fine-grained near base; intensely bioturbated at top, declining to moderately bioturbated at base. Core below DD 897 is badly broken and ground; appears to be gradational base.	0.58 Box 56/57 0.12 DD 897 0.03			
		Sandstone/mudstone (75:25 at top, grading to 20:80 at base) – interlaminated dark grey very fine-grained sandstone and dark grey mudstone; sparsely to moderately bioturbated; occasional *shell fossils*; abrupt base.	1.71		273.88	
		Mudstone – dark olive drab, bentonitic; possibly pyritic; abrupt base.	0.01	0.01	273.89	
		Mudstone – dark brown, carbonaceous, slightly broken and ground; some slickensides.	0.08	0.08	273.97	
		Mudstone – medium brown, slightly carbonaceous, intensely sheared; soft.	0.10	0.10	274.07	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
-----		**----- Roof of Comox No.1 Rider coal bed -----**				
D 1/6/1	*Comox No.1 Rider coal bed: net coal 0.54 0.57 m*	COAL - dull and bright, hard; bubbling gas when core retrieved.	0.04	0.04	274.11	
		Mudstone - medium olive drab, pyritic.	0.02	0.02	274.13	
		COAL - dull and bright, hard, gassy.	0.03	0.03	274.16	
		Mudstone - black, coaly, intensely sheared, powdery, soft.	0.01	0.01	274.17	
		COAL - dull and bright, hard.	0.06	0.06	274.23	
		COAL dull banded, hard, bubbling gas.	0.08	0.08	274.31	8°

D 1/6/2		COAL bright banded, hard, with occasional large pyritic nodules; bubbling gas.	0.25	0.25	274.56	
		Core loss (coal)		(0.08)	274.64	
-----		**----- Floor of Comox No.1 Rider coal bed -----**				
		Mudstone dark brown, carbonaceous, intensely sheared; powdery and cornflakes.	0.15	0.15	274.79	
		Mudstone - black, coaly, intensely sheared; powdery.	0.05	0.05	274.84	
		Mudstone black, carbonaceous, slicked and broken.	0.13	0.13	274.97	
		COAL - bright, broken.	0.01	0.01	274.98	
		Mudstone black, carbonaceous, with occasional thin bright coal bands.	0.06	0.06	275.04	
		Mudstone – dark grey, silty, carbonaceous, rooty, with occasional thin and thick bright coal bands; sheared and broken at base.	0.12	0.12	275.16	
		Core loss (rock – probably carbonaceous mudstone)		(0.10)	275.26	
	-----		DD 907			
	Core #86	Mudstone – black, carbonaceous, with occasional thin bright coal bands.	0.12	0.12	275.38	
		Siltstone – olive drab, possibly ferruginous; core is milled in middle but probably no core lost.	0.78	0.78	276.16	
		Mudstone – black, carbonaceous, with occasional thick bright coal bands.	0.04	0.04	276.20	12°

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
-----		----- **Roof of Comox No.1 coal bed** -----				
D 1/7/1	*Comox No.1 coal bed: net coal 0.22 0.38 m*	COAL – bright banded, hard, bubbling gas.	0.03	0.03	276.23	

D 1/7/2		Mudstone – black, carbonaceous, with occasional thick bright coal bands; some pyrite streaks; oblique slicks at top and base.	0.06	0.06	276.29	

D 1/7/3		Mudstone black, canneloid, hard, bubbling gas; core ground at top.	0.10 Box 57/58	0.10	276.39	

D 1/7/4		Core loss (coal)		(0.12)	276.51	
		COAL dull banded, slicked at top and base; stick.	0.07	0.07	276.58	7° to 12°
-----		----- **Floor of Comox No.1 coal bed** -----				
		Mudstone – dark brown, carbonaceous, with pedogenic listric surfaces and slickensides; a few rootlets; core broken.	0.03			
		Mudstone – black, coaly, dense, with a few thick bright coal bands; gradational base.	0.12			
		Mudstone – black, coaly, with 50% pyrite bands; gradational base.	0.05			
		Mudstone – dark brownish-grey, silty, carbonaceous; gradational base.	0.39			
		Mudstone/siltstone (50:50) – thin to medium interbeds of intensely bioturbated and churned mudstone and siltstone; with flaseroid sandy bands at immediate top; occasional thick bright coal bands; gradational base.	0.36			
		Siltstone medium brownish-grey, ferruginous, hard.	0.06			
		Mudstone/siltstone (50:50) – as above, with occasional oblique slips; gradational base.	0.39			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #87	Sandstone/siltstone/mudstone (40:40:20) - interlaminated to thinly-interbedded fining-upward light grey very fine- to fine-grained sandstone, medium grey siltstone and dark grey mudstone with occasional carbonaceous streaks; overall flaseroid appearance; sparsely to moderately bioturbated; abrupt base.	0.40 DD 917 2.48 Box 58/59 0.56			
	----- Core #88		DD 927 0.16			
		Siltstone - dark grey, sandy at top, massive, with incipient blocky to rubbly fracturing; badly broken and ground in basal 0.05 m; some clayey fault gouge.	1.23			
		----- *Fault, probable* -----				
		Siltstone/sandstone (95:5 at top, 50:50 at base) - very thin to thin interlaminae of dark grey siltstone and light grey, fine-grained sandstone; moderately to intensely bioturbated; core broken and locally ground in top 40 cm; abrupt base.	0.62			
	----- Core #89	Sandstone - medium- to coarse-grained, light grey, arkosic; silty, carbonaceous and intensely bioturbated in top 15 cm; below is sparsely bioturbated, with occasional carbonaceous streaks containing finely-broken plant debris; erosional base.	0.95 DD 937 0.60 Box 59/60 0.65			
		Sandstone - medium- to coarse-grained at top, coarsening down to very coarse-grained and gritty at base; occasional well-rounded basalt pebbles to 10 mm in basal 4 cm. On the whole this is a clean and well-sorted unit with abundant carbonaceous streaks, including abundant coarse plant debris in top 7 cm. Erosional base.	0.45			
		Sandstone - medium-grained, light grey, clean, with abundant fine plant debris at base; abrupt base.	0.25			
	----- Core #90	Sandstone - coarse- to very coarse-grained, light grey, clean, arkosic, minor basalt grains; occasional floating pebbles and grit of basalt; thick planar beds; abrupt base.	1.10 DD 947 0.93			
		Sandstone - medium- to coarse-grained, light grey, clean, with occasional thin fine-grained streaks; gradational base.	0.94 Box 60/61 0.72			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #91	Sandstone – coarse-grained, light grey, with occasional thick bright coal bands and abundant silty intraclasts in basal 10 cm; erosional base.	0.49 DD 957 0.50		290.97	
		COMOX FORMATION (CUMBERLAND MEMBER)				
		Sandstone and COAL – large burrow-fillings of light grey, medium-grained sandstone within a sparse matrix of bright coal; abrupt base.	0.03	0.03	291.00	
-----		----- **Roof of Comox No.2 Rider coal bed** -----				
D 1/8/1	*Comox No.2 Rider coal bed: net coal 0.35 0.35 m*	COAL – dull banded, with occasional burrow-fills of fine-grained pyritic sandstone; stick.	0.07	0.07	291.07	
		COAL – dull and bright, hard; polished basal contact; stick.	0.10	0.10	291.17	3°
		COAL – dull, sooty, broken; a fusain band.	0.01	0.01	291.18	
		COAL – dull and bright, broken.	0.01	0.01	291.19	
		Core loss (coal)		(0.16)	291.35	
-----		----- **Floor of Comox No.2 Rider coal bed** -----				
		Mudstone – dark grey, carbonaceous, rooty, listric; broken stick.	0.02			
		Mudstone – black, silty, carbonaceous, grading down to dark grey carbonaceous siltstone; rooty throughout; gradational base.	0.07			
		Siltstone – medium grey, sandy, rooty, intensely bioturbated; rootlets crosscut the bioturbate texture; gradational base.	0.42			
		Sandstone – fine-grained, silty, moderately bioturbated, with occasional muddy flasers; rooty throughout; abrupt base.	0.30			
		Sandstone/siltstone/mudstone (40:40:20) – interlaminated and thinly interbedded fine-grained light grey sandstone, dark grey siltstone and dark grey slightly carbonaceous mudstone; sparsely to moderately bioturbated throughout, with occasional rippled flaseroid zones; abrupt base.	1.28			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #92	Sandstone/mudstone (90:10) very fine- to fine-grained, medium grey sandstone with thin interbeds of dark grey silty mudstone.	0.17 DD 967 0.16 Box 61/62			
		Siltstone medium grey, very sandy, rippled, flaseroid; abrupt base.	0.08			
		Sandstone/siltstone (95:5) fine- to medium-grained, light grey flaseroid sandstone with thin laminae of dark grey slightly carbonaceous siltstone; abrupt base.	0.38			
	----- Core #93	Sandstone/siltstone (100:0 at top grading down to 95:5 in basal half) fine- to medium-grained, light grey, clean, low-angle cross-laminated, with occasional laminae of dark grey carbonaceous siltstone; locally sparsely bioturbated; abrupt base.	2.54 DD 977 0.27			
		Mudstone dark brownish-grey, slightly carbonaceous, silty, with a polished slip in middle; gradational base.	0.14			
		Sandstone/siltstone (50:50 at top, 70:30 at base) interbedded medium grey, very fine- to fine-grained sandstone and dark grey siltstone; locally slumped, occasional angiosperm leaves; sparsely to intensely bioturbated; gradational base.	1.05 Box 62/63 0.31			
		Mudstone dark grey, silty; abrupt base.	0.12			
		Mudstone dark brown, carbonaceous, with occasional thin bright coal bands; polished base.	0.36			
----- DD 991		Mudstone black, coaly, with abundant thin bright coal bands.	0.03		298.85	
---		**----- Roof of Comox No.2 coal bed -----**				
DD 992		COAL bright banded, with calcite on cleat; parts readily from overlying mudstone.	0.01	0.01	298.86	
----- DD 878A Canister C-2		COAL bright banded, clean, with nothing on cleats; stick. Mudstone dark brown, carbonaceous, with abundant large plant stems at top.	0.09 0.02	0.09 0.02	298.95 298.97	15°

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
Note: coals and mudstones were bubbling gas when placed in canister	*Comox No 2 coal bed net coal 0.90-1.35 m*	COAL bright banded, clean; abrupt base.	0.02	0.02	298.99	
		Mudstone black, carbonaceous; stick.	0.01	0.01	299.00	
	Burley composite sample 11785 from 298.82 to 300.20 includes 3 cm of roof material	COAL bright banded; abrupt base.	0.01	0.01	299.01	
		Mudstone black, coaly; abrupt base.	0.01	0.01	299.02	
		COAL dull and bright; slightly sheared at base.	0.02	0.02	299.04	
		Mudstone dark grey to black carbonaceous; silty at base; oblique slip; abrupt base.	0.03	0.03	299.07	
		COAL bright banded, with occasional ankerite films on cleat; abrupt base.	0.05	0.05	299.12	
		COAL bright, with pyrite on cleat; abrupt base.	0.03	0.03	299.15	
		COAL dull banded; abrupt base.	0.02	0.02	299.17	
		COAL dull, stony; abrupt base.	0.02	0.02	299.19	
		COAL bright banded; stick.	0.03	0.03	299.22	

DD93		COAL bright; slightly sheared and broken.	0.03	0.03	299.25	

DD94		Mudstone black, carbonaceous, hard, with abundant thick bright coal bands; occasional pyritic laminae.	0.07	0.07	299.32	

DD95		COAL dull and bright; stick.	0.11	0.11	299.43	
		Core loss (coal)		(0.10)	299.53	
---	---					
DD96	Core #94	Mudstone black, coaly; intensely sheared, cornflakes.	0.08 DD 987	0.08	299.61	

DD97		Core loss (coal)		(0.09)	299.70	
		Core loss (rock)		(0.03)	299.73	
		Mudstone black, coaly, intensely sheared; soft.	0.06	0.06	299.79	
		COAL dull, stony; stick	0.04	0.04	299.83	
		Mudstone - black, coaly, intensely sheared, powdery.	0.03	0.03	299.86	
		Mudstone dark brown to black, carbonaceous, polished base.	0.02	0.02	299.88	

DD98B *Canister C-3*		COAL dull, stony; abrupt base.	0.09	0.09	299.97	
		COAL dull and bright; stick.	0.06	0.06	300.03	

SAMPLES	CORE RUNS/ RECOV	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
Coal bubbling gas when placed in canister -----		COAL dull and bright; stick.	0.14	0.14	300.17	8°
		COAL bright banded, broken.	0.03	0.03	300.20	
		----- Floor of Comox No.2 coal bed -----				
		Mudstone black, carbonaceous, polished top; steep dip at top (possible slip plane?).	0.01	0.01	300.21	40° at top
		Siltstone dark grey, carbonaceous, rooty at top, sandy, with occasional thick bright coal bands; gradational base.	0.26			
		Mudstone medium to dark grey, silty, with carbonaceous bands; slightly sheared at base; polished base.	0.14			
		Mudstone black, carbonaceous, with abundant thick bright coal bands; slightly sheared; abrupt base.	0.05			
		Siltstone dark grey, sandy, rooty, ferruginous, massive; abrupt base.	1.37			
		Sandstone very fine-grained at top, grading to fine-grained at base; medium grey, silty, planar-laminated; ferruginous at base; abrupt base.	0.35 Box 63/64 0.30 DD 997 0.06			
	----- Core #95	Siltstone/sandstone (60:40) - interlaminated dark grey siltstone and light to medium grey, very fine- to fine-grained sandstone; plane-laminated, with a few flaseroid ripple-drapes; abrupt base.	0.29			
	----- Core #96	Sandstone coarse-grained, grading down to very coarse-grained at base; light grey, quartz-basalt, clean, medium to thick planar beds and large-scale low-angle cross-beds; abundant small silty intraclasts in basal 0.30 m; abrupt base.	2.82 DD 1007 0.95 Box 64/65 2.10 DD 1017 0.61			
	----- Core #97					

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone - coarse-grained, fining to medium- to coarse-grained at base; light grey, clean, quartz-basalt as above; gradational base.	1.58 Box 65/66 0.80 DD 1027			
	----- Core #98		0.36			
	----- Core #99	Sandstone - very coarse-grained, grading down to coarse-grained, light grey, clean, quartz-basalt, as above; occasional concretions; abrupt base.	2.70 DD 1037 0.03			
		Sandstone - very coarse-grained, light grey, clean, with occasional stringers rich in silty intraclasts and coaly plant trash; abrupt base.	0.31			
		Sandstone - coarse-grained, light grey, medium to thick low-angle cross-beds, rare carbonaceous laminae; clean; abundant coaly plant trash at base; abrupt base.	0.06 Box 66/67 1.37			
	----- Core #100	Sandstone - medium- to coarse-grained, light grey, clean, sparsely bioturbated (difficult to see burrows -- no rims); abundant poorly-preserved plant trash at base; erosional base.	1.27 DD 1047 1.63			
		Sandstone - coarse-grained, light grey, clean, thick-bedded, low-angle cross-bedded; abrupt base.	0.11 Box 67/68 1.37			
	----- Core #101		DD 1057 1.03			
		Siltstone - dark grey, sandy, carbonaceous; abrupt base.	0.02			
		Sandstone - coarse-grained, light grey; abrupt base.	0.10			
		Siltstone - black, carbonaceous, sandy; gradational base.	0.02			
		Sandstone - coarse-grained, light grey, with occasional carbonaceous laminae; locally-abundant intraclasts of black silty mudstone in basal 0.62 m; erosional base.	1.48			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone/siltstone (55:45) – contorted intraclastic blocks of interlaminated medium grey, rippled, very fine-grained sandstone and dark grey sandy siltstone; abrupt base; possible bank-collapse breccia?	0.36			
		Sandstone – coarse-grained, light grey, clean; occasional very large silty intraclasts to 60 mm; abrupt base.	0.07 Box 68/69 DD 1067			
	----- Core #102		0.16			
		Sandstone medium-grained, light to medium grey, clean, occasional carbonaceous streaks; abundant bright coal bands in basal 2 cm; erosional base.	1.05		325.27	
	-----	**----- Roof of Comox No.2A coal bed -----**				
		COAL – bright banded, polished base.	0.01	0.01	325.28	
		Core loss (coal)		(0.10)	325.38	

D 19/A *Canister C-4*	*Comox No.2A coal bed: net coal 0.51/1.25 m*	COAL - bright banded, with large sand-filled burrows; gassy; abrupt base.	0.01	0.01	325.39	
		COAL – bright banded, with calcite-filled cleats; gassy; abrupt base.	0.05	0.05	325.44	
		COAL - bright banded, with abundant large sand-filled burrows; gassy; stick.	0.04	0.04	325.48	
		Mudstone – dark brown, carbonaceous, with occasional thick bright coal bands; intensely bioturbated; gassy; stick.	0.07	0.07	325.55	
		COAL - dull banded, with widely-spaced ankerite-filled cleats; gassy; stick.	0.10	0.10	325.65	5° to 15°

		Mudstone – black, canneloid, gassy; broken at base.	0.06	0.06	325.71	7°
		COAL - bright, gassy; broken.	0.01	0.01	325.72	
		Mudstone – black, coaly; gradational base.	0.02	0.02	325.74	
		Mudstone – dark grey to black, carbonaceous, with 10% disseminated sand grains; occasional thick bright coal bands near top; gradational base.	0.34	0.34	326.08	
		Sandstone – fine-grained, black, coaly, rippled, with coal spars at base; erosional base.	0.26	0.26	326.34	

SAMPLES	CORE RUNS/ REC.OV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
-----	-					
DT 10 1		Core loss (coal)		(0.07)	326.41	
		COAL bright banded; stick; abrupt base.	0.12	0.12	326.53	17°
-----		**----- Floor of Comox No.2A coal bed -----**				
DT 10 2		Mudstone black, canneloid, with occasional thick bright coal bands; slightly sheared at base.	0.07	0.07	326.60	

		Siltstone dark grey, sandy, slightly carbonaceous, ferruginous, rooty at top, with polished slips every 3 to 8 cm.	0.44	0.44	327.04	
		Mudstone black, coaly, slightly sheared; broken.	0.02 DD 1077	0.02	327.06	
	----- Core #103	Mudstone black, coaly, badly broken and ground; soft.	0.01	0.01	327.07	
		Mudstone light brownish-grey, intensely sheared, soft, with pyrite blebs and occasional thick bright coal bands.	0.04	0.04	327.11	
		Core loss (coal)		(0.10)	327.21	

DT 10 3		Mudstone black, canneloid, with abundant very thin and a few thick bright coal bands; stick.	0.06	0.06	327.27	18°

		Siltstone medium brownish-grey, ferruginous, dense, intensely bioturbated, churned; rooty at top; gradational base.	0.11			
		Mudstone - dark grey, very silty, with occasional thick bright coal bands; churned, possibly slumped; abrupt, churned base.	0.15			
		Siltstone medium grey, slightly ferruginous, massive, intensely bioturbated; abrupt base.	0.38			
		Sandstone - medium-grained, grading down to coarse-grained; medium grey, with occasional thick bright coal bands; moderately to intensely bioturbated; abrupt base.	0.41			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Siltstone dark grey; abrupt base.	0.18			
		Mudstone/siltstone (70:30) thickly-interlaminated black carbonaceous mudstone and dark grey siltstone; occasional thin bright coal bands; polished base.	0.06 Box 69/70			
		Mudstone black, canneloid, with abundant pyrite streaks and blebs; gassy; gradational base.	0.04			
		Mudstone dark grey, silty, locally carbonaceous; a few thick bright coal bands; some broken zones with polished slips; gradational base.	0.42			
		Siltstone/mudstone (80:20) thin to medium interbeds of medium grey siltstone and dark grey, slightly carbonaceous mudstone; intensely bioturbated in basal half; gradational base.	0.75			
	----- Core #104	Sandstone/siltstone (70:30) interlaminated fine-grained medium grey sandstone and dark grey, flaseroid carbonaceous siltstone; abrupt base.	0.29 DD 1087 0.29			
		Siltstone/sandstone (70:30) interlaminated dark brownish-grey siltstone and medium grey, very fine-grained sandstone; occasional carbonaceous streaks; polished base.	0.28			
		Mudstone dark brown, with abundant thick bright coal bands; soft; sheared and crushed; polished base.	0.08			
		----- *Bedding-plane shear zone, probable* ----- Mudstone dark grey, silty, with occasional thick bright coal bands; gradational base.	0.04			
		Siltstone medium brownish-grey, sandy, ferruginous; rooty and churned at top; abrupt base.	0.56		331.38	

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Mudstone dark grey to black, carbonaceous, with occasional thick bright coal bands; sheared and crushed at base; polished base.	0.05	0.05	331.43	
		----- *Bedding-plane shear zone, possible* -----				
-----		----- **Roof of Comox No.2A Lower coal bed** -----				
D 1/11/1	*Comox No.2A Lower coal bed: net coal 0.43 0.46 m*	COAL dull and bright, with calcite on cleats; bubbling gas; stick.	0.02	0.02	331.45	
		COAL - dull and bright, with calcite and pyrite on cleats; brecciated and recemented with calcite; bubbling gas; stick.	0.04	0.04	331.49	
		COAL – dull and bright; bubbling gas; broken stick.	0.03	0.03	331.52	
		COAL – bright banded; bubbling gas; broken stick.	0.03	0.03	331.55	

D 1/11/2		Mudstone and COAL – black, coaly [illegible]tone, intensely sheared and broken; mixed with bright coal fragments in core box.	0.05	0.05	331.60	
		Core loss (coal)		(0.16)	331.76	
		COAL – dull banded, slightly sheared at top; broken stick.	0.04	0.04	331.80	
		COAL and shale – intensely sheared and broken bright coal and black coaly mudstone, mixed in core box.	0.01	0.01	331.81	

D 1/11/3		COAL – dull and bright, hard; stick.	0.08	0.08	331.89	10°
-----		----- **Floor of Comox No.2A Lower coal bed** -----				
		Siltstone – dark brownish-grey, carbonaceous, ferruginous, with pyritic streaks; abundant very thin bright coal bands; rooty at top; gradational base.	0.39	0.39	332.28	
		Mudstone - dark brownish-grey, silty, carbonaceous; polished base.	0.14	0.14	332.42	
		Mudstone – black, canneloid; broken stick.	0.02	0.02	332.44	
		Siltstone – black, coaly; gradational base.	0.02	0.02	332.46	
		Siltstone - dark grey; rooty at top, sandy at base; gradational base.	0.32			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone medium- to coarse-grained, medium grey; silty at top; occasional carbonaceous streaks; sparsely bioturbated; gradational base.	0.22			
		Sandstone coarse-grained, light to medium grey, quartz-basalt, becoming lighter and arkosic towards base; core ground at base; abrupt base.	0.07 Box 70/71 0.06 DD 1097 2.98 DD 1107 0.63			
	----- Core #105 ----- Core #106					
		Sandstone fine- to medium-grained at top, coarsening down to coarse-grained at base; light to medium grey; carbonaceous laminae near top; abundant large and small silty intraclasts in basal 8 cm; erosional base.	0.12			
	----- Core #107	Sandstone medium- to coarse-grained, light grey, arkosic with minor basalt grains; broken and jointed in top 60 cm; abundant small silty intraclasts in basal 5 cm; abrupt base.	2.37 DD 1117 0.70			
		Sandstone medium- to coarse-grained, grading down to very coarse-grained in basal 5 cm; light grey, arkosic; occasional bands of fine plant trash in basal 28 cm.	1.36			
	----- Core #108 ----- Core #109	Sandstone medium-grained; coarsens to coarse-grained at base; light to medium grey, quartz-basalt; base is marked by intraclasts of dark grey siltstone; abrupt base.	0.46 Box 72/73 0.40 DD 1127 3.11 DD 1137 0.67			
		Sandstone coarse- to very coarse-grained; light to medium grey; quartz-feldspar-basalt; clean; abrupt base.	0.40 Box 73/74 1.24			

SAMPLES	CORE RUNS/ RECOV.	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone – fine-grained, dark grey, very silty, with scattered quartz grit; occasional intensely-weathered basalt pebbles to 30 mm; churned, with some rootlets at top; abrupt base.	0.41 Box 74/75 0.82 DD 1157 0.01	1.24	351.55	
	----- Core #111	**KARMUTSEN FORMATION** Basalt – fine-grained, amygdaloidal, mottled red and green, intensely weathered at top, becoming less weathered below; chalky-weathering along subhorizontal fractures (bedding?); intrusive basal contact.	3.06 DD 1167 0.04			
	----- Core #112	**MOUNT WASHINGTON INTRUSIVE SUITE** Dacite – fine-grained, pale green, chloritic, sheared, with abundant xenoliths of basalt in top 15 cm; porous; gassy; high-pressure (ca. 1100 psi) nitrogen with minor combustible gas encountered in this zone, accompanied by salt water and loose magnetite sand; intrusive basal contact.	0.50 Box 76/77 0.01			45° at top; 20° at base.
		KARMUTSEN FORMATION Basalt – fine-grained, amygdaloidal, medium green, with red and green mottling in top 60 cm; fresh below; some zones contain abundant calcite veins, resembling a crackle-breccia; intrusive basal contact.	2.53			
	----- Core #113	**MOUNT WASHINGTON INTRUSIVE SUITE** Feldspar porphyritic dacite – fine-grained, pale greenish-grey, sheared, soft; abrupt basal contact.	0.05 DD 1177			5° at top
	----- Core #114	**KARMUTSEN FORMATION** Basalt – fine-grained, amygdaloidal, medium to dark green, chloritic; may be slightly sheared near base; broken and ground in basal 35 cm; possible core loss.	1.81 Box 76/77 1.15 DD 1187 End of hole		360.90	

Report on the Sealing of Drillholes

Inspection District:	Comox (Vancouver Island)	Date of Report:	AUG 31/01
Company:	Priority Ventures Ltd.	Land District:	Comox
Coal Map Number:	92 F/11 E	Licence Number:	383369

1. Number of Drillhole:	2. Surface Elevation:	3. Drillhole Type:
Dove Creek D-1	approx. 91.5 metres	Diamond-drill hole with wide-diameter surface casing and aquifer protection casing

4. Drilled by:	Contractor:	cored section:	Exploration Company:
	casing: Pyfe's Well Drilling;	Aggressive Diamond Drilling	Priority Ventures Ltd.

5. Date of Completion: July 20, 2001; reamed for geophysical logging on August 1,2001

6. Date of Sealing: AUG 29 – 30, 2001

7. Sealed by:	Contractor: Pyfe's Well Drilling	Exploration Company: Priority Ventures Ltd.

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole?: Yes

(b) If so, give details and location: 150-mm aquifer protection casing from ground level to 9.6 metres; 107-mm surface casing from ground level to 37 metres – casing points measured by geophysical logs. 96-mm open-hole section extends to total depth of 361.8 metres. Caliper log indicates minimal overgauge (washed-out) sections in coal beds. Squeezing, sticky zone at 235.3 to 236.5 metres; partial bridge at 288.6 metres; bottom of hole caved at 357 metres.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspector's Instructions?: YES. PORTLAND CEMENT (TYPE 10) WAS USED AND MIXED AT 1:1 RATIO WITH POTABLE WATER. DARATARD 17 WAS

(b) If no, give reasons and details of variation:

10. (a) Was the sealing effective?: YES. ADDED TO DELAY INITIAL SET TIME.

(b) Details of any tests carried out: – BOREHOLE OBSERVED SEALED TO GROUND SURFACE

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature: B.A.Sc(Eng) Countersignature: C.G. Cathly I – Brickford, P.Geo.

Designation: PRINCIPAL / MANAGER Designation: Project Manager

Aug 31, 2001. Sept. 4, 2001

Pyfe's
WELL DRILLING LTD.
3351 ALBERNI HIGHWAY
QUALICUM, B.C.
752-9558 V9K 1Y5

Westwater Mining Ltd.

Consultants in Applied Geology
88 Glamis Gardens SW, Calgary Alberta T3E 6S4
2719-A Dunsmuir Avenue, Cumberland B.C. V0R 1S0

B.C. Ministry of Energy and Mines
Mines Branch
2080 B Labieux Road, Nanaimo, B.C. V9T 6J9
Attention of: Ed Taje, District Inspector of Mines

By Fax 751-7373

August 15, 2001

Report of Dangerous Occurrence on July 19, 2001, pursuant to *Mines Act* --

In accordance with a request made by Ed Taje and Greg Carriere on August 13, 2001, the following report is made for purposes of documenting the circumstances and lessons learned.

Location:

The incident occurred at Priority Ventures Ltd's Dove Creek drill site 'C', at which borehole D-1 was being drilled. The drill site is situated in the northeastern corner of District Lot 131, Comox Land District, at approximate UTM co-ordinates 350848 E, 5507379 N (NAD 83 datum by GPS observation).

The drill site is situated in a cleared area along the southwestern side of B.C. Hydro's main John Hart - Puntledge power transmission line. The land is closely bordered by mature second-growth timber on its southwestern side, and is presently planted with juvenile conifers.

Persons involved:

The incident was first encountered by the night-shift drilling crew of Aggressive Drilling Ltd., consisting of driller Ryan Elliott and helper Walter Bodnar. Persons subsequently attending on-site were drill foreman Mitch McLellan, also with Aggressive Drilling, project manager Gwyneth Cathyl-Bickford of Westwater Mining Ltd., company man Neil Swift of Priority Ventures Ltd., day-shift driller Stan Beaupre and helper Monte Ross, and geologist Dr. Barry Ryan of the British Columbia Geological Survey.

Equipment involved:

A truck-mounted Boyles Brothers model 56 diamond-drill was in use. Integral mud-tanks with supplementary in-ground steel mud-tank and cuttings retention sump were used to contain the drilling mud. At the time of the incident, a 10-foot [3-metre] HQ core barrel was at the bottom of the borehole. A blowout prevention system (BOP) was installed beneath the drilling floor.

Circumstances:

The night-shift drilling crew arrived at the borehole site at 1900 hours on July 19, to start their work shift. They commenced work by conducting a check that the BOP was functioning normally.

At approximately 0400 hours on July 20, 2001, while drilling ahead at a depth of 361.8 metres, the crew broke off the water swivel to retrieve the core tube. They found the hole to be making water and gas, which fountained up and broke the masthead lights of the drill, approximately 6 metres above the top of the drill head. Both the driller and the helper independently reported that the gas which accompanied the water ignited at first, burning with a faint blue flame which then rapidly self-extinguished.

The flow of water increased to the point that it prevented the crew from re-attaching the water swivel to the top of the rods. They then added an additional 3-metre length of drilling rod, which allowed them to get ahead of the water and re-attach the swivel.

The crew then engaged the BOP, which functioned normally, sealing the hole with an observed surface pressure of 150 PSI. Following the standard blowout drill, they notified the drill foreman in Courtenay, who then left a telephone message with the project manager in Cumberland.

The crew attempted to pump a heavy barite/bentonite mud down the hole, but this process was hampered by the presence of the core barrel at the bottom of the tool string, which severely reduced the available flow pathway for drilling mud. As of 0700 hours, the pumping pressure was 900 PSI.

The night-shift crew was relieved at 0700 hours by the day-shift crew. The drill foreman remained on site to supervise operations. The project manager arrived on-site at 0720 hours, and a safety meeting was held with the drillers and the foreman to review the circumstances thus far and to plan how best to recover the borehole. At 0800 hours the flowline valve of the BOP was opened, and a sample of the flowing gas was taken for analysis by Dr. Barry Ryan.

Additional barite and bentonite mud was brought in from the supply base in Courtenay, while mud pumping continued. Balanced conditions were re-established in the hole at a measured pumping pressure of 1100 PSI.

At 1130 hours, another safety meeting was held, and consensus was reached to attempt blowing-down the pressure in the borehole. The flowline valve was re-opened, and gas was allowed to flow. A mist of salt water accompanied the gas. The gas flow steadily reduced over approximately 15 minutes, at which point the flowline valve was closed and mud circulation was restarted.

Commencing at 1200 hours, attempts were made to latch onto the core barrel with the wireline and overshot, and at 1220 hours the crew commenced tripping pipe out of the borehole, stopping occasionally to attempt retrieval of the core barrel by sending the overshot down again. All of these attempts were unsuccessful, and when the core barrel was finally pulled out of the hole at 1600 hours, its top was found to be sanded-in to the bottom-hole assembly.

A barite/bentonite mud with measured density of 1032 kg/m^3 and pH of 7.5 was circulated into the borehole; this mud weight was found to be sufficient to prevent further flows of water or gas, and the borehole was capped awaiting geophysical logging.

When the core barrel was opened, it was found to contain amygdaloidal basalt of the Karmutsen Formation, which forms economic basement beneath the Comox coal measures. Only 2.96 metres of core was recovered within the 3.05-metre drilled interval, suggesting that 9 cm of core was either lost in the hole, washed away, or represented by an open fissure in the basement rocks.

Gas composition

Two samples of the gas from the flowline, analysed for Dr. Ryan by B.C. Research, were found to consist mainly (over 91%) of nitrogen, with minor amounts (5 to 6%) of methane and oxygen (3 to 4%). The oxygen content and some of the nitrogen probably represent air contamination of the sample. It is probable that the gas flowing from the flowline consisted mainly of nitrogen with a small amount of methane.

Effects on personnel

No personnel were injured. 12 hours of work time for the drill crew, foreman and project manager were taken for recovery operations.

Effects on equipment

The masthead lights of the drill-rig were knocked loose by the kick. The cost of repair is unknown, but probably less that $100. The core barrel was filled with compacted medium-grained magnetite-rich sand, but it did not appear to be damaged, and it was returned to service following disassembly and cleaning.

Effects on the environment

An unknown quantity of water and nitrogen gas, with minor amounts of methane, were released to the environment during the initial kick, and during subsequent blow-down and recovery operations. The water was slightly saline, consisting of a mixture of salty formation-water and fresh drilling-mud makeup water, with admixed barite, bentonite and shale-control polymer. Most of the water was contained in the mud tanks or drill cuttings sump, owing to the provision of a surface drainage channel beneath the drill rig, and a cuttings retention berm along the low side of the sump. Effects on the environment are therefore regarded as minimal.

Follow-up

A safety meeting was held at the drill site on July 21, to review lessons learned from this incident, and to review the steps needed to prevent its recurrence.

Lessons learned

The BOP system prevented a more serious incident from developing, by allowing the workers to control and seal the borehole until heavier mud could be circulated into the borehole.

Some time would have been saved by keeping reserve supplies of barite (a mud-weighting agent) on site, but the time taken to bring additional materials to the site did not adversely impact the ultimate outcome of the incident.

It is doubtful that the specific circumstances of a gas and water kick from the basement rocks could have been reasonably anticipated. Flows of gas while drilling, as recorded to date in the Comox coalfield, have mostly come from sandstones or coals, and occasionally from shales or siltstones.

The Comox Coalfield should be regarded as having the potential for overpressured subsurface conditions, and BOP systems should be considered as standard protective equipment in deep boreholes within the coalfield. Determination of the threshold depth for overpressure is not yet possible given available information.

Respectfully submitted,

Gwyneth Cathyl-Bickford, M.Sc. P.Geo.
Project Manager, Vancouver Island

elane:aug14b01.doc

Annex A-2: Logs of Priority Ventures Dove Creek D-2A

Contents:

Borehole summary sheet of D-2A

Core Description of D-2A

Enclosure A-4: Gamma-Density-Caliper log of uphole section of D-2A

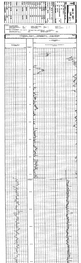
Enclosure A-5: Gamma-Density-Caliper log of downhole section of D-2A

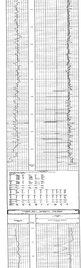
Enclosure A-6: Coalbed Methane (Quad Neutron/Dual Gamma) log of D-2A

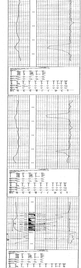
Enclosure A-7: Resistance Log of D-2A

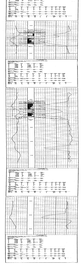
Enclosure A-8: Directional Log of D-2A

Report on sealing of drillholes (for D-2A)









ROXE

RESISTANCE LOG #822

Company: ROXE ENERGY LIMITED
Well: 15/30-7 ROXE ET AL CORMORANT BLOCK 30 SOUTH
Field: CORMORANT
Location: BLOCK 30 SOUTH
County: SHETLAND ISLANDS
State: SCOTLAND
Country: UNITED KINGDOM
Permanent Datum: MEAN SEA LEVEL
Elev.: 0 M
Log Measured From: KELLY BUSHING
Elev.: 0 M
Drilling Measured From: KELLY BUSHING
Elev.: 0 M
Date: 24-DEC-1991
Run No.: ONE
Depth-Driller: 626 M
Depth-Logger: 626 M
Bottom Logged Interval: 626 M
Top Logged Interval: 100 M
Casing-Driller: 20" @ 180 M
Casing-Logger: 180 M
Bit Size: 17.5"
Type Fluid in Hole: SEAWATER/GEL/LIGNOSULPHONATE
Density: 1.03 KG/M3
Viscosity: 40 S
PH: 9.5
Fluid Loss: 0 C3
Source of Sample: FLOWLINE
Rm @ Meas. Temp: 0.19 @ 20 DEGC
Rmf @ Meas. Temp: 0.16 @ 20 DEGC
Rmc @ Meas. Temp: 0.25 @ 20 DEGC
Source: Rmf: MEASURED Rmc: CALCULATED
Rm @ BHT: 0.12 @ 70 DEGC
Time Since Circ.: 5 HRS
Max. Rec. Temp.: 70 DEGC
Equipment No.: 1
Location: LERWICK
Recorded By: S. SMITH - GEORGE
Witnessed By: D. MACKAY

EQUIPMENT

SURFACE EQUIPMENT
LOGGING UNIT: 93 /
CABLE WINCH/DRM: 6 /
LINE PWR MODULE: 203 /
RECORDER: 2227 /

NUMC COMPUTER: 4 /
INTEL COMPUTER: 486-1 /
SOFTWARE: GI 12 /
HEAD SHEAVE: /

PRESS/TEMP: 1 /
DATA: /
5.25 FLOPPY: 1 /
3.50 FLOPPY: 1 /

DOWNHOLE EQUIPMENT
MULTI-CHANNEL TOOL SECTION: WCA/SHT/GR01 , FGR/GR2 , P : GR101
TEL MOT , CCL/MAT , MMOD1 , SHT/TEN-001
CALIPER (CALS): 1 ARM CALIPER 829
CORRECTIONAL (CORS): 150 312
GR-SP-HEAD

2803.500

GAMMA RAY - RESISTANCE

DATA FROM WCT & SP-RES SONDES

LOGGED OPEN HOLE

200 METRE

GAMMA RAY
(Low Energy Cutoff)
(API)
0 — 200

DEPTH
(METRES)
w.r.t. MSL

RESISTANCE
OHMM
(16 OHM/DIV)
10 — 90

SURFACE CASING @ 180.2

F.R. GAMMA RAY
516.7

F.R. RESISTIVITY
520.8

DEPTH RECORDED
625

ENC. H-8

ROKE DIRECTIONAL SURVEY

LOGGED OPEN AND CASED HOLE #872

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA

LSD	Company: PRIORITY VENTURES LTD	
SEC	Well: D-2A	
TWP	Location: SECTION 40 COMOX LAND DISTRICT	SCALES
RGE	Field: C421 NTS 92F11	
W M	Province: BRITISH COLUMBIA	

Unique Well Identifier:

Permanent Datum: GROUND LEVEL Elev: metres K.B. m

Log Measured From: GROUND LEVEL m Above Perm. Datum C.F. m

Well Depths Measured From: GROUND LEVEL G.L. m

Other Services: CBMM, RES, GDC DIR.HDG

Run No.	DIRECTIONAL
Date	30 JULY 2001
First Reading	520.0
Last Reading	20.0
Footage Logged	500.0
Depth Reached	521.7
Depth Driller	522.5
Casing Roke	180.7
Casing Driller	
Fluid Type	DRILLING MUD
Liquid Level	
Min. Diameter	96 mm BIT SIZE
Rm @ degrees C	OHMM @ C
Operating Time	13:30 - 00:30
Truck No.	52
Recorded By	D. SMITH
Witnessed By	G. CATHYL-BICKFORD

ROKE DIRECTIONAL SURVEY

DIR.BLC

STATION NUMBER	CABLE DEPTH	SLANT ANGLE	SLANT ANGLE BEARING	STATION NUMBER	CABLE DEPTH	SLANT ANGLE	SLANT ANGLE BEARING
1	020	00.70	N/A	2	040	00.90	N/A
3	060	01.90	N/A	4	080	01.90	N/A
5	100	01.80	N/A	6	120	01.80	N/A
7	140	01.80	N/A	8	160	01.80	N/A
9	180	02.60	N/A	10	200	02.80	286.0
11	220	02.80	287.9	12	240	02.80	287.9
13	260	02.80	288.1	14	280	02.70	289.6
15	300	01.70	268.4	16	320	01.80	282.8
17	340	01.80	270.2	18	360	02.70	286.0
19	380	02.70	291.3	20	400	02.70	292.2
21	420	02.00	279.3	22	440	02.50	296.2
23	460	02.50	293.0	24	480	02.50	292.1
25	500	02.40	291.1	26	520	02.40	299.8
				REPEAT SECTION			
27	440	02.40	290.8	28	360	02.50	288.3
29	280	02.50	287.9	30	200	02.60	286.2
31	120	01.80	N/A	32	040	00.60	N/A

ALL CABLE DEPTHS ARE MEASURED IN METRES.
ALL SLANT ANGLE AND SLANT ANGLE BEARING VALUES RECORDED IN DEGREES.

Section of DOVE CREEK D-2A surface borehole
Purpose: to prove strata and coal seams down to basement
Exact site: UTM NAD 83 Zone 10U (cell CA) coordinates:

E 354080 metres ±2 metres
N 5507886 metres ±2 metres

Legal description: Sec.40, Pl. DD 18633-F, Comox Dist.

Level at which bore commenced relative to geodetic datum at mean sea level: 18 metres ± 1 metre (ground level)

Date of boring: 16 July to 28 July 2001

Drillers: Glen Fyfe, Fyfe Drilling Rig No.1 (open-hole section); Mitch McLellan, Stan Beaupre and Ryan Elliott, Aggressive Drilling Rig No.56 (cored section)

BCGS Sheet	B.H. Reg'd No.
092 F 075	D-2A

Sketch map of B.H. location

Area: Comox Coalfield

Cores examined by: Gwyneth Cathyl-Bickford, Vern Slater and Dirk Meckert

Geophysical interpretation by: Gwyneth Cathyl-Bickford

Core & hole sizes:

Depth (m)	Dia. of core (mm)	Nominal Dia. of hole (mm):
0 - 31.2	Open hole	150
31.2 - 180.7	Open hole	144
180.7 - 523.3	59	96

Drilling History:

First attempt at drilling this site (D-2) was abandoned when casing buckled on a boulder in Drift. Rig was skidded over 1.5 metres westward to drill a successful hole (D-2A), which was taken to planned target without incident. Caliper log indicates minimal overgauge (washed-out) sections in coal beds.

Borehole made gas to surface from Dunsmuir Member, requiring use of heavy mud.

Deviations recorded at 20 metre intervals from 20 metres to 520 metres. Maximum deviation 2.8 degrees.

Conductor pipe and surface casing cemented in the borehole from surface to 180.7 metres.

Method of sealing-off borehole:

Totally filled with neat cement, using high-pressure grouting unit.

Deviation surveys:

By Roke Oil Enterprises Ltd.

Geophysical surveys:

Gamma-density-caliper, resistance and quad-neutron logs by Roke Oil Enterprises Ltd., logged by Dave Smith.

Geological synopsis:

Starts in Willow Point under 27.8 metres of Drift. Top of Baynes Sound at 28.55 metres. Top of Royston at 33.6 metres. *Extensional fault (Royston over Royston) at 202.65 metres.* Top of Browns at 218.9 metres. Top of Puntledge at 315.1 metres. Top of Cowie at 362.89 metres. Top of Cougarsmith at 380.1 metres Top of Dunsmuir at 386.46 metres. Top of Cumberland at 503.95 metres. Top of Karmutsen at 515.34 metres. Stopped in Karmutsen. Coals from Comox X through Comox 2 were found. Lower coals absent due to non-deposition on basement paleohigh.

Valid test? Yes.

PRIORITY VENTURES LTD. CORE DESCRIPTION

BOREHOLE: D-2A BY: C.G. Cathyl-Bickford, P.Geo DATE: July 22, 2001 PAGE: 1

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Note: *Top of rock core is in Box 6. Boxes 1 through 5 and top portion of Box 6 contain core of cement which was used to secure casing.*	Box 1				
		DD 507			-----	
	Rubber - black; disked and torn in middle; cement plug.	0.27			Core #1	
		0.05				
	Cement - ground core; driller reports loss of 10 feet of cement core at this point.	DD 517			-----	
		3.02			Core #2	
	Cement - medium greenish-grey, locally broken and ground; moderately hard.	DD 527			-----	
		0.87			Core #3	
	Cement - harder; not ground.	Box 1/2				
		2.14				
		DD 537			-----	
		2.22			Core #4	
	Cement - locally broken and ground.	Box 2/3				
		0.87				
		DD 547			-----	
		3.20			Core #5	
	Cement - core locally jumbled.	DD 557			-----	
		0.08			Core #6	
		Box 3/4				
		3.11				
		DD 567			-----	
		1.29			Core #7	
		Box 4/5				
		1.92				
		DD 577			-----	
		2.18			Core #8	
	Cement - compact and hard; occasional gas bubbles; broken stick.	Box 5/6				
		0.34				
		0.19				
	Rubber - orange, soft.	0.05				
	Metal - conical, narrow end down; ground at base (ea. float shoe check valve).	DD 587			-----	
					Core #9	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Wire - copper. Cement - fine-grained, medium greenish-grey, hard.	0.01 1.99		182.09		
	TRENT RIVER FORMATION (ROYSTON MEMBER) *continued from rathole* Sandstone - fine-grained, medium grey, cherty; core broken and ground.	0.04	0.04	182.13		
	Sandstone - very fine- to fine-grained, medium grey, alternating clean and silty phases; intensely bioturbated; gradational base.	0.16	0.16	182.29		
	Sandstone - fine-grained, light grey, cherty; abrupt base.	0.09	0.09	182.38		
	Sandstone - very fine-grained, medium grey, silty, intensely bioturbated; abrupt base.	0.04 DD 595 0.10	0.14	182.52	-----	
	Siltstone - dark grey, sandy, intensely bioturbated; gradational base.	0.43	0.43	182.95		
	Sandstone - very fine-grained, grading down to fine- to medium-grained at base; light to medium grey, silty and intensely bioturbated at top, cleaner below and sparsely bioturbated; abrupt base. [60 cm core loss interpreted to be in this unit]	0.09 DD 597 0.07	0.76	183.71	Core #10 ----- Core #11	
	Siltstone/sandstone (60:40) - thin to medium fining-upward interbeds of dark grey sandy siltstone and very fine-grained silty sandstone; moderately to intensely bioturbated; abrupt base.	0.62 Box 6/7 0.97	1.59	185.30		
	Siltstone/mudstone (70:30, grading down to 95:5) - medium fining-upward interbeds of dark grey sandy siltstone and silty mudstone; locally siltstones are very sandy; moderately to intensely bioturbated, with occasional fine *shell debris*; locally broken, with occasional slickensides; abrupt base. [core jumbled in box]	1.34 DD 607 1.44	2.52	187.82	----- Core #12	
	Mudstone - dark grey, locally very silty; moderately to intensely bioturbated; occasional slicked and broken zones; gradational base.	0.62 Box 7/8 1.11	2.10	189.92		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
		DD 617 0.96			-----	
					Core #13	4
	Sandstone - very fine- to fine-grained, medium grey, moderately bioturbated; abrupt, churned base; may be a turbidite band.	0.01	0.01	189.93		
	Mudstone - as above, but less silty; gradational base.	1.07	1.07	191.00		
	Sandstone/siltstone (80:20) - interlaminated fine-grained cherty sandstone and dark grey siltstone; moderately bioturbated; no visible porosity; abrupt base.	0.58	0.58	191.58		
	Sandstone - very fine-grained, dark grey, very silty, intensely bioturbated; abrupt base.	0.40 DD 627 0.02	0.52	192.10	-----	
	Siltstone - dark brownish-grey, sandy, ferruginous, moderately bioturbated; gradational base.	0.15	0.15	192.25	Core #14	
	Sandstone - very fine- to fine-grained, medium grey, silty and concretionary at top; occasional poorly-preserved plant debris; abrupt base.	0.04 Box 8/9 0.16	0.20	192.45		
	Siltstone - medium grey, very sandy, possible flaseroid banding; sparsely bioturbated, thin-bedded, with abundant muddy laminae; abrupt base.	0.34	0.34	192.79		
	Mudstone - dark grey, grading down to sandy siltstone at base; occasional fine *shell debris*, including *Tesserolax?* (gastropod) in growth position at 1.82 m below top; moderately to intensely bioturbated; gradational base.	2.35 DD 637 0.70	2.42	195.21	-----	
	Sandstone - very fine-grained, grading down to fine-grained at base, very silty throughout, medium to dark grey, locally ferruginous, moderately to intensely bioturbated; abrupt base.	0.62	0.62	195.83	Core #15	
	Siltstone - dark grey, very sandy, patchy moderate bioturbation; *Sphenoceramus ?naumanni* near base; possible relict flaseroid sandy bands toward base; gradational base obscured by bioturbation.	0.30 Box 9/10 0.62	0.92	196.75		5°

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - very fine-grained, medium to dark grey, very silty, with occasional laminae of waxy mudstone (possibly bentonitic?); one *gastropod* fossil; abrupt base.	0.74	0.65	197.40	----- [Core #16]	
	Siltstone - dark grey, sandy; gradational base.	0.09	0.50	197.90		
	Sandstone - very fine-grained, medium to dark brownish-grey, ferruginous at top; very silty, intensely bioturbated, with abundant fine *shell debris*; possible *fish scale*; abrupt base.	0.22	0.22	198.12		
	Siltstone - dark grey, sandy, intensely bioturbated; one *ammonite* fragment (*?Eubostrychoceras*); gradational base.	0.30	0.30	198.42		
	Sandstone - very fine- to fine-grained, medium brownish-grey, ferruginous; intensely bioturbated; abrupt base.	0.33	0.33	198.75		
	Siltstone - dark grey, grading down to slightly silty mudstone at base; moderately to intensely bioturbated at top; sheared and broken at base.	0.93	0.85	199.60		
	----- *Bedding-plane shear zone, possible* -----					
	Mudstone - dark grey, silty at top; clean and waxy at base; moderately bioturbated; base not seen (washed-out during start of next core run?)	1.16 DD 637 Box 10/11	1.16	200.76	----- Core #17	
	Sandstone/siltstone (50:50) - thinly interbedded very fine-grained sandstone and dark grey siltstone; intensely bioturbated; churned base.	0.33	1.04	201.80		
	Mudstone - dark grey, silty; abrupt base.	0.14				
	Siltstone - dark grey, sandy, intensely bioturbated; locally broken and slicked; intensely sheared and brecciated in basal 3 cm.	1.48		202.65		7
	----- *Fault, probable* -----					45
	Siltstone - dark grey; gradational base.	0.87				
	Siltstone - dark grey, very sandy, intensely bioturbated; abrupt base.	0.30 DD 667 0.13			----- Core #18	

SAMPLES	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone - dark grey, locally sandy, intensely bioturbated, with occasional calcite-filled fractures; abrupt base.	0.60				
	Mudstone - dark grey, silty, waxy lustre; abrupt base.	0.29				
	Siltstone - medium to dark grey, very sandy, moderately bioturbated; abrupt base.	0.21 Box 11/12 0.05				
	Siltstone - dark grey, becoming sandy towards base; moderately bioturbated; gradational base.	0.91				
	Sandstone - very fine-grained, dark grey, silty, moderately bioturbated, with flaseroid ripples; gradational base.	0.66				
	Sandstone - fine-grained, medium grey, clean at top, becoming silty at base; sparsely bioturbated; abrupt base.	0.17 DD 677 0.76			-----	5
	Siltstone/mudstone/sandstone (65:20:15) - thin to medium fining-upward interbeds of medium to dark grey, moderately to intensely bioturbated sandy siltstone, soft mudstone and very fine-grained sandstone; mudstones are burrowed; abrupt base.	1.44			Core #19	
	Sandstone/siltstone/mudstone (70:20:10) - thin to medium fining-upwards beds as above; sparsely to moderately bioturbated; abrupt base.	0.45 Box 12/13 0.47 DD 687 0.01			-----	
	Sandstone - fine-grained, medium grey, slightly silty, with occasional silty intraclasts near base; erosional base.	0.35			Core #20	
	Mudstone - dark grey, very silty, with thick irregular laminae rich in very fine sand grains; sparsely bioturbated; gradational base.	0.22				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone/siltstone (70:30) - thin to medium fining-upwards interbeds of very fine- to fine-grained, medium grey sandstone and dark grey sandy siltstone; sparsely to moderately bioturbated; abrupt base.	1.90				
	Siltstone - dark grey, very sandy, intensely bioturbated; gradational base.	0.51 DD 697			-----	
	Sandstone - very fine-grained, medium grey, silty, moderately to intensely bioturbated; slightly ferruginous at top; occasional large *Inoceramus* fragments; abrupt churned base.	0.30			Core #21	
	Siltstone - dark grey, sandy, grading down to medium grey very fine-grained, very silty sandstone; moderately to intensely bioturbated throughout; abrupt base.	0.66 Box 13/14 0.28				
	Mudstone - dark grey, slightly silty, locally fissile, parting readily along bedding; sparsely bioturbated; abrupt base.	0.19				
	Mudstone - very light grey, hard, waxy lustre, bentonitic; an ash band; polished base.	0.01				
	Mudstone dark grey, slightly silty; abrupt base.	0.01				
	Sandstone/siltstone (90:10 at top, grading down to 50:50 at base) - thinly interbedded, moderately to intensely bioturbated medium grey very fine silty sandstone and sandy siltstone; beds part readily; occasional thin *shell fragments*; abrupt base.	0.84				
	Siltstone/mudstone (85:15) - dark grey very sandy siltstone with occasional thin interbeds of dark grey silty mudstone; intensely bioturbated and featureless, but containing occasional thin *pelecypod* fragments; very gradational base.	0.48 DD 707 1.34		218.90	----- Core #22	
	TRENT RIVER FORMATION (BROWNS MEMBER)					
	Sandstone - very fine- to fine-grained, medium grey, silty, moderately to intensely bioturbated, occasional finely-broken plant debris; no visible porosity; abrupt base.	1.25 Box 14/15 0.04				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone/siltstone (75:25) - thin to medium, coarsening-upwards interbeds of very fine- to fine-grained, light grey silty sandstone and dark grey, slightly ferruginous siltstone; sparsely to moderately bioturbated throughout; occasional carbonised plant debris near top; abrupt base.	0.44 DD 717 1.31			----- Core #23	
	Sandstone - fine- to medium-grained, light to medium grey, with alternating clean and silty bands; moderately bioturbated, with locally-abundant *shell hash*; patchy fair intergranular porosity; abrupt, churned base.	0.64				
	Sandstone - fine-grained at top, becoming medium- to coarse-grained at base, medium grey, cherty, moderately bioturbated, with spectacular large dark-rimmed burrows including possible *Thalassinoides* and *Ophiomorpha*. Sand appears to contain locally-abundant matrix of black carbonaceous silt. Abrupt, churned base.	1.17 DD 727 0.42			----- Core #24	
	Siltstone - dark grey, with abundant large sand-filled burrows; gradational base.	0.08				
	Sandstone - fine- to medium-grained, medium grey, intensely bioturbated and churned; occasional large dark-rimmed burrows at base; abrupt base.	0.29 Box 15/16 0.49				
	Siltstone - dark grey, very sandy, intensely bioturbated; gradational base.	0.14				
	Sandstone - medium- to coarse-grained at top, grading down to fine-grained and silty at base; medium grey at top, becoming dark grey at base; moderately bioturbated throughout; patchy fair porosity in top half; abrupt, churned base.	1.78 DD 737 0.91			----- Core #25	
	Sandstone/siltstone (50:50) - thinly-interbedded dark grey fine-grained silty sandstone and sandy siltstone, moderately to intensely bioturbated; gradational base.	0.54				
	Sandstone - fine- to medium-grained, medium grey, with churned silty bands at top; moderately to intensely bioturbated; with abundant *shell fragments* at base; erosional base.	0.40				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - fine- to medium-grained, dark grey, grading down to very coarse-grained and medium grey at base; abundant *shell hash* near base; moderately to intensely bioturbated; abrupt base.	0.05 Box 16/17 0.36				
	Sandstone - medium- to coarse-grained, medium grey; thin to medium fining-upward beds with occasional silty carbonaceous laminae; poor to fair intergranular porosity; abrupt base.	0.89 DD 747 0.39			----- Core #26	
	Sandstone - fine- to medium-grained, dark grey, very silty, cherty, tight; very hard; erosional base.	1.72				
	Siltstone sandstone (65:35) - very thin to thin fining-upward interbeds of dark grey, locally ferruginous very fine-grained sandstone and sandy carbonaceous siltstone; abrupt base.	0.61				7
	Sandstone - medium-grained, medium grey, cherty, with fair intergranular porosity; clean; apparently a single massive bed; abrupt base. (Note: no core loss between boxes)	0.33 Box 17/18				
	Siltstone - black, carbonaceous, thin-bedded; sandy at base; gradational base.	0.10 DD 757 0.04			----- Core #27	
	Sandstone - medium- to coarse-grained at top, becoming fine-grained at base; thin fining-upward beds with occasional thin bands of dark grey carbonaceous siltstone; locally abundant fine *shell hash* and *Inoceramus* debris; patchy fair intergranular porosity in top 65 cm; gradational base.	1.39				
	Sandstone - fine-grained, medium grey, with occasional very thin bands of black carbonaceous siltstone and locally-abundant thin silty intraclasts; sparsely bioturbated, with occasional *shell debris*, very hard and well-cemented; abrupt base.	0.18				
	Sandstone - fine- to medium-grained, medium grey, alternating clean and very silty phases;	1.37				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	sparsely to moderately bioturbated, with locally-abundant *Inoceramus* prisms; abrupt base.					
	Siltstone/sandstone (60/40): very thin fining-upward interbeds of rippled fine-grained sandstone and medium to dark grey muddy siltstone, sparsely bioturbated; abrupt base.	0.05 DD 767 0.10			-----	
Start log by D. Meckert	Sandstone - medium-grained, medium grey, with small shaly intraclasts and occasional *shell fragments*; gradational base.	0.21			Core #28	
	Siltstone - dark grey, moderately bioturbated, with increasing sand content toward base; gradational base.	0.59				
	Sandstone - fine- to medium-grained, medium grey, with silty intraclasts; erosional base.	0.23				
	Siltstone/sandstone (50:50) - regularly interbedded medium grey fine-grained sandstone and dark grey siltstone; abrupt, undulating base.	0.10 Box 18/19 1.24				
	Sandstone - medium-grained, grey, massive; fair porosity; erosional base.	0.19				
	Siltstone/sandstone (50:50 at top, becoming siltier to 80:20 at base) - interbedded; gradational base.	0.48 DD 777 1.46			-----	
	Siltstone/sandstone - dark grey siltstone with thin interbeds of medium grey fine-grained sandstone; occasionally cherty; uniform throughout; gradational base.	1.12 Box 19/20 0.24			Core #29	
	Sandstone - fine- to medium-grained, dark grey, silty; silt decreases from 50% at top to 20% at base; very bioturbated; gradational base.	0.25 DD 787 1.22			-----	
	Sandstone - fine- to medium-grained, light to medium grey, fair porosity; medium bioturbation with large burrows towards the base; one large *Inoceramus* fragment at 1.20 m below top.	1.79			Core #30	
	Siltstone/sandstone - interbedded dark grey siltstone and fine-grained sandstone; very bioturbated throughout; abrupt, wavy (not erosive) base.	0.08 DD 797 0.66			-----	
					Core #31	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone/siltstone - medium grey fine-grained sandstone with interbeds of dark siltstone; abrupt base.	0.19 Box 20/21 0.36				
	Siltstone - dark grey, gradually changing into medium grey fine-grained sandstone at base; abrupt base.	0.30				
	Siltstone - dark grey, gradually changing into fine- to medium-grained sandstone; increasingly cherty towards base; abrupt base.	1.30				
	Sandstone - medium-grained, medium grey, with thin silty layers; very cherty throughout; erosional base.	0.37 DD 807 0.71			-----	
	Siltstone - dark grey, gradually changing to medium grey fine-grained sandstone; abrupt base.	0.19			Core #32	
	Sandstone/siltstone - medium grey fine- to medium-grained sandstone with interbeds of siltstone, which get thinner and phase after 2/3 to dominant sand; cherty; abrupt base.	0.93				
	Siltstone - dark grey, sandy, with wavy base.	0.09				
	Sandstone - fine- to medium-grained, medium grey, with small silt clasts; fair porosity; abrupt base.	0.23 Box 21/22 0.25				
	Sandstone - dark grey, very silty fine-grained sandstone, very gradually phasing out silt towards the base and adding more medium-grained sand; very bioturbated.	0.63 DD 817 2.68			-----	
	Sandstone - fine- to medium-grained, with darkish grey "clouds" which indicate siltier layers chewed up by bioturbation; many large burrows in cross-section.	0.42 DD 827 0.29			Core #33 -----	
		Box 22/23 2.60			Core #34	
	Sandstone - medium-grained, with thin coarser-grained sections which show fair porosity; large burrows increasing with depth; abrupt, wavy base.	0.24 DD 837 1.20			-----	
					Core #35	

PRIORITY VENTURES LTD.

CORE DESCRIPTION

BOREHOLE: D-2A BY: Dirk Meckert, Ph.D. DATE: March 12, 2002

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - darkish-grey, silty and fine-grained at top; towards medium grey, medium- to coarse-grained at base; moderately bioturbated; some large silt clasts; abrupt base.	0.39 Box 23/24 0.36				
	Sandstone - darkish, silty and fine-grained, to medium grey and coarse-grained at base; no bioturbation; erosional base.	0.23				
	Sandstone - fine-grained, darkish grey, silty, very bioturbated; very uniform throughout.	0.93 DD 847 0.71			-----	
	Sandstone siltstone (50:50) - fine-grained sandstone with no visible bioturbation, grading into siltstone/mudstone at base.	0.36			Core #36	
"Distinct"	Top black cherty mudstone, middle medium-grained sandstone (brownish(limonitic) oxidised?) black silty mudstone at base.	0.10				
	Sandstone - medium-grained, medium grey, very uniform except for silty 2 cm at top; erosional base.	1.11				
	Sandstone - fine-grained, silty; from 60% silt to 30% at base; darkish, bioturbated; abrupt wavy base.	0.64				
	Sandstone - medium-grained, medium grey, no bioturbation.	0.11 Box 24/25 0.06				
	Siltstone/sandstone - dark grey siltstone interbedded with medium-grained sandstone; some layers crossbedded; siltier at base; abrupt, wavy base.	0.03 DD 857 0.12			-----	
	Sandstone - medium- to coarse-grained, medium grey, very uniform; cherty section in centre of unit; healed crack at 70° in cherty section; large leaf fragment at 1.20m.	1.90			Core #37	
	Mudstone - dark, silty; grading into fine-grained sandstone at base.	0.14				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - fine-grained, darkish grey, very silty, grading into fine- to medium-grained sandstone; some small silt clasts; abrupt, wavy base.	0.81				
	Sandstone - fine-grained, dark grey, silty; bioturbated.	0.11 DD 867 0.92			----- Core #38	
	Sandstone fine-grained, dark grey, sharp wavy base.	0.32 Box 25/26 0.24				
	Sandstone fine-grained, silty, very bioturbated; excellent porosity near base; gradational base	1.09				
	Sandstone medium-grained, medium grey.	0.39				
	Siltstone dark grey, fine sandy streaks; sharp base.	0.09 DD 877 0.15			----- Core #39	
	Sandstone fine- to medium-grained, medium grey, some silty streaks in upper third; good porosity; water washed salty?; sharp base.	1.56				
	Sandstone fine-grained, silty; sharp base.	0.16				
	Sandstone fine-grained, medium grey, good porosity; sharp wavy base.	0.57 Box 26/27 0.24				
	Sandstone fine-grained, silty muddy streaks, rippled at top; gradational base.	0.12 DD 887 0.28			----- Core #40	
	Sandstone medium-grained, medium grey; sharp base.	0.16				
	Sandstone fine-grained, dark grey, silty streaks; erosional base.	0.31				
	Sandstone/siltstone (50:50) interbedded in thin layers, dark grey, sharp wavy base.	0.41				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone fine-grained at top, grading downward into medium-grained sandstone; sharp base.	1.40				
	Siltstone dark grey, sandy; sharp base.	0.03				
	Sandstone fine-grained, grading down to medium-grained; medium grey; erosive base.	0.54 DD 897 0.06			----- Core #41	
	Sandstone fine-grained, very silty at top; dark grey; erosional base.	0.16				
	Sandstone fine- to medium-grained, silty, medium grey; grading down into fine dark grey silty sandstone; erosive base.	0.32				
	Sandstone fine-grained, silty, dark grey, bioturbated; gradational base.	0.37 Box 27/28 0.50				6"
	Sandstone fine-grained, dark grey, silty streaks throughout; gradational base.	0.84				
	Sandstone fine-grained, dark grey, silty, very bioturbated; gradational base.	0.81 DD 907 1.81			----- Core #42	
	Sandstone fine- to medium-grained, medium grey; erosional base.	0.14				
	Sandstone fine-grained, silty, dark grey, bioturbated; fair porosity; salty?; *Idiomearca* (bivalve) at top of Box 29; *fish scale* 100 cm above DD 927; gradational base.	0.31 Box 28/29 0.78 DD 917 3.10 DD 927 0.58 Box 29/30 0.42			----- Core #43 ----- Core #44	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone fine-grained, medium grey; gradational base.	0.43				
	Sandstone fine-grained, silty, dark grey, bioturbated toward base; silt decreasing, medium-grain increasing.	1.42 DD 937 0.28			----- Core #45	
	Sandstone medium-grained, medium grey, lower 3/4 cherty; high-angle fracture; gradational base.	1.22				
	Sandstone fine-grained, medium grey; erosional base.	0.53				
	Siltstone dark grey with sandy streaks; sharp base	0.12				4°
	Sandstone fine-grained, silty, medium grey.	0.15 Box 30/31				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
		Box 30/31				
	Sandstone - very fine- to fine-grained, light grey, clean, with small silty intraclasts in basal 1.5 cm; abrupt base.	0.58				
	Sandstone - fine-grained, light grey, clean; gradational base.	0.24				
	Sandstone - very fine-grained, very dirty, with abundant carbonaceous plant debris.	0.06				
	Sandstone / siltstone (70:30 in top 55 cm, grading to 90:10 at base) - thin, laminated interbeds of very fine- to fine-grained sandstone and siltstone; intensely bioturbated at top and churned at base; erosional base.	0.05 DD 947 0.97			----- Core #46	
	Siltstone - ferruginous, with mudstone or siltstone intraclasts; a hardground.	0.01				
	Sandstone / siltstone laminite (60:40) - very thinly interlaminated, very fine-grained medium grey sandstone and dark grey siltstone, with abundant streaks of plant debris; moderately to intensely bioturbated; abrupt base.	0.75				
	Sandstone / siltstone (80:20 at top, grading down to 50:50 at base) - medium grey sandstone, fine-grained at top, grading down to very fine-grained at base, with interbeds of medium to dark grey siltstone; abrupt base.	1.31 DD 957 0.33			----- Core #47	
		Box 31/32 0.01				
	Sandstone - very fine- to fine-grained, light to medium grey, clean; a massive bed with a few discontinuous streaky layers of carbonaceous plant debris near base; gradational base.	2.45				
	Sandstone - fine to medium-grained, medium grey, cherty with minor quartz, clean; coarsening-downwards, slumped at base; poor intergranular porosity; abrupt base.	0.22 DD 967 1.44			----- Core #48	
		Box 32/33 0.22				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - medium- to coarse-grained, medium grey, quartz-chert as above; poor intergranular porosity; abrupt base.	1.07				
	Sandstone - coarse-grained; salt-and-pepper, with poor intergranular porosity; abrupt base.	0.04				
	Siltstone / sandstone (60:40) - very thin interbeds of medium grey, very fine-grained sandstone and dark grey siltstone; intensely bioturbated; abrupt base.	0.11 DD 977 0.28			-----	
	Sandstone - very fine-grained, medium grey, clean; gradational base.	0.55			Core #49	
	Sandstone / siltstone (70:30 at top, 95:5 at base) - intensely bioturbated medium grey, very fine- to fine-grained sandstone with thin to medium interbeds of dark grey siltstone; sandstone becomes clean at base.	2.26 DD 987 2.23				
	Sandstone / siltstone (60:40) - medium grey sandstone and dark grey siltstone; moderately to intensely bioturbated.	0.91 DD 997 1.26 Box 34/35 1.47			----- Core #50	
	Siltstone - dark grey to black; parts readily on muddy carbonaceous laminae; cross-fractures.	0.09				
	Sandstone / siltstone (50:50) - intensely bioturbated silty sandstone; erosional base.	0.22 DD 1007			-----	
	Siltstone - brown, ferruginous; a hardground; contains siltstone intraclasts; abrupt base.	0.27 0.04			Core #51	
	Sandstone - very fine-grained, medium grey, silty, sparsely bioturbated; abrupt base.	2.23				
	Siltstone / sandstone (50:50) - very fine-grained, medium grey sandstone as above with thin laminated interbeds of dark grey siltstone.	0.09 Box 35/36				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
		Box 35/36				
	Sandstone - fine-grained, medium greenish-grey, trace glauconite; occasional intensely bioturbated bands of silty sandstone, but on the whole sparsely to moderately bioturbated; core locally broken and ground; gradational base.	0.11 DD 1017 0.57			----- Core #52	
	Sandstone - fine- to medium-grained, light to medium greenish-grey, intensely bioturbated, with occasional *pelecypod* shells; gradational base.	1.31				
	Sandstone - fine- to medium-grained, as above, but moderately bioturbated; abrupt base.	0.09 DD 1027 0.78			----- Core #53	
		Box 36/37				
	Sandstone - fine- to medium-grained, medium grey, sparsely bioturbated, cleaner than above; occasional silty intraclasts; fair to good intergranular porosity; abrupt base.	0.11 1.53				
	Sandstone - very fine-grained, medium grey, silty; abrupt base.	0.10				
	Siltstone - dark grey; abrupt base.	0.02				
	Sandstone - fine-grained, light to medium grey, clean, with occasional small silty intraclasts; abrupt base.	0.52 DD 1037 0.86		315.10	----- Core #54	
	TRENT RIVER FORMATION (PUNTLEDGE MEMBER) Sandstone / siltstone (90:10) - very fine- to fine-grained, medium grey sandstone with very thin interbeds of dark grey siltstone; core broken and jumbled.	0.26				
	Siltstone - dark grey, sandy, intensely broken and ground.	0.01				
	Sandstone - very fine- to fine-grained, medium greenish-grey; sparsely to moderately bioturbated, with occasional finely-broken *shell debris*; gradational base.	0.95 Box 37/38 0.88 DD 1047			----- Core #55	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
		0.28				
	Sandstone - fine-grained, medium to dark grey, very silty, intensely bioturbated, with occasional *pelecypod* fragments; one large *Inoceramus* 3 cm above base; abrupt base.	1.44				
	Mudstone - dark grey, very silty.	0.09				
	Mudstone - medium grey, possibly bentonitic an ash band ?; intensely sheared and broken; abrupt base.	0.05				
	Sandstone - very fine-grained, dark grey, silty; abrupt base.	0.15				
	Mudstone / siltstone (50:50) - interbedded, moderately bioturbated dark grey silty mudstone and medium grey very sandy siltstone; abrupt base.	0.43				
	Sandstone - very fine- to fine-grained, medium grey, silty, intensely bioturbated; gradational base.	0.47 DD 1057			-----	
	Sandstone - fine-grained, light to medium greenish-grey, trace glauconite; clean, fair intergranular porosity; abrupt base.	0.23 Box 38/39			Core #56	3°
	Sandstone - very fine-grained, grading down to fine-grained; medium grey, very silty, intensely bioturbated; gradational base.	1.73 0.99				
	Sandstone - fine- to medium-grained, light grey, clean, sparsely bioturbated; fair intergranular porosity at top; occasional silty streaks at top; abundant fine silty intraclasts at base; abrupt base.	0.16 DD 1067 0.52			----- Core #57	
	Sandstone / siltstone (85:15) - fine- to medium-grained sandstone as above with discontinuous laminae of dark grey siltstone; abrupt base.	0.11				
	Sandstone - fine- to medium-grained, light grey, clean, with occasional thin laminae of	0.83				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	siltstone at top; fair intergranular porosity; abrupt, scoured base.	Box 39/40 0.28				
	Sandstone - very fine-grained, medium grey, silty, with a few very thin mudstone bands at top; intensely bioturbated; abrupt base.	0.96				
	Sandstone - mudstone (50:50) - very thin fining-upward beds of very fine- to fine-grained, medium greenish-grey sandstone and dark grey silty mudstone; sparsely bioturbated; gradational base.	0.08				
begin log by K.V. Slater	Sandstone - very fine-grained, medium grey, silty, with abundant carbonaceous laminae of fine plant debris; abrupt base.	1.69 DD 1077 0.05			----- Core #58	
	Sandstone - very fine-grained, medium grey, very silty, carbonised plant streaks; burrows at base; abrupt base.	1.67 Box 40/41 0.37 DD 1087 0.71			----- Core #59	
	Siltstone - dark grey.	0.02				
	Siltstone - muddy, crumbly, unconsolidated rubble; abrupt base.	0.07				
	----- *Bedding-plane shear zone, possible* ----- Siltstone - clean, with fine carbonaceous bands; basal 6 cm is bioturbated.	0.93		335.00?		
	Sandstone - very fine-grained, medium grey, very silty; gradational base.	0.48				
	Sandstone - very fine to fine-grained, medium to dark grey, silty at top, clean below, with minor carbonaceous debris.	0.92 DD 1097 0.80 Box 41/42			----- Core #60	
	Sandstone - very fine- to fine-grained, medium greenish-grey, glauconitic, with occasional small silty intraclasts near base; abrupt base.	0.70		337.10		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone/sandstone (85:15) - thin to very thin interbeds of dark grey sandy siltstone and very fine-grained silty sandstone; moderately to intensely bioturbated; abrupt base.	1.57 DD 1107 1.33	3.70	340.80	-----	6° to 10°
	Sandstone - fine- to medium-grained, medium grey, cherty, with abundant very thin silty laminae; occasional coaly streaks; sparsely bioturbated with large dark-rimmed burrows at top; abrupt base.	0.21	0.21	341.01	Core #61	
	Siltstone/sandstone (90:10 at top, grading down to 5:95 at base) - as above, but sandstones are very fine-grained at top, coarsening to fine- to medium-grained at base; occasional tiny silty intraclasts at base; abrupt base.	0.45	0.44	341.45		
	Siltstone/sandstone (70:30) - dark grey very sandy siltstone with medium interbeds of intensely-bioturbated very fine-grained silty sandstone; gradational base.	0.04 Box 42/43 0.92	0.80	342.25		
	Sandstone - fine-grained, plane-laminated, with abundant silty laminae at top, becoming massive below; sparsely bioturbated; abrupt base.	0.13 DD 1117 1.00	1.13	343.48	-----	
	Mudstone/siltstone (50:50) - dark grey, thickly-interlaminated, moderately bioturbated; abrupt base.	0.17	0.17	343.65	Core #62	
	Siltstone - dark grey, sandy, grading down to very fine-grained dark grey silty sandstone at base; abrupt base.	0.48	0.47	344.12		
	Mudstone - dark grey to black, very thin-bedded, sparsely bioturbated with small silt-filled trails; sheared at base.	0.12	0.10	344.22		
	----- *Bedding-plane shear zone, possible* -----					
	Siltstone - dark grey, very sandy, thin- to medium-bedded, moderately to intensely bioturbated; abrupt base.	0.53	0.48	344.70		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone/sandstone(80:20 at top, grading to 60:40 at base) - very thin fining-upward couplets of medium to dark grey siltstone and fine- to medium-grained silty sandstone; patchy sparse bioturbation; gradational base.	0.72 DD 1127 0.01	0.73	345.43	----- Core #63	
	Sandstone - fine- to medium-grained, dark grey, silty, poorly sorted; intensely bioturbated; abrupt base.	0.36 Box 43/44	0.36	345.79		
	Sandstone - medium- to coarse-grained, medium grey, quartz-chert, clean, with fair intergranular porosity; low-angle cross-bedded; two rootlets at 0.19 m and 0.25 m below top; gradational base.	0.96	0.96	346.75		
	Sandstone - medium-grained, medium to dark grey, with alternating clean and silty bands; patchy sparse bioturbation; abrupt base.	1.43	1.43	348.18		
	Sandstone - medium- to coarse-grained, light to medi grey, clean; fair intergranular porosity; probably a steep planar crossbed; erosional base.	0.12	0.12	348.30		30
	Sandstone - very fine- to fine-grained, grading down to medium-grained at base; medium grey, silty at top, cleaner towards base; occasional carbonaceous streaks; patchy moderate bioturbation; abrupt base.	0.17 DD 1137 0.35	0.52	348.82	----- Core #64	
	Sandstone - fine-grained, medium grey, silty, with occasional carbonaceous streaks; gradational base.	0.06	0.06	348.88		
	Sandstone - fine-grained, medium grey, slightly ferruginous, intensely bioturbated; gradational base.	0.14	0.14	349.02		
	Siltstone/sandstone (90:30 at top, grading down to 50:50 at base) - very thin interbeds of moderately to intensely bioturbated, dark grey, very sandy siltstone and medium grey, medium- to coarse-grained sandstone with much *shell hash*; abrupt base.	0.85	0.85	349.87		
	Sandstone - fine- to very coarse-grained, alternating very thin fine and coarse bands,	0.28	0.28	350.15		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	medium grey; moderately to intensely bioturbated; much *shell hash*; gradational base.					
	Sandstone - fine- to medium-grained, medium grey, slightly silty; gradational base.	0.03 Box 44/45 0.05	0.21	350.36		
	Sandstone - coarse- to very coarse-grained, medium grey, quartz-chert; no visible porosity; sparsely to moderately bioturbated; erosional base.	0.22	0.22	350.58		
	Siltstone/sandstone (80:20) - thin interbeds of dark grey siltstone with carbonaceous streaks, and medium- to very coarse-grained sandstone with much *shell hash*; moderately to intensely bioturbated; gradational base.	0.83	0.79	351.37		
	Sandstone - fine- to medium-grained, medium to dark grey, very silty, moderately to intensely bioturbated; much fine *shell hash* at top; abrupt base.	0.19 DD 1147 0.50	0.68	352.05	------ Core #65	
	Siltstone - dark grey, sandy at top and base; moderately to intensely bioturbated, with occasional carbonaceous streaks; abrupt base.	1.06	1.06	353.11		
	Sandstone - very fine-grained and silty at top, grading down to medium-grained and slightly silty below; medium grey; moderately bioturbated at top; abrupt base.	0.42	0.42	353.53		
	Sandstone - very fine-grained at top; fine-grained at base; medium to dark grey, silty throughout, moderately bioturbated; abrupt base.	0.70	0.70	354.23		
	Siltstone - dark grey, very sandy, intensely bioturbated; gradational base.	0.13	0.13	354.36		
	Sandstone - very fine-grained at top, fine-grained below, medium to dark grey, very silty, moderately to intensely bioturbated; gradational base.	0.40 DD 1157 0.04 Box 45/46 0.09	0.52	354.88	----- Core #66	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - fine- to medium-grained, medium grey, locally silty; thin to medium coarsening-upward beds, slightly carbonaceous, sparsely bioturbated, with occasional coarse plant debris; poor to fair intergranular porosity; abrupt, churned base.	0.96	0.96	355.84		4°
	Sandstone - medium-grained, medium grey, cherty, mostly clean with occasional silty streaks; trace glauconite; occasional silty intraclasts, sparsely bioturbated; fair intergranular porosity; gradational base.	0.96	0.96	356.80		
	Siltstone - dark grey, very sandy, with occasional irregular contorted bands of fine-grained, bioturbated sandstone (sandstone dykes?); sparsely bioturbated at top, with occasional *fish scales*; abrupt, churned base.	0.98 DD 1167 1.47 Box 46/47 1.61 DD 1177 0.72	4.50	361.30	---- Core #67 ---- Core #68	
	Sandstone - coarse-grained, light to medium grey, silty, slightly carbonaceous; abrupt base.	0.15	0.15	361.45		
	Siltstone - dark grey to black, very sandy; moderately to intensely bioturbated, with 15% thin bands of very fine-grained sandstone in top half; abrupt base.	0.70	0.65	362.10		
	Sandstone - medium- to coarse-grained, medium grey, very silty, cherty, no visible porosity; abrupt base.	0.15	0.15	362.25		
	Mudstone/sandstone, fine- to medium-grained (70:30) - thickly-interlaminated, flaseroid dark grey silty mudstone and slightly glauconitic sandstone; intensely bioturbated and churned at base; abrupt base.	0.44	0.63	362.88		5°
	Mudstone - black, slightly carbonaceous; abrupt base.	0.01	0.01	362.89		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	TRENT RIVER FORMATION (COWIE MEMBER)					
	Sandstone - very fine-grained, grading down to medium-grained, medium to dark grey, very silty at top, carbonaceous, moderately to intensely bioturbated; abrupt base.	0.15				
	Siltstone - dark grey, carbonaceous, bentonitic, slightly sheared; abrupt base.	0.06				
	Sandstone - medium- to coarse-grained, light to medium grey, clean, granitic, fair intergranular porosity; erosional base.	0.17				
	Sandstone - fine-grained, medium to dark grey, very silty, with occasional carbonaceous laminae; no visible porosity.	0.30 Box 47/48				
Begin log by K.V. Slater, July 25th	Sandstone - fine-grained, grading down to coarse-grained at base; abrupt base.	0.23 DD 1187 0.01			----- Core #69	10°
	Sandstone - fine- to medium-grained, medium grey, clean; basal 6 cm is burrowed; gradational base.	1.47				
	Sandstone - fine-grained, medium grey, becoming dirty, with carbonaceous plant debris; more plant debris in basal 20 cm; broken at base of run above DD 1207; gradational base.	0.43 DD 1197 1.03 Box 48/49 1.80 DD 1207 0.20			------ Core #70 ----- Core #71	8°
	Sandstone / siltstone (50:50) - thin, laminated interbeds of medium grey, very fine- to fine-grained sandstone and dark grey siltstone; intensely bioturbated.	2.34 Box 49/50				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - very fine- to fine-grained, medium grey, with abundant plant debris in broken laminae; intensely bioturbated in part; churned base.	0.60 DD 1217 2.96			----- Core #72	
		DD 1227 0.62			----- Core #73	
	Sandstone - medium-grained, light to medium grey, dirty; some dark-rimmed burrows and plant debris; abrupt base.	0.18 Box 50/51 0.25				
	Sandstone - fine-grained, dark grey, silty; abrupt base.	0.11				
	Sandstone - medium-grained, dark grey, clean, churned or sparsely bioturbated; some carbonaceous bands; abrupt base.	1.07				
	Sandstone - fine- to medium-grained, medium to dark grey; burrowed and bioturbated zones; carbonaceous laminae; slanted abrupt base.	0.42				
Begun log by C.G. Cathyl-Bickford	Sandstone - medium-grained, fining downwards to fine-grained, medium grey, with carbonaceous laminae; a few dark thin carbonaceous bands near base, less than 2 mm thick; abrupt base.	0.43 DD 1237 0.90		380.10	----- Core #74	
	TRENT RIVER FORMATION (COUGARSMITH MEMBER) Siltstone / sandstone (50:50) - thin irregular interbeds of medium to dark grey sandy siltstone and fine- to medium-grained light grey sandstone, locally with abundant carbonaceous laminae; sparsely to moderately bioturbated; abundant coaly plant trash in basal 4 cm; erosional base.	0.78				
	Sandstone - very fine-grained, medium grey, thin-bedded, silty, with carbonaceous streaks at top; light brownish-grey; churned base.	0.36				
	Sandstone / siltstone (90:10) - very fine-grained, medium grey sandstone with downward increasing interbeds of dark grey siltstone; abundant finely-broken plant debris; trace glauconite at top; intensely bioturbated; gradational base.	0.44 Box 51/52				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone / siltstone (60:40) - very fine-grained, medium to dark grey sandstone and dark grey, argillaceous, thinly-laminated siltstone; trace glauconite; sparsely bioturbated; abrupt base.	0.44				
	Sandstone / siltstone (80:20, grading down to 50:50 at base) - thinly-interbedded very fine-grained, medium grey sandstone and dark grey siltstone; mostly clean; sparsely bioturbated; abrupt base.	0.57 DD 1247 0.10			----- Core #75	
	Sandstone / mudstone (60:40) - thinly-interbedded very fine- to fine-grained light grey sandstone and dark grey silty mudstone; locally carbonaceous; gradational base.	0.71				
	Siltstone / mudstone / sandstone (60:20:20) - thin interbeds as above, sparsely burrowed; more bubbling core; bubbles general throughout surface; gradational base.	0.22				
	Sandstone / siltstone (90:10) - fine-grained light grey cherty sandstone with thick laminae of medium grey carbonaceous siltstone; gradational base.	0.61				5°
	Sandstone - fine-grained, light grey, silty; abrupt base.	0.24				
	Sandstone / siltstone / mudstone (50:45:5) - very fine-grained sandstone with thin interbeds of sparsely bioturbated siltstone and mudstone; with bands of carbonaceous debris; gradational base.	0.76				
Begin log by K.V. Slater	Sandstone - very fine-grained, cherty; silty in top half; with thin carbonaceous laminae and trace fossils; a few small sand-filled burrows, abrupt base.	0.62 DD 1257 0.03			----- Core #76	
	Siltstone / mudstone laminite - very thinly laminated, occasionally burrowed; abrupt base.	0.25 Box 52/53 0.05				
	Siltstone /mudstone / sandstone (60:20:20) - thinly-interbedded, sparsely bioturbated; occasional burrows; sharp base.	0.29				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone / sandstone / mudstone (60:30:10) - sparsely bioturbated; with light grey, clean, fine-grained sandstone in middle of unit; abrupt base.	0.79				
	Siltstone - dark grey, slightly sheared and broken at top; intensely sheared cornflakes at base; possible bedding-plane shear; polished base.	0.05				
	----- *Bedding-plane shear zone, possible* -----					
	Siltstone - dark grey, sandy; gradational base.	0.01		386.25		
	Sandstone / siltstone (70:30) - very fine-grained, dark grey sandstone and dark grey siltstone; intensely bioturbated, producing a 'silty sandstone'; erosional base.	0.21	0.21	386.46		
	COMOX FORMATION (DUNSMUIR MEMBER)					
	Sandstone - fine-grained, light to medium grey, clean, with a few carbonaceous laminae; abrupt base.	1.15	1.15	387.61		
	Sandstone - fine- to medium-grained, with *Inoceramus*; gradational base.	0.13	0.13	387.74		
	Sandstone - medium- to coarse-grained, medium grey to greenish-grey, cherty; silty or micaceous, possible trace glauconite; hackly fracture; poorly cemented; excellent intergranular porosity; possibly burrowed; abrupt base.	0.15 DD 1267 0.02	0.14	387.88	------ Core #77	
	Sandstone - coarse-grained, medium grey, cherty, clean, excellent intergranular porosity; bubbling gas throughout (mud returns were surging while coring); erosional base.	1.31 Box 53/54 0.14	1.45	389.33		
	Siltstone / sandstone laminite - possibly intraclastic dark grey siltstone and very fine-grained, dark grey sandstone; intensely bioturbated in part.	0.65	0.65	389.98		
	Sandstone - fine- to medium-grained, medium grey, clean to intensely-bioturbated; carbonaceous, with large *Pelecypodichnus* burrows.	0.77	0.77	390.75		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - medium- to coarse-grained, medium grey, with argillaceous laminae; gradational base.	0.19 DD 1277 0.04	0.23	390.98	----- Core #78	
	Sandstone - fine- to medium-grained, medium grey, clean; abrupt base.	0.05	0.05	391.03		
	Sandstone / mudstone (50:50) - very thinly-interbedded fine-grained, light grey sandstone and very soft pebbly mudstone; rubble; probable core loss.	0.10	0.07	391.10		
	----- *Bedding-plane shear zone, possible* ----- Sandstone - fine-grained, light grey, clean; abrupt base.	0.13	0.13	391.23		
	Sandstone / siltstone (50:50) - sandstone as above, with medium grey, intensely bioturbated siltstone; gradational base.	0.46	0.46	391.69		
	Sandstone - fine-grained, clean, with carbonaceous laminae; gradational base.	0.79	0.79	392.48		
	Sandstone - very fine-grained, grading down to fine-grained, clean, with occasional dark silty intraclasts; abrupt base.	0.46	0.46	392.94		
	Siltstone / sandstone (50:50) - very fine-grained sandstone with silt-filled burrows; intensely bioturbated.	0.25	0.25	393.19		
	Sandstone - fine-grained, dark grey, micaceous, locally broken and ground; clean.	0.34 Box 54/55 0.47 DD 1287	0.77	393.96		
	Sandstone - very fine- to fine-grained at top; grading down to medium-grained at base; dark grey, as above, with carbonaceous laminae; sparsely bioturbated. Basal 7 cm is medium-grained, almost salt-and-pepper (light and dark grey grains), with finely disseminated flakes of plant debris; abrupt base.	3.02 DD 1297 0.72 Box 55/56 0.07			----- Core #79 ----- Core #80	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone / sandstone - thinly-interbedded dark grey sandy siltstone and medium brownish-grey, very fine-grained silty sandstone, with abundant layers of carbonised plant debris; spiral burrow at 56 cm below top; becomes muddy or carbonaceous in basal 5 cm; abrupt base.	2.27 DD 1307 1.22			----- Core #81	
	Sandstone - very fine-grained, medium grey, clean.	0.29				
	Siltstone - dark grey, sandy, flat-bedded, with abundant thin carbonaceous laminae; intensely burrowed in top 10 cm.	0 38 Box 56/57 0.50				
	Siltstone - sandy, dirty or argillaceous, with abundant layers of plant debris; generally flat, possible ripples; occasional burrows, rare bioturbated zones; dark beds at 1.42 to 1.52 m below top, cleaner toward base; gradational base.	0.58 DD 1317 2.22			----- Core #82	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
Begin log by C.G. Cathyl-Bickford	Sandstone - very fine- to fine-grained, grading down to fine-grained at base; medium greenish-grey, clean, cherty, with abundant shell fragments of *pelecypods* and possible *gastropods* at base. Abundant silty laminae in top 9 cm; erosional base.	0.74 Box 57/58 DD 1327 0.56			----- Core #83	
	Sandstone / siltstone (90:10) - medium greenish-grey, very fine- to fine-grained sandstone with very thin interbeds of siltstone; sands are variably clean or silty; very sparsely bioturbated throughout; possible *Pelecypodichnus* burrows; abundant small silty intraclasts in basal 3 cm; abrupt base.	0.63				
	Sandstone - very fine- to fine-grained, medium greenish-grey, clean, with abundant small silty intraclasts at immediate base.	0.19				
	Sandstone - very fine-grained, grading down to fine-grained at base; silty and intensely bioturbated at top; clean and very sparsely bioturbated at base; occasional carbonaceous laminae; abundant small silty intraclasts in basal 2 cm; abrupt base.	0.84				
	Siltstone - medium to dark grey, very sandy, medium- to very thick-bedded; intensely bioturbated; abundant small silty intraclasts in basal 2 cm; abrupt base.	0.85 DD 1337 0.80			----- Core #84	
	Sandstone - fine-grained, light grey, clean, sparsely bioturbated, with locally-abundant very small silt-filled burrows and occasional larger dark-rimmed burrows parallel to bedding; fair intergranular porosity; this sand did not bubble gas but the underlying siltstones did; abundant tiny intraclasts at base; abrupt base.	0.37 Box 58/59 0.13				
	Sandstone - fine- to medium-grained, light to medium grey, clean, quartz-feldspar; thin planar beds at top, massive below; looks almost cherty; fair intergranular porosity but no gas bubbles; abrupt, undulating base.	1.12				
	Sandstone - very fine- to fine-grained, light to medium greenish-grey; silty and very carbonaceous at top and base; cleaner in middle; intensely bioturbated at top and base, but sparsely bioturbated in middle; gradational base.	0.23				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAINSIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - fine-grained, light to medium greenish-grey, clean, with locally-abundant small silty intraclasts in basal 15 cm; abrupt base.	0.46 DD 1347 0.09			-----	
	Siltstone - dark grey, carbonaceous, very sandy, moderately bioturbated at top, with occasional large dark-rimmed horizontal burrows and abundant finely-broken plant debris; planar-laminated and unbioturbated at base; gradational base. Bubbling gas - a good gas show, suggesting lack of effective permeability.	0.08			Core #85	
	Sandstone - very fine-grained at top, grading down to very coarse-grained at base, light to medium greenish-grey, a single fining-upward bed; glauconitic at base; occasional small silty intraclasts at base; erosional base locally obscured by burrows.	0.20				
	Sandstone - siltstone laminite (50:50) - medium to dark grey, locally carbonaceous; moderately to intensely bioturbated; locally glauconitic; bubbling gas; abrupt base.	0.63				
	Sandstone - siltstone (50:50) - thin to medium interbeds, essentially as above, but silts are wavy-bedded and locally are muddy with a slight brownish tinge; sands are cleaner than above and lack glauconite; abundant silty intraclasts in basal 4 cm; abrupt base.	1.03				
	Sandstone - very fine- to fine-grained, light to medium grey, cherty-appearing, silty, tight, massive, with rare *angiosperm leaf* fragments; abrupt, churned base. Core is dry but slightly salty in middle.	0.45 Box 59/60 0.45 DD 1357 0.44			-----	
	Siltstone / sandstone (50:50) - dark brownish-grey sandy siltstone with large amalgamated burrow-fills of sandstone; churned, abrupt base.	0.08			Core #86	
	Siltstone - dark brownish-grey, sandy, carbonaceous, with occasional thick bright coal bands bubbling gas; abrupt base.	0.33				
	----- Roof of Comox X coal zone -----			416.40		
-----	COAL - dull, stony, with calcite bands; broken stick; gassy.	0.02				
D2-11	Mudstone - dark grey, carbonaceous, slicked, with *Inoceramus* shell fragments.	0.02				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Mudstone - black, canneloid, hard; abrupt base.	0.02				
	COAL - dull lustrous, gassy.	0.01				
D2 1 1	Mudstone - dark brown, carbonaceous; abrupt base.	0.01				
	COAL - dull banded, gassy; abrupt base.	0.02				
	COAL - bright banded, gassy, with shell debris at top and thin ankerite films along cleat.	0.04				
	Core loss (coal)	*(0.05)*				
	COAL - dull banded, hard; broken stick.	0.06				
	COAL - dull banded, stony; gradational base.	0.01		416.66		

	Mudstone - brownish-grey, slightly carbonaceous, with slight root-disturbance at top; occasional thin bright coal bands; gradational base.	0.10				
	Siltstone - dark brownish-grey, ferruginous.	0.04				
not sampled (thick medial dirt band within X coal bed)	Mudstone - black, carbonaceous, with one thick bright coal band at top; gradational base.	0.01				
	Mudstone - dark brownish-grey, ferruginous, hard, heavy; abrupt base.	0.09				
	Mudstone - dark brownish-grey, silty, with one oblique shear; abrupt base.	0.05				
	Siltstone - dark brownish-grey, slightly carbonaceous, hard.	0.04				
	Sandstone - fine-grained, black, carbonaceous, rippled; broken stick; a crevasse-splay?	0.01				
	Mudstone - dark grey, silty, carbonaceous, hard, with listric surfaces; stick; core ground at top.	0.02				
	Mudstone - black, coaly; abrupt base.	0.01				
	Mudstone - black, carbonaceous; stick.	0.03				
	Mudstone - black, carbonaceous, with one oblique shear; broken stick.	0.03				
	Siltstone - dark grey, with occasional poorly preserved plant steams; slicked in middle; stick.	0.08				
	Mudstone - dark grey, silty, slightly carbonaceous; slightly sheared; broken stick.	0.05				
	Core loss (rock)	*(0.14)*		417.36		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING

	Core loss (coal)	*(0.13)*				
D2-2-1	COAL - dull banded, stony.	0.03				
	COAL - dull banded, stony, gassy; stick; abrupt base.	0.04				
	COAL - bright banded, with occasional pyritic flecks along cleat.	0.03				
	COAL - bright, hard, with ankerite films along cleat.	0.04		417.63		
-----	**----- Floor of Comox X coal zone -----**					
	Mudstone - dark brown, carbonaceous, dense; stick.	0.10				
	Mudstone - dark brownish-grey, silty, slightly carbonaceous, with occasional rootlets; stick.	0.04				
	Siltstone - dark grey; abrupt base.	0.06				
	Siltstone - dark grey, slightly ferruginous.	0.08				
	Siltstone - dark grey, sandy; gradational base.	0.09				
	Sandstone - very fine-grained, dark grey, silty; gradational base.	0.10				
	Sandstone - very fine-grained, dark grey; abrupt base.	0.05				
	Sandstone - very fine-grained, dark brownish-grey, ferruginous.	0.12				
	Sandstone - very fine- to fine-grained, medium to dark grey, very thin-bedded, locally silty; abrupt base.	0.09				
	Mudstone - dark grey, silty; slightly sheared; polished base.	0.22				
	Mudstone - black, carbonaceous, platy to fissile; core broken into chips; probable core loss.	0.02				
	Siltstone / sandstone (60:40) - thin to medium interbeds of dark grey siltstone and light to medium grey very fine- to fine-grained rippled sandstone; sparsely to moderately bioturbated; gradational base.	0.01 DD 1367 1.08 Box 60/61 0.40			----- Core #87	
	Sandstone / siltstone (80:20) - light grey, medium- to coarse-grained, steeply cross-bedded clean sandstone with thin interbeds of dark grey, very sandy, sparsely bioturbated siltstone; abrupt base.	0.26				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone / sandstone (65:35) - thin interbeds of dark grey sandy siltstone and medium grey, sparsely bioturbated, very fine- to fine-grained sandstone; abrupt base.	0.26				
	Sandstone / siltstone (80:20) - thin interbeds as above, sparsely bioturbated at top; sands are fine-grained; abrupt base.	0.90				
	Sandstone / siltstone (50:50) - interbedded light grey, generally clean sandstone and dark grey, locally carbonaceous siltstone; some low-angle crossbeds; abrupt base.	0.26 DD 1377 1.93			----- Core #88	
	Sandstone - siltstone / mudstone laminite (35:35:30) - planar- to wavy-bedded fining-upward beds of thickly-interlaminated light grey, rippled, very fine- to fine-grained sandstone, medium grey sandy siltstone and dark grey mudstone; very sparsely bioturbated; abrupt base.	9.43		423.50		
	Mudstone - dark grey, silty, carbonaceous; abrupt base.	0.02 Box 61/62				
	Siltstone / sandstone (90:10) - dark grey massive siltstone with occasional very thin interbeds of sparsely-bioturbated, medium grey, very fine-grained sandstone; abrupt, undulating base.	0.66 DD 1387			-----	
	Mudstone - dark grey, silty; gradational base.	0.06			Core #89	
	Mudstone - dark grey, carbonaceous.	0.08		424.75		
	----- Roof of Comox X Lower coal bed -----					
-----	COAL - dull banded; gas bubbling from core; ankerite films along cleat; abrupt base.	0.05				
	COAL - dull lustrous, hard; abrupt base.	0.04				
D2/3/1	COAL - dull banded, with ankerite films along cleat; abrupt base.	0.05				
	COAL - dull; abrupt base.	0.01				
	COAL - bright.	0.04				
-----	Mudstone - dark grey, silty, with a few rootlets and occasional thick bright coal bands.	0.07				
D2/3/2						
-----	*Core loss (coal)*	*(0.18)*				
	COAL - dull and bright; core broken and ground.	0.03				
D2/3/3	COAL - dull lustrous, hard; abrupt base.	0.05				
	Mudstone - black, canneloid, hard, pyritic; abrupt base.	0.01				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	COAL - dull and bright.	0.02				
D2 3/3	COAL - dull and bright; abrupt base.	0.05				
	COAL - dull, stony.	0.03		425.38		
-----	----- **Floor of Comox X Lower coal bed** -----					
	Mudstone - dark grey, carbonaceous; silty at base; gradational base.	0.37				
	Siltstone - dark grey, sandy, sparsely bioturbated; gradational base.	0.45				
	Sandstone - very fine-grained, dark grey, silty, moderately to intensely bioturbated; gradational base.	0.73				
	Siltstone - dark grey, sandy.	0.10				
	Siltstone - dark grey, sandy, intensely bioturbated.	0.75				
		DD 1397			-----	
		0.57			Core #90	
	Mudstone - white, bentonitic, silty; probable ash band.	0.02				
	Siltstone - dark grey, sandy, intensely bioturbated; as above.	0.12				
		Box 62/63				
	Siltstone - dark grey to black, sandy, carbonaceous, with abundant finely-broken plant debris, grading down to very fine-grained, intensely bioturbated sandstone; gradational base.	1.13		429.62		
	Sandstone fine to medium-grained at top, grading down to medium to coarse-grained at base; light grey, clean; intensely bioturbated at top; abrupt base.	1.19				
		DD 1407			-----	
		2.12			Core #91	
		Box 63/64				
		0.90				
		DD 1417			-----	
		0.45			Core #92	
	Sandstone fine-grained; light grey at top, becoming medium grey and slightly carbonaceous toward base; abrupt base.	0.88				
	Sandstone / mudstone (50:50) - interchurned and burrowed black carbonaceous mudstone and fine-grained sandstone; abrupt base.	0.06				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Mudstone - black, carbonaceous, with occasional thick bright coal bands.	0.08				
	Mudstone - black and carbonaceous at top, grading down to dark grey and silty at base.	0.46				
	Siltstone - dark grey; very sandy at base; locally moderately to intensely bioturbated; gradational base.	0.96				
	Sandstone - very fine-grained, sparsely to moderately bioturbated and silty at top; fine- to medium-grained and clean below; gradational base.	0.03 DD 1427 0.52 Box 64/65			----- Core #93	
	Sandstone - fine to medium-grained at top, becoming medium- to coarse-grained at base; occasional carbonaceous streaks; locally sparsely bioturbated; abrupt base.	2.15				
	Sandstone - fine- to medium-grained at top, grading to medium-grained at base; light grey, clean, quartz-basalt; abrupt base.	0.44 DD 1437 1.85 Box 65/66			----- Core #94	
	Sandstone - fine-grained, moderately bioturbated and silty at top, becoming medium- to coarse-grained and clean below; light grey; abrupt base.	0.31				
	Sandstone - medium-grained at top, grading down to coarse-grained at base; light to medium grey, with occasional very thin carbonaceous streaks; moderately bioturbated in basal half; abrupt base.	0.57 DD 1447 0.23			----- Core #95	
	Sandstone - very fine-grained, medium grey, silty, rippled, with flaseroid streaks of dark grey carbonaceous mudstone; abrupt base.	0.05		443.00		
-----	**----- Roof of Comox Y coal bed -----**					
	COAL - bright, with sand-filled burrows making 30% of rock by volume; abrupt base.	0.01				
D2-41	COAL - bright banded, with 40% sand-filled burrows; slightly sheared at top; stick.	0.03				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
D2-4-1	COAL - bright; broken stick.	0.02				
	Sandstone - fine-grained, black, coaly, rippled.	0.01		443.07		
-----	COAL - dull and bright, bubbling gas; abrupt base; stick.	0.02				
	COAL - dull and bright, with 20% large burrow-fills of pyritic sandy siltstone.	0.01				
D2-4-2	COAL - dull banded; broken stick; probable core loss.	0.03		443.13		
	Core loss (coal)	*(0.29)*		443.42		
-----	COAL - dull; abrupt base; does not part freely from underlying mudstone.	0.01				
	Mudstone - medium brown, silty, bentonitic (an ash band); rooty and churned; abrupt base; does not part freely from underlying coal.	0.01				
D2-4-3	COAL - dull banded; stick.	0.01		443.45		

D2-4-4	COAL - bright banded, with occasional large pyrite nodules; slightly sheared; broken.	0.10		443.55		
-----	**----- Floor of Comox Y coal bed -----**					
	Mudstone - black, coaly, with abundant very thin bright coal bands; broken stick.	0.04				
	Mudstone - dark brown, carbonaceous, rooty, sheared and badly broken; some root-disturbance; probable seatearth.	0.05				
	Siltstone - dark brown, carbonaceous; sheared at base.	0.03				
	Mudstone - dark brown, silty, carbonaceous, rooty; slightly sheared.	0.03				
	Siltstone - dark brownish-grey, slightly carbonaceous, with abundant finely broken plant debris; gradational base.	0.50				
	Siltstone - dark grey, very sandy; gradational base.	0.25				
	Sandstone - fine-grained, medium grey, silty, intensely bioturbated at top; grades down to medium-grained, light grey, clean, sparsely bioturbated at base; glauconitic at base; abrupt base.	0.44				

SAMPLES	CORE DESCRIPTION: LITHOLOGY -- GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone / siltstone (50:50 at top, 70:30 at base) - thin interbeds of medium grey, very fine- to fine-grained, locally-rippled sandstone and siltstone; intensely bioturbated at top, declining to moderately bioturbated below; abrupt base.	0.89				
	Mudstone - dark grey, silty; badly broken; probable core loss.	0.01 DD 1457			-----	
	Siltstone / sandstone (70:30) - thin interbeds as above; abrupt base.	0.26 Box 66-67			Core #96	
	Siltstone / sandstone (80:20) - dark grey siltstone with very thin interbeds of very fine-grained, locally-rippled sandstone; sparsely to moderately bioturbated throughout, with small mud-filled burrows; occasional slicks and calcite near base (compactional faulting?); abrupt base.	1.71				
	Siltstone / COAL (50:50) - thickly interlaminated rippled sandy siltstone and bright coal; slightly sheared.	0.02				
not sampled	COAL / mudstone (60:40) - thickly interlaminated bright coal and hard black canneloid mudstone; gradational base.	0.03				
	Mudstone - black, canneloid, lustrous, hard; gradational base.	0.01				
	Sandstone - fine-grained, medium grey, with occasional finely-broken plant debris; a few tiny rootlets; abrupt base; does not part readily from underlying coal.	0.04		448.31		
-----	----- **Roof of Comox Y Lower coal bed** -----					
D2-5-1	COAL - bright banded, gassy, slicked at base.	0.03		448.34		
-----	----- **Floor of Comox Y Lower coal bed** -----					
	Mudstone - black, coaly, slicked; may be slumped.	0.02				
	Mudstone - black, carbonaceous, slightly sheared and slicked; may be core loss below.	0.04				
	Mudstone - dark grey, silty, slightly carbonaceous, dense; with locally abundant finely-broken plant debris; gradational base.	0.26				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone / sandstone laminite (90:10 at top, 50:50 at base) - dark grey sandy siltstone and medium to dark grey, rippled, very fine-grained sandstone; gradational base.	0.15				
	Sandstone - fine- to medium-grained, light grey, rippled, with abundant flaseroid silty laminae; gradational base.	0.02 DD 1467 0.01			-----	
	Sandstone - medium- to coarse-grained, clean, quartz-basalt; gradational base.	0.99			Core #97	
	Sandstone - medium- to coarse-grained, clean, quartz-basalt, with abundant *Macaronichnus* burrows; erosional base.	0.39				
	Sandstone - medium- to coarse-grained, clean, quartz-basalt; one coarse coalified plant stem with pyrite coating at immediate top; gradational base.	0.05 Box 67/68 0.29				
	Sandstone - medium- to coarse-grained, clean, quartz-basalt, with abundant *Macaronichnus* burrows; abrupt base.	1.06				
	Sandstone - medium-grained at top, becoming coarse-grained at base; abundant finely-broken plant debris throughout; light to medium grey with slight greenish tinge; may be slightly silty and more basaltic than overlying beds; a few very small silty intraclasts at base; abrupt base.	0.15 DD 1477 0.37			----- Core #98	
	Sandstone - medium-grained, light grey, clean; abrupt base.	0.11				
	Sandstone - medium- to coarse-grained at top, becoming medium-grained below; light grey, clean, massive, with very few *Macaronichnus* burrows; carbonised plant debris at immediate top; abrupt base.	2.03				
	Sandstone fine- to medium-grained, light grey, clean; abrupt base.	0.35 Box 68/69 0.18				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone - alternating thin fine- to medium-grained and coarse-grained beds; low-angle crossbeds; clean, with occasional carbonaceous streaks; abrupt base.	0.12 DD 1487 0.37			-----	
	Sandstone - medium- to coarse-grained, light grey, clean; abrupt base.	0.26			Core #99	
	Sandstone - alternating very thin fine- to medium-grained and coarse- to very coarse-grained wavy beds, with abundant carbonised plant trash at top; abrupt base.	0.17				
	Sandstone - medium- to coarse-grained at top, grading down to very fine-grained at base; light grey, clean, with locally-abundant carbonaceous streaks consisting of coarse plant debris with pyrite films; sparsely bioturbated at base, with large dark-rimmed horizontal burrows; abrupt base, slightly obscured by burrowing.	1.57				
	Sandstone / siltstone laminite (70:30) - medium grey, very fine-grained sandstone and dark grey flaseroid siltstone; sparsely bioturbated; gradational base.	0.05				
	Siltstone / sandstone laminite (70:30) - medium to dark grey siltstone and very fine-grained flaseroid sandstone; sparsely to moderately bioturbated; gradational base.	0.25				
	Sandstone - fine-grained, light to medium grey, slightly silty; intensely bioturbated at top; gradational base.	0.25				
	Sandstone - fine- to medium-grained, light grey, clean, massive; gradational base.	0.17 DD 1497 0.90 Box 69/70 0.06			----- Core #100	
	Sandstone - fine- to medium-grained, grading down to very fine-grained at base, with locally-abundant carbonaceous streaks and occasional coal spars; one large dark-rimmed burrow; abrupt base.	0.69		459.72		12°
----- D2/6-1	COAL and sandstone - bright banded coal with thin ankerite films on cleats, and 40% isolated ripples and occasional burrow-fills of medium-grained, black carbonaceous sandstone; proportion of sand declines downward to 5% at base; stick. No core loss at top; some grinding at base.	0.10		459.82		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
D2 6 1	*Core loss (coal)*	*(0.17)*		459.99		

	Mudstone - dark grey, occasional rootlets; core is disked and appears to be very thin-bedded;	0.30				
D2 6 2	probable seatearth; stick and broken stick.					
	Mudstone - black, coaly, soft, fissile, slightly sheared, cloddy; core badly broken.	0.05				
	Mudstone - dark grey, carbonaceous, hard; abrupt base.	0.03				
	Mudstone - black, canneloid, with occasional thin bright coal bands; abrupt base.	0.01		460.38		
----	**----- Roof of Comox Z coal bed -----**					
	COAL - dull banded, massive, hard; abrupt base.	0.04				
D2 6 3	Mudstone - black, canneloid; abrupt base.	0.02			*Comox Z coal bed, net coal*	
	COAL - dull, massive, hard; stick.	0.12			*0.98 [illegible] m*	
	COAL - dull banded, massive, hard, with cleat spacing 10 to 15 mm; calcite films on cleat.	0.15		460.71		
-----					*Bottle*	
	Mudstone - black, coaly, with thick bright coal band[illegible] stick.	0.02			*composite*	
D2 6 4	*Core loss (rock)*	*(0.03)*			*sample 11602*	
	Mudstone - medium brown, rooty, soft, crumbly; a seatearth.	0.09			*from 460.38 to*	
	Mudstone - dark brownish-grey, silty, rooty at top; hard.	0.09			*462.13 m*	
	Mudstone - dark brown, carbonaceous, slightly sheared; abrupt base.	0.02		460.96		

	COAL - dull banded, gassy, dry in centre of stick.	0.04				
D2 6 5	Mudstone - black, canneloid; abrupt base.	0.01				
	COAL - dull banded, massive, hard; cleat spacing [illegible]30 mm; gassy; abrupt base.	0.04				
	COAL - dull banded, as above; abrupt base; stick.	0.06				
	COAL - bright, friable; cleat spacing 8 to 20 mm; stick.	0.02		461.13		
-----		DD 1507				
D2 6 6	COAL - dull lustrous (canneloid?) with a few rootlets; abrupt base; does not part freely at	0.02		461.15	-----	
-----	base.				Core #101	
D2 6 7	COAL - dull and bright, with abundant pyrite on cleat; abrupt base.	0.04				
	Mudstone - black, canneloid, hard; stick.	0.01				
	COAL - bright banded, with calcite on closely-spaced cleats; gassy; abrupt base.	0.03				
	COAL - dull, stony, massive, hard; abrupt base; does not part freely at base.	0.02		461.25		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING

	Mudstone - black, canneloid; polished base; stick.	0.02				
D2 6 8	Mudstone - black, carbonaceous, with listric surfaces at top and base; abundant thin bright coal bands; badly broken at base; broken stick.	0.08				
	Core loss (rock)	*(0.05)*				
	Mudstone - dark brownish-grey, rooty, sheared, soft.	0.06				
	Mudstone - black, carbonaceous.	0.01				
	Mudstone - dark brown, carbonaceous, intensely sheared; soft and sticky.	0.03				
	Mudstone - black, canneloid; gassy.	0.02		461.52		

	Core loss (coal)	*(0.07)*				
D2 6 9	COAL - dull and bright; cleat 20 mm; broken stick.	0.02				
	COAL - dull, hard; cleat 45 mm; gassy; stick.	0.02				
	Mudstone - black, canneloid; abrupt base.	0.02				
	COAL - dull banded, hard; cleat 20 mm; abrupt base.	0.04				
	COAL - dull and bright, hard; cleat 8 to 15 mm; stick.	0.05				
	COAL and shale (60:40) - bright banded coal and black canneloid mudstone ground and mixed together in core box; slightly sheared.	0.05		461.79		

	Mudstone - black, carbonaceous, slicked at top; rooty; abrupt base.	0.09				
D2 6 10	Siltstone - dark brown, ferruginous.	0.01				
	Mudstone - black, coaly, with thin bright coal bands; sheared plates and cornflakes.	0.01		461.90		

	Mudstone - coaly, with occasional bright coal bands, massive, hard; abrupt base.	0.07				
D2 6 11	COAL - bright banded, massive, hard; cleat 30 mm; stick; core ground at base - possible core loss.	0.05		462.02		
	Core loss (coal)	*(0.10)*				
	COAL - bright; abrupt base.	0.01				
	Sandstone - very fine-grained, black, coaly, rippled; abrupt base.	0.01				
	COAL - dull and bright, slicked at base; abrupt base.	0.01		462.15		
-----	**----- Floor of Comox Z coal bed -----**					

SAMPLES	CORE DESCRIPTION: LITHOLOGY — GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone - dark brown, ferruginous, rooty, heavy, hard; gradational base.	0.11				
	Sandstone - fine-grained, medium grey, carbonaceous, rooty; abrupt base.	0.16				
	Sandstone - medium-grained, grading down to very fine-grained in basal 10 cm; light greenish-grey, locally silty; slumped in middle; abrupt base.	0.86				8°
	Sandstone - fine- to medium-grained, light greenish-grey, clean; abrupt base.	0.09 Box 70/71 0.08				
	Sandstone - medium-grained, light grey, quartz-basalt, clean; abrupt base.	0.80 DD 1517 0.08			-----	8°
	Sandstone - medium- to coarse-grained, light grey, clean, with occasional *Macaronichnus* burrows near base; gradational base.	0.90			Core #102	
	Sandstone, medium- to coarse-grained, light grey, clean, with abundant *Macaronichnus* burrows; abrupt base.	1.51				
	Sandstone, medium-grained, light grey, clean, with occasional *Macaronichnus* burrows; abrupt base.	0.56 DD 1527 0.05			----- Core #103	
	Sandstone - fine- to medium-grained, light to medium grey; locally slightly silty; abrupt base.	0.36 Box 71/72 0.53				15°
	Sandstone - very coarse-grained, grading down to medium- to coarse-grained at base; light grey, clean, with locally-abundant very small flat silty intraclasts; abrupt base.	0.59				
	Sandstone - alternating very thin beds of medium-grained and very fine- to fine-grained light to medium grey sandstone; abrupt base.	0.73				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone / siltstone laminite (80:20) - medium greenish-grey, very fine- to fine-grained sandstone with abundant thin to very thin laminae of black coaly siltstone; locally moderately bioturbated and churned; abrupt base.	0.55				
	Sandstone - fine- to medium-grained, becoming coarse-grained and gritty at base; with occasional silty carbonaceous laminae in top half; sparsely bioturbated at top; abrupt base.	0.19 DD 1537 0.47			---- Core #104	
	Sandstone - medium-grained, alternating clean and slightly silty phases; sparsely bioturbated at base; erosional base.	1.33 Box 72/73 0.92		473.20		
	Sandstone - fine- to medium-grained, medium greenish-grey; slumped and carbonaceous at top (possible traction structure); abrupt base.	0.19				
	Mudstone - siltstone / sandstone (70:30:0 at top, 20:70:10 at base) - thin to medium-bedded, sparsely to moderately bioturbated, with occasional ferruginous bands (possibly concretions); this is overall a monotonous and dirty unit; abrupt base.	0.06 DD 1547 2.35			---- Core #105	
	Siltstone - dark grey, very sandy, intensely bioturbated, with occasional isolated flaseroid sandy ripples toward top; gradational base.	0.77 DD 1557 0.15 Box 73/74			---- Core #106	
	Sandstone - dark grey, very silty, with occasional flaseroid ripples; sparsely bioturbated; abrupt base.	0.42				5°
	Siltstone - dark grey, very sandy, moderately bioturbated; abrupt base.	0.12				
---- D2-7-1 ----	Mudstone - black, coaly, with abundant thin and thick bright coal bands and occasional pyritic streaks; abrupt base; parts readily at base.	0.08		476.97		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING

	COAL - dull lustrous, with 6 mm fusain band at top; ankerite on cleats; slightly sheared;	0.05		477.02		
D2-7-2	slicked base.					

	Mudstone - dark brownish-grey, silty, slightly sheared at base, with occasional pyritic streaks	0.12		477.14		
D2-7-3	in top half; slicked base; parts readily at base.					
-----	**----- Roof of Comox No.1 Rider coal bed -----**					
	Core loss (coal)	*(0.29)*			*Comox No.1 Rider coal bed - net coal 1.08 / 1.56 m*	
D2-7-4	Mudstone - black, canneloid, with occasional bright coal bands.	0.04		477.47		

	Mudstone - black, canneloid, hard; abrupt base.	0.02				
D2-7-5	Mudstone - dark brownish-grey; abrupt base.	0.05				
	Mudstone - dark brownish-grey, silty, with *plant stems*; abrupt base.	0.08				
	Mudstone - dark brown, carbonaceous, tough; stick.	0.04				
	Core loss (rock)	*(0.15)*		477.81		

	COAL - dull banded, stony; abrupt base; does not part readily at base.	0.11				
D2-7-6	Mudstone - dark brown, carbonaceous; sheared at base; stick; probably no core loss here.	0.03		477.95		

	COAL - dull banded; abrupt base.	0.04				
D2-7-7	COAL - dull, with trace pyrite; ankerite on cleat; abrupt base.	0.03				
	COAL - dull lustrous; gradational base.	0.02				
	COAL - dull lustrous, with abundant pyrite on cleat; gradational base.	0.02				
	COAL - dull lustrous; abrupt base.	0.04				
	COAL - dull and bright, hard; with calcite on cleats; stick.	0.13		478.23		

	COAL - dull and bright; stick.	0.05				
D2-7-8	COAL - dull banded; abrupt base.	0.02				
	COAL - bright; stick.	0.03				
	COAL - dull and bright; abrupt base.	0.06				
	COAL - dull; abrupt base.	0.02				
	COAL - dull banded; stick.	0.01		478.42		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING

	COAL - dull, stony; stick.	0.02				
D2 7 9	COAL - dull and bright, with pyrite blebs; stick.	0.02				
	Mudstone - black, canneloid; broken stick.	0.02				
	COAL - dull banded; stick.	0.03				
	COAL - dull, stony; stick.	0.02				
	Mudstone - dark brown, carbonaceous; slightly sheared; stick.	0.01				
	COAL - bright banded; stick.	0.02				

	Mudstone - black, carbonaceous, with occasional thick bright coal bands; sheared at base.	0.04				
D2 7 10	COAL - bright; sheared at base.	0.01				
	Core loss (dirty coal)	*(0.09)*		478.70		
-----	**----- Floor of Comox No.1 Rider coal bed -----**					
	Mudstone - dark brown, carbonaceous, with occasional finely-broken plant debris and occasional rootlets; gradational base.	0.05				
	Mudstone - brownish-grey, silty, with occasional thick bright coal bands; gradational base.	0.10				
	Siltstone - dark grey, sandy; gradational base.	0.24				
	Sandstone / siltstone laminite (90:10) - rippled, light grey, fine-grained sandstone with abundant thin laminae and lenticles of dark grey carbonaceous siltstone; abrupt base.	0.25				
	Sandstone - fine- to medium-grained, light grey; intensely bioturbated at top, with occasional very thin carbonaceous laminae below; abrupt base.	0.24 DD 1567 0.60			----- Core #107	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone / siltstone (60:40) - very thin to thin interbeds of light grey, planar-laminated very fine- to fine-grained sandstone and dark grey sparsely-bioturbated carbonaceous siltstone; abrupt base.	0.24				
	Sandstone - fine-grained, medium grey, slightly silty, planar-laminated, sparsely-bioturbated; abrupt base.	0.21				
	Sandstone / siltstone (50:50) - thinly-interbedded, slumped, medium grey, silty, very fine-grained silty sandstone and dark grey siltstone; abrupt.	0.08				
	Sandstone - fine- to medium-grained, light grey, with abundant carbonaceous streaks; rippled at top; abundant silty intraclasts near top; sparsely [illegible]rbated at base; abrupt base.	0.45 Box 74/75 0.22				
	Sandstone / siltstone (50:50) - thin to medium interbeds of light grey, fine- to medium-grained sharp-based sandstone and dark grey siltstone; moderately to intensely bioturbated; gradational base.	0.27				
	Siltstone - dark grey, intensely bioturbated; gradational base.	0.21				
	Sandstone - fine-grained, medium brown, ferruginous; intensely bioturbated; abrupt base.	0.08				
	Siltstone - dark grey, intensely bioturbated; sandy at base; gradational base.	0.10				
	Sandstone - fine-grained, slightly ferruginous, with occasional carbonaceous streaks; wavy-bedded; abrupt base.	0.08				
	Siltstone / sandstone (85:15) - dark grey, moderately to intensely bioturbated siltstone with very thin interbeds of very fine-grained sandstone; abrupt base.	0.33				
	Mudstone - dark grey, silty; abrupt base.	0.11 DD 1577 0.27			---- Core #108	

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Siltstone - dark grey, sandy, intensely bioturbated; abrupt and churned base.	0.41				
	Sandstone / siltstone (50:50) - thinly-interbedded, intensely bioturbated medium brownish-grey very fine-grained sandstone and siltstone; ferruginous at top and base; abrupt base.	0.11				
	Mudstone - dark grey, silty, moderately bioturbated; abrupt base.	0.69				
	Sandstone - very fine-grained, medium grey, very silty; abrupt base.	0.06				
	Mudstone - dark grey, very silty; abrupt base.	0.16				5°
	Mudstone - dark grey to black, carbonaceous.	0.13		484.34		

	Mudstone - dark grey to black, carbonaceous; intensely sheared; cornflakes.	0.08				
D2 8 1	Mudstone - medium grey, rooty, very soft, intensely broken; slightly sheared; a seatearth.	0.08		484.50		

	Mudstone - black, coaly, with occasional thin bright coal bands; intensely sheared.	0.02				
D2 8 2	COAL - bright banded, broken stick; pyrite films on cleats.	0.02				
	COAL - dull banded; broken stick.	0.02		484.56		

	Mudstone - black, carbonaceous, with abundant thin bright coal bands; broken stick.	0.07				
D2 8 3	Mudstone - black, canneloid; slightly sheared.	0.02		484.65		
-----	----- **Roof of Comox No.1 coal bed** -----				*Comox No 1 coal bed net coal 1.19 [illegible] m*	
	COAL - bright banded, with pyritic blebs along laminae; broken.	0.03				
D2 8 4						
	COAL - bright banded, with closely-spaced cleats (5 to 8 mm); badly broken at base; broken stick.	0.25 Box 75/76		484.93		

	COAL - dull and bright, powdery; core broken and ground.	0.08				
D2 8 5	COAL - dull and bright; badly broken.	0.06				
	COAL - bright banded; badly broken.	0.06		485.13		
	COAL - dull banded; broken into 1 to 2 cm cubical blocks.	0.17		485.30		

D2 8 6	Mudstone - black, coaly, with abundant thin and thick bright coal bands; trace ankerite films on stepped joints; broken stick.	0.04		485.34		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING

	COAL - dull banded, massive, hard; abrupt base.	0.03				
D2 8 7						
	COAL - bright banded; stick.	0.03				
	COAL - dull, stony; badly broken.	0.03		485.43		
-----		DD 1587			-----	
	Mudstone - dark brown, carbonaceous, with abundant thick bright coal bands; slightly	0.12			Core #109	
D2 8 8	sheared; core broken and disked.					
	Mudstone - dark brown, carbonaceous; abrupt base.	0.01				
	Mudstone - black, carbonaceous, with occasional thick bright coal bands; abrupt base.	0.03				
	Siltstone - dark grey, sandy, pyritic; abrupt base.	0.06				
	Mudstone - dark brown, carbonaceous; abrupt base.	0.02				
	Siltstone - dark grey, sandy, pyritic; stick.	0.02		485.69		

	Mudstone - dark brown, carbonaceous, with abundant thin and thick bright coal bands; stick.	0.15		485.84		
D2 8 9	Mudstone - black, coaly, hard, stick.	0.03		485.87		
	Mudstone - black, coaly, hard, with occasional thick bright coal bands; abrupt base.	0.09		485.96		
(continue C-6)						
	COAL and Mudstone (2:1)- interlaminated bright coal and black coaly mudstone; stick.	0.03		485.99		
	COAL - dull and bright; abrupt base.	0.04		486.03		
	COAL - dull banded; stick.	0.04		486.07		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
D2 8 10	COAL - bright banded; slightly sheared.	0.07		486.14		
D2 8 11	COAL - bright, slightly sheared and broken.	0.04		486.18		
	COAL - dull banded, hard, stony; stick.	0.02		486.20		
(Comox Coal)	COAL - dull and bright; locally sheared and broken; broken stick.	0.17		486.37		
	Core loss (coal)	*(0.05)*		486.42		
	----- Floor of Comox No.1 coal bed -----					
	Mudstone - dark brown, carbonaceous, slightly sheared, hard; stick.	0.11		486.53		
D2 8 12	Mudstone - dark brown, carbonaceous; silty at base.	0.10		486.63		
	Siltstone - medium brownish-grey, hard, with a few rootlets.	0.12				
	Mudstone - dark brown, carbonaceous; slightly sheared.	0.03				
	Siltstone - dark grey, sandy; intensely bioturbated at base; gradational base.	0.50				
	Siltstone / sandstone (90:10) - dark grey siltstone with very thin interbeds of very fine-grained sandstone; gradational base.	0.50				
	Siltstone /sandstone (70:30) - thin to medium interbeds of medium grey, very sandy siltstone and light grey, fine-grained sandstone; moderately to intensely bioturbated; gradational base.	0.52				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
----- *RXA at 489.59 to 489.88* -----	Sandstone - fine to medium-grained, grading down to fine-grained at base; light to medium grey, clean, with occasional carbonaceous streaks and occasional coarse coalified plant debris; silty at top; moderately to intensely bioturbated in top half; abrupt base.	0.27 DD 1597 Box 76/77 1.99	2.26	490.63	----- Core #110	5° to 8°
	Sandstone - fine-grained, with occasional coal streaks and occasional stringers of ironstone grit, especially at base; steeply cross-laminated; abrupt base.	0.08	0.08	490.71		
	Sandstone - very fine-grained, dark grey, silty, carbonaceous; abrupt base.	0.02		490.73		
-----	**----- Roof of Comox No.1 Lower coal bed -----**					
	COAL - dull and bright, with occasional pyrite blebs; broken and broken stick.	0.08		490.81		
D2 9 1	*Core loss (coal)*	*(0.23)*		491.04		
	COAL - dull banded; abrupt base.	0.02				
	Mudstone - black, coaly, very pyritic, abrupt base.	0.01				
	COAL - dull banded, stick.	0.01				
	COAL - dull banded, broken.	0.01				
	Mudstone - black, coaly, tough, compact, with abundant very thin bright coal bands; stick.	0.01				
	COAL - dull and bright, slightly sheared at base; abrupt base.	0.02				
	COAL - dull banded, with ankerite on cleats; stick.	0.03				
	COAL - dull banded; broken stick, some core loss?	0.05				
	COAL - dull, stony, hard; broken stick.	0.02		491.22		
-----	**----- Floor of Comox No.1 Lower coal bed -----**					
	Mudstone - dark brown, carbonaceous, rooty, slightly slicked, with pyrite films along slicks.	0.05				
	Mudstone - black, coaly, hard, with 50% thick bright coal lenses; pyrite along bedding.	0.02				

SAMPLES	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Mudstone - black, carbonaceous, hard, with abundant very thin bright coal bands.	0.05				
	Mudstone - dark brown, carbonaceous, with a few rootlets; gradational base.	0.08				
	Siltstone - medium grey, sandy, rooty; gradational base.	0.05				
	Siltstone - dark grey, rooty at top; abrupt base.	0.37 DD 1607 0.41			----- Core #111	6°
	Siltstone - medium brown, sandy, ferruginous, moderately bioturbated; gradational base.	0.10				
	Siltstone - dark grey, moderately hard; core locally lathed; abrupt base.	0.46				
	Siltstone - medium brown, sandy, ferruginous, moderately bioturbated; abrupt base.	0.11				
	Siltstone - dark grey, sandy at top.	0.26 Box 77/78				
	Sandstone - very fine-grained, medium grey, very silty; abrupt base.	0.43				5°
	Siltstone / sandstone (80:20) - thin to medium interbeds of dark grey carbonaceous siltstone and very fine to fine-grained, medium grey sandstone; occasional thick bright coal bands; planar and wavy bedding (lake beds?); possible *Rhamnites* plant fossil at 6 cm below top; abrupt base.	1.14 DD 1617 0.41			----- Core #112	
	Sandstone / siltstone laminite (80:20 at top, 95:5 at base) - overall fining-upward, very thinly interbedded medium grey sandstone and dark grey to black carbonaceous siltstone; very sparsely bioturbated; abundant plant trash near base; abrupt base.	0.51				
	Mudstone / siltstone / sandstone (50:50:0 at top, 10:10:80 at base) - thin to medium, locally churned or slumped interbeds of dark grey mudstone and siltstone and medium grey, very fine to medium-grained, sharp-based sandstone; locally with abundant fine plant debris; abrupt base.	0.47				7°

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Sandstone / mudstone laminite (85:15) - light grey, fine to medium-grained sandstone with abundant flaseroid laminae of black coaly mudstone (maybe top of channel-fill?); gradational base.	1.00 Box 78/79 0.09				
-----	Sandstone - medium-grained, grading down to medium- to coarse-grained at base; light greenish-grey, quartz-basalt, clean, medium to very thick-bedded; bed tops marked by finely-broken plant trash; gradational base.	0.27 DD 1627 3.08 DD 1637 0.89 Box 79/80		501.81	----- Core #113 ----- Core #114	8° to 10°
	Sandstone - medium- to coarse-grained, grading down to coarse- to very coarse-grained at base; light to medium greenish-grey, quartz-basalt, clean; abundant small silty intraclasts and occasional coal spars in basal 7 cm; abrupt base.	2.14 DD 1647	2.14	503.95	----- Core #115	5° at top; 12° in middle
	COMOX FORMATION (CUMBERLAND MEMBER)					
-----	**----- Roof of Comox No.2 Rider coal bed -----**					
	COAL - dull lustrous, hard, with abundant pyrite at top; stick.	0.02	0.02	503.97		
D2-10-1	COAL - dull banded; abrupt base.	0.03	0.03	504.00		
	COAL - bright banded; stick.	0.02	0.02	504.02		
	COAL - bright; abrupt base.	0.01	0.01	504.03		
	COAL - dull, with pyritised fusain; abrupt base.	0.01	0.01	504.04		
	COAL - bright, slicked at base; stick.	0.01	0.01	504.05		
	Core loss (coal)	*(0.08)*		504.13		

	Mudstone - black, coaly; slicked at top and base.	0.01	0.01			
D2-10-2	Mudstone - dark brown, carbonaceous, rooty, with listric surfaces; occasional pyrite blebs at top.	0.04	0.04	504.18		

	COAL - bright banded, with occasional pyrite films along cleat; stick.	0.02	0.02	504.20		
D2-10-3	COAL - dull banded; broken stick.	0.02	0.02	504.22		
	COAL - dull, with ankerite films on cleat; cleat ~22 mm; stick.	0.02	0.02	504.24		
	COAL - dull banded; broken stick.	0.01	0.01	504.25		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Core loss (coal)	*(0.04)*		504.29		
D2 10 3	COAL - dull lustrous, with calcite films on cleat; abrupt base.	0.05				
	COAL - bright banded, with occasional pyrite flecks along cleat; stick.	0.02				
	COAL - dull, hard, with calcite films along cleat.	0.02				
	COAL - bright, with scattered pyrite flecks; stick.	0.01		504.39		

D2 10 4	Mudstone - black, coaly, hard.	0.02		504.41		

	COAL - bright banded; slightly sheared.	0.01				
D2 10 5						
	COAL - dull and bright, hard, with wavy lamination at top; stick.	0.02				
	COAL - dull banded, with occasional pyritic laminae; stick.	0.03				
	COAL - dull banded, with occasional pyrite; abrupt base.	0.03				
	COAL - dull, with 1 mm fusain band at top; stick.	0.02				
	COAL - bright banded; abrupt base.	0.01				
	COAL - dull banded; stick.	0.02				
	COAL - dull and bright, with minor pyrite films along cleat; broken, probable core loss.	0.02		504.57		
-----	**----- Floor of Comox No.2 Rider coal bed -----**					
	Mudstone - black, canneloid; broken stick.	0.01				8°
	Mudstone - black, coaly, rooty, laminated, with pyrite flecks along lamination; abundant finely broken plant debris; broken stick.	0.04				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Mudstone - dark brown, carbonaceous, rooty; gradational base.	0.01				
	Siltstone - light to medium grey, very sandy, siliceous, rooty, with occasional plant stems; gradational base; looks like bleached soil horizon.	0.25				
	Sandstone - very fine- to fine-grained, light brownish-grey, slightly ferruginous, rooty, with sand-filled chambered plant roots; gradational base.	0.24				
	Siltstone / mudstone (60:40) - thin to medium interbeds of medium grey sandy siltstone with locally-abundant rootlets, and medium brown to dark grey, very soft, sheared seatearth mudstone, which swells upon contact with moisture and contains locally-abundant rootlets; abrupt base.	0.83				7°
	Siltstone - dark grey, very sandy, with occasional rootlets; gradational base.	0.36 Box 80/81 0.04				
	Siltstone / sandstone (65:35) - thin to medium interbeds of dark grey, locally rooty siltstone and medium grey to brownish-grey, locally ferruginous very fine- to fine-grained sandstone; patchy sparse bioturbation and churning; occasional poorly-preserved plant stems; abrupt base.	0.83 DD 1657 0.98			------ Core #116	4°
	Mudstone / siltstone (85:15) - thin to medium interbeds of dark grey silty mudstone with occasional poorly-preserved plant stems, and medium brownish-grey, sandy, ferruginous, rooty siltstone; core locally broken with conchoidal fractures suggesting high rock stress; abrupt base.	1.85 DD 1667 0.25			----- Core #117	
	Mudstone - dark brownish-grey, slightly carbonaceous, rooty, with abundant finely-broken plant debris; core is friable and swells in the core box; gradational base; probable seatearth.	0.07				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Mudstone - dark brownish-grey, laminated, with locally-abundant plant debris including leaves and steams; core locally broken and ground; gradational base.	0.13				
	Mudstone - dark brownish-grey, silty, slightly sheared; gradational base.	0.04				
	Mudstone - dark brown, carbonaceous, sheared and broken; possible core loss.	0.02 Box 81/82				
	Mudstone - dark brownish-grey, silty, slightly carbonaceous; locally intensely broken and ground; polished base.	0.16				
	Mudstone - dark brownish-grey, silty, carbonaceous, with abundant thick bright coal bands; gradational base.	0.04				
	Sandstone / siltstone / mudstone laminite (55:30:15) - very thin fining-upward sharp-based gradational beds of fine-grained sandstone and dark grey carbonaceous siltstone and mudstone; sands are locally rippled. This unit is rooty at top; probable crevasse-splay; abrupt base.	0.17				
	Sandstone - medium-grained, grading down to coarse-grained at base; medium greenish-grey, basaltic; carbonaceous at top, with coarse plant trash at top; abrupt base.	0.19				
	Sandstone / siltstone laminite (95:5 at top, 50:50 at base) - thin to medium-bedded, fine-grained, medium grey silty sandstone with downward-increasing planar laminae of dark grey carbonaceous siltstone; locally sparsely bioturbated, with 6 mm calcite vein near base; occasional ferruginous concretions toward base; abrupt base.	1.07				
	Mudstone - dark brown, carbonaceous, very thin-bedded, fissile, locally sheared and broken; cloddy; slickensided base.	0.06		512.25		
	Mudstone - black, carbonaceous, with abundant thick bright coal bands; sheared and broken; probable core loss.	0.04		512.29		

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Mudstone - black, carbonaceous, fissile, with occasional thick bright coal bands; slightly sheared; slicked at base.	0.02				
	Mudstone - black, coaly, platy, slightly sheared.	0.01		512.32		
	Mudstone - black, carbonaceous, with occasional thin bright coal bands; polished base.	0.06		512.38		
DD 1677	----- **Roof of Comox No.2 coal bed** -----					
	Core loss (coal)	*(0.22)*		512.60		
(continued)	COAL - bright, with occasional laminae of black carbonaceous mudstone; pyrite flecks; polished base.	0.01		512.61		
	COAL - dull banded, stony, massive, hard; abrupt base.	0.04		512.65		15°
	COAL - bright, with pyrite flecks; sheared at top and base; a coalified log?	0.01		512.66		
	----- **Floor of Comox No.2 coal bed** -----					
	Mudstone - black, canneloid; oblique slip at top; polished base with pyrite flecks; slick.	0.04		512.70		
	Mudstone - black, carbonaceous, with abundant thick bright coal bands; occasional pyrite bands along bedding	0.16		512.86		
	Mudstone - dark brownish-grey, silty, slightly carbonaceous, grading down to medium grey, sandy siltstone at base; occasional thin bright coal bands; rooty at base.	0.23				
DD 1677	Mudstone - light grey, rooty, with occasional listric surfaces; probable seatearth.	0.14			----- Core #118	
	Siltstone - light grey, rooty, locally slickensided, locally sheared and broken; core broken and ground; abrupt base.	0.25				
	Sandstone - medium brown, kaolinitic, rooty, hard; abrupt base.	0.02				
	Tuff? - fine-grained, dark grey, basaltic, slightly sheared; abrupt base.	0.03				
	Siltstone - light ashen grey, tuffaceous, with scattered grit and subangular chips of intensely-weathered basalt; may be an intensely-bleached tuff; slickensided base.	0.50				
	Siltstone - dark brownish-grey, slightly carbonaceous, with subangular fragment greater than 55 mm across of intensely-weathered basalt; polished base.	0.03				

SAMPLES	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	CORE NUMBERS	APPARENT DIP OF BEDDING
	Breccia - angular clasts of basalt greater than 60 mm in abundant matrix of dark grey carbonaceous mudstone; slightly sheared; core broken and ground.	0.10				
	Mudstone - sandy, maroon, hematitic, slightly sheared and broken at base; probable base of Cretaceous.	0.18		515.34		
	KARMUTSEN FORMATION					
	Laterite? - dark reddish-brown hematitic mudstone with occasional small pebble-sized fragments of intensely-weathered basalt; probable top of Karmutsen.	0.22				
	Pillow Breccia - dark green, basaltic, milled fragmental texture with locally-abundant calcite veinlets.	0.31 Box 82/83				
	Basalt - fine-grained, amygdaloidal, dark green, with occasional calcite veinlets; abrupt base.	0.79				
	Hyaloclastite - dark green, medium- to coarse-grained, with occasional cobble- to boulder-sized knockers of amygaloidal basalt; occasional narrow calcite veinlets; abrupt base.	0.66 DD 1687			-----	
	Basalt - fine-grained, amygdaloidal, with locally-abundant calcite veinlets; patchy purple and green stain at top, becoming mostly purple with green phases toward base; base is marked by sudden downward decrease in size and abundance of amygdales.	1.90 0.04 Box 83/84 0.19 DD 1697			Core #119 ------	
	Basalt - fine-grained, dark green, with alternating zones containing large and small amygdales; abrupt base.	2.66 0.19 DD 1707			Core #120 -----	
		1.28 Box 84/85			Core #121	
	Basalt - fine-grained, dark green, porphyritic, with locally-abundant porphyroblasts of chloritised hornblende; locally sparsely amygdaloidal; occasional brick-red, possibly-hematitic zones; abrupt base.	0.55 0.98				
	Breccia - basaltic, possibly hyaloclastite; abundant calcite veins; core broken.	0.22 DD 1771 End of Hole		523.30		

Report on the Sealing of Drillholes

Inspection District:	Comox (Vancouver Island)	Date of Report:	AUG 31, 2001
Company:	Priority Ventures Ltd.	Land District:	Comox
Coal Map Number:	92 F/11 E	Licence Number:	FREEHOLD

1. Number of Drillhole:	2. Surface Elevation:	3. Drillhole Type:
Dove Creek D-2	approx. 18 metres	Water-well borehole; not to bedrock.

4. Drilled by:	Contractor:	cored section:	Exploration Company:
	casing: Fyfe's Well Drilling;	Aggressive Diamond Drilling	Priority Ventures Ltd.

5. Date of Completion: July 16, 2001

6. Date of Sealing: July 16, 2001

7. Sealed by:	Contractor: Fyfe's Well Drilling	Exploration Company: Priority Ventures Ltd.

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole?: Yes

(b) If so, give details and location: 150-mm aquifer protection casing from ground level to 9 metres; 165-mm open-hole through unconsolidated Drift to 15.8 metres. Casing is buckled.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspector's Instructions?: Yes, but with bentonite instead of cement.

(b) If no, give reasons and details of variation: Borehole was sealed by filling with bentonite pellets, per good water-well practice. (1982 CODE OF PRACTICE)

10. (a) Was the sealing effective?: Yes

(b) Details of any tests carried out: Swelled bentonite was observed at ground surface.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature: [signature] B.A.Sc.(Eng) Countersignature: [signature] T.G. Cathy Bickford, P.Geo.

Designation: PRINCIPAL/MANAGER. Designation: Project Manager

Date: Aug 31, 2001. Date: Sept 4, 2001

WM Form 327
26 Jun 01

Fyfe's
WELL DRILLING LTD.
3331 ALBERNI HIGHWAY
QUALICUM, B.C.
752-9358 V9K 1Y5

Report on the Sealing of Drillholes

Inspection District:	Comox (Vancouver Island)	Date of Report:	AUG 31, 2001
Company:	Priority Ventures Ltd.	Land District:	Comox
Coal Map Number:	92 F/11 E	Licence Number:	FREEHOLD

1. Number of Drillhole:	2. Surface Elevation:	3. Drillhole Type:
Dove Creek D-2A	approx. 18 metres	Diamond-drill hole with wide-diameter surface casing and aquifer protection casing

4. Drilled by:	Contractor:		Exploration Company:
	casing: Fyfe's Well Drilling;	cored section: Aggressive Diamond Drilling	Priority Ventures Ltd.

5. Date of Completion: July 27, 2001

6. Date of Sealing: Aug 27-28, 2001

7. Sealed by:	Contractor: Fyfe's Well Drilling	Exploration Company: Priority Ventures Ltd.

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole?: Yes

(b) If so, give details and location: 150-mm aquifer protection casing from ground level to 31.2 metres; 107-mm surface casing from ground level to 180.7 metres – casing points measured by geophysical logs. 96-mm open-hole section through rock extends down to total depth of 523.3 metres. Caliper log indicates minimal overgauge (washed-out) sections in coal beds.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspector's Instructions?: YES. PORTLAND CEMENT (TYPE 10) WAS USED AND MIXED AT 1:1 RATIO WITH POTABLE WATER

(b) If no, give reasons and details of variation: DARATARD 17 WAS ADDED TO

10. (a) Was the sealing effective? YES DELAY INITIAL SET TIME

(b) Details of any tests carried out: BOREHOLE OBSERVED SEALED TO GROUND SURFACE

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature: J. Fyfe B.A.Sc.(Eng). Countersignature: C.C.

Designation: PRINCIPAL/MANAGER. Designation: C.C. Cathyl-Bickford, P.Geo. Project Manager.

Date: Aug 31, 2001 Date: Sept. 4, 2001

WM Form 327
26 Jun 01

Fyfe's WELL DRILLING LTD
3331 ALBERNI HIGHWAY
QUALICUM, B.C.
752-9358 V9K 1Y8

Annex A-3: Logs of Priority Ventures Dove Creek D-3

Contents:

Borehole summary sheet of D-3

Core Description of D-3

Enclosure A-9: Gamma-Density-Caliper log of D-3

Enclosure A-10: Coalbed Methane (Quad Neutron/Dual Gamma) log of D-3

Enclosure A-11: Resistance Log of D-3

Enclosure A-12: Directional Log of D-3

Report on sealing of drillholes (for D-3)

ROKE

WELL NAME	100/08-29-076-15W6/00
LOCATION	08-29-076-15W6
LICENCE NO.	0000
LICENSEE	ENCANA CORP.
CONTRACTOR	ENCANA CORP.
RIG	0
SPUD DATE	0-0-0
DRLG FLUID TYPE	WATER
MAX REC TEMP	0
EQUIP/LOC	0
TIME SINCE CIRC	0
MAX DEV	0
LOGGED INTERVAL	0 TO 0
TYPE FLUID IN HOLE	WATER
DENS	0
VISC	0
PH	0
FLUID LOSS	0
SOURCE OF SAMPLE	0
RM @ MEAS TEMP	0
RMF @ MEAS TEMP	0
RMC @ MEAS TEMP	0
SOURCE RMF & RMC	0
RM @ BHT	0
TIME CIRC	0
TIME LOGGER ON BOTTOM	0
MAX RECORDED TEMP	0
EQUIP LOCATION	0
RECORDED BY	0
WITNESSED BY	0

RUN NO. | ONE | TWO | THREE
DATE | 0-0-0 | |
TYPE LOG | GAMMA RAY - RESISTANCE | |
DEPTH-DRILLER | 0 | |
DEPTH-LOGGER | 0 | |
BTM LOG INTERVAL | 0 | |
TOP LOG INTERVAL | 0 | |
CASING-DRILLER | 0 @ 0 | |
CASING-LOGGER | 0 @ 0 | |
BIT SIZE | 0 | |
TYPE FLUID IN HOLE | WATER | |
DENS | 0 | |
VISC | 0 | |
PH | 0 | |
FLUID LOSS | 0 | |
SOURCE OF SAMPLE | 0 | |
RM @ MEAS TEMP | 0 | |
RMF @ MEAS TEMP | 0 | |
RMC @ MEAS TEMP | 0 | |
SOURCE RMF & RMC | 0 | |
RM @ BHT | 0 | |
TIME CIRC | 0 | |
MAX REC TEMP | 0 | |
EQUIP LOCATION | 0 | |
RECORDED BY | 0 | |
WITNESSED BY | 0 | |

RUN NUMBER: ONE
TIME LOGGER ON BOTTOM: 0
DATE: 0-0-0
TIME: 0
LOGGING DISTRICT: 0
LOGGED BY: 0
WITNESSED BY: 0

EQUIPMENT

SURFACE EQUIPMENT
SERIAL NO. 52 /
CABLE MONITOR 4 /
LINE PWR MOD/ID 200
SECOND/S 227/

DOWNHOLE EQUIPMENT
MULTI-CHANNEL TOOL MCT-
CALIPER ICAL>
DIRECTIONAL D2BD

NOME COMPUTER 4 /
INTEL COMPUTER 486+1 /
SOFTWARE GL52 /
HARD DRIVE> 0

MCAL(HT200) , ICP002 , P GR003
TEL002 , CCL002 , MH001 , BHT/TRM 001
459 DENSITY DEMOD 829
100 GR-SP-RES> 312

PRINTER> 1 /
DATA 1 /
5.25 FLOPPY> 1 /
3.50 FLOPPY> 1 /

GRAPHICS

GAAMA RAY - RESISTANCE

DATA FROM MCT & SP-RES SONDES

LOGGED OPEN HOLE

200 METRES

GAMMA RAY
(Low Energy Cutoff)
(API)

0 — 100 GAMMA/API

DEPTH
IN
METRES

RESISTANCE
OHMM
(10 OHM/DIV)

0 — 200

SURFACE CASING @ 45.4

50
75
100
125
150
175
200
225
250
275
300
325

P.B. GAMMA RAY
375.0

P.B. RESISTANCE
328.5

DEPTH REACHED

LOG PARAMETERS
ALS V3.0

EXCEL RAW DATA FILEID= M-1A.RAW SP-RES.RAW
HOLESIZE FILE= GR852.ALS
LOG PARAMS FILE= GR852.ALS

M-1A.AL

DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
0	0.227	4	0.23	0	0.367	0	0	0.5	0
0	0.224	5	0	0	0	0	0	0	0
0	0.223	6	1.208	0	0	0	0	0	0
0	1.172	9	1.193	0	0.367	0	0	0	0
0	0.172	10	1.182	0	0.367	0	0	0	0
0	0.173	11	1.052	0	0.3	0	0	0	0
0	0.185	12	1960.5	-242.42	0.3	0	0	0	0
0	0.185	0	0	0	0.3	0	0	0	0
0	0.177	1	1001.7	-246.667	0.3	0	0	0	0
0	0.377	3	0.3977	0	0.367	0	0	0	0

M-1BICAL

DP1	DP2	DP3	DP4	DP5	DP6
0	0.05	1	14.8	-1573	0.05

CSMAP.PO

PRE	DP1	DP2	DP3	DP4	PRE	DP6	DP7	DP8	DP9	DP10
1	0	0	0	0	0	0	0	0	0	0.5
4	0	0	0	0	0	0	0	0	0	0.4
7	0	0	0	0	0	0	0	0	0	0.3
10	69	0	0	0	0	0	0	0	0	0.5
24	+LVE	0	1	1.9	0.2	0	0	0.008	0	0.8
27	+LVE	0	0	0	0	0	0	0	0	0.8
30	69.25	-1.25	0	0	0	0	0	0	0	0.8
33	0	0	0	0	0	0	0	0	0	0.8

SP-RES.PO

PRE	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
37	0	0	0	0	0	0	0	0	0	0.05

GRHEAD.PAR

TRK	PRE	FIX	LWR	RMR	LT	LC	LDI	LDZ	DR
GR	1	0	0	200	0	0	100	0	0
RES	10	11	13	10	7	5	100	0	0

Enclosure A-12

#872

ROKE DIRECTIONAL SURVEY

LOGGED OPEN & CASED HOLE

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA

LSD	Company:	PRIORITY VENTURES LTD
SEC	Well:	D-3
TWP	Location:	NW 1/4 SEC 22 TP 9 COMOX LAND DISTRICT
RGE	Field:	A56I NTS 92F11
W M	Province:	BRITISH COLUMBIA

SCALES

Unique Well Identifier:

Permanent Datum: GROUND LEVEL Elev: metres K.B. m

Log Measured From: GROUND LEVEL m Above Perm. Datum C.F. m

Well Depths Measured From: GROUND LEVEL G.L. m

Other Services: CBMM, GDC, RES DIR.HDG

Run No.	DIRECTIONAL
Date	05 AUGUST 2001
First Reading	328.0
Last Reading	0.0
Footage Logged	328.0
Depth Reached	330.2
Depth Driller	331.3
Casing Roke	45.4
Casing Driller	
Fluid Type	DRILLING MUD
Liquid Level	
Min. Diameter	96 mm BIT SIZE
Rm @ degrees C	OHMM @ C
Operating Time	18:00 - 05:30
Truck No.	52
Recorded By	D. SMITH
Witnessed By	G. CATHYL-BICKFORD

PVS
CDNX Trading Symbol
Designed & Printed by Key Graphics Ltd., Courtenay, B.C. www.keygfx.com

ROKE DIRECTIONAL SURVEY

DIR.BLC

STATION NUMBER	CABLE DEPTH	SLANT ANGLE	SLANT ANGLE BEARING	STATION NUMBER	CABLE DEPTH	SLANT ANGLE	SLANT ANGLE BEARING
1	020	01.30	N/A	2	040	01.30	N/A
3	060	01.40	162.9	4	080	01.30	163.8
5	100	01.20	158.7	6	120	01.20	141.8
7	140	01.20	155.6	8	160	01.10	146.0
9	180	00.80	154.1	10	200	01.00	135.9
11	220	01.00	170.0	12	240	01.00	154.2
13	260	01.20	167.7	14	280	01.20	132.1
15	300	01.20	169.5	16	320	01.20	176.3
17	328	01.20	175.1				

REPEAT SECTION

18	240	01.10	165.5	19	160	01.10	152.4
20	080	01.00	163.4				

ALL CABLE DEPTHS ARE MEASURED IN METRES.
ALL SLANT ANGLE AND SLANT ANGLE BEARING VALUES RECORDED IN DEGREES.

Section of DOVE CREEK D-3 surface borehole
Purpose: to prove strata and coal seams down to basement
Exact site: UTM NAD 83 Zone 10U (cell CA) coordinates:

E 350980 metres ±5 metres
N 5508350 metres ±5 metres

Legal description: Lot 1, Sec.22, Twp.9, Pl. VIP 55092, Comox Dist.

Level at which bore commenced relative to geodetic datum at mean sea level: 79.5 metres ± 0.5 metre (ground level)

Date of boring: 30 July to 5 August 2001

Drillers: Glen Fyfe, Fyfe Drilling Rig No.1 (open-hole section); Mitch McLellan, Ryan Elliott, Mike Rennie, Aggressive Drilling Rig No.56 (cored section)

BCGS Sheet	B.H. Reg'd No.
092 F 075	D-3

Sketch map of B.H. location

Area: Comox Coalfield

Cores examined by: Gwyneth Cathyl-Bickford, Vern Slater, and Dirk Meckert

Geophysical interpretation by: Gwyneth Cathyl-Bickford

Core & hole sizes:

Depth (m)	Dia. of core (mm)	Nominal Dia. of hole (mm):
0 - 17.8	Open hole	152
17.8 - 47.8	Open hole	144
47.8 - 331.3	59	96

Drilling History:

No difficulties encountered, but core was very difficult to break off and retrieve when drilling in ?silicified Karmutsen basement. Caliper log indicates minimal overgauge (washed-out) sections in coal beds.

Deviations recorded at 20 metre intervals from 20 metres to 320 metres, and at 328 metres. Maximum deviation 1.4 degrees.

Conductor pipe and surface casing cemented in the borehole from surface to 45.4 metres.

Method of sealing-off borehole:

Totally filled with neat cement, using high-pressure grouting unit.

Deviation surveys:

By Roke Oil Enterprises Ltd.

Geophysical surveys:

Gamma-density-caliper, resistance and quad-neutron logs by Roke Oil Enterprises Ltd., logged by Dave Smith.

Geological synopsis:

Starts in Royston under 12.5 metres of Drift. Top of Browns at 23.0 metres. *Extensional fault (Browns over Puntledge) at 70.9 metres.* Top of Puntledge faulted out. Top of Cowie at 183.35 metres. Top of Cougarsmith at 196.6 metres Top of Dunsmuir at 208.1 metres. Top of Cumberland at 309.4 metres. Top of Karmutsen at 315.98 metres. Stopped in Karmutsen. Coals from Comox X through Comox 2 were found. Lower coals absent due to non-deposition on basement paleohigh.

Valid test? Yes.

DOVE CREEK D-3
BY: Dirk Meckert, Ph.D

DATE: JUNE, 2002

CORE DESCRIPTION
PAGE 1

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
log by D. Meckert	Core # 1	**Trent River Formation (Browns Member)** Sandstone - fine-grained, silty, medium grey, plant debris, intensely bioturbated; churned base.	0.27			
		Sandstone - fine-grained, medium grey, intensely bioturbated; churned base.	0.37			
		Sandstone - fine to-medium grained (50/50), light grey, intensely bioturbated, large piece of wood; churned base.	0.46			
		Sandstone - fine to medium-grained (70/30), medium grey; churned base.	0.24			
		Sandstone - fine to medium-grained (50/50), med grey, bioturbated, grading into parallel bedded fine sandstone towards base, medium grey; churned base.	0.16			
		Sandstone - fine-grained, medium grey, intensely bioturbated; gradual base.	0.15			
		Sandstone - very fine-grained, medium grey, almost laminated; sharp base.	0.035			
	--- Core # 2	Sandstone - medium to fine grained (70/30), medium grey, intensely bioturbated, plant & *Mollusc shell debris*; erosive base.	1.18 DD 167 0.18 Box 1/2 0.87			
		Siltstone - dark grey, grading into fine to medium Sandstone (50/50), medium grey, towards base, intensely bioturbated; erosive base.	0.12			
		Siltstone - dark grey, grading into fine to medium-grained Sandstone (50/50), medium grey, towards base, plant & shell debris; churned base.	0.48			
		Siltstone - sandy, dark grey, intensely bioturbated; churned base.	0.20			
		Sandstone - fine to medium-grained (60/40), medium grey, intensely bioturbated, churned base.	0.42			
		Sandstone - fine-grained, silty, medium grey, intensly bioturbated but with local patches of parallel bedding, plant & *mollusc shell debris*; churned base.	0.70			6°
	--- Core # 3	Sandsone - fine grained, medium grey, grading into medium grained sandstone at base, intensely bioturbated, Plant & mollusc *shell debris*, small concretion, gradual base.	0.09 DD 177 1.42			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine to medium-grained (50/50), medium grey, core broken at base.	0.07 Box 2/3 0.20			
		Sandstone - fine to medium-grained (50/50), lighter grey, cherty, dense, irregular base.	0.29			
	--- Core # 4	Sandstone - fine to medium-grained (60/40), medium grey, intensely bioturbated, top half of core broken due to horizontal shear planes; sharp base.	0.94 DD187 0.51			
		Siltstone, dark grey, tin layer grading down into medium-grained Sandstone, medium grey, parallel bedded with layers of siltclasts.	0.38			0°
		Sandstone - medium-grained, silty, intensely bioturbated, locally remnants of thin siltstone layers (80/20); sharp base.	0.94			
		Sandstone - medium to fine-grained (80/20), medium grey, well sorted, sparsely bioturbated at top; erosive base.	0.32			
		Sandstone - fine to medium-grained (50/50), silty, medium grey, intensely bioturbated, gradational base.	0.66 Box 3/4 0.07			
	--- Core # 5	Sandstone - medium to fine-grained (80/20), parallel bedded, some siltclasts, plant debris; sharp base.	0.23 DD196 0.24			
		Siltstone - dark grey, interbedded with fine-grained sandstone preserved as skeletal structure due to locally intense bioturbation; churned base.	2.70			
	--- Core # 6	Sandstone fine to medium-grained (50/50), medium grey, bioturbated; churned base.	0.06 DD 206 0.31			
		Sandstone - fine-grained, darkish grey, intensly bioturbated; gradual base.	0.64 Box 4/5 0.96			3°
		Siltstone - dark grey, with fine-grained sandstone layers, some ripples, sparsely bioturbated; sharp base.	0.36			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks.	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Siltstone - dark grey, sandy, intensely bioturbated; sharp base.	0.11			
		Sandstone - fine-grained, cherty, medium grey, sparsely bioturbated, well sorted; churned base.	0.32 DD216			
	--- Core # 7		0.14			
		Siltstone - dark grey, alternating with finegrained sandstone (50/50), darkish grey, moderately bioturbated, some ripples and horizontal bedding; sharp base.	2.21 Box 5/6			
		Siltstone - dark grey, with thin slightly sandier layers (70/30); sharp base.	0.23			
		Sandstone - fine to medium-grained(50/50), medium grey, well sorted; sharp base.	0.63			
		Siltstone - dark grey, with thin layers of fine-grained sandstone (70/30); gradational base.	0.18			
		Siltstone - darkish grey, alternating with fine-grained sandstone (60/40), bioturbated; gradational base.	0.10 DD 226			
	--- Core # 8		0.27			
		Sandstone - fine to medium-grained (50/50), lower two thirds cherty, large vertical fractures; sheared at base with possible loss in next layer.	0.84			
		- - - - - - Fault, established - - - - - -				
		Trent River Formation (Puntledge Member)				
		Sandstone - fine-grained, silty, medium grey, moderately bioturbated; gradual base.	0.33			
		Sandstone - fine to medium-grained (50/50), medium grey, lower two thirds cherty and with vertical fractures.	0.55 DD 236			
	--- Core # 9					
		Sandstone - fine-grained, very silty, darkish grey, intensely bioturbated; core broken at base.	0.45			
		Sandstone - fine to medium-grained (50/50), medium grey, well sorted; gradational base.	0.19			
		Sandstone - fine to medium-grained (50/50), darkish grey, intensly bioturbated, core locally broken and swollen; gradational base.	0.42 Box 6/7 2.46			
		Sandstone - fine to medium grained (50/50), silty, intensely bioturbated, core broken from top to DD; sharp base.	0.35 DD 247 1.19 Box 7/8			
	--- Core # 10					

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Siltstone - dark grey, alternating with thin layers of fine sandstone (60/40), darkish grey, intensely bio-turbated; gradual base.	0.30			
		Sandstone - fine-grained, very silty darkish grey, gradual base.	1.60			
	---		DD 257			
	Core # 11		0.74			
		Siltstone - darkish grey, alternating with thin layers of fine to medium-grained sandstone (70/30); wavy base.	0.94			
		Sandstone - fine to medium grained (50/50), medium grey, moderately bioturbated; gradational base.	0.09			
		Sandstone - fine to medium-grained (50/50), medium grained; erosive base.	0.09			
		Siltstone - dark grey, sandy, moderately bioturbated; gradual base.	0.52			
			Box 8/9			
			0.11			
		Sandstone - fine grained, medium grey; erosive base.	0.05			
		Siltstone - dark grey, with thin fine-grained sandstone layers (80/20), moderately bioturbated, gradational base.	0.43			
	---		DD267			
	Core # 12		0.32			
		Sandstone - fine-grained, silty, darkish grey, slightly coarser at base; sharp base.	0.67			6°
		Siltstone - sandy, dark grey, moderately bioturbated; sharp base.	1.29			
		Sandstone - finegrained, silty, darkish grey, moderately bioturbated; sharp base.	0.84			
			DD 277			
			0.32			
		Siltstone, sandy, dark grey, moderately bioturbated, sharp base.	0.06			
			Box 9/10			
			0.02			
		Sandstone - very fine-grained, with thin silty layers (70/30), darkish grey; erosive base.	0.10			
		Siltstone - dark grey; gradational base.	0.05			
		Sandstone - very fine-grained, silty, darkish grey, rippled, sharp base.	0.07			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine-grained, very silty, dark grey, intensely bioturbated; churned base.	0.67			<3°
		Sandstone - finegrained, darkish grey, silty carbonaceous layers (90/10), coarsening towards base; erosive base.	1.14			
		Sandstone - fine-grained, silty, darkish gray, with thin siltstone layers (70/30), moderately bioturbated; sharp base.	0.28			
	--- Core # 13	Sandstone - fine-grained, medium grey, rippled, some small siltclasts; gradational base.	0.33 DD 287			
		Sandstone - fine-grained, very silty, darkish grey, moderately bioturbated; sharp base.	0.39			
		Sandstone - fine-grained, medium grey; gradational base.	0.12			
		Sandstone - fine-grained, very silty, darkish grey; sharp base.	0.12			
		Siltstone - muddy, dark grey, swollen; sharp base.	0.19			
		Sandstone - fine-grained, darkish grey, carbonaceous layers, some small siltclasts; sharp base.	0.37			4°
		Sandstone - fine-grained, silty, darkish grey, silt grading out towards base, erosive base.	0.35 Box 10/11 0.10			
		Siltstone - sandy, dark grey, intensely bioturbated, healed fracture 10°.	0.69			
		Sandstone - fine-grained, medium grey; erosive base.	0.12			
	--- Core # 14	Siltstone - sandy, dark grey, intensely bioturbated; two healed fractures 20°; gradational base.	0.85 DD 297 0.34			
		Sandstone - fine-grained, silty, darkish grey, moderately bioturbated; churned base.	0.36			
		Sandstone - fine-grained, silty, interbedded with thin dark grey siltstones (60/40); gradational base.	0.64			
		Sandstone - fine-grained, silty, darkish grey; churned base.	0.23			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Siltstone - sandy, dark grey; sharp base.	0.11			
		Sandstone - fine-grained, silty, darkish grey; sharp base.	0.13			
		Siltstone - sandy, dark grey; gradational base.	0.05			
		Sandstone - fine-grained, silty, darkish grey, with thin layers of dark grey siltstone (70/30), moderately bioturbated; sharp base.	0.81			
		Siltstone - dark grey, with thin layers of fine-grained sandstone (80/20); churned base.	0.24			
	--- Core# 15		DD 307 Box 11/12 0.07			
		Sandstone - fine to medium-grained (60/40), medium grey, some siltclasts; erosive base.	0.37			
		Sandstone - fine-grained, silty at top, carbonaceous layers near base; churned base.	0.88			
		Sandstone - fine-grained, medium grey; sharp base.	0.28			6°
		Sandstone - fine to medium-grained (50/50), silty, darkish grey, intensely bioturbated; churned base.	1.49			
	--- Core # 16		DD317 1.23 Box 12/13 0.04			
		Sandstone - medium-grained, medium grey; gradational base.	0.23			
		Siltstone - sandy, dark grey; sharp base.	0.13			
		Sandstone - fine-grained, darkish grey, with thin carbonaceous layers; churned base.	0.12			
		Siltstone - dark grey; churned base.	0.02			
		Sandstone - fine to medium-grained, with thin carbonaceous layers; sharp base.	1.05			
		Siltstone - dark grey, interbedded with darkish grey fine-grained sandstone (50/50); sharp base.	0.23			
	------ Core # 16		DD327 0.01			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine to medium-grained, with thin carbonaceous layers; sharp base.	0.75			
		Siltstone - sandy at top, dark grey; sharp base.	0.10			
		Sandstone - fine-grained, silty, darkish grey, with thin layers of dark grey siltstone (70/30), crossbedded near base; erosive base.	0.32			
		Siltstone - sandy, dark grey; wavy base.	0.24			
		Sandstone - fine to very fine-grained, interbedded with dark grey siltstone (60/40), moderately bioturbated, *mollusc shell debris*; gradational base.	1.15 Box 13/14 0.49 DD 337			
	--- Core # 17		1.52			
		Sandstone - fine-grained, silty, darkish grey, moderately bioturbated; churned base.	0.99			
		Sandstone - finegrained, medium grey, some siltclasts; erosive base.	0.19			
		Siltstone - sandy, dark grey, moderately bioturbated; gradational base.	0.06			
		Sandstone - fine-grained, medium grey; erosive base.	0.06			
		Sandstone - fine-grained, silty, darkish grey, moderately bioturbated; sharp base.	0.25 DD 347			
	--- Core # 18		0.10			
		Sandstone - fine-grained, medium grey, with thin carbonaceous layers, siltclasts near base; churned base.	0.51			
		Siltstone - dark grey, with erosive sandfilled cracks; sharp base.	0.10			6°
		Sandstone - fine-grained, medium grey, some siltclasts; gradational base.	0.17 Box 14/15 0.59			
		Sandstone - fine-grained, silty, medium grey, intensely bioturbated; churned base.	0.59			
		Sandstone - fine-grained, with thin carbonaceous layers and some siltclasts; erosive base.	0.32			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Siltstone - dark grey, gradational base.	0.33			
	---	Sandstone - fine-grained, silty, darkish grey, with thin layers of dark siltstone (80/20), moderately bioturbated; gradational base.	0.24 DD 357			
	Core # 19		0.43			
		Sandstone - fine-grained, medium grey, thin carbonaceous layers; sharp base.	0.24			5°
		Siltstone - sandy, dark grey, moderately bioturbated, churned base.	0.22			
		Sandstone - fine-grained, medium grey, moderately bio turbated at top, carbonaceous layers near base; sharp base.	0.80			
		Siltstone - dark grey, with thin sandy layers; sharp base.	0.18			
		Sandstone - fine grained, medium grey, with thin carbonaceous layers; sharp base.	0.36			
		Sandstone - fine-grained, silty, darkish grey, intensely bioturbated; gradational base.	0.07 Box 15/16 0.24			
		Sandstone - fine grained, darkish grey, cherty; sharp base.	0.49 DD367			

	Core # 20	Sandstone - fine-grained, silty, darkish grey, intensely bioturbated churned base.	0.59			
		Sandstone - fine-grained, medium grey; erosive base.	0.81			
		Sandstone - fine-grained, silty, darkish grey, moderately bioturbated, some thin silty layers near base (90/10); sharp base.	1.44			6°
		Sandstone - finegrained, silty, darkish grey, with thin silty layers; erosive base.	0.15 DD377			

	Core # 21		0.52			
		Siltstone - dark grey, interbedded with thin layers of fine-grained, silty sandstone (60/40), darkish grey, moderately bioturbated; gradational base.	0.19 Box 16/17 1.43 DD 387			

	Core # 22		2.01 Box 17/18			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
			Box 17/18 0.38			
		Siltstone - dark grey, with thin layers of fine-grained, darkish gey sandstone (80/20); sharp base.	0.52			6°
	---	Sandstone - fine-grained, medium grey; erosive base.	0.03 DD 397			
	Core # 23		0.35			
		Siltstone - sandy, dark grey, moderately bioturbated; gradational base.	2.73 DD 407			

	Core # 24		0.45 Box 18/19			
			2.66 DD 417			

	Core # 25		0.73			
		Sandstone - fine-grained, very silty, dark grey, intensely bioturbated; gradational base.	1.00 Box 19/20			
			1.27 DD 427			

	Core # 26		0.43			
		Siltstone - sandy, dark grey, moderately bioturbated; gradational base.	2.71 Box 20/21			
		Sandstone - finegrained, silty, darkish grey, intensely bioturbated; gradational base.	0.06 DD 437			

	Core # 27		1.47			
		Sandstone - finegrained, medium grey; erosive base.	0.45			
		Sandstone - fine-grained, silty, darkish grey, moderately bioturbated; gradational base.	0.66			
		Sandstone - fine-grained, medium grey, cwith carbonaceous layers, siltclasts; erosive base.	0.35			5°
		Sandstone - fine-grained, silty, darkish grey, intensely bioturbated; gradational base.	0.11 DD 447			

	Core # 28		0.93			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine-grained, medium grey, with thick carbonaceous layers at top, coarsening down into medium grained sandstone, with large silt clasts; erosive base.	0.36 Box 21/22 0.28			8°
	--- Core # 29	Siltstone - sandy, dark grey, moderately bioturbated, large healed fracture near top 50°; gradational base.	1.47 DD457 1.41			
		Sandstone - fine-grained, silty, darkish grey, intensely bioturbated; erosive base.	1.23 Box 22/23 0.19			
	--- Core # 30	Siltstone - sandy, dark grey, intensely bioturbated, some shell debris; gradational base.	0.24 DD 467 2.73			
		Sandstone - fine-grained, medium grey; erosive base.	0.23			
	--- Core # 31	Siltstone, sandy, dark grey, moderately bioturbated, sandier towards base; gradational base.	0.26 DD 477 0.69 Box 23/24 1.30			
		Sandstone - fine-grained, very silty, dark grey, intensely bioturbated; gradational base.	1.11			
	--- Core # 32	Sandstone - fine-grained, medium grey; erosive base.	0 01 DD487 0.31			
		Siltstone - sandy, dark grey, intensely bioturbated; gradational base.	0.70			
		Sandstone - fine-grained, medium grey; erosive base.	0.09			
	--- Core # 33	Siltstone - sandy, locally very sandy, dark grey, intensely bioturbated, with few (90/10) thin fine-grained sandstone layers; gradational base.	0.92 Box 24/25 0.98 DD 497 1.21			6°

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine-grained, medium grey; erosive base.	0.12			
		Siltstone - sandy, dark grey, with a thin sandy layer near top; wavy base.	0.26			
		Sandstone - fine-grained, medium grey, carbonaceous, moderately bioturbated; erosive base.	0.07			
		Sandstone - fine-grained, silty, darkish grey, less silty at base, moderately bioturbated, several *Baculites* 30 cm from base; gradational base.	0.93			3°
		Sandstone - fine-grained, medium grey, sparsely bioturbated, sharp base.	0.13			
	---		DD 507			
	Core # 34		0.29			
		Sandstone - fine-grained, silty, darkish grey, intensely bioturbated, *Mollusc shell debris*; gradational base.	0.26			
			Box 25/26			
			2.44			
	---		DD 517			
	Core # 35		0.93			
		Sandstone - fine-grained, medium grey, with carbonaceous and silty layers; gradational base.	0.63			
		Sandstone - fine-grained, silty to locally very silty, darkish grey, some thin silty layers (70/30), moderately bioturbated, pieces of wood; erosive base.	0.44			
			Box 26/27			
			1.03			
	---		DD 527			
	Core # 36		0.88			
		Sandstone - fine-grained, silty, darkish grey, intensely bioturbated; churned base.	2.21			
	---		DD 537			
	Core # 37		0.36			
			Box 27/28			
			0.35			
		Sandstone - fine-grained, medium grey, thin carbonaceous layers; erosive base.	0.14			5°
		Sandstone - fine-grained, silty to locally very silty, darkish grey, intensely bioturbated; gradational base.	2.16			
	---		DD 547			
	Core # 38		1.42			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine-grained, silty, darkish grey, sparsely bioturbated; sharp base.	0.38			
		Sandstone - fine-grained, very silty, darkish grey, intensely bioturbated; gradational base.	0.02 Box 28/29 1.28 DD 557			
	--- Core # 39		0.29			
		Sandstone - fine-grained, medium grey, carbonaceous layers; gradational base.	0.63			
		Sandstone - fine-grained, medium grey, well sorted, some siltclasts, layer of *mollusc shell debris* near base, bottom third cherty; sharp base.	1.46			
	--- Core # 40	Sandstone - fine-grained, silty, medium grey, intensely bioturbated, some thin silty layers (90/10), silt phases out downward, sand getting coarser towards base; gradational base.	0.66 DD 567 0.16 Box 29/30 2.90 DD 577			3 -5°
	--- Core # 41		0.42			
		Sandstone - fine-grained, medium grey, erosive base.	0.22			11°
		Sandstone - fine-grained, medium grey, silt clasts, carbonaceous layers; sharp base.	0.29			
		Sandstone - fine-grained, silty, medium grey, intensely bioturbated; gradational base.	0.62 Box 30/31			

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
Begin log by C.G. Cathyl-Bickford			Box 30/31			
---		Sandstone/siltstone (75:25 at top, grading down to 90:10 at base) – very fine- to fine-grained, light to medium grey sandstone with downward-decreasing thin interbeds of dark grey, carbonaceous, very sandy siltstone; moderately bioturbated at top and base, intensely bioturbated in middle; occasional pyritised burrows; gradational base.	0.84	0.84	177.22	11°
R3A at 177.12						

---		Sandstone – fine-grained, light grey, slightly silty, sparsely bioturbated at top, moderately below; fair intergranular porosity; abrupt base.	0.26	0.26	177.48	
R3B at 177.32						
---		Sandstone – very fine- to fine-grained, alternating thin clean and silty bands, with 10% very thin interbeds of churned black carbonaceous siltstone; abrupt base.	0.34	0.34	177.82	
		Sandstone – very fine-grained, tan-weathering, slightly silty, moderately bioturbated; possible hardground?; churned base, with long vertical sand-filled shaft burrow extending down through this unit and into underlying unit.	0.04 DD 587 0.09	0.13	177.95	
	--- Core #42					
		Sandstone/siltstone (85:15 at top, grading down to 55:45 at base) – very fine- to fine-grained sandstone with churned, largely obliterated very thin interbeds of siltstone; locally abundant finely-broken plant debris; moderately bioturbated at top, increasing to intensely bioturbated at base; abrupt base.	0.42	0.42	178.37	14°
		Sandstone/siltstone (95:5) – very fine-grained, tan-weathering sandstone with occasional relict laminae of black carbonaceous siltstone; intensely bioturbated; gradational base.	0.25	0.25	178.62	

R3C at 178.78		Sandstone – very fine-grained, light grey, sparsely bioturbated, fair intergranular porosity; locally-abundant very small silty intraclasts; abrupt base.	0.43	0.43	179.05	

		Sandstone/siltstone (95:5 at top, grading down to 80:20 at base) – fine-grained, light grey sandstone with partly-churned laminae and thin interbeds of medium grey, sandy, slightly carbonaceous siltstone; locally abundant *shell hash*; sands have poor intergranular porosity; tan-weathering in top 42 cm; moderately bioturbated throughout; gradational base.	0.90	0.90	179.95	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #43	Sandstone/siltstone (90:10) – very fine-grained, light to medium grey sandstone with occasional thin interbeds of dark grey carbonaceous siltstone; moderately bioturbated at top, increasing to intensely bioturbated at base; patchy poor intergranular porosity; abrupt base.	0.57 Box 31/32 0.11 DD 597 0.08	0.91	180.83	
		Sandstone/siltstone (65:35 at top, grading down to 90:10 at base) – thin to medium interbeds of very fine- to fine-grained sandstone and carbonaceous siltstone, intensely bioturbated, with patchy poor intergranular porosity; abrupt base.	0.31	0.31	181.14	11°
----- *R31) at 181.38* -----		Sandstone/siltstone (70:30 at top, grading down to 95:5 at base) – interbedded very fine- to fine-grained sandstone and siltstone as above, moderately bioturbated with possible *Thalassinoides* burrows, fair to poor intergranular porosity; abrupt base.	0.37	0.37	181.51	
		Sandstone/siltstone (90:10) – very fine- to fine-grained sandstone with occasional thin interbeds of siltstone, as above; tight; intensely bioturbated; abrupt base.	0.41	0.41	181.92	
		Siltstone/sandstone (60:40) – interbedded siltstone and sandstone as above, but moderately bioturbated; gradational base.	0.16	0.16	182.08	
		Sandstone/siltstone (75:30) – interbedded sandstone and siltstone as above, moderately bioturbated; churned base.	1.02	1.05	183.13	16°
		Siltstone/sandstone (60:40) – interbedded siltstone and sandstone as above, but moderately to intensely bioturbated; gradational base.	0.22	0.22	183.35	
	----- Core #44	TRENT RIVER FORMATION (COWIE MEMBER) Sandstone/siltstone (75:25 at top, grading down to 85:15 at base) - interbedded sandstone and siltstone as above; intensely bioturbated at top, declining to moderately bioturbated below; churned base	0.47 DD 607 0.71	1.09	184.42	
		Sandstone/siltstone (80:20) – very fine-grained silty sandstone with occasional thin interbeds of dark grey carbonaceous siltstone; intensely bioturbated; abrupt base.	0.17	0.15	184.57	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone/mudstone (65:35) – thinly-interbedded , rippled, very fine- to fine-grained silty sandstone and dark grey silty mudstone; moderately to intensely bioturbated; churned base.	0.32 Box 32/33 0.19	0.46	185.03	
		Sandstone/siltstone (100:0 at top, grading down to 80:20 at base) – thinly-interbedded very fine- to fine-grained silty sandstone and dark grey siltstone; sparsely bioturbated, rippled at base; abrupt base.	0.10	0.10	185.13	12°
----- *R3E at 185.33* -----		Sandstone – very fine- to fine-grained, light grey, silty, tight, sparsely bioturbated, with occasional shaly intraclastic streaks at top; sheared base at 64°. ----- *Fault, possible* -----	0.40	0.37	185.50	19°
		Siltstone/mudstone (50:50) – very thinly-interbedded, rippled sandy siltstone and dark grey mudstone, locally microfaulted (slumped?); slightly sheared; abrupt base.	0.10	0.10	185.60	13°
		Sandstone/siltstone (95:5) – very fine- to fine-grained sandstone with occasional thin bands of dark grey, carbonaceous siltstone, mostly obliterated by intense bioturbation; occasional robust but thin-shelled *bivalve shells* near base; gradational base.	0.48	0.48	186.08	
		Sandstone – very fine-grained, medium grey, tan-weathering, silty, tight, with abundant large silty intraclasts and *shell fragments*; abrupt base.	0.09	0.09	186.17	
		Siltstone – dark grey, brown-weathering, very sandy; gradational base.	0.04	0.09	186.21	
		Sandstone /siltstone (90:10)– very fine-grained, medium grey sandstone, tan-weathering at top, silty; with occasional thin, moderately to intensely bioturbated interbeds of dark grey siltstone; abrupt, rolly base.	0.38	0.38	186.59	8°
	----- Core #45	Mudstone/sandstone (80:20) – dark grey, very silty mudstone with very thin interbeds of very fine-grained silty sandstone; base broken (possible core loss).	0.13 DD 617	0.12	186.71	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Siltstone – very light grey, sandy, bentonitic, probable ash band; abrupt base.	0.03	0.03	186.74	
		Mudstone – dark grey, silty, fissile, flaky and splintery; sheared and locally ankeritic at base; abrupt base. ----- *Bedding-plane shear zone, possible* -----	0.08	0.07	186.81	10°
		Sandstone/siltstone (80:20) – very thin to thin interbeds of very fine-grained silty sandstone and dark grey siltstone; moderately to intensely bioturbated; tight; churned base.	0.24	0.24	187.05	
		Mudstone – dark grey, slightly silty, with abundant tiny sand-filled burrows; sheared at base; abrupt base.	0.09	0.09	187.14	
		Mudstone/sandstone (60:40) – thinly-interbedded, intensely bioturbated dark grey mudstone and very fine-grained sandstone; abundant disseminated finely-broken plant trash throughout; gradational base.	0.14	0.14	187.28	
		Sandstone – very fine- to fine-grained, light grey, with locally-abundant *shell hash*; poor intergranular porosity; abrupt base.	0.15	0.15	187.43	
		Siltstone – dark grey, very sandy, intensely bioturbated, parts readily along bedding; gradational base.	0.37	0.41	187.84	11°
		Sandstone – very fine- to fine-grained, medium grey, very silty, with occasional *robust bivalve shell fragments*; intensely bioturbated; abrupt base.	0.56	0.56	188.40	
		Mudstone/sandstone (65:35) – thickly interlaminated dark grey silty mudstone and very fine-grained silty sandstone; gradational base.	0.04	0.04	188.44	
		Sandstone – very fine-grained, medium grey and silty at top, grading down to medium-grained, light grey and cleaner at base; fair intergranular porosity; abrupt base.	0.14	0.14	188.58	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone – very fine-grained, silty, medium grey, intensely bioturbated; abrupt base.	0.12	0.12	188.70	
		Mudstone/siltstone (50:50) – very thin fining-upward interbeds of very fine-grained, medium grey sandy siltstone and dark grey silty mudstone; moderately bioturbated; gradational base.	0.10	0.10	188.80	12°
		Sandstone – very fine-grained, light to medium grey, silty, plane-laminated; tight; abrupt base.	0.04	0.04	188.84	
		Sandstone/siltstone (70:30) – very thin fining-upward interbeds of intensely bioturbated very fine- to fine-grained sandstone and dark grey muddy siltstone, with abundant fine plant trash; gradational base.	0.24	0.24	189.08	
----- *R3F at 189.30* -----		Siltstone/sandstone (60:40 at top, grading down to 50:50 at base) – very thin fining-upward interbeds of moderately to intensely bioturbated dark grey siltstone and very fine-grained silty sandstone, with occasional *shell fragments*; abrupt base.	0.23 Box 33/34 0.19	0.42	189.50	10°
----- *R3G at 189.70* -----	----- Core #46	Sandstone – very fine- to fine-grained, light grey, tan-weathering, with locally abundant laminae rich in finely-broken plant debris; patchy poor intergranular porosity; abrupt base.	0.29 DD 627 0.50	0.76	190.26	
		Sandstone – fine-grained at top, grading down to coarse-grained; light grey, tan-weathering, with occasional small silty intraclasts and a few small silt-filled burrows; poor intergranular porosity; churned base.	0.46	0.45	190.71	
		Sandstone/siltstone (90:10) – fine- to medium-grained, tan-weathering, tight sandstone with locally-abundant thin laminae and intraclastic bands of black carbonaceous siltstone; locally-abundant coarse plant debris near base; erosional base.	0.44	0.44	191.15	
		Sandstone – medium- to coarse-grained, light grey, light tan-weathering, with fair intergranular porosity; locally-abundant small silty platy intraclasts; abrupt base.	0.79	0.79	191.94	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	----- Core #47	Sandstone – fine- to medium-grained, light grey, locally light tan-weathering, clean, quartz-chert-basalt, with occasional thin silty intraclasts; poor intergranular porosity; gradational base.	0.87 DD 637 0.49	1.33	193.27	
----- *R3J at 194.32* -----		Sandstone – fine- to medium-grained at top, coarsening down to medium- to coarse-grained at base, chertier than above; tight; abrupt base.	0.37 Box 34/35 0.90	1.25	194.52	
----- *R3K at 195.27* -----		Sandstone – medium-grained, light to medium grey, silty, poorly sorted, cherty, tight; gradational base.	0.40	0.40	194.92	
	----- Core #48	Sandstone – fine-grained, medium grey, very silty, poorly sorted, with vague steep planar lamination near top; abrupt base.	0.85 DD 647 0.23	1.05	195.97	3°
		Sandstone – fine- to medium-grained, slightly cleaner than above but still silty; poor intergranular porosity; abrupt base.	0.32	0.32	196.29	
		Sandstone – fine- to medium-grained and intensely bioturbated at top, coarsening down to medium- to coarse-grained and massive at base; tan-weathering throughout, with rare large silty intraclasts; abrupt base.	0.31	0.31	196.60	
Begin log by D. Meckert		TRENT RIVER FORMATION (COUGARSMITH MEMBER) Siltstone – dark grey, muddy, sandy at top and slightly finer below; moderately to intensely bioturbated.	1.26 Box 35/36 0.20	1.56	198.16	

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
	--- Core # 49	Sandstone - fine-grained, very silty, dark grey, intensely bioturbated, *mollusc shell debris*; erosive base.	0.58 DD 657 1.66	2.24	200.40	
	--- Core # 50	Sandstone - fine-grained, locally medium-grained, very silty, dark grey, siltclasts and ripped up layers of silt, *mollusc shell debris*, intensely bioturbated, coaly layer at base (, 1cm); sharp base.	1.31 DD 667 0.64 Box 36/37 1.45	3.40	203.80	0°
	--- Core # 51	Sandstone - fine-grained, very silty, dark grey, churned silt layers, shell debris, intensely bioturbated but large size burrows; gradational base.	1.07 DD 677 0.15	1.22	205.02	12°
		Siltstone - dark grey, sand filled burrows, low angle *fractures*; sharp base.	0.20	0.20	205.22	
		Sandstone - fine-grained, silty, darkish grey carbonaceous, moderately bioturbated (large burrows); gradational base.	0.26	0.26	205.48	13°
		Siltstone - dark grey, with thin fine-grained sandstone layer (70/30), gradational base.	0.26	0.26	205.74	
		Siltstone - sandy, darkish grey, some carbonaceous layers, moderately bioturbated, core broken and locally swollen; core loss 0.59m in this unit; gradational base.	1.00 Box 37/38 0.77	2.36	208.10	4°
		Comox Formation (Dunsmuir Member)				
	--- Core # 52	Sandstone - fine-grained, very silty, dark grey, intensely bioturbated, coarsening downward to medium-grained sandstone, gradational base.	0.23 DD 687 2.68	2.91	211.01	
	--- Core # 53	Sandstone - medium to coarse-grained, medium grey, well sorted, finer at base, good porosity, gradational base.	0.28 DD 697 Box 38/39 2.02	2.25	213.26	2°
		Sandstone - medium to coarse-grained, medium grey, some silt clasts, *mollusc shell debris*, sparsely bioturbated; erosive base.	0.44	0.44	213.70	

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
	--- Core # 54	Sandstone - fine to medium-grained, small silt clasts, well sorted, small silt clasts, good porosity, erosive base.	0.48 DD 707 1.35 Box 39/40 0.59	2.42	216.12	
	--- Core # 55	Sandstone - fine to medium-grained, silty, dark grey, *mollusc shell debris*, intensely bioturbated; gradational base.	1.06 DD 717 1.11	2.17	218.29	
		Siltstone - dark grey, large burrows filled with fine-grained sandstone giving it a skeletized look; gradational base.	0.48	0.48	218.77	
		Siltstone - dark grey, moderately bioturbated, with thin sandy and carbonaceous layers (90/10) in lower half; gradational base.	0.31	0.31	219.08	3°
		Sandstone - fine-grained, medium grey, carbonaceous, some large burrows; wavy base.	0.11	0.11	219.19	
		Sandstone - fine-grained, medium-grained, carbonaceous layers, silt clasts; sharp base.	0.44 Box 40/41	0.44	219.63	6°
	--- Core # 56	Siltstone - dark grey, few sandy layers (70/30), moderately bioturbated; gradational base.	0.37 DD 727 0.07	0.44	220.07	
		Sandstone - fine-grained, silty, darkish grey; sharp base.	0.13	0.13	220.20	19°
		Sandstone - fine-grained, medium grey / Siltstone - dark grey (60/40), chaotic - slumped layer?; eroded base.	0.13	0.13	220.33	
		Sandstone - fine-grained, medium grey, carbonaceous layers; gradational base.	0.21	0.21	220.54	
		Siltstone - dark grey, moderately bioturbated, healed low angle fracture; churned base.	0.11	0.11	220.65	
		Sandstone - fine-grained, medium grey, some carbonaceous layers; sharp base.	0.37	0.37	221.02	
		Sandstone - fine-grained, medium grey, with carbonaceous and silty layers, moderately bioturbated; gradational base.	1.59	1.59	222.61	5°
	--- Core # 57	Sandstone - fine-grained, silty, darkish grey, moderately bioturbated; gradational base.	0.44 DD 737 0.31	0.80	223.41	

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine-grained, medium grey, interbedded with carbonaceous and silty layers (50/50), moderately bioturbated; gradational base.	0.57 Box 41/42 0.58	1.15	224.56	
		Sandstone - fine-grained, medium grey, carbonaceous layers near base; erosive base.	0.20	0.20	224.76	
	--- Core # 58	Siltstone - dark grey, interbedded with fine-grained sandstone (70/30), moderately bioturbated, fractures parallel to bedding plane ? (5° to 10°); gradational base.	1.52 DD 747 0.04	1.56	226.32	17°
		Sandstone - fine-grained, medium grey-brownish, thin carbonaceous and silty layers (90/10); erosive base.	0.85	0.85	227.17	
		Siltstone - sandy, dark grey, moderately bioturbated; gradational base.	0.17	0.17	227.34	
		Sandstone - fine-grained, brownish grey, carbonaceous, erosive base.	0.39	0.39	227.73	
		Sandstone - fine-grained, silty, darkish grey, intensely bioturbated; core broken and sheared near base; sharp base 45° - fault!	0.86 Box 42/43 0.70	1.56	229.29	
	--- Core # 59	Sandstone - fine-grained, medium grey, lower third siltier and containing large burrows; gradational base.	0.12 DD 757 0.60	0.72	230.01	
		Sandstone - fine-grained, medium grey, few burrows near top, silt clasts, good porosity; erosive base.	0.96	0.96	230.97	
		Sandstone - fine-grained, silty, medium grey, moderately bioturbated; churned base.	0.35	0.35	231.32	
		Sandstone - fine-grained, medium grey, some large burrows, carbonaceous and silty layers; gradational base.	0.37	0.37	231.32	9°
R3L @ 233.17 m *R3M @ 233.47 m* *R3N @ 235.13*	--- Core # 60	Sandstone - fine to medium-grained, medium grey, some carbonaceous layers, small silt clasts, thick bivalves likely *Glycymerita* at 34 cm below top of box 44; good porosity; erosive base.	0.69 DD 767 0.59 Box 43/44 2.41	3.69	235.38	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
Begin log by C.G. Cathyl-Bickford	----- Core #61	Mudstone – black, carbonaceous, slightly silty, wavy-bedded, with occasional thick bright coal bands; sharp, polished base.	0.13 DD 777 0.07			13°
		COAL – dull stony, slicked and badly broken; probable core loss.	0.01			
		Mudstone – black, coaly, hard, broken, with polished slips at 22 degrees; possible core loss at base.	0.03			
		Mudstone – black, carbonaceous, ferruginous, dense, with occasional pyritised coaly laminae.	0.16			
		Mudstone – black, coaly, hard; abrupt base.	0.02			
		Mudstone – black, carbonaceous, ferruginous, dense.	0.06		236.12	
		—— Roof of Comox X coal bed ——				
	Comox X coal bed: 0.52/1.46 m (36% coal)	COAL – dull and bright, with ankerite films on cleats.	0.04	0.04	236.16	
		COAL – dull, stony; broken and ground; possible core loss.	0.01	0.01	236.17	
		COAL and shale – thickly interlaminated bright coal and canneloid mudstone; abrupt base.	0.06	0.06	236.23	
		Mudstone – black, carbonaceous, with occasional thin bright coal bands; gradational base.	0.04	0.04	236.27	
		Siltstone – dark grey, carbonaceous; abrupt base.	0.12	0.12	236.39	16°
		Siltstone – medium brown, kaolinitic; probable ash band; abrupt base.	0.01	0.01	236.40	
		Siltstone – dark brownish-grey, ferruginous, intensely bioturbated, with occasional ankerite-filled bedding-plane slips at 23 degrees; abrupt, churned base.	0.29	0.29	236.69	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Mudstone – dark grey, slightly carbonaceous, with occasional thin bright coal bands; polished base	0.16	0.16	236.85	

Canister C-10		COAL and shale – bright coal with very thin bands of black carbonaceous mudstone.	0.01	0.01	236.86	
D 3/1/B		COAL – sheared and broken.	0.01	0.01	236.87	
		Mudstone – black, carbonaceous, with abundant thick bright coal bands.	0.02	0.02	236.89	
		Mudstone – black, canneloid.	0.11	0.11	237.00	20°
		COAL – dull and bright, with abundant thin bands of carbonaceous mudstone.	0.04	0.04	237.04	
		Mudstone – dark grey, silty, carbonaceous, with occasional thick bright coal bands.	0.07	0.07	237.11	
		COAL and shale – bright coal with interbeds of black carbonaceous mudstone.	0.05	0.05	237.16	
		Mudstone – black, canneloid, with occasional thick bright coal bands.	0.05	0.05	237.21	

Canister C-9		COAL – dull, stony.	0.08	0.08	237.29	
D 3/1/A		COAL – dull and bright, slightly sheared.	0.05	0.05	237.34	
		Mudstone – black, coaly, intensely sheared, platy.	0.01	0.01	237.35	
		COAL – dull banded.	0.04	0.04	237.39	
		COAL – dull and bright.	0.08 Box 44/45	0.08	237.47	15°
-----		COAL – dull banded.	0.05 DD 787	0.05	237.52	
	----- Core #62	Core loss – coal		(0.06)	237.58	
		----- Floor of Comox X coal bed ——				

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Siltstone – dark brown to black, carbonaceous, with locally-abundant ankerite-rimmed plant debris.	0.14			24°
		Mudstone/siltstone (50:50) – interlaminated black mudstone and dark grey sandy siltstone with occasional thick coal bands and very thin ankerite veinlets; sparsely bioturbated; a few tiny rootlets.	0.37			
		Mudstone – medium brownish-grey, bentonitic, slightly sheared, soft, swelling; probable ash band.	0.09			
		COAL – dull stony, massive; abrupt.	0.025			20°
		COAL – bright.	0.005			
		Mudstone – black, carbonaceous, with occasional ankerite veinlets parallel to bedding; gradational base.	0.05			
		Siltstone – dark brownish-grey to black, ferruginous, dense and heavy, with occasional thick bright coal bands; ankerite veinlets; gradational base.	0.35			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
	--- Core # 63	Sandstone - fine-grained, dark grey, very carbonaceous, less carbonaceous towards base; gradational base.	0.16 DD 787 0.22			
		Sandstone - fine to medium-grained, medium grey, carbonaceous, moderately bioturbated; gradational base.	1.07			
R3P @ 56cm above base of box 45	--- Core # 64	Sandstone - medium-grained, light grey, locally thin coarser layers, carbonaceous, silt clasts, coarsening towards base, good porosity; erosive base.	1.49 Box 45/46 0.07 DD 797 0.35			
		Siltstone - dark grey, flaser bedded; irregular base.	0.07			
R3Q @ 30 cm below top		Sandstone - medium-grained, light grey; fair porosity; gradational base.	0.82			
		Sandstone - medium-grained, medium grey, cherty; healed 80° fracture; gradational base.	0.52			
	--- Core # 65	Sandstone - medium-grained, light grey, some carbonaceous layers, small cherty part just below DD; gradational base.	1.23 DD 807 0.91			17°
		Sandstone - medium-grained, light grey, sparsely bioturbated, carbonaceous layers; sharp base.	0.32 Box 46/47 0.13			
		Sandstone - fine to medium-grained, medium grey, moderately bioturbated; churned base.	0.66			
		Sandstone - medium-grained, one carbonaceous layer in center; erosive base.	0.23			
	--- Core # 66	Sandstone - fine to medium-grained, medium grey, carbonaceous, moderately bioturbated, gradational base.	0.78 DD817 0.02			
		Sandstone - fine-grained, dark grey, very carbonaceous; wavy base.	0.54			
		Sandstone - fine-grained, brownish grey, sparsely carbonaceous, sparsely bioturbated; wavy base.	0.20			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - fine-grained, dark grey, carbonaceous, grading down to very carbonaceous at base; gradational base.	0.55			19°
		Sandstone - medium to coarse-grained, darkish grey, very carbonaceous; gradational base.	0.17			
		Sandstone - medium to coarse-grained, medium grey, carbonaceous, sparsely bioturbated; gradational base.	0.27			
R3R @ 39 cm above base of box 47	--- Core # 67	Sandstone - medium to coarse-grained, light grey, some carbonaceous layers, fair porosity; gradational base.	0.71 Box 47/48 0.63 DD 827 0.48			
		Sandstone - medium-grained, medium grey, cherty; gradational base.	1.19			
R3S @ 30 cm above DD 837 *R3T @ 30 cm below DD 837*	--- Core # 68	Sandstone - medium-grained, light grey, well sorted, fair porosity; erosive base.	1.41 DD 837 0.71 Box 48/49			
		Sandstone - medium-grained, medium grained, carbonaceous layers, coal spars in bottom 4 cm; abrupt base.	0.49			
Begin log by C.G. Cathyl-Bickford		Mudstone - dark brown, carbonaceous, intensely sheared and soft at top; abrupt base.	0.08	0.08		
		COAL - bright banded, pyritic; abrupt base	0.01	0.01		
		Mudstone - black, canneloid, slicked at base.	0.04	0.04	255.52	
		---- Roof of Comox Y coal bed				
	Comox Y coal bed: 0.12/0.19 m (63% coal)	COAL - dull banded, lustrous, with subconchoidal fracture; pyritic; abrupt base.	0.02	0.02	255.54	
		Mudstone - black, coaly, slightly sheared; abrupt base.	0.03	0.03	255.57	
		COAL - dull and bright, with pyritic films on cleat; abrupt base.	0.02	0.02	255.59	
		Mudstone - black, canneloid, hard.	0.04	0.04	255.63	
		COAL - dull banded, lustrous, pyritic.	0.03	0.03	255.66	

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		COAL - dull lustrous, slightly stony.	0.05	0.05	255.71	12°
		---- Floor of Comox Y coal bed				
		Mudstone - black, carbonaceous, with occasional thin bright coal bands; slicked at top and base.	0.11	0.11		10°
		Silt stone/sandstone (90:10 at top, grading to 50:50 at base) - medium to thick interlaminae of siltstone and very fine to fine-grained flaseroid sandstone; sparsely bioturbated at top, with rare thin bright coal bands; abrupt base.	0.55	0.55		20°
Begin log by D. Meckert *R3U @ 30 cm above DD 847*	---	Sandstone - medium-grained, light grey, some carbonaceous layers, good porosity; gradational base.	0.86 DD 847			18°
	Core # 69	Sandstone - fine to medium-grained, medium grey, numerous carbonaceous layers, few thin coaly layers; sharp base.	1.03 Box 49/50			7°
			1.10			4°
Begin log by C.G. Cathyl-Bickford	---	Mudstone - dark brown, carbonaceous, with occasional rootlets; hackly fracture	0.01	0.01	259.96	
	Core # 70	**---- Roof of Comox YL coal bed**	DD 857			
		Core loss - coal.		(0.20)	260.16	
		COAL - bright banded, hard, with stepped fractures at top (may have burst into well bore); *gassy* when recovered from core barrel; abrupt base.	0.07	0.07	260.23	
		---- Floor of Comox YL coal bed				
		Sandstone - fine to medium-grained, dark brown carbonaceous, rippled; abrupt base.	0.02	0.02	260.25	
		Mudstone - black, coaly, sandy, with occasional thick bright coal bands; gradational base.	0.02	0.02	260.27	
		Sandstone - black and coaly at top, becoming dark grey and carbonaceous below; rooty at top; occasional thin bright coal bands; gradational base.	0.06	0.06	260.33	13°
Begin log by D. Meckert *R3V @ 50 cm below top* *R3W @ 85 cm below top* *R3X @ 40 cm above base of box 50*	---	Sandstone - medium-grained, medium grey, carbonaceous; gradational base.	0.23			
	Core # 71	Sandstone - medium to coarse-grained, light grey, well sorted, *Macaronichnus* burrows in last 60 cm of box 50, fair porosity; gradational base.	2.69 DD 867 Box 50/51 0.68			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Sandstone - coarse-grained, light grey, good porosity; gradational base.	0.36			
		Sandstone - medium to coarse-grained, light grey, one thin coaly layer, some *Macaronichnus* burrows in bottom 30 cm; gradational base.	0.91			
	--- Core # 72	Sandstone - medium to coarse-grained, light grey, ferruginous banded, good porosity; gradational base	1.00 DD 877			
		Sandstone - medium-grained, light grey, becoming ferruginous towards base, large silty/carbonaceous clast in center, good porosity; sharp base.	0.60			
		Sandstone - fine-grained, dark grey, with many carbonaceous layers, cross bedded; sharp base.	0.11			15°
		Sandstone - fine-grained, brownish grey, very ferruginous, dense; sharp base.	0.17			
		Sandstone - fine to medium-grained, brownish grey, ferruginous banded, good porosity; wavy base.	0.63 Box 51/52 0.12			
		Sandstone - medium-grained, medium grey, cherty; fair porosity.;sharp base.	1.29			
R3Y @ 20 cm below DD 887	--- Core # 73	Sandstone - medium to coarse-grained, light grey, good porosity; gradational base.	0.26 DD 887 1.48			
R3Z @ 28 cm below top		Sandstone - medium to coarse-grained, medium grey carbonaceous, good porosity; erosive base.	0.71			

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Detailed log of portions of Boxes 52 and 53 – Z coalbed and floor strata.				
		Sandstone – as logged by Meckert; erosional base.				
Begin log by C.G. Cathyl-Bickford		Mudstone – black, carbonaceous, with sand-filled burrows; abrupt base.	0.05			
		Mudstone – medium grey, sandy, kaolinitic, sheared and broken; probable ash band.	0.08			
		Mudstone – dark brown, carbonaceous to coaly, intensely sheared; soft and sticky when first recovered from core barrel.	0.03		271.50	
		–— Roof of Comox Z coal bed —–				
	Comox Z coal bed: 0.15/0.15 m (100% coal)	Core loss – coal		(0.06)	271.56	
		COAL – dull, stony, badly broken and ground.	0.01	0.01	271.57	
		COAL – bright banded, clean, distinctly low density, with patchy calcite and pyrite on cleats.	0.08	0.08	271.65	
		–—– Floor of Comox Z coal bed –—–				
		Mudstone – black, coaly, hard, slicked at top and base.	0.02			
		Siltstone – medium brown, sandy, ferruginous, rooty; rolly, possibly erosional base.	0.06			
		Mudstone/siltstone (90:10 at top, grading down to 20/80 at base) – medium to thick fining-upward interlaminae of mudstone and siltstone; siltstones are locally rippled and sandy, especially at base of unit; probable crevasse-splay; abrupt base.	0.15 Box 52/53 0.20			
	----- Core #74	Mudstone – dark brownish-grey, silty, ferruginous, possibly slumped; core broken and ground at base.	0.10 DD 897 0.45			
		Siltstone – medium brown, ferruginous, sandy at base; gradational base.	0.16			
		Siltstone/mudstone (75:25) – thinly-interlaminated fining-upward dark grey siltstone and black mudstone with finely-broken plant debris; abrupt base.	0.21			14°

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Sandstone – very fine-grained, dark grey, with abundant silty carbonaceous laminae; contains an anastomosing network of calcite and ankerite veinlets; abrupt, polished base.	0.04			
		----- *Bedding-plane shear zone, probable* -----				
		Mudstone – dark brown, silty, intensely sheared and soft.	0.01			
		Siltstone – black, carbonaceous, sandy at base.	0.36			
		Sandstone – fine-grained, medium grey, with silty laminae; an isolated sharp-based band.	0.01			
		Sandstone – very fine-grained, medium to dark grey, very silty, ferruginous, dense, vaguely planar-laminated; gradational base.	0.20			
		Siltstone – dark grey, with locally-abundant ankerite veinlets; ferruginous; abrupt base. (*Note: this 102-cm set of strata may represent a channel-fill or oxbow plug.*)	0.45			
		Mudstone – black, very silty, slightly carbonaceous, slightly silty, with occasional finely-broken plant debris; abrupt base.	0.30			
		COAL – dull banded, stony, very hard; gradational base.	0.03			23°
		Mudstone – black, coaly, hard; abrupt base.	0.02			
		Siltstone – medium brownish-grey, ferruginous, a few small rootlets; large mud-filled burrows at top; abrupt base.	0.06			
		Mudstone – dark grey, very silty, slightly ferruginous; abrupt base.	0.13			
		COAL – dull and bright, with abundant ankerite on cleats; central dull band is notably granular (detrital?)	0.02			
		Siltstone – dark grey, slightly carbonaceous, locally ferruginous.	0.50			17°
		From here below pick up Meckert log.				

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
			DD 907			
	---	Siltstone - muddy, black, carbonaceous; gradational base.	0.36			
	Core # 75					
		Sandstone - fine-grained, medium grey, carbonaceous; gradational base.	0.23			
R3AA @ 20 cm above base		Sandstone - fine-grained, medium grey, carbonaceous layers, fair porosity; gradational base.	0.35			
			Box 53/54			
			1.19			14°
R3AB @ 15 cm below DD 917		Sandstone - fine-grained, brownish grey, ferruginous, carbonaceous layers, good porosity; gradational base.	0.94			
			DD 917			
	---		1.09			
	Core # 76					
		Sandstone - fine to medium-grained, medium grey, carbonaceous and carbonaceous layers, coal spars, gradational base.	0.46			
		Sandstone - medium-grained, light grey, well sorted, coarsening downward, good porosity throughout; erosive base.	0.60			
			Box 54/55			
			0.73			
	---		DD 927			
	Core # 77		3.03			
R3AC @ 50 cm above base of box 55	---		DD 937			
	Core # 78		0.70			
			Box 55/56			
			1.57			
		Sandstone - fine-grained, light grey, carbonaceous layers; gradational base.	0.26			
	---		DD 947			
	Core # 79		0.50			
		Sandstone - fine-grained, light grey, locally cherty, coarsening at base, ferruginous, fair porosity; erosive base.	1.48			
			Box 56/57			
			0.54			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
	--- Core # 80	Siltstone - dark grey, carbonaceous, few large burrows; flaser bedded in top half; sharp base.	0.53 DD 957 0.16			13°
		Sandstone/Siltstone (50/50) - fine-grained, darkish grey, carbonaceous, moderately bioturbated; gradational base.	0.37			
		Sandstone - fine-grained, medium grey, interbedded with very carbonaceous siltstone, few large burrows, healed 80° fracture; gradational base.	0.36			
		Siltstone - black, very carbonaceous, few large burrows filled with fine-grained sandstone; gradational base.	0.53			
		Sandstone - fine-grained, dark grey, interbedded with silty / carbonaceous layers, sparsely bioturbated, healed 80° fracture; gradational base.	0.39			
		Sandstone/Siltstone (50/50) - fine-grained, dark grey, interbedded with silty / carbonaceous layers, ripples and flaser bedding; sharp base.	0.87			
		Sandstone - fine-grained, very silty, dark grey, carbonaceous, moderately bioturbated; churned base.	0.31			
	--- Core # 81	Siltstone - dark grey, very carbonaceous, large healed 80° fracture, internally fractured and distorted; sharp base.	0.14 DD 967 0.06 Box 57/58 0.25			
		Siltstone - muddy, black, abundant thin layers of very fine-grained sandstone (80/20), few thin coaly bands near base; sharp base.	1.40			9°

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Detailed log of parts of Boxes 58 and 59.				
Begin log by C.G. Cathyl-Bickford		Siltstone – muddy, as above; abrupt base.	0.01			
		Mudstone – black, flaky, fissile, pyritic; abrupt base.	0.02			
		Siltstone – dark grey, sandy, grading down to rippled fine-grained sandstone at base; locally badly broken and ground; basal 9 cm are sheared.	0.42			
		COAL and shale – intensely-sheared bright coal interbedded with black coaly mudstone.	0.02			
		Mudstone – dark grey, intensely sheared; cornflakes.	0.01			
		----- *Bedding-plane shear zone, probable* -----				
		Siltstone – medium brownish-grey, slightly carbonaceous, rooty, fissile, splintery.	0.17		295.98	
		---- Roof of Comox No.1R coal bed ----				
	Comox No.1R coal bed: 0.60/0.60 m (100% coal)	COAL – intensely sheared and pulverised.	0.07	0.07	296.05	
		COAL – dull and bright, slightly sheared; badly broken.	0.11	0.11	296.16	
		COAL – dull banded, slightly sheared, broken, with sulphate bloom.	0.24	0.24	296.40	
		COAL – dull, stony, slightly sheared, broken.	0.07	0.07	296.47	
		COAL – bright banded, intensely sheared, badly broken and pulverised; friable.	0.06	0.06	296.53	
		Core loss – coal		(0.05)	296.58	
		----- Floor of Comox No.1R coal bed ----				
		Mudstone – black, carbonaceous, sheared and slicked; rooty.	0.05	0.05	296.63	
		Siltstone – dark grey, slightly carbonaceous; badly broken and ground.	0.11	0.11	296.74	
		----- *Bedding-plane shear zone, possible* -----				

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
	-----		DD 977			
	Core #82	Core loss – rock.		(0.02)	296.76	
		Siltstone – medium grey, slightly carbonaceous, with occasional rootlets; locally slicked and broken; sharp base.	0.31	0.31	297.07	
		Siltstone – medium grey, sandy, slightly ferruginous, slicked and sheared towards base; polished base.	0.43	0.43	297.50	19°
		—— Roof of Comox No.1 coal bed ——				
	Comox No.1 coal bed: 0.51/0.56 m	COAL – dull and bright, lustrous, broken.	0.04	0.04	297.54	
		Core loss (coal)		(0.01)	297.55	
		COAL – dull banded, stony; core ground at top.	0.04	0.04	297.59	28°

Canister C-11		COAL – dull and bright; abrupt base; *very gassy* when retrieved from core barrel.	0.01	0.01	297.60	
		Mudstone – black, canneloid, hard; abrupt base.	0.01	0.01	297.61	
D 3/5/A		COAL – dull and bright, slightly sheared; polished base.	0.11	0.11	297.72	
		COAL – bright banded, with calcite on cleats; abrupt base.	0.05	0.05	297.77	10°
		Mudstone – black, canneloid, massive, hard; abrupt base.	0.04	0.04	297.81	
		COAL – bright banded, with calcite on cleats; abrupt base.	0.09	0.09	297.90	25°
		COAL – dull and bright, hard.	0.09	0.09	297.99	
-----			Box 58/59			
		COAL – dull banded, lustrous, locally pyritic, badly broken.	0.07	0.07	298.06	
		—— Floor of Comox No.1 coal bed ——				
		Mudstone – black, coaly, flaky.	0.06			
		Mudstone – black, carbonaceous, with ferruginous laminae and occasional bright coal bands; abrupt base.	0.06			
		Mudstone – black, canneloid, with abundant very thin bright coal bands.	0.08			19°
		Shale and coal – black canneloid mudstone with thick bright coal bands; abrupt base.	0.03			
		Siltstone – medium grey, flaky, with occasional rootlets; probable seatearth; abrupt base.	0.09			

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY - GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Mudstone – dark grey, carbonaceous, with ferruginous streaks toward base; gradational base.	0.14			
		Siltstone – medium brownish-grey, ferruginous, rooty; abrupt base.	0.09			
		Mudstone – black, carbonaceous, with occasional very thin bright coal bands; gradational base.	0.25			23°
		Mudstone – black, coaly, with abundant thin bright coal bands.	0.03		298.88	17°
-----		**---- Roof of Comox No.1L coal bed ----**				
Canister C-12	*Comox No.1L coal bed:*	COAL – dull and bright.	0.12	0.12	299.00	
D 3/5/B	*0.35/0.35 m (100% coal)*	COAL – bright, intensely sheared; cornflakes.	0.05	0.05	299.05	
		COAL – bright banded, slightly sheared.	0.18	0.18	299.23	20°
-----		**---- Floor of Comox No.1L coal bed ----**				
		Mudstone – dark brownish-grey, slightly silty; ferruginous in top half; gradational base.	0.16			
		Siltstone – medium brownish-grey, occasional rootlets; locally sphaerosideritic; occasional oblique slips; core broken and disked.	0.29			
		Continue with Meckert log.				

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
	---		DD 987			
	Core # 83	Siltstone - muddy, black, carbonaceous, moderately bioturbated, sheared and broken; gradational base.	0.96			
		Sandstone - fine-grained, very silty, dark grey, carbonaceous; gradational base.	0.61			
		Siltstone - very muddy, black, carbonaceous, some thin layers of fine-grained sandstone (80/20); gradational base.	0.64 Box 59/60 0.15			
		Sandstone - medium-grained, dark grey, very carbonaceous; gradational base.	0.24			
		Sandstone - fine grained, brownish grey, carbonaceous layers, large silt clasts at base; gradational base.	0.39			
		Sandstone - medium to coarse-grained, light grey, silt clasts, good porosity; erosive base.	0.04			
R3AD @ 24 cm below DD 997	---		DD 997			
	Core # 84		0.78			
		Sandstone - fine to medium-grained, dark grey, thinly interbedded with carbonaceous siltstone layers (55/45); sharp base.	0.11			
		Sandstone - medium-grained, medium grey, silt clasts; erosive base.	0.33			
		Siltstone - muddy, black, very carbonaceous; gradational base.	0.22			
		Sandstone - fine-grained, medium grey, carbonaceous layers at top; gradational base.	0.21			20°
		Sandstone - medium-grained, light grey, carbonaceous streaks, silt clasts, sharp base.	0.41			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Siltstone - muddy, black, carbonaceous; sharp base.	0.20			
		Sandstone - medium to coarse-grained, light grey, silt clasts, fair porosity; erosive base.	0.42			40°
		Sandstone - medium-grained, light grey, carbonaceous layers, silt clasts, fair porosity; gradational base.	0.23			
		Siltstone - dark grey, very carbonaceous; gradational base.	0.09			
	---		DD 1007			
	Core # 85	Sandstone - fine-grained, light grey, carbonaceous layers, ferruginous nodule at top; gradational base.	0.28			
			Box 60/61			18°
			0.23			
						21°
R3AE @ 75 cm below top		Sandstone - medium-grained, light grey, large silt clasts scattered, vertical healed fracture, poor porosity; gradational base.	1.05			
		Sandstone - fine-grained, medium grey, dense; wavy base.	0.08			
R3AF @ 6 cm below top		Sandstone - medium-grained, light grey, few silt clasts; poor porosity; wavy base.	0.78			
		Siltstone - very sandy, dark grey, ferruginous; wavy base.	0.09			
		Sandstone - medium-grained, light grey, siltclasts scatterred; erosive base.	0.45			
		Siltstone - dark grey, with fine-grained sandstone laminae at base, few sandfilled burrows;sharp base.	0.08		309.40	35°
	---		DD 1017			
	Core # 86	Sandstone - medium-grained, light grey, large siltclasts scattered, erosive base.	0.53			
		COMOX FORMATION (CUMBERLAND MEMBER):				
		—— Roof of Comox No.2 Rider coal bed (horizon only) ——				
		Siltstone - dark grey, carbonaceous, thinly interbedded with fine-grained sandstone (80/20); sharp base.	0.12			
		Sandstone - fine-grained, light grey, ferruginous; erosive base.	0.13			
		Siltstone - sandy, dark grey, fine-grained sandstone laminae at base; sharp base.	0.07			
		Sandstone - fine-grained, light grey, with thin silty layers (90/10) at top and base; erosive base.	0.27			36°
		Siltstone - sandy, medium grey, gradational base.	0.04			
		Sandstone - fine-grained, light grey, with few thin silty layers (95/5), small siltclasts, poor porosity; erosive base.	0.38			
			Box 61/62			
			0.10			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Siltstone - dark grey, thinly interbedded with fine-grained sandstone; erosive base.	0.08			
		Sandstone - fine-grained, light grey, with silty layers at top, grading down into medium-grained sand with few siltclasts, further into coarse-grained sandstone with abundant siltclasts at base; erosive base.	0.95			
		Sandstone - medium-grained, light grey, silt clasts; erosive base.	0.40			
	---		DD 1027			
	Core # 87		0.13			
		Siltstone - dark grey, irregularly interbedded with medium-grained sandstone (50/50); wavy base.	0.05			
		Sandstone - medium-grained, light grey; sharp base.	0.23			
		Siltstone - sandy dark grey, carbonaceous; sharp base.	0.06			32°
		Sandstone - fine-grained, light grey, few silty streaks, ferruginous; gradational base.	0.17			
		Sandstone - medium-grained, silty, medium grey, ferruginous, thin silty layers near base; sharp base.	0.09			
		Sandstone - fine-grained, light grey; gradational base.	0.08			
		Sandstone - medium-grained, light grey, carbonaceous streaks, thick calcitic fracture (along bedding plane?) at base.	0.44			28°
R3AG @ 69 above base *R3AH @ 19 above base*		Sandstone - coarse-grained, light grey, pebbly at base; sharp base.	0.92			
		Sandstone - coarse-grained, light grey, pebbly, silt clasts, very soft and brittle (high feldspar content?); erosive base.	0.19			

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Detailed log of portions of Boxes 62 and 63 – ties to Meckert logs above and below.				
Begin log by C.G. Cathyl-Bickford		Mudstone – dark grey to black, carbonaceous; sheared and slicked.	0.04		314.45	35°
		—— Roof of Comox No.2 coal bed ——				
	Comox No.2 coal bed: 0.315/0.93 m (34% coal)	COAL – dull banded, with occasional laminae of mudstone; sheared and broken.	0.05	0.05	314.50	
		Mudstone – black, coaly, with occasional thick bright coal bands; slicked and broken.	0.05	0.05	314.55	
		COAL – dull, stony, intensely sheared and broken.	0.05	0.05	314.60	
		Mudstone; black, coaly, rooty, sheared and slicked.	0.02	0.02	314.62	
		Mudstone – dark grey, silty, rooty.	0.14 Box 62/63	0.14	314.76	
		Mudstone – dark grey, silty, slightly carbonaceous, rooty, broken.	0.06	0.06	314.82	35°
		Mudstone – black, coaly, sheared and broken.	0.02	0.02	314.84	
		COAL – dull, intensely sheared and pulverised.	0.09	0.09	314.93	
		Mudstone – black, coaly, slicked.	0.06	0.06	314.99	
		Mudstone – black, canneloid, sheared and slicked.	0.02	0.02	315.01	
		COAL – dull and bright, intensely sheared and broken; cornflakes.	0.06	0.06	315.07	
		Mudstone – dark brownish-grey, carbonaceous, with occasional rootlets; sheared and slicked, badly broken.	0.04	0.04	315.11	
		Shale and coal – intensely sheared flakes of canneloid mudstone with abundant thick bright coal bands.	0.03	0.03	315.14	

SAMPLES	CORE RUNS/ RECOVERY	CORE DESCRIPTION: LITHOLOGY – GRAIN-SIZE, COLOUR, MODIFIERS, MINOR CONSTITUENTS, SEDIMENTOLOGY, PALAEONTOLOGY, TECTONIC FEATURES, PHYSICAL CONDITION, BASAL CONTACT	RECOVERY (METRES) CORE BOXES, AND MARKER BLOCKS	THICKNESS (METRES, AS INTERPRETED FROM GEOPHYSICS)	DEPTH TO BASE (METRES, AS INTERPRETED FROM GEOPHYSICS)	APPARENT DIP OF BEDDING
		Mudstone – black, coaly, with abundant thick bright coal bands and patchy ankeritic films; abrupt base.	0.11	0.11	315.25	40°
		COAL – bright; polished at base.	0.01 DD 1037	0.01	315.26	
	Core #88	COAL – dull banded, hard, with ankerite films on cleats; broken.	0.04	0.04	315.30	
		Mudstone – black, coaly; bubbling *gas* when recovered from core barrel; abrupt.	0.05	0.05	315.35	
		COAL and shale – interlaminated bright coal and coaly mudstone; abrupt base.	0.03	0.03	315.38	
		—— Floor of Comox No.2 coal bed ——				
		Mudstone – dark brown, carbonaceous, slightly ferruginous, rooty, with occasional bright coal bands and disseminated volcanic grit.	0.09	0.09	315.47	
		Mudstone – black, coaly, with scattered volcanic grit; gradational base.	0.04	0.04	315.51	
		Siltstone – dark brownish-grey, carbonaceous, ferruginous, with occasional thin bright coal bands and scattered volcanic grit; bubbling *gas*; gradational base.	0.09	0.09	315.60	
		Siltstone – dark grey to brownish-grey, sandy, locally carbonaceous, with occasional thick bright coal bands and disseminated volcanic grit, possibly including lapilli; *very gassy* when recovered from core barrel; abrupt base.	0.38	0.38	315.98	35°
		KARMUTSEN FORMATION?				
		Breccia – angular to round pebbly shards and possible cobbles of dark grey ?tuff and fine-grained brown porphyritic dacite; frequent ankerite veinlets cut by younger calcite veinlets; general pervasive rusty stain outlining fragmental textures. Clast size increases downwards from grit to cobbles; appears to have been barely transported regolith, probably weathering rind on basement; *gassy* when first seen; abrupt base.	2.36	2.36	318.34	45°
			DD 1047			
	Core #89	Basalt? – fine-grained, light brownish-grey, with abundant ankerite veinlets; appears to be bleached. Possible tie to Meckert logging here.	0.32			
		Basalt? – as above, but more sound and coherent.	0.32 Box 63/64			

Samples	Coreruns/ Recovery	Core Description: Lithology - Grainsize, Colour, Modifiers, Minor Constituents, Sedimentology, Paleontology, Tectonic Features, Physical condition, Basal Contact.	Recovery (Metres) Core Boxes, and Marker Blocks	Thickness (Metres as interpreted from Geophysics)	Depth to Base (Metres, as interpreted from Geophysics)	Apparent Dip of Bedding
		Basalt (Regolith)- light brown, weathered, in situ with extensive mudfilled cracks.	0.32 Box 63/64 2.44 DD 1057 0.43			
	--- Core # 90					
		Basalt - unweathered, ranging from very fine-grained bluish sections to dark grey to black sections with ankerite/calcite filled vacuities; Many smal ankeritic veinlets throughout.	1.51 Box 64/65 1.11 DD 1067 2.84 DD 1077 Box 65/66 3.08 DD 1087			
	--- Core # 91					
	--- Core # 92					

Report on the Sealing of Drillholes

Inspection District:	Comox (Vancouver Island)	Date of Report:	AUG 31, 2001
Company:	Priority Ventures Ltd.	Land District:	Comox
Coal Map Number:	92 F/11 E	Licence Number:	383369

1. Number of Drillhole:	2. Surface Elevation:	3. Drillhole Type:
Dove Creek D-3	approx. 79.5 metres	Diamond-drill hole with wide-diameter surface casing and aquifer protection casing

4. Drilled by:	Contractor:	cored section:	Exploration Company:
	casing: Fyfe's Well Drilling;	Aggressive Diamond Drilling	Priority Ventures Ltd.

5. Date of Completion: August 6, 2001

6. Date of Sealing: Aug 29-30, 2001

7. Sealed by:	Contractor: Fyfe's Well Drilling	Exploration Company: Priority Ventures Ltd.

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes

(b) If so, give details and location: 150-mm aquifer protection casing from ground level to 17.8 metres; 107-mm surface casing from ground level to 45.4 metres – casing points measured by geophysical logs. 96-mm open-hole section through rock extends down to total depth of 331.3 metres. Caliper log indicates minimal overgauge (washed-out) sections in coal beds.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspector's instructions? YES. PORTLAND CEMENT (TYPE 10) GROUT WAS USED WITH 1:1 MIXTURE WITH POTABLE WATER. DARATARD 17 WAS ADDED TO

(b) If no, give reasons and details of variation: DELAY FINAL SET TIME.

10. (a) Was the sealing effective? YES.

(b) Details of any tests carried out: – BOREHOLE OBSERVED SEALED TO GROUND SURFACE.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature: B.A.Sc (Eng). Countersignature: C.G Cathyl Pritchard, P.Geo.

Designation: PRINCIPAL / MANAGER. Designation: Project Manager

Date: Aug 31, 2001 Date: Sept. 4, 2001

WM Form 327
28 Jun 01

Fyfe's WELL DRILLING LTD.
3331 ALBERNI HIGHWAY
QUALICUM
75[illegible]

Annex A-4: Logs of Canadian Collieries (Dunsmuir) Ltd. boreholes CX-105, -107, -109, -110, -111, -113, -114, -117, -118, -120, and –121

Contents:

Core Description of CX-105
Core Description of CX-107
Core Description of CX-109
Core Description of CX-110
Core Description of CX-111
Core Description of CX-113
Core Description of CX-114
Core Description of CX-117
Core Description of CX-118
Core Description of CX-120
Core Description of CX-121

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-105

Location as given on log: *in Lot 154, Comox Land District*
Coordinates: UTM NAD 83: *349431 m E, 5509072 m N*
Collar elevation: *79.25 metres*
Total depth: *1179.83 feet*
Commenced: *February 8, 1911* **Completed:** *March 29, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1989*

Record source: *Inspector of Mines collection (linen plus strip log); Coal Assessment Report 694 (annotated strip log); British Columbia Archives and Records Service, Additional Manuscript 436, Box 6, File 3.*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Gravel	89	89
TRENT RIVER FORMATION (BROWNS MEMBER):		
Sandstone	7	96
TRENT RIVER FORMATION (PUNTLEDGE MEMBER):		
Sandy shale	381	477
Sandstone, grey	6	483
Sandy shale	3	486
Sandstone, coarse	2	488
Sandy shale	29	517
TRENT RIVER FORMATION (COWIE MEMBER):		
Sandstone, grey	6	523
TRENT RIVER FORMATION (COUGARSMITH MEMBER):		
Sandy shale	17	540
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone, grey	50	590
Sandy shale	36	626
Sandstone, grey	13.42	639.42
—— Roof of Comox X coal bed (repeat?) ——		
Coal	0.5	639.92
Shale, brown	2.08	642
Coal, bony	2.25	644.25
----- Floor of Comox X coal bed (repeat?) -----		
Shale, brown	2.75	647
----- Roof of Comox X Lower coal bed (repeat?) -----		
Coal, bony	0.33	647.33
----- Floor of Comox X Lower coal bed (repeat?) -----		
Shale, brown	2.67	650
Sandstone, grey	68	718
----- *Fault, possible* -----		
Shale, brown	3	721
----- Roof of Comox X coal bed? -----		
Coal, bony	0.67	721.67
----- Roof of Comox X coal bed? ----		

Log of Comox CX-105 (continued):

Description:	Thickness (feet):	Depth(feet):
Shale, brown	2.33	724
----- Roof of Comox X Lower coal bed? -----		
Coal	0.5	724.5
----- Floor of Comox X Lower coal bed? -----		
Sandstone, light grey	54.5	779
Shale – brown	2.83	781.83
----- Roof of Comox Y coal bed -----		
Coal	1.67	783.5
----- Floor of Comox Y coal bed -----		
Sandstone, grey	17.83	801.33
Sandstone	41.42	842.75
Shale, brown	0.25	843
Sandstone	25.17	868.17
Shale, brown	5.08	873.25
----- Roof of Comox Z coal bed? -----		
Coal	1.42	874.67
----- Floor of Comox Z coal bed? -----		
Shale, brown	13.33	888
Sandstone	10	898
Shale, brown	1.5	899.5
Coal	0.92	900.42
Shale, brown	6.58	907
Sandy shale	2	909
Sandstone, shaly	6	915
Sandstone	8	923
Coal	0.75	923.75
Shale, brown	1	924.75
Sandstone	21.25	946
Shale, brown	4.67	950.67
----- Roof of Comox No.1 Rider coal bed -----		
Coal	0.5	951.17
Shale, brown	0.67	951.83
Coal	1.83	953.67
------Floor of Comox No.1 Rider coal bed -----		
Shale, brown	2	955.67
----- Roof of Comox No.1 coal bed -----		
Coal	1.25	956.92
----- Floor of Comox No.1 coal bed -----		
Shale, brown	4.08	961
Sandstone	45	1006
COMOX FORMATION (CUMBERLAND MEMBER):		
Shale, brown	0.33	1006.33
----- Roof of Comox No.2 Rider coal bed -----		
Coal	0.67	1007
Shale, brown	1	1008
Coal	1.08	1009.08
----- Floor of Comox No.2 Rider coal bed -----		
Shale – brown	10.67	1019.75
----- Roof of Comox No.2 coal bed -----		
Coal	0.5	1020.25

Log of Comox CX-105 (continued):

Description:	**Thickness (feet):**	**Depth(feet):**
Shale, brown	1.17	1021.42
Coal	0.5	1021.92
----- Floor of Comox No.2 coal bed ----		
Shale, brown	10.08	1032
Sandstone, grey	18	1050
----- Roof of Comox No.2A coal bed -----		
Coal	1.17	1051.17
----- Floor of Comox No.2A coal bed ----		
Shale	10.67	1061.83
Sandstone, grey	25	1086.83
Sandstone	4	1090.83
Sandy shale	2	1092.83
Coal, bony	2.67	1095.5
Sandy shale	11.33	1106.83
Shale, brown	0.83	1107.67
----- Roof of Comox No.3 coal bed -----		
Coal, bony and mixed with shale	5.67	1113.33
----- Floor of Comox No.3 coal bed -----		
Shale, brown	0.67	1114
Sandy shale	4.83	1118.83
Sandstone, grey	13	1131.83
Shale	3	1134.83
COMOX FORMATION (BENSON MEMBER):		
Conglomerate, soft	13	1147.83
KARMUTSEN FORMATION:		
Trap rock	32	1179.83

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-107

Location as given on log: *in Sec.21, Twp.9, Comox Land District*
Coordinates: UTM NAD 83: *349946 m E, 5507702 m N*
Collar elevation: mine datum: *267 feet*
Total depth: *552 feet*
Commenced: *April 11, 1911* **Completed:** *May 6, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1999*

Record source: *Inspector of Mines collection (linen plus strip log); Coal Assessment Report 694 (annotated strip log and typed overburden log).*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Clay	8	8
Gravel and boulders	9	17
TRENT RIVER FORMATION (PUNTLEDGE MEMBER):		
Sandy shale	28	45
TRENT RIVER FORMATION (COWIE MEMBER):		
Sandstone	18	63
Sandstone (grey)	34	97
TRENT RIVER FORMATION (COUGARSMITH MEMBER):		
Sandy shale	69	166
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone, grey	80	246
----- Roof of Comox X coal bed -----		
Coal, bony	**1**	247
----- Floor of Comox X coal bed -----		
Sandy shale	39	286
Sandstone, grey	38	324
Shale, dark	6	330
----- Roof of Comox Y coal bed -----		
Coal	**1**	331
----- Floor of Comox Y coal bed -----		
Shale, dark	8	339
Sandstone, grey	44	383
Coal	**0.33**	383.33
Sandstone, grey	60.67	444
Shale, dark	1	445
----- Roof of Comox Z coal bed -----		
Coal	**1.5**	446.5
----- Floor of Comox Z coal bed -----		
Shale, dark	3	449.5
Sandstone, grey	15.5	465
Shale, dark	21	486
Sandstone, grey	20	506
Shale, grey	9	515

Log of Comox CX-107 (continued):

Description:	**Thickness (feet):**	**Depth(feet):**
----- Roof of Comox No.1 coal bed -----		
Coal, bony	**3.5**	518.5
----- Floor of Comox No.1 coal bed -----		
Clay shale	11.5	530
KARMUTSEN FORMATION:		
Trap rock, hard	22	552
	-----	-------

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-109

Location as given on log: *in Sec. 20, Twp. 9, Comox Land District*
Coordinates: UTM NAD 83: *349066 m E, 5508047 m N*
Collar elevation: mine datum: *276 feet*
Total depth: *289 feet*
Commenced: *May 19, 1911* **Completed:** *May 30, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1999*

Record source: *Inspector of Mines collection (linen plus strip log); Coal Assessment Report 694 (annotated strip log and typed overburden log).*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Coarse gravel and large boulders	36	36
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone, light grey	43	79
----- Roof and floor of Comox X coal bed (horizon only) -----		
Sandstone, shaly	9	88
Sandstone, light grey	15	103
Shale, black	4	107
Sandstone, light grey	51	158
----- Roof of Comox Y coal bed -----		
Coal, bony -- recovered 1 foot core	3	161
----- Floor of Comox Y coal bed -----		
Sandstone, light grey	30	191
Sandstone, dark grey	7	198
Shale, brown	18	216
Sandstone, light	34.5	250.5
----- Roof of Comox Z coal bed (horizon only) -----		
Shale, brown	7.5	258
Sandy shale	2	260
Sandstone, shaly	13	273
Sandy shale	7	280
KARMUTSEN FORMATION:		
Trap rock	9	289
	-----	-------

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-110

Location as given on log: *in Section 16, Township 9, Comox Land District*
Coordinates: UTM NAD 83: *349791 m E, 5506582 m N*
Collar elevation: geodetic datum: *82.3 m*
Total depth: *764 feet*
Commenced: *May 25, 1911* **Completed:** *June 11, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1998*

Record source: *BCARS Add. Mss. 463, Box 6, File 3; also in Inspector of Mines collection.*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Gravel	10	10
TRENT RIVER FORMATION (PUNTLEDGE MEMBER):		
Sandy shale	161	171
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone	11.5	182.5
---- Roof of Comox X coal bed ----		
Coal and shale	3.5	186
Shale	0.08	186.08
Coal	0.17	186.25
---- Floor of Comox X coal bed ----		
Sandy shale	0.75	187
Sandstone	89.08	276.08
Shale	0.5	276.58
---- Roof of Comox Y coal bed ----		
Coal	0.83	277.42
---- Floor of Comox Y coal bed ----		
Shale	5.17	282.58
---- Roof of Comox Y Lower coal bed ----		
Coal	0.83	283.42
---- Floor of Comox Y Lower coal bed ----		
Sandstone	56.08	339.5
Shale	0.5	340
Coal	0.58	340.58
Shale	7.33	347.92
---- Roof of Comox Z coal bed ----		
Coal	0.67	348.58
Shale, bony	0.92	349.5
Coal	1.58	351.08
---- Floor of Comox Z coal bed ----		
Shale	1.83	352.92
Coal	0.17	353.08
Sandstone	48.92	402
Sandy shale	4	406
---- Roof of Comox No.1 Rider coal bed? (horizon only) ----		
Shale, dark	14	420
Sandy shale	1.5	421.5

Log of Comox CX-110 (continued):

Description:	Thickness (feet):	Depth (feet):
----- Roof of Comox No.1 coal bed -----		
Coal	1.5	423
----- Floor of Comox No.1 coal bed -----		
Shale mixed with bony **coal**	3.5	426.5
Soapstone	0.5	427
Shale, dark	6	433
----- Roof of Comox No.1 Lower coal bed -----		
Coal	0.5	433.5
Coal mixed with shale	0.75	434.25
----- Floor of Comox No.1 Lower coal bed -----		
Sandy shale, grey	0.75	435
Sandy shale	20	455
Sandstone, grey	8.5	463.5
Sandy shale	1.5	465
Sandstone, grey	28	492
COMOX FORMATION (CUMBERLAND MEMBER):		
----- Roof of Comox No.2 Rider coal bed -----		
Coal	0.75	493.75
----- Floor of Comox No.2 Rider coal bed -----		
Shale, grey	4	497.75
Sandstone, grey	19.25	517
Shale, dark	2.58	519.58
Coal, bony	0.42	520
Shale, dark	1	521
Shale, brown	1.33	522.33
----- Roof of Comox No.2 coal bed -----		
Coal	0.25	522.58
Shale	0.08	522.67
Coal	0.42	523.08
Coal and shale	0.67	523.75
Coal	1.92	525.67
----- Floor of Comox No.2 coal bed -----		
Shale	0.75	526.42
Shale, limey	9.58	536
Sandy shale, grey	4	540
Sandstone	44	584
Shale, dark	0.67	584.67
Sandstone, grey	5.5	590.17
----- Roof of Comox No.2A coal bed -----		
Coal	1	591.17
----- Floor of Comox No.2A coal bed -----		
Shale, dark	2	593.17
Sandstone, grey	3	596.17
Sandy shale	4.17	600.33
Sandstone, grey	15.67	616
Coal	0.5	616.5
Shale, dark	2	618.5
Sandstone, grey	4	622.5
Sandstone, bluish-grey, with coal markings	6	628.5
Shale, dark	5.5	634

Log of Comox CX-110 (continued):

Description:	Thickness (feet):	Depth (feet):
----- Roof of Comox No.1 coal bed -----		
Coal	1.5	423
----- Floor of Comox No.1 coal bed -----		
Shale mixed with bony **coal**	3.5	426.5
Soapstone	0.5	427
Shale, dark	6	433
----- Roof of Comox No.1 Lower coal bed -----		
Coal	0.5	433.5
Coal mixed with shale	0.75	434.25
----- Floor of Comox No.1 Lower coal bed -----		
Sandy shale, grey	0.75	435
Sandy shale	20	455
Sandstone, grey	8.5	463.5
Sandy shale	1.5	465
Sandstone, grey	28	493
COMOX FORMATION (CUMBERLAND MEMBER):		
----- Roof of Comox No.2 Rider coal bed -----		
Coal	0.75	493.75
----- Floor of Comox No.2 Rider coal bed -----		
Shale, grey	4	497.75
Sandstone, grey	19.25	517
Shale, dark	2.58	519.58
Coal, bony	0.42	520
Shale, dark	1	521
Shale, brown	1.33	522.33
----- Roof of Comox No.2 coal bed -----		
Coal	0.25	522.58
Shale	0.08	522.67
Coal	0.42	523.08
Coal and shale	0.67	523.75
Coal	1.92	525.67
----- Floor of Comox No.2 coal bed -----		
Shale	0.75	526.42
Shale, limey	9.58	536
Sandy shale, grey	4	540
Sandstone	44	584
Shale, dark	0.67	584.67
Sandstone, grey	5.5	590.17
----- Roof of Comox No.2A coal bed -----		
Coal	1	591.17
----- Floor of Comox No.2A coal bed -----		
Shale, dark	2	593.17
Sandstone, grey	3	596.17
Sandy shale	4.17	600.33
Sandstone, grey	15.67	616
Coal	0.5	616.5
Shale, dark	2	618.5
Sandstone, grey	4	622.5
Sandstone, bluish-grey, with coal markings	6	628.5
Shale, dark	5.5	634

Log of Comox CX-110 (continued):

Description:	**Thickness (feet):**	**Depth (feet):**
Sandy shale	15	649
Shale	1	650
Shale, blue	3	653
----- Roof of Comox No.3 coal bed -----		
Coal	1	654
----- Floor of Comox No.3 coal bed -----		
Shale, dark	4	658
Sandy shale	3	661
Sandstone, grey	3	664
Sandstone, grey, with coal markings	15	679
Sandstone, grey	44.5	723.5
----- Roof of Comox No.3A coal bed -----		
Coal	2.67	725.17
Shale, brown	0.92	726.08
Coal, bony	1.25	727.33
Shale, dark	2	729.33
Coal	3.33	732.67
Coal, bony	0.33	733
----- Floor of Comox No.3A coal bed -----		
Shale	0.5	733.5
Shale mixed with **coal**	0.83	734.33
Fireclay	7.67	742
Shale	6	748
KARMUTSEN FORMATION		
Trap, decomposed	6	754
Trap rock	10	764
	---------	---------

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-111

Location as given on log: *in SW ¼, Section 20, Township 9, Comox Land District*
Coordinates: UTM NAD 83: *348276 m E, 5507782 m N*
Collar elevation: geodetic datum: *110 m*
Total depth: *464 feet*
Commenced: *June 20, 1911* **Completed:** *July 10, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1989*

Record source: *BCARS Add. Mss. 463, Box 6, File 3; also in Inspector of Mines collection.*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Gravel and boulders	28	28
COMOX FORMATION (DUNSMUIR MEMBER):		
----- Floor of Comox X Lower coal bed? (horizon only) -----		
Sandstone	84	112
Sandstone, shaly	4	116
Shale	1	117
---- Roof of Comox Y coal bed -----		
Coal, bony	1	118
---- Floor of Comox Y coal bed -----		
Sandstone	67	185
Shale	1.33	186.33
---- Roof of Comox Z coal bed -----		
Coal, bony and mixed with shale	2.67	189
----- Floor of Comox Z coal bed ----		
Shale	3	192
Sandstone	55	247
----- Roof of Comox No.1 Rider coal bed? (horizon only) -----		
Shale	4	251
Sandstone	16	267
Shale	0.5	267.5
----- Roof of Comox No.1 coal bed -----		
Coal	0.67	268.17
Shale	0.67	268.83
Coal	0.5	269.33
---- Floor of Comox No.1 coal bed -----		
Shale	2.33	271.67
----- Roof of Comox No.1 Lower coal bed ----		
Coal	0.25	271.92
Shale	0.25	272.17
Coal	0.67	272.83
----- Floor of Comox No.1 Lower coal bed -----		
Shale	1	273.83
Sandstone	26.17	300
Sandy shale	10	310
Sandstone	74.5	384.5
Coal, bony	0.25	384.75
Sandstone	0.75	385.5

Log of Comox CX-111 (continued):

Description:	**Thickness (feet):**	**Depth (feet):**
COMOX FORMATION (CUMBERLAND MEMBER):		
-----Roof of Comox No.2 Rider coal bed -----		
Coal, bony	0.25	385.75
----- Floor of Comox No.2 Rider coal bed -----		
Shale	2.25	388
Clay shale	9.5	397.5
Shale	0.5	398
----- Roof of Comox No.2 coal bed ----		
Coal	0.75	398.75
Clay shale	1.5	400.25
Coal, bony	0.58	400.83
Clay shale	0.58	401.42
Coal, bony	0.08	401.5
Shale	0.42	401.92
Coal	1.08	403
----- Floor of Comox No.2 coal bed -----		
Shale	22	425
Sandstone, shaly	5	430
Sandstone	23	453
Clay shale	3	456
Sandstone	8	464

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-113

Location as given on log: *in Sec.15, Twp.9, Comox Land District*
Coordinates: UTM NAD 83: *350931 m E, 5508047 m N*
Collar elevation: geodetic datum: *53.34 m*
Total depth: *353.67 m*
Commenced: *July 3, 1911* **Completed:** *August 7, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1999*

Record source: *Inspector of Mines collection (linen plus strip log); J.D. McKenzie (GSC) NB 39, p.34, sta. 10.VI.9x5*

Description:	Thickness (feet):	Depth (feet):
SALISH SEDIMENTS:		
Gravel and boulders	17	17
TRENT RIVER FORMATION (PUNTLEDGE MEMBER):		
Sandy shale	403	420
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone, grey	84	504
Sandy shale, dark	12	516
Sandstone, grey	18	534
Sandstone, shaly	5	539
Sandstone, grey	9	548
----- Roof of Comox X coal bed -----		
Coal	1	549
----- Floor of Comox X coal bed -----		
Sandstone, grey	86	635
----- Roof of Comox Y coal bed -----		
Coal	1	636
----- Floor of Comox Y coal bed -----		
Sandy shale	6	642
Sandstone, grey	3	645
Shale	2.5	647.5
----- Roof of Comox Y Lower coal bed -----		
Coal	1.08	648.58
----- Floor of Comox Y Lower coal bed -----		
Sandstone, grey	66.42	715
Coal	0.17	715.17
Shale, dark	0.67	715.83
----- Roof of Comox Z coal bed -----		
Coal	1	716.83
Shale. dark	0.17	717
Coal	1	718
Shale	0.25	718.25
Coal	1.5	719.75
----- Floor of Comox Z coal bed -----		
Sandstone, grey	40.25	760
----- Roof of Comox No.1 Rider coal bed (horizon only) -----		
Sandy shale, hard, dark	4	764
Sandy shale, dark	3	767
Sandstone, grey	12.75	779.75

Log of Comox CX-113 (continued):

Description:	Thickness (feet):	Depth (feet):
—— Roof of Comox No.1 coal bed -----		
Coal	1.5	781.25
----- Floor of Comox No.1 coal bed -----		
Shale, dark	6	787.25
Sandstone, grey	31.75	819
Sandy shale, dark	7	826
Sandstone, grey	7	833
Sandy shale	4	837
Sandstone, grey	34	871
COMOX FORMATION (CUMBERLAND MEMBER):		
----- Roof of Comox No.2 Rider coal bed -----		
Coal	1.25	872.25
----- Floor of Comox No.2 Rider coal bed -----		
Sandstone, shaly, grey	29.75	902
Shale, dark	5	907
----- Roof of Comox No.2 coal bed ------		
Coal	1	908
Shale	0.25	908.25
Coal	0.5	908.75
Shale	1.58	910.33
Coal, bony	1.67	912
Coal	1.42	913.42
---- Floor of Comox No.2 coal bed -----		
Shale and **coal**	0.75	914.17
Shale, dark	3.67	917.83
Shale, limy	3	920.83
Sandstone	9.17	930
Sandstone, grey	59	989
Shale, dark	6	995
----- Roof of Comox No.2A coal bed -----		
Coal	1.5	996.5
----- Floor of Comox No.2A coal bed -----		
Shale	22.5	1019
Sandstone, broken	9	1028
----- *fault, possible* -----		
Sandstone	2	1030
Shale	7.67	1037.67
----- Roof of Comox No.3 coal bed -----		
Coal	0.42	1038.08
Shale	0.25	1038.33
Coal	1.67	1040
----- Floor of Comox No.3 coal bed -----		
Shale	10	1050
Sandstone	6	1056
Shale	11	1067
Shale, with streaks of **coal**	5	1072
Shale	0.67	1072.67
Coal	1.58	1074.25
Shale	9.75	1084
Sandstone, grey	25.17	1109.17

Log of Comox CX-113 (continued):

Description:	**Thickness (feet):**	**Depth (feet):**
Shale, bony	0.5	1109.67
Sandstone	0.33	1110.4
Sandy shale	4	1114
Sandstone	3.5	1117.5
----- Roof of Comox No.3A coal bed -----		
Coal, broken	1.5	1119
Shale, mixed with **coal**	3	1122
Coal	1	1123
----- Floor of Comox No.3A coal bed -----		
Shale, black	7	1130
Shale, with streaks of **coal**	6	1136
KARMUTSEN FORMATION:		
Trap, decomposed	17	1153
Trap, hard	7	1160

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-114

Location as given on log: *in Sec.15, Twp.9, Comox Land District*
Coordinates: UTM NAD 83: *347911 m E, 5507952 m N*
Collar elevation: geodetic datum: *112.78 m*
Total depth: *561 feet*
Commenced: *July 21, 1911* **Completed:** *October 26, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1999*
Record source: *BCARS Add. Mss. 463, Box 6, File 3; also in Inspector of Mines collection.*

Description:	**Thickness (feet):**	**Depth (feet):**
SALISH SEDIMENTS:		
Gravel	7	7
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone	54	61
Shale	11	72
---- Roof of Comox Z coal bed -----		
Coal	1.17	73.17
---- Floor of Comox Z coal bed -----		
Shale	10.83	84
Sandstone	73	157
Shale	2.75	159.75
----- Roof of Comox No.1 coal bed -----		
Coal	0.75	160.5
Shale	0.33	160.83
Coal	0.5	161.33
---- Floor of Comox No.1 coal bed -----		
Shale	2	163.33
----- Roof of Comox No.1 Lower coal bed -----		
Coal	0.25	163.58
Shale	0.33	163.92
Coal	0.58	164.5
----- Floor of Comox No.1 Lower coal bed -----		
Shale	0.58	165.08
Sandstone	76.92	242
COMOX FORMATION (CUMBERLAND MEMBER):		
Shale	7.33	249.33
----- Roof of Comox No.2 Rider coal bed -----		
Coal	1.17	250.5
----- Floor of Comox No.2 Rider coal bed -----		
Shale	4.58	255.08
Coal, bony	0.17	255.25
Clay shale	12	267.25
Coal, bony	0.08	267.33
Clay shale	2.83	270.17
Coal	0.33	270.5
Clay shale	16.33	286.83
----- Roof of Comox No.2 coal bed -----		
Coal, bony	0.92	287.75
----- Floor of Comox No.2 coal bed ----		
Shale	6.33	294.08

Log of Comox CX-114 (continued):

Description:	**Thickness (feet):**	**Depth (feet):**
Sandstone	10.92	305
Shale	2	307
Coal	1	308
Shale	4	312
Clay shale	37	349
Shale	0.5	349.5
----- Roof of Comox No.2A coal bed -----		
Coal	0.67	350.17
Shale	0.25	350.42
Coal	0.67	351.08
----- Floor of Comox No.2A coal bed -----		
Shale	0.42	351.5
Clay shale	6.5	358
Sandy shale	2	360
Clay shale	4	364
Sandstone	54	418
Shale	6	424
Clay shale	2.5	426.5
----- Roof of Comox No.3 coal bed -----		
Coal, bony	0.58	427.08
----- Floor of Comox No.3 coal bed -----		
Clay shale	5	432.08
Coal	0.58	432.67
Clay shale	9.33	442
Sandstone, shaly	19	461
Clay shale	9	470
Sandstone	36	506
Shale	12	518
Clay shale	13.5	531.5
Shale	0.5	532
----- Roof of Comox No.3A coal bed -----		
Coal	0.5	532.5
Shale	0.5	533
Coal	0.5	533.5
Shale	0.75	534.25
Coal	0.75	535
Shale	0.5	535.5
Coal	0.83	536.33
----- Floor of Comox No.3A coal bed -----		
Clay shale	3.17	539.5
----- Roof of Comox No.4 coal bed? -----		
Coal, bony	0.75	540.25
Shale	0.75	541
Coal	0.58	541.58
----- Floor of Comox No.4 coal bed? -----		
Shale	2.42	544
Clay shale	4	548
Shale	3	551
KARMUTSEN FORMATION:		
Trap rock	10	561
	------	--------

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-117

Location as given on log: *in Section 30, Township 9, Comox Land District*
Coordinates: UTM NAD 83: *347381 m E, 5509622 m N*
Collar elevation: geodetic datum: *102 m*
Total depth: *901 feet*
Commenced: *August 1, 1911* **Completed:** *October 5, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1998*

Record source: *BCARS Add. Mss. 463, Box 6, File 3; also in Inspector of Mines collection.*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Boulders	25	25
Gravel and blue clay	51	76
TRENT RIVER FORMATION (COUGARSMITH MEMBER):		
Sandy shale	10	86
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone, shaly	98	184
Shale, brown	1	185
----- Roof of Comox X coal bed -----		
Coal, bony	0.25	185.25
Shale, brown	0.75	186
Coal, bony	0.83	186.83
----- Floor of Comox X coal bed -----		
Shale, brown	7.17	194
Sandstone, light grey	53	247
Shale, brown	3	250
Sandstone, light grey	60.33	310.33
----- Roof of Comox Y coal bed -----		
Coal, bony	0.83	311.17
Shale, brown	0.17	311.33
Coal, shaly	1	312.33
Coal	0.33	312.67
Shale, brown	0.17	312.83
Coal	0.17	313
----- Floor of Comox Y coal bed -----		
Sandstone, light grey	22	335
Clay shale	16	351
----- Roof of Comox Z coal bed -----		
Coal	0.5	351.5
Clay shale	0.42	351.92
Coal, bony	0.25	352.17
Coal	0.83	353
Shale, brown	0.92	353.92
Coal	0.17	354.08
Clay	0.42	354.5
Coal	0.33	354.83
----- Floor of Comox Z coal bed -----		
Shale, brown	0.33	355.17

Log of Comox CX-117 (continued):

Description:	Thickness (feet):	Depth (feet):
Sandstone, light grey	45.83	401
Sandy shale	7	408
Shale, brown	17	425
Sandstone, shaly	14	439
Clay shale	7	446
Sandstone, shaly	27	473
----- Roof of Comox No.1 Rider coal bed (horizon only) -----		
Shale, brown	11	484
Sandstone, shaly	4	488
Sandstone, light grey	35	523
Sandstone, shaly	6	529
----- Roof of Comox No.1 coal bed -----		
Coal, bony	1.5	530.5
----- Floor of Comox No.1 coal bed -----		
Shale, brown	3	533.5
Coal	0.25	533.75
Sand, black	2.75	536.5
Clay shale	3.5	540
----- Roof of Comox No.1 Lower coal bed -----		
Coal	1	541
----- Floor of Comox No.1 Lower coal bed -----		
Clay shale	40	581
Sandstone, shaly	21.75	602.75
COMOX FORMATION (CUMBERLAND MEMBER):		
Shale, brown	1.33	604.08
Coal	0.08	604.17
Shale, brown	1	605.17
----- Roof of Comox No.2 Rider coal bed -----		
Coal, bony	0.67	605.83
----- Floor of Comox No.2 Rider coal bed -----		
Shale, brown	1	606.83
Clay shale	8.17	615
Sandstone, shaly	5	620
Clay shale	14	634
Clay, shaly	5	639
Clay shale	7.5	646.5
Shale, brown	10.25	656.75
----- Roof of Comox No.2 coal bed -----		
Coal	1.25	658
Coal, bony	1	659
----- Floor of Comox No.2 coal bed -----		
Clay shale	5	664
Sandstone, light grey	43.33	707.33
Shale and **coal**	2.33	709.67
Shale	2.5	712.17
----- Roof of Comox No.2A coal bed -----		
Coal	0.42	712.58
Shale	0.42	713
Coal	0.67	713.67
----- Floor of Comox No.2A coal bed -----		

Log of Comox CX-117 (continued):

Description:	**Thickness (feet):**	**Depth (feet):**
Shale	0.17	713.83
Sandstone, shaly	2.67	716.5
Sandstone, light grey	17.17	733.67
Shale, black	0.83	734.5
Coal	0.58	735.08
Shale, black	5.92	741
Sandy shale	11.5	752.5
Shale, black	2	754.5
----- Roof of Comox No.3 coal bed -----		
Coal, bony	0.83	755.33
----- Floor of Comox No.3 coal bed -----		
Shale, brown	2	757.33
Clay shale	5.67	763
Sandstone	6	769
Clay shale	12.67	781.67
Coal	0.75	782.42
Shale	0.25	782.67
Coal, bony	0.33	783
Shale, brown	19	802
Sandy shale	7	809
Sandstone, shaly	20	829
Sandstone, light grey	20	849
Shale, brown	8	857
----- Roof of Comox No.3A coal bed -----		
Coal, bony	1.5	858.5
----- Floor of Comox No.3A coal bed -----		
Shale, black	9	867.5
Shale, brown	16	883.5
Clay	2.5	886
KARMUTSEN FORMATION		
Trap rock	15	901
	------	------

Log of Canadian Collieries (Dunsmuir) Ltd. Comox borehole CX-118

Location as given on log: *in Section 17, Township 9, Comox Land District*
Coordinates: UTM NAD 83: *348561 m E, 5506532 m N*
Collar elevation: mine datum: *112.78 m*
Total depth: *583.17 feet*
Commenced: *September 20, 1911* **Completed:** *October 1, 1911*
Drilled by: *unknown*
Logged by: *driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1989*

Record source: *Coal Assessment Report 694 (annotated strip log).*

Description:	**Thickness (feet):**	**Depth (feet):**
DRIFT (UNDIVIDED):		
Surface gravel	10	10
COMOX RIVER FORMATION (DUNSMUIR MEMBER):		
----- Floor of Comox Y Lower coal bed (horizon only) -----		
Sandstone, grey	56.75	66.75
----- Roof of Comox Z coal bed -----		
Coal	**2.92**	69.67
----- Floor of Comox Z coal bed -----		
Sandstone, grey	63.33	133
----- Roof of Comox No.1 coal bed (horizon only) -----		
Shale	4	137
Sandstone, grey	53	190
----- Roof of Comox No.1 Lower coal bed (horizon only) -----		
Sandy shale	6	196
Sandstone, grey	58	254
COMOX FORMATION (CUMBERLAND MEMBER)		
----- Roof of Comox No.2 Rider coal bed -----		
Coal	**1.67**	255.67
----- Floor of Comox No.2 Rider coal bed -----		
Shale	25.33	281
----- Roof of Comox No.2 coal bed -----		
Coal	**1.33**	282.33
Shale	3.08	285.42
Coal	**1.33**	286.75
----- Floor of Comox No.2 coal bed -----		
Sandy shale	4.67	291.42
Sandstone, grey	20.5	311.92
Shale	29.58	341.5
----- Roof of Comox No.2A coal bed -----		
Coal and shale	**0.75**	342.25
Coal	**0.67**	342.92
Coal, bony	**0.33**	343.25
Shale	0.42	343.67
Coal	**0.42**	344.08
----- Floor of Comox No.2A coal bed -----		
Shale	1	345.08
Sandstone, grey	20.25	365.33
Coal	**0.33**	365.67
Shale	1.33	367

Log of Comox CX-118 (continued):

Description:	Thickness (feet):	Depth (feet):
Sandstone, grey	22.08	389.08
Sandy shale	6.75	395.83
----- Roof of Comox No.3 coal bed -----		
Coal	**1.92**	397.75
----- Floor of Comox No.3 coal bed -----		
Shale	6.33	404.08
Sandstone	88	492.08
Coal	**1.67**	493.75
Shale	2.92	496.67
----- Roof of Comox No.3A coal bed -----		
Coal	**0.5**	497.17
Coal, bony	**0.42**	497.58
Coal	**0.83**	498.42
Coal, bony	**0.5**	498.92
Shale	2	500.92
Coal, a little bony	**1.75**	502.67
Shale	0.75	503.42
Coal	**1.08**	504.5
----- Floor of Comox No.3A coal bed -----		
Shale	4.33	508.83
Coal and shale	**1**	509.83
Shale	1.33	511.17
Sandstone, grey	32	543.17
----- Roof of Comox No.4 coal bed ----		
Coal, bony	**1**	544.17
Coal	**0.75**	544.92
----- Floor of Comox No.4 coal bed -----		
Shale	1	545.92
Sandstone, grey	4	549.92
Shale	1.58	551.5
Coal, very bony	**1.25**	552.75
Shale	0.42	553.17
Sandstone	0.5	553.67
Coal, bony	**0.5**	554.17
Sandstone, grey	3.17	557.33
Shale	2.33	559.67
KARMUTSEN FORMATION		
Trap, decomposed	14.5	574.17
Trap	9	583.17
	-------	--------

Log of Canadian Collieries (Dunsmuir) Ltd. Comox borehole CX-120

Location as given on log: *in Section 29, Township 9, Comox Land District*
Coordinates: UTM NAD 83: *348351 m E, 5510302 m N*
Collar elevation: mine datum: *not surveyed* **map:** *approximately 93 m*
Total depth: *1301.5 feet*
Commenced: *October 26, 1911* **Completed:** *December 29, 1911*
Drilled by: *unknown*
Logged by: *driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1989*

Record source: *Coal Assessment Report 694 (annotated strip log).*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Surface drift	15	15
TRENT RIVER FORMATION (PUNTLEDGE MEMBER):		
Sandy shale	243	258
COMOX RIVER FORMATION (DUNSMUIR MEMBER):		
Sandstone, grey	107	365
Sandstone, shaly	23	388
Sandstone, grey	132	520
Shale	12.83	532.83
----- Roof of Comox Y coal bed -----		
Shale and bony **coal**	1.83	534.67
----- Floor of Comox Y coal bed -----		
Shale	7	541.67
Sandstone, grey	33.33	575
Shale	6	581
Sandstone, grey	33	614
----- Roof of Comox Z coal bed? (horizon only) -----		
Shale, with streaks of **coal**	2	616
Sandstone, shaly	7	623
Shale	5	628
Sandstone, grey	65	693
Sandstone, shaly	4	697
Shale	2	699
----- Roof of Comox No.1 coal bed -----		
Shale and **coal**	1	700
----- Floor of Comox No.1 coal bed -----		
Sandstone, grey	59	759
Shale	3	762
Sandstone, shaly	20	782
COMOX RIVER FORMATION (CUMBERLAND MEMBER):		
Sandy shale	79.5	861.5
----- Roof of Comox No.2 coal bed -----		
Coal, bony	3.5	865
----- Floor of Comox No.2 coal bed -----		
Shale	6	871
----- Roof of Comox No.2A coal bed -----		
Coal	1	872
----- Floor of Comox No.2A coal bed -----		
Shale and **coal**	1	873

Log of Comox CX-120 (continued):

Description:	Thickness (feet):	Depth(feet):
Shale	8	881
Sandy shale	26	907
Shale	9	916
Sandstone, grey	23.5	939.5
Shale	1	940.5
Coal	1.5	942
Shale	7	949
Sandy shale	10	959
Sandstone, grey	18	977
Sandstone	7	984
Shale	2.5	986.5
----- Roof of Comox No.3 coal bed -----		
Shale and **coal**	10	996.5
----- Floor of Comox No.3 coal bed -----		
Shale	10.5	1007
Sandstone, grey	45	1052
Shale	1	1053
Coal	1	1054
Shale	2	1056
Sandstone	6.5	1062.5
Coal	0.5	1063
Shale	2	1065
Sandstone	10	1075
Shale	2	1077
----- Roof of Comox No.3A coal bed -----		
Coal, bony and dirty	2.5	1079.5
----- Floor of Comox No.3A coal bed -----		
Shale	6	1085.5
Sandstone, grey	36	1121.5
Coal	0.5	1122
Shale	1.5	1123.5
Sandstone	9	1132.5
Shale	1.67	1134.17
Coal	0.83	1135
Shale	2.5	1137.5
Sandstone, shaly	8	1145.5
Shale	1	1146.5
----- Roof of Comox No.4 coal bed -----		
Coal	1	1147.5
----- Floor of Comox No.4 coal bed -----		
Shale	6.33	1153.83
Coal	0.5	1154.33
Shale	3	1157.33
Coal	0.83	1158.17
Sandy shale	2	1160.17
Sandstone, grey	35.33	1195.5
Sandstone, shaly	20	1215.5
Shale	15	1230.5
Shale, with streaks of **coal**	10	1240.5
Shale	61	1301.5

Log of Canadian Collieries (Dunsmuir) Ltd. borehole CX-121

Location as given on log: *in Section 17, Township 9, Comox Land District*
Coordinates: UTM NAD 83: *348441 m E, 5506992 m N*
Collar elevation: geodetic datum: *132.59 m*
Total depth: *640.83 feet*
Commenced: *November 7, 1911* **Completed:** *December 5, 1911*
Drilled by: *unknown*
Logged by: *Driller?*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1998*
Record source: *BCARS Add. Mss. 463, Box 6, File 3; also in Inspector of Mines collection.*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Surface drift	46	46
COMOX FORMATION (DUNSMUIR MEMBER):		
Shale	4	50
Sandstone, shaly	17	67
----- Roof of Comox X Lower coal bed -----		
Coal, bony	**0.5**	67.5
Shale	0.67	68.17
Coal, bony	**0.42**	68.58
Shale	0.33	68.92
Coal, bony	**0.5**	69.42
Coal	**0.92**	70.33
----- Floor of Comox X Lower coal bed -----		
Shale	1.17	71.5
Sandstone, grey	58.33	129.83
----- Roof of Comox Y coal bed? (horizon only) -----		
Shale	11	140.83
Sandstone, shaly	4	144.83
Sandstone, grey	64	208.83
Sandstone, shaly	7	215.83
Sandstone, grey	2	217.83
Sandy shale	3	220.83
Shale	13	233.83
----- Roof of Comox Z coal bed -----		
Coal, bony	**0.67**	234.5
----- Floor of Comox Z coal bed -----		
Sandstone, grey	57.83	292.33
Sandy shale	7.08	299.42
------ Roof of Comox No.1 coal bed -----		
Coal, bony	**0.58**	300
------ Floor of Comox No.1 coal bed -----		
Shale	0.83	300.83
Sandstone, grey	54	354.83
Sandstone, shaly	2	356.83
----- Roof of Comox No.1 Lower coal bed? (horizon only) -----		
Shale	5	361.83
Sandstone, grey	31	392.83

Log of Comox CX-121 (continued):

Description:	**Thickness (feet):**	**Depth(feet):**
COMOX FORMATION (CUMBERLAND MEMBER):		
----- Roof of Comox No.2 Rider coal bed -----		
Coal, bony	**0.5**	393.33
----- Floor of Comox No.2 Rider coal bed -----		
Shale	20.83	414.17
----- Roof of Comox No.2 coal bed -----		
Coal	**0.25**	414.42
Shale	0.5	414.92
Coal	**0.42**	415.33
Coal, bony	**0.5**	415.83
Coal	**0.75**	416.58
----- Floor of Comox No.2 coal bed -----		
Clay shale	9	425.58
Shale	7.25	432.83
Sandy shale	15	447.83
Shale	5	452.83
Sandstone, shaly	22	474.83
----- Roof of Comox No.2A coal bed? (horizon only) -----		
Shale	10	484.83
Sandstone, grey	26	512.83
Shale	2	514.83
----- Roof of Comox No.3 coal bed -----		
Coal	**0.25**	515.08
Shale	0.17	515.25
Coal	**0.25**	515.5
Shale	0.58	516.08
Coal	**0.17**	516.25
----- Floor of Comox No.3 coal bed -----		
Shale	5.58	521.83
Sandstone, grey	71	592.83
Shale	23	615.83
----- Roof of Comox No.4 coal bed? (horizon only) -----		
Shale, with some **coal**	15	630.83
KARMUTSEN FORMATION		
Trap rock	10	640.83
	---------	--------

Annex A-5: Log of Vancouver Coal Prospecting Company Hodgson Farm V-1

Contents:

Core Description of V-1

Log of Vancouver Coal Prospecting Company Hodgson Farm borehole V-1

Location as given on log: *in Section 57, Comox Land District*
Coordinates: UTM NAD 83: *352121 m E, 5509582 m N*
Collar elevation: mine datum: *not surveyed* **map:** *approximately 29 m*
Total depth: *2151 feet*
Commenced: *1907* **Completed:** *1908*
Drilled by: *T.D. Jones*
Logged by: *R. C. Campbell-Johnston, 1908*
Stratigraphic and structural interpretation by: *C.G. Cathyl-Bickford, 1989*

Record source: *Glenbow-Alberta Institute Archives, Add. Mss. 2269 (CPR Papers), File 1949; also Coal Assessment Report 694 (annotated strip log).*

Description:	Thickness (feet):	Depth (feet):
DRIFT (UNDIVIDED):		
Gravel		19
Gravel and clay		94
Sand - grey		98
Clay and gravel		108
TRENT RIVER FORMATION (WILLOW POINT MEMBER):		
Shale - dark		400
Sandy shale		403
Shale		407
TRENT RIVER FORMATION (BAYNES SOUND MEMBER):		
Sandstone		408
Shale		416
Sandy shale		424
Sand rock		426
TRENT RIVER FORMATION (ROYSTON MEMBER):		
Sandy shale		472
Sand rock		474
Shale		484
Sandy shale		502
Shale		506
Sandy shale		513
Shale		519
Sand - grey		520
Sandy shale		530
Shale		548
Sandy shale		567
Shale		592
Sandy shale		960
TRENT RIVER FORMATION (BROWNS MEMBER):		
Sandstone		1113
TRENT RIVER FORMATION (PUNTLEDGE MEMBER):		
Shale		1144
Sandstone		1155
Sandshale		1165
Sandstone		1174
Sandy shale		1204
Sandstone		1206
Sandshale		1212

Log of Hodgson Farm V-1 (continued):

Description:	**Thickness (feet):**	**Depth(feet):**
TRENT RIVER FORMATION (COWIE MEMBER):		
Sandstone		1264
Shale		1274
Sandstone		1280
Sandy shale		1286
Sandstone		1357
TRENT RIVER FORMATION (COUGARSMITH MEMBER):		
Sandy shale		1360
Sandstone		1370
Sandy shale		1380
COMOX FORMATION (DUNSMUIR MEMBER):		
Sandstone		1426
Sandy shale		1437
Sandstone		1542
Shale		1544
Sandy shale		1556
Sandstone		1586
----- Roof of Comox X coal bed? (horizon only) -----		
Sandy shale		1596
Sandstone		1776
----- Roof of Comox Z coal bed? (horizon only) -----		
Sandy shale		1832
Sandstone		1839
Sandy shale		1849
Sandstone		1857
Sandstone - shaly		1859
Sandy shale		1867
Shale		1868
----- Roof of Comox No.1 Rider coal bed -----		
Coal	1	1869
----- Floor of Comox No.1 Rider coal bed -----		
Shale		1872
Sandy shale		1887
Shale		1894
----- Roof of Comox No.1 coal bed -----		
Coal	1	1895
Shale	0.5	1895.5
Coal	0.67	1896.17
----- Floor of Comox No.1 coal bed ----		
Sand - yellow		1897
Shale		1900
Sandstone		1923
----- Roof of Comox No.1 Lower coal bed -----		
Coal	1.17	1924.17
----- Floor of Comox No.1 Lower coal bed -----		
Shale		1925
Sandstone		1935
Sandy shale		1939
Sandstone		1963.5

Log of Hodgson Farm V-1 (continued):

Description:	Thickness (feet):	Depth(feet):
COMOX FORMATION (CUMBERLAND MEMBER):		
Coal and fireclay	1.5	1965
Shale	7.5	1972.5
----- Roof of Comox No.2 Rider coal bed -----		
Coal and fireclay	1.5	1974
----- Floor of Comox No.2 Rider coal bed -----		
Shale	4	1978
Coal	0.5	1978.5
Shale	3.5	1982
Coal and fireclay	2	1984
Shale	5.83	1989.83
----- Roof of Comox No.2 coal bed -----		
Coal and fireclay	6.17	1996
----- Floor of Comox No.2 coal bed -----		
Shale		2003
Sandstone		2029
Sandy shale		2038
Coal and fireclay	1	2039
Sandy shale	6	2045
----- Roof of Comox No.2A coal bed -----		
Coal	1	2046
----- Floor of Comox No.2A coal bed -----		
Shale		2048
Sandy shale		2049
Sandstone		2064
Sandy shale		2076
----- Roof of Comox No.3 coal bed -----		
Coal and fireclay	4	2080
----- Roof of Comox No.3 coal bed -----		
Fireclay		2086
Shale		2089
Sandy shale		2112
Sandstone		2135
----- Roof of Comox No.3A coal bed -----		
Fireclay and **coal**	1	2136
----- Floor of Comox No.3A coal bed -----		
Fireclay	2	2138
Sandy shale	3	2141
Sand and fireclay	2	2143
----- Roof of Comox No.4 coal bed -----		
Coal	4	2147
----- Floor of Comox No.4 coal bed -----		
Fireclay - sandy		2149
Fireclay		2151

Annex B: Analyses of raw coal samples

Contents:

	Page
Analytical reports for 12 canister samples (Birtley 11166 to 11177) taken from boreholes D-1, D-2A and D-3	*B-2*
Analytical reports for 34 ply samples (Birtley 11486 to 11519) taken from borehole D-1	*B-3 to B-5*
Analytical reports for 47 ply samples (Birtley 11315 to 11329) taken from borehole D-2A	*B-6 to B-9*
Certification and quality practices information	*B-10 to B-11*

CLIENT:	**BC GEOLOGICAL SURVEY**
PROJECT	12 SAMPLES
LAB NOS:	11166-11177
DATE:	NOVEMBER 8, 2001 UPDATED CV, SG, FSI ADDED

ANALYSIS OF COAL, air dried basis

LAB NO:	SAMPLE ID:	ADM%	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	S.G.	BASIS
11166	D 1/5/B	5.12	0.76	39.02	25.83	34.39	1.54	--	--	--	adb
	CANISTER 1		5.84	37.02	24.51	32.63	1.46				arb
				39.32	26.03	34.65	1.55				db
11167	D 1/8/A	2.25	0.76	34.80	26.80	37.64	1.92	--	--	**1.60**	adb
	CANISTER 2		2.99	34.02	26.20	36.79	1.88				arb
				35.07	27.01	37.93	1.93				db
11168	D 1/8/B	1.95	0.73	12.01	35.53	51.73	1.64	**7318**	**9.0**	**1.36**	adb
	CANISTER 3		2.67	11.78	34.84	50.72	1.61	**7265**			arb
				12.10	35.79	52.11	1.65	**8317**			db
11169	D 1/9/A	2.70	0.79	47.66	23.59	27.96	1.94	--	--	--	adb
	CANISTER 4		3.47	46.37	22.95	27.21	1.89				arb
				48.04	23.78	28.18	1.96				db
11170	D 1/5/A	5.30	0.70	52.10	23.38	23.82	2.17	--	--	**1.77**	adb
	CANISTER 5		5.96	49.34	22.14	22.56	2.05				arb
				52.47	23.54	23.99	2.19				db
11171	D 2/8/9	1.63	0.65	61.49	19.63	18.23	7.20	--	--	--	adb
	CANISTER 6		2.27	60.49	19.31	17.93	7.08				arb
				61.89	19.76	18.35	7.25				db
11172	D 2/8/11	2.83	0.77	55.37	20.34	23.52	1.18	--	--	--	adb
	CANISTER 7		3.58	53.80	19.76	22.85	1.15				arb
				55.80	20.50	23.70	1.19				db
11173	D 2/11/1	3.09	0.99	63.77	19.67	15.57	1.07	--	--	--	adb
	CANISTER 8		4.05	61.80	19.06	15.09	1.04				arb
				64.41	19.87	15.73	1.08				db
11174	D 3/1/A	1.92	1.12	25.77	28.96	44.15	0.88	--	--	--	adb
	CANISTER 9		3.02	25.28	28.40	43.30	0.86				arb
				26.06	29.29	44.65	0.89				db
11175	D 3/1/B	1.76	0.99	49.87	22.82	26.32	1.06	--	--	--	adb
	CANISTER 10		2.73	48.99	22.42	25.86	1.04				arb
				50.37	23.05	26.58	1.07				db
11176	D 3/5/A	2.78	0.83	7.88	35.64	55.65	1.78	--	--	--	adb
	CANISTER 11		3.59	7.66	34.65	54.10	1.73				arb
				7.95	35.94	56.12	1.79				db
11177	D 3/5/B	2.49	0.68	28.72	28.80	41.80	4.56	--	--	--	adb
	CANSITER 12		3.15	28.00	28.08	40.76	4.45				arb
				28.92	29.00	42.09	4.59				db

GWIL Birtley Coal & Minerals Testing Division
INDUSTRIES

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT	DOVE CREEK BOREHOLE D-1
LAB NOS:	11486-11519
DATE:	NOVEMBER 8, 2001 UPDATED SG CV FSI ADDED

ANALYSIS OF COAL, air dried basis

LAB NO:	SAMPLE ID:	ADM%	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	S.G.	BASIS
11486	Coal Bed XU	1.49	0.69	44.36	--	--	2.75	--	--	--	adb
	D 1/1/1		2.17	43.70			2.71				arb
				44.67			2.77				db
11487	Coal Bed YU	1.59	0.81	21.37	30.15	47.67	2.30	--	--	--	adb
	D 1/2/1		2.39	21.03	29.67	46.91	2.26				arb
				21.54	30.40	48.06	2.32				db
11488	Coal Bed YU	0.99	0.63	14.33	33.51	51.53	6.83	**7,099**	**8.0**	--	adb
	D 1/2/2		1.61	14.19	33.18	51.02	6.76	**7,055**			arb
				14.42	33.72	51.86	6.87	**8,287**			db
11489	Coal Bed XL	1.23	0.85	19.76	34.10	45.29	4.81	**6,539**	6.5	--	adb
	D 1/3/1		2.07	19.52	33.68	44.73	4.75	**6,483**			arb
				19.93	34.39	45.68	4.85	**8,149**			db
11490	Coal Bed XL	1.33	0.58	17.82	36.08	45.52	6.85	**6,738**	**6.0**	--	adb
	D 1/3/2		1.90	17.58	35.60	44.91	6.76	**6,699**			arb
				17.92	36.29	45.79	6.89	**8,199**			db
11491	Z (ROOF)	2.44	0.94	55.18	--	--	4.25	--	--	--	adb
	D 1/4/1		3.36	53.83			4.15				arb
				55.70			4.29				db
11492	Coal Bed Z	1.24	0.53	13.27	35.05	51.15	2.05	**7,218**	**8.0**	**1.37**	adb
	D 1/4/2		1.76	13.11	34.62	50.52	2.02	**7,180**			arb
				13.34	35.24	51.42	2.06	**8,322**			db
11493	Coal Bed Z	1.97	0.92	78.00	--	--	0.35	--	--	**2.23**	adb
	D 1/4/3		2.87	76.46			0.34				arb
				78.72			0.35				db
11494	Coal Bed Z	1.52	0.71	33.02	27.84	38.43	1.21	--	--	**1.51**	adb
	D 1/4/4		2.22	32.52	27.42	37.85	1.19				arb
				33.26	28.04	38.70	1.22				db
11495	Coal Bed Z	1.54	0.60	36.94	27.52	34.94	13.60	--	--	--	adb
	D 1/4/5		2.13	36.37	27.10	34.40	13.39				arb
				37.16	27.69	35.15	13.68				db
11496	Coal Bed Z	1.47	0.77	46.92	--	--	0.65	--	--	--	adb
	D 1/4/6		2.23	46.23			0.64				arb
				47.28			0.66				db
11497	Coal Bed 1R	1.05	0.68	23.05	33.09	43.18	5.52	--	--	--	adb
	D 1/6/1		1.72	22.81	32.74	42.73	5.46				arb
				23.21	33.32	43.48	5.56				db
11498	Coal Bed 1R	1.06	0.75	16.33	35.97	46.95	6.99	**6,771**	**9.0**	--	adb
	D 1/6/2		1.80	16.16	35.59	46.45	6.92	**6,720**			arb
				16.45	36.24	47.30	7.04	**8,092**			db
11499	Coal Bed 1	0.78	0.61	26.69	33.36	39.34	3.79	--	--	--	adb
	D 1/7/1		1.39	26.48	33.10	39.03	3.76				arb
				26.85	33.56	39.58	3.81				db
11500	Coal Bed 1	1.31	0.70	73.33	--	--	3.62	--	--	--	adb
	D 1/7/2		2.00	72.37			3.57				arb
				73.85			3.65				db

ADDITIONAL ANALYSIS ARE IN BOLD.

GWIL INDUSTRIES Birtley Coal & Minerals Testing Division

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT:	DOVE CREEK BOREHOLE D-1
LAB NOS:	11486-11519
DATE:	NOVEMBER 8, 2001 (UPDATED)

ANALYSIS OF COAL, air dried basis

LAB NO:	SAMPLE ID:	ADM%	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	S.G.	BASIS
11501	Coal Bed 1	0.89	0.81	50.34	--	--	3.61	--	--	--	adb
	D 1/7/3		1.69	49.89			3.58				arb
				50.75			3.64				db
11502	Coal Bed 1	0.66	0.56	23.41	34.21	41.82	3.23	--	--	--	adb
	D 1/7/4		1.22	23.26	33.98	41.54	3.21				arb
				23.54	34.40	42.06	3.25				db
11503	Coal Bed 2R	1.22	0.92	22.27	30.88	45.93	3.72	--	--	--	adb
	D 1/8/1		2.13	22.00	30.50	45.37	3.67				arb
				22.48	31.17	46.36	3.75				db
11504	2 (ROOF)	1.55	0.86	68.97	--	--	0.29	--	--	**1.98**	adb
	D 1/9/1		2.40	67.90			0.29				arb
				69.57			0.29				db
11505	Coal Bed 2	1.53	0.78	37.44	26.84	34.94	0.65	--	--	--	adb
	D 1/9/2		2.30	36.87	26.43	34.41	0.64				arb
				37.73	27.05	35.21	0.66				db
11506	Coal Bed 2	1.12	0.62	10.69	38.72	49.97	3.22	**7,266**	+9	--	adb
	D 1/9/3		1.73	10.57	38.29	49.41	3.18	**7,221**			arb
				10.76	38.96	50.28	3.24	**8,135**			db
11507	Coal Bed 2	0.66	0.82	57.58	--	--	12.47	--	--	--	adb
	D 1/9/4		1.47	57.20			12.39				arb
				58.06			12.57				db
11508	Coal Bed 2	0.75	0.77	19.71	32.44	47.08	1.70	**6,581**	**5.5**	**1.39**	adb
	D 1/9/5		1.51	19.56	32.20	46.73	1.69	**6,530**			arb
				19.86	32.69	47.45	1.71	**8,196**			db
11509	Coal Bed 2	1.51	0.79	53.37	--	--	4.92	--	--	--	adb
	D 1/9/6		2.29	52.56			4.85				arb
				53.79			4.96				db
11510	Coal Bed 2	2.67	0.84	50.43	--	--	1.51	--	--	--	adb
	D 1/9/7		3.49	49.08			1.47				arb
				50.86			1.52				db
11511	Coal Bed 2A	0.97	0.83	30.80	27.93	40.44	9.34	--	--	--	adb
	D 1/10/1		1.79	30.50	27.66	40.05	9.25				arb
				31.06	28.16	40.78	9.42				db
11512	Coal Bed 2A	0.90	0.99	58.45	--	--	2.70	--	--	--	adb
	D 1/10/2		1.88	57.92			2.68				arb
				59.03			2.73				db
11513	Coal Bed 2A	1.25	1.04	65.16	--	--	0.84	--	--	--	adb
	D 1/10/3		2.28	64.35			0.83				arb
				65.84			0.85				db
11514	Coal Bed 2AL	1.36	0.73	22.84	35.34	41.09	1.30	--	--	--	adb
	D 1/11/1		2.08	22.53	34.86	40.53	1.28				arb
				23.01	35.60	41.39	1.31				db
11515	Coal Bed 2AL	1.21	0.72	22.81	30.63	45.84	0.60	--	--	--	adb
	D 1/11/2		1.92	22.53	30.26	45.29	0.59				arb
				22.98	30.85	46.17	0.60				db

ADDITIONAL ANALYSIS ARE IN BOLD.

GWIL Birtley Coal & Minerals Testing Division
INDUSTRIES

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT:	DOVE CREEK BOREHOLE D-1
LAB NOS:	11486-11519
DATE:	NOVEMBER 8, 2001 (UPDATED)

ANALYSIS OF COAL, air dried basis

LAB NO:	SAMPLE ID:	ADM%	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	S.G.	BASIS
11516	Coal Bed 2AL	1.00	0.76	13.18	36.78	49.28	0.91	**7,023**	**9.0**	--	adb
	D 1/11/3		1.75	13.05	36.41	48.79	0.90	**6,969**			arb
				13.28	37.06	49.66	0.92	**8,089**			db
11517	Coal Bed 3	1.34	0.90	28.63	28.57	41.90	2.28	--	--	--	adb
	D 1/12/1		2.23	28.25	28.19	41.34	2.25				arb
				28.89	28.83	42.28	2.30				db
11518	Coal Bed 3	1.55	0.99	43.54	--	--	1.46	--	--	--	adb
	D 1/12/2		2.52	42.87			1.44				arb
				43.98			1.47				db
11519	Coal Bed 3	1.37	0.97	44.92	--	--	0.26	--	--	--	adb
	D 1/12/3		2.33	44.30			0.26				arb
				45.36			0.26				db

ADDITIONAL ANALYSIS ARE IN BOLD.

GWIL Birtley Coal & Minerals Testing Division
INDUSTRIES

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT:	DOVE CREEK BOREHOLE D-2A
LAB NOS:	11283-11329
DATE:	NOVEMBER 8, 2001 UPDATED SG, CV FSI ADDED

ANALYSIS OF COAL, air dried basis

LAB NO:	SAMPLE ID:	ADM%	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	S.G.	BASIS
11283	Coal Bed X	0.71	1.33	41.41	--	--	5.01	--	--	--	adb
	D 2/1/1		2.03	41.12			4.97				arb
				41.97			5.08				db
11284	Coal Bed X	0.55	1.32	22.27	31.31	45.10	2.17	--	--	--	adb
	D 2/2/1		1.86	22.15	31.14	44.85	2.16				arb
				22.57	31.73	45.70	2.20				db
11285	Coal Bed XL	0.77	1.49	24.85	29.66	44.00	2.36	--	--	--	adb
	D 2/3/1		2.25	24.66	29.43	43.66	2.34				arb
				25.23	30.11	44.67	2.40				db
11286	Coal Bed XL	1.28	2.03	78.65	--	--	0.52	--	--	--	adb
	D 2/3/2		3.28	77.64			0.51				arb
				80.28			0.53				db
11287	Coal Bed XL	0.52	1.30	24.00	31.08	43.62	3.59	--	--	--	adb
	D 2/3/3		1.81	23.88	30.92	43.39	3.57				arb
				24.32	31.49	44.19	3.64				db
11288	Coal Bed Y	1.20	1.02	44.03	--	--	4.98	--	--	--	adb
	D 2/4/1		2.21	43.50			4.92				arb
				44.48			5.03				db
11289	Coal Bed Y	0.49	1.15	17.11	32.61	49.13	3.41	**6,899**	**8.5**	--	adb
	D 2/4/2		1.63	17.03	32.45	48.89	3.39	**6,819**			arb
				17.31	32.99	49.70	3.45	**8,323**			db
11290	Coal Bed Y	1.27	1.62	53.56	--	--	0.39	--	--	--	adb
	D 2/4/3		2.87	52.88			0.39				arb
				54.44			0.40				db
11291	Coal Bed Y	0.96	1.12	16.82	33.50	48.56	1.83	**6,872**	7.5	--	adb
	2/4/4		2.07	16.66	33.18	48.09	1.81	**6,795**			arb
				17.01	33.88	49.11	1.85	**8,261**			db
11292	Coal Bed YL	0.73	1.18	7.75	36.34	54.73	1.10	7,737	8.0	--	adb
	D 2/5/1		1.90	7.69	36.07	54.33	1.09	7,681			arb
				7.84	36.77	55.38	1.11	7,829			db
11293	Z (ROOF)	0.30	0.88	38.23	25.97	34.92	5.09	--	--	--	adb
	D 2/6/1		1.18	38.12	25.89	34.82	5.07				arb
				38.57	26.20	35.23	5.14				db
11294	Z (ROOF)	0.92	1.41	80.24	--	--	1.70	--	--	--	adb
	D 2/6/2		2.32	79.50			1.68				arb
				81.39			1.72				db
11295	Coal Bed Z	0.63	1.24	27.89	29.11	41.76	2.27	--	--	1.48	adb
	D 2/6/3		1.86	27.71	28.93	41.50	2.26				arb
				28.24	29.48	42.28	2.30				db
11296	Coal Bed Z	1.65	1.52	82.88	--	--	0.13	--	--	2.30	adb
	D 2/6/4		3.14	81.51			0.13				arb
				84.16			0.13				db
11297	Coal Bed Z	0.74	1.26	24.93	28.61	45.20	0.50	--	--	--	adb
	D 2/6/5		1.99	24.75	28.40	44.87	0.50				arb
				25.25	28.98	45.78	0.51				db
11298	Coal Bed Z	0.00	1.19	13.30	31.17	54.34	0.49	**7,105**	**4.0**	1.34	adb
	D 2/6/6		1.19	13.30	31.17	54.34	0.49	**7,020**			arb
				13.46	31.55	54.99	0.50	**8,195**			db

ADDITIONAL ANALYSIS ARE IN BOLD.

GWIL INDUSTRIES Birtley Coal & Minerals Testing Division

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT:	DOVE CREEK BOREHOLE D-2A
LAB NOS:	11283-11329
DATE:	NOVEMBER 8, 2001 UPDATED

ANALYSIS OF COAL, air dried basis

LAB NO:	SAMPLE ID:	ADM%	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	S.G.	BASIS
11299	Coal Bed Z	0.47	1.15	23.44	31.73	43.68	1.16	--	--	1.42	adb
	D 2/6/7		1.61	23.33	31.58	43.47	1.15				arb
				23.71	32.10	44.19	1.17				db
11300	Coal Bed Z	1.50	1.37	71.08	--	--	0.23	--	--	--	adb
	D 2/6/8		2.85	70.01			0.23				arb
				72.07			0.23				db
11301	Coal Bed Z	0.72	1.17	24.99	29.12	44.72	2.07	--	--	1.42	adb
	D 2/6/9		1.88	24.81	28.91	44.40	2.06				arb
				25.29	29.46	45.25	2.09				db
11302	Coal Bed Z	1.25	1.55	56.45	--	--	0.32	--	--	1.75	adb
	D 2/6/10		2.78	55.74			0.32				arb
				57.34			0.33				db
11303	Coal Bed Z	0.57	1.33	26.59	30.95	41.13	0.51	--	--	--	adb
	D 2/6/11		1.89	26.44	30.77	40.90	0.51				arb
				26.95	31.37	41.68	0.52				db
11304	1R (ROOF)	0.47	1.00	48.38	--	--	4.69	--	--	--	adb
	D 2/7/1		1.47	48.15			4.67				arb
				48.87			4.74				db
11305	1R (ROOF)	0.43	0.87	27.36	30.98	40.79	4.65	--	--	--	adb
	D 2/7/2		1.30	27.24	30.85	40.61	4.63				arb
				27.60	31.25	41.15	4.69				db
11306	1R (ROOF)	0.85	1.42	73.38	--	--	2.59	--	--	--	adb
	D 2/7/3		2.26	72.76			2.57				arb
				74.44			2.63				db
11307	Coal Bed 1R	0.53	1.17	44.8[illegible]	--	--	3.95	--	--	--	adb
	D 2/7/4		1.69	44.5[illegible]			3.93				arb
				45.34			4.00				db
11308	Coal Bed 1R	0.57	1.56	81.52	--	--	2.19	--	--	--	adb
	D 2/7/5		2.12	81.06			2.18				arb
				82.81			2.22				db
11309	Coal Bed 1R	0.45	1.49	48.41	--	--	2.16	--	--	--	adb
	D 2/7/6		1.93	48.19			2.15				arb
				49.14			2.19				db
11310	Coal Bed 1R	0.18	1.12	10.16	35.63	53.09	3.00	7,414	9.0	--	adb
	D 2/7/7		1.30	10.14	35.57	52.99	2.99	7,401			arb
				10.28	36.03	53.69	3.03	7,498			db
11311	Coal Bed 1R	0.26	1.20	10.69	33 92	54.19	0.85	7,390	+9.0	--	adb
	D 2/7/8		1.46	10.66	33.83	54.05	0.85	7,371			arb
				10.82	34.33	54.85	0.86	7,480			db
11312	Coal Bed 1R	0.82	1.27	46.28	--	--	1.07	--	--	--	adb
	D 2/7/9		2.08	45.90			1.06				arb
				46.88			1.08				db
11313	Coal Bed 1R	0.72	1.45	55.39	--	--	0.44	--	--	--	adb
	D 2/7/10		2.16	54.99			0.44				arb
				56.20			0.45				db
11314	1 (ROOF)	1.69	1.00	88.37	--	--	0.22	--	--	--	adb
	D 2/8/1		2.67	86.88			0.22				arb
				89.2o			0.22				db

ADDITIONAL ANALYSIS ARE IN BOLD.

GWIL INDUSTRIES

Birtley Coal &
Minerals Testing
Division

MEMORANDUM

DATE: **March 13, 2002**

TO: **Gwyneth Cathyl-Bickford**
Westwater Mining Ltd.

FROM: **Peter Graham**

RE: **Certification and Quality Practices Information**

As you requested, I am pleased to provide the following information.

Birtley is not aware of any certification process specific to coal testing and, as such is not currently accredited under any external organization. Birtley is however, currently working towards ISO certification. At this time it is in the Process Documentation Stage and hopes to be certified as early as 2003. Even prior to the ISO process Birtley has had in place a Quality Control Program. As part of its Quality Control Program, Birtley has been a member of the Canspecs (renamed Canspex in 2000) coal testing round robin program for over 20 years. The program that currently consists of over 90 coal testing laboratories world-wide is mandated to assist the laboratories to obtain consistent and accurate results. Blind coal and ash samples are delivered to each lab 4 times per year and test results reported to Canspex. Results are reported to all labs and each lab can identify how their results matched against the other participants. In so doing inconsistent results can be readily identified and procedural/equipment errors rectified.

Individual laboratory results are ranked against the consensus value for each series of test results. Birtley is consistently within the preferred grouping of laboratories. A chart of Birtley's most recent results is attached. Additional results from historical round robin tests are also available.

In addition to the Canspex program, Birtley also participates in several other round robin programs sponsored by other clients. By agreement with the clients, these results are confidential.

Birtley provides testing services using both ASTM and ISO procedures, and uses the specific procedure requested by the client. Most clients request ASTM procedures and the following table identifies Birtley's procedures used.

Analysis	ASTM Procedure Used
Sample Preparation & as received moisture	D2013
Proximate Analysis	D3172, D3173, D3174 & D3175
Calorific Value	D2015
Sulphur Content	D4239, bomb digestion method
Sulphur Forms	D2492
FSI	D720
Mineral Analysis of Ash	D3682
Hardgrove Analysis (HGI)	D409

Gwyneth, I hope this helps answer some of your questions. I will be away from March 14 to April 19 but Veena Bhardwaj should be able to help you with other details.

Sincerely

Peter Graham
General Manager

Annex C: Coal licence documents

Contents:

	Page
Coal licence 383367	*C-2 to C-4*
Coal licence 383368	*C-5 to C-7*
Coal licence 383369	*C-8 to C-10*
Coal licence 383370	*C-11 to C-13*
Coal licence 383371	*C-14 to C-16*
Coal licence 383372	*C-17 to C-19*
Coal licence 383373	*C-20 to C-22*
Coal licence 383374	*C-23 to C-25*

Coal Licence Number 383367

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 217 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the ons of any regulations which may be made under the Act, and all such provisions as are enacted or made ..l be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness

Licensee

Witness

Witness

Licensee

Minister of Energy, Mines and Petroleum Resources, Licensor
DELEGATED BY ORDER IN COUNCIL NUMBER 1411/94 AND MINISTER'S ORDER NUMBER 351/94 TO THE CHIEF GOLD COMMISSIONER

MTL 201 — 90/09

cycled Paper

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

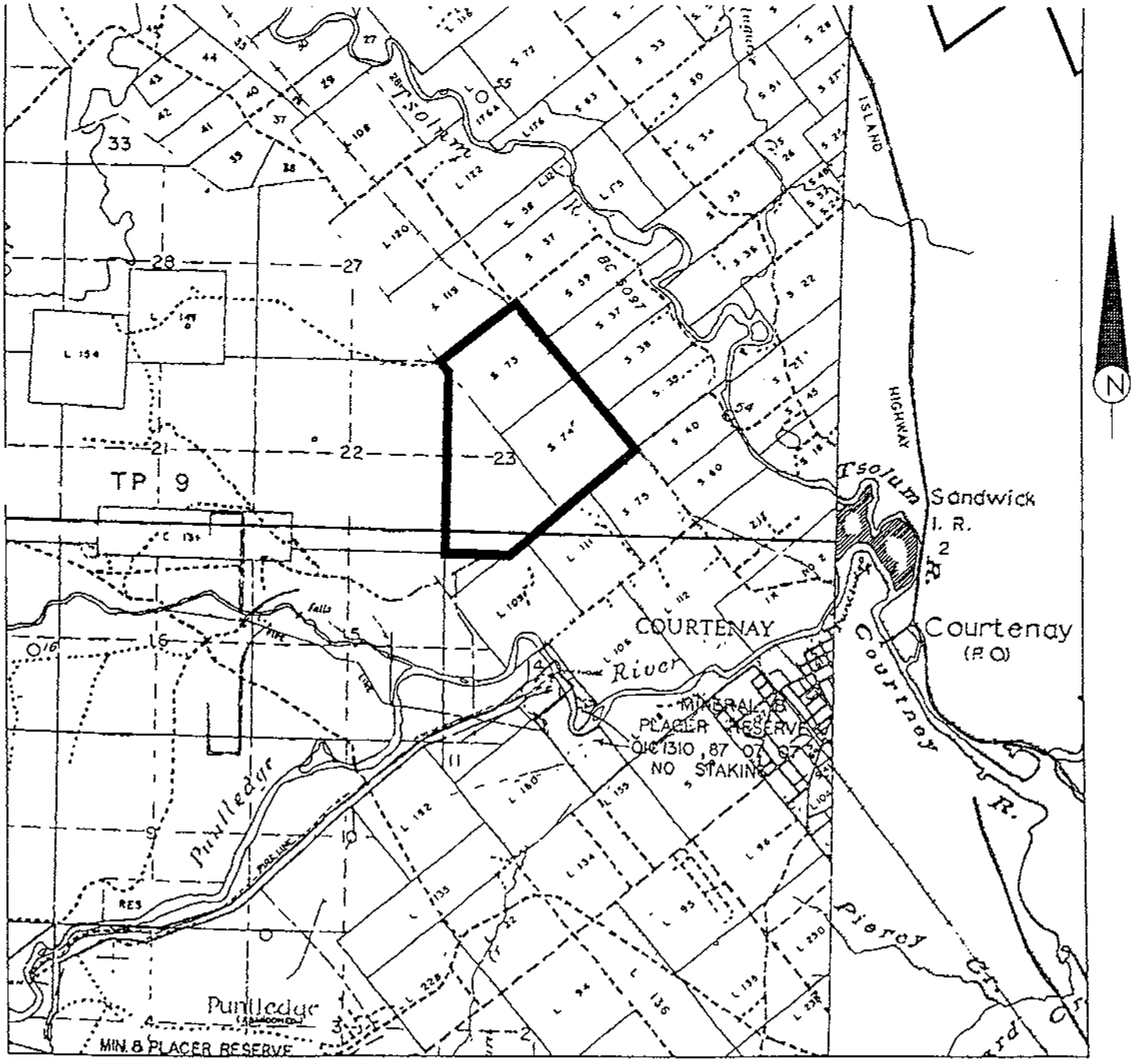
4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

Description of location:

Comox Land District
Nanaimo Mining Division

Fractional Section 23, Township 9

Sections 73, 74



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 1		COAL LICENCE NO.
	MINING DIVISION: NANAIMO		383367
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 217	FILE NUMBER: 13755 02 93

Coal Licence Number 383368

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 250 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants nd agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the provisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness

Licensee

Witness

Licensee

Witness

Minister of Energy, Mines and Petroleum Resources, Licensor
DELEGATED BY ORDER IN COUNCIL NUMBER 1411/94 AND MINISTER'S ORDER NUMBER 351/94 TO THE CHIEF GOLD COMMISSIONER

MTL 201 — 90/

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

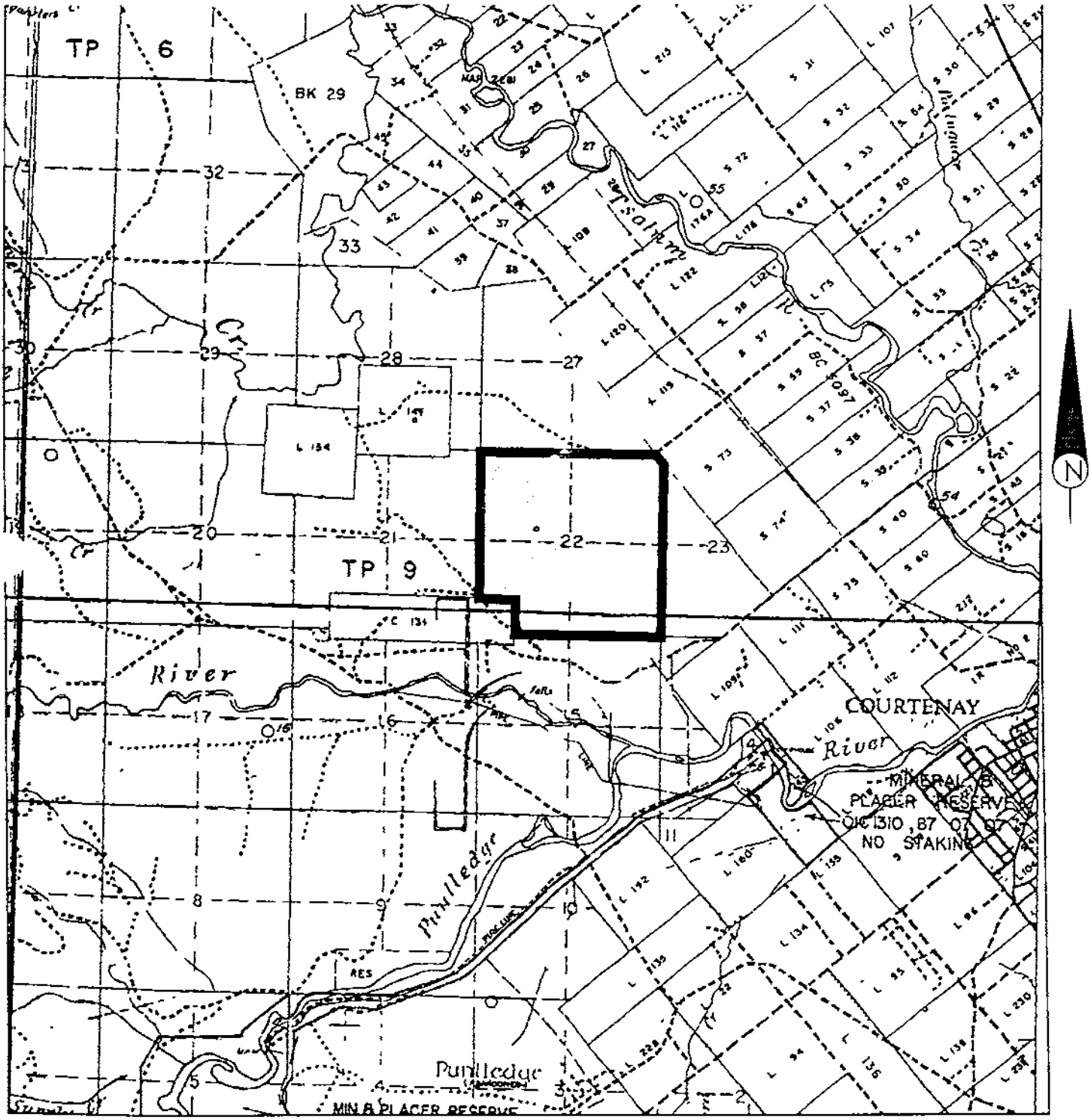
4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

Description of location:

Comox Land District

Nanaimo Mining Division

Fractional Section 22, Township 9



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 2	COAL LICENCE NO.	
	MINING DIVISION: NANAIMO	383368	
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 250	FILE NUMBER: 13755 02 93

Coal Licence Number 383369

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 256 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the provisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness

Licensee

Witness

Licensee

Witness

Minister of Energy, Mines and Petroleum Resources, Licensor
DELEGATED BY ORDER IN COUNCIL NUMBER
1411/94 AND ... ORDER NUMBER 351/94
TO THE CHIEF GOLD COMMISSIONER

MTL 201 — 90/09

Recycled Paper

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

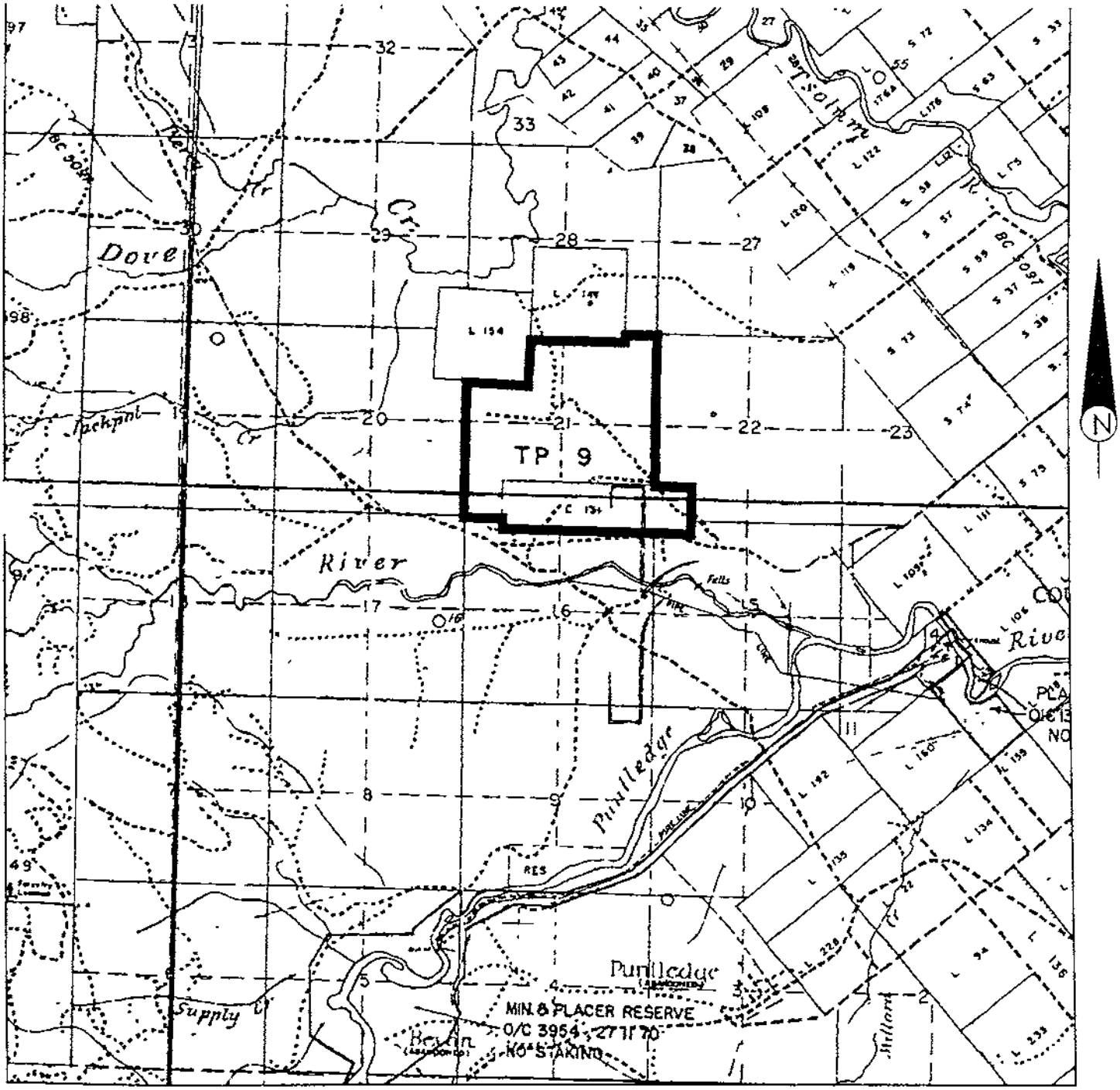
4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

Description of location:

Comox Land District
Nanaimo Mining Division

Fractional Section 21, Township 9

Lot 131 E&N



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 3		COAL LICENCE NO.
	MINING DIVISION: NANAIMO		383369
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 256	FILE NUMBER: 13755 02 93

Coal Licence Number 383370

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 249 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the provisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness *Licensee*

Witness *Licensee*

Witness *Minister of Energy, Mines and Petroleum Resources, Licensor*

DELEGATED BY ORDER IN COUNCIL NUMBER 1411/94 AND MINISTER'S ORDER NUMBER 351/94 TO THE CHIEF GOLD COMMISSIONER

MTL 201 — 90/09

Recycled Paper

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

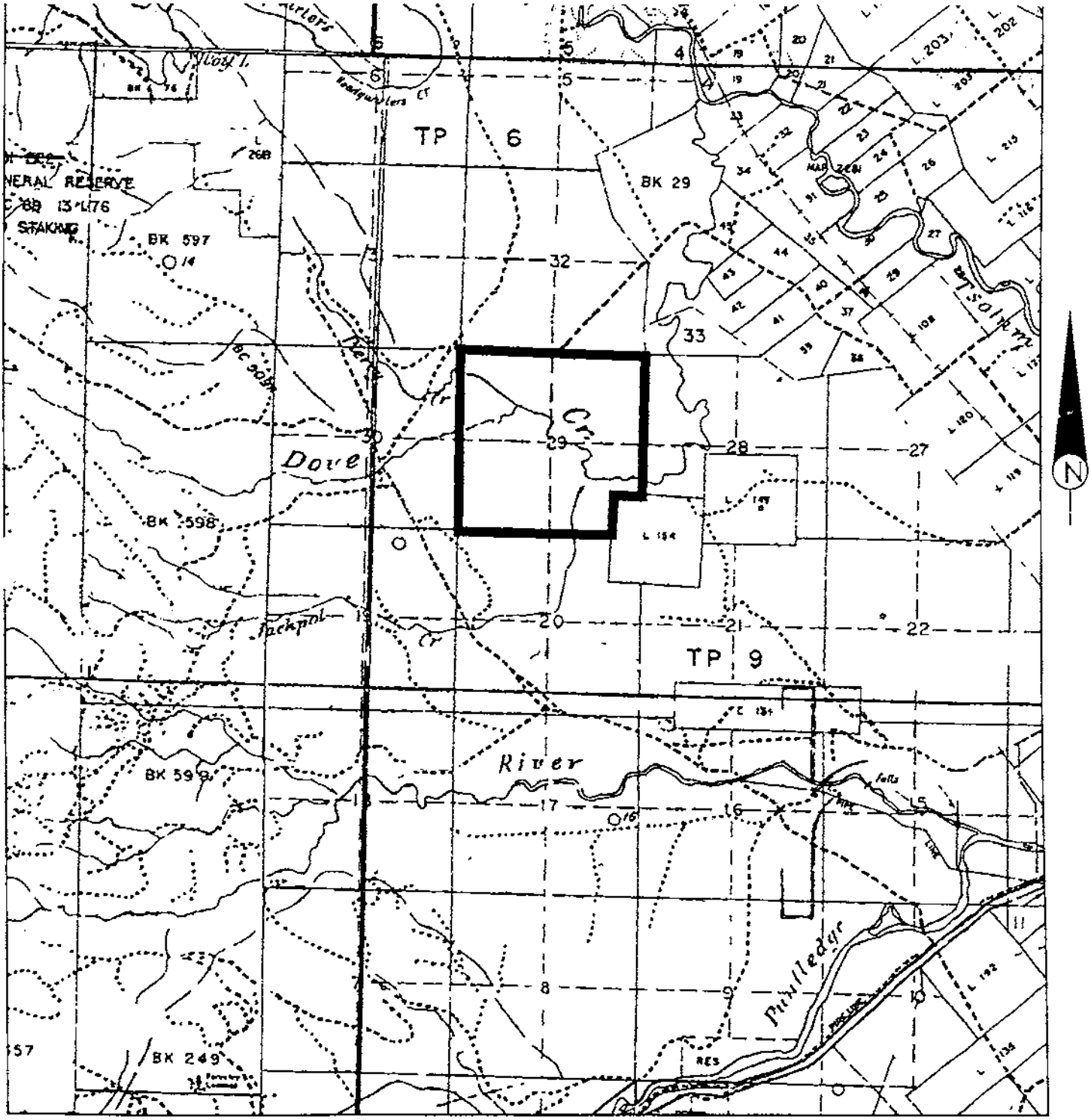
4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

Description of location:

Comox Land District

Nanaimo Mining Division

Fractional Section 29, Township 9



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 4	COAL LICENCE NO.	
	MINING DIVISION: NANAIMO	383370	
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 249	FILE NUMBER: 13755 02

Coal Licence Number 383371

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 300 Date Issued January 10, 2021

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the provisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness

Licensee

Witness

Licensee

Witness

Minister of Energy, Mines and Petroleum Resources, Licensor
DELEGATED BY ORDER IN COUNCIL NUMBER 1411/94 AND MINISTER'S ORDER NUMBER 351/94 TO THE CHIEF GOLD COMMISSIONER

MTL 201 — 90/09

Recycled Paper

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

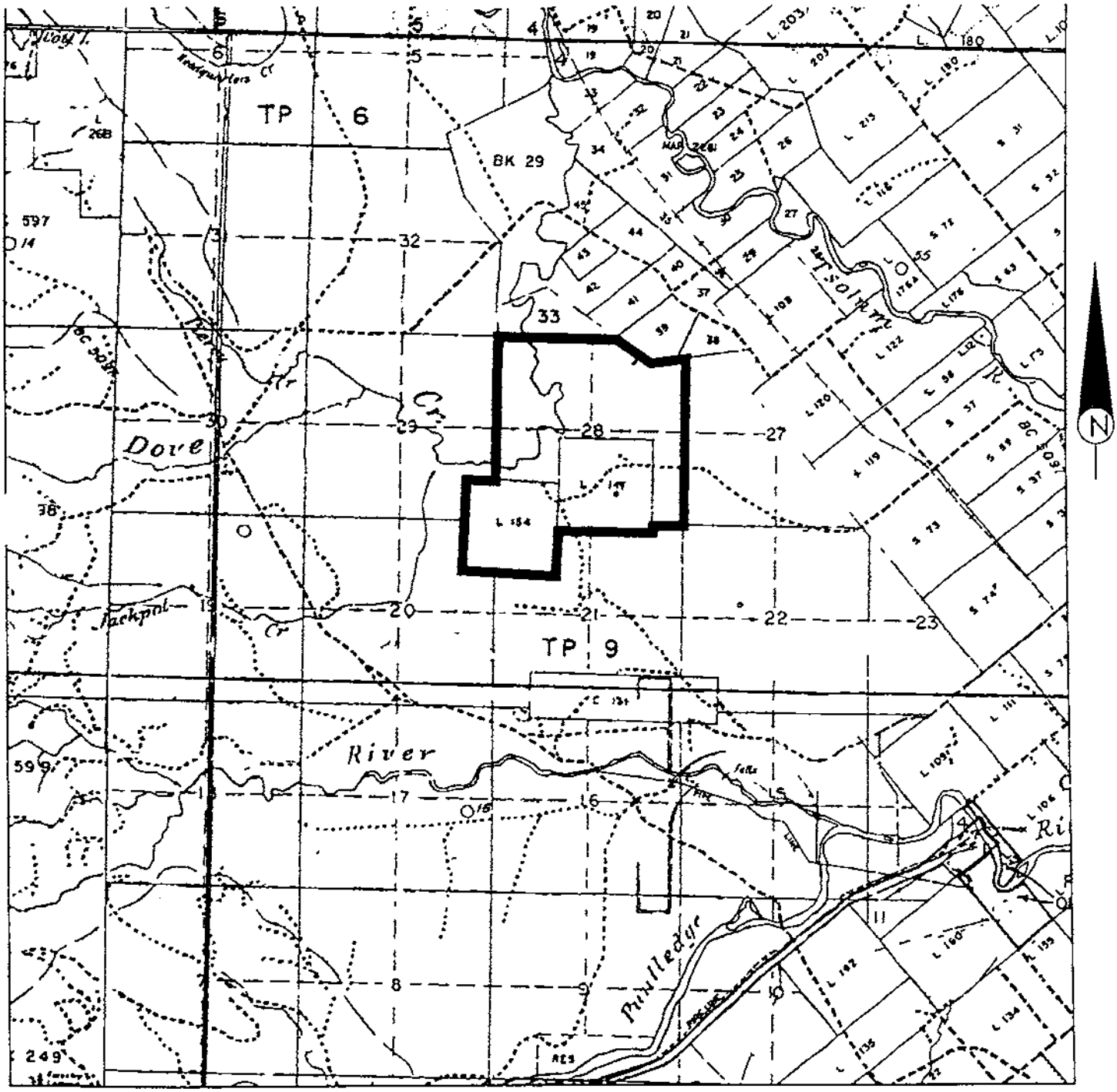
Description of location:

Comox Land District

Nanaimo Mining Division

Fractional Section 28, Township 9

Lots 142 E & N, 154 E & N



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 5	COAL LICENCE NO.	
	MINING DIVISION: NANAIMO	383371	
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 300	FILE NUMBER: 13755 02 93

Coal Licence Number 383372

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 281 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the rovisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness

Licensee

Witness

Licensee

Witness

Minister of Energy, Mines and Petroleum Resources, Licensor
DELEGATED BY ORDER IN COUNCIL NUMBER
1411/94 AND ORDER NUMBER 351/94
TO THE MINERAL GOLD COMMISSIONER

MTL 201 — 90/09

Recycled Paper

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

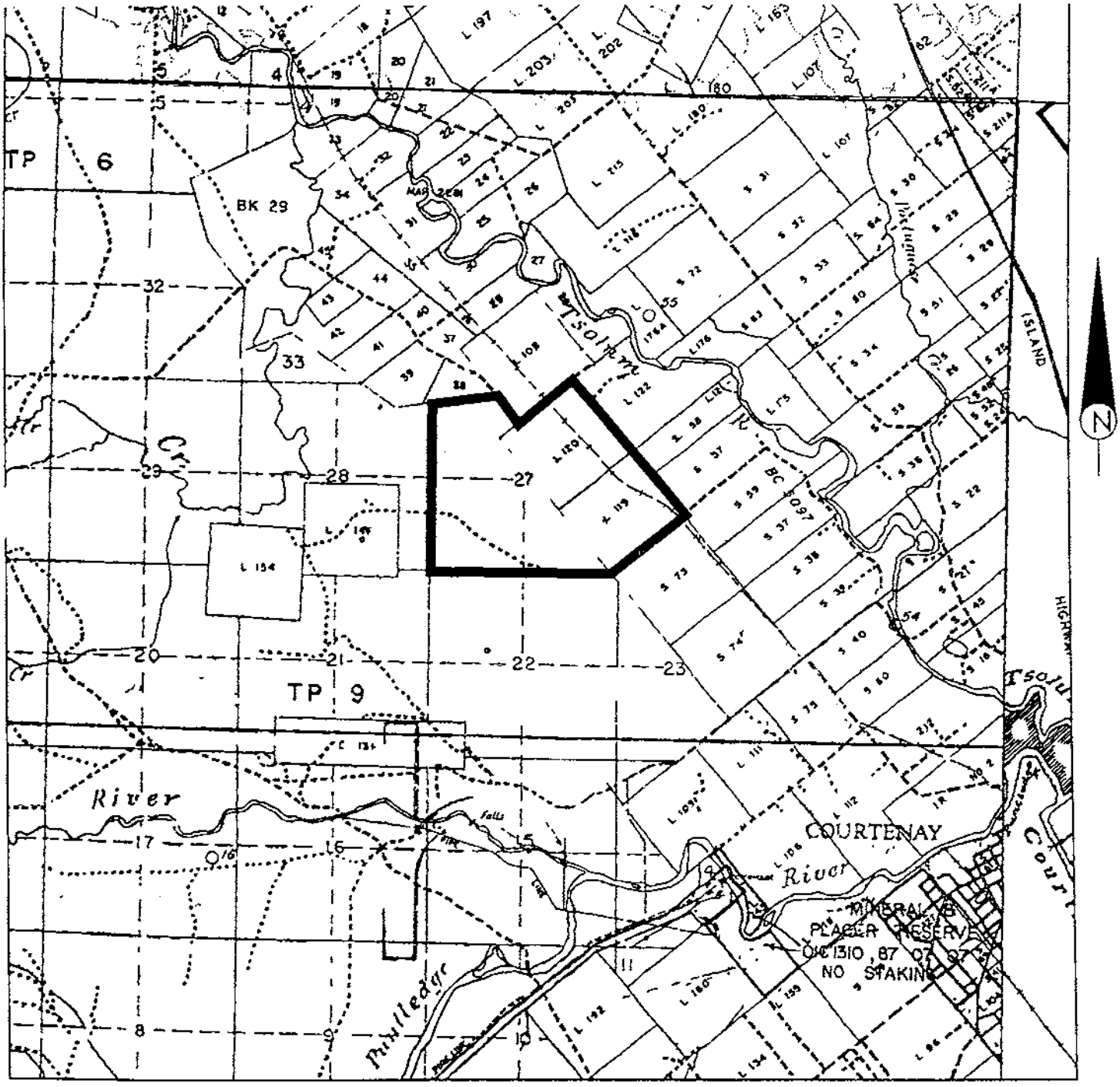
Description of location:

Comox Land District

Nanaimo Mining Division

Fractional Section 27, Township 9

LOTS 119 E & N, 120 E & N



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 6		COAL LICENCE NO.
	MINING DIVISION: NANAIMO		383372
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 281	FILE NUMBER: 13755 02 93

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

Coal Licence Number 383373

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 328 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the provisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Witness — Neil Swift

Licensee

Witness

Licensee

Witness

Minister of Energy, Mines and Petroleum Resources, Licensor

[illegible] NUMBER 351/94
[illegible] 351/94 [illegible] NUMBER 351/94
TO [illegible] COMMISSIONER

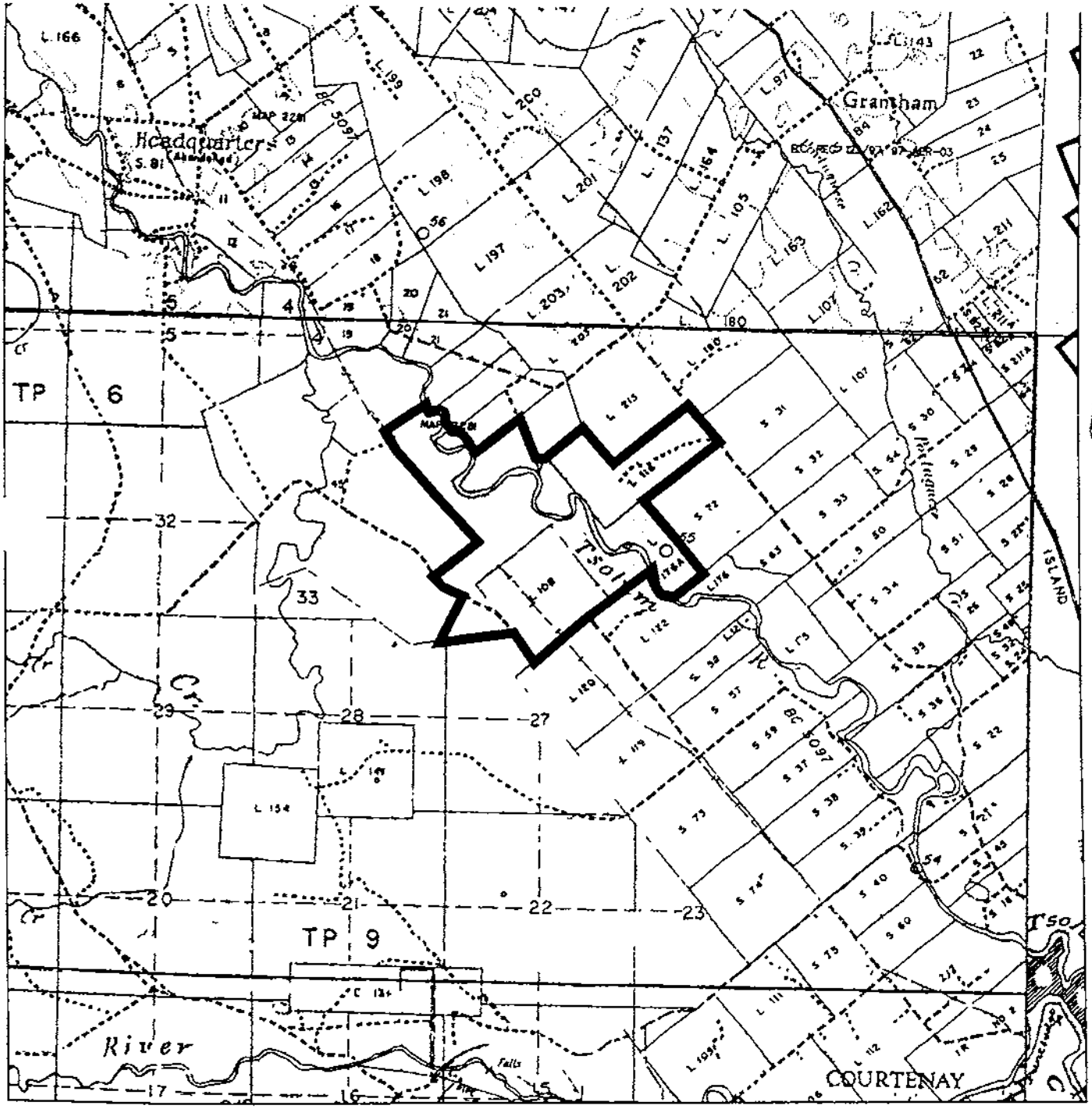
MTL 201 — 90/09

Recycled Paper

Description of location:

Comox Land District
Nanaimo Mining Division

All that parcel or tract of land together with all that foreshore or land covered by water as shown on the attached sketch.



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 7	COAL LICENCE NO.	
	MINING DIVISION: NANAIMO	383373	
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 328	FILE NUMBER: 13755 02 90

Coal Licence Number 383374

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

COAL ACT

LICENCE

Map reference 92F/11E Hectares 323 Date Issued January 10, 2001

Licensee Neil Swift
710 Back Road
Courtenay, British Columbia
V9N 3X2

The licensor grants to the licensee, in accordance with and subject to the provisions of the Act, the right to do exploration and development work of every kind for all coal in the location described, and the licensee covenants and agrees at all times to perform, observe, and comply with the provisions of the Act, and amendments and the provisions of any regulations which may be made under the Act, and all such provisions as are enacted or made shall be deemed to be incorporated into this licence and shall bind the licensee in the same manner and to the same extent as if the same, as they are enacted, made, or amended, were set out herein as covenants on the part of the licensee.

The licensee shall keep the licensor indemnified against all actions, claims, and demands that may be brought or made against the licensor by reason of anything done by the licensee, his servants, workmen, or agents, in the exercise or purported exercise of the rights, powers, and privileges hereby granted.

This licence is further subject to

(a) the provisos hereinafter enumerated (if any),
(b) the prior rights of the Crown and any agency thereof, and
(c) the prior rights of all persons entitled thereto by virtue of any other Statute.

IN WITNESS WHEREOF the licensor and licensee have hereunto set their hands and seals the day and year first above written.

Neil Swift

Witness

Licensee

Witness

Licensee

Witness

Minister of Energy, Mines and Petroleum Resources, Licensor

ORDER IN COUNCIL NUMBER
1111/94 AND ORDER NUMBER 351/94
TO THE MINERAL TITLES COMMISSIONER

MTL 201 — 90/09

Recycled Paper

Provisos:

1. Before commencing any exploration or development work on the location and for the purposes of section 7 of the *Coal Act* , the licensee will conduct a search in the Victoria Land Registry for any privately owned land; and search the records of the Crown Land Registry, Ministry of Environment, Lands and Parks to determine any tenures issued by the Crown.

2. The licensee acknowledges that this licence does not grant to the licensee the right to natural gas, (including coal bed gas) on the location herein described.

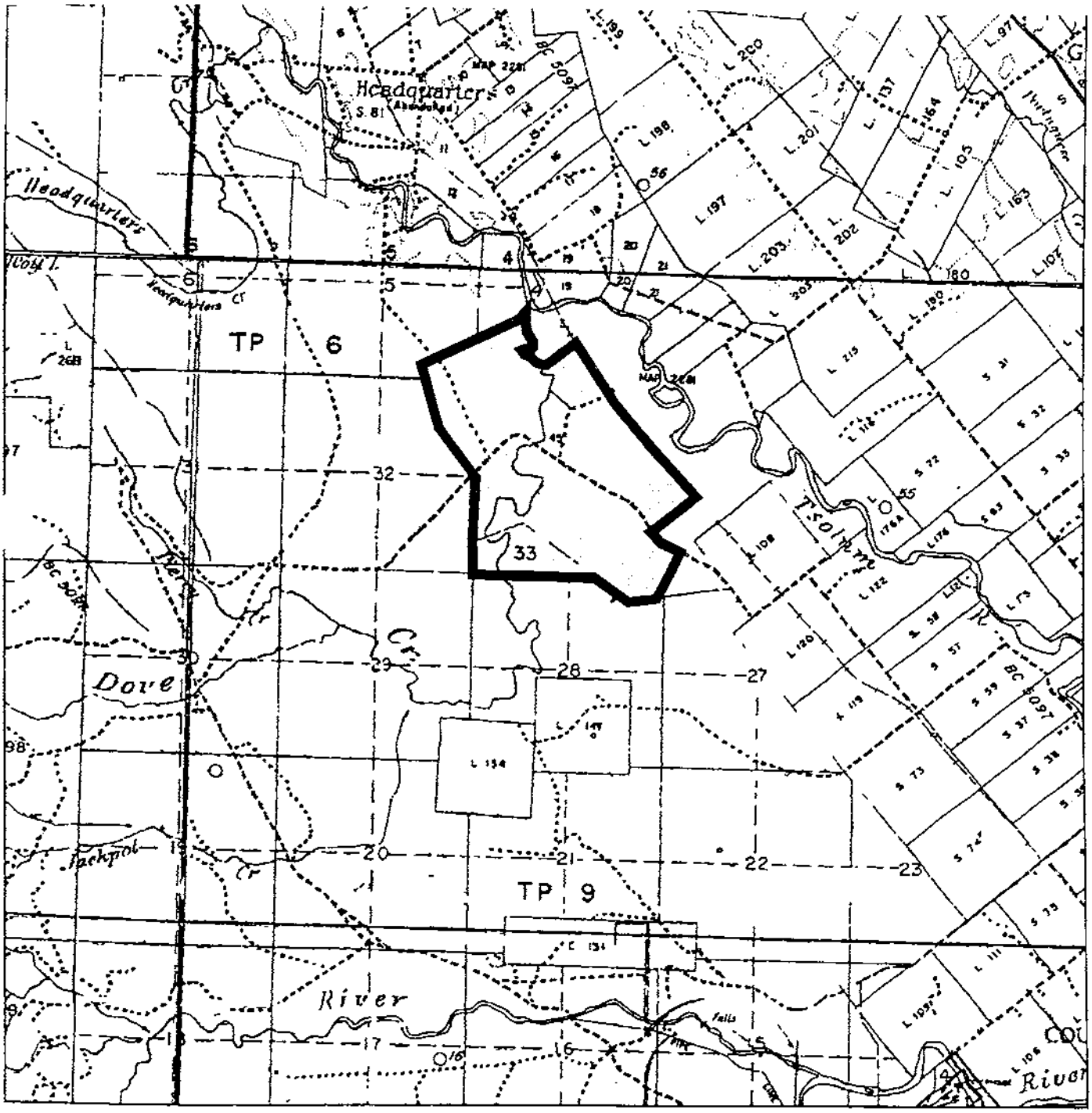
3. The licencee acknowledges that the location currently or may in the future overlap Petroleum and Natural Gas Tenure issued under the *Petroleum and Natural Gas Act* RSBC 1996 c. 361.

4. Before commencing any exploration or development work on the location, best efforts must be made to negotiate a compatible exploration and development program with the petroleum and natural gas holder(s) over the location, as specified in Information Letter E92-11 or as amended.

Description of location:

Comox Land District
Nanaimo Mining Division

All that parcel or tract of land together with all that foreshore or land covered by water as shown on the attached sketch.



BRITISH COLUMBIA Ministry of Employment and Investment Mineral Titles Branch	DESCRIPTION DOVE CREEK COAL - PARCEL 8	COAL LICENCE NO. 383374	
	MINING DIVISION: NANAIMO		
	LAND DISTRICT: COMOX	PREPARED BY: KWD	SCALE 1 : 50 000
	MAPS: 092F11E	HECTARES: 323	FILE NUMBER: 13755 02 93

Annex D: Statements of experience and qualifications

Contents:

	Page
Statement by C.Gwyneth Cathyl-Bickford, P.Geo.	*D-2*
Statement by K.V. Slater	*D-3*
Statement by Dirk Meckert, Ph.D.	*D-4*

Statement of Experience and Qualifications

C.G. Cathyl-Bickford, P.Geo.

Principal Geologist

1. I am a Director of an Alberta corporation, Westwater Mining Ltd., with corporate offices at 88 Glamis Gardens SW, Calgary, Alberta T3E 6S4.

2. I have continuously practiced my profession as a sedimentary geologist, specialising in the Cretaceous rocks of Canada, since 1978.

3. I have published, as sole or joint author, numerous technical papers and geological map-sheets concerning the applied geology of eastern Vancouver Island.

4. I am registered as a Professional Geoscientist (#20550) in British Columbia, and licenced as a Geologist (#2089) in Washington State.

5. I am a member of the Coal Division of the Canadian Institute of Mining and Metallurgy, the Society for Mining, Metallurgy and Exploration, and the Society of Petroleum Engineers.

6. I hold the earned degrees of Bachelor of Science (Geological Sciences, 1978) and Master of Science (Geological Sciences, 1993), from the University of British Columbia.

7. The present report has been prepared under my supervision, and incorporates information obtained by drilling, geological mapping, interpretation of seismic reflections, and study of published and private geological and engineering reports.

8. I do not hold any shares or securities or any interest whatsoever in Priority Ventures Ltd., or in any mineral or surface estates within the Dove Creek coal property.

Signed September 9, 2002, at Cumberland, British Columbia.

C. G. Cathyl-Bickford, P.Geo.

Statement of Experience and Qualifications

K. V. Slater

Sr. Geological Technologist

1. I was continuously employed in various areas of petroleum geology for 29 years, starting in 1964 as a geological assistant for Chevron Standard and then continuing with one organization from 1965 to retirement in 1993 as it changed ownership and identity as Banff Oil, Aquitaine Canada, Canterra Energy, C.D.C. Oil and Gas, and Husky Oil. Since retirement I have done occasional work for Westwater Mining and Priority Ventures.

2. My responsibilities have included sample examination, curatorship of core storage, drillsite work and office support of drilling operations, geological field work, log picking and analysis, geological and geophysical mapping and data synthesis, computer mapping, volumetric and probability evaluation, and technical writing and editing, including preparation of government and shareholder reports. I have worked extensively in both conventional and frontier exploration areas, covering all Alberta, southern Saskatchewan and Manitoba, most British Columbia basins, the Hudson Bay, all north of 60°, all East Coast and Nova Scotia offshore, the Pacific offshore south to California, and all Alaska.

3. My geological training includes some work toward a BSc and over 30 miscellaneous courses in applied geology and mapping, including in-house courses. I am expert in the Zycor and Geographix computer mapping systems. I also hold a Professional Writing Certificate (MRC), a Business Administration Certificate (UC), and formerly held an Alberta Teaching Certificate (UA).

4. I am no longer a member of any professional association.

5. I do not hold shares or any other interests in Priority Ventures or its associated properties.

Signed August 29, 2002, at Cumberland, British Columbia.

K. V. Slater

2001 Coal Assessment Report for the

Dove Creek Coal Property

Volume 3: Clean coal quality and coalbed gas data (confidential)

Annex E: Sink-float tests and analyses of clean coal products

Annex F: Coalbed gas and canister test data

Annex E: Sink-float tests and analyses of clean coal products

Contents:

	Page
Memorandum regarding sink-float and FSI/CV testwork	E-2
Table 13: Sink-float data for Z coal bed in borehole D-1 (Birtley 11784)	E-3
Figure 11: Borehole D-1: Composite results for Z coal bed	E-4
Table 14: Sink-float data for No.2 coal bed in borehole D-1 (Birtley 11785)	E-5
Figure 12: Borehole D-1: Composite results for No.2 coal bed	E-6
Table 15: Sink-float data for Z coal bed in borehole D-2A (Birtley 11602)	E-7
Figure 13: Borehole D-2A: Composite results for Z coal bed	E-8
Table 16: Analyses of clean coal composites floated at 1.60 S.G.	E-9

Westwater Mining Ltd.

Consultants in Applied Geology
88 Glamis Gardens SW. Calgary Alberta T3E 6S4
2719-A Dunsmuir Avenue, Cumberland B.C. V0R 1S0

Birtley Coal and Minerals Testing
505-50th Avenue SE
Calgary, Alberta T2G 2B4

By Fax 403 259-4720

Attention of: Peter Graham and Heather Dexter

November 7, 2001

Subject: sink-float and FSI/CV work - Dove Creek

Dear Peter and Heather:

This fax is a follow-up to the telephone conversation which I had with Peter yesterday afternoon.

1) Additional CV/FSI determinations for borehole D-2A (D2/series ply samples):

I'd like to chase the CV and FSI up to 20% ash, to see how the dirtier coal plies perform. From data on hand here, I'd like to run CV and FSI on the following samples:

Y coal bed: D2/4/2, D2/4/4 Z coal bed: D2/6/6 2R coal bed: D2/10/1

2) Additional CV/FSI determinations for borehole D-1 (D1/series ply samples):

Likewise, I'd like to run CV and FSI up to 20% ash on this borehole. From data on hand here, the samples will be:

Y_U coal bed: D1/2/2 Y_L coal bed: D1/3/1, D1/3/2 Z coal bed: D1/4/2

1R coal bed: D1/6/2 2 coal bed: D1/9/3, D1/9/5, D1/8/B $2A_L$ coal bed: D1/11/3

3) Specific gravity determinations for borehole D-1 (D1/series ply samples):

To help in the compositing, I'd like to run specific gravities on the following samples, using the same top size (3/8-inch) that was used for the previously-done determinations concerning borehole D-2A:

Z coal bed: D1/4/2, D1/4/3, D1/4/4, D1/5/A. 2 coal bed: D1/9/1, D1/8/A, D1/9/5, D1/8/B.

4) Compositing and sink-float testing for borehole D-1 (D1/series ply samples):

I'd like to do sink-float tests on two composites, using the same parameters as the work previously-done for borehole D-2A, with one change: an additional determination at S.G. 1.45. Included samples will be:

Z coal bed: D1/4/1, D1/4/2, D1/4/3, D1/4/4, D1/5/A, D1/4/5, D1/5/B, D1/4/6.

2 coal bed: D1/9/1, D1/9/2, D1/8/A, D1/9/3, D1/9/4, D1/9/5, D1/9/6, D1/9/7, D1/8/B.

Regards,

Gwyneth Cathyl-Bickford, M.Sc. P.Geo.
Project Manager, Vancouver Island

elane:nov07a01.doc

E-2

CLIENT: **PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT: DOVE CREEK BOREHOLE D-1
LAB NOS: 11784 COMPOSITE - Z COAL BED
DATE: November 15, 2001

RAW COAL COMPOSITE (-3/8") MAKE-UP

LAB NO:	SAMPLE ID:	WT%
11491	D 1/4/1	1.99
11492	D 1/4/2	13.28
11493	D 1/4/3	24.02
11494	D 1/4/4	13.55
11495	D 1/4/5	1.16
11496	D 1/4/6	1.25
11166	D 1/5/B	20.61
11170	D 1/5/A	24.15

HEAD RAW ANALYSIS (adb)

%MOIST.	%ASH	%VOL.	%F.C.	%S	BASIS
0.76	45.88	24.60	28.76	1.49	adb
	46.23	24.79	28.98	1.49	db

SCREEN SIZE ANALYSIS (adb)

SIZE	WT%	RM%	ASH%	S%	CUM WT%	CUM S%	CUM ASH%
+60M	95.12	0.71	44.38	1.52	95.12	1.52	44.38
-60M	4.88	0.80	47.97	1.76	100.00	1.53	44.56

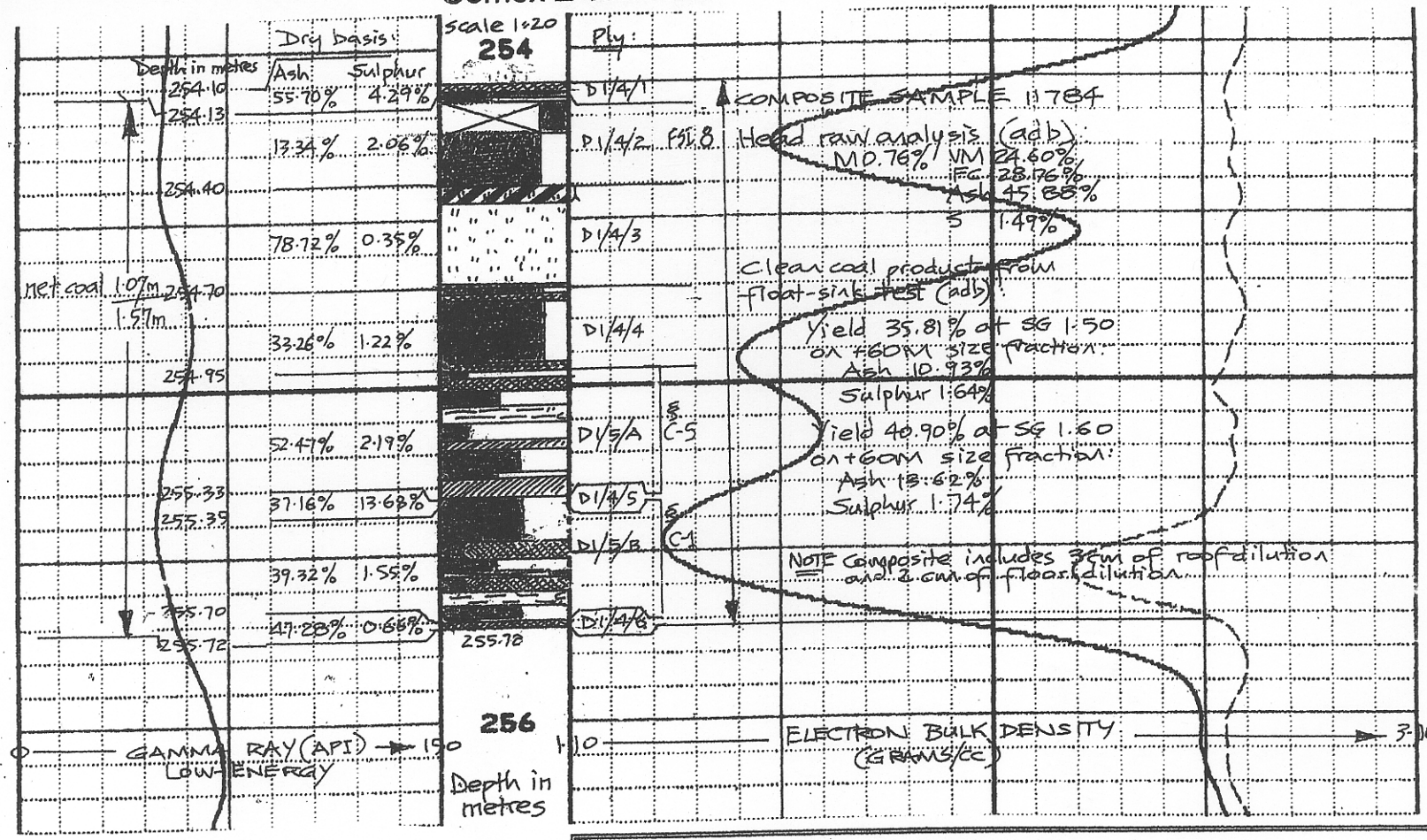
FLOAT SINK ANALYSIS (adb)

	SIZE: +60M (adb)								
S.G.	WT%	RM%	ASH%	S%	F.S.I.	CAL/G	CUM WT%	CUM S%	CUM ASH%
- 1.30	14.42	0.83	5.40	1.39	8.5	7997	14.42	1.39	5.40
1.30 - 1.40	14.75	0.75	10.87	1.70	7.5	7483	29.17	1.55	8.17
1.40 - 1.45	4.05	0.78	20.84	2.00	5.0	6508	33.22	1.60	9.71
1.45 - 1.50	2.59	1.03	26.56	2.13	4.0	5972	35.81	1.64	10.93
1.50 1.60	5.09	0.98	32.53	2.46	3.5	5362	40.90	1.74	13.62
1.60 - 1.70	4.57	0.95	41.94	2.08	2.5	4503	45.47	1.78	16.46
+1.70	54.53	1.09	74.26	1.62	0.0	1330	100.00	1.69	47.98

GWIL INDUSTRIES Birtley Coal & Minerals Testing Division

Table 13:
Sink-float data for Z coal bed
in borehole D-1 (Birtley 11784)

Borehole D-1
Comox Z coal bed



PRIORITY VENTURES LTD.		
Dove Creek Coal Licences **Borehole D-1** **Composite results for Z coal bed**		
Scale: 1:20	By: C.G. Cathyl-Bickford, P.Geo.	
Date: Feb. 18, 2002	Analytical data: Birtley	Base: Roke GDC log for D-1
Westwater Mining Ltd.		Dwg.: WR 19511/02 Fig. 11

CLIENT: **PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT: DOVE CREEK BOREHOLE D-1
LAB NOS: 11785 -COMPOSITE 2 COAL BED
DATE: November 15, 2001

RAW COAL COMPOSITE (-3/8") MAKE-UP

LAB NO:	SAMPLE ID:	WT%
11504	D 1/9/1	2.72
11505	D 1/9/2	0.74
11506	D 1/9/3	1.75
11507	D 1/9/4	6.04
11508	D 1/9/5	13.39
11509	D 1/9/6	14.19
11510	D 1/9/7	14.78
11167	D 1/8/A	26.42
11168	D 1/8/B	19.96

HEAD RAW ANALYSIS (adb)					
%MOIST.	%ASH	%VOL.	%F.C.	%S	BASIS
0.75	35.14	27.81	36.30	2.71	adb
	35.41	28.02	36.57	2.71	db

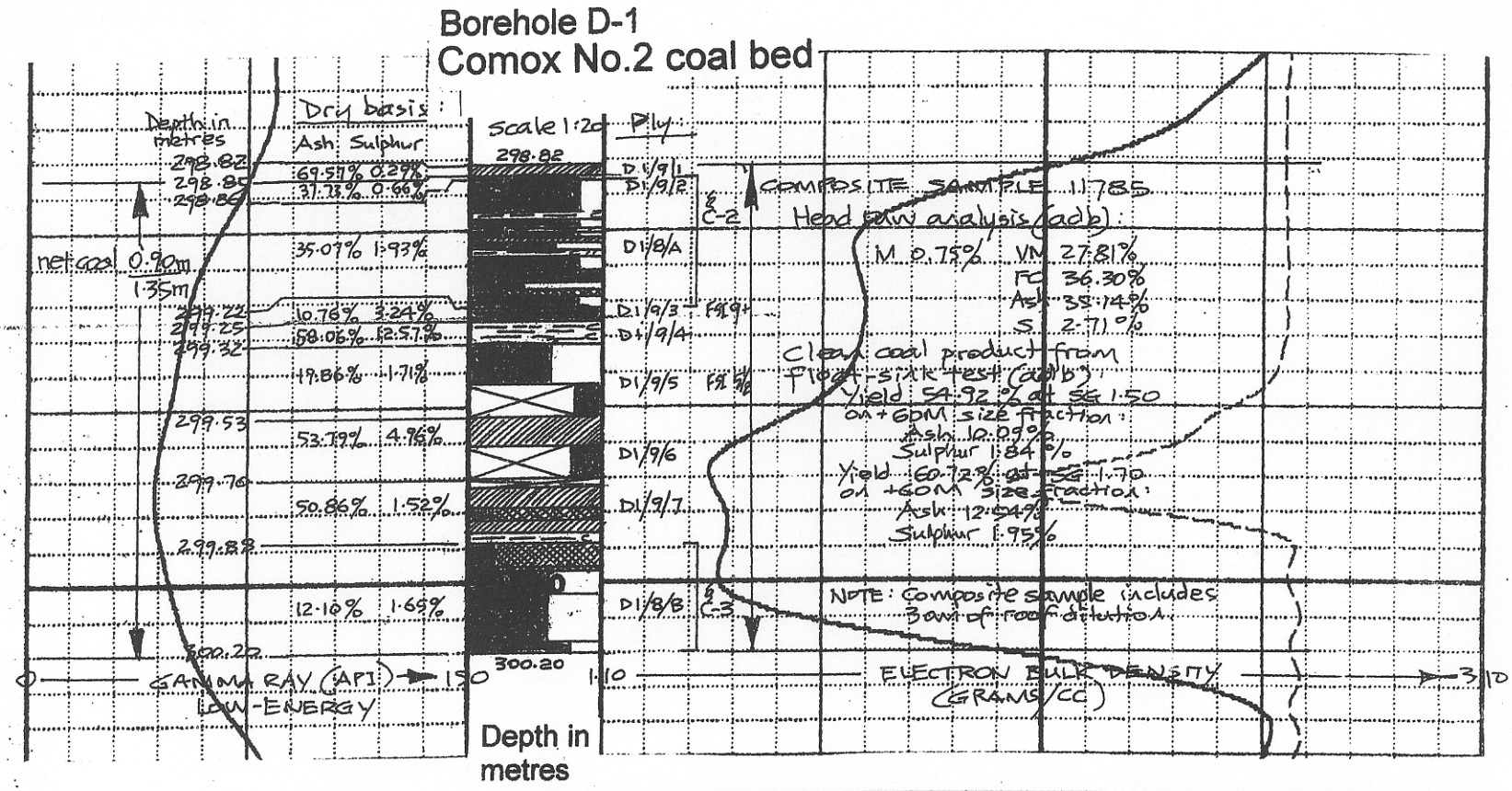
SCREEN SIZE ANALYSIS (adb)								
SIZE	WT%	RM%	ASH%	S%		CUM WT%	CUM S%	CUM ASH%
+60M	93.40	0.77	32.87	2.70		93.40	2.70	32.87
-60M	6.60	0.96	45.91	2.43		100.00	2.68	33.73

FLOAT SINK ANALYSIS (adb)									
	SIZE: +60M (adb)								
S.G.	WT%	RM%	ASH%	S%	F.S.	CAL/G	CUM WT%	CUM S%	CUM ASH%
- 1.30	24.65	0.88	4.78	1.50	8.5	8078	24.65	1.50	4.78
1.30 - 1.40	20.33	0.86	10.90	2.00	5.5	7479	44.98	1.73	7.55
1.40 - 1.45	6.81	0.84	19.75	2.25	5.0	6654	51.79	1.79	9.15
1.45 - 1.50	3.13	0.95	25.62	2.62	3.5	6001	54.92	1.84	10.09
1.50 - 1.60	3.59	0.90	32.00	2.93	3.5	5407	58.51	1.91	11.43
1.60 - 1.70	2.21	0.97	41.90	3.00	*	4361	60.72	1.95	12.54
+1.70	39.28	0.91	69.51	3.85	0.0	1882	100.00	2.70	34.92

*NOTE: Not enough sample

GWIL Birtley Coal & Minerals Testing Division
INDUSTRIES

Table 14:
Sink-float data for No.2 coal bed in borehole D-1 (Birtley 11785)



PRIORITY VENTURES LTD.		
Dove Creek Coal Licences **Borehole D-1** Composite results for No.2 coal bed		
Scale: 1:20	By: C.G. Cathyl-Bickford, P.Geo.	
Date: Feb. 18, 2002	Analytical data: Birtley	Base: Roke GDC log for D-1
Westwater Mining Ltd.		Dwg.: WR 19512/02 — Fig. 12

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT	DOVE CREEK BOREHOLE D-2A
LAB NOS:	11602 - COMPOSITE
DATE:	OCTOBER 18, 2001

RAW COAL COMPOSITE (-3/8") MAKE-UP

LAB NO:	SAMPLE ID:	WT%
11295	Coal Bed Z - D 2/6/3	16.55
11296	Coal Bed Z - D 2/6/4	19.43
11297	Coal Bed Z - D 2/6/5	8.28
11298	Coal Bed Z - D 2/6/6	1.01
11299	Coal Bed Z - D 2/6/7	4.73
11300	Coal Bed Z - D 2/6/8	18.92
11301	Coal Bed Z - D 2/6/9	12.84
11302	Coal Bed Z - D 2/6/10	6.42
11303	Coal Bed Z - D 2/6/11	11.82

HEAD RAW ANALYSIS (adb)

%MOIST.	%ASH	%VOL.	%F.C.	%S	BASIS
1.20	46.50	23.44	28.86	0.89	adb
	47.06	23.72	29.21	0.89	db

SCREEN SIZE ANALYSIS (adb)

SIZE	WT%	RM%	ASH%	S%	CUM WT%	CUM S%	CUM ASH%
+60M	94.80	1.25	46.95	0.86	94.80	0.86	46.95
-60M	5.20	1.21	50.48	0.93	100.00	0.86	47.13

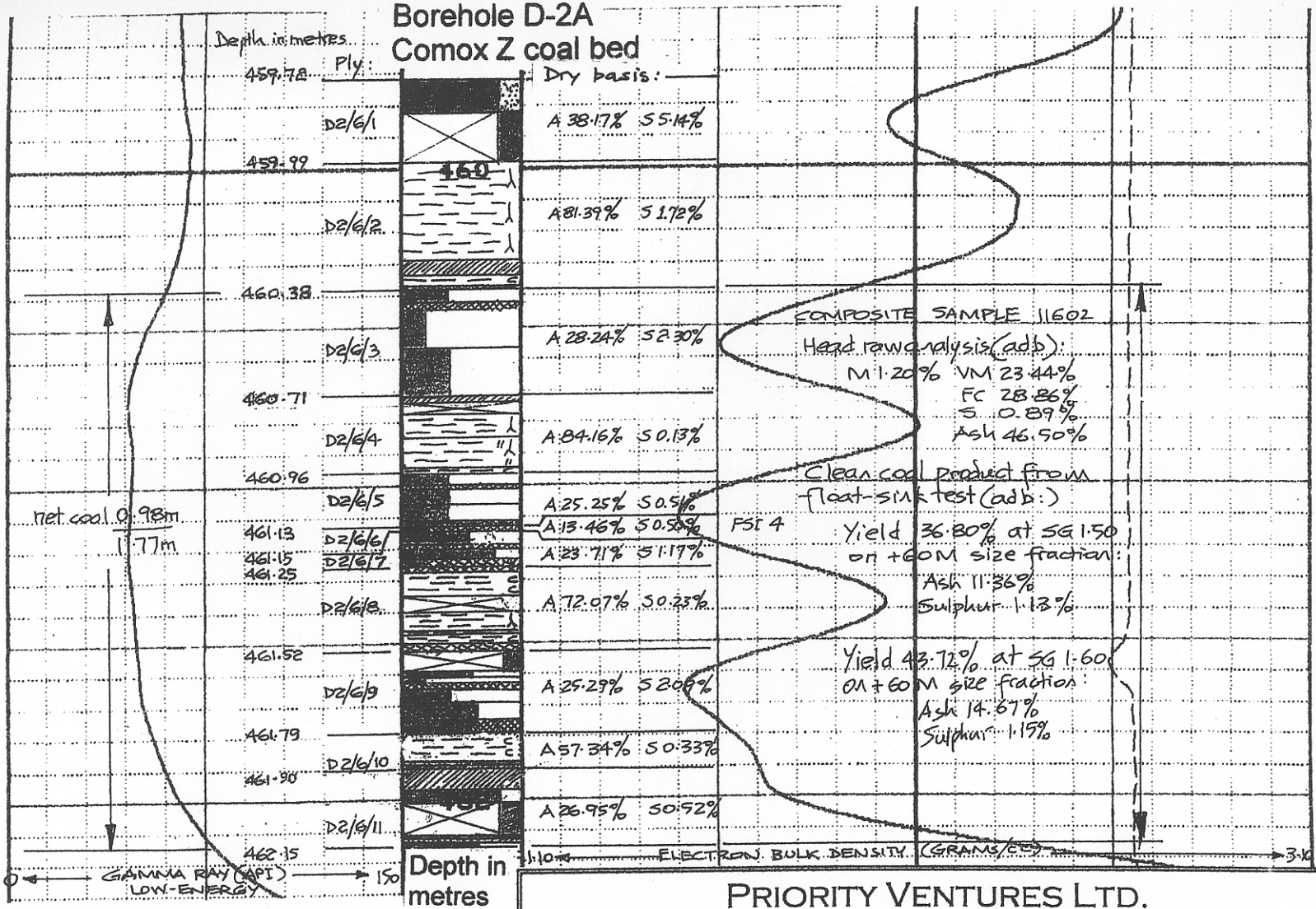
FLOAT SINK ANALYSIS (adb)

	SIZE: +60M (adb)								
S.G.	WT%	RM%	ASH%	S%	F.S.I.	CAL/G	CUM WT%	CUM S%	CUM ASH%
- 1.30	13.46	0.80	4.93	1.02	7.5	7972	13.46	1.02	4.93
1.30 - 1.40	13.78	0.75	10.62	1.10	7.0	7485	27.24	1.06	7.81
1.40 - 1.50	9.56	0.70	21.48	1.34	4.0	6412	36.80	1.13	11.36
1.50 - 1.60	6.92	0.64	32.26	1.20	1.5	5393	43.72	1.14	14.67
1.60 - 1.70	4.01	0.75	40.14	1.18	1.0	4599	47.73	1.15	16.81
+1.70	52.27	0.79	76.45	0.56	--	---	100.00	0.84	47.98

-60M froth flotation sample available for frothing - we will require parameters to run it.

GWIL Birtley Coal & Minerals Testing Division
INDUSTRIES

Table 15:
Sink-float data for Z coal bed in borehole D-2A (Birtley 11602)



PRIORITY VENTURES LTD.

Dove Creek Coal Licences

Borehole D-2A

Composite results for Z coal bed

Scale: 1:20	By: C.G. Cathyl-Bickford, P.Geo.	
Date: Feb. 18, 2002	Analytical data: Birtley	Base: Roke GDC log for D-2A
Westwater Mining Ltd.		Dwg.: WR 19513/02 Fig. 13

CLIENT:	**PRIORITY VENTURES LTD. - WESTWATER MINING LTD.**
PROJECT	DOVE CREEK BOREHOLE D-1 & D-2A
LAB NOS:	11784,85,11602
DATE.	MARCH 12, 2002

CLEAN COAL COMPOSITES @ 1.60 S.G.										
LAB NO:	SAMPLE ID:	MOIST%	ASH%	VOL%	F.C.%	%S	CAL/G	F.S.I.	HGI	BASIS
11784	D1	0.77	11.58	34.92	52.73	1.81	7,388	8.0	65	adb
	Z COAL BED		11.67	35.19	53.14	1.82	8,356			db
11785	D1	0.82	13.58	34.55	51.05	1.71	7,210	8.0	66	adb
	2 COAL BED		13.69	34.84	51.47	1.72	8,343			db
11602	D-2A	0.88	15.49	33.44	50.19	1.14	6,988	6.5	51	adb
	Z COAL BED		15.63	33.74	50.64	1.15	8,269			db

LAB NO:	%Total Sulphur	%Pyritic Sulphur	%Sulphate Sulphur	%Organic Sulphur
11784	1.81	0.750	0.025	1.04
11785	1.71	0.814	0.004	0.89
11602	1.14	0.511	0.011	0.62

MINERAL ANALYSIS OF ASH											
LAB NO:	SiO_2	Al_2O_3	TiO_2	Fe_2O_3	CaO	MgO	Na_2O	K_2O	P_2O_5	SO_3	Undet.
11784	47.19	26.47	1.35	12.01	5.63	0.99	0.39	1.16	1.24	3.55	0.00
11785	49.82	27.27	1.37	9.44	5.15	0.93	0.47	1.47	1.42	2.40	-0.26
11602	50.84	29.40	1.29	9.24	3.74	1.03	0.42	0.90	0.88	2.00	-0.26

GWIL INDUSTRIES Birtley Coal & Minerals Testing Division

Table 16:
Analyses of clean coal composites floated at 1.60 S.G.

Annex F: Coalbed gas and canister test data

Contents:

	Page
Table 17: Canister test record	F-2
Table 18: Gas analyses from Dove Creek boreholes and canister tests	F-3
Table 19: Coal petrography of canister samples (from Dr. Barry Ryan)	F-4
Chart 6: Gas content (as-measured) of canistered zones, as a function of ash yield and depth	F-5
Chart 7: Gas content (dry, ash-free) of canistered zones, as a function of ash yield and depth	F-6
Chart 8: Gas content (dry, at 20% ash) of canistered zones, as a function of ash yield and depth	F-7

Canister Test Record

Borehole	Coal bed and ply	Depth (m) top	Depth (m) base	Canister number	Sample weight (gm)	Coal analysis serial number	Air-dried moisture	adb Ash content	Gas content (m^3/tonne) as-measured	Gas content (m^3/tonne) dry ash-free (daf)
D-1	Z 1/5/B	255.20	255.58	1	861	B 11166	0.76	39.02	6.2	10.22
"	2 1/8/A	298.70	299.08	2	1347	B 11167	0.76	34.80	6.00	9.24
"	2 1/8/B	299.73	300.05	3	1129	B 11168	0.73	12.01	4.33	4.93
"	2A 1/9/A	325.11	325.38	4	843	B 11169	0.79	47.66	2.75	5.29
"	Z 1/5/A	254.80	255.18	5	1292	B 11170	0.70	52.10	2.38	5.01
D-2A	1 2/8/9	485.69	486.07	6	1513	B 11171	0.65	61.49	2.95	7.74
"	1 2/8/11	486.14	486.53	7	1199	B 11172	0.77	55.37	3.33	7.53
"	2 2/11/1	512.32	512.70	8	750	B 11173	0.99	63.77	2.15	6.04
D-3	X 3/1/A	237.94	238.25	9	1245	B 11174	1.12	25.77	2.65	3.38
"	X 3/1/B	237.58	237.94	10	1427	B 11175	0.99	49.87	2.43	4.90
"	1 3/5/A	297.63	298.03	11	1218	B 11176	0.83	7.88	3.26	3.54
"	1 3/5/B	298.90	299.25	12	1312	B 11177	0.68	28.72	2.05	2.88

Coal analyses by: Birtley Coal & Minerals Testing
Gas content data by: Barry Ryan, P.Geo.

Record prepared by: C.G. Cathyl-Bickford, P.Geo.
Date: 2001 September 24

Table 17:
Canister test record

		Mole percent (air-free basis)													
		H_2	He	N_2	CO_2	H_2S	C1	C2	C3	IC4	NC4	IC5	NC5	C6	CO	Total
Wellhead samples:																
Borehole D-1, at total depth (basement source?)		0.1	n.d.	93.0	0.2	n.d.	6.6	0.1	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.1	100.1
Borehole D-2, at total depth		0.1	n.d.	29.6	0.3	n.d.	69.5	0.3	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	100.0
Canister samples:																
Borehole D-1																
Canister 2	No.2 coal	0.1	n.d.	2.9	2.8	n.d.	93.5	0.5	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	100.0
Canister 4	No.2A coal	0.1	n.d.	21.5	3.0	n.d.	74.6	0.5	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	99.9
Canister 5	Z coal	0.1	n.d.	11.0	2.2	n.d.	86.4	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	100.1
Borehole D-2A																
Canister 6	No.1 coal	0.1	n.d.	17.4	1.5	n.d.	80.7	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	100.1
"	"	0.1	n.d.	17.6	1.2	n.d.	80.8	0.1	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.1	99.9
Canister 7	No.1 coal	0.1	n.d.	10.5	1.3	n.d.	87.7	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	100.0
"	"	0.1	n.d.	20.1	1.1	n.d.	78.4	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	100.1
Canister 8	No.2 coal	0.1	n.d.	22.5	0.3	n.d.	76.6	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	99.9
Borehole D-3																
Canister 9	X coal	0.3	n.d.	56.9	9.8	n.d.	32.2	0.1	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.7	100.0
"	"	0.2	n.d.	68.8	3.7	n.d.	26.5	0.5	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.4	100.1
Canister 11	No.1 coal	0.1	n.d.	85.1	3.0	n.d.	11.2	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.2	99.8
Canister 12	No.1 coal	0.2	n.d.	83.7	6.3	n.d.	9.0	0.4	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.4	100.0

Data sources:
Wellhead and canister samples analysed by B.C. Research for B.C. Geological Survey Branch; samples were taken and these results were provided by Dr. Barry Ryan of BCGSB.

Table 18:
Gas analyses from Dove Creek boreholes and canister tests

Table 19:
Coal petrography of canister samples
(work by Dr. Barry Ryan, B.C. Geological Survey)

PROJECT				COAL PETROGRAPHY					NOTES										
SEAM		Magnification	50x10																
DATE									VOLUME PERCENTS										
		1	2	3	4	5	6	7	7	8	9	10	11		12	wt %			
scam	sample		telinite	collo telinite	colo detrinite	vitro detrinite	liptinite	psuedo vitrinite	total reacts	semi fusinite	fusinite	mac rinite	mic rinite	inerto detrinite	total inerts	min matter	ash	total	comments
1	Can 3	count	12	43	120	4	16	23	218	15	8	9	0	17	49.0	33		300.0	
		%	4	14	40	1	5	8	73	5	3	3	0	6	16	11	17.2	100	
2	Can 11	count	23	40	151	1	16	24	255.0	11	0	11	0	7	29.0	16		300.0	
		%	8	13	50	0	5	8	85	4	0	4	0	2	10	5	8.8	100	
3	Can 7	count	19	35	86	3	23	5	171.0	13	3	24	0	11	51.0	78		300.0	
		%	6	12	29	1	8	2	57	4	1	8	0	4	17	26	35.9	100	
4	Can 9	count	17	44	93	5	9	24	192.0	30	0	14	0	6	50.0	58		300.0	
		%	6	15	31	2	3	8	64	10	0	5	0	2	17	19	28.2	100	
5	Can1	count	0	38	101	1	12	30	182.0	40	1	7	6	0	54.0	64		300.0	
		%	0	13	34	0	4	10	61	13	0	2	2	0	18	21	30.6	100	
6	Can2	count	0	61	78	7	14	22	182.0	10	0	11	14	0	35.0	83		300.0	
		%	0	20	26	2	5	7	61	3	0	4	5	0	12	28	37.7	100	
7	Can 4	count	0	44	64	4	13	24	149.0	15	0	6	10	0	31.0	120		300.0	
		%	0	15	21	1	4	8	50	5	0	2	3	0	10	40	49.7	100	
8	Can 5	count	0	38	54	13	5	33	143.0	7	0	5	7	0	19.0	138		300.0	
		%	0	13	18	4	2	11	49	2	0	2	2	0	6	46	54.8	100	
9	Can 6	count	0	32	31	24	3	3	93.0	5	0	8	8	0	21.0	186		300.0	
		%	0	11	10	8	1	1	31	2	0	3	3	0	7	62	66.6	100	
10	Can 10	count	3	58	43	29	6	28	167.0	11	0	7	6	0	24.0	109		300.0	
		%	1	19	14	10	2	9	56	4	0	2	2	0	8	36	46.3	100	
11	Can 12	count	1	68	95	14	9	23	210.0	25	0	18	4	0	47.0	43		300.0	
		%	0	23	32	5	3	8	70	8	0	6	1	0	16	14	21.8	100	
12		count							0.0						0.0			0.0	
		%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	
13		count							0.0						0.0			0.0	
		%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	
14		count							0.0						0.0			0.0	
		%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	
	total pt count		75	501	916	105	126	239	1962	182	12	120	55	41	410	928		3300	
	Averages %		2.3	15.2	27.8	3.2	3.8	7.2	59.5	5.5	0.4	3.6	1.7	1.2	12.4	28.1	36.1	1100	
	Averages mm free		3.2	21.1	38.6	4.4	5.3	10.1	82.7	7.7	0.5	5.1	2.3	1.7	17.3	200.0	0.0		

		telinite	collo telinite	collo detrinite	vitro detrinite	liptinite	gelo vitrinite	total reacts	semi fusinite	fusinite	inerto detrinite	macrinite	micrinite	total inerts	mineral matter	wt ash

density coal	1.25	2.5	min matter/ash	1.15	density rock	

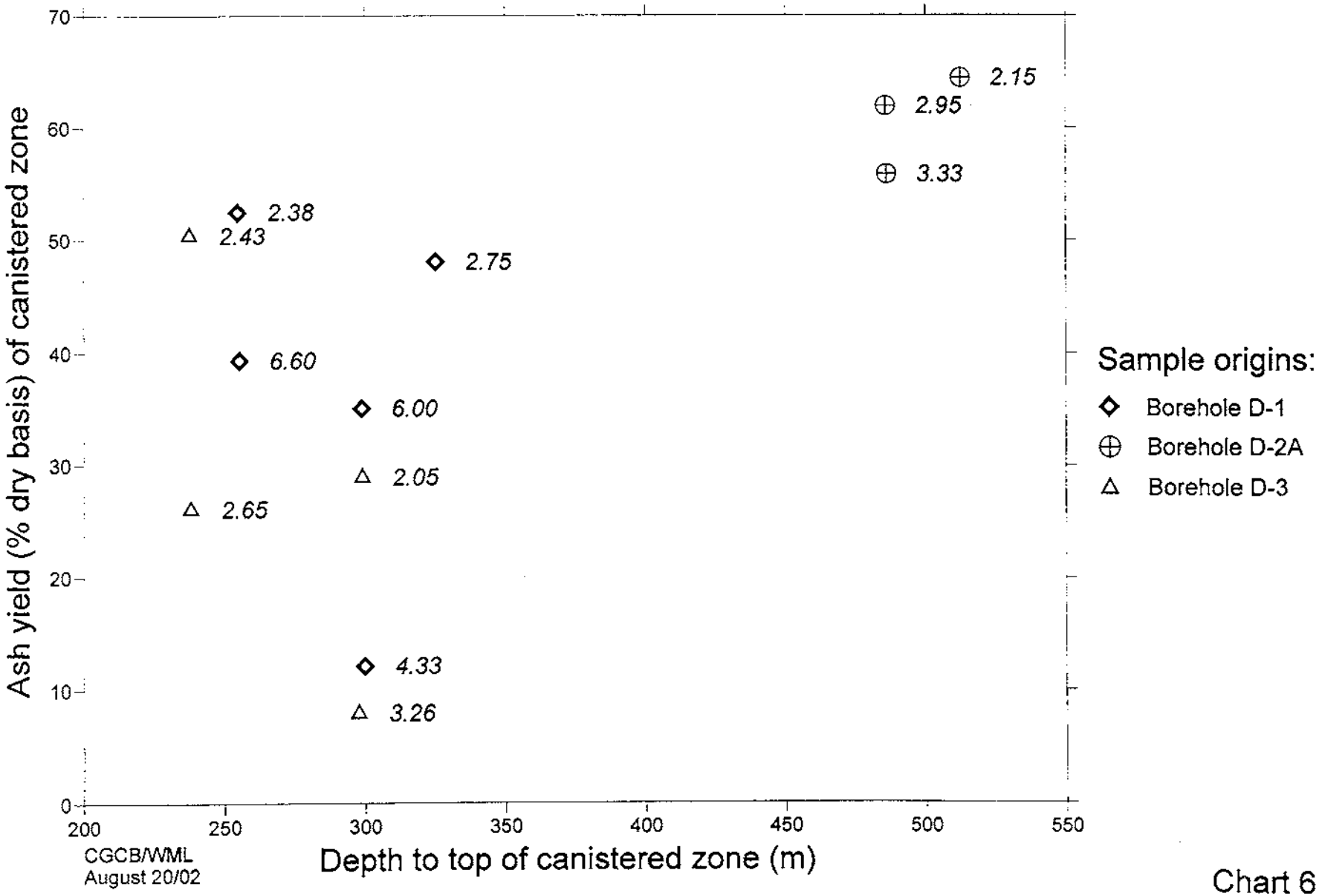


Chart 6:

Gas content (as-measured) of canistered zones, as a function of ash yield and depth

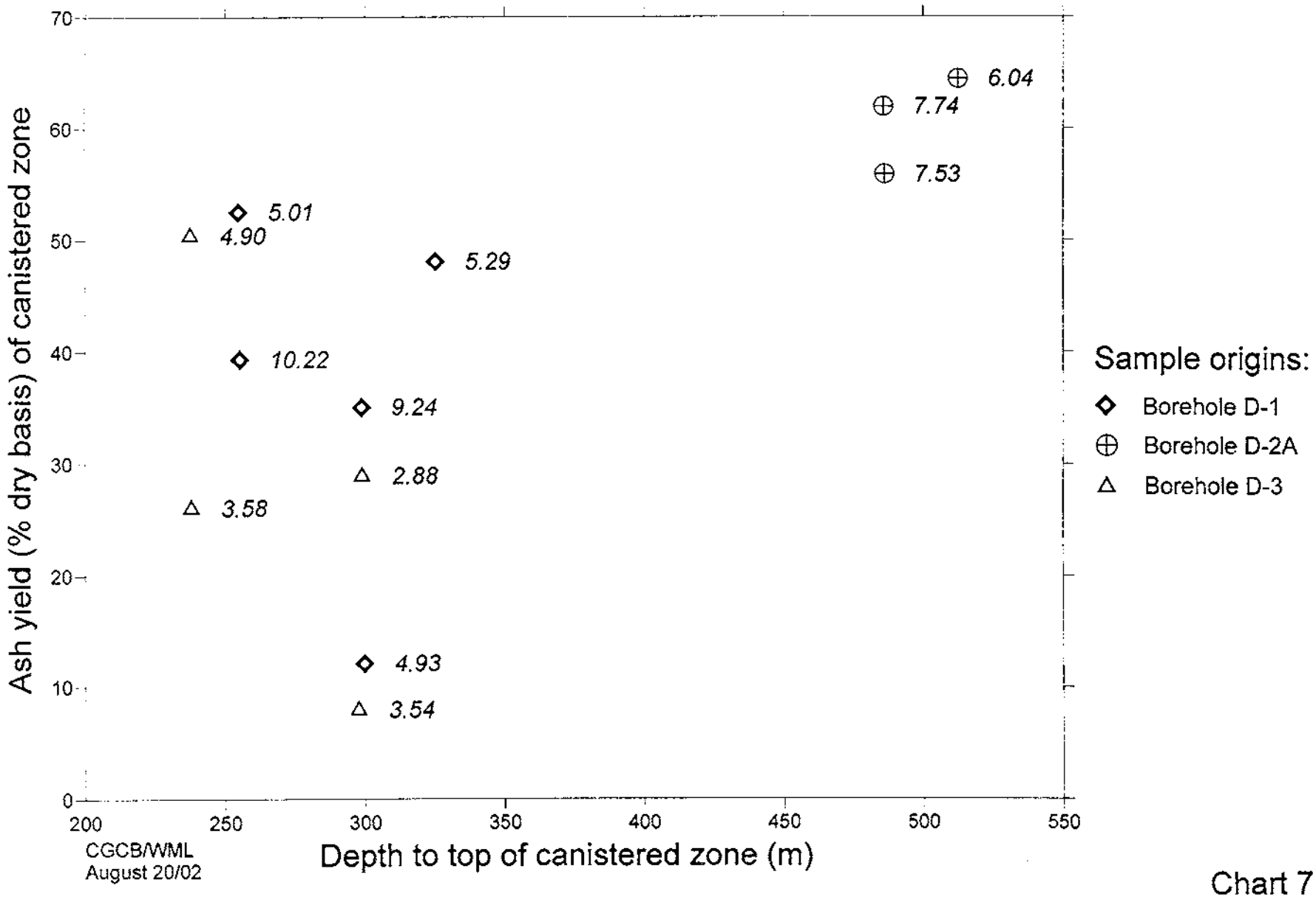


Chart 7:
Gas content (dry, ash-free) of canistered zones, as a function of ash yield and depth

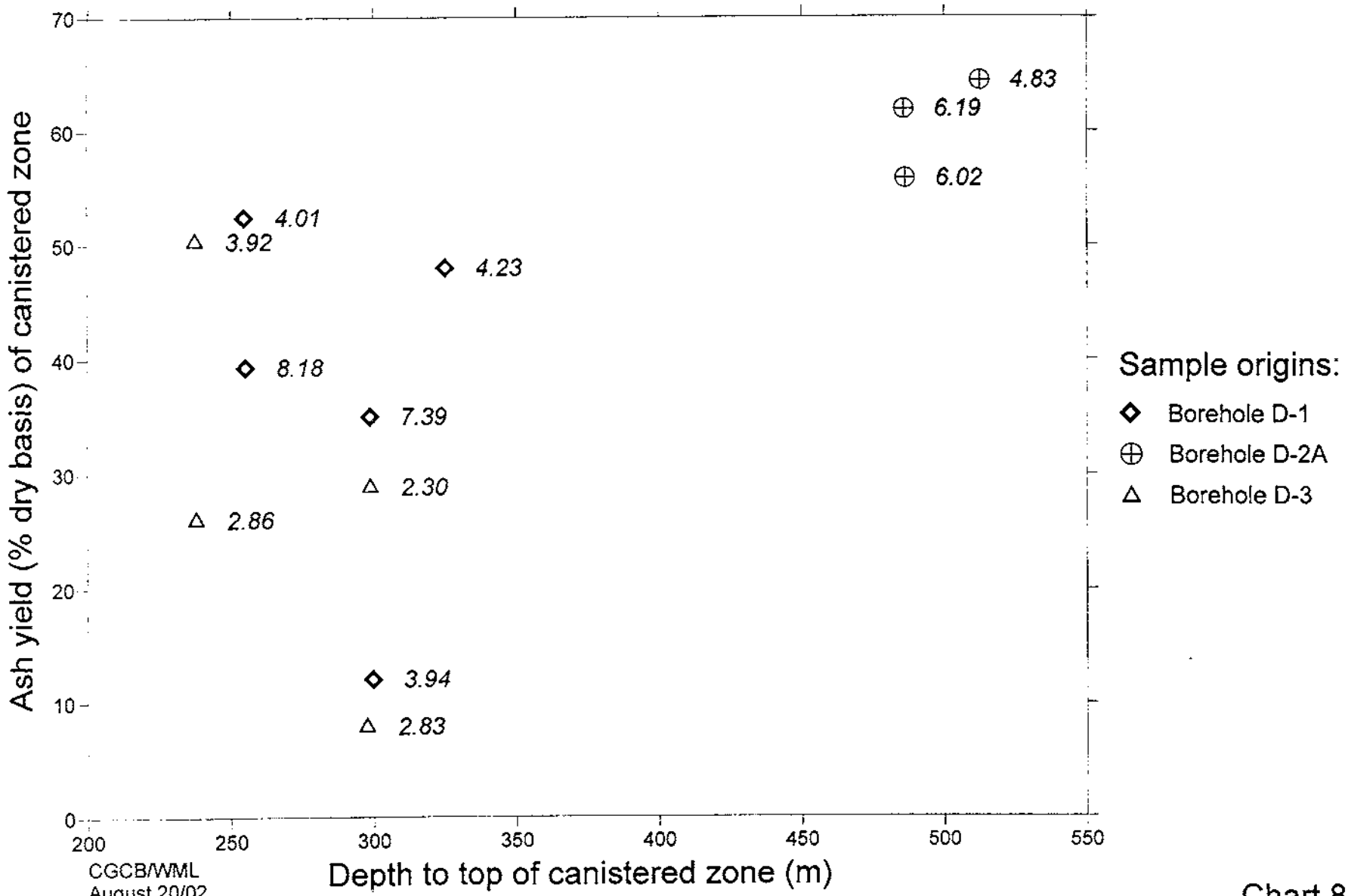


Chart 8:

Gas content (dry, at 20% ash) of canistered zones, as a function of ash yield and depth