

### CORONER'S COURT OF BRITISH COLUMBIA

held at \_\_\_\_\_

Kimberley , British Columbia

We, the Jury, having been duly sworn and serving at the inquest, commencing o			mmencing on	on 9 July, 2007			
Kimberley	, British Co	olumbia, and conti	nued on the followir	ng dates <u>July 10, 1</u>	11, 12, 13		
into the death of	Douglas Lloyd Eric	kson	find he came	e to his death at ap	proximately <u>early pm</u> hou		
on the <u>15<sup>th</sup></u> day of	May Al	D, <u>2006</u> at o	r near	Kimberley	,British Columbi		
MEDICAL CAUSE OF DEATH (1) Immediate Cause of Death:	a) Anoxia	USAGE OF		OF BRITI	SOLICITOR GENERAL SH COLUMBIA		
Antecedent Cause if any:	Due to or as a conseq b) Low atmosphe		In accordance with the Freedom of information Protection of Privacy Act and to the policies				
Giving rise to the Immediate cause (a) above, stating underlying cause last.	DUE TO OR AS A CONSEQUENCE (			procedures made pursuant to it, selected personal Identifiers have been blacked out on this document. If you have any questions, contact the office of the			
(2) Other Significant Conditions Contributing to Death:			Chie	f Coroner at (604)	660-7745		
CLASSIFICATION OF THE EVENT		☐ Homicide	☐ NATURAL	SUICIDE	Undetermined		
The above verdict certifie	ed by the Jury on t	he	_13 <sup>th</sup> _day of _	July	AD, <u>2007</u> .		
	Jeffrey M. Dolan			W/			
Pres	iding Coroner's Printed Nam	18 18		eresiding Coron	er's Signature		
		in Sign strik franch de kenne de kommen de kenne de kenn In service de la service de kenne de k	and the second s		in a section of the s		
	То ве	COMPLETED BY	PRESIDING CORON	ER			
Age: 48 ye	ears	Gender:	⊠ Male	Female			
Date of Birth:		Native:	Yes	⊠ No			
Coroner's Case No.: 2006	:422: 0022	Post Morten	n: 🛭 Full	☐ External	None		
Police File No.: 06-85	56	Toxicology:	⊠ Yes	☐ No			
Police Department: Kimbo	erley RCMP	Identificatio	n Method: 🛛 Visua	Other	(specify below)		
Court Reporter: Verba	itim Words West	Identified by	y: frlend				
Phone: (604	1) 591-6677	Premise of I	injury: Sampling	shed at #1 waste	dump, Sullivan Mine		
		Premise of I	Death: As above				
	(POST						

# BRITISH COLUMBIA

## CORONER'S COURT OF BRITISH COLUMBIA

held at Kimberley , British Columbia

Ve, the Jury, having been duly	the Jury, having been duly sworn and serving at the inquest, commencing on			9 July, 2007			
Simberley	, British Columb	la, and continued on t	he following d	ates July 10, 1	1, 12, 13		
nto the death of	Shawn Michael Currier	·	find he came	to his death at	approximately	1052_ hou	
n the <u>17<sup>th</sup></u> day of	May AD, :	2006 at or near _		Cranbrook		British Columb	
MEDICAL CAUSE OF DEATH (1) Immediate Cause of Death:	a) Anoxia	0.5	In acc	organce with th	e Freedom of it	BIA	
Antecedent Cause if any:	b) Low atmospheric of		proced	lures made nur	ACT and to the	policies and	
Giving rise to the immediate cause (a) above, <u>stating underlying cause last.</u>	Due to or as a consequence (c)	procedures made pursuant to it, selected personal identifiers have been blacked out on this document. If you have any questions, contact the office of the Chief Coroner at (604) 660-7745					
(2) Other Significant Conditions Contributing to Death:				u. (0011)	000-1745		
CLASSIFICATION OF THE EVENT  The above verdict certifie	☑ ACCIDENTAL ☐ H		TURAL [	SUICIDE	☐ UNDET		
	JEFFREY M. DOLAN			$\mathbb{W}$			
Presi	iding Coroner's Printed Name			Presiding Compre	er's Signature		
	То ве сом	PLETED BY PRESIDIN	G CORONER				
Age: 21 ye	ears	Gender:	⊠ Male	Female			
	uary 17, 1985	Native:	Yes	⊠ No			
Coroner's Case No.: 2006:		Post Mortem:	⊠ Full	☐ External	☐ None		
Police File No.: 06-85	56	Toxicology:	⊠ Yes	□ No			
Police Department: KImbe	erley RCMP	Identification Method:	⊠ Visual	Other	(specify below)		
Court Reporter: Verba	atim Words West Ltd	Identified by:	friend				
Phone: (604	1) 591-6677	Premise of Injury:	Sampling she	ed at #1 waste	dump, Sullivan	Mine	
		Premise of Death:	East Kootena	y Regional Hos	pital, Cranbrool	¢, Β.C.	
	(Ban)						

# BRITISH COLUMBIA

## CORONER'S COURT OF BRITISH COLUMBIA

held at Kimberley , British Columbia

We, the Jury, having been dul	ly sworn and serving at the	inquest, commencing	on	9 Jul	y, 2007 at
Kimberley	, British Columbi	a, and continued on t	he following da	ates July 10, 1:	1, 12, 13
nto the death of	Klm Karlene Weitzel	find	she came to h	er death at app	roximately1029_ hours
on the <u>17<sup>th</sup></u> day of	May AD, 2	006 at or near		Cranbrook	,British Columbia
MEDICAL CAUSE OF DEATH (1) Immediate Cause of Death:  Antecedent Cause If any:  Giving rise to the immediate cause (a) above, stating underlying cause last. (2) Other Significant Conditions Contributing to Death:	a) Anoxia  Due to or As a consequence of b) Low atmospheric ox  Due to or As a consequence of c)	kygen	In accord Protection procedur Identifiers If you ha	OF BRITIS  dance with the I  n of Privacy A  es made pursu  s have been bla	DLICHOR GENERAL H COLUMBIA Freedom of information and ct and to the policies and ant to it, selected personal cked out on this document. s, contact the office of the 60-7745
Classification of the Event	Accidental □ He	omicide 🔲 Na	TURAL [	] Suicide	☐ UNDETERMINED
The above verdict certifi	ed by the Jury on the	_13 <sup>th</sup>	day of	July	AD, <u>2007</u> .
	Jeffrey M. Dolan		4		f 1
Pre	siding Coroner's Printed Name			Presiding Corone	r's Signature
	То ве сом	PLETED BY PRESIDIN	g Coroner	<u> </u>	
Age: 44 y	vears 4	Gender:	☐ Male		
•	/ember 1 <sup>°</sup> 4, 1961	Native:	Yes	⊠ No	
Coroner's Case No.: 2006	·	Post Mortem:	☐ Full	☐ External	None
Police File No.: 06-8		Toxicology:	⊠ Yes	□ No	
	perley RCMP	Identification Method:	⊠ Visual	Other	(specify below)
·	atim Words West Ltd.	Identified by:	friend		
·	4) 591-6677	Premise of Injury:		d at #1 waste o	lump, Sullivan Mine
. Morior (00		Premise of Death:			oital, Cranbrook

# BRITISH COLUMBIA

### CORONER'S COURT OF BRITISH COLUMBIA

held at Kimberley , British Columbia

We, the Jury, having bee	e inquest, commencing	on	9 July, 2007				
Kimberley	, British Columi	bia, and continued on t	he following o	lates <u>July 10, 1</u>	1, 12, 13		
nto the death of	Charles Robert Murray Newo	ombe find he came to his death at approximately			proximately1039	hours	
on the <u>17<sup>th</sup></u> day of	May AD,	2006 at or near	·····	Cranbrook	anbrook ,British Colum		
MEDICAL CAUSE OF DEATH (1) Immediate Cause of Dea	Due to or as a consequence b) Low atmospheric of	oxygen	In accorda Protection	PROPERTY OF SOLICITOR GENERAL OF BRITISH COLUMBIA In accordance with the Freedom of information and Protection of Privacy Act and to the policies and procedures made pursuant to it, selected personal			
Giving rise to the immediate cau above, stating underlying cause		E OF	ldentifiers have been bla		ked out on this document.  contact the office of the		
(2) Other Significant Conditi Contributing to Death:	ions		Chief Coro	1-7745.			
CLASSIFICATION OF THE EVENT	⊠ ACCIDENTAL □ H	HOMICIDE 🗌 NA	TURAL	SUICIDE	☐ Undetermined	,	
The above verdict ce	JEFFREY M. DOLAN  Presiding Coroner's Printed Name		day of	July  Presiding Corone	AD, 2007 .	π.	
	То ве сом	APLETED BY PRESIDIN	g Coroner				
Age: Date of Birth:	50 years	Gender: Native:	⊠ Male	☐ Female			
Coroner's Case No.:	2006:422: 0025	Post Mortem:	⊠ Full	☐ External	None		
Police File No.:	06-856	Toxicology:	⊠ Yes	☐ No			
Police Department:	Kimberley RCMP	Identification Method:	⊠ Visual	Other	(specify below)		
Court Reporter:	Verbatim Words West Ltd.	Identified by:	friend				
Phone:	(604) 591-6677	Premise of Injury:	Sampling sh	ed at #1 waste	dump, Sullivan Mine		
	POSTED	Premise of Death:	East Kootena	ay Regional Hosp	pital, Cranbrook		



## FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

File No.: 2006:422:0022

2006:422:0023 2006:422:0024 2006:422:0025

Erickson Newcombe Weitzel Currier Douglas Lloyd Charles Robert Murray Kim Karlene Shawn Michael

GIVEN NAMES

SURNAME

#### **PARTIES INVOLVED IN THE INQUEST:**

Presiding Coroner: Mr. Jeff Dolan

Coroner Counsel: Mr. Rodrick MacKenzie

Court Reporting/Recording Agency: Verbatim Words West

Participants/Counsel:

Mr. Richard Meyer and Ms. Mailyne Ouellette representing Ministry of Energy

Ms. Carmela Allevato representing the Currier and Weitzel families

Norm Trerise representing Teck Cominco

Mr. Andy King representing United Steelworkers and Newcombe family

Mr. Hugh Gwillim and Ms. Anne Maloney representing the BC Ambulance Service

Mr. Mark Powers representing WorkSafeBC

Donald Howieson representing the City of Kimberley Fire Department

The Sheriff took charge of the jury and recorded 23 exhibits. 23 witnesses were duly sworn in and testified.

#### PRESIDING CORONER'S COMMENTS:

The following is a brief summary of the circumstances of the death as set out in the evidence presented to the jury at the inquest. The following summary of the evidence as presented at the inquest is to assist the reader to more fully understand the Verdict and Recommendations of the jury. This summary is not intended to be considered evidence nor is it intended in any way to replace the jury's verdict.

During the course of the five day inquest, the jury heard from a number of witnesses on the specific features that identify a confined space:

- The space is enclosed or partially enclosed
- The space must be of size and shape to allow a person to bodily enter and perform assigned work
- The space must have restricted openings that make it difficult to enter and leave
- The space must not be designed for continuous human occupancy



# FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

File No.: 2006:422:0022

2006:422:0023 2006:422:0024 2006:422:0025

Erickson Newcombe Weitzel Currier

SURNAME

Douglas Lloyd Charles Robert Murray Kim Karlene Shawn Michael

GIVEN NAMES

A confined space expert who gave evidence stated that, quite often, the first sign that there is a hazard is the death or critical injury of a worker and those attempting to render assistance. It was evident from witness testimony that not all of the individuals associated to the incident at the Sullivan Mine in Kimberley recognized the sampling shed at the #1 waste site as a confined space. Since the incident all are in agreement that it was in fact a confined space.

The expert witness on geochemical behaviour in the mining industry explained the chemical and geological factors that contributed to the incident that led to the deaths of Mr. Erickson, Mr. Newcombe, Ms. Weitzel and Mr. Currier. It was the evidence of the witness that the air inside the waste rock pile was very near 0% on May 15-17, 2006. Due to the fact the temperature in the rock dump was approximately 10° Celsius and lower than the external air temperature, the air fell off the rock to the bottom of the dump. The dump was capped which prevented the flow of air out of the site, reducing it to diffusive movement. The drainage pipe leading from the toe into the sampling shed allowed for the deoxygenated air to leave the site and enter the shed; thereby creating an atmosphere that would not sustain human life.

Witnesses testified that Pryzm Environmental employee Douglas Lloyd Erickson was under contract with Teck Cominco to perform water quality monitoring at the closed Sullivan Mine in Kimberley, BC. Mr. Erickson would have attended the sampling shed at the #1 waste dump at some point during the early PM hours of May 15, 2006. Mr. Erickson was not seen or heard from again until he was located collapsed and unresponsive in the shallow water of the sump at approximately 0745 hours on May 17, 2006. The jury found that Mr. Erickson died shortly after entering the shed during the early afternoon hours of May 15, 2006.

The Acting Charge Dispatcher at the BC Ambulance Service (BCAS) Kamloops Communication Centre on May 17, 2006 testified that a report of a possible drowning was received at 0745 AM MST. The caller identified himself as Bob Newcombe of Teck Cominco and reported that there was a man down in shallow water at the #1 shaft waste dump at the Sullivan Mine. Evidence given at the inquest revealed that Mr. Newcombe subsequently entered the shed and collapsed.

During his 2.5 minute conversation with Mr. Newcombe, the charge dispatcher made the initial determination that the call was that of a possible drowning and cardiac arrest. Prompted by certain key words, the charge dispatcher referred to the Emergency Medical



## FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

File No.: 2006:422:0022

2006:422:0023 2006:422:0024 2006:422:0025

Erickson Newcombe Weitzel Currier

SURNAME

Douglas Lloyd Charles Robert Murray Kim Karlene Shawn Michael

GIVEN NAMES

Once the suspicion of  $H_2S$  was raised, all attending emergency personnel were instructed to stay out of the shed without proper breathing apparatus and harnesses.

The Kimberley Fire Chief testified that the firefighters were of the initial understanding that they were attending a drowning in a pond. As a result the engine was returned to the fire hall and only the KFD command vehicle attended the scene. Once it was identified that the four individuals were inside what appeared to be a confined space, the engine carrying the breathing apparatus and harnesses was recalled from the Kimberley fire hall.

The on site first aid attendant testified that he had been employed at the Sullivan Mine since its closure. On May 17, 2006 the attendant assisted other emergency personnel at the sampling shed. He did not enter the shed due to the fact that he had neither the equipment nor the training to do so safely.

All four individuals were removed from the sump area of the shed by KFD personnel. Mr. Newcombe, Ms. Weitzel and Mr. Currier were transported to EKRH by ambulance where, despite the aggressive efforts of emergency medical personnel, they were pronounced deceased. Upon extracting Mr. Erickson it was determined that he was deceased. The jury heard from the pathologist who conducted the autopsies that all four died of anoxia due to low atmospheric oxygen.

As of June 10, 2006, procedures were developed to control entry into the incident site. The three levels of entry control consisted of a fenced enclosure with a single key locking gate and a  $30' \times 30'$  area surrounding the shed is designated as a hazard area marked by signage and ropes and requiring continuous monitoring of oxygen levels. The third level of entry is the shed itself with a single key lock. Access can only be gained via a confined space entry permit.

As of November 23, 2006 Teck Cominco has a confined space entry procedure in place.

Pursuant to Section 38 of the Coroners Act, the following recommendations are forwarded to the Chief Coroner of the Province of British Columbia for distribution to the appropriate agency:



## FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

File No.: 2006:422:0022

2006:422:0023 2006:422:0024 2006:422:0025

Erickson Newcombe Weitzel Currier

SURNAME

Douglas Lloyd Charles Robert Murray Kim Karlene Shawn Michael

GIVEN NAMES

in from the region as well as work-related discussions amongst staff. Telephone communication is often further compromised by data bursts, described as simultaneous voice and data and the fact that the caller may be on a mobile phone in a remote area.

4. Enforce that communication centre dispatchers take entitled breaks away from their work stations.

Coroner's comments: The jury heard that staff members at the Kamloops BCAS dispatch centre may work in excess of twelve hours without taking a scheduled break; thereby increasing the potential for fatigue. When breaks are taken, it is common for the employee to remain at their work station.

5. Issue one oxygen sensor per ambulance mandatory to be worn by the senior person at all times while on shift. Appropriate training along with the issue of the sensor be provided.

Coroner's comments: The jury heard that gas sensors are worn by some emergency responders, but not by ambulance attendants in the Kimberley area. This type of sensor would have alerted the attendants of the low oxygen levels in and around the sampling shed at the dump site.

- 6. Make it mandatory for all BCAS staff to review the BC Worksafe website and take the confined space course annually and have the supervisor record and track their progress.
- 7. The Kimberley station assign a full time unit chief to ensure training and compliance are maintained to a high standard.
- 8. BCAS designate a contact for the families of the deceased to provide periodic updates on the progress and state of implementation

Coroner's comments: The jury heard that there were inconsistencies amongst emergency responders and mine employees with respect to knowledge, training and experience in the areas of:

- Confined space training; identification and entry
- Hazard recognition and identification on mine property



## FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

File No.: 2006:422:0022

2006:422:0023 2006:422:0024 2006:422:0025

Erickson Newcombe Weitzel Currier

SURNAME

Douglas Lloyd Charles Robert Murray Kim Karlene Shawn Michael

GIVEN NAMES

To: Honourable Richard Neufeld
Ministry of Mines, Energy and Petroleum Resources
PO Box 9060 Stn Prov Govt

Victoria, BC V8W 9E2

11. Amend the <u>Mines Act</u> regulations to meet or exceed the WCB standards with regards to confined space provisions in the OH&S regulations.

Coroner's comments: The jury heard that the WCB standards with respect to confined spaces exceeded those in the Ministry's OH&S regulations in May 2006. In B.C. OH&S guidelines at mines fall under the Mines Act and not WorkSafe BC, or the Workers' Compensation Board. Contractors are responsible for adapting the H&S regulations under the Mines Act when working for Teck Comino.

- 12. Review the effectiveness of Ministry's enforcement strategy to establish a minimum number of site visits per mine per year and increase the penalty provisions with enforcement of the Mines Act to reflect the seriousness of non-compliance.
- 13. All B.C. mines must identify with signage all of the confined spaces on their respective mine sites within the next six months.

Coroner's comments: The Sullivan Mine Reclamation site, including the monitoring shed, had been the subject of inspections by the Ministry of Mines, Energy and Petroleum Resources on a regular basis. One or two inspections had been conducted between January 1 and May 15, 2006. During the reclamation period there was no indication of atmospheric hazards in or around this shed.

Prior to the 15<sup>th</sup> of May, 2006, no human hazards associated to the sampling shed had been identified. During previous health and safety tours, the shed had not been identified as a confined space. On May 15 and 17, 2006 the only signage on the sampling shed read "Danger Open Hole Behind Door".

14. Have all decommissioned mines in B.C. contact local fire/rescue and notify of hazards.



# FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

File No.: 2006:422:0022

2006:422:0023 2006:422:0024 2006:422:0025

Erickson Newcombe Weitzel Currier Douglas Lloyd Charles Robert Murray Kim Karlene Shawn Michael

SURNAME

GIVEN NAMES

A representative of Teck Cominco Limited testified that the mining company had complied with all of the directives.

JEFFREY M. DOLAN

Presiding Coroner's Printed Name

Presiding Coroner's Signature