

# HCR Atlas Copco Pit Viper 275 Drill Rig - S/N 4567

Inspection Details Created from the Non Operating Plant

<b>Business Name</b>	HCR Atlas Copco Pit Viper 275 Drill Rig - S/N 4567	<b>Reference No</b>	GPO 25426
<b>Contact Name</b>	Dale Flor - Site Senior Executive	<b>Status</b>	Closed
<b>Address</b>	Peabody Energy Moorvale Mine Peak Downs Highway Via Nebo Qld 4720	<b>Region</b>	Central Regional Office
<b>Industry Type</b>	Hydrocarbon Refrigerants	<b>Telephone No.</b>	07 4847 1453
<b>Gas</b>	Other	<b>Reason for Inspection</b>	Planned
<b>Inspection Date &amp; Time</b>	03/04/2014 10:00:00 AM	<b>Check List Item</b>	
<b>Assessment</b>	Acceptable	<b>Inspector</b>	Graham Rasmussen
<b>Compliance Tool Used</b>		<b>Supporting Inspector (s)</b>	
<b>Danger Tag Used ? (Y/N)</b>	No	<b>Keywords</b>	

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Time Spent	Entered	Month	Entered By	RTI	Hours	Comments
<b>Total Hours</b>					<b>3.00</b>	
	🕒 04/04/2014	April	Graham Rasmussen	No	1.00	Data entry
	🕒 03/04/2014	April	Graham Rasmussen	No	2.00	Testing gas from recovery cylinder that was evacuated from veh

Relie

**Attributes Inspected**

Vehicle Air Conditioning Refrigerant Gas Type Test.

- Test machine used is a Neutronics Automotive Ultima ID Refrigerant Identifier Type R12 & R134
- Vehicle tested was a Atlas Copco Pit Viper 275 rotary blasthole drill rig owned and operated by DrillPro Services Pty Ltd
- Identified as Drill 15
- Vehicle Serial Number 4676, DOM 2010

**Observations**

Refrigerant gas test sample taken identified that the gas within the a/c system gas was -  
R135A = 98.4 %  
R22 = 1.6 %

No trace of hydrocarbon refrigerant gas used within the a/c system.

Southern Cross Group auto electrician (Chris Baker - [redacted] S) was on site and had evacuated the refrigerant gas from the vehicles a/c system before the P&G Inspector could test the vehicles system. Due to this a gas sample was then taken from all refrigerant gas cylinders that were on the auto electricians service vehicle.

No evidence of any hydrocarbon refrigerants within any of the gas cylinders was identified as all tested as R134A.

**Action/Recommendations**

Nil

**Conclusions**

**Attachments**

**Comments**

(Inspectors, Regional Inspectors, Chief Inspectors)

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# Form 5A - Queensland mining industry incident report form

Processed By Agent: 10/07/2014

Incident Report Date/Time: 03/07/2014

Incident Report Number: 130060

Type of Incident	Code	Code Description
Incident Type:	Lost time	40
Medical Treatment injury:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Summary/title of incident:	an explosion with an unknown substance.	
Incident Classification:	Gas Ignition	109 Gas Ignition
Breakdown:	MOBILE PLANT AND TRANSPORT	
Sub-Breakdown:	Self-propelled plant	
Breakdown Class:	Other and not specified self-propelled plant	
Detailed Classification:	Other and not specified self-propelled plant	
Mechanism:	HEAT, ELECTRICITY AND OTHER ENVIRONMENTAL FACTORS	
Sub-Mechanism:	Contact with hot objects	
Previously Notified:	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Date: (Previously Notified)	28/03/2014	

Mine Details	Code	Code Description
Mine/quarry name	Moorvale Mine	M03749
Mine Type	coal Surface	
Company contact	Colin Simpson	
Phone	07 4847 1463	
Where in the mine did the incident occur?	C pit	102 Open cut - drill and blast
Surface or underground?	surface	

Incident Details		Code	Code Description
Date of Incident:	28/03/2014		
Time of Incident: (24 hour clock)	11:00		
Time shift started: (24 hour clock)	06:00		
Shift Duration: (24 hour clock)	12:00		
No. of complete shifts/day worked prior to accident:	3 days		
No. of days in shift cycle:	14 days		
No. of days rostered off prior to starting current shift cycle:	7 days		
Total hours worked in 24 hr period prior to accident, inc travel time:	12,25 days		
Travel Hours:	0,25		
Rostered Travel Hours:	0,25		
Rostered Pattern:	7x7		
Date of first full working day lost:	29/03/2014		
Primary equipment/tool involved in incident:	Atlas Copco PV 275	171	Drilling rig
Describe exactly how did the incident occur:	Suspected ignition of hydrocarbon air conditioning gas.		
What hazards have been identified from this incident:	Possible hydrocarbon gas in drill rig air conditioning system.	112	Flammable liquids/gases

Injured Person Details		Code	Code Description
Surname	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> RTI/DL RELEASE - DNRM  s78B(2) - Personal Information </div>		
Date of Birth			
First name and initial			
Gender			
Employee Number		40	Driller
Work activity at time of incident			
Type of employee			
If contractor, company name		Drillpro Services Pty Ltd	

Nature of injury/disease  
 Body location Upper limbs  
 Description of personal damage Partial thickness burns to hands and superficial burns to face and neck.  
 Is this a permanent incapacity? No

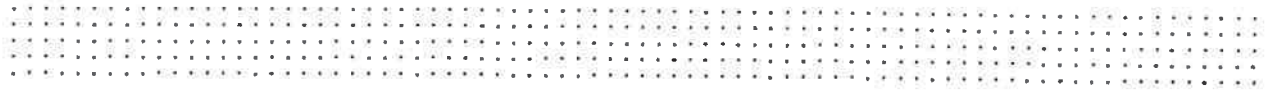
Incident Causes		Code	Code Description
<b>What happened leading up to the injury/incident/disease?</b>			
Organisational	Suspected charging of air conditioning system with hydrocarbon. Incorrect fitting of TX valve.	107	Maintenance management
		104	Hardware
Task/environmental conditions	Not applicable.	322	No task/environment factor involved
Individual/team actions	Not applicable.	222	No ind./team factor involved
Absent or failed defenses	Disabling high pressure valve	405	Inappropriate/inadequate safety features

**Preventative Action**

Give details of any control measures/actions being considered and/or implemented to prevent reoccurrences  
 Audit of all site mobile plant air conditioning systems.

**Submitter Details**

Date 03/07/2014  
 Your Full Name JULIE MUNRO  
 Position HST SUPPORT OFFICER  
 Email jmunro@peabodyenergy.com



<b>Inspection</b>	<b>Moorvale- Drill 12 – Operator Burns Incident</b>
<b>Date of Inspection</b>	<b>31<sup>st</sup> March 2014</b>
<b>Location</b>	<b>Workshop Industrial Area</b>
<b>Observation</b>	<b>Photos documenting inspection</b>

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Great state. Great opportunity.





**Photograph**

Camera – Canon IXUS 132



Drill Cab



RTI DL RELEASE - DNR/W



Release



Air Conditioner Filter



Wiring Inspection

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Release



Drill 15

Recovery  
Cylinder

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 100.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3.4.2014

(Date)

*Adam*

sch4p3(3) Prejudice the pr

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 98.5%  
R12 = 0.0%  
R22 = 1.5%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3.4.2014

(Date)

*Adam*

(Technician)



RTI DL RELEASE - DNRM

Drill 15

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 98.4%  
R12 = 0.0%  
R22 = 1.6%  
HC = 0.0%  
Air = 0.0%

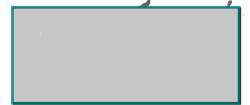
Tested R134a....  
Conclusion:  
R134a - PASS

3.4.2014

(Date)

*Adam*

(Technician)



# Incident Notification

(Mines Inspectorate)

**Mine Name** Moorvale Mine  
**Operator Name** Peabody Energy Australia PCI (C&M Management) Pty Ltd ABN 65077890932  
**Mine Type** Coal Mine - Surface  
**Mine Region** Central Region  
**Mine Office** Mackay District Office  
**Mine File No** 32584

## NOTIFICATION DETAILS

**Notifier's Name** Dale Flor  
**Notifier's Position/Title** SSE  
**Notifier's Contact Number** 0419 466 565  
**Notification Received on** 28/03/2014 at 01:10 PM  
**Notification Received By** Creswick Bulger  
**Entered By** Creswick Bulger on 31/03/2014

## INCIDENT DETAILS

**Incident Date & Time** 28/03/2014 11:00 AM  
**Location (Section/area)** Moorvale Mine - C102  
**Equipment Involved** Drillpro Drill#12  
**Concise Description** s78B(2) - Personal Information when he entered the drills cabin and an event occurred in which energy has been released that has caused s78B(2)  
s78B(2) - Personal

### Other details

It appears that there has been an event inside the cabin of the drill while in the process of being trammed from one drill area to the other.

The drill was stopped and the operator has exited the cabin on returning to the cabin there has been a release of energy where the worker

s78B(2) - Personal Information The employee was taken to s78B(2) - hospital, and then relocated to s78B(2) hospital, and was to be released from hospital over the weekend. The person is not expected to incur any permanent scarring s78B(2)

s78B(2) - Personal Information

The scene of the incident has been secured until the cause of the event has been determined. Peabody Energy has also ceased the Drillpro operations at both Coppabella and Moorvale mines until the cause of this incident is determined.

So far the investigation has revealed that the drills air conditioning system has lost its gas. The system had been re-gassed sometime back, but at this stage it is not known what type of gas was used. It is also thought that a wiring fault within the drills cabin may have caused the ignition, but this is yet to be verified.

**Incident Classification** Explosion

**Other Inspectorates to be notified**

## INJURIES

**Injuries - Person(s) Involved** 1

**Name** Jason Dunlop  
**Injuries** Superficial burns to hands, arms, and facial area  
**Current Status** No longer onsite  
**Employment Status** Contractor  
**Contractor Company** Drillpro

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FATALITIES

Fatalities - Person(s) Involved 0

RESPONSE

Actions Taken By Mine / Operator

Instructions or advice given to Mine / Operation

INCIDENT CATEGORY

Event Type High Potential Incident
Incident Category An unplanned ignition of gas, dust, or a combination of gas and dust.

- Oral Report confirmed by notice within 48 hours 30/03/2014
Site not to be interfered with without permission 28/03/2014
Notify an Inspector as soon as possible 28/03/2014
Report to be submitted within 1 month 27/04/2014

INCIDENT FOLLOW-UP

Officer allocated to investigate and/or follow-up reports Creswick Bulger

Oral confirmatory report received
Written report received

External DB Accident ID (LTAD) 130060
IR Summary Title s78B(2) - Personal Information an explosion with an unknown substance.

Incident Date 28/03/2014
Processed Date 10/07/2014 04:11:33 PM
(MIR Web Site submission processed)

Mine Name Moorvale Mine
Incident Type Lost time

Injured Person (s) s78B(2) - Personal
Organisational Suspected charging of air conditioning system with hydrocarbon. Incorrect fitting of TX valve.

Task / Environmental Conditions Not applicable.
Individual / Team Actions Not applicable.

Absent / Failed Defences
Preventative Action Audit of all site mobile plant air conditioning systems

DETAILS OF PERSONS ADVISED

EMAILED

Table with 4 columns: Emailed To, Comment, Emailed Date, Emailed Time. Lists email recipients and dates/times.

Release

paul.sullivan  
peter.herbert  
russell.albury  
Shaun.Dobson  
theo.kahl  
trudy.tilbury  
Andrew.Clough  
Richard.Gouldstone  
Neil.Reynoldson

ORALLY (if any)

Notified

Comment

Date

Time

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## LANG Jennifer (Admin Review)

---

**From:** REYNOLDSON Neil  
**Sent:** Wednesday, 2 April 2014 9:36 AM  
**To:** RASMUSSEN Graham  
**Subject:** FW: Petroleum & Gas testing - Thursday

Coppabella confirmed for testing as well

Neil

---

**From:** Scheepers, Albert [<mailto:AScheepers@peabodyenergy.com>]  
**Sent:** Wednesday, 2 April 2014 9:09 AM  
**To:** REYNOLDSON Neil; Flor, Dale  
**Cc:** Gabb, Anthony; DL-AU\_COP\_Management  
**Subject:** RE: Petroleum & Gas testing - Thursday

Hi Neil

We have one Drillpro drill on site, it would be good if we can have the test done.

See you tomorrow on site around 11:30.

Regards  
Albert

---

**From:** REYNOLDSON Neil [<mailto:Neil.Reynoldson@dnrm.qld.gov.au>]  
**Sent:** Wednesday, 2 April 2014 8:37 AM  
**To:** Flor, Dale  
**Cc:** Gabb, Anthony; Scheepers, Albert  
**Subject:** Petroleum & Gas testing - Thursday

Dale, Further to conversation this morning, I spoke to Graham Rasmussen at Petroleum and Gas inspectorate and because of the limited gas that might be left in the system they would like to do test first rather than Simtars .

The test will only take around 3 minutes and P&G would like to do all machines to verify for you.

### MINE RECORD ENTRY FROM LAST WEEK

I have had the Mine Record entry reviewed ( my first one ) and will be finalizing today . So I will bring a copy to site tomorrow.

### COPPABELLA INSPECTION & IMPLICATIONS FROM DRILLPRO INCIDENT

I will also be visiting Coppabella after the visit focusing on the recent uncontrolled movement and a general inspection to get my orientation in relation to the pit and changes that I need to be aware of .

Albert- can you confirm that you have Drillpro drills on site , if such the P&G inspectors should undertake a quick test on the drills for you. We would arrange to do this - and I suspect it would be around 11:30.

Regards  
Neil Reynoldson  
Mines Inspector

Release

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RTI DL RELEASE - DNR

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## LANG Jennifer (Admin Review)

---

**From:** REYNOLDSON Neil  
**Sent:** Wednesday, 2 April 2014 8:52 AM  
**To:** RASMUSSEN Graham  
**Subject:** FW: Petroleum & Gas testing - Thursday

Graham,

Can you give Dale some information as he requested.

Peabody will have a fire forensic investigator and SIMTARS out as well tomorrow, but P&G will get to do first test

Peabody want to ensure that it is co-ordinated right - so they want confirmation of our arrival time . If we leave at 7:00- we will be on site at 9:00 and then 30 minutes for induction , discussion etc

Does that sound alright to you ?

### COPPABELLA

Coppabella is Moorvale's sister mine and is 10km away . Drillpro have drills at both sites .

### DRILLPRO

I spoke to Moorvale today and Drillpro still can't dig up any details on the gas.

Neil Reynoldson.

---

**From:** Flor, Dale [<mailto:DFlor@peabodyenergy.com>]  
**Sent:** Wednesday, 2 April 2014 8:46 AM  
**To:** REYNOLDSON Neil  
**Subject:** RE: Petroleum & Gas testing - Thursday

Neil –

Can you give me an idea of the sampling and analysis process for the gas please? I'm really concerned about the amount of sample that may be available so we'll need to get this right.

Dale

---

**From:** REYNOLDSON Neil [<mailto:Neil.Reynoldson@dnrm.qld.gov.au>]  
**Sent:** Wednesday, 2 April 2014 8:37 AM  
**To:** Flor, Dale  
**Cc:** Gabb, Anthony; Scheepers, Albert  
**Subject:** Petroleum & Gas testing - Thursday

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Regards  
Neil Reynoldson  
Mines Inspector

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# HCR Atlas Copco Pit Viper 275 Drill Rig - S/N 4506

Non Operating Plant Details

↑ Inspection(s)

Industry Type	Hydrocarbon Refrigerants
Contact Details	Dale Flor - Site Senior Executive
Telephone	07 4847 1453
Mobile	
Fax	
Email	
Contact Description	
Business Name	
Street Address	Peabody Energy Moorvale Mine Peak Downs Highway Via Nebo Qld 4742
Region	Central Regional Office
Customer Owned	<input type="radio"/> Yes <input type="radio"/> No
Supplier	
File Ref	
Facility Attributes	Vehicle Air Conditioning Refrigerant Gas Type Test Test machine used is a Neutronics Automotive Ultima ID Refrigerant Identifier Type R12 & R134  Vehicle tested was a Atlas Copco Pit Viper 275 rotary blasthole drill rig owned and operated by DrillPro Services Pty Ltd  Vehicle Serial Number 4506, DOM 2008
Notes	

RTI DIVERGENCE - DNRM

Release

# HCR Atlas Copco Pit Viper 275 Drill Rig - S/N 4567

Non Operating Plant Details

1 Inspection(s)

<b>Industry Type</b>	Hydrocarbon Refrigerants
<b>Contact Details</b>	Dale Flor - Site Senior Executive
<b>Telephone</b>	07 4847 1453
<b>Mobile</b>	
<b>Fax</b>	
<b>Email</b>	
<b>Contact Description</b>	
<b>Business Name</b>	
<b>Street Address</b>	Peabody Energy Moorvale Mine Peak Downs Highway Via Nebo Qld 4720
<b>Region</b>	Central Regional Office
<b>Customer Owned</b>	<input type="radio"/> Yes <input type="radio"/> No
<b>Supplier</b>	
<b>File Ref</b>	
<b>Facility Attributes</b>	Vehicle Air Conditioning Refrigerant Gas Type Test Test machine used is a Neutronics Automotive Ultima ID Refrigerant Identifier Type R12 & R134  Vehicle tested was a Atlas Copco Pit Viper 275 rotary blasthole drill rig owned and operated by DrillPro Services Pty Ltd Identified as Drill 15  Vehicle Serial Number 4676, DOM 2010
<b>Notes</b>	

RTI DIVERGENCE - DNRM

Release

**LANG Jennifer (Admin Review)**

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**From:** REYNOLDSON Neil  
**Sent:** Friday, 4 April 2014 12:23 PM  
**To:** RASMUSSEN Graham  
**Subject:** Moorvale MRE 030414.doc



**Moorvale MRE  
030414.doc**

Graham,

Could you please review

Thanks  
Neil

RTI DL RELEASE - DNRM

Release

Today I attended Moorvale Mine with Petroleum and Gas Inspector Graham Rasmussen to observe the testing of the residual refrigerant gas in Drillpro Overburden Drill 12. This drill was stood down after the incident on 31/3/14 which resulted in a contract overburden driller s78B(2) - Personal Info

Inspector Rasmussen and I had discussions with Dale Flor, Moorvale Site Senior Executive and Brett Lamont, Health and Safety Superintendent to explain the testing process. Mr Flor explained that due to unforeseen circumstances, the external fire forensic expert and the SIMTARS testing technician, who were to be on site today, were now expected to be conducted on Monday 7/4/14. Mr Flor also confirmed that Drillpro Drill 15, Pit Viper 275- RCS commissioned in 2010, was currently stood down pending the gas testing today. Inspector Rasmussen explained the greater use of flammable hydrocarbon refrigerants were being driven by its reduced cost and environmental benefits.

### Drillpro Drill 12 Testing

Inspector Rasmussen conducted the test with the Petroleum and Gas Inspectorate Neutronics Inc Refrigerant Identifier unit. The test couldn't detect gas as a consequence of the complete discharge of the refrigerant gas. The consequence of the failed test means SIMTARS testing of compressor oil will be necessary to identify the composition of refrigerant gas, importantly whether a flammable hydrocarbon or industry standard R134a was used in the system.

Mr Flor confirmed that the Drill 12, S/N 4506 was commissioned in 2008 and that Moorvale was still working with the drill contractor Drillpro on records of air conditioning maintenance.

### Drill 15 Testing

The second Drillpro Pit Viper 275 on site, Drill 15, refrigerant gas was tested from a cylinder provided by Auto Electrical contractors Southern Cross. The result of testing is summarized in the table below and no hydrocarbon % was detected:-

Gas Detected	Test 1 (%)	Test 2 (%)
R134a	98.5%	98.4%
R22	1.5%	1.6%

The Southern Cross contractor also provided their recovery gas cylinder for testing and the result indicated 100% R134a. Drill 15 was allowed to return to work as a consequence of this test result.

### Close Out Meeting and Next Steps.

A close out meeting was conducted and confirmed the criticality of the SIMTARS testing for hydrocarbon and any residual Ethyl Mercaptan. The identification of ignition source and flammable gas will continue next week and the ICAM be conducted when this information is available. I explained that if the findings of this investigation identify hydrocarbon was used in the air conditioning unit then effective and comprehensive preventative actions will be needed to eliminate reoccurrence of this incident. These actions will be involved suppliers, air conditioning maintainers and improvement of sites Safety Health Management Systems.

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Mine Name	File No.	Operator	Activity Type	Region	Activity Date
Moorvale Mine	32584	PEABODY ENERGY AUSTRALIA PCI (C&M MANAGEMENT) PTY LTD	Investigation	Central	03/04/2014

Vision: Our Industries Free of Safety and Health Incidents

## Mine Record Entry

*This report forms part of the Mine Record under s68 of the Coal Mining Safety and Health Act 1999. It must be placed in the Mine Record and displayed on Safety Notice Boards.*

*Note that inspection or audit activities conducted by the Mines Inspectorate are based upon sample techniques. It remains the primary responsibility of Mine Personnel to identify hazards, and risks associated with Operations and ensure those risks are at an acceptable level.*

Today I attended Moorvale Mine with Petroleum and Gas Inspector Graham Rasmussen to observe the testing of the residual refrigerant gas in Drillpro Overburden Drill 12. This drill was stood down after the incident on 31/3/14 which resulted in a contract overburden driller

s78B(2) - Personal Informat

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Release

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**Neil Reynoldson**  
**Lead Investigator**  
**Inspector of Mines**  
**Central Region**

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Mine Name	File No.	Operator	Activity Type	Region	Activity Date
Moorvale Mine	32584	PEABODY ENERGY AUSTRALIA PCI (C&M MANAGEMENT) PTY LTD	Investigation	Central	31/03/2014

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### Site Safety & Health Reps Consulted: Gerry Grima

Today, Department of Natural Resources and Mines Mines Inspector Neil Reynoldson attended Moorvale Mine to conduct an investigation on the incident that occurred on 28/3/2014 at 11:00AM. The incident resulted in overburden drill operator [s78B(2) - Personal Information] after entering Drillpro Overburden Drill 12 operating cab.

I had discussions with Dale Flor, Site Senior Executive and Anthony Gabb, General Manager regarding the current status of the Moorvale operation and the transition from Leighton Contracting to operations being conducted by Peabody. Following this Dale Flor gave me an update on the burns investigation and Dale accompanied me to inspect Drill 12 which was brought up to the workshop area. Both Drillpro drills on site were stopped pending the outcomes of the investigation.

### Drillpro Drill 12 Burns Investigation

I was told by Mr Flor that the driller, [s78B(2) - Personal Information] had been released from hospital [s78B(2) - Personal Information] applied and is expected that he will have no permanent scarring. Jarrod Stewart, Mining Manager, was visiting [s78B(2)] today to follow up on the investigation statements and to ensure [s78B(2)] well being.

Dale Flor outlined the emergency response that involved both on call day shift MSS paramedic and site ERT personnel. Mr Flor confirmed an emergency response debrief was undertaken and the response time from initial call was 5 minutes.

### Investigation in the potential source of flammable gas

In the discussion with Dale Flor, Dale explained that the drill was working in C102 block on presplit holes down to coal and this pit had previous incidents of methane concentrations in holes drilled to coal. Dale Flor explained that gas measurements had been taken around the

Release

drill holes and the maximum concentration was found at the collar and the levels reduced dramatically from the immediate collar area. Mr Flor could not tell me what levels were measured. Mr Flor explained that Peabody Energy was arranging an in house methane specialist to visit site as part of the investigation.

- Methane measurement readings should be included in the investigation to support any findings that the ignition was not a result of methane.

Mr Flor further explained that the air conditioning system had been discovered to have all of its gas discharged and that there was no recording of air conditioning failure on the prestart inspection by the operator. At the time of the investigation, Mr Flor could not tell me what the refrigerant gas was and these records were being collated offsite by Drillpro Operation Manager, Matt Anderson. I informed Mr Flor of the existence of safety information in relation to highly flammable hydrocarbon refrigerants. The following points were raised in discussion:-

- The confirmation of the refrigerant gas type and its material properties, system charging, maintenance program and inspection records are essential information for the ongoing investigation.
- The Petroleum and Gas inspectorate have been organized to conduct testing on the refrigerant gas on Drillpro drill rigs on Thursday 3/4/14.
- A research search involving the refrigerant gas supplier should also be conducted to identify whether similar incidents have occurred

#### **Ignition Source**

Mr Flor informed me that the ignition source had yet to be identified.

- The cause of the ignition must be identified in the investigation.

#### **Inspection of the Drill**

Mr Flor accompanied me to inspect the Drill. The initial inspection showed:-

- All cab windows except one had been blown out
- The cab had no distinguishable fire damage.
- Electrical wiring adjacent to the air conditioning vents showed no signs of burning or heating
- Only sign of fire damage was singed paper.
- Air conditioner vents were below console level and also on the right hand pillar of the cab.

#### **Close Out Meetings and Follow Up**

A close out meeting was conducted with the SSE, with the following points:-

- To keep me informed in relation to any investigation findings as the incident has application to other operations
- Confirmed the requirements of serious accident report with 1 month under the Coal Mining Safety and Health Act 1999 s 201 (1) (b).

At the end of the visit I briefly spoke to the Site Safety Health Representative, Gerry Grima, to confirm his involvement and knowledge of the Drillpro incident. Mr Grima confirmed the view that response was timely and effective in reducing s78B(2) injuries and that he was issued timely communication on the incident.

**Neil Reynoldson**  
**Lead Investigator**  
**Inspector of Mines**  
**Central Region**

Release



**LANG Jennifer (Admin Review)**

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**From:** REYNOLDSON Neil  
**Sent:** Wednesday, 2 April 2014 9:02 AM  
**To:** Flor, Dale; RASMUSSEN Graham  
**Subject:** P&G Inspectorate - 8 am at the gate

Dale,

We will be at the gate at 8am tomorrow.

Neil

RTI DL RELEASE - DNRM

Release

## LANG Jennifer (Admin Review)

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**From:** RASMUSSEN Graham  
**Sent:** Friday, 4 April 2014 2:39 PM  
**To:** REYNOLDSON Neil  
**Cc:** WRIGHT John  
**Subject:** Re: Moorvale MRE 030414.doc

Looks all ok.

Just spoke to Greg from Simtars at Redbank Brisbane. He advised that Whanau White from Simtars Mackay will be at site on Monday around 10.00 am to oversee the chain of evidence.

Apparently Atlas Copco are checking the system for integrity again their OEM for the machine and to assist in removal of parts also on Monday.

Regards

Graham Rasmussen  
Senior Petroleum and Gas Inspector  
Petroleum & Gas Inspectorate  
Safety and Health Division, Central Region  
Department of Natural Resources and Mines  
16-32 Enterprise Street  
Bundaberg QLD 4670  
Phone 07 41315723  
Fax 07 41315895  
Mobile sch4p3(3) Prejudice the  
Email graham.rasmussen@dnrm.qld.gov.au

On 4 Apr 2014, at 12:23 pm, "REYNOLDSON Neil" <[Neil.Reynoldson@dnrm.qld.gov.au](mailto:Neil.Reynoldson@dnrm.qld.gov.au)> wrote:

Graham,

Could you please review

Thanks  
Neil

<Moorvale MRE 030414.doc>

**NOTICE OF CONFIRMATION TO THE MINES INSPECTORATE  
AND INDUSTRY SAFETY & HEALTH REPRESENTATIVE  
OF A  
HIGH POTENTIAL INCIDENT OR SERIOUS ACCIDENT**

**MINE:** Peabody Energy Moorvale Mine **DATE:** 29/03/2014

*This notice\* is made by or on behalf of the Site Senior Executive primarily\*\* pursuant to section 198(4) or (5) of the Coal Mining Safety & Health Act 1999 to confirm the initial oral report to an inspector and an Industry Safety & Health Representative*

**NOTE:** \* Notice required within 48 hours or 24 hours in the case of a fatality: \*\* Also serves to report "Non-Reportable Incidents"

**SECTION 1: INITIAL ORAL REPORT**

<b>Made by:</b> Dale Flor	<b>Company Position:</b> SSE/General Manager	<b>Phone:</b> 0419 466 565
<b>Made to:</b> Cres Bulger	<b>Time:</b> 13:10	<b>Date:</b> 28/3/2014
<b>Made to:</b> Stephen Woods	<b>Time:</b> 13:15	

**SECTION 2: SERIOUS ACCIDENT**

**Is this Incident a SERIOUS ACCIDENT?** **Y** **Delete as appropriate**

**NOTE 1:** Act s.16: A SERIOUS ACCIDENT is one that causes (a) death or (b) a person to be admitted to hospital as an in-patient for treatment of the injury. Also by definition it is a HIGH POTENTIAL INCIDENT

**NOTE 2:** While not included in the definition of SERIOUS ACCIDENT, Act s.198(2) (iii) requires immediate notification of an accident "that causes a person to suffer an injury, causing or likely to cause, a permanent injury to the persons health". This is also a HPI. (SERIOUS INJURY is not defined)

**SECTION 3: PRESCRIBED HPI - TYPE BEING REPORTED**

	SCHEDULE 1		SCHEDULE 2	
	Type No's 1 - 9	Type No.10 (a) - (p)	Part 1	Part 2
<b>Type no:</b>				
<b>NOTE 1:</b>	Types 1-9 are HPI's without qualification	Types 10(a) to (p) are HPI's only if they "endanger the safety or health of a person"	Person not to interfere with site without inspectors permission	Investigation report to be provided to an inspector within 1 month
<b>NOTE 2:</b>	Some HPI types in Schedule 1 also qualify as types in Schedule 2, Part 1 and/or Part 2. See details on reverse of this form			

**SECTION 4: NON-PRESCRIBED/APPEARANT HPI OR NON-REPORTABLE INCIDENT - NRI**

	TYPE A (apparent HPI):	TYPE B (NRI):	Delete which does not apply
<b>NOTE:</b>	Type A: Where a "match" cannot be made to the Schedules but the event appears to be a HPI	Type B: Where the incident is significant and has a safety "message" to share with industry	Indicate 'A' or 'B' above and complete "DETAILS OF EVENT" section below

**SECTION 5: DETAILS OF THE EVENT**

**NOTE:** Information provided in this section includes the "Primary Information" required by s.198(3) of the Act

**SUMMARY DESCRIPTION OF THE EVENT**

It appears that there has been an event inside the cabin of the drill while in the process of being trammed from one drill area to the other. The drill was stopped and the operator has exited the cabin on returning to the cabin there has been a release of energy where the worker has s78B(2) - Personal I

**DATE:** 28-3-2014 **TIME:** 11:00 **LOCATION:** Moorvale Mine - C102

**EQUIPMENT INVOLVED:** Drillpro Drill #12

**ENVIRONMENTAL CONDITIONS:** Light:  X Dark:  Sunny:  Wet:  Dry:  X Windy:

**NUMBER OF PERSONS INVOLVED:** 1 **DAMAGE:** To be determined

**NAME(S) OF DECEASED:** N/A

NAMES OF PERSONS INJURED	INJURIES	EMPLOYER (contractor where applicable)
<span style="background-color: #e0e0e0;">s78B(2) - Personal Information</span>		DrillPro

**NAMES OF ANYONE WHO SAW THE INCIDENT OR WERE PRESENT AT THE TIME:** Nil

**IF NO WITNESSES, NAME OF PERSON FINDING THE INCIDENT:** Brendan McKeowen (after emergency call)

**OTHER INFORMATION/DETAIL:**

**IMPORTANT NOTE:**

This is NOT an "Official Form". There is no statutory obligation to use it.

The objectives of the form are to:-

1. Raise awareness of the requirement to provide written confirmation of reported incidents and to facilitate that confirmation process
2. Obtain consistent information as required for input into the Inspectorate Database.
3. Guide industry to correctly identify the HPI "Type" that is reported and thereby to understand the statutory obligations that apply
4. Provide for the reporting of all Incidents with a "Safety Message" - provides for reporting "Non-Reportable Incidents" (NRI's)
5. Provide a "ready reference" to assist with the understanding of Schedules 1 & 2.

**Coal Mining Safety & Health Act 1999:**

s.17. A "high potential incident" at a coal mine is an event, or a series of events, that causes or has the potential to cause a significant adverse effect on the safety or health of a person.

**Coal Mining Safety & Health Regulation 2000:**

SCHEDULE 1: Types Of High Potential Incidents For Section 198 Of The Act		SCHEDULE 2 **	
		Part 1	Part 2
1	An unplanned ignition of gas, dust, or a combination of gas and dust.	√	√
2	The spontaneous combustion of coal or other material in an underground mine.		√
3	The entrapment of a person.		√
4	An electric shock to a person.		√
5	An event causing the withdrawal of a person from the mine or part of the mine.		
6	An abnormal circumstances declaration.		√
7	An event that causes only 1 escapeway from the mine to be available for use.		
8	A fire on a vehicle or plant		
9	An incident involving an explosive		
10	A FOLLOWING INCIDENT THAT ENDANGERS THE SAFETY OR HEALTH OF A PERSON—		
(a)	a fire;		
(b)	a ventilation failure causing a dangerous accumulation of methane or other gas;		√
(c)	an inrush;		√
(d)	a coal or rock outburst;		
(e)	damage to, or failure of, haulage equipment used to transport a person in a shaft or slope;	√	
(f)	an unplanned movement of, or failure to stop, a vehicle or plant;		
(g)	the failure in service of explosion protection of explosion protected equipment;	√	√
(h)	a failure of electrical equipment or an electrical installation;		
(i)	an unplanned ignition or explosion of a blasting agent or explosive;	√	√
(j)	a failure of strata control;		√
(k)	the exposure of a person to a hazardous substance;		
(l)	an unforeseen hazard requiring a review of the mine's safety and health management system;		
(m)	the unplanned immersion of a person in liquid;		
(n)	an unplanned movement of earth or coal;		
(o)	a structural failure of equipment;		√
(p)	a collision involving a vehicle or plant.		

NOTE: \*\* The ticks indicate those types in Schedule 1 that are also a type in part 1 or part 2 of Schedule 2 and subject to the requirements of that schedule.

SCHEDULE 2			
PART 1 - Types for section 200(1)		PART 2 - Types for section 201(1)	
<i>Must not interfere with site without inspectorate permission</i>		<i>Investigation Report to an inspector within 1 month.</i>	
1	An incident causing the death of, or a serious bodily injury to, a person	1	An unplanned ignition of gas, dust, or a combination of gas and dust
2	An unplanned ignition of gas, dust, or a combination of gas and dust.	2	The spontaneous combustion of coal or other material in an underground mine.
3	Damage to, or failure of, haulage equipment used to transport a person in a shaft or slope, if the damage or failure causes a hazard.	3	An inrush.
4	The failure in service of explosion protection of explosion protected equipment.	4	The failure in service of explosion protection of explosion protected equipment
5	A failure of electrical equipment or an electrical installation causing an electric shock to a person.	5	An electric shock to a person.
6	An unplanned ignition or explosion of a blasting agent or explosive.	6	An unplanned ignition or explosion of a blasting agent or explosive.
7	A major structural failure of equipment, if the failure causes a hazard.	7	A major failure of strata control.
		8	The entrapment of a person.
		9	An abnormal circumstances declaration.
		10	A major structural failure of equipment.

**LANG Jennifer (Admin Review)**

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**From:** REYNOLDSON Neil  
**Sent:** Friday, 4 April 2014 9:09 AM  
**To:** RASMUSSEN Graham  
**Subject:** Scanned copies of Gas measurements  
**Attachments:** Drill 12 Zero measurement.pdf; Drill 15 and recovery cylinder MV030414.pdf; Coppabella Gas measure 030414.pdf

Thanks and regards

Neil

RTI DL RELEASE - DNRM

Release

DEHL12

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = .0.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%

Tested R134a....  
Conclusion:  
R134a: FAIL<<<

11-14-2014  
(Date)

sch4p3(3) Prejudice the protec

(Technician)

DNRM

RTI DL RELEASE - DNRM

Drill 15

Recovery  
Cylinder

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 100.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3.4.2014  
(Date)

*[Signature]*

sch4p3(3) Prejudice the p

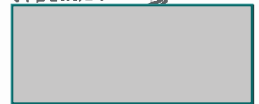
Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 98.5%  
R12 = 0.0%  
R22 = 1.5%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3.4.2014  
(Date)

*[Signature]*  
(Technician)



RTI DL RELEASE - DIRM

Drill 15

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 98.4%  
R12 = 0.0%  
R22 = 1.6%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3.4.2014  
(Date)

*[Signature]*  
(Technician)



RTI DL RELEASE - DNRM

Atlas Copco  
Dm 45/50 L  
SN #  
79682 J01280  
Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 100.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3-4-2014  
(Date) 12:30 pm

*[Signature]*  
(Technician)  
*[Signature]*

sch4p3(3) Prejudice the pro

SH 400  
# 65

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 100.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3-4-2014  
(Date) 1:30 pm

(Technician)  
*[Signature]*  
*[Signature]*



RTI DL RELEASE - DNRM

Atlas Copco  
Dm 45/50L  
S/N #  
79682 J01250  
Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 100.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3-4-2014  
(Date) 12:20 pm

*[Signature]*  
(Technician)  
*[Signature]*

sch4p3(3) Prejudice the

SH 400  
# 65

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 100.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%  
Air = 0.0%

Tested R134a....  
Conclusion:  
R134a - PASS

3-4-2014  
(Date) 1:30 pm

(Technician)

*[Signature]*  
*[Signature]*

DE1112

Neutronics, Inc.  
Refrigerant  
Identifier

R134a = 0.0%  
R12 = 0.0%  
R22 = 0.0%  
HC = 0.0%

Tested R134a....  
Conclusion:  
R134a: FAIL<<<

4-2014

(Date)

sch4p3(3) Prejudice the pro

(Technician)

DNRM

RTI DL RELEASE - DNRM