

LANG Jennifer (Admin Review)

From: WALLACE Doreen
Sent: Thursday, 1 May 2014 8:33 AM
To: MANTHEY Greg
Cc: SimtarsMackay
Subject: RE: Moorvale Coal - Collection of Gas Cylinders

I will be heading out this morning for a drug & alcohol test and can pick them up. Not sure how the freight works. Leanne can you please advise whether you need them brought back to the office before freighting to Redbank.

Doreen Wallace
Occupational Health and Safety Officer | Simtars

Department of Natural Resources and Mines
169 Sydney Street Mackay Qld 4740 | PO Box 453 Mackay Qld 4740 Australia
T +61 7 4999 5300 | F +61 7 4999 5301 | M [REDACTED]
038| doreen.wallace@simtars.com.au | www.simtars.com.au

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From: MANTHEY Greg
Sent: Wednesday, 30 April 2014 5:15 PM
To: SimtarsMackay
Subject: Moorvale Coal - Collection of Gas Cylinders

Dear Mackay,

There is an Air Conditioning Contractor providing me with a couple of gas cylinders for an investigation job. They are based in Mackay and I need someone to collect the cylinders from them and then freight them to me at Redbank.

The contractors are NB Industries – Steve on [REDACTED] sch4p3(3) Prejudic Can you please assist me.

Thanks,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

Department of Natural Resources and Mines
2 Smith Street Redbank Qld 4301 | PO Box 467 Goodna Qld 4300 Australia T +61 7 3810 6364 | F +61 7 3810 6388
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Ideas into
action



Unleash
potential



Be
courageous



Empower
people



Department of Natural Resources and Mines

RTI DL RELEASE - DNRM

Release

LANG Jennifer (Admin Review)

From: BRENNAN Tabitha
Sent: Wednesday, 30 April 2014 8:14 PM
To: MANTHEY Greg
Subject: Re: Moorvale Coal - Collection of Gas Cylinders

Sure can. Will look after it for you :)

Sent from my iPhone

On 30 Apr 2014, at 5:15 pm, "MANTHEY Greg" <Greg.Manthey@simtars.com.au> wrote:

Dear Mackay,

There is an Air Conditioning Contractor providing me with a couple of gas cylinders for an investigation job. They are based in Mackay and I need someone to collect the cylinders from them and then freight them to me at Redbank.

The contractors are NB Industries – Steve on [redacted] Can you please assist me.

Thanks,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

Department of Natural Resources and Mines
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<image001.jpg>

LANG Jennifer (Admin Review)

From: TURNER David (DNRM)
Sent: Friday, 11 April 2014 8:25 AM
To: MANTHEY Greg
Cc: WINTER Matthew; FORRESTER Lauren; MULLER Sean; LYNCH Patrick
Subject: RE: Moorvale Coal - Refrigerant Testing

Greg

Should be able to assist with looking at the pressure switch. Any testing we can do will depend on the condition of the switch and whether it is still functioning. We can try to see whether we can recover the identification markings. Do they have an understanding of what it should be from the manufacturer?

Regards
David Turner
Director - Engineering, Testing and Certification Centre | Simtars

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Department of Natural Resources and Mines

From: MANTHEY Greg
Sent: Thursday, 10 April 2014 9:06 AM
To: TURNER David (DNRM)
Cc: WINTER Matthew; FORRESTER Lauren; MULLER Sean; LYNCH Patrick
Subject: FW: Moorvale Coal - Refrigerant Testing

David,

See e-mails below and the attached letter from Peabody. This is one that you have not previously been involved in as it was expected to be just a Gas Group and OHECC Lab analysis. However the client has unexpectedly asked for additional testing that we do not do over this side of the compound. I thought I would get your input before talking to the client.

Background is in the attached e-mail.

Over and above the testing we do, client has asked for:

- Testing a pressure switch and identifying faults and failures,
- Recovering identification markings on a damaged label.

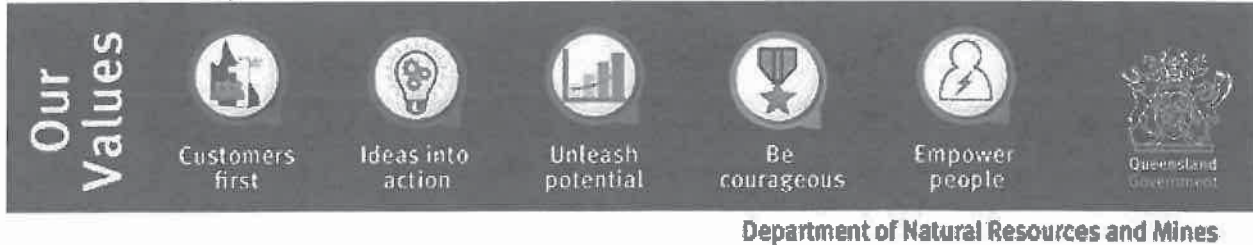
Can your guys do this?

Pat / Lauren / Sean – For info on the testing that client has specifically detailed.

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

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From: Lamont, Brett W [<mailto:BLamont@peabodyenergy.com>]
Sent: Wednesday, 9 April 2014 10:58 AM
To: MANTHEY Greg
Subject: RE: Moorvale Coal - Refrigerant Testing

Good Morning Greg,

Please find attached our letter of instructions around the testing of the samples obtained yesterday as part of our drill investigation. Could you please assist by providing an outline of when we could expect to see the testing results?

Please do not hesitate to contact me if you have any questions.

Thanking you in advance,

Brett W Lamont.

From: MANTHEY Greg [<mailto:Greg.Manthey@simtars.com.au>]
Sent: Monday, 7 April 2014 8:40 AM
To: Lamont, Brett W
Cc: BRENNAN Tabitha; LYNCH Patrick; FORRESTER Lauren; TAYLER Craig; WINTER Matthew
Subject: Moorvale Coal - Refrigerant Testing

Brett,

Good morning. Below is a summary of the project and discussions here regarding the sampling / testing process.

- A field technician from Simtars Mackay is planned to arrive at Moorvale prior to 10:00 a.m. today to liaise with Atlas Copco during the removal of sections of a drill rig air conditioning plant which may have contributed to an incident in the rig. The incident is believed to have involved the ignition of flammable gas within the cabin of the rig. There is the possibility that the gas may have originated from the refrigerant section of the air conditioning plant. The incident occurred on or around 28th March.
- Sections of the air conditioning plant will be freighted to Simtars Redbank where we will evaluate the potential for sampling and analysis of residual refrigerant, either as a gas or as a dissolved fraction in condenser / compressor oils.
- We will seek to sample and analyse for:
 - LPG analytes,
 - Natural gases,
 - Halogens,

- o Mercaptans

As was discussed on Friday last week, at this point it is not clear what testing will be possible and so the project is proceeding on an hourly-rate basis plus incurred costs. Peabody Moorvale hold an account with Simtars so all I would ask is your confirmation of the ex-GST rates below. If you would like to reference a particular purchase order number, please advise.

Principal Hygienist / Principal Scientist – project management / sample evaluation	\$209 / hr
Senior Chemist / Senior Hygienist – sample analysis evaluation and oversight	\$180 / hr
Hygiene Technician – collection of sample, travel, freighting activities	\$167 / hr
Incurred costs – vehicle costs, freight charges etc	

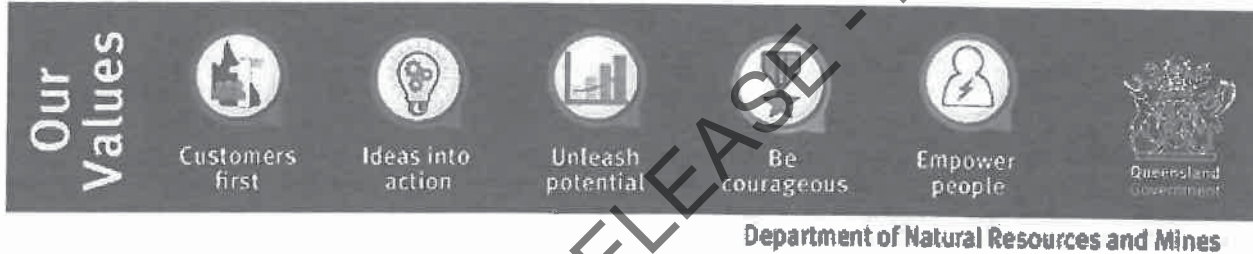
Once the unit is received at Simtars, we will provide a formal quote for any sampling and analysis that is proposed.

Regards,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

Department of Natural Resources and Mines
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LANG Jennifer (Admin Review)

From: Lamont, Brett W <BLamont@peabodyenergy.com>
Sent: Tuesday, 8 April 2014 11:28 AM
To: MANTHEY Greg
Subject: RE: Moorvale Coal - Refrigerant Testing

Thanks Greg,

We are happy with the process that you are undertaking and thank you and the team for putting together a solution so quickly for us.

Regards,

Brett.

From: MANTHEY Greg [mailto:Greg.Manthey@simtars.com.au]
Sent: Monday, 7 April 2014 8:40 AM
To: Lamont, Brett W
Cc: BRENNAN Tabitha; LYNCH Patrick; FORRESTER Lauren; TAYLER Craig; WINTER Matthew
Subject: Moorvale Coal - Refrigerant Testing

Brett,

Good morning. Below is a summary of the project and discussions here regarding the sampling / testing process.

- A field technician from Simtars Mackay is planned to arrive at Moorvale prior to 10:00 a.m. today to liaise with Atlas Copco during the removal of sections of a drill rig air conditioning plant which may have contributed to an incident in the rig. The incident is believed to have involved the ignition of flammable gas within the cabin of the rig. There is the possibility that the gas may have originated from the refrigerant section of the air conditioning plant. The incident occurred on or around 28th March.
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Hygiene Technician – collection of sample, travel, freighting activities	\$167 / hr
Incurred costs – vehicle costs, freight charges etc	

Once the unit is received at Simtars, we will provide a formal quote for any sampling and analysis that is proposed.

Regards,

Greg Manthey

Release

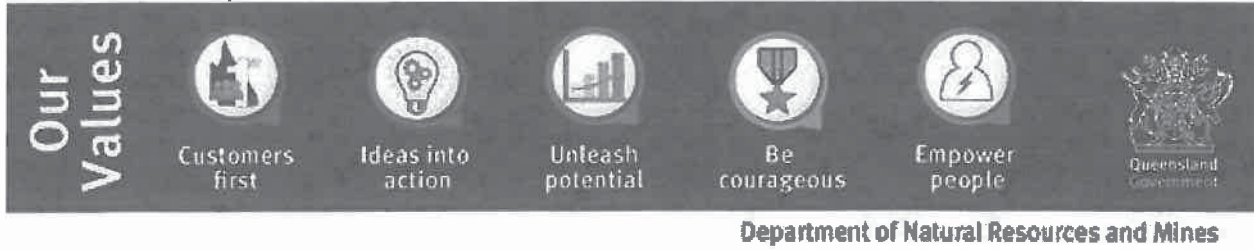
Principal Occupational Health & Hygiene Specialist | Simtars

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LANG Jennifer (Admin Review)

From: WINTER Matthew
Sent: Monday, 7 April 2014 8:42 AM
To: MANTHEY Greg
Subject: RE: Moorvale Coal - Refrigerant Testing

Whanau is almost at the site

Matt Winter
Director - Occupational Hygiene Environment and Chemistry Centre | Simtars
A/Director - Mine Safety Technology | Simtars

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From: MANTHEY Greg
Sent: Monday, 7 April 2014 8:39 AM
To: blamont@peabodyenergy.com
Cc: BRENNAN Tabitha; LYNCH Patrick; FORRESTER Lauren; TAYLER Craig; WINTER Matthew
Subject: Moorvale Coal - Refrigerant Testing

Brett,

Good morning. Below is a summary of the project and discussions here regarding the sampling / testing process.

- A field technician from Simtars Mackay is planned to arrive at Moorvale prior to 10:00 a.m. today to liaise with Atlas Copco during the removal of sections of a drill rig air conditioning plant which may have contributed to an incident in the rig. The incident is believed to have involved the ignition of flammable gas within the cabin of the rig. There is the possibility that the gas may have originated from the refrigerant section of the air conditioning plant. The incident occurred on or around 28th March.
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Regards,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

Department of Natural Resources and Mines
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RTI DL RELEASE - DNRM

LANG Jennifer (Admin Review)

From: MANTHEY Greg
Sent: Monday, 14 April 2014 9:52 AM
To: 'Lamont, Brett W'
Cc: WINTER Matthew
Subject: RE: Moorvale Coal - Refrigerant Testing

Brett,

Items arrived here Friday and I am arranging a meeting of the different analytical sections later today to evaluate the sampling strategy.

Your Letter of Instruction included some unexpected analysis requests, namely the switch and label aspects which we had not previously discussed. I am looking into these with our Electrical Testing branch and will advise our capacity to undertake this part as soon as they have had opportunity to look at the equipment.

With regard to the fan, this can be forwarded in a similar manner to the compressor and receiver / dryer. Ensure that the target surfaces that may be contaminated such as the fan blades are handled as little as possible.

Can you please provide a contact number for the air conditioning technicians / contractor that you used for the removal of the components. I will get in touch with them to assist us to access the internals of the parts you have sent.

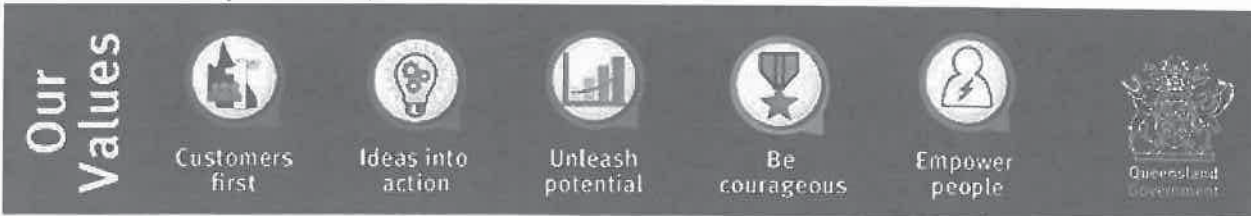
I will also get in touch with the inspectorate and advise them of timing here in order to alleviate pressure on you from that source.

Regards,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

Department of Natural Resources and Mines
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Department of Natural Resources and Mines

From: Lamont, Brett W [mailto:BLamont@peabodyenergy.com]
Sent: Monday, 14 April 2014 7:41 AM
To: MANTHEY Greg
Subject: FW: Moorvale Coal - Refrigerant Testing

Good Morning Greg,

As per my email and Letter of Instructions of Wednesday 9 April, could you please advise as to the date we could expect some dates for results. This is to allow us to indicate to the Inspectorate how long we need to complete the

investigation, not hold SIMTARS to a date. I would also rather err on the side of caution as I would rather not have to re-apply for an extension to the investigation.

In addition to the samples already provided, we are also considering sending a fan that was down-line from the identified failure point. This fan may have some oil residue on the blades and in involved in pushing the air into the drill rig cabin. Could you please advise as to the best methodology for us to send the fan to SIMTARS.

Thanking you in advance,

Brett Lamont.

From: Lamont, Brett W
Sent: Wednesday, 9 April 2014 10:58 AM
To: 'MANTHEY Greg'
Subject: RE: Moorvale Coal - Refrigerant Testing

Good Morning Greg,

Please find attached our letter of instructions around the testing of the samples obtained yesterday as part of our drill investigation. Could you please assist by providing an outline of when we could expect to see the testing results?

Please do not hesitate to contact me if you have any questions.

Thanking you in advance,

Brett W Lamont.

From: MANTHEY Greg [<mailto:Greg.Manthey@simtars.com.au>]
Sent: Monday, 7 April 2014 8:40 AM
To: Lamont, Brett W
Cc: BRENNAN Tabitha; LYNCH Patrick; FORRESTER Lauren; TAYLER Craig; WINTER Matthew
Subject: Moorvale Coal - Refrigerant Testing

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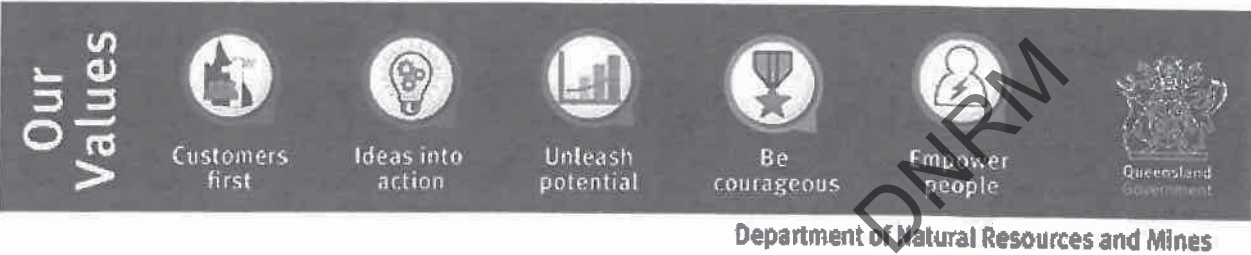
Once the unit is received at Simtars, we will provide a formal quote for any sampling and analysis that is proposed.

Regards,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

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LANG Jennifer (Admin Review)

From: TAYLER Craig
Sent: Friday, 4 April 2014 10:29 AM
To: MANTHEY Greg; WHITE Whanau
Cc: BRENNAN Tabitha; WINTER Matthew; LYNCH Patrick; VANZANTEN Deborah; FORRESTER Lauren; VANZANTEN Pieter; HOLLYER Jeremy
Subject: RE: Morevale Coal - Air Conditioning Plant Investigation

Whanau

Take a camera as well and hopefully they will grant permission to take photos / video of removal process.

May come in handy later

Craig Tayler
Senior Occupational Hygienist| Simtars

Department of Natural Resources and Mines
2 Smith Street Redbank Qld 4301 | PO Box 467 Goodna Qld 4300 Australia
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From: MANTHEY Greg
Sent: Friday, 4 April 2014 9:45 AM
To: WHITE Whanau
Cc: BRENNAN Tabitha; TAYLER Craig; WINTER Matthew; LYNCH Patrick; VANZANTEN Deborah; FORRESTER Lauren; VANZANTEN Pieter; HOLLYER Jeremy
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

s.73

Contact at site is Brett Lamont.
Phone [REDACTED]
blamont@peabodyenergy.com

Visitor induction. Standard PPE. Should be no drama taking photos but he will get confirmation from SSE for camera use. I said we would let him see all photos we take. He doesn't think it will go into Tuesday so should be out and back Monday.

Issues:

1. He would ideally like Whanau to take custody of the parts / bits / debris on Monday and take away with him. This will depend on what it is, how big etc. You will have to assess at the time. If it is something that we can readily pack in Mackay and freight, all good. However if it is not then we should get assistance from them as required.
2. Whanau can get directions to site from Brett (he thinks he has met you previously doing dust or noise survey)

3. 10:00 am Monday on site.

4. We are to charge at hourly rates at this point and get a formal sample / analysis quote to him once we assess at Redbank. Can someone send Brett a quote with hourly rates listed?

5. Take some sealable glass sample bottles and consider taking some oil samples out there if possible. Check with Pat as to how much sample is needed. Also take
- a few pair of lab gloves for sample handling,
- aspirator bulb and tube and some Tedlar and aluminium gas bags just in case there is a sudden need to grab a sample.

Whanau - we will talk Monday

Call me in need before then.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: [redacted] sch4p3(3) Prejudice

Sent from my iPhone

On 04/04/2014, at 8:24 AM, "WHITE Whanau" <Whanau.White@simtars.com.au> wrote:

s.73

Whanau White
Occupational Health & Safety Officer - Mackay | Simtars

Department of Employment Natural Resources and Mines

169 Sydney Street Mackay Qld 4740 | PO Box 453 Mackay Qld 4740 Australia
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www.simtars.com.au

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<image001.jpg>

From: MANTHEY Greg
Sent: Thursday, 3 April 2014 5:13 PM
To: TAYLER Craig
Cc: BRENNAN Tabitha; WHITE Whanau
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

I don't see why not.

Greg Manthey
Principal Occupational Hygienist
Simtars

Phone: (07)38106364
Mobile: [sch4p3(3) Prejudic]

Sent from my iPhone

On 03/04/2014, at 5:10 PM, "TAYLER Craig" <Craig.Taylor@simtars.com.au> wrote:

Can Whanau take photos / video of removal

Sent from my iPhone

On 3 Apr 2014, at 5:08 pm, "MANTHEY Greg"
<Greg.Manthey@simtars.com.au> wrote:

Thanks Pat. That will give us something to work on. Sampling will take place at Redbank so we will have opportunity to consider best option beforehand.

Tab - can you and Whanau please contact me so we can discuss what Whanau will need to do on site. I will explain to Morevale that while Whanau is not from the analysing lab, he is one of our experienced field technicians and very capable of overseeing the process

Craig / Deb - any chance you could shanghai someone to do a quote for this? Hourly rate basis plus costs I think is the only way we can quote this. Brett Lamont said that they would find accommodation for the Monday night. Will need to see if these guys fall under our existing account with Peabody.

Matt - if all our ducks are lined up, I will call Brett Lamont tomorrow morning and arrange.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: [REDACTED]

Sent from my iPhone

On 03/04/2014, at 4:18 PM, "LYNCH Patrick"
<Patrick.Lynch@simtars.com.au> wrote:

Greg

As you probably realise the lab has no method for sampling or analysing refrigerant gas however if there is any gas available for you to sample:

One option may be to sample any gas/vapour onto a charcoal tube; we can desorb and run thru the GCMS and look for refrigerants.

Possibly we could try and fill a syringe and inject the contents into the GCMS and see what shows up but feel this is unlikely to be of use due to concentration/instrument sensitivity issues.

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I realise this is not much of a response but is all we can do with what we have on short notice.

Patrick Lynch
Principal Scientist | Simtars

Department of Natural Resources and Mines
2 Smith Street Redbank Qld 4301 | PO Box 467 Go
odna Qld 4300 Australia
T +61 7 3810 6351 | F +61 7 3810 6388 | patrick.lynych@simtars.com.au | www.simtars.com.au

smart health safety and environmental solutions
<image001.jpg>

From: MANTHEY Greg
Sent: Thursday, 3 April 2014 2:47 PM
To: LYNCH Patrick; FORRESTER Lauren; WINTER Matthew; TAYLER Craig; BRENNAN Tabitha; VANZANTEN Deborah; Darren Brady
Subject: Fwd: Morevale Coal - Air Conditioning Plant Investigation

Sorry, I think that anywhere I said "compressor oil" should have said "condenser oil"

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: sch4p3(3) Prejudice

Sent from my iPhone

Begin forwarded message:

From:
<Greg.Mantry@simtars.com.au>
>
Date: 3 April 2014 2:26:53 PM
AEST

To: LYNCH Patrick
<Patrick.Lynch@simtars.com.au>, FORRESTER Lauren
<Lauren.Forrester@simtars.com.au>, Darren Brady
<darren@minesafetyinstitute.com.au>

Cc: WINTER Matthew
<Matt.Winter@simtars.com.au>, TAYLER Craig
<Craig.Tayler@simtars.com.au>, Tabitha Brennan
<Tabitha.Brennan@simtars.com.au>, Deborah Van Zanten
<Deborah.VanZanten@simtars.com.au>

Subject: Morevale Coal - Air Conditioning Plant Investigation

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Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: [redacted] sch4p3(3) Prejudic

Sent from my iPhone

RTI DL RELEASE - DNRM

LANG Jennifer (Admin Review)

From: BRENNAN Tabitha
Sent: Friday, 4 April 2014 9:51 AM
To: MANTHEY Greg
Cc: WHITE Whanau
Subject: RE: Morevale Coal - Air Conditioning Plant Investigation

Hey Greg,

I am a little uncomfortable with them handing the parts for us to pack and freight, I believe that they should be responsible for packing up correctly ready for freight. We can have the part travel with us and be freighted from here, but that is a lot of double handling. Why can't the part be freighted directly from site to RB?

We do not have:

- aspirator bulb and tube and some Tedlar and aluminium gas bags just in case there is a sudden need to grab a sample.

We have ready:

Sampling vials, identification labels and camera.

I will get Whanau to give Brett a call now just to touch base.

Whanau – Can you ask about accommodation in case you have to overnight on the Monday? Will they organise or will we? If we organise, where is the closest accommodation?

Greg- [redacted] and thank-you for all you've done!

Tabitha Brennan
Health Safety & Environmental Scientist | Simtars

Department of Natural Resources and Mines
169 Sydney Street Mackay Qld 4740 | PO Box 453 Mackay Qld 4740 Australia
T +61 7 4999 5300 | F +61 7 4999 5301 | tabitha.brennan@simtars.com.au | www.simtars.com.au

smart health safety and environmental solutions

From: MANTHEY Greg
Sent: Friday, 4 April 2014 9:45 AM
To: WHITE Whanau
Cc: BRENNAN Tabitha; TAYLER Craig; WINTER Matthew; LYNCH Patrick; VANZANTEN Deborah; FORRESTER Lauren; VANZANTEN Pieter; HOLLYER Jeremy
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

s.73 [redacted]

Contact at site is Brett Lamont.

Phone [redacted]
blamont@peabodyenergy.com

Visitor induction. Standard PPE. Should be no drama taking photos but he will get confirmation from SSE for camera use. I said we would let him see all photos we take. He doesn't think it will go into Tuesday so should be out and back Monday.

Issues:

1. He would ideally like Whanau to take custody of the parts / bits / debris on Monday and take away with him. This will depend on what it is, how big etc. You will have to assess at the time. If it is something that we can readily pack in Mackay and freight, all good. However if it is not then we should get assistance from them as required.

2. Whanau can get directions to site from Brett (he thinks he has met you previously doing dust or noise survey)

3. 10:00 am Monday on site.

4. We are to charge at hourly rates at this point and get a formal sample / analysis quote to him once we assess at Redbank. Can someone send Brett a quote with hourly rates listed?

5. Take some sealable glass sample bottles and consider taking some oil samples out there if possible. Check with Pat as to how much sample is needed. Also take
- a few pair of lab gloves for sample handling,
- aspirator bulb and tube and some Tedlar and aluminium gas bags just in case there is a sudden need to grab a sample.

Whanau - we will talk Monday

Call me in need before then.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: [redacted] (3) Prejudice t

Sent from my iPhone

On 04/04/2014, at 8:24 AM, "WHITE Whanau" <Whanau.White@simtars.com.au> wrote:

s.73

Whanau White
Occupational Health & Safety Officer - Mackay | Simtars

Department of Employment Natural Resources and Mines

169 Sydney Street Mackay Qld 4740 | PO Box 453 Mackay Qld 4740 Australia
T +61 7 4999 5300 | F +61 7 4999 5301 | M +61 [redacted] whanau.white@simtars.com.au |
www.simtars.com.au

smart health safety and environmental solutions

<image001.jpg>

From: MANTHEY Greg
Sent: Thursday, 3 April 2014 5:13 PM
To: TAYLER Craig

Cc: BRENNAN Tabitha; WHITE Whanau
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

I don't see why not.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: [sch4p3(3) Prejudic]

Sent from my iPhone

On 03/04/2014, at 5:10 PM, "TAYLER Craig" <Craig.Tayler@simtars.com.au> wrote:

Can Whanau take photos / video of removal

Sent from my iPhone

On 3 Apr 2014, at 5:08 pm, "MANTHEY Greg"
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Thanks Pat. That will give us something to work on. Sampling will take place at Redbank so we will have opportunity to consider best option beforehand.

Tab - can you and Whanau please contact me so we can discuss what Whanau will need to do on site. I will explain to Morevale that while Whanau is not from the analysing lab, he is one of our experienced field technicians and very capable of overseeing the process

Craig / Deb - any chance you could shanghai someone to do a quote for this? Hourly rate basis plus costs I think is the only way we can quote this. Brett Lamont said that they would find accommodation for the Monday night. Will need to see if these guys fall under our existing account with Peabody.

Matt - if all our ducks are lined up, I will call Brett Lamont tomorrow morning and arrange.

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Phone: (07)38106364
Mobile: [REDACTED]

Sent from my iPhone

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smart health safety and environmental solutions


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RTI RELEASED DNRM

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Mobile: [redacted] sch4p3(3) Prejudice the

Sent from my iPhone

RTI DL RELEASE - DNRM

LANG Jennifer (Admin Review)

From: MANTHEY Greg
Sent: Friday, 4 April 2014 9:47 AM
To: Darren Brady
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

Call me. Always up for a chat with you.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: sch4p3(3) Prejudic

Sent from my iPhone

On 04/04/2014, at 8:40 AM, "Darren Brady" <darren@minesafetyinstitute.com.au> wrote:

> Greg,
> Are you up to a quick chat on this one?
>
>
> Regards
>
> Darren
>
> Darren Brady | Consultant

> MINE SAFETY INSTITUTE OF AUSTRALIA PTY LTD
> ABN 3115 135 4442
> Email darren@minesafetyinstitute.com.au
> Address 2602, 21 Mary Street, Brisbane Q 4000
> Post PO Box 15533, Brisbane Q 4002
> Phone +61(0)7 3211 2126 or + 61(0) [REDACTED]
> Web www.minesafetyinstitute.com.au

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> -----Original Message-----

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> Sent: Thursday, 3 April 2014 2:27 PM
> To: LYNCH Patrick; FORRESTER Lauren; Darren Brady
> Cc: WINTER Matthew; TAYLER Craig; BRENNAN Tabitha; VANZANTEN Deborah
> Subject: Morevale Coal - Air Conditioning Plant Investigation

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> Greg Manthey
> Principal Occupational Hygienist
> Simtars
> Phone: (07)38106364
> Mobile: [redacted]sch4p3(3) Prejudice

>

> Sent from my iPhone

>

> -----

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> If you have received this message in error, you are asked to inform the sender as quickly as possible and delete this message and any copies of this message from your computer and/or your computer system network.

> -----

>

RTI/DI RELEASE - DNRPM

From: MANTHEY Greg
To: BRENNAN Tabitha
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation
Date: Friday, 4 April 2014 7:45:15 AM

Thanks Tab

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile:

Sent from my iPhone

On 04/04/2014, at 5:57 AM, "BRENNAN Tabitha" <Tabitha.Brennan@simtars.com.au> wrote:

We do have a camera, but some sites won't allow anyone just to bring a camera unless it's approved for use by the SSE. Some sites will have an approval register/ process for both phones and cameras. We'll find out today what the deal is.

Sent from my iPhone

On 3 Apr 2014, at 9:07 pm, "WINTER Matthew" <Matt.Winter@simtars.com.au> wrote:

Ask Leanne,
He got one anyway.

Regards,
Matt Winter
Director - Occupational Hygiene Environment and Chemistry Centre | Simtars

Department of Natural Resources and Mines
M+61 matt.winter@simtars.com.au | www.simtars.com.au

smart health safety and environmental solutions

Sent from my iPhone

On 3 Apr 2014, at 8:58 pm, "MANTHEY Greg" <Greg.Manthey@simtars.com.au> wrote:

Don't we have our own camera in Mackay ???

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile:

Sent from my iPhone

On 03/04/2014, at 7:28 PM, "BRENNAN Tabitha" <Tabitha.Brennan@simtars.com.au> wrote:

I will get Whanau to seek approval, if if they supply the camera and email the photos.

Sent from my iPhone

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Patrick Lynch
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Department of Natural Resources and
Mines
2 Smith Street Redbank Qld 4301 | PO Box 467 Goodna Qld 4300 Australia

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Rel

smart health safety and environmental
solutions
<image001.jpg>

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Morevale Coal - Air
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Hygienist
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Phone:
(07)38106364
Mobile:

sd

Sent from my
iPhone

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>
Date: 3
April
2014
2:26:53
PM
AEST
To:
LYNCH
Patrick
<Patrick.Lynch@simtars.com.au
>,
FORRESTER
Lauren
<Lauren.Forrester@simtars.com.au
>,
Darren
Brady
<darren@minesafetyinstitute.com.au
>
Cc:
WINTER
Matthew
<Matt.Winter@simtars.com.au
>,
TAYLER
Craig
<Craig.Tayler@simtars.com.au
>.

Tabitha
Brennan
<Tabitha.Brennan@simtars.com.au
>,
Deborah
Van
Zanten
<Deborah.VanZanten@simtars.com.au
>

Subject:
Morevale
Coal -
Air
Conditioning
Plant
Investigation

All,

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suspect
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Refrigerant
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non-
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Senior
Gas
Inspector
Graham
Rasmussen
has
indicated
to
Morevale
that
they
should

RTI DL RELEASE - DNRM

Re

get
Simtars
to
analyse
the air
conditioning
unit to
identify
what
was in
the
refrigerant.
Relevant
issues
are:
- the
refrigerant
may
have
contained
propane,
iso-
butane
or
similar
- the
company
that last
re-
gassed
the unit
seems
to have
lost
their
records
on what
gas was
used (
surprise!)
- the air
con
unit
appears
to have
been
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during
the
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and the
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RTI DL RELEASE - DNRM

Re

residual
may be
dissolved
in the
air con
compressor
oil,
- I don't
know
much
about
these
systems
but it
would
seem to
me that
the
refrigerant
is not
likely
to have
contaminated
the
compressor
oil
reservoir
but
more
likely
there
could
be
residual
compressor
oil in
the
refrigerant
circuit.
That
could
be the
contaminated
oil they
are
talking
about,
- Atlas
Copco
(the
original
supplier
of the
unit)
and a
fire
investigator
are
going
to be
on site
Monday
and
Tuesday
next
week to
inspect
the
damaged
unit
and as

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Re

part of
this
exercise,
Peabody
are
asking
Copco
to
remove
the
unit,
bag it
and
send to
us for
examination.

-
Peabody
want to
ensure
a very
tight
Chain
of
Custody
and so
they
want
someone
from
Simtars
there to
observe
the
removal,
packing
and
freighting
process,
- we
will be
able to
get
guidance
from
Atlas
Copco
on
where
in the
unit the
residual
refrigerant
may be
hiding.

Our
task
will be
extraction
and
analysis,
but it
may be
present
as a gas
or an
oil-
based
contaminant
- the
gas

RTI DL RELEASE - DNRM

Ret

inspectors
who
attended
site
specifically
recommended
that
Peabody
use
Simtars,
so we
should
not
lightly
turn
this job
down.

- Brett
Lamont
would
like
someone
from
Simtars
there
for the
whole
of
Monday
and
Tuesday
even
though
the
packing
is
probably
only
taking
place
Tuesday.

- both
[redacted]
and
[redacted]

are
away
until
next
week
so I
can't
really
discuss
this
with
them,
given
that [redacted]

[redacted] not
there
either.

Pat -
the
critical
factor
in this
is the
analysis.
I am

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confident
we can
sample
appropriately
provided
we
know
how the
analysis
is to be
done.

Can
you
please
consider
the best
sampling
approach
and
advise.

Darren

- any
thoughts
on the
gas
capture
and
analysis
aspect
in the
absence
of

[redacted]

and

[redacted]?

Gas
bag and
analysis
for
natural
gases
seems
obvious,
but I
would
need to
check
the
MSDS
of the
suspected
refrigerant.

Matt /

Craig /

Deh - I

may
need a
hand
organising
his one.

Chances
are [redacted]

[redacted]
not be
there
tomorrow
either.

RTI DL RELEASE - DNRM

Greg
Manthey
Principal
Occupational
Hygienist
Sintars
Phone:
(07)38106364
Mobile:

6

Sent
from
my
iPhone

RTI DL RELEASE - DNRM

LANG Jennifer (Admin Review)

From: MANTHEY Greg
Sent: Thursday, 3 April 2014 5:24 PM
To: LYNCH Patrick
Cc: TAYLER Craig; MEAD Bryan
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

Not sure that Summa is the way to go. Looking for short-chain hydrocarbons (< hexane) and maybe ethyl / methyl mercaptan. Summa analysis won't get these.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: sch4p3(3) Prejudice

Sent from my iPhone

On 03/04/2014, at 5:12 PM, "LYNCH Patrick" <Patrick.Lynch@simtars.com.au> wrote:

Craig probably best to talk to David Pass at QLD Health to determine if summa is an option.. I am not familiar with sampling/analysis with summa.
I can get Bryan to make contact with David and see what he thinks?

Patrick Lynch
Principal Scientist | Simtars

Department of Natural Resources and Mines
2 Smith Street Redbank Qld 4301 | PO Box 467 Goodna Qld 4300 Australia
T +61 7 3810 6351 | F +61 7 3810 6388 | patrick.lynch@simtars.com.au | www.simtars.com.au

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<image001.jpg>

From: TAYLER Craig
Sent: Thursday, 3 April 2014 5:07 PM
To: LYNCH Patrick
Cc: MANTHEY Greg; WINTER Matthew; FORRESTER Lauren; BRENNAN Tabitha; Darren Brady; VANZANTEN Deborah; VANZANTEN Pieter; MEAD Bryan
Subject: Re: Morevale Coal - Air Conditioning Plant Investigation

Thanks Pat
Retention of sample on charcoal tube may present a problem if there is limited sample left.

Any thoughts on using a summa canister to provide indicative voc?

May have a better idea when the unit arrives so we can see what we are dealing with.

Sent from my iPhone

On 3 Apr 2014, at 4:18 pm, "LYNCH Patrick" <Patrick.Lynch@simtars.com.au> wrote:

Greg

As you probably realise the lab has no method for sampling or analysing refrigerant gas however if there is any gas available for you to sample:

One option may be to sample any gas/vapour onto a charcoal tube; we can desorb and run thru the GCMS and look for refrigerants.

Possibly we could try and fill a syringe and inject the contents into the GCMS and see what shows up but feel this is unlikely to be of use due to concentration/instrument sensitivity issues.

If there is oil then we could dissolve some in a suitable solvent and inject into the GCMS and again see what shows up? If we have access to some of the same unused condenser oil we could use it as a reference and compare to the used oil. I am aware the used and unused oil may well give different profiles even if the refrigerant is absent but maybe worth a try.

I realise this is not much of a response but is all we can do with what we have on short notice.

Patrick Lynch
Principal Scientist | Simtars

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T +61 7 3810 6351 | F +61 7 3810 6388 | patrick.lynch@simtars.com.au | www.simtars.com.au

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From: MANTHEY Greg
Sent: Thursday, 3 April 2014 2:47 PM
To: LYNCH Patrick; FORRESTER Lauren; WINTER Matthew; TAYLER Craig; BRENNAN Tabitha; VANZANTEN Deborah; Darren Brady
Subject: Fwd: Morevale Coal - Air Conditioning Plant Investigation

Sorry, I think that anywhere I said "compressor oil" should have said "condenser oil"

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: sch4p3(3) Prejudice th

Sent from my iPhone

Begin forwarded message:

From: <Greg.Manthey@simtars.com.au>
Date: 3 April 2014 2:26:53 PM AEST
To: LYNCH Patrick <Patrick.Lynch@simtars.com.au> ,

FORRESTER Lauren <Lauren.Forrester@simtars.com.au>, Darren Brady <darren@minesafetyinstitute.com.au>
Cc: WINTER Matthew <Matt.Winter@simtars.com.au>, TAYLER Craig <Craig.Tayler@simtars.com.au>, Tabitha Brennan <Tabitha.Brennan@simtars.com.au>, Deborah Van Zanten <Deborah.VanZanten@simtars.com.au>
Subject: Morevale Coal - Air Conditioning Plant Investigation

All,

I have just spoken to Brett Lamont from Peabody who is the lead investigator at Morevale in this matter. Seems there was a fire in a blasting drill rig and they suspect that a contributing factor was a flammable refrigerant gas in the rig's air con system. Refrigerant gases are supposed to be non-flammable. Senior Gas Inspector Graham Rasmussen has indicated to Morevale that they should get Simtars to analyse the air conditioning unit to identify what was in the refrigerant. Relevant issues are:

- the refrigerant may have contained propane, iso-butane or similar
- the company that last re-gassed the unit seems to have lost their records on what gas was used (surprise!)
- the air con unit appears to have been damaged during the incident and the bulk of the refrigerant has vented to atmosphere,
- there may be some residual refrigerant (as a gas) in the dryer unit or other piping or the residual may be dissolved in the air con compressor oil,
- I don't know much about these systems but it would seem to me that the refrigerant is not likely to have contaminated the compressor oil reservoir but more likely there could be residual compressor oil in the refrigerant circuit. That could be the contaminated oil they are talking about,
- Atlas Copco (the original supplier of the unit) and a fire investigator are going to be on site Monday and Tuesday next week to inspect the damaged unit and as part of this exercise, Peabody are asking Copco to remove the unit, bag it and send to us for examination.
- Peabody want to ensure a very tight Chain of Custody and so they want someone from Simtars there to observe the removal, packing and freighting process,
- we will be able to get guidance from Atlas Copco on where in the unit the residual refrigerant may be hiding. Our task will be extraction and analysis, but it may be present as a gas or an oil-based contaminant
- the gas inspectors who attended site specifically recommended that Peabody use Simtars, so we should not lightly turn this job down.
- Brett Lamont would like someone from Simtars there for the whole of Monday and Tuesday even though the packing is probably only taking place Tuesday.
- both [sch4p3] and [] are away until next week so I can't really discuss this with them, given that [] not there either.

Pat - the critical factor in this is the analysis. I am confident we can sample appropriately provided we know how the analysis is to be done. Can you please consider the best sampling approach and advise.

Darren - any thoughts on the gas capture and analysis aspect in the absence of [redacted] and [redacted]? Gas bag and analysis for natural gases seems obvious, but I would need to check the MSDS of the suspected refrigerant.

Matt / Craig / Deb - I may need a hand organising his one. Chances are [redacted] not be there tomorrow either.

Greg Manthey
Principal Occupational Hygienist
Simtars
Phone: (07)38106364
Mobile: [redacted] sch4p3(3) Prejudice

Sent from my iPhone

RTI DL RELEASE - DNRM

LANG Jennifer (Admin Review)

From: Lamont, Brett W <BLamont@peabodyenergy.com>
Sent: Wednesday, 3 September 2014 10:52 PM
To: MANTHEY Greg
Subject: RE: Prelim Report

Thank you Greg,

I do not know why we did not receive the original email. I do note however that the email did not indicate that you required any comment or feedback from myself or Peabody. In fact, there is no indication as to why this report is preliminary.

Can you please issue the final report as a matter of urgency, certainly no later than midday tomorrow (Thursday 4 September). I see no facts in sections 1 or 2, which are the only sections I believe I have a capacity to comment on. Also, can you please ensure that the report issue date is amended to read tomorrows date as this will be the date that it will be issued.

Thanking you in advance,

Brett W Lamont
Mine Production Superintendent

Phone: 61 7 4847 1451
Mobile: 61 (0) [sch4p3\(3\)Preju](tel:0sch4p3(3)Preju)

From: MANTHEY Greg [<mailto:Greg.Manthey@simtars.com.au>]
Sent: Wednesday, 3 September 2014 11:38 AM
To: Lamont, Brett W
Subject: Prelim Report

Brett,

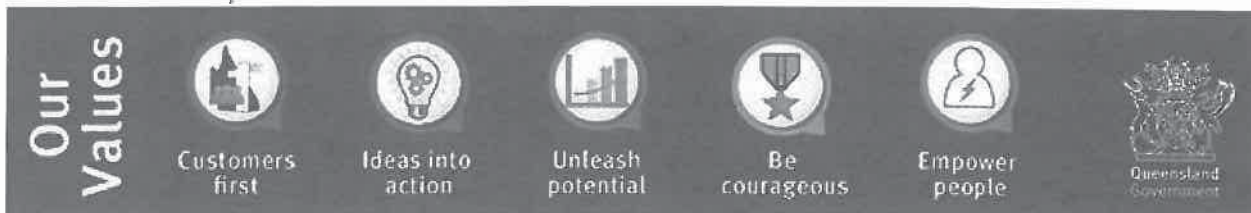
Attached is the original e-mail.

Regards,

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

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| M [sch4p3\(3\)Preju](tel:0sch4p3(3)Preju) | greg.manthey@simtars.com.au | www.simtars.com.au

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Release

LANG Jennifer (Admin Review)

From: Lamont, Brett W <BLamont@peabodyenergy.com>
Sent: Monday, 23 June 2014 3:45 PM
To: MANTHEY Greg
Subject: Teleconference Details

Good Afternoon Greg,

Please find below the teleconference details for this afternoon's discussion –

Dial in
Guest

Regards,

Brett W Lamont
Mine Production Superintendent
Moorvale Mine
Peabody Energy Australia

Peak Downs Highway
Via Nebo QLD 4742

Phone: 61 7 4847 1451
Mobile: 61 (0)

PO Box 193
Nebo QLD 4742

blamont@peabodyenergy.com
www.peabodyenergy.com



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LANG Jennifer (Admin Review)

From: HOLLYER Jeremy
Sent: Thursday, 29 May 2014 9:31 AM
To: MANTHEY Greg
Cc: MULLER Sean
Subject: Sulphur on Moorvale

Hello Greg,

I did the test injections on the two Moorvale samples for the mercaptans this morning as requested. I could not find either Methyl or ethyl mercaptan, though there is a trace of either H₂S or COS below the level of reporting.

Regards,
Jeremy Hollyer
Analytical Chemist | Simtars

Department of Natural Resources and Mines
2 Robert Smith Street Redbank Qld 4301 | PO Box 467 Goodna Qld 4300 Australia
T +61 7 3810 6361 | F +61 7 3810 6388 | jeremy.hollyer@simtars.com.au | www.simtars.com.au



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Release

MANTHEY Greg

Subject: Moorvale teleconference
Location: phone

Start: Mon 23/06/2014 4:00 PM
End: Mon 23/06/2014 4:30 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: MANTHEY Greg
Required Attendees: MULLER Sean
Resources: Simtars MST Gas Group

Brett Lamont to send dial-in details

Teleconference with Brett Lamont and Alan Miskin from Peabody. Lauren Forrester also. Discussed:

- Findings in the two practice cylinders and what this might mean for the results of the actual sample cylinders,
- Emphasised that it does not mean that the actual sample cylinders were definitely pre-contaminated, just that it is not certain that the contamination found in the test cylinders was from the air conditioning system.
- Information from Alan Miskin during this teleconference suggests that, contrary to what Simtars understood, the two practice cylinders may have been subjected to a much less stringent cleaning process than the ones used to collect the samples on site.
- Alan was confident that the sample cylinders were clean and uncontaminated.

Agreed to proceed as follows:

- Moorvale to contact NB Industries and obtain two more practice cylinders,
- Cylinders to be forwarded to Simtars for analysis,
- Report all results at same time.

Release

LANG Jennifer (Admin Review)

From: MANTHEY Greg
Sent: Wednesday, 28 May 2014 11:58 AM
To: 'Lamont, Brett W'
Cc: HOLLYER Jeremy; MULLER Sean
Subject: Testing Results
Attachments: Test Report Pressure Switch.pdf; IMG_3663.JPG; IMG_3664.JPG; IMG_3665.JPG; IMG_3666.JPG; Receiver Drier Result Document.pdf; IMG_3673.JPG; IMG_3674.JPG; IMG_3675.JPG; IMG_3676.JPG

Brett,

Attached are the following with regard to the testing to date by Simtars:

1. Pressure switch test report NE14/0017.
2. 4 x images of the pressure switch – IMG 3663 to IMG 3666 inclusive.
3. Receiver / Dryer Result Document.
4. 4 x images of the receiver / dryer – IMG 3673 to IMG 3676 inclusive.

The preliminary gas testing results are below. The results will be reported formally upon return of the Senior Chemist at the start of next week.

- The Sample Cylinder marked High Side purge contained significant concentrations of iso-Butane and Propane. There was also what appears to be some neo-Pentane, which is being checked. The rest of the sample (around 50% of the total sample) is normal air.
- The Sample Cylinder marked Low Side purge contained mostly air, approximately 95%, but had small amounts of iso-Butane, Propane and also possibly neo-Pentane.
- The two 'Test' cylinders provided by NB Industries contained significant amounts of n-butane and propane in addition to the known gases we spiked them with.
- It is apparent from discussion with Wayne from NB Industries that the two 'Test' cylinders were not entirely clean as believed. The two 'Test' cylinders were found to contain pre-existing LPG contaminants.
- There is the potential that the two Sample Cylinders used at site to collect the residual atmosphere from the refrigerant system may also have been in a similar state.

The gas testing results will be formally reported upon return of the Gas Chemist at the beginning of next week.

With regard to the oil testing, I am currently in contact with a couple of NATA laboratories and identifying analysis methods and costs. I expect to have firm information on this for within the next day or so.

Please call me in need.

Greg Manthey
Principal Occupational Health & Hygiene Specialist | Simtars

Department of Natural Resources and Mines
2 Smith Street Redbank Qld 4301 | PO Box 467 Goodna Qld 4300 Australia T +61 7 3810 6364 | F +61 7 3810 6388
| M [sch4p3\(3\) Prejudice](tel:0800000000) | greg.manthey@simtars.com.au | www.simtars.com.au

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courageous



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people



Queensland
Government

Department of Natural Resources and Mines

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**Simtars
Engineering, Testing and Certification Centre**

2 Smith Street, REDBANK, QLD 4301, Australia
Postal Address: PO Box 467, GOODNA, QLD, 4300 Australia

Phone +61 7 3810 6381
Fax +61 7 3810 6366

Test Report

Operation of AC Overpressure Switch

Report No: NE14/0017

Date(s) Tested: 07 May 2014

Job No.: OG172932

Applicant/Customer Name: Moorvale Mine

Peabody Energy Australia PCI (O&M Management) Pty Ltd
Peak Downs Highway via Nebo
PO Box 193
NEBO QLD 4742

Equipment Details: AC Overpressure Switch

Scope: Test the pressures at which the AC Pressure Switch operates and identify possible faults in the AC Pressure Switch

Compiled By:

sch4p3(3) Prejudice the pro

Date: 21/5/2014

E-KROSS

Approved Signatory:

B. Parmar

Date: 21/5/2014



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The results of the tests, calibrations and/or measurements included in this report are traceable to national standards.

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Simtars Engineering, Testing and Certification Centre

2 Smith Street, REDBANK, QLD 4301, Australia
Postal Address: PO Box 467, GOODNA, QLD, 4300 Australia

Phone +61 7 3810 6381
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1.0 Scope

Simtars was requested by Peabody Energy Australia to test the operation of a Pressure Switch and to identify faults in the Pressure Switch attached to the AC Compressor.

2.0 Description of Apparatus

The Pressure Switch fitted to the compressor displayed no legible markings which identified the brand, part number or operating pressure. The pressure switch is approximately 60 mm long x 22 mm in diameter and utilises two wires for the electrical connection. Refer to the identifying photos on page 3.

3.0 Test Specification

The Pressure Switch was initially tested as supplied by Peabody Energy Australia and as removed from the compressor unit in the Calibration Laboratory, firstly on a Druck DPI605 Pressure Calibrator and then on the high pressure test unit with a calibrated 0 to 2500 kPa test gauge fitted in order to observe and record the pressure applied. A digital multimeter was attached to the two wires and the meter set to continuity test in order to observe the electrical operation of the pressure switch. The pressure was raised gradually and the observations recorded. The Pressure Switch when fitted to the high pressure test unit was cycled through the test pressures three times to confirm the observations.

After completion of the initial tests the Pressure Switch conductors were examined and it was found that both conductors were damaged and broken inside the protective shroud of the switch. Electrical connections were then made directly onto the internal electrical connections and the pressure switch was retested on the high pressure test unit as per the initial test and the observations recorded.

4.0 Observations

Tables 1 and 2 detail the observations on the operation of the Pressure Switch when tested as supplied by the client. Table 3 details the observations on the operation of the Pressure Switch when tested with the meter connections made inside the connector housing directly onto the internal electrical connections.

Table 1: Druck Calibrator

Pressure Applied kPa	Electrical Circuit Closed/Open	Audible Operation
0	Open	No
150.48	Open	No
511.52	Open	No
853.32	Open	No
1010.65	Open	No
1216.9	Open	No
0	Open	No



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Simtars Engineering, Testing and Certification Centre

Test Report No: NE14/0017

Table 2: High Pressure Test Unit

Pressure Applied kPa	Electrical Circuit Closed/Open	Audible Operation
0	Open	No
2200 - ascending	Open	Yes
1400 - descending	Open	Yes

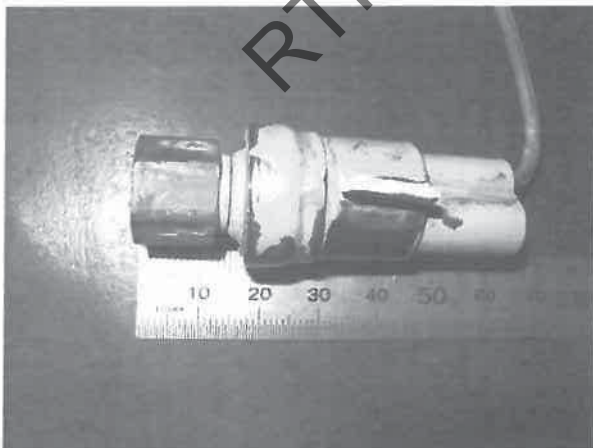
Table 3: High Pressure Test Unit

Pressure Applied kPa	Electrical Circuit Closed/Open	Audible Operation
0	Closed	No
2200 - ascending	Open	Yes
1400 - descending	Closed	Yes

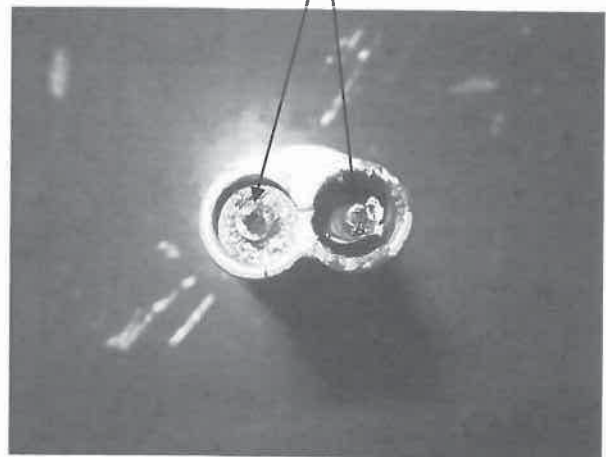
5.0 Summary of Observations

The Pressure Switch as supplied by Peabody Energy Australia operated mechanically and an audible click could be heard when the pressure reached 2200 kPa and again at 1400 kPa when the pressure was gradually reduced. There was no change in the electrical continuity of the Pressure Switch regardless of the pressure applied with the switch remaining open circuited.

After initial testing was completed the Pressure Switch wires were examined for damage and it was found that both the electrical conductors had been damaged by either vibration and or corrosion to the point that no electrical circuit was present. This damage was located in an area inside the terminal housing and accordingly protected by the terminal housing. When electrical connections were made directly to the internal terminals of the Pressure Switch, the Pressure Switch operated at the pressures indicated in Table 3.



Damaged Conductors



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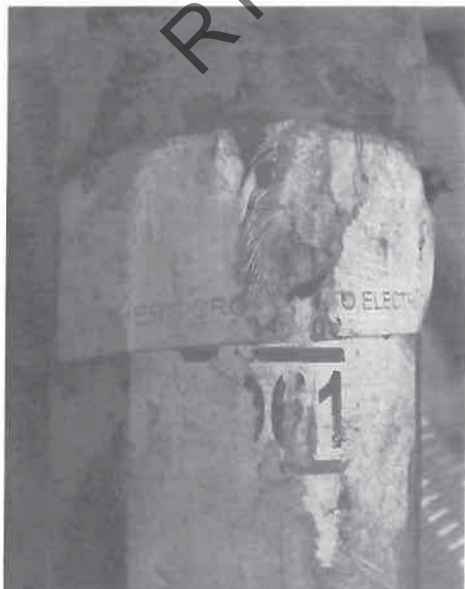
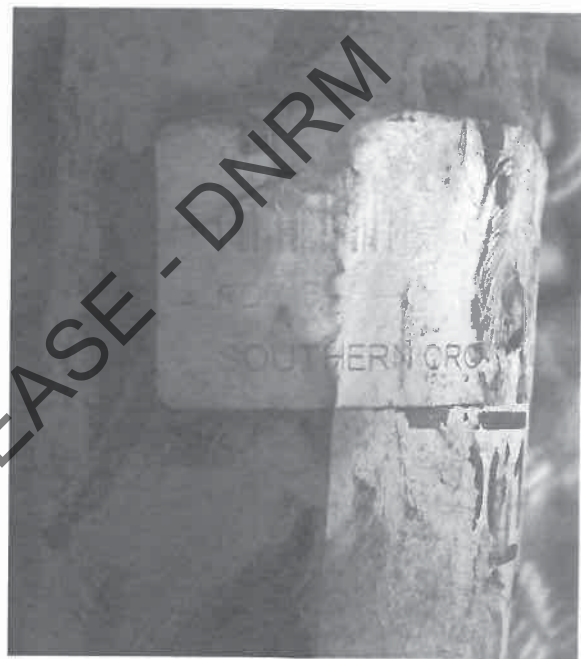
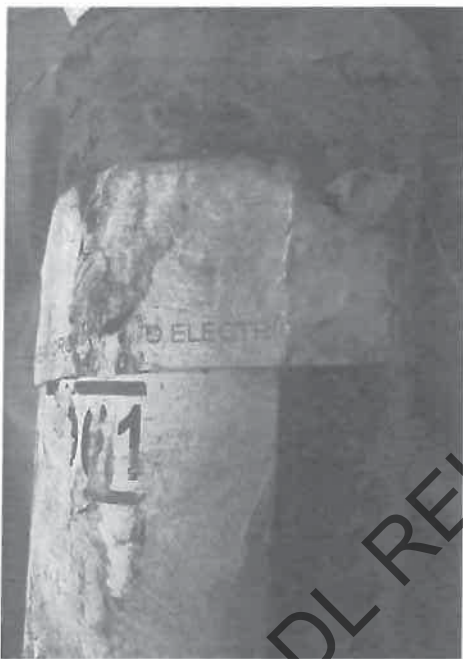
Moorvale Coal

Identification of Receiver Drier

The label on the receiver drier was cleaned with distilled water to expose the printed writing. The label was old and damaged and as such could not be fully deciphered. What was discernible is as below.

- RD6159 (Receiver/drier part number)
- Southern Cro.....to Electric.

The photos below were taken after cleaning.



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RTI DL RELEASE - DNRM

SOUTH
04 01
ELECTRIC

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RTI DL RELEASE - DNRM

SOUTHERN CRO 04 03 ELECT

001



RTIDL RELEASE - DNRM

ELECTRIC
04 03

Notes for Moorvale Mine Re: Drill-Pro 12 Cabin Explosion

Monday 7 April 2014.

09:10 – 09:30 Arrive onsite complete visitor induction.

09:30 approximately 10:45 Meet company representatives. Some idle time due to arrival time of forensic investigator.

10:45 – 12:25 Meeting and Drill Rig inspection held to discuss process to be followed for investigation and extraction of air-con components for Simtars analysis. Present were:

- Alan Miskin – Peabody Senior Health & Safety officer and main point of onsite contact.
- Stuart Richie – Forensic Consultant
- Ben ? – Peabody Lawyer
- Steven ? – NB Industries. Contractor hired to check, extract atmosphere from air-con lines, and oversee extraction of components for Simtars testing.
- Other site maintenance personal

Following a brief initial meeting there was an inspection of the Drill Rig – Drill-pro 12, following a spontaneous combustion within the operator's cabin which occurred under normal operational conditions. Stuart Richie was invited to start his initial investigation of the site scene.

Once Stuart had completed his initial inspection Steven of NB industries and I were invited to inspect the scene.

The inspection was followed a meeting which excluded Simtars due to legal privilege.

12:25 – 13:00 Further discussion on what process would be used to extract atmosphere and components for Simtars analysis.

13:00 17:00 Stuart Richie completes his scene examination. Another “in confidence” meeting is convened. There is an “all up” meeting to finalise the process to be used in extraction of atmosphere and removal of the compressor and receiver/dryer. Greg Manthey involved in part of this process via phone conference.

Left site approximately 17:15

Tuesday 8 April 2014-04-09

09:20 – Arrive at site.

10:00 – 10:20 Meeting to confirm day's proceedings.

10:20 – 10:45 Assembled at drill rig. Steven (NB Industries) set up equipment to draw atmosphere in the air conditioning system into gas bottles. This included the extraction of atmosphere from the high pressure and low pressure side.

Release

High pressure side atmosphere would have included atmosphere from the compressor passing through the condenser and the receiver/dryer before being deposited in one of the gas bottles.

Low pressure atmosphere would have been captured from the evaporator inside the cab up to the compressor.

Steven attached gauges to the air con system and established that it contained no pressure.

The pump and equipment used to extract atmosphere included running of equipment for ten minutes on the purge side and recovery side to minimise any chance of contamination.

The extraction of atmosphere into a gas cylinder on the high pressure side started at 11:10 and ended at 11:15.

The pump was purged before the process was repeated on the low pressure side which started at 11:24 and ended at 11:29.

Gas bottles marked with respective high/low side samples and time of extraction.

11:38 Valves shut off in compressor and receiver/dryer replaced.

Note: Compressor valves shut off and new receiver/dryer put in place to allow the system to be charged with pressurised nitro. This was done to try to establish if there was a leak in the air conditioning system. **A leak was subsequently discovered in the area around the high pressure inlet inside the operator's cabin.**

11:43 Receiver/dryer removed and immediately capped. Receiver/dryer then wrapped in bubble wrap in preparation for transport to Redbank. New receiver/dryer put in place.

12:00 Nitro put into system to assist in establishing if a leak is present in the air con system.

12:18 Site fitter commences dismantling of the compressor.

12:35 In the process of extracting the compressor, the fitter while loosening a bolt on the suction intake of the compressor breaks off a bolt housing one of the shut off valves. This exposes the oil contained inside to the outside atmosphere. I cover the hole with my hand and Steven (NB Industries) proceeds to plug and cap the hole.

12:50 Compressor and receiver/dryer packaged up for transport to Redband. This task was performed by Elias of Peabody and me. Prior to tapping up the box I asked Alan Miskin to inspect how components were packaged and asked if he was satisfied with the way they were packed to which he replied in the affirmative.

13:40 Elias and I delivered package and gas bottles to dispatch with instruction as to how samples needed to be handled.

Left site at approximately 14:15.

Release