MORRISON Natalie

From: Niehaus, Wouter [redacted]
Sent: Thursday, 4 July 2019 4:43 PM
To: BRENNAN Keith
Cc: Grosvenor Mine Record
Subject: FW: LW103 TG Gas IMT Meeting Minutes
Attachments: 19_07_04 - IMT Meeting Minutes for TG103 CH4 Higher than 2.2 Percent.pdf

Hi Keith,

As requested, please find attached a copy of our IMT minutes.

Ring me if you have any questions.

Kind Regards
Wouter

From: Mohr, Logan
Sent: Thursday, 4 July 2019 4:14 PM
To: Grosvenor All Users [redacted]
Cc: Packham, Russell [redacted]
Subject: LW103 TG Gas IMT Meeting Minutes

All,

Please see attached the latest LW103 TG Gas IMT Meeting Minutes

Regards,

Logan Mohr
Technical Services Superintendent

AngloAmerican

E [redacted]
D [redacted]
M [redacted]

COAL
Grosvenor Mine
464 Goonyella Road, Moranbah, 4744, Australia
www.angloamerican.com
A member of the Anglo American plc group

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GROSVENOR COAL MINE

TEM-IMT Meeting Minutes for TG103 CH4 Higher than 2.2 Percent

Meeting Minutes	**LW TG Level 2 General Body Methane Levels (≥ 2.20%)**
Date / Time	04/07/19 10:00am
Location	GM's Conference Room
Chairperson	Logan Mohr

Attendees	**Name**	**Initial**
Underground Mine Manager	Wouter Niehaus	WN
Seam Gas Manager	Casper Badenhorst	CB
LW Mining Co-Ordinator	Michael Burgess	MB
Acting TSM	Logan Mohr	LM
Ops Manager / SSE	Rob Nowell	RN
Undermanager	Wayne Pate	WP
Seam Gas Superintendent	Bevin Mulcahy	BM

Apologies	
File Location	W:\Technical Services\Shared_LW103\11. IMT Minutes\TG Gas levels 2%\19_07_04 – IMT Meeting Minutes for TG103 CH4 Higher than 2.2 Percent.docx
Minutes Taken / Updated by	Logan Mohr
Objective	Develop and implement strategies to assist in reducing the methane emissions in the TG roadway and the LW face to adequate levels to allow consistent longwall production in line with forecast.

Ref	**Description**	**Owner**	**Due date**
1.0 Review of last 24 hours			

Summary Data

Longwall stood for 36hrs

Gas Monitoring Trends

Longwall stood for 36hrs

Figure 1 – LW Gas and Shearer Position Trends

Goaf Plant

DATE	TIME	Static Pressure kPa (gauge)	Differential pressure kPa	Orifice ID mm	CO PPM	CH_4 Vol %	O_2 Vol %	CO_2 Vol %	N_2 Vol %	Total Flow L/s at STP	Methane Flow L/s at STP	VPS or Venturi	Comments	LW Chainage mt.
ADJACENT GOAF LONGWALL 102														
4/07/2019	04:10:00	-9.50	2.45	150	0.00	65.00	1.40	1.60	32.00	781	479	VPS	GRO:ZV053 VI511 Valve 100% open	200
									TOTALS	781	479			
GOAF LONGWALL 103														
4/07/2019	03:15:00	-11.80	2.94	150	0.00	96.00	0.80	0.80	2.60	867	784	VPS	GR03L026 GM518 Valve 100% open	3483
4/07/2019	02:50:00	-18.45	4.40	150	0.00	92.00	1.40	0.80	3.80	1070	922	VPS	GR03L001 GM516 Valve 100% open	2528
4/07/2019	03:05:00	-12.60	1.66	150	0.00	92.00	1.20	0.00	6.80	692	599	VPS	GR03V054 GM512 Valve 100% open	2580
4/07/2019	02:55:00	-20.15	2.10	150	0.00	92.00	1.00	0.60	6.40	740	636	VPS	GR03L004 GM503 Valve 100 % open	2378
4/07/2019	04:20:00	-9.70	1.85	150	11.00	39.00	2.20	3.80	55.00	631	232	VPS	GR03L009 GM504 Valve 100% open	2128
4/07/2019	04:30:00	-10.45	1.40	150	11.00	74.00	2.60	1.40	22.00	605	422	VPS	GR03L011 GM5-14 Valve 100% open	2026
4/07/2019	04:40:00	-10.20	2.20	150	42.00	54.00	6.90	1.20	37.50	714	364	VPS	GR03L013 GM5-02 Valve 100% open	1926
4/07/2019	04:45:00	-9.37	3.25	150	42.00	33.00	11.00	1.00	55.00	825	256	Venturi	GR03L014 GM5-01 Valve 100% open Tarp 1	1878
4/07/2019	03:50:00	-11.20	1.36	150	52.00	56.00	5.80	0.80	37.40	552	292	VPS	GR03L015 GM5-05 Valve 100% open	1828
4/07/2019	03:40:00	-11.25	1.60	150	54.00	54.00	5.80	0.80	39.40	609	310	VPS	GR03L015.2 GM5 08 Valve 100% open	1828
4/07/2019	03:30:00	-13.35	0.38	150	16.60	42.00	7.30	1.20	49.50	286	113	VPS	GR03L016 GM5 13 Valve 100% open	1778
4/07/2019	03:25:00	-14.60	1.28	150	16.60	42.00	7.60	1.20	49.20	518	204	Venturi	GR03L016.2 GM5 13 Valve 100% open	1778
									TOTALS	8108	5185			

Ref	Description	Owner	Due date

Gas Monitoring

MG	CH4 (A)	0.35 %
	CH4 (B)	0.34 %
	CO	0.6 ppm
	CO2	0.09 %
	O2	20.5 %
TG	CH4 (A)	0.86 %
	CH4 (B)	0.72 %
SHR	CH4 (A)	0.00 %
	CH4 (B)	0.00 %
Dogleg CH4		1.03 %
TG Inbye CH4		0.98 %

Slow Down	Stopped
0 mins	1199 mins

12hr avg diff: OB - IB CH4 0.07 %

6hr max CH4 rise

	30 - MG	115 - TG
Dogleg	0.21 %	0.00 %
TG Inbye	0.21 %	0.00 %

	PRS 30	PRS115
Shr Stop	2.12 %	1.90 %

BYPASS SHR TG CH4 STOP

LONGWALL CHAINAGE	
Maingate	1748.5
Tailgate	1749.2

Borehole	Chainage	Metres Past
GR03L026	3465	1715.8
GRO3L014	1878	128.8
GRO3L015	1828	78.8
GRO3L016	1778	28.8

LONGWALL METRES TO NEXT HOLE		
Borehole	Chainage	Metres To
GRO3L017	1728	21.2
GRO3L018	1678	71.2

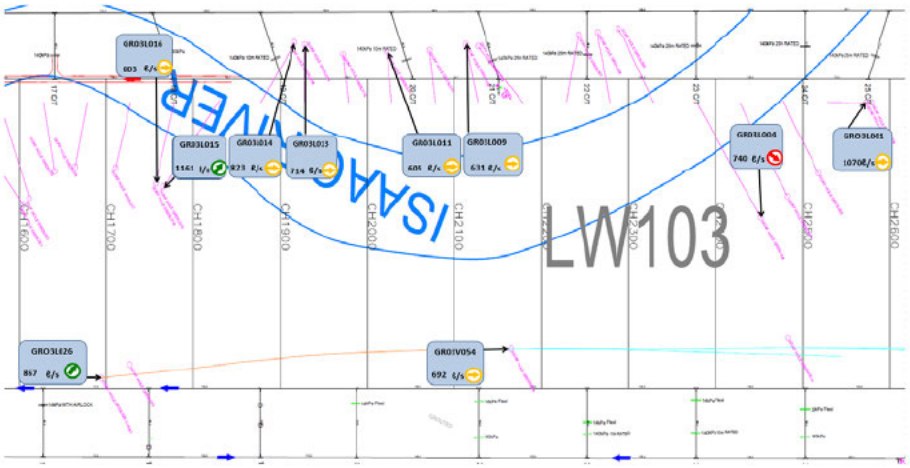

Figure 2 – Most recent Goaf Shift Report

Goaf Drainage Update

- All goaf holes running at 100% capacity
- GRO3V014 running in TARP level 1 for Low CH4 and High 02
- Barometer effecting goaf TG emissions with large changes (weather change predicted for the weekend).
- MG vertical GRO3V053 at 1725m chainage
- Plans to drill Mid panel Goaf hole GR03V055 at 1522m chainage (97m from MG ribline)

Ref	Description	Owner	Due date
	Observations • The LW103 Shearer was Cutting from MG to TG, at 2:26pm, shearer was stopped at shield #140 when the Inbye TG CH4 senor reached 2.34% CH4. Prior to the event the shearer was paused at shield #115 by the CH4 control system for a period of 2hours and 12minutes. At 2:36pm, outbye sensor peaked at 2.52% • The LW103 Shearer was Cutting from MG to TG, at 5:03am, the shearer reached shield #144 when a sudden increase in CH4 was observed at the Inbye TG CH4 senor. The sensor reached a peak of 2.7% CH4. At 5:11am, the outbye sensor peaked at 2.52%		
2.0 Plan Moving Forward			
	TG Gas Sensor Variance • Installing IR CH4 sensors at 3-4ct adjacent to currently installed sensors (comparison purposes only) • Continue investigations with baffle setup to drop moisture and dust prior to reaching sensor. **Short Term Ventilation Strategy** • Model, plan and execute the perimeter road ventilation reversal to lower CH4 levels entering the MG • Predicted low pressure weather system to significantly lower barometric pressure over the next 2 days • Maintain face ventilation quantity (review post vent change to minimise changing too many variables) **Short Term Goaf Drainage Strategy** • GR03V055 – Targeted Ch1530 90m from MG (additional infill hole) • GR03V053 – Expected to come online at Ch1690 (P seam MG) • GR03V056 – to be scoped and designed for ~Ch1100 • Review gas compliance cores for GM and P Seams for remainder of LW103 **Long Term Goaf Drainage Strategy** • Install 6th LRP at Gas Plant • Purchase and install blowers • All SIS gas currently plumbed to Arrow • UIS currently 8% of gas plant capacity. Purity of UIS will result in disconnections from Arrow if below 94% CH4. (UIS to Arrow not ideal) • Venting restricted emergency situations only • Identify potential goaf gas sources and areas for LW104. • Complete review of SGE model against actuals • Increase SGE resolution to identify areas with predicted higher goaf gas. **Long Term Ventilation Strategy** • Commission MG103 41c/t shaft to exhaust for LW104 start-up • Seal LW101,102,103 perimeter road		

Next Meeting date / Time	Friday 5/7/19 8:00am

Actions from IMT Meeting		
Action	**Who**	**When**
Review the impact of ventilation change on work areas adjacent to change area (complete change management for vent reversal)	G. Zerner	Prior to vent change taking place
Setup CITECT to show newly installed TG IR sensor	G. West	4/5/19
Complete change management and trial preliminary design for baffle and moisture reduction unit for current CH4 sensors	G. West	18/7/19
Complete modelling and develop implementation plan for the ventilation reversal in the LW101-103 perimeter road. (Aim to maintain current face ventilation as part of change)	G. Zerner	9/7/19
Develop scope and design for an infill goaf hole targeting Ch1100.	B. Mulcahy	8/7/19
Review gas compliance cores for remainder of LW103	R. Kostowski	Complete
Source and install 6th liquid ring pump	C. Badenhorst	20/11/19
Source and install 4x blower skids	C. Badenhorst	15/09/19
Develop formal process to restrict venting gas to emergency situations only.	C. Badenhorst	18/7/19
Complete review of SGE Model vs Actuals	R. Packham	28/7/19
Review SGE model and data to identify areas of potential increased gas make.	R. Packham	28/7/19

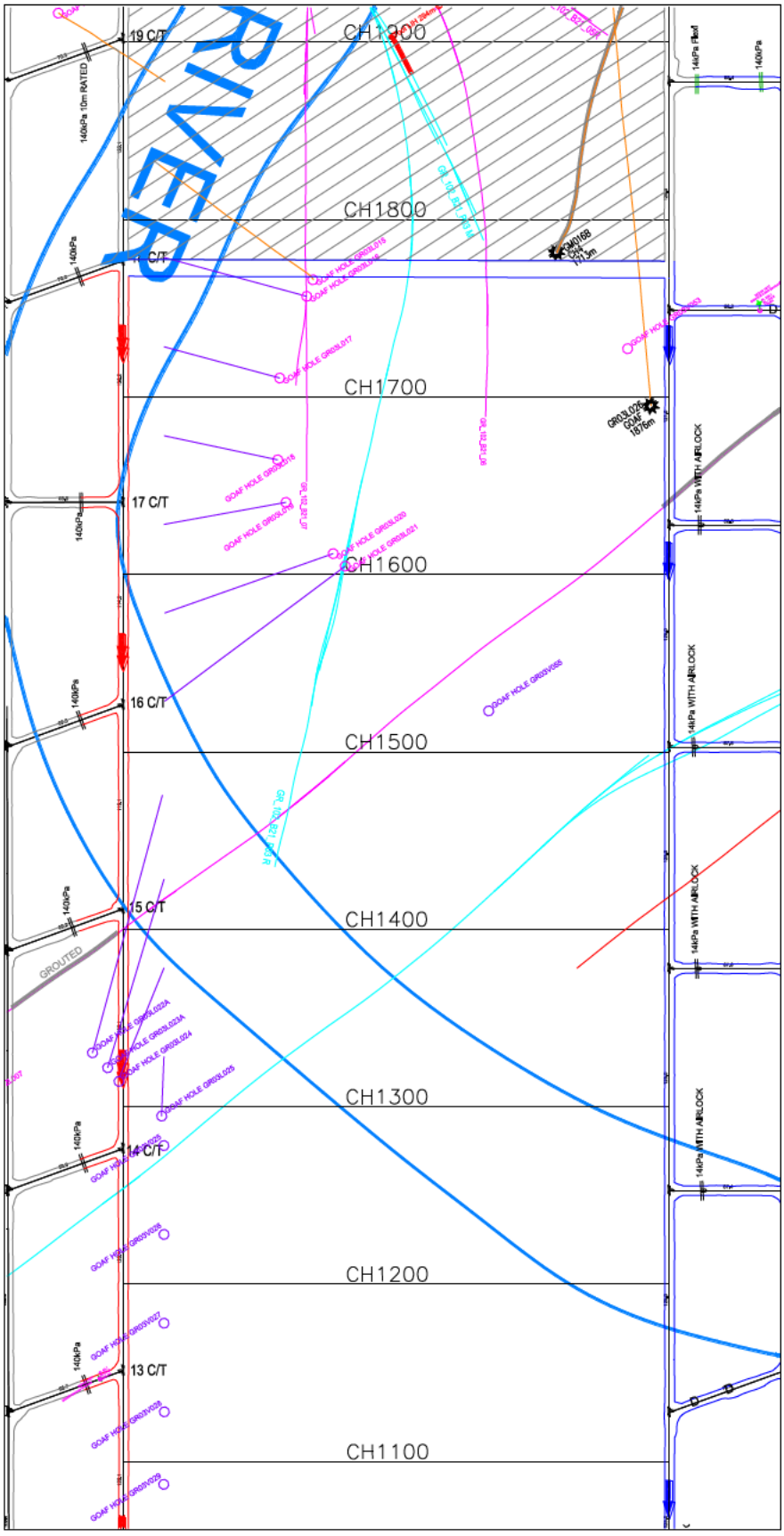

Figure 3 - Plan View of Goaf Holes