

Mr M. Clarke
Wollangong

ANNUAL REPORT FOR THE CHIEF INSPECTOR OF COAL MINES

FOR THE YEAR ENDED 30TH JUNE, 1985.

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Total raw coal production for 1984/85 was a record 70.08 million tonnes.

Underground production decreased slightly by 0.59 million tonnes to 42.05 million tonnes, while open-cut production rose by 4.13 million tonnes to 28.03 million tonnes.

Production by longwall mining methods was 8.51 million tonnes, an increase of 2.06 million tonnes. Longwall production represented 20.2% of the underground production, being an increase from 15.1%. During the period 12 longwall mining units contributed to the production at 11 collieries.

Total employment increased by 38 to 18,875. In underground mines, employment decreased by 362 to 14,999, while in open-cut mines, employment increased by 400 to 3,876.

Staff

Vacancies which existed for Inspectors of Coal Mines at Newcastle at the beginning of the period were filled by the recruitment of Mr. I.C. Anderson and Mr. A.A. Ryan.

The retirement of Mr. J.M. Ansell and Mr. R.J. Mould as Inspectors of Coal Mines at Wollongong created vacancies which were filled by Mr. C.E. Taylor and Mr. R. Smith.

Mr. J. Frost, Inspector of Mechanical Engineering retired prematurely from the Wollongong Office. This position was filled by the recruitment of Mr. J.R. Bout.

At the Singleton Office Mr. S. Thornton resigned as Inspector of Coal Mines and his position was filled by Mr. T. Shacklady.

NEW LEGISLATION

The Coal Mines Regulation Act, 1982 became fully effective on 1st July, 1984 and was thus effective for the full year.

ACCIDENTS

Accidents reportable under Section 86, Coal Mines Regulation Act, 1982 are compared with the previous year in the following table. There was no material difference in the requirement for reporting such accidents under the new Act.

Category	Fatal		Serious Injury	
	1983/84	1984/85	1983/84	1984/85
<u>Underground</u>				
Falls of Roof	3	2	15	11
Falls of Face and/or Sides	1	-	4	7
Haulage	2	3	6	9
Machinery	-	-	11	14
Miscellaneous	-	-	16	21
Electricity	-	-	-	-
Noxious Gases	1	1	-	-
Shafts	-	-	-	-
Explosions	-	-	-	-
Explosives	-	-	-	-
Total Underground	7	6	52	62
<u>Surface</u>				
Haulage	-	1	-	2
Machinery	-	1	5	5
Miscellaneous	-	-	14	18
Electricity	-	-	-	1
Total Surface	-	2	19	26
Overall Total	7	8	71	88

The number of fatal accidents increased by one from the previous year. The total number of reportable accidents increased by 18, a disappointing result, notwithstanding an increased production.

FATALITIES

Falls of Roof

Two persons were killed as a result of falls of roof. A continuous miner driver died in a pillar extraction fall, he may have survived in the canopy, and a machineman was struck by stone from a pot hole fall whilst bolting. Temporary support may have prevented this accident.

Haulage Underground

Three workmen were killed as a result of movement of track haulage equipment. In two cases the accidents occurred as a consequence of failure to observe the appropriate transport rules and the third as a result of poor planning and communication.

Haulage Surface

A workman was killed when he was driving a vehicle which was run over by a 170 tonne rear dump truck. The workman was in contravention of the transport rules.

Machinery Surface

A fitter was killed when struck by a piece of broken chain sling which flew when the sling broke whilst supporting a shovel boom.

Noxious Gases

A continuous miner driver was asphyxiated as a result of being buried by fine coal from an outburst of about 350 tonne of material and gas. The incident was reported as being unavoidable under the circumstances as the agreed procedures were in force for mining in an outburst zone. Further safeguards are to be introduced.

SERIOUS BODILY INJURY

Falls of Roof

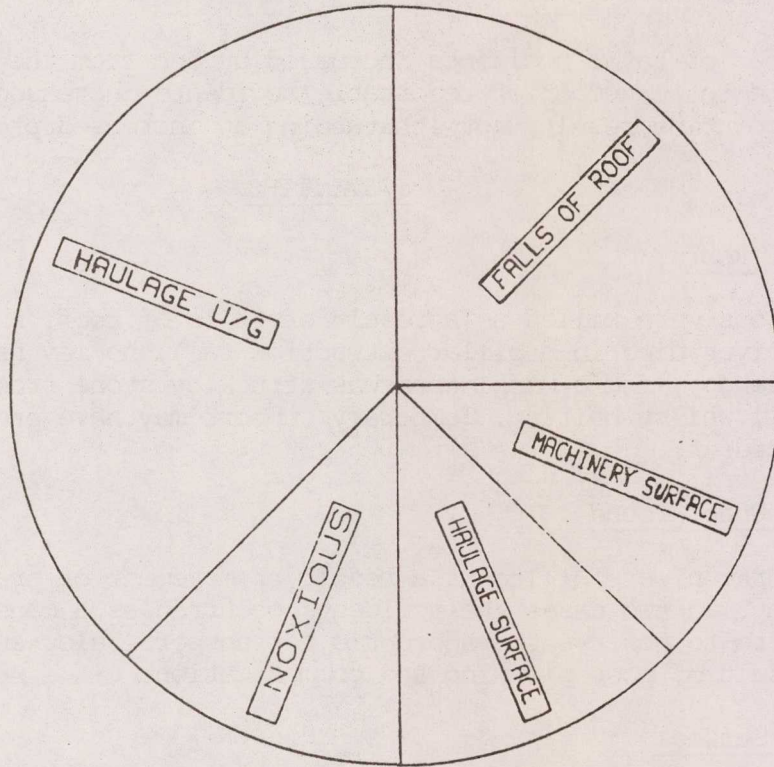
Eleven workmen sustained injury when struck by falls of roof material, six less than the previous year. As in previous years, failure to examine and to adequately support were the main causes.

Falls of Face and/or Sides

Seven persons were injured as a result of falls of sides, three more than the previous year. Failure to support or failure to inspect the conditions were the continuing causes.

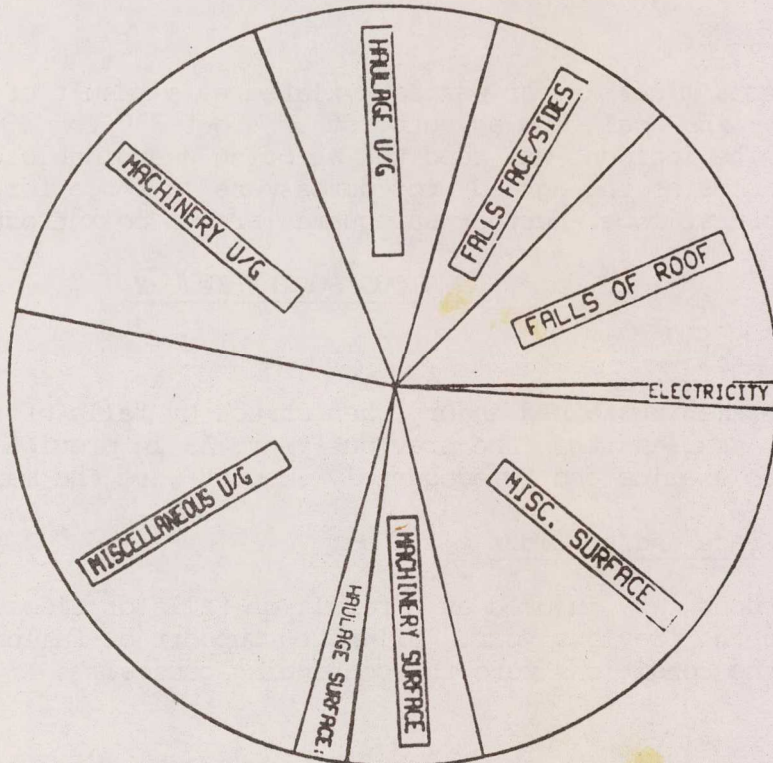
FATAL ACCIDENTS 1984/1985

FALLS OF ROOF:
2 (25.0%)
HAULAGE U/G:
3 (37.5%)
NOXIOUS:
1 (12.5%)
HAULAGE SURFACE:
1 (12.5%)
MACHINERY SURFACE:
1 (12.5%)



SERIOUS ACCIDENTS (1984/1985)

FALLS OF ROOF:
11 (12.5%)
FALLS FACE/SIDES:
7 (8.0%)
HAULAGE U/G :
9 (10.2%)
MACHINERY U/G :
14 (15.9%)
MISCELLANEOUS U/G :
21 (23.9%)
HAULAGE SURFACE:
2 (2.3%)
MACHINERY SURFACE:
5 (5.7%)
MISC. SURFACE :
10 (20.5%)
ELECTRICITY SURFACE:
1 (1.1%)



Haulage Underground

Nine workmen received reportable injuries from accidents involving haulage, including two from belt conveyors. The remainder involved falling from rolling stock or being rammed or struck by improperly parked vehicles which moved.

Machinery Underground

Fourteen persons sustained injury, three more than the previous year, mainly by means of uncontrolled movements of machinery. Three such accidents were caused by uncontrolled roof bolting machines.

Miscellaneous Underground

There were twenty one reportable injuries to persons from various causes, five more than the previous year. Tripping and falling caused ten injuries; struck by props or other falling material caused nine and two were due to other causes.

Haulage Surface

Two workmen were seriously injured in the same accident when they were struck by a derailed flat top trolley whilst sitting at the bench provided at the tunnel mouth.

Machinery Surface

Five workmen were injured during the year, three on the surface of underground mines and two in open-cut mines. Two of these accidents were associated with cranes.

Miscellaneous Surface

Eighteen workmen were reportably injured, eleven of whom received injuries by slipping or falling, three were struck by moving objects and the remainder by lifting or jumping from equipment.

Electricity Surface

A contracting employee was seriously burnt when his levelling staff contacted high tension overhead wires.

General Observations

Reportable accidents were 23% more than the previous year, increasing from 78 to 96. Coal production increased by about 5% in the same period, all from open-cut operations.

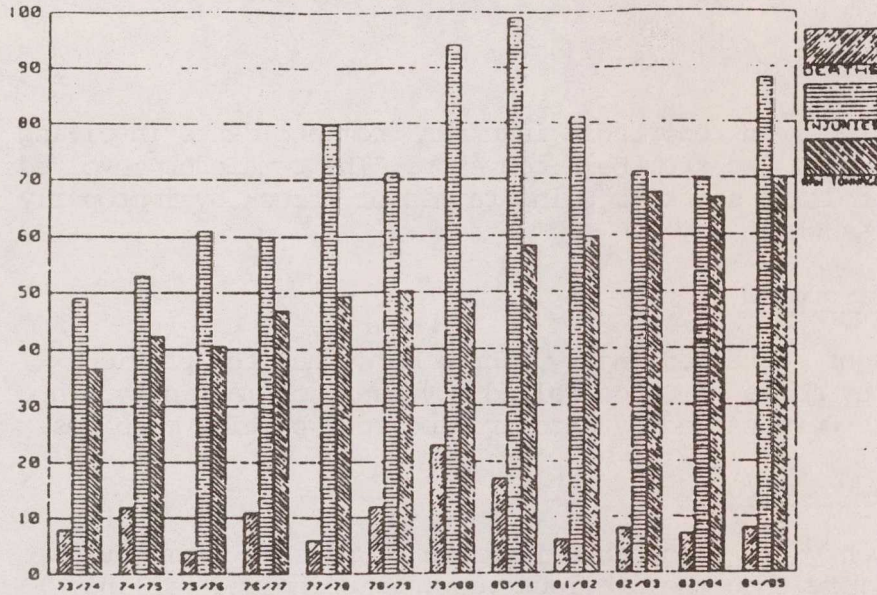
With the exception of falls of roof all categories of accidents increased in number, a disappointing result softened only by a decrease in the number of falls of roof accidents.

Notably, there was a 47% increase in reportable accidents in open-cuts during the year, (including two persons killed).

This no doubt reflects an increased activity in open-cut operations but demands more attention to supervision and training of personnel.

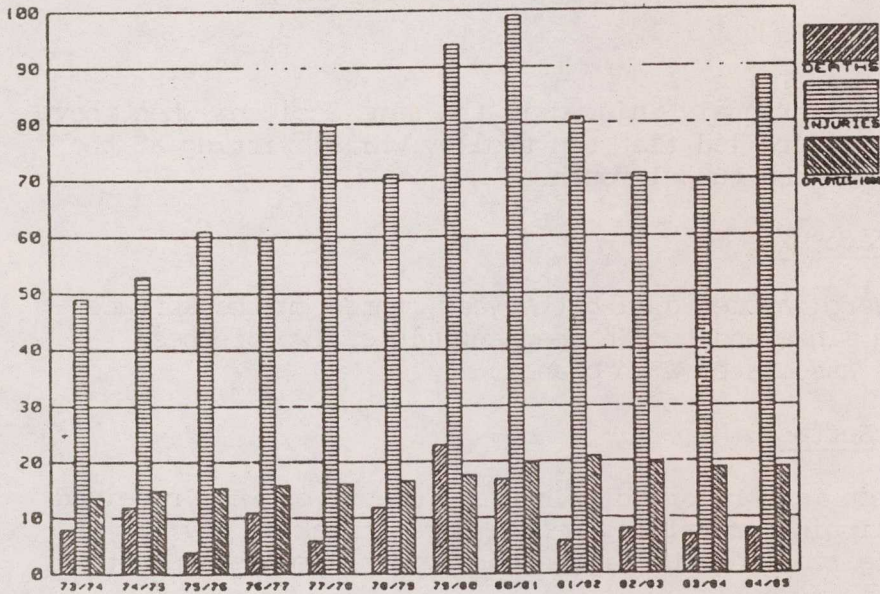
COLLIERY ACCIDENT STATISTICS

DEATHS, INJURIES, OUTPUT (MILLION TONNES)



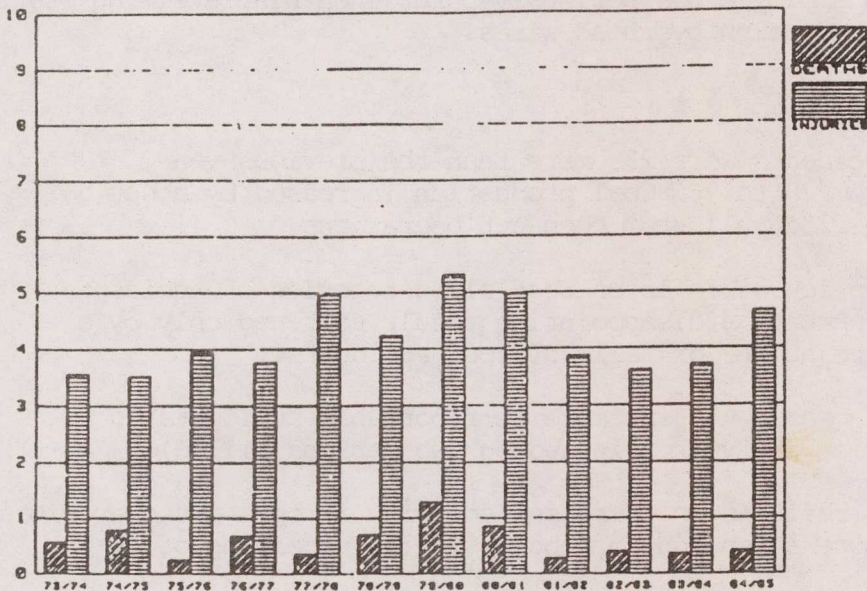
COLLIERY ACCIDENT STATISTICS

DEATHS, INJURIES, TOTAL EMPLOYEES



COLLIERY ACCIDENT STATISTICS

DEATHS, INJURIES, PER THOUSAND EMPLOYEES



Accidents involving haulage and those accidents caused by slipping, stumbling, falling and handling materials were the major cause of the increase and management's attention is directed to a review of methods and training aimed at these causes.

The accompanying charts depict fatal and serious accidents by agency for the period.

Graphs depict fatal and prescribed serious accident experienced since 1973/74 related to production and total employment and also as a rate per thousand employees. The data from which the graphs are derived is given in Appendix 'C'.

DANGEROUS OCCURRENCES

There were 226 reportable occurrences during the year, 80 of which occurred at open-cut mines. This was a substantial increase after the previous period when 100 incidents were reported.

The Coal Mines Regulation Act, 1982 was effective from the beginning of the period and introduced new categories of reportable incidents, for example, arcing external to electrical equipment casings in a hazardous zone was reportable for the first time and resulted in 68 incidents being reported. There were 31 buried continuous miners which would not previously have been reportable.

All occurrences are listed in Appendix 'A'.

The occurrences have been categorised as follows:-

DANGEROUS OCCURRENCES UNDERGROUND

	South & West	North	Singleton	Total
Arcing in a Hazardous Zone	49	15	4	68
Buried Continuous Miners	14	7	10	31
Mechanical Fires	10	6	4	20
Electrical Fires	6	0	0	6
Electrical Shock/Burns	1	4	0	5
Self Heatings	1	0	2	3
Shaft Incidents	0	2	0	2
Outbursts	6	0	0	6

Inrushes	1	0	0	1
Ignition of Gas	0	1	0	1
Overwind	1	0	0	1
Failure of Transport Gear	1	0	0	1
Explosions	0	1	0	1
	90	36	20	146

DANGEROUS OCCURRENCES OPEN-CUT

Overtuned Vehicles	19
Collisions	8
Loss of Control of Vehicles	7
Self Heatings	16
Mechanical Fires	15
Electrical Fires	6
Fires	3
Failure of high/low walls	5
Other	1
	<u>80</u>

Noticeably, reports of external arcs are disproportionately distributed when compared between districts. The reason for the imbalance is under investigation. It appears, however, to be due to differences in the interpretation of the reportable incident requirements.

Most external arcs are due to shuttle car trailing cables where high loads are applied due to improper setting of reeling equipment. This matter is under investigation.

Buried continuous miners represents a significant number of the reportable incidents. These have been the subject of informal reporting for some years and the incidence is in fact improving with the close attention being paid by management and the inspectorate.

Fires underground continue to be a matter for continued attention. Fortunately, a trained workforce and availability of firefighting equipment have ensured that each fire was quickly extinguished.

Inadequate and reckless handling of vehicles resulted in 34 separate reportable incidents at open-cut mines involving vehicles ranging from a large bulldozer to a small truck. On nineteen occasions a vehicle was overturned, in eight instances collisions occurred and seven drivers lost control of their vehicle. It is evident that a concerted effort is necessary by those in management positions and also on the part of individuals to eliminate these avoidable occurrences.

There was also a significant number of fires on open-cut machines. Better design and maintenance could have prevented these incidents. Fortunately, on board fire suppression equipment worked satisfactorily in most cases.

In December, 1984, a 12.3M.W. capacity gas turbine alternator and two three stage compressors with ancillary equipment were commissioned. Power generated by the turbine fully met the requirements of the Westcliff mine with a surplus being exported to the New South Wales electricity grid.

There is little doubt that the installation is proving very effective in reducing the gas problem underground at the mine.

At the end of the period, provision was being made to extract gas directly from the seam at two other mines.

Outbursts

Despite a system of controlled mining in outburst prone areas a continuous miner driver was killed when 350 tonnes of coal and gas was discharged from the face while mining was taking place. A major review of precautions was undertaken with the likelihood of modification to the continuous mining machine to protect the driver with provision for a continuous stream of compressed air in the driver's cabin.

In a second instance, two workmen operating roof bolting equipment narrowly avoided injury when a small incident occurred.

Four other reportable outbursts occurred during the year. A number of other outbursts occurred which were not regarded as abnormal as they took place on known geological abnormalities.

Airborne Dust

Continuous miner unit working places generally complied with the prescribed maximum concentration of 3.0mg/m³. Difficulty was experienced keeping below the prescribed limit with some hard coals and work was actively pursued to solve this problem.

VENTILATION OF MINES AND FLAMMABLE GAS

Ventilation of most mines was monitored at a satisfactory standard.

Bratticing standards at the face, however, were again a major cause of deficiencies detected by Inspectors and were rectified quickly. This highlights a need for officials to be ever watchful for falling standards and also for emphasis to be placed on bratticing techniques in colliery training schemes.

Few difficulties were reported in respect of mines using ducted auxiliary ventilation systems. The trend is toward greater use of auxiliary fans.

Some mines still fall victim to inadequate planning with resultant high fan ventilation pressures. In one instance a fan pressure of 330mm has eventuated with low resistance returns still being driven at the end of the period and long after they were justified.

Modern high capacity fans are of no avail unless they are matched airways of adequate size.

Use of raise bores continue to provide both a speedy and effective solution to ventilation problems at some mines. Almost 4kms of return airway was eliminated at one mine in this manner during the year.

Although detectable at most mines, flammable gas was diluted as it was given off.

An isolated blower of gas at New Vale No. 2 mine was ignited when machine cutting picks engaged the conglomerate roof. The resulting fire was confined to the face and was quickly extinguished. The incident, however, reinforces the need for constant care.

A notice under Section 63 of the Coal Mines Regulation Act 1982 was issued on two separate occasions at one mine where methane was encountered, above statutory limits. A satisfactory solution to the problem can only be obtained at the mine referred to above by the provision of low resistance return airways.

Continuous miner methane monitors continue to provide a valuable service where they have been installed. Mine gas monitoring systems also prove to be useful tools where their installation has been justified.

Predrainage and postdrainage of flammable gas from the seam and surrounding status at Westcliff mine continued during the year. Predrainage holes 80mm in diameter were drilled into the unworked coal for a distance of up to 240mm. Whilst downward inclined postdrainage holes were drilled 56mm in diameter to depths of 120ms. An average of 2,500mm of drainage holes were drilled each month. During the month of June gas was drawn from the mine at a rate of 5,680 cubic metres per hour at an average purity of 62.6% methane.

Roadway Dust

During the year 1,776 roadway dust samples were obtained of which 125 failed to comply. The greater rate of rejection occurred in the southern district where more mines are rated as Class A under the regulations. Some mines, such as Clarence and Wallerawang continue to have unreasonably high rejection rates. Efforts will be made during the coming year to rectify this situation.

COAL MINING QUALIFICATIONS BOARD

The constitution of the Board for 1984 was:-

Messrs J.G. Bailey (Chairman),
L.R. Carrall, M.J. Muir, V. Parkinson,
Prof. F.F. Roxborough,
B.J. Howe, D.G. Thomas, A.H. Penman,
J.G. Dwyer and G. Hawke

The examining panels for the various Certificates of Competency as appointed by the Board at its meeting held on 13th March, 1985, were:-

Mine Managers and Undermanagers

Examiners: Messrs A.I. Balks, J.D. Hamment, B.J. Lyne, L.R. Carrall, R.C. Gibbons and K. McLaughlin.

Emergency: Mr. S.M. Saywell

Deputy

Examiners: Messrs C.E. Taylor, S.M.C. Saywell, D.R. Mowbray and J.B. Sleigh

Emergency: To be appointed when required by the Chairman

Electrical Engineers

Examiners: Messrs S. McDonald, A.J. Mychael, S.F. Maginnis, A.A. Reczek.

Emergency: Mr. L.A. Hall

Mechanical Engineers

Examiners: Messrs P.R. Torr, P.E. Reid, J.F. Garaty

Emergency: Mr. R.L. Smith

Surveyors

Examiners: Messrs R.A. Knight, N.N. Nielsen, K.G. Anderson, P. Whalan

Emergency: Mr. K. O'Reilly

Open-Cut Managers/Examiners

Examiners: Messrs W.N. Burton, R. Gardner and K.D. Smith

Emergency: Mr. D.K. Hicks

During the period Certificates of Competency were issued as follows:-

Category	Number of Certificates
Managers	17
Undermanagers	30
Deputy	74
Electrical Engineers	9 Underground 13 Open-Cut
Mechanical Engineers	9
Surveyors	13
Open-Cut Managers	7
Open-Cut Examiners	23

MINES RESCUE ACT

Inspections were made of the four Mines Rescue Stations during the year in accordance with the provisions of the Mines Rescue Act, 1925 as amended.

The standard of rescue training maintenance of breathing apparatus, other equipment and facilities was found to be satisfactory. Records were found to be adequately maintained.

Trainees

During the year 99 persons were trained and satisfactorily met the requirements for receipt of a Certificate under Section 18A of the Mines Rescue Act. A further 29 persons were in the course of preparing for examination.

Taking resignations, retirements and recently examined trainees into account, there was a total of 826 persons trained to take part in mines rescue work at the end of the period. This was a decrease of 76. There were also 34 trained persons at Mines Rescue Stations.

There were also 72 persons trained in open-cut mines rescue procedures, with 64 in the course of training. Open-cut activities were centred in the Hunter Valley and the Western District.

Apparatus

A total of 365 closed circuit units of breathing apparatus rated as having a minimum of two hours duration were in use at the end of the period. Of this total 296 suits were of the compressed oxygen type, with the remainder using liquid oxygen.

Open circuit apparatus comprised 113 compressed air units and 92 compressed oxygen therapy units, which were owned and serviced by the Rescue Stations.

Emergencies

There were no emergency calls to the Rescue Stations during the year.

The Newcastle Station rendered assistance when an explosion of mains gas was initiated by fireworks at a water supply reservoir in Newcastle.

Assistance generally was provided in regard to spontaneous combustion problems.

Assistance was also rendered in respect of several haulage incidents at open-cut mines involving loss of life and serious personal injury.

Rescue Competitions

The twenty-second Interdistrict Mines Rescue Competition was held in Collinsville, Queensland during the year. The South Bulli Colliery team, representing the Southern District Station, proved to be the outright winner.

Regional Emergency Planning

The Southern Mines Rescue Station participated in an emergency exercise to determine how the regional district planning could cope with a disaster situation. The exercise assumed that 40 persons were injured or killed in a colliery explosion. Eight emergency service groups and four hospitals were involved in the exercise.

The exercise proved beneficial in monitoring the response and effectiveness of the regional emergency services.

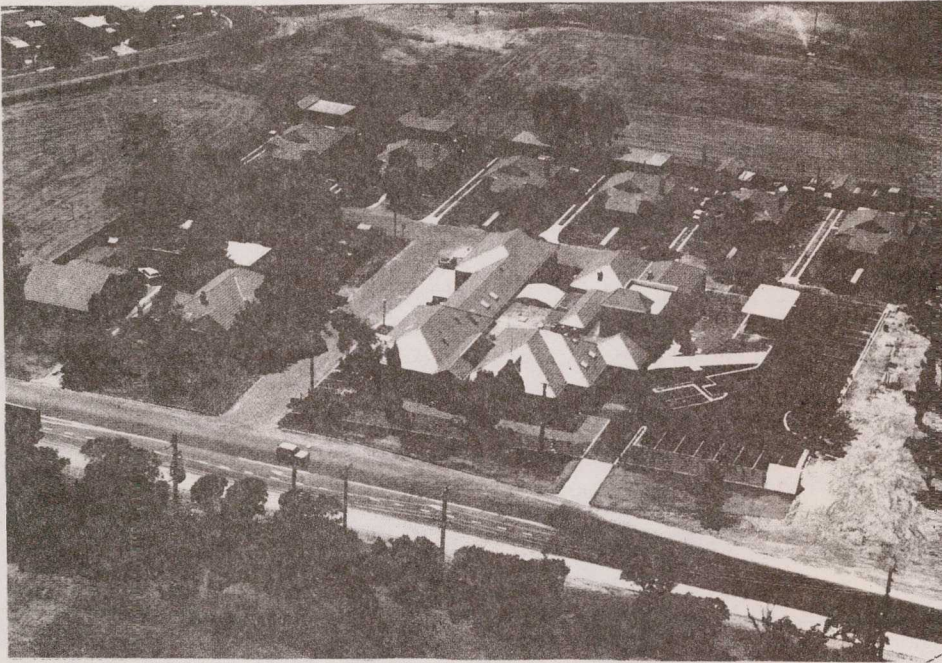
Technical Services

The Southern Mines Rescue Station consolidated efforts to provide a technical service to the industry. A well equipped laboratory with two full-time officers provided services to fifty-five collieries, other rescue stations and equipment suppliers.

A mobile laboratory used for much of the work can be readily placed into service for gas monitoring in the event of a mine emergency.

New Developments

The redevelopment of the Newcastle Station was completed during the year. A feature of the new station is the underground training gallery where mine situations can be readily and realistically simulated.

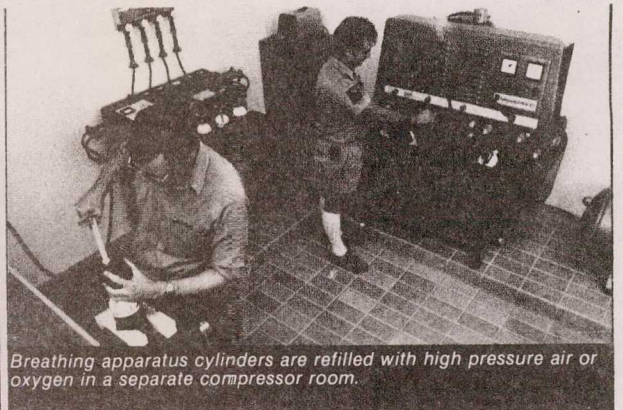


Aerial View of Newcastle Mines Rescue Station

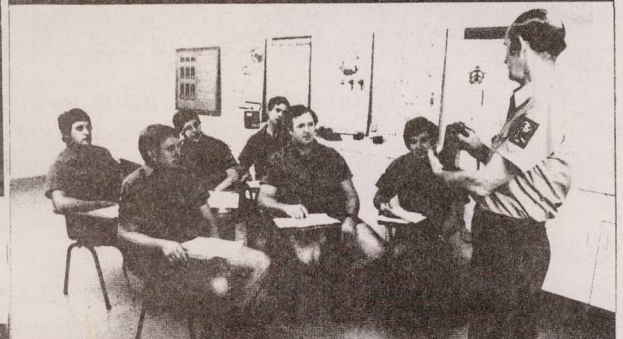


The realistic design of the Mine Simulator allows actual pit work to be carried out. Here a team sets timber during a training session.

Mines Rescue Team under training, shown here filling liquid oxygen into their breathing apparatus sets prior to a practice at the Station.



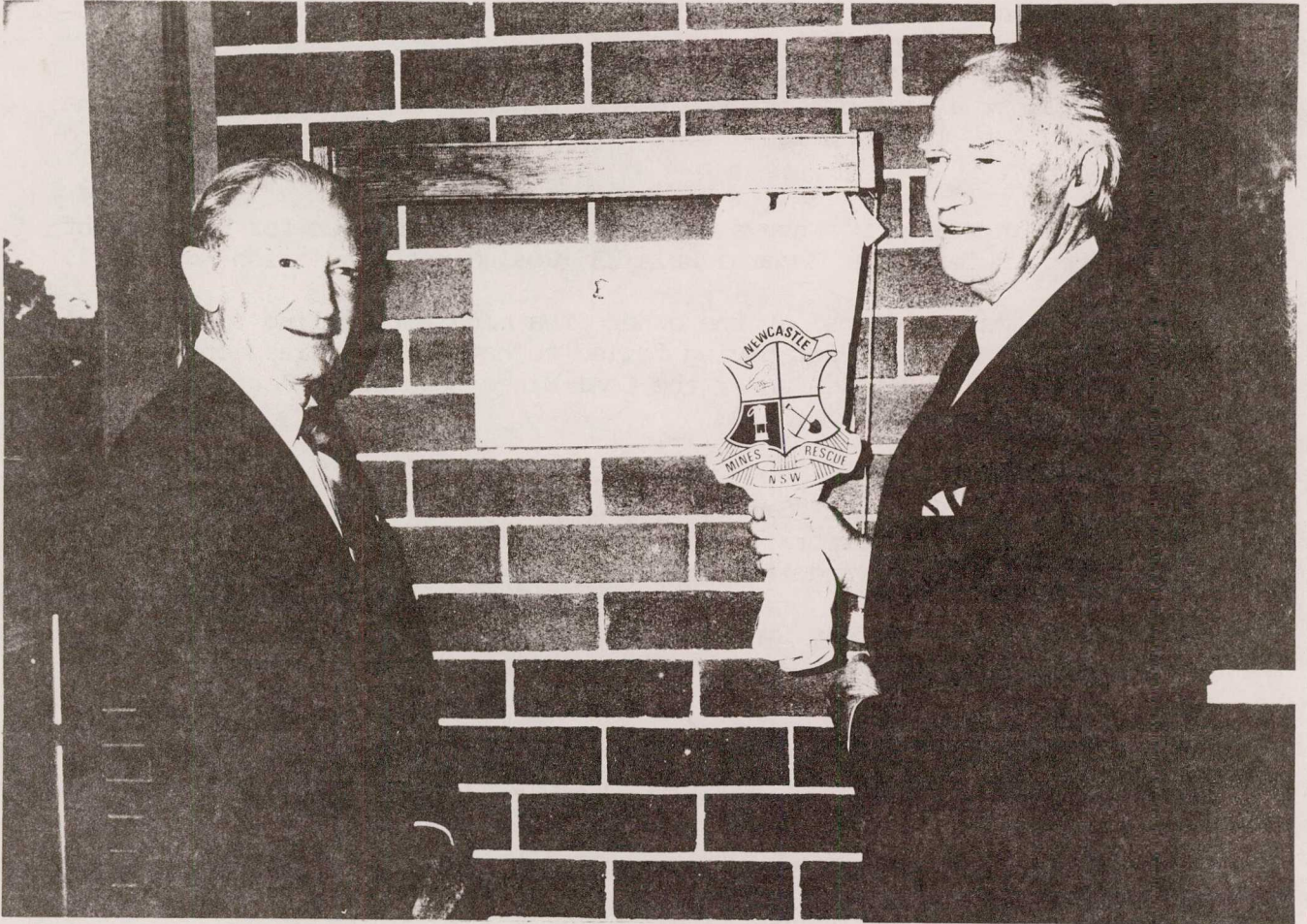
Breathing apparatus cylinders are refilled with high pressure air or oxygen in a separate compressor room.



Instructor Des Rochester instructs the Newcastle Competition team in the use of gas detection instruments in one of the lecture rooms.

Team under training in the Mines Simulator. Real mine conditions, including smoke, heat and flooding can be created in safety.





Mr. P.D. Hills, M.P., Minister for Industrial Relations,
opening the Newcastle Mines Rescue Station new facility on 9th February,
1985 with Dr. D.T. Hanrahan, Chairman of the Rescue Station Committee.

The new facility was formally opened by the Minister for Industrial Relations, Mr. P.D. Hills, M.P. on the 9th February, 1985.

Accompanying photographs illustrate aspects of the new station and its opening by Mr. Hills.

PROSECUTIONS

No action was taken during the period in respect of breaches under the Coal Mines Regulation Act, 1982.

Action against a manager for breaches of General Rules 1 and 3, Coal Mines Regulation Act, 1912 mentioned last year were still in process at the end of this year.

Action was initiated against a deputy and an undermanager for breaches of the support rules under General Rule 23, Coal Mines Regulation Act, 1912.

Information was laid against the owner of a mine for failing to adequately ventilate the mine and for having failed to have regular inspections carried out. The action was taken under the Coal Mines Regulation Act, 1912.

EMPLOYEE TRAINING

A safety poster entitled "Safety is a Way of Life" was prepared for the Division by the xxx Corporation Pty. Ltd. Free copies of the poster were made available to the industry.

The sixth Colliery Safety Symposium was held on the 22nd October, 1984 at the State Office Block Theatre, with approximately two hundred attending. Papers presented were as follows:-

THE IMPLEMENTATION OF TRAINING AND THE NEEDS OF THE TRAINING OFFICER.

Dr. O. Barry, Training Officer, Joint Coal Board

AN INTEGRATED APPROACH TO MINE SAFETY THEORETICAL CONSIDERATIONS

Mr. R. McLellan, General Manager, Safety & Training, Clutha Development Pty. Ltd.

AN INTEGRATED APPROACH TO MINE SAFETY - PRACTICAL APPLICATIONS

Mr. B. Nicholls, Manager, Tahmoor Colliery

A REVIEW OF RECENT ACCIDENT EXPERIENCES

Mr. I. Pankhurst, Inspector of coal Mines, Dept. of Industrial Relations

THE SELECTION AND TRAINING OF SAFETY TRAINING OFFICERS

Safety Training Officer, Nattai North

COAL MINING AMBULANCE CORPS

Courses were held at each of the mines rescue stations during the year and B.P. Coal Training Centre, Narellan.

Thirty nine persons attended the courses. Awards were as follows:-

Gold Awards	10
Silver Awards	9
Bronze Awards	20

Successful candidates at the examination received a certificate and an appropriate lapel badge.

ELECTRICAL AND MECHANICAL ENGINEERING

Investigations were concluded during the period to identify means of minimising electromagnetically induced voltages on structures in mines beneath high energy transmission lines. The problem was brought to the attention of industry generally through a paper presented to the Institution of Engineers. The methods outlined in the paper involved the use of earthed shields to be interposed between the transmission lines and the parallel structures, such as conveyors, to be protected.

The spring applied shuttle car brake referred to last year has, after minor teething problems, proven to be effective and has gained widespread acceptance. Better braking, lower temperatures and lower maintenance are reported as advantages of the system. All manufacturers are fitting the brake to new shuttle cars.

Successful use of the Coalfields Division link with the Dialog and European Space Agency information systems has resulted in the modification of an advanced 'Applied Programming Language computer programme on the Public Service Board I.B.M. 365 maneframe computer. The programme developed for the U.S. Bureau of Mines by the Pennsylvania State University permits the interactive design and analysis of safe mine power systems. The programme has been used to analyse safety aspects of 3,300 volt longwall installations. The programme has the flexibility to permit dynamic models involving as motor starting and braking to be studied. The facility has been made known to industry.

Micro computers have been used in the division's head office with considerable advantage. The units have accessed international data banks when required. The relatively cheap units will be provided for district officers in due course.

A potentially disastrous incident occurred underground on a transformer substation on the 20th September, 1984. An explosion had sufficient potential to ignite coal dust and once again demonstrates that the explosion hazard in coal mines is not confined to methane. The circumstances of the ignition involved the entrapment of incurred solvent vapours inside the transformer tank and their ignition by stray electrical sparks around the transformer core.

GENERAL

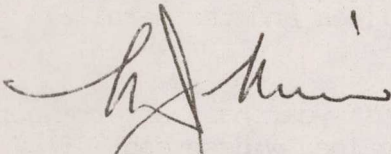
The Coal Mines Safety Advisory Committee met on six occasions during the year. The sub-committee monitoring pillar extraction methods in the Vales Point-Munmorrah area was again active and extended its interest to several other mines where difficulties had arisen with the extraction of pillar coal.

I acted as Chairman of the Mines Rescue Board and the Coal Mines Safety Advisory Committee. I also served on the Dam Safety Committee.

Officers of the Division attended a number of conferences and symposia whilst representation on appropriate Australian Standards Committees was continued.

The assistance rendered by technical and administrative staff of the Division during the year is acknowledged as is the co-operation of other officers of the Department.

Significant developments at mines during the year have been listed in Appendix "B".



M. J. MUIR,
Chief Inspector of Coal Mines.

APPENDIX A
DANGEROUS OCCURRENCES

6/7/84 BULLI MINE

An electrical arc occurred external to a shuttle car cable which was trapped and damaged by the back reeling shoe when the car passed too close to the anchor point.

7/7/84 WARKWORTH OPEN CUT MINE

An articulated hydraulic tractor crane overturned when attempting to move a shovel cable.

12/7/84 STOCKTON BOREHOLE MINE

Arcing and a flash occurred in a hazardous zone when a shuttle car squeezed a section feeder cable against a prop.

13/7/84 NATTAI NORTH MINE

An inrush of approximately 21,000 litres of water occurred when a continuous miner holed into an uncharted sump on the edge of a goaf.

13/7/84 CORDEAUX MINE

A diesel powered personnel man car ran away from a parked position when release of the deadman pedal failed to operate the brake.

16/7/84 TAHMOOR MINE

An electrical arc occurred when power was restored to a shuttle car cable after it had been trapped under the car.

19/7/84 TAHMOOR MINE

An outburst of stone coal and gas occurred while the roof was being bolted in a place advancing through a 1.5m dyke. It was estimated that 5 to 6 tonne of material and an unknown quantity of predominately CO2 gas was involved.

24/7/84 STOCKTON BOREHOLE MINE

An oil fire occurred on a rotary screw oil flooded compressor installed underground.

25/7/84 STOCKRINGTON NO. 2 MINE

A continuous miner was buried in a fall of a coal ply roof, while taking the first lift in a fender.

The roof collapsed suddenly and trapped the miner.

26/7/84 HUNTER VALLEY EXTENDED OPEN CUT MINE

The driver of a rear dump truck discharged his load and failed to lower the tray before driving off. The tray struck overhead 11,000 volt transmission lines.

30/7/84 MACQUARIE MINE

A shuttle car feeder cable was damaged and arcing occurred in a hazardous zone.

30/7/84 TAHMOOR MINE

An arc occurred on a shuttle car cable which was pulled in two when it became trapped under the wheels of the car.

30/7/84 HUNTER VALLEY NO. 1 OPEN CUT MINE

An outbreak of fire occurred on an hydraulic face shovel when hydraulic oil sprayed onto the hot engine turbo charger.

31/7/84 LEMINGTON NO. 2 UNDERGROUND MINE

A continuous miner was buried by a goaf fall while removing the last lift off from the last fender of a row of pillars.

3/8/84 TAHMOOR MINE

An electrical arc occurred on a shuttle car cable when power was reapplied after an earth leakage trip.

3/8/84 STOCKTON BOREHOLE MINE

Arcing occurred in a hazardous zone on a shuttle car trailing cable when the power was re-applied after it had tripped off. Subsequent inspection revealed that the cable had been crushed.

6/8/84 DARKES FOREST MINE

A fire occurred on a damaged bearing of a conveyor belt gib roller.

7/8/84 AWABA MINE

A continuous miner was buried when filling the last car off the final stook.

7/8/84 MACQUARIE MINE

Arcing occurred in a hazardous zone when a shuttle car trailing cable was pulled apart after it caught on a cable roller guide.

9/8/84 MOUNT THORLEY OPEN CUT MINE

A rear dump truck was extensively damaged and the driver fortunate not to sustain severe injuries when the vehicle was reversed over the edge of a dump. After flipping over backwards, the truck completed a full somersault before landing on its wheels.

13/8/84 HUNTLEY MINE

An arc occurred on a shuttle car cable and at the same time a car driver received a burn from electrical discharge when he handled a cable jammed in the cable reel compartment while the power was on to the cable.

16/8/84 APPIN MINE

A momentary flash occurred on a damaged continuous miner cable in the cut through outbye while the miner was cutting at the face.

24/8/84 SAXONVALE OPEN CUT MINE

Two 170 tonne trucks collided on a wet haulage road.

27/8/84 DRAYTON OPEN CUT MINE

A fire occurred on a rear dump truck due to an electrical fault.

27/8/84 AVON MINE

A continuous miner was buried in a pillar lift in the Wongawilli seam by a sudden roof fall.

30/8/84 LIDDELL UNDERGROUND MINE

The head of a continuous miner was buried by a fall of immediate roof strata when the first lift of the fender was holed.

4/9/84 NEWSTAN MINE

A foreman with a contracting firm received an electric shock and burns to 50% of his body when an engineering staff he was holding made contact with a 66KV overhead power line.

5/9/84 WARKWORTH OPEN CUT MINE

An electrician, on night shift, was driving a 4WD along a haul road when he lost control of the vehicle in wet and muddy conditions and drove /slid into a drainage channel which had been eroded along the side of the road.

6/9/84 WEST WALLSEND NO.2 MINE

Arcing occurred in a hazardous zone on the supply cable to an "hours run meter" on a continuous miner. A steel plate had worked loose and chafed the cable.

11/9/84 CHAIN VALLEY MINE

A 1000V continuous miner trailing cable was damaged causing the earth leakage protection equipment to operate. When the power was restored arcing occurred burning the leg of the continuous miner driver.

11/9/84 COAL CLIFF MINE

An arc occurred on a damaged shuttle car cable as the car was being shunted.

12/9/84 TAHMOOR MINE

An electrical arc occurred on a damaged cable in the cable reel compartment of a shuttle car.

13/9/84 MACQUARIE MINE

A flash occurred in a hazardous zone when an isolating switch short circuited between phases on the incoming terminals.

13/9/84 MUNMORAH MINE

A continuous miner driver was reported to have received an electrical shock while operating a continuous miner. A shuttle car hit the rear end of the continuous miner, jamming the 1000V continuous miner trailing cable against the frame of the machine.

19/9/84 NEWVALE MINE

Power was restored to a damaged lead to a nipper motor resulting in sparking.

19/9/84 LIDDELL STATE UNDERGROUND MINE

A continuous miner was buried by an intersection fall while commencing a brakeway.

20/9/84 WEST CLIFF MINE

An arc occurred on conductors of a lighting circuit when power was applied to the circuit while the flameproof enclosures were open.

20/9/84 LAMBTON MINE

A dry type 11KV/1KV transformer sustained a violent internal explosion when an electrician restored the power to the primary, high tension side after making an earth leakage test.

Results of tests indicate that an explosive mixture of xylene and air within the transformer core tank was ignited by electrical arcing around the transformer core at the moment it was switched on and energised.

21/9/84 LIDDELL UNDERGROUND MINE

A small fire occurred on the rear drive drum of a drivehead when the drive drum moved on its shaft and rubbed on the drive head housing.

24/9/84 AWABA MINE

A continuous miner was extracting a pillar of coal when a fall of roof occurred with little warning.

25/9/84 DURHAM NORTH OPEN CUT MINE

Sparks from an oxy-acetylene torch started a fire to the seat and lining of a 3 tonne truck.

26/9/84 COAL CLIFF MINE

An arc occurred in a hazardous zone when an electrician used a screw driver to clean out a plug receptacle on a load centre.

26/9/85 NEWVALE MINE

A fire was caused when an oil filter rubbed against a drive shaft on a continuous miner.

27/9/84 LEMINGTON OPEN CUT MINE

A water cart rolled off the edge of a coal bench and came to rest in a spoil heap some three metres below. The driver was attempting to water the area while reversing.

3/10/84 FOYBROOK NO. 1 UNDERGROUND MINE

A cable reel on a shuttle car jammed and the cable pulled in halves causing a small fire.

3/10/84 _ ELLALONG MINE

A frictional ignition occurred on the rear end of a diesel powered scoop tram when a universal joint failed causing the shaft to bear against the support housing.

4/10/84 _ TAHMOOR MINE

A fire occurred when the rubber hose used on the discharge of a compressor overheated and burst allowing the discharge of burning particles.

9/10/84 _ CORRIMAL MINE

A fire occurred about a brake solenoid coil on a belt loop take-up.

11/10/84 _ NEWDELL PREPARATION PLANT OPEN CUT MINE

A highway truck fell over on its side when a load of coal and clay caused the tray to become unstable.

15/10/84 _ COAL CLIFF MINE

Arcing occurred on a shuttle car cable when the car ran over its cable while travelling to the boot end. The cable reel drive chain was found to be off its sprocket.

15/10/84 _ TAHMOOR MINE

Arcing occurred when a shuttle car cable pulled apart in service. The cable had become jammed between the sheave roller and the mounting plate.

16/10/84 _ TAHMOOR MINE

Arcing occurred about a section of shuttle car cable lying in water.

17/10/84 _ WARKWORTH OPEN CUT

A scraper dumping partings at a dragline face tipped over on its side.

17/10/84 _ HOWICK/FDYBROOK OPEN CUT MINE

A 4WD vehicle overturned when the driver lost control along a haulage road during the afternoon shift.

18/10/84 WEST CLIFF MINE

A fire occurred on a disc brake of a chock transporter when foreign material in the hydraulic circuit blocked a vent hole and prevented complete release of the brakes.

19/10/84 METROPOLITAN MINE

Arcing occurred on a shuttle car cable which was run over by its own car while travelling to the boot end.

23/10/84 CHARBON MINE

Arcing occurred on a shuttle car cable when the cable jammed and was run over by the car.

28/10/84 LEMINGTON OPEN CUT MINE

A fire completely destroyed an hydraulic overburden drill. Fire damage was so extensive as to render the cause of the fire inconclusive.

29/10/84 BULLI MINE

A continuous miner was buried in the first lift off a pillar split during removal of old pillars.

30/10/84 MOUNT THORLEY CHPPCSM OPEN CUT MINE

A 20 ton crane was being used to lift two electrical cabinets using nylon webbing slings. Two feet off the ground, one sling broke, allowing the cabinets to fall to the ground.

30/10/84 HUNTLEY MINE

A fire occurred within a conveyor belt starter panel due to a short circuit on a 415/32 volt lighting transformer.

30/10/84 BAYSWATER NO. 2 OPEN CUT MINE

A moving overburden drill slumped into a void formed when a rock fell out of the top section of a drill bench.

30/10/84 DRAYTON OPEN CUT MINE

Spontaneous combustion of a stockpile of coal occurred when it was retained for a period longer than initially planned.

31/10/84 HUNTER VALLEY NO. 1 OPEN CUT MINE

A small fire occurred on a rear dump truck due to dragging brakes.

2/11/84 FOYBROOK NO. 1 UNDERGROUND MINE

Self heating was discovered in 10 North goaf area. The heating was the result of a seal failing in the area.

7/11/84 HUNTER VALLEY NO. 1 OPEN CUT MINE

During darkness a rear dump truck collided with and crushed, a broken down, portable lighting set. Heavy rain and poor visibility contributed to the occurrence.

8/11/84 TAHMOOR MINE

An arc occurred on a shuttle car cable when the cable was pulled in two. The shuttle car had been running to the boot with its cable on a backreeling shoe. As the car moved toward the face and passed the anchor point the cable did not release from the shoe. This resulted in the cable being tensioned at its point of contact with the edge of the shoe so that it broke.

8/11/84 CLARENCE MINE

A continuous miner was buried in a fall during the third lift off a pillar split.

There was a major downthrow fault in the vicinity and it was considered that the area became unstable because pillar extraction had been carried out too close to the fault plane.

9/11/84 WAMBO UNDERGROUND MINE

A roof fall buried a continuous miner in No. 3 Section during a period when the men had been withdrawn from the mine.

9/11/84 BAAL BONE MINE

A continuous miner was buried under a fall while extracting the second last lift off a pillar split.

12/11/84 GUNNEDAH UNDERGROUND MINE

A small fire occurred around and under the thrusher brake assembly on a trunk drivehead. A lid jamming the thruster brake in the "off" position fell out causing the application of the brake.

13/11/84 NATTAI NORTH MINE

An arc occurred on a shuttle car cable when the cable was run over by the car.

14/11/84 LEMINGTON OPEN CUT MINE

Fire occurred on a Drill Rig. An hydraulic hose attached to the drill hand in the mast structure burst, spraying hydraulic oil over the exhaust system of the diesel engine, resulting in a flash fire.

20/11/84 HUNTER VALLEY NO. 1 MINE

A water truck was parked on the hardstand area outside workshop. The truck rolled backwards down a slight incline into two Toyota landcruisers, causing substantial damage to the Toyotas.

20/11/84 MACQUARIE MINE

Arcing occurred when a continuous miner ran over its own trailing cable while tramming back from the face. Due to wet and slippery conditions the trailing cable had slipped under the miner.

21/11/84 WAMBO OPEN CUT MINE

A water truck was damaged when it was struck by a raised blade of a D10 dozer. The D10 driver's visibility was limited because he was travelling with the blade raised, and was travelling around a stationary truck.

22/11/84 CLARENCE MINE

Arcing occurred on a shuttle car and miner cable both of which had apparently superficial surface damage to their outer sheaths. The shuttle car cable sustained an intermittent fault while it was moved and this induced higher than normal voltage across the miner cable insulation.

23/11/84 NEWDELL OPEN CUT MINE

The cantilever jib section of the No. 2 raw coal conveyor failed at a join with the main frame, resulting in the section collapsing 4 metres into a partially filled coal storage bin.

26/11/85 LEMINGTON NO. 1 UNDERGROUND MINE

A continuous miner was buried while forming a breakaway to the left of a single roadway. The fall was sudden, with very little pre-warning.

27/11/84 DURHAM NORTH OPEN CUT MINE

A small fire occurred on a loader. The fire was caused by poor maintenance and housekeeping.

27/11/84 DRAYTON OPEN CUT MINE

A drill rig used for coal drilling rolled over onto its side when drilling was attempted on a cross-slope.

27/11/84 PRESTON EXTENDED UNDERGROUND MINE

A continuous miner was buried while taking the second lift off a fender. The roof fell with little warning. The fall was extensive and extended back to the intersection area. Considerable additional support had been erected. Factors which contributed to the fall were adverse physical conditions, presence of a fault along the outbye rib of the pillar split and slow extraction rate.

30/11/84 NATTAI NORTH MINE

A continuous miner was buried under a fall during removal of the last fender to complete extraction of a row of pillars. The extraction involved removal of rows of old standing pillars between two goaves. The miner had been withdrawn because of weighting during the pocketing of the last pillar remnant. When the goaf quietened the miner was moved back in to complete the pocketing but the goaf fell and rode over the breakers.

4/12/84 NEWVALE NO. 2 MINE

A frictional ignition of flammable gas occurred when minor picks struck a piece of conglomerate roof rock.

4/12/84 TAHMOOR MINE

An arc occurred on a shuttle car cable which was pulled apart at a joint when the cable became jammed under the car.

5/12/84 CLARENCE MINE

Lubricant caught fire on a plummer block bearing on a conveyor belt roller due to misalignment.

6/12/84 TAHMOOR MINE

An outburst of 100 tonnes of coal occurred off a shear zone during development by continuous miner.

9/12/84 MOUNT THORLEY OPEN CUT

A self heating was found in a run of mine stockpile.

12/12/84 PIKE'S GULLY UNDERGROUND MINE

An electric flash occurred near the left hand ripper motor of a continuous miner when the ripper motors were started. The ripper motor cable had sustained mechanical damage consistent with crushing.

12/12/84 OAKDALE MINE

A continuous miner was buried under a fall during lifting off from an 80m long split.

During formation of the split a holing had been formed to the goaf to assist ventilation and fall occurred on the first lift outbye the holing.

13/12/84 CLARENCE MINE

A continuous miner was buried during the second lift off a pillar fender. The fall came off a cutter which was known to be present and which ran across the start of the lift.

13/12/84 BULLI MINE

A continuous miner was buried under a fall in the second lift off a split in the Wongawilli type extraction of the Bulli seam.

13/12/84 DRAYTON OPEN CUT MINE

A rear dump truck ran down an incline on a haulage road when the driver left the cabin without applying the brake.

14/12/84 NATTAI NORTH MINE

An arc occurred on a miner cable when the power was restored following a trip.

The miner had been used to brush the floor and had just been trammed back to the face when it tripped out. It appeared that the shuttle car had damaged the miner cable which had fallen into the shuttle car tyre tracks.

19/12/84 SAXONVALE OPEN CUT MINE

Several blocks of strata totalling approximately 87,000 cubic metres in the low wall, on the SE corner of the mine, began sliding on clay bands following a period of heavy rain.

15/1/85 NEWVALE MINE

Sparking occurred between the cable entry gland of a continuous miner headlight and the armouring of a hydraulic hose.

16/1/85 MUNMORAH MINE

A continuous miner was buried for twenty six hours in a fall of roof while flitting out of the last fender.

17/1/85 GUNNEDAH UNDERGROUND MINE

A self heating redeveloped in a sealed goaf area close to the outcrop when cracks from prolonged dry weather allowed air to enter the goaf area.

17/1/85 DRAYTON OPEN CUT MINE

A dozer, while traversing a pushed up heap of coal, rolled over into a sampling pit that had been excavated on a previous shift. The dozer rolled down the side of the pit and came to rest on its side.

18/1/85 COAL CLIFF MINE

Arcing occurred on a shuttle car cable when the cable was damaged by a sharp edge on a back reeling shoe.

22/1/85 TAHMOOR MINE

An arc occurred on a shuttle car cable when slack loops developed in the cable reel compartment and a loop protruded through the base of the compartment and was cut on sharp edges of stone on the wheeling road.

22/1/85 NEWSTAN MINE

A shuttle car ran over and damaged its own cable.

23/1/85 GUNNEDAH UNDERGROUND MINE

A small fire occurred on a centrifugal water pump. Lack of bearing lubrication caused the bearing to heat up, resulting in a fire in the driving end bearing seal.

25/1/85 WARKWORTH OPEN CUT MINE

A self heating occurred in a raw coal stockpile.

25/1/85 HUNTER VALLEY NO. 1 OPEN CUT MINE

A scraper ran into the rear of a tray top vehicle causing sustained damage to the vehicle.

25/1/85 COAL CLIFF MINE

An arc occurred on a shuttle car cable which was pulled in two. The shuttle car travelling to the face snagged the loose cable on the gate end box side of the anchor.

25/1/85 SOUTH BULLI MINE

An arc occurred on a shuttle car cable which was pulled in two. The occurrence resulted when a loop of cable fell over the side of the cable reel drum and became jammed between the check plate and the drive sprocket.

26/1/85 WALLSEND BOREHOLE OPEN CUT MINE

A loading machine tyre exploded due to a weakness in a side wall.

28/1/85 CORDEAUX MINE

An arc occurred on a shuttle car cable which was pulled in two. The cable became jammed when it got tangled in the cable compartment access door.

31/1/85 WARKWORTH OPEN CUT MINE

A fire occurred in the lower tub section of a mining shovel when grease lines were ignited in the 6,600 volt slip ring compartment. The grease lines were burnt through and parts dropped into the lower tub section, igniting oil lines, air lines and accumulated grease.

31/1/85 TAHMOOR MINE

An arc occurred on part of a miner cable stacked in the rib side. Investigation indicated that the arc occurred at a part of the cable which had been cut on some previous occasion.

1/2/85 HUNTER VALLEY NO. 1 OPEN CUT MINE

A tray top overturned on a haul road ramp when the driver attempted a "U" turn in half the road width on a downhill slope.

1/2/85 DRAYTON OPEN CUT MINE

A 120 tonne rear dump truck caught fire in the engine compartment when oil from the transmission filter sprayed onto the front turbo.

1/2/85 KEMIRA MINE

A continuous miner was buried at the face of a sub split being driven in the wongawilli seam prior to pillar extraction in a new strip of coal in an area where partial extraction had been adopted to protect the overlying natural gas pipeline.

4/2/85 STOCKTON BOREHOLE MINE

A shuttle car jammed a continuous miner trailing cable causing short circuit and arcing.

5/2/85 TAHMOOR MINE

An arc occurred on a shuttle car in a hazardous zone. The arcing occurred in an area where the cable had been damaged.

6/2/85 FERNBROOK MINE

A fire occurred in fine spillage which had accumulated around a brake unit on an outbye belt drivehead.

6/2/85 NEWSTAN MINE

A continuous miner had just completed the first split of a coal pillar. Without warning, a fall of about 300 mm of coal occurred.

8/2/85 SOUTH BULLI MINE

An outburst of approximately 50 tonnes of coal associated with a quantity of methane occurred while a continuous miner was cutting at the face of a heading in a two heading development.

11/2/85 SAXONVALE OPEN CUT MINE

A small fire occurred in the engine compartment of a loader when a 500mm length of rubber tubing came into contact with the exhaust pipe and ignited.

12/2/85 WEST CLIFF MINE

An arc occurred on a shuttle car cable which jammed between its car and a prop at an intersection.

13/2/85 CLARENCE MINE

An arc occurred on a miner cable approximately 4.5 metres back from the miner. Investigation indicated that the arc occurred at a point where a 20mm cut had occurred in the sheath.

15/2/85 CLARENCE MINE

An arc occurred on a shuttle car cable which was pulled in two at a joint.

15/2/85 WARKWORTH OPEN CUT MINE

A self heating occurred in a raw coal stockpile.

18/2/85 COAL CLIFF MINE

An arc occurred on a shuttle car cable which was broken in two. The shuttle car was travelling away from the boot and it appeared that the cable became jammed in a damaged part of the spill plate of the body of the machine.

18/2/85 NEWVALE MINE

A continuous miner trailing cable was squeezed by a shuttle car causing short circuit and arcing.

18/2/85 WARKWORTH OPEN CUT

A dragline spoil heap failed due to excessive floor heave.

19/2/85 COAL CLIFF MINE

An arc occurred on a shuttle car cable which was pulled in two as the car back reeled from the boot. Investigation indicated that the cable reel had failed to reel in the cable.

19/2/85 JOHN DARLING MINE

A fire occurred on a shuttle car brake when the brake seized in the 'on' position due to the ingress of dirt.

21/2/85 BAYSWATER NO. 2 OPEN CUT MINE

A self heating was discovered in a coal seam in the high wall.

25/2/85 SAXONVALE OPEN CUT MINE

A tray tap vehicle overturned due to hand braking and turning.

27/2/85 RAVENSWORTH NO. 2 OPEN CUT MINE

A scraper was operating at night time, without lights, collided with guy lines securing a power pole, and brought down overhead power lines onto the pilot circuit.

27/2/85 RAVENSWORTH NO. 2 OPEN CUT MINE

A fire occurred in the engine bay of a truck when an apprentice attempted to re-fit a fuel line on the pressure side of the fuel pump with the engine running.

27/2/85 APPIN MINE

An arc occurred on the longwall shearer trailing cable when part of the cable screening came in contact with a power conductor.

1/3/85 WARKWORTH OPEN CUT MINE

A fire occurred on a conveyor belt in a coal preparation plant.

5/3/85 HOWICK/FOYBROOK OPEN CUT MINE

A bull-dozer overturned while preparing a face for a shovel.

5/3/85 CORDEAUX MINE

An arc occurred when a shuttle car cable was jammed against the rib as the car was shunted into a position where it would be out of the way.

6/3/85 WEST CLIFF MINE

An arc occurred when a shuttle car cable was pulled in two.

Lubricating hoses of excessive length became entangled in the indexing mechanism in the cable reel.

6/3/85 SAXONVALE OPEN CUT MINE

Cable insulation overheated and caught fire on a rear dump truck.

7/8/85 WARKWORTH OPEN CUT MINE

A low wall failed because the angle of repose was too steep.

7/3/85 MOUNT THORLEY OPEN CUT MINE

A heating was discovered in a coal stockpile adjacent to the crusher.

7/3/85 CLARENCE MINE

An arc occurred on a continuous miner cable at the position where the cable had previously suffered a cut in the sheath.

7/3/85 DAKDALE MINE

A fire occurred inside an isolator panel on a 150 Kw pump motor when power was restored after testing.

An explosion associated with the fire occurred inside the panel and the switch was severely damaged. The isolator had been mounted on top of the pump motor and it was considered that vibration had caused physical damage to the switch.

7/3/85 HUNTLEY MINE

A fire occurred on a disc brake which formed part of the service braking system on a diesel locomotive.

The locomotive had been driven under load down a long decline under retardation and then up a steep drift when the driver noticed flame at the disc brake area.

It was considered that the exhaust brake on the locomotive should have been used on the decline to reduce use of the service brake. It was also found that one of the three service brake discs was coated with spilled oil and that the service brake controller did not return to the 'off' position so that the brake may have been partly applied during the uphill journey.

11/3/85 DRAYTON OPEN CUT MINE

Three areas of self heating of coal and carbonaceous material developed in the mine.

11/3/85 HUNTER VALLEY NO. 1 OPEN CUT MINE

A fire occurred in the cabin of a rear dump truck, when an electrical lead from the machine's 24 volt battery short circuited causing the wiring harness to burn.

12/3/85 HOWICK/FOYBROOK OPEN CUT MINE

The driver of a 23 man personnel carrier overturned the vehicle when he attempted to drive over a short cut with a steep drop.

14/3/85 TAHMOOR MINE

An outburst of approximately 10 tonnes of coal with associated carbon dioxide and methane occurred from the face of a development heading during mining.

The outburst was not associated with any recognizable geologic abnormality nor was it associated with any previously delineated outburst prone zone.

14/3/85 ULAN MINE

A self heating occurred in an old goaf open to return ventilation. The goaf was sealed and became inert within twenty four hours.

15/3/85 WALLSEND BOREHOLE OPEN CUT MINE

A fire occurred on the turbo charger of a wheel loader engine when an injector line fractured and allowed fuel under pressure to spray onto hot surfaces of the turbo charger.

17/3/85 BULLI MINE

A fire occurred at start-up on a brake unit fitted to a decline belt.

Investigation showed that a poorly made connection in the starter circuitry had come loose and the belt drive motor continued to drive through the brakes when the brake thrusters did not lift the brakes and the safety relay failed to operate.

18/3/85 MOUNT THORLEY OPEN CUT MINE

A self heating occurred in the north dump area. The dump had some inferior coal stocked on it with the intention of burying it with overburden.

18/3/85 HUNTER VALLEY NO. 1 MINE

A fire occurred on a hydraulic shovel. Hydraulic oil was sprayed onto a hot exhaust and turbo area thus igniting the fire.

19/3/85 HUNTER VALLEY NO. 1 OPEN CUT MINE

An outbreak of fire occurred on a coal hauler. The fire was caused by a build-up of coal dust in an area to the near rear side of the engine.

20/3/85 NEWSTAN MINE

The cutter motor supply cable on a Miner was damaged when a roof bolt caught in the turret section of the machine causing short circuit and arcing.

20/3/85 HUNTER VALLEY NO. 1 OPEN CUT MINE

A fire occurred on a hydraulic shovel. Hydraulic oil, under pressure was sprayed onto the engine exhaust, igniting the oil.

20/3/85 APPIN MINE

An arc occurred on a shuttle car cable which was run over by the car it was servicing.

It is considered that the cable came out of the back reeling shoe and fell under the wheels of the car. The power tripped on earth continuity protection.

21/3/85 MOUNT THORLEY OPEN CUT MINE

A self heating developed in a crushed coal dump.

25/3/85 COAL CLIFF

A continuous miner was buried for two shifts when a fall of roof occurred on the head of the miner as it holed into an old roadway at the edge of a goaf.

The holing into the goaf was narrow and the developing roadway was well supported. The difficulty in recovering the miner when the fall occurred arose because the fallen roof jammed behind the head of the miner and across the narrow opening.

28/3/85 MOUNT THORLEY OPEN CUT MINE

A self heating occurred in fired coal at the southern end of the open cut.

28/3/85 BLUE MOUNTAIN MINE

An arc occurred on a miner cable when a phase to earth fault occurred at a point where the cable was run over by a shuttle car. The car had run out of its normal wheeling track.

30/4/85 TAHMOOR MINE

A continuous miner was buried in the first lift off a split in a pillar.

The contributing factors appear to have been that the extraction involved windowing a fender on the left and lifting the fender on the right off a split which had been standing for six days over a holiday period.

7/5/85 WAMBO UNDERGROUND MINE

A continuous miner was buried while backing out of a lift that had been completed. A stone fell, isolating the emergency stop and before it could be re-set, the miner was buried under a large roof fall.

7/5/85 LEMINGTON NO. 2 UNDERGROUND MINE

A flash occurred on damaged 1000V cable when the power was reapplied.

8/5/85 SWAMP CREEK OPEN CUT MINE

A fire occurred on a front end loader when a loose clamp bolt rubbed through a fuel injection line, allowing diesel to spray and ignite on part of the engine.

9/5/85 MOUNT THORLEY OPEN CUT MINE

A dragline operator was returning to his place of work after a meeting. He did not realise the water cart had been along the road. He lost control and overturned his vehicle.

10/5/85 HUNTER VALLEY NO. 1 OPEN CUT

A light vehicle rolled over on a main haul road. The accident was caused by driver error. The driver was not authorised to be on the road entering the mine.

10/5/85 PIKES GULLY UNDERGROUND MINE

A continuous continuous miner was buried at the face in a development section. The fall appears to be the result of substantial water in the roof strata which was faulted and subjected to subsidence from working in a lower seam.

10/5/85 TAHMOOR MINE

An arc occurred across a join between a reticulation cable plug and the cable when power was restored after an earth fault.

3/4/85 COAL CLIFF MINE

A continuous miner was buried in the first lift off a pillar split. The roof was known to have a series of close cutters running parallel to the lift and the support density had been increased.

7/4/85 RAVENSWORTH NO. 2 OPEN CUT MINE

A fire occurred in a 4 WD vehicle when hot metal cuttings from the dragline fell into the cabin.

9/4/85 MOUNT THORLEY OPEN CUT MINE

A heating occurred in crushed ROM coal.

10/4/85 MOUNT THORLEY OPEN CUT MINE

A self heating occurred in a crushed coal stockpile.

10/4/85 BERRIMA MINE

A fire occurred on the disc brake of a transport. The vehicle was being driven by a relatively inexperienced driver who apparently applied the brakes too often.

15/4/85 COAL CLIFF MINE

An arc occurred on a shuttle car cable when the cable was run over by the car to which it was attached. It was considered that the primary cause of the occurrence was that the archimedes spiral was bent and out of line with the cable reeling position on the drum.

19/4/85 TAHMOOR MINE

An arc occurred on a shuttle car cable at a section of cable which had been cut in use.

23/4/85 TAHMOOR MINE

A continuous miner was buried in the last lift off a split in a sequence of extraction involving a split across the middle pillar of a three pillar retreat panel.

29/4/85 MOUNT THORLEY OPEN CUT MINE

A self heating occurred in a section of contaminated coal that had been left unworked due to an industrial stoppage at the mine.

29/3/85 COAL CLIFF MINE

A fire occurred about the brake on a conveyor belt.

Investigation indicated that the brake mounting was loose which allowed the brake drum to take up an eccentric path resulting in drag on the brake pads.

1/4/85 APPIN MINE

An arc occurred when a shuttle car cable pulled in two.

Investigation showed that the archimedes and hair pin feed were out of sequence with the lay of cable on the drum. This placed excessive strain on the cable which parted.

1/4/85 CHAIN VALLEY MINE

A continuous miner driver received a flash and burns to the face when a continuous miner trailing cable flashed out due to it being squeezed between the rear of the continuous miner and a shuttle car.

1/4/85 LIDDELL UNDERGROUND MINE

A self heating developed when a plaster board stopping was displaced by a roof fall.

1/4/85 LIDDELL STATE UNDERGROUND MINE

A small fire occurred on the left hand traction brake assembly of a continuous miner, when a leading hand electrician attempted to move the machine away from the face area.

2/4/85 DURHAM NORTH OPEN CUT MINE

A coal truck backed into a 4WD parked behind the truck.

3/4/85 APPIN MINE

An arc occurred on a shuttle car cable when the car ran over its own cable while travelling toward the anchor.

Investigation indicated a failure of the hydraulic system which prevented proper reeling pressures from pulling the cable onto the reel.

The earth fault was found to be due to a broken guide pin in the traction contractor and could not be shown by cable testing.

10/5/85 SOUTH BULLI MINE

A minor outburst of approximately 5 tonnes of coal occurred in a development heading at a point approximately 12m inbye of where a larger outburst had occurred.

11/5/85 GUNNEDAH UNDERGROUND MINE

A fire occurred on the drive end bearing of the ripper motor of a continuous miner.

15/5/85 TAHMOOR MINE

An arc occurred when a shuttle car cable became jammed under the wheels while back spooling and the cable was pulled in two.

16/5/85 WAMBO UNDERGROUND MINE

A continuous miner was buried when premature flushing of the goaf occurred.

17/5/85 TAHMOOR MINE

A shuttle car cable became jammed on the reel when it was trapped under three loops of cable and it then separated at a joint causing an arc before the protection tripped.

20/5/85 LEMINGTON NO. 2 UNDERGROUND MINE

A continuous miner was buried by a sudden roof fall while taking the last lift inbye of a fender.

20/5/85 SOUTH BULLI MINE

A fire occurred about insulation on a high tension cable when power was restored to the cable after it had been damaged by a derailed mancar.

20/5/85 ABERDARE NORTH MINE

A continuous miner was reburied by a large second fall after a small fall had trapped the miner while it was recovering loose bottom coal.

21/5/85 RAVENSWORTH NO. 2 OPEN CUT

A collision occurred between a sedan car and a landcruiser.

21/5/85 HUNTER VALLEY NO. 1 MINE

A night shift overburden drill crew drove onto and continued drilling inside an area marked off as a sleeping shot. Both operators were aware of the sleeping shot prior to commencing work and both were aware when they entered the marked off area.

24/5/85 BULLI MINE

A fire occurred on the insulation of a cable from the battery to the chassis on a battery locomotive.

Investigation indicated that damage had occurred to the cable when the cable plug was forced into the receptacle. The damage was in the form of a partial open circuit which overheated when the locomotive was under heavy load.

24/5/85 CLARENCE MINE

An arc occurred on a shuttle car cable when power was restored after an earth fault trip. The arc occurred at a place where damage had occurred to the insulation between one phase and earth. Subsequent investigation showed a small pinhole not detectable by normal visual inspection.

25/5/85 LEMINGTON OPEN CUT MINE

Two 170 tonne rear dump trucks were waiting to be loaded by a shovel, one facing towards the shovel, the other, away from the shovel. A third truck was being loaded. Once the truck under the shovel was loaded and moving away, the two parked trucks moved towards the loading position and collided.

26/5/85 BAYSWATER NO. 2 OPEN CUT MINE

A 4WD vehicle ran out of control and overturned when a tie rod end failed.

30/5/85 KEMIRA MINE

A continuous miner was buried shortly after holing a sub split to an existing goaf in the Wongawilli seam.

30/5/85 JOHN DARLING MINE

A flash and a small fire occurred when a shuttle car trailing cable was jammed against the coal rib.

31/5/85 MOUNT THORLEY OPEN CUT MINE

Self heating occurred in broken coal remaining in the low wall area of the pit. The coal had been broken some 9 months earlier.

31/5/85 WEST CLIFF MINE

A fire occurred on the insulation around the terminals of a circuit breaker on a diesel powered mobile alternator or "power-tram" being used to drive a heading machine out of the mine.

Investigation showed that one set of circuit breaker contacts had over-heated and this had caused ignition of insulation on the incoming cabling.

1/6/85 KEMIRA MINE

A continuous miner was buried at the face of a sub split being driven in the Wongawilli seam prior to pillar extraction in a new strip of coal in an area where partial extraction had been adopted to protect the overlying natural gas pipeline.

4/6/85 WARKWORTH OPEN CUT MINE

A small fire occurred when crankcase oil entered a starter motor solenoid on a diesel driven overburden drill.

5/6/85 APPIN MINE

A fire occurred above the evasee of the main fan when a lightning strike ignited methane from the drainage plant.

The fire burnt for thirty minutes and was extinguished by a gust of wind.

12/6/85 TAHMOOR MINE

An arc occurred about a damaged shuttle car cable which had power restored to it after an earth fault.

12/6/85 DRAYTON OPEN CUT MINE

A fire occurred on a hydraulic shovel. A broken hydraulic hose caused hydraulic fluid, under pressure, to be sprayed on to the engine housing and turbo area.

12/6/85 SWAMP CREEK OPEN CUT MINE

A small fire occurred on a hydraulic shovel. A steel fitting on a hydraulic hose fractured allowing oil under pressure to spray onto the engine housing area.

13/6/85 SWAMP CREEK OPEN CUT MINE

A fire occurred in the resistor bank cubicle of No. 2 ring mill crusher at the control room of the coal crunching plant.

14/6/85 NEWVALE NO. 2 MINE

An overwind and detachment of an empty coal haulage skip in the headframe occurred when a loaded skip was driven in the wrong direction after a change over from automatic to manual supervisory control.

The false wind was not apparent to the driver until the wind was almost complete, by which time the winder brakes were unable to stop the wind before the detaching hook was operated.

18/6/85 SWAMP CREEK OPEN CUT MINE

A fully laden water cart being used to wash down a drill rig went backwards over the high wall. The truck was idling at 1,500 rpm and was facing forward on a downhill slope of 1 in 50 away from the highwall when reverse gear was apparently engaged and the truck drove backwards over the high wall.

19/6/85 CHAIN VALLEY MINE

A small fire occurred on the brake assembly of an electric shuttle car because the return springs on the brake master cylinder actuating linkage were missing.

20/6/85 CORRIMAL MINE

An overwind occurred on the bulk winder, also used as a second means of egress when the skip overwound during a test run after maintenance on a multi rope Koepe. The overspeed protection failed to detect the overspeed condition and the skip entered the docking zone at full speed and became jammed in the arrestors.

The protection circuitry was found to have a short circuit which by-passed the protective relay contacts.

20/6/85 TAHMOOR MINE

An arc occurred on a shuttle car which was pulled in two after the cable became jammed in the cable reel compartment door.

Investigation indicated that loose cable was thrown as the car travelled toward the anchor at the boot and the cable then slipped into the gap in the door.

24/6/85 TAHMOOR MINE

An outburst of over 300 tonnes of coal and dyke material accompanied by large quantities of seam gas predominately carbon dioxide occurred while mining close to a dyke in a known outburst area.

In the outburst the miner driver was killed probably by asphyxiation.

26/6/85 COORANBONG MINE

A continuous miner was buried by a fall of roof strata. At the time of the fall, the miner had just driven the first split of a fender. The roof fell without warning and the machine was covered by about 4 metres of stone and coal.

27/6/85 SWAMP CREEK OPEN CUT MINE

A self heating occurred on a truck dump site in an old part of the mine. The heating was caused by small pieces of coal distributed through the dump.

27/6/85 MELVILLE OPEN CUT MINE

A plant operator turned a scrapper over on a coal stockpile while discharging coal.

30/6/85 BAYSWATER NO. 2 OPEN CUT MINE

A mining official rolled a 4WD vehicle over a 1.5m high embankment while reversing along a dam wall.

APPENDIX B

SIGNIFICANT DEVELOPMENTS

Angus Place

Longwall 8 was completed without incident and Longwall 9 was commenced. Planning for Longwall 11 to 16 has been turned 90 degrees because of surface constraints.

Appin

A large intrusion curtailed development in the north western longwall area. Future longwall development will be in the south east and south west areas.

Longwall 10 was completed in May, 1985. Longwall 11 commenced in June, 1985.

Two extra methane drainage vacuum pumps were commissioned and initial work for electricity generation from drained gas commenced.

Ashford Open-Cut

Production recommenced in Cut No. 10, to produce 80,000 tonnes per annum for the local power station.

Awaba State

Development in the southern part of the holding was recommenced. The area had been previously discontinued and allowed to fill with water.

Baal Bone

Development work for the first longwall operation began. Work commenced to erect a washery and install a rail loop.

Bulli

Development has continued under the stored waters of the Cataract Reservoir and in the marginal zones.

The 2 South West area was mined by the partial extraction system and recently 3 South West was commenced.

The No. 4 shaft was commenced in February, 1985.

Chain Valley

An automatic winch was commissioned in the belt conveyor drift.

Clarence

Three drifts were completed through a 22 metre fault to gain access to the eastern part of the holding. The mine was the highest producing underground coal mine in Australia during the year.

Coal Cliff

The holdings of Coal Cliff and Darkes Forest were amalgamated.

Corrimal

The No. 2 longwall operation was completed and No. 3 operation commenced. High gas make on one occasion stopped production for four days.

Ellalong

Longwall 2 commenced production in January, 1985. A new in 'seam, single entry' continuous miner was assembled for use at the mine.

Fernbrook

An upcast shaft has been established by raise bore method and a fan installed.

Work progressed for the first longwall operation.

Gunnedah

A new upcast shaft was established by raise bore method and the main fan re-sited.

Invincible

Longwall 1 commenced production in April, 1985.

John Darling

Production was discontinued in the Victoria Tunnel seam.

Longwall 4 commenced production in the Borehole seam in April, 1985.

Lemington Open-Cut

Construction commenced to erect a Marion 204 shovel, the third of its kind in the world.

Liddell

Work began in preparation for the first longwall operation.

Macquarie

Name changed to Pacific.

Metropolitan

A new Koepe friction winder was installed in the ventilation shaft. This winder is for 2nd egress.

Melville Open-Cut

Commenced operations.

Mt. Thorley

A new coal preparation plant was completed.

Muswellbrook No. 2

Development drifts to Flemming seam from St. Helier's seam were commenced.

Nattai North

Part of the lease inbye a major fault was transferred to Oakdale mine.

Newvale

Development of the Fassifern seam continued.

Newstan

Longwall 1 commenced production in the Fassifern seam in August, 1984 and extraction was completed at Easter, 1985.

Longwall 2 began 4 weeks after longwall 1 ceased.

A 3 metre diameter 100 metre deep raise bore between the Young Wallsend and Borehole seam was completed in less than 3 days.

Three new drifts were being driven. One, a cross measure drift from the Young Wallsend to the Borehole seam and two from the surface to the Borehole seam. Winders were installed for the surface drift.

Pacific

Longwall 3 commenced during the period.

In-seam methane drainage equipment was commissioned, discharging methane into a return airway.

Pelton

Production recommenced on 11th June, 1985 after 18 months discontinuance.

Pikes Gully

Pillar commenced.

South Bulli

Outbursts occurred in the vicinity of the main Bulli fault.

Stockton Borehole

Longwall No. 1 was commenced in the Borehole seam.

Ulan Open-Cut

A third production shift commenced, giving the mine the production capability of 3.5 million tonnes of washed coal per annum.

Vickery

Coal production commenced on a trial basis.

Warkworth

The coal preparation plant has been extended to facilitate the washing of both steaming coal and coking coal.

West Cliff

Longwall mining continued during the period with the commencement of the No. 4 operation during october, 1984.

A 15 M.W. STAL LAVAL gas turbine alternator commenced operation, utilising methane drained from the colliery workings. Excess power generated is fed into the State grid.

APPENDIX C - STATISTICS

SERIOUS ACCIDENTS

Serious Injuries	1984/85
Falls of Roof	11
Falls of Face and/or Sides	7
Haulage Underground	9
Machinery Underground	14
Miscellaneous Underground	21
Haulage Surface	2
Machinery Surface	5
Electricity Surface	1
Miscellaneous Surface	18
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TOTAL	88

COLLIERY ACCIDENT STATISTICS
DEATH, INJURIES AND TOTAL EMPLOYEES

Year	Deaths	Injuries	Employees
1973/74	8	49	13.71
1974/75	12	53	15.00
1975/76	4	61	15.48
1976/77	11	60	15.91
1977/78	6	80	16.15
1978/79	12	71	16.74
1979/80	23	94	17.68
1980/81	17	99	19.87
1981/82	6	81	20.91
1982/83	8	71	19.60
1983/84	7	70	18.85
1984/85	8	88	18.87

UNDERGROUND ACCIDENT STATISTICS
DEATHS, INJURIES, OUTPUT (MILLION TONNES)

Year	Deaths	Injuries	Tonnes
1973/74	8	42	30.16
1974/75	8	45	32.96
1975/76	2	52	32.21
1976/77	9	43	37.01
1977/78	5	67	37.87
1978/79	9	56	38.21
1979/80	23	78	35.36
1980/81	16	73	43.26
1981/82	4	60	44.53
1982/83	7	50	46.27
1983/84	7	52	42.64
1984/85	6	62	42.05

SURFACE ACCIDENT STATISTICS
DEATHS, INJURIES

Year	Deaths	Injuries
1973/74	0	7
1974/75	4	8
1975/76	2	9
1976/77	2	17
1977/78	1	13
1978/79	3	15
1979/80	0	16
1980/81	1	26
1981/82	2	21
1982/83	1	21
1983/84	0	18
1984/85	2	26

COLLIERY ACCIDENT STATISTICS
DEATHS, INJURIES, OUTPUT (MILLION TONNES)

Year	Deaths	Injuries	Tonnes
1973/74	8	49	36.63
1974/75	12	53	42.31
1975/76	4	61	40.59
1976/77	11	60	46.78
1977/78	6	80	49.25
1978/79	12	71	50.52
1979/80	23	94	48.71
1980/81	17	99	58.29
1981/82	6	81	59.82
1982/83	8	71	67.46
1983/84	7	70	66.54
1984/85	8	88	70.08

COLLIERY ACCIDENT STATISTICS
DEATHS, INJURIES, PER THOUSAND EMPLOYEES

Year	Deaths	Injuries
1973/74	0.58	3.57
1974/75	0.80	3.53
1975/76	0.26	3.94
1976/77	0.69	3.77
1977/78	0.37	4.96
1978/79	0.72	4.24
1979/80	1.30	5.32
1980/81	0.86	4.98
1981/82	0.29	3.87
1982/83	0.41	3.62
1983/84	0.37	3.71
1984/85	0.42	4.66