

BUID: THE BRITISH UNIVERSITY IN DUBAI



MSc Project Management Dissertation

Project Productivity vs. Health & Safety

Stephen Wilson Student ID: 20050066

December 2008

DISSERTATION RELEASE FORM

Student Name	Student ID	Programme	Date
Stephen John Wilson	20050066	MSc Project Management	21 st April, 2009

Title

“Project Productivity vs. Health & Safety”

I warrant that the content of this dissertation is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that one copy of my dissertation will be deposited in the University Library for permanent retention.

I hereby agree that the material mentioned above for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make that copy available in digital format if appropriate.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my dissertation for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.

Signature



Stephen John Wilson, 21st April, 2009

Executive Summary

Health and Safety often has a negative perception among project managers who operate in high pressure environments where high levels of productivity are demanded from Management. The level of procedures that must be followed and the associated bureaucracy are often seen as having an impeding effect on completing work in the most optimum way possible.

Many studies have been conducted to further investigate this theory, with mixed results. Ideologies such as Total Safety Management (TSM) which borrows its theories heavily from Total Quality Management (TQM) have been shown to have a substantial positive effect on health and safety performance while boosting productivity as a by-product. Other approaches which have been the victim of poor implementation or poor management have been seen to further the theory that increased focus on safety management can impede a company's ability to operate at its most efficient with respect to productivity.

This study investigates two Companies operating in the Oil & Gas Industry in the UAE, over a five year period to assess the impact on productivity that their Health and Safety prioritised approach had on productivity. Company A adopted a proactive intensive Health and Safety Management approach immediately prior to the 5 year period while Company B revised their approach to a more in depth safety management outlook midway through the five year period.

Research was undertaken at both of these Companies by studying their productivity performance figures against their accident reporting statistics. Surveys and interviews with each Company's workforce were also conducted to measure the intangible factors from a behavioural and psychological approach towards the new safety management systems adopted by each company.

It was found in both cases that the improved safety management approaches had a great effect on the workforce both in improving accident reporting statistics matched by significant gains in productivity. The outcome of the surveys also supported this showing great increase in the perception of safety in the work place and increased levels of motivation and good feeling towards the management of each Company.

It can be seen that if implemented correctly and with the visible support of senior management, adopting a safety focused approach towards a productivity and projectised environment that increased safety on site can lead to improved productivity rather than the opposite.

Further research is required into this vast field for a better behavioural and psychological understanding of the benefits of positive proactive safety management. There is also a large scope for further research into finding the most optimal management and implementation methods of a new safety management system to provide a guide for companies looking to revise their safety management approach in the future.

Contents

1.0 Introduction.....	4
2.0 Background.....	6
3.0 Key Areas.....	8
4.0 Primary Aims.....	9
5.0 Literature Review.....	11
5.1 Total Safety Management.....	11
5.2 Positive Reinforcement.....	15
5.3 Participation.....	20
5.4 Productivity versus Safety.....	24
5.5 Research Methods & Analysis of Data.....	26
5.6 Influencing Factors on Safety Performance.....	29
5.8 Summary.....	34
6.0 Research Methodology.....	35
6.1 Common Methods.....	35
6.1.1 Research Methods.....	35
6.1.2 Data Analysis.....	42
6.2 Chosen Method.....	45
6.3 Strategies.....	49
6.4 Problems.....	53
7.0 Findings & Discussion.....	59
7.1 Company A.....	59
7.1.1 Background.....	59
7.1.2 Target Zero.....	60
7.1.3 Target Achieved?.....	65
7.1.4 The Future.....	74
7.2 Company B.....	80
7.2.1 Background.....	80
7.2.2 The Old Approach (Years 1-3).....	81
7.2.3 The New System (Years 4 & 5).....	88
8.0 Conclusions & Recommendation.....	94
8.1 Comparisons & Contrasts.....	94
8.2 Dispelling the Myths.....	99
8.3 Recommendations.....	103
8.4 Future Research.....	106
9.0 References.....	107
10.0 Bibliography.....	109

1.0 Introduction

Health & Safety is often perceived as a dirty word in the engineering industry, specifically in project based operations. The words health and safety imply needless bureaucracy and excessive procedures that must be followed before and during project execution. Project managers in general view the restrictions imposed by health and safety guidelines as a cause of delay in projects and providing a very restrictive environment in which to operate especially when deadlines are tight and quick decisions must be made and implemented in order to meet deadlines. Enforcing Health and Safety guidelines also affects productivity as employees fear the repercussions of not adhering to the strict guidelines during day to day operation.

A common example of this being employees stopping work when HSE inspectors are present so that they cannot be inspected and subsequently found to be breaching any guidelines. As a consequence of this, animosity often grows towards HSE employees who are viewed as 'whistle blowers' and are often ostracized by the general workforce and this has a negative effect on employee and company morale.

Safety Management itself is a wide ranging field that has great effect on the overall performance of a company, and yet, as the outcomes of a successful and productive safety system do not add direct and tangible value to a company's operating profits, the safety management field is often one that is over looked. As concluded from the research of this study much of the studies and literature written about the subject of safety management are written by safety executives and safety officers who are not specifically engineers nor accustomed to working as part of a project team, and as such focus too much of on the theory of safety management and risk prevention without considering the effects that these methods have on the project environment as a whole.

Considering projects cannot operate without some form of safety management system and safety management would not be required if projects of any sort were not performed therefore it is unusual that these are often considered as separate entities. There is much scope for study on the effects of both project management practices aimed at boosting productivity and the effects of safety management aimed at minimising risk and accidents working in cooperation with one another with the intent

of optimizing both approaches to produce a highly productive environment with a zero or near zero accident rate.

In modern businesses there appears to be a growing trend that actually rather than being a hindrance investment in safety can have beneficial outcomes for a company, one of which being increased productivity. By eliminating time spent recovering from accidents and the psychological benefits of a workforce that believe they are working in a safe environment, these factors could add up to increased performance. Times have changed greatly from the early draconian days of industry where man power was cheap and productivity and profit priced above all. The industrialised Western world was the quickest to adapt to the new order of valuing safety and their employee's wellbeing. Change and legislation took many years to form but in its present day HSE guidelines are at their most stringent and legal consequences and repercussions await those that choose to flout the law. Some companies in the Eastern Hemisphere are beginning to embrace proactive health and safety as an active part in the ongoing business activities with an aim to not only safeguard the livelihood of their employees but also as a means of raising their corporate profile and as a tool to increase productivity. This study will examine two companies in the oil and gas fabrication industry which have sought to revolutionise their approach to safety and the outcomes and effect it had on their projects and overall productivity.

2.0 Background

The oil and gas fabrication industry as a whole worldwide is a habitually dangerous industry to work in. The nature of the work requires extensive welding, grinding and cutting of steel along with handling of large cumbersome structures and equipments and not to mention working at heights of up to 100+m from the ground. All of this occurs even before chemicals and flammable gases/liquids are introduced to the situation along with highly volatile hydro-testing activities and radioactive materials used for Non Destructive Testing (NDT). With the sums of money involved and time critical nature of the work, productivity is the most significant driving force behind any fabrication company's success. As a consequence of the inherent danger of the work, accidents can and do happen on an alarmingly regular basis more so in the past than the current day but the exposure to risk is still high.

In more developed regions of the world safety has become a major priority over the past twenty years and no more so than in the oil and gas industry. Safety initiatives, techniques and equipments have been under constant development and the environment as a whole is much safer than the dark days of the 70's and 80's and even into the mid 90's. Many events have driven this world wide crack down on safety several globally exposed incidents such as the Piper Alpha disaster have brought safety into the public eye. Companies at all levels are loathe to allow bad reputations to develop due to lax safety practices and so accidents have been curtailed as a public relations and business exercise as much as a humanitarian one.

While this applies to the industry worldwide some regions are still lagging behind this overall surge for improvement notably the developing countries such as China, India and in particular the UAE. The UAE itself has sufficient laws with respect to industrial health and safety, however enforcement of such laws can be seen to be questionable as is a lack of transparency with publication of accident statistics to the public domain. It speaks volumes when accident rates are listed by monthly fatalities rather than lost time injuries or first aid cases as they are in West. On a more sceptical approach it is a common perception in the UAE that many companies exploit the lax enforcement of safety legislation in the UAE to their advantage by maximising productivity without having the threat of consequence from legal standards and codes of conduct that other companies have in other countries. While

the attitude of most international companies operating in the UAE is changing due to the global exposure of their activities the lack of enforcement by law is allowing an almost glacial change in attitudes to occur, where profit is often valued more than life. As such the safety standards will continue to be lacking in comparison to other developed countries until legislation, enforcement and public accountability is in place that makes a high level of safety a legal requirement.

3.0 Key Areas

The key areas of this study will be the correlation of company performance/productivity in comparison to the safety performance of the same company over a given period. Initially this will be a direct comparison between each set of figures for each company to observe the trend over the given period. From here further research will be conducted to establish the root causes of the performance factors and if these have come as a direct impact from any changes to the safety management philosophy over the equivalent time period. The level of impetus and dedication to safety management will also be observed and aligned with the performance figures as well as in depth analysis of the feelings of the employees of each company towards safety and their well being. The style of implementation will also be studied to understand if there are any performance / utilization benefits of encouraging a positive proactive approach rather than an authoritarian reactive approach. The theory being that an authoritarian approach will intimidate the majority of employees into performing in the way you desire by making them fear any disciplinary/financial implications or for their future employment and while this will have success at a very basic level the consequences will inevitably be counterproductive. The likely outcomes of constant retribution and punishment will be low morale, low co-operation among employees and management and consequently low productivity. The aim of the positive enforcement approach is to eradicate the blame culture and instead of chastising people in the event of any wrong doing, the aim is to identify the problem and re-educate the employee to remove the root cause of any potential problems through training and education. By removing the blame you remove the potential for singling out individuals and therefore treat employees as a team, which promotes team building and co-operation. As concluded in the research by Priest, et al (2005), if teams and employees are not fearful of reprisals from their senior colleagues they are more likely to converse with management and identify and discuss issues of potential problems.

4.0 Primary Aims

The primary aim of this research is to research the performance of two project focused companies and study their productivity performance in relation to their level of involvement in health and safety management and participation. The aim of such a comparison is to investigate whether the level of investment in health and safety protocol and management has an effect on the overall productivity of the company.

The intention is to analyse the results with the aim to add evidence to the argument that an increased focus on safety and active safety management of employees can be a contributing factor to not only safety performance i.e. lowering recordable incident but also contribute to an improvement in the productivity of the company.

Based on reputation and industry thinking it is envisaged that Company A will show the effects of adopting a new safety management approach and its effect on productivity over a full five year sample period, with a brief comparison to its performance in the final year before the change occurred allowing for analysis of the immediate effects and transition period post implementation as well as the ongoing effect over the remaining 4 years.

Company B will display a good sample of the more dated approach to safety management for the first three years of the sample period and then show the immediate effects and transitional effects along with the overall effects two full years after the initial implementation.

A comparison will be made between the two companies before during and after implementation to discover if the effects of the new system were uniform with both companies and in the event of any disparity, the surveys and interviews with the workforce at each company will show the root causes of any disparities by displaying the differences in implementation between the two companies.

The final outcome will be derived from the statistical data from the accident and productivity reports being contrasted with the statistical data and outstanding observations made during the workforce survey period to ensure that the statistical accident and productivity data provides a valid and true reflection of onsite conditions for the given period and is not just the result of good fortune or anomalies. The primary aim is to draw a final conclusion on the potential benefits of safety

management and its effect on safety performance and productivity in a project based environment and to add to existing studies as well as open up avenues for further research into this vast and wide ranging field of research.

5.0 Literature Review

Much of the literature written on the subject of revising and introducing proactive and positive approaches toward Health, Safety and Environment (HSE) management are based around instances where changes to HSE or Occupational Health and Safety (OHS) policy have been required due to changes in legislature in the respective regions of which the companies in the reports were based. Although this does not apply with respect to the UAE where HSE guidelines enforced by law are basic, the literature provides guidelines that although not legally required to be upheld are none the less practical for achieving the company's goals.

5.1 Total Safety Management

Total Safety Management (TSM) is a new safety management strategy that takes a lead from the principles and ideologies of Total Quality Management. The quest for Total Quality was pioneered in Japan in the 1950's with the intent of producing a manufacturing system that produced zero defects. The success of TQM is dependent on active and strong communications between work groups and the perception of other disciplines as internal customers and treating them accordingly. As noted in the work by Yu & Hunt (2004) and Cooper & Phillips (1997) there is a growing trend for adopting the Total Quality Management (TQM) practices into a system for safety management. TQM preaches total quality throughout the manufacturing process and constant development and refinement to attain the ultimate goal of total quality. Adapting from TQM where the aim is zero defects to Total Safety Management (TSM) the aim shifts to 'zero accidents' therefore an ultimate goal immediately presents itself.

The main problems that arise when using the TQM model is that there is no universally acknowledged definition of TQM and the factors that contribute to it. "Although one of the main goals of TQM is to provide a common focus or frame of reference to enable people to communicate in the same language, difficulties and confusion exist among TQM gurus as to the precise definition of quality. This has inevitably led to problems in defining the management of quality in practical terms." Cooper & Phillips (1997, p34).

Neither is there a unified formula for adopting and utilising a successful TQM management system as the TQM system required by each Company is ultimately unique to that particular operation alone, and the field of TSM is no different. In order to find a TSM system that will have a positive effect a certain amount of trial and error is required to optimise the system to the Company's particular requirements.

The study by Donald & Young, (1996) shows that there is a direct correlation between the improvement in safety management and an improvement in TQM. Increasing safety performance has been shown to have benefits for other attributes of the organisation such as quality management.

The definitions of Safety Culture and Safety Climate are very much up for debate and neither of which have been firmly defined in the same vane as TQM and TSM. Davies, et al (2003) supports this notion of a lack of definition however in attempting to distinguish between both phrases he surmises the work of Rousseau, (1988) as: "**safety climate:** the sum of the individual perceptions of the organisation, **safety culture:** the expression of shared or group beliefs," from Davies, et al (2003), page 111. The most common and recognised definitions can be put forward thusly as noted by Arezes & Miguel, (2003) based on their research from page 23:

Safety Culture: Defines the attitudes towards safety at all levels within the company for a given (often long term) period. Safety culture is often the outcome from the various safety procedures and guidelines put forward by the company and are greatly influenced by the level of management commitment to these procedures as perceived at lower hierarchical levels. Thusly provides an indication of the commitment levels at all levels of the company toward the enforcement, compliance and enhancement of the current procedures or overall safety theory.

Safety Climate: Is the temporal state of feelings of the workforce and management at a specific point within the safety culture. E.g. the culture will be looked at over an annual period whereas the climate is the current prevailing conditions on a daily or weekly basis relevant to the overall safety culture. The culture on a whole may be good, however in the aftermath of an incident or at times of low morale the climate itself maybe poor. It is during

times of a negative safety climate that accidents are more prone to occur. Hence the climate is relatively unstable and liable to change rapidly under the prevailing conditions.

Therefore in light of both definitions both climate and culture are intrinsically linked being temporal safety climate will be a result of the prevailing safety culture at the present time. The safety culture of a company is often the focal point for managers and observers to judge a company's approach to safety as it is reflective of the ethos or safety mantra by which a company intends to or believes to be operating by. Safety culture is a long term view often dictated by a target however this gives little bearing on the actual prevailing status for a given day or point in time which is why it is important to consider the safety climate in any deliberation. However due to the unstable nature of the safety climate it is important when looking for an aggregated or mean safety picture to consider the climate at more than one time presence to gain a more balanced view of the overall safety culture.

Therefore neither safety culture nor safety climate has precedence over the other but as the climate is an outcome of the culture itself, but the climate will provide the most accurate results for a given time. With reference to the above Arezes & Miguel, (2003) succinctly summarise by concluding,

“The traditional safety performance indicators, such as the accident statistics indices, seem to have a limited application and may not reflect with precision the company's overall safety performance.”

A by-product of adopting the TSM approach is that due to the level of investigation required and the iterative nature of the philosophy the company's practices and operating methods are constantly under scrutiny and therefore productivity improves as a bi-product. Also due to the reduction or removal of workplace incidents productivity further increases due to time lost due to accidents being eradicated. The intrusive nature of TSM also forces openness and communications between all areas of the company. Increased communication highlights further issues as allows for team and togetherness to grow.

In a paper by Vassie, (1998) the importance of a proactive approach to continuous improvement in safety performance using the TSM method is emphasised from a team based perspective. Vassie highlights that the company involved needs to recognise that proactive risk control through a safety management system that the workers have confidence in is far more beneficial, particularly in the long term, than a reactive approach once the accident has occurred. The corner stone of the proactive approach is that employees need to take ownership of their safety and the measures taken to ensure this, as was found in the research that this is far more effective in a team based environment rather than from an individual perspective.

5.2 Positive Reinforcement

Priest, et al, (2005) has extensively researched the theory that reversing the trend of an authoritarian approach and taking a positive attitude to safety will bring about positive results with respect to reducing accident rates. The importance is promoting a positive safety culture from the top down and show visible and active support for the safety culture and active enforcement. They show at great length that an active organisational culture promotes an active safety attitude and culture among employee and vice versa. In this study guidelines are laid out for how best to achieve a positive safety culture which is in line with other works on this topic. The key ethos is involvement and commitment at all levels, with particular emphasis in the genesis period but also throughout the campaign that ideas and cultures should propagate from the top levels down. If an employee sees that senior members are taking an active interest it acts as a reassurance of their value to the company and that their wellbeing is catered for. As such the employee is more likely to participate and as employee participation is pivotal the safety culture grows and gains value. As discussed later in this review establishing an active safety culture is the corner stone of Total Safety Management (TSM) a method of striving toward a zero accident ethos. People management and behavioural approaches are also an integral part of the process, Priest et al, (2005) show that a punishment culture has adverse effects on the objectives and also as often occurs blame is attributed to one person, if one person takes the fall for an incident this further damages team and cooperative mentalities which create obstacles in the establishment of an organisation wide safety culture.

In the work by Ridley (2003) he proffers that in positive reinforcement encourages the desired performance or behaviour of employees by providing them with something that is desired or held in value in return for compliance or behaving accordingly. Using the punishment approach or negative reinforcement Ridley found that the desired outcome is achieved by providing consequences or disciplinary actions which are withheld in the event of satisfactory performance. By comparing the two approaches it was observed that positive reinforcement performed better and had a longer lasting effect on performance than the negative approach. Providing goals and rewards for achievement allowed for more flexibility as the targets can be increased to further improve performance. The negative approach has a limit in that

after you threaten to remove employment for unsatisfactory behaviour you have no more leverage. It was also observed by Ridley that constant threats and criticism served to damage morale and team work as a whole that a greater negative effect among a wider range of employees was observed.

Moving beyond the actual safety system itself there is a great importance imposed on how and which style is used to implement the system. It is possible to have the most robust and effective safety system conceivable but if you implement the system poorly with the respect to how you engage your workforce and how you deal with them at a behavioural level this can have significant effect on the overall success of the safety management system. The overall effectiveness of a safety system is ultimately dependent upon how it is received and responded to by your workforce. On many occasions the idea that participation and enthusiasm from the workforce towards the safety system is a vital component of the overall success or failure of the system in practice, this is a recurring theme in much of the research into behavioural based safety management. Marsh, et al, (1995) found that the use of disciplinary action with respect to violations of safety protocol, unless in extreme cases where disciplinary action is unavoidable, often had a negative effect on both productivity and morale. They found through a case study on a construction site that it was 'better to use the carrot rather than the stick.' Intimating that it is better to reward the workforce for consistently safe practice or for providing valid safety solutions rather than punish individuals or teams for poor performance. Punishment often lead to low morale and therefore decreased productivity and an increased likelihood of accidents occurring. It was also noted that minor accidents and near misses often went unreported by foremen as they feared retribution from the workforce by handing out punishments, or retribution against themselves from management due to high accident reporting figures. Unreported accidents and near misses have serious consequences as it shows there is a problem that requires to be rectified but by ignoring it, this problem is allowed to propagate and leave the potential for a major incident to occur. By setting goals for the team over a set time frame they found that not only were the workmen motivated to achieve these targets and obtain a reward but morale and productivity flourished due to the healthy competitive atmosphere. Teams were more likely to strive together and help each other and guide each other as teams rather than as individuals to point out the error of others for fear of being ostracised as a

whistleblower or identified as someone trying to make the work take longer or be more difficult by reducing the use of 'unsafe shortcuts.'

Further supporting the positive behaviour and attitude model is the work by Clarke, (2003) which intimates that team work and communication is pivotal in establishing a successful safety culture and providing continuous improvement of the safety model. The increased communication encourages input from all levels as opposed to just management and supervisors putting forward solutions or observation. This plays a vital role as the views of the hands on workers is invaluable as they are the ones with the actual exposure to present risks and are thus in the best position to identify them and if possible propose a solution. Ignored risk or hazards have the biggest accident potential as a problem is known to exist and if it remains unidentified then it is almost certain that an accident will subsequently occur as a result.

For the positive reinforcement method to be effective Fuller (1999) and Vassie (1998) observed that it is crucial that all levels of management show clear commitment to the initiative and can be actively seen taking responsibility and action. Employees are less likely to get behind a new scheme if they are sceptical of its longevity due to a lack of visual commitment from the senior members of the organisation. The bigger the management's involvement the more reassurances the workforce receive that their opinions and well being are being valued thus are more likely to actively participate in safety drives, initiatives and meetings. Fuller, (1999) shows the differences in the outcomes of ten companies that participated in their study of the trial implementation of a proactive safety system. The companies who saw significant improvement in their safety performance were the ones where management had spearheaded the changes in policy, the companies where the new system failed to be accepted or failed to perform were found to be those where the driving of the new system came from the safety departments within the companies and with very little input or participation from management.

Management should get involved at all levels and take part in the initial meetings publicising the change in policy and be seen to have a presence when it is being introduced to the workforce at the lower levels. This reassures the staff that the new initiatives are being taken seriously by management and are originating from them and not purely the safety department. Many employees have a cynical attitude towards the safety department witnessed in all industries as they are perceived as the ones who are preventing the workmen from performing their tasks to the best of their

abilities and with a minimum of outside interference. As such many directives are ignored or ridiculed as they are seen as yet more interference to getting the work completed. If the new initiatives are shown to have management backing this has a twofold effect, the first being that it shows the directive did not come purely from safety and is something that is being taken seriously and monitored by the management of the company. The second and potentially more emotive reason is that if employees see this initiative being championed by a manager then the fear of punishment for non compliance will begin to filter in to the employee's mind. Fear of loss of employment or disciplinary action that may impact an employee's ability to earn or progress in the company has continuously been shown to be one of the strongest influences on employees despite not being the best course of action from the perspective of maintaining a happy workforce with high morale and positive feelings towards management. Not only will this have the necessary stimulation to coerce the more stubborn employees into participation it will also allow for a direct link to be created between the lower level employees and the management, a path of communication not always witnessed at many companies. The direct access will stimulate more employees to voice their concerns or suggestions when previously they would have remained silent. The reasoning behind this is that an employee might be tempted to use this as a method of differentiating themselves from the other workers in a bid to ease their career progression. Alternatively employees will tend to have more faith that their observations will be acted upon by directing their communication directly to a manager. In this instance this positive benefit can be cancelled out by inactivity upon the management's part but this further reinforces the need for management participation and interest if the initiative is to succeed.

Workforce behaviour and encouragement of a positive safety culture was found to flourish under a healthy competitive atmosphere as found by Fuller, (1999) again the theory of goal setting and safety competitions was investigated as opting for a positive approach to safety rather than a punishment culture. The safety competitions also allowed for a benchmarking of safety performance rather than using the negative indices of accident reporting to provide a statistical representation of safety performance. From a statistical stand point an indication of 'good' safety performance is represented by a lack of accident figures and thus a negative index is created. This negative index is often misunderstood by managers in the attempt to indicate good performance as it is a strange concept under normal circumstances to

display positive results where there are no perceptible figures to support it. This often leads to managers presenting low incident rates or long periods without accident as an indicator of safety performance. While both theories are technically valid they do not show the whole picture with regard to the safeness of an environment as they do not give a clear indication of the potential for accidents to occur. By displaying a low accident rate or a long period of time without incident this can be merely down to a period of good fortune rather than good management therefore a more accurate reporting and analysing method needs to be addressed. The consequences of adopting a blaming culture with regard to HSE violations and accidents is shown to have a detrimental effect on both productivity and accurate safety reporting as found in the study by Zellmer, et al, (2006.) Workers who are rebuked for breaching procedures are found to be demotivated resulting in a loss in productivity or in times of constant altercation over minor infractions the workforce are found to become disenchanted and blasé about safety procedures. Another consequence is that fear of retribution leads to accidents going un-reported or cover-ups being deployed to avoid disciplinary action. Covering up issues to protect colleagues or to protect yourself has the potential to have grave consequences for anybody working in the environment or related system to the one in which the near miss or minor accident occurred. A near miss or minor accident is a clear indicator of a failing in the existing accident prevention procedure, guidelines or employee attitude and behaviour. If this is allowed to remain unnoticed or not brought to the attention of someone with the power to correct such failings then the chances of a significant accident occurring are greatly increased. Potentially these early warnings may come at a time when only a minor corrective action is required however if left to propagate the issues are liable to expand and effect more areas requiring a significant overhaul or corrective measure. What may appear to be a short term gain by leaving the accident unreported can rapidly transform into a significant loss in the event of a future accident.

5.3 Participation

In the study conducted by Klein, (2005) which centres on the DuPont corporation's drive to improve the safety culture within the company extols the value of employee enablement. It was found that in order to achieve their goals of a proactive safety environment it was essential to get employees to believe in and actively enforce the safety culture through their own activity. This involved ensuring employees looked out for their own safety and that of others and participated in meeting to discuss observed issues and potential improvements.

Looking into the same field but with different aims of research Wong, et al, (2002) conducted a study relating to the influences of stress in the workplace on accident rates in the oil and gas industry. The importance of this research with respect to my own is that the physical environments experienced by the workforce in this industry are not the sole cause of accidents. This provides evidence that despite the dangerous nature of the work there is opportunity for significant safety improvements within the industry and thus any positive findings of the proposed research can add value to the industry. As identified by Armstrong (2003) the source of stress found in any workforce can emerge from a multitude of sources; stress can grow from increased pressure from senior colleagues to perform a given amount of work within a given timeframe that is tantamount to too much work in too short a time period. Stress could also generate from the level of responsibility placed on a particular employee who is in a position of responsibility that they are not capable of handling due to limited skills or knowledge about the actions for which they have been given responsibility. Another source of stressful environments is having manageable responsibility but on too many areas at one time causing an employee to suffer 'burnout' from looking after too many responsibilities at once. In general all of the sources identified can be alleviated by better management of people or resources or in the case of an employee who is not capable of performing his duties, by further training and education. All of these issues not only relate to resource management itself but management style and approach in that if an employee feels threatened by potential repercussions for not delivering as per the desired targets set by the management. Moving away from stresses caused by mismanagement of resources or poor management attitudes and implementation a significant cause of stress which can

have a direct relationship with the likelihood of the occurrence of accidents is workplace stress which occurs as a direct result of the environment from which an employee has to operate. If an employee is forced to work in an environment where he feels it is unsafe, hazardous or has a high potential for an accident to occur the chances that the same employee will suffer high levels of work related stress is significant. Operating in a hazardous environment is not necessarily endemic that an accident is certain to occur as a consequence of this environment alone but when the hazardous environment is twinned with an employee who is under a great amount of stress as a result then the likelihood of an accident occurring is exponentially increased. It is therefore pivotal to good safety management and accident prevention to not only take mitigating action against any hazards but also to ensure employee stress levels are reduced by ensuring they feel reassured or have a comfort factor in the environment in which they operate. If an employee feels they will be free to operate without risk of accident or safe in the knowledge that every potential mitigating action or preventative measure has been taken to prevent an accident then this will remove the stress factor from the equation and thus further reduce the likelihood of potential accidents by removing the human element to another order of magnitude. This opens up another potential area for employee participation in a safety system; if you actively involve an employee in removing hazards from their environment the benefits are numerous. Firstly it is likely that the employee operating in that particular environment will have the greatest knowledge of the potential hazards and more than likely have some good ideas as to how to prevent or remove these hazards. Getting the employee to participate in his particular area will give a greater potential that he will participate in other area or for the company as a whole or in other safety related activities as he will be able to see the benefits first hand and thus have more faith in the system. Finally if the employee has taken an active role in protecting himself and making his environment safer the stress levels are likely to reduce even quicker as the employee will have a full knowledge of what is wrong and what is being done to correct the situation rather than having to trust the actions and advice of others about what is being done to make the environment safer.

To improve the overall safety culture and performance of a company Shannon, et al, (2005) show that it is vital to consider the organisation as a whole and not to focus on the individual initially, the primary concern for this being that each individual will have a unique requirement to make their work place completely safe.

If the working environment as a whole can be made safer then the risks exposed to the individual will be subsequently reduced thus allowing for further more exacting measures to be taken on a personal level after a safety culture is established at an organisational level. Working from a high level approach towards risk and hazard reduction will have greater and faster effect as it is likely that many issues and hazards will be endemic to all parts of a company's business and daily activities. If these can first be removed then the positive effect will be felt throughout thus acting as a driver to gain interest and support from the employees with the intent of maintaining these levels of interest when the company chooses to adopt a narrower focus on individual areas. The narrow focus is required as despite solving wide ranging problems this does not necessarily mean you will solve all of the problems and actions in one attempt, the likelihood is that you will merely reduce the overall risk instead of eradicating risks that affect individual and specific environments. Therefore it is key to utilise the tool deployed and taught to the workforce during the wide ranging risk mitigation exercises and encourage these to be applied locally to each workplace environment by smaller focussed teams of individuals. These smaller focus groups should gradually be able to minimise or eliminate the minute problems in each area thus further increasing the overall safety levels to their maximum potential. It is vital that the actions and methods are well documented and maintained as these exercises will require to be repeated periodically to maintain a safe environment in changing conditions. Analysis of the methods and their success rate should also be monitored to allow for the processes and actions to be further optimised or amended with the aim of streamlining the system to boost performance and efficiency.

A potential method of encouraging safety awareness among the workforce with particular respect to the younger members is provided by the results of a study conducted by Lavack, et al, (2007.) They found supportive evidence that "youth-centric literature" and clear signage with safety advice or slogans had a positive result with encouraging or guiding the workforce into safe deploying safe working practices. This is just one of many creative solutions pioneered in the field of safety awareness and participation, as per the study conducted by Lavack, et al this method was particularly effective with the younger employees however it is also vital to maintain persistence with other methods or initiatives to find solutions that will encompass the

different demographics represented in the workforce or to find a wide ranging and all encompassing approach that will have a good response at all levels.

MacIntosh & Gough, (1998) found that the more innovative the approach to introducing improved HSE practices the more beneficial the results were with respect to safety performance. They found that in companies that did the bare legal minimum had the least results in contrast to companies that made a concerted effort where the resulting performance was often in excess of the desired goals. The greater the level of participation by the workforce was in implementing the new guidelines at both a local and organisational level the better results were found initially and the greater potential for future improvement.

Further support for the aims of the research above is provided by Niemela et al. (2002) who found that improving the level of HSE involvement and procedures within the company that was the subject of their research actually improved the productivity of the company. There were two core reasons for this improvement found by comparing a control group with a research group (subjected to an improved level of HSE involvement.) Firstly being the reduction of accidents meant that work teams were not depleted through injury allowing for a larger number of man hours to be achieved by the same number of men in the improved group than the control group. Secondly the psychological benefit felt by the workmen from working in a safer environment resulted in increased productivity at an individual level as observed by foremen interviewed as part of the study they witnessed the workers taking less unofficial breaks, working in a more efficient and organised manner as well as observing an overall improvement in team work. The observed increase in productivity for the study period was 9.1%. This study adds weight to the claim that increased HSE presence and enforcement will not necessarily have a negative impact on productivity.

5.4 Productivity versus Safety

Shoaf, et al, (2004) also take the theory that increased health and safety will have an adverse effect on productivity and affect the financial performance of a company. As a result of their research they found that there is scope for further research into improvement of productivity by increasing HSE presence and enforcement. They propose the use of an effective model for introducing additional HSE methods into the workplace without affecting productivity. The main result of this study is that further research is required into this field as active and successful implementation solutions are attainable.

Reducing operating costs by improving safety can have an economical and productive outcome, thus negating to perception that spending on safety is money lost for no tangible gain with respect to project completion. It is often a misnomer purported throughout construction and fabrication industries that time and costs attributed to safety don't have a direct impact on project success rates and increased productivity. Smallman, (1994) found that efficient spending on safety supported by qualitative and quantitative assessment can lead to a reduction in project life cycle costs due to the reduction in accidents and lost time as well as the boost to productivity as a consequence of workforce morale and attitudes attributed to the workforce's comfort level with their working environment. Companies will often use a zero or near zero accident record for a given or series of projects as a rebuttal to these findings but as highlighted by Smallman, (1994) the next major accident can be just around the corner. Supporting this he found that the majority of the fatalities reported in the North Sea offshore environment can be attributed to just four major incidents. However due to the severity of these incidents the repercussions had major implications for the companies involved. Meaning that although you may have an impeccable record currently, one major accident is enough to damage your reputation and perception in the industry added to the direct costs attributable to the accident itself and the aftermath to destroy what was previously a healthy and successful company.

In a study performed by Ansari & Modarress, (1997) investigating the Boeing Corporation came to a conclusion that supports the very reason for conduction research to investigate if productivity can be boosted by an active approach to HSE.

“Despite the fact that many businesses have focused on continuously improving product quality while reducing costs and cycle time, their efforts towards workplace safety programmes remain constant. The workplace safety programme directly impacts on quality, cost and cycle time. Failure to view safety as a competitive weapon will inhibit the ability of companies to meet the challenges of the global economy. To ensure continued competitiveness and market growth, businesses must develop strategies for the transition to world-class safety performance.”

5.5 Research Methods & Analysis of Data

With relation to processing the safety performance data Mearns, et al, (2003) provide very astute calculations to statistically analyse the results of the safety questionnaires they created and tabulate with statistical safety data for the corresponding time periods. The study performed by Mearns, et al, (2003) provides a conclusive study into this field. The way in which they processed the data may be used to form a guideline or for inspiration for the creation of formulae for analysis and proving hypotheses in future research.

For analysing the data related to safety after the new HSE initiatives are introduced as a means of measuring the success of the new proactive approach, Geldart, et al, (2005) raise factors that may prejudice the results. As they correctly highlight it is important to consider more factors than just the figures at face value, they highlight for example that if the company involved chooses to invest after a fruitful period the new machinery purchased may replace manual work thus theoretically improving safety figures by removing risk exposure. This will show an improvement in safety figures but this will not be directly related to the theories put forward by this study and therefore caution must be taken when analysing the performance data. It is vital then to support the statistical data obtained from company reports by some means of verification to ensure the figure reflect the actual tangible improvements in a change of system and not those that occurred as part of a new approach to manufacturing or better methods of manufacturing. In order to obtain this verification it is important to research any potential capital expenditures made by the subject of the research or review their processes for consistency. This can also be supported by surveys of the workforce covering the periods researched to ensure consistency with the results and ensure the not outside influences have had some bearing on the data which you are analysing to support a final conclusion.

Setting goals and providing feedback has been shown by Marsh, et al, (1995) to significantly improve employee involvement with safety initiatives. Giving employees something to strive for and the potential of offering some form of reward for achievement can give employees a reason to get involved in the safety culture and strive for improvement. The benefits of goal setting and providing positive feedback

as well as negative feedback, constructive criticism and aversion of a blaming culture will have a positive effect on safety performance.

Measurement of safety performance is not as simple as monitoring accident rates as highlighted by Arezes & Miguel, (2003) The major difference in monitoring goal achievement in safety as opposed to other areas is that in general success requires an absence of figures rather than monitoring the presence, as zero accidents or near misses means there will be no data for a successful period. However a period of zero accidents cannot be used solely to forecast or prove a safe working environment as much as it may be a reflection of a period of good fortune or a time of relatively low risk due to minimal work being performed. Therefore management should not rest on a zero accident record as proof that their safety procedures are 'bullet proof' as the next accident maybe looming on the horizon. In order to ascertain a better understanding of the performance of safety procedures within an organisation it is more appropriate to survey the thoughts of the workforce with respect to the current safety 'climate.' It is the workers themselves that will allow you to understand whether your current accident rate is proof of sound theory or a matter of fortune due to their perception and comfort level with their safe surroundings faced on a daily basis.

The issue of benchmarking as a means of gaining a more accurate view of the performance of a company's long term safety climate was further discussed in work by Mearns & Havold, (2003) They attempted to create a balanced score card that would allow employees and management alike to accurately gauge the performance in the current safety culture taking into account for the negative / positive impacts of the current safety climate. The aim of the scorecard is to provide information on a range of HSE related aspects rather than having a narrow focus on one aspect such as the accident rate, which as shown before can mask the prevailing conditions or impending incidents. Active and competent use of the Balanced Score Card (BSC) can further reduce the time and costs involved with safety on future projects as it allows for an established benchmark to be identified and can be introduced as a standard procedure on projects. The BSC approach is integral in maintaining continuous improvement of the safety model as required in a TSM approach to safety management. As noted in the study the monitoring and reporting method used by a company has a crucial impact in the behaviour of managers. This stems from the amount of accountability that each individual manager is liable to. For example if a company has a lax

reporting system and one particular manager's team is lagging in performance, it would be easier for the manager to alter his reported figures to cover up for his deficiencies, in a stringently managed reporting system this would not be possible and hence the manager would be more likely to take a greater proactive approach to ensure good performance as he will be liable for poor results.

The BSC approach aims to monitor a multitude of factors concurrently; each of the factors will have a contributory value towards the Company's nominated overall goal. The intent of this is to open up the reporting method to a wider range of factors as reporting aspects individually may not show a root cause of a problem when reported separately as they will be accounted for in other fields therefore combining multiple factors under the BSC gives a wide ranging picture with a single focus.

Taking the above points further into consideration (Shannon, et al, 1996) show other aspects that can affect the reporting over accident rates over a period of time. The additional factors that this study introduces for consideration in the results put forward here include that good relations between management in labour tend to result in lower reporting rates for smaller incidents thus resulting in a deceptively low accident rate. Also observed in this study and conducive to the findings of (Geldart, et al, 2005) is that in cases of smaller workforce or a workforce consisting of older workers with more experience will result in lower figures due to not reporting small injuries as an older workforce either through force of habit or neglect for HSE policies will tend not to report all reportable incidents.

In the course of research for this study the intention in order to provide a background from which to compare the companies in the case study to provide accident statistics from the UAE. It has been observed and verified by reports from industry leaders in the UAE and backed by reports in national news outlets such as the Gulf News publicly accessible safety statistics are not readily available or reported. The Ministry of Labour which is the overall authority on HSE in the UAE has been contacted as well as extensive searching of their online resources for such data to no avail.

5.6 Influencing Factors on Safety Performance

One potential area that will require further research is the issues raised by Hasle & Jensen, (2006) that shows despite enabling safety teams and managers with the tools to promote and enforce a proactive safety culture, enabling the change is often met with resistance. The "change agents" as they identified had difficulties in introducing new procedures and ideologies into the work environment, due to the unwillingness of the organisation to adapt to change the creation of the new safety culture ultimately failed to materialise. This area will require greater research in the dissertation to find viable solutions to the resistance to change.

In the study performed by Clarke & Ward, (2006) they found that the style of leadership employed by either management or change agents with the safety department has a great effect on the level of employee participation in safety culture. Whether a transactional or transformational style was utilised had varying effects based on the safety climate. It is important to take time to fully understand the prevailing safety climate prior to selecting the most optimum leadership style to produce the best results.

Cole & Brown, (1996) found that the level of training received by employees both initially and periodically throughout their time of employment greatly dictates safety performance. One key factor identified in this research that has definite repercussions to that of my own is that employees for whom English was not their first language did not perform as well as a consequence of the additional training. In the UAE where most companies have a largely diverse workforce the language barrier will have a significant impact, especially in relation to lower skilled labourers where often only the most rudimentary grasp of English is required and at many companies, employment can be granted even if the person is incapable of understanding any English. In order to account for these findings the most optimal solution would be to provide training in a variety of languages that will cover the largest swathes of the workforce. As is often the case that the majority of the workforces are drawn from three specific countries namely India, The Philippines and China, which despite having many languages and dialects internal to each country, in this scenario training would have to be provided in three additional languages representing the most common language or dialect in each of the respective countries. As is stated in many

of the studies communication plays a pivotal role in any management system and is key to the performance in particular of a safety management system which relies on communication of hazards, problems, incidents, etc to be successful therefore overcoming or finding an effective system to manage the language barrier is crucial. This will also have wider ranging effects than specifically on training as it will have an hindering affect in the work environment, if employees from two different backgrounds are employed in the same area without some form of common language or communicative system then identifying problems, risks or immediate dangers between the two groups will be difficult which introduces a significant risk factor, such a risk factor will be multiplied in such dangerous environments as offshore work sites where hazards are a constant and constantly varying presence. One thing they suggested was to perform the training sessions in the mother tongue of the employees if the number made it feasible which in the case of my research with a prominent Indian Subcontinent work force this will be a major factor. Not only that but this also introduces a cultural factor into the workplace in that if you have two groups for example from Pakistan and India, two countries which have a history of conflict, then communication and cooperation may be actively impeded by those at the work front. This represents a dangerous risk such that if someone was to observe an employee from the other group who was exposed to a hazard the he was not aware of the person who identified the issue may chose not to make his colleague aware of the imminent danger due to differing national cultures. It would be scepticism in the extreme to say this was the status quo and common practice which it is very much doubt that this is a wide ranging practice but it would be naïve to believe that this sort of practice was not present on some level. All of these issues can be alleviated to an extent through active teambuilding sessions in mixed groups and through active safety training conducted in the mother tongue of the groups represented by the workforce. Performing the training in a native language helps to convey the methods and meanings of safety management and will cause for the employee to take more on an interest in the message being conveyed than if it was in another language. It also allows for the training to be conducted in the necessary depth and technical detail required without having to be restrained by the constraints of having to conduct the training in a simple and easy to understand context, thus further adding merit to the value of the training.

It is important to also consider the effect the actual environment has upon the workers environment; it is too easy to focus on the physical dangers posed by machinery or other hazards and ignore the physical environment the employees are operating in. Shikdar & Sawaqed, (2003) performed a study of the working environments of several businesses in Oman, which due to being a neighbouring country to the UAE will therefore have a near identical climate, to see if there was a relationship between the environment with a view to occupational health and safety and the productivity. It was found that workers left without shade and working in extreme temperatures or those left working in environments with excessive noise were prone to poor productivity. What was also found in the study was that workers exposed to the environments at the poorer end of the safety scale were found to complain of illness and aches and pains whether truthful or not and this has a massive detrimental effect on productivity and morale. This issue is not only a purely safety based concern due to the risks and hazards involved with operating in such a hot environment it also introduces the risks identified by in relation to the impact of stress on workplace safety, stress in this scenario occurring as a result of work in such adverse conditions. It is important from a health perspective to ensure that workmen operating in temperature which can reach in excess of 50°C in the summer months have adequate resources or aids to combat the extreme workplace temperatures. In reference to the direct impact of the heat such mitigating measures could be providing as much shade as possible, cooling systems where applicable or nearby which could be utilised during breaks. Other means could be ensuring regular breaks and the provision of water and isotonic drinks to prevent dehydration as well as raising awareness to the effects of heat illness and how to prevent it as well as how to identify this symptoms and take the necessary action. However working in extreme temperatures also raises potential hazards which are not a direct cause of the effect of heat on the health of the body; there are numerous consequences or side affects which could increase the risk potential of a worksite. Working in such an environment will induce fatigue at a much earlier level than would occur at regular temperatures, the fatigue will not only weaken the body but will impair the reactions and the ability of the brain to function and affect concentration. A combination of these side effects could lead to an employee becoming easily distracted in the workplace and thus an immediate hazard to work place safety occurs not only to that individual but to those working around him if for example he is operating heavy machinery. The third

element as noted previously is the risk induced due to the increased stress factor, having to work in adverse conditions will be a root cause of stress to an employee in itself even before the other factors are taken into account, as shown increased stress levels can act as enablers for accidents to occur and thus increases the overall risk potential for the given situation yet further. It is therefore crucial that companies working in these climates take the time to consider the impact of the actual physical environment itself when designing a safety system and not just the hazards inflicted by the mechanical or operational environments in which the men work.

In a report written by Jim Hammer in 1980 he studied the relationship between management, HSE and the prevailing economic climate with respect to the UK. Although written almost 30 years ago it has a great relevance to the current practices and ideals witnessed throughout the construction industry and the offshore fabrication industry in the UAE. Hammer identifies that health and safety representatives should become an integral framework of the industry and not something that is primarily focused on in times of economic success when productivity is successful. He intimates that it is vital that when the tide turns and all focus falls on expediting work to meet deadlines and ensure economic viability those safety officers are not jettisoned to one side so that work can continue unhindered. As highlighted earlier by Yu & Hunt, (2004) often productivity suffers in a zero safety environment due to the advent of incidents and associated stoppages plus the decreased motivation of the workforce due to the high risk exposure. Something that Hammer also argues with relevance to modern day UAE is the need to ensure that safety practices are under constant improvement and not just to the minimum standard required by legislation. One facet of staying ahead of the law is not just for the increased safety factor but also, as was witnessed over the prevailing 20 years in the UK, there is likely with time to be great reform in the safety legislature. If your company has maintained a progressive attitude you are therefore likely to be ahead of the curve and thus less likely to suffer from the new stringent safety rules as a by-product of the reform.

Mitroussi, (2003) looks at the importance of developing the natural safety culture that is a direct result of conforming to the safety guidelines and regulations in the relevant industry and using that as a building point to evolve a safety culture centred on the company's own operations and workforce requirements. The minimal safety standards in general are only to act as a guideline or overall high level

instruction with a non work specific tone and therefore do not provide sufficient cover for the day to day activities of a given company as the hands on work will often differ to the general guidelines. It is crucial therefore to develop procedures that are tailored to the prevailing conditions in order to account for every potential working environment and situation and to ensure there is constant and sufficient review and as necessary updating of these procedures to ensure they remain valid and useful in constantly changing and prevailing conditions. Abiding by the regulations although mandatory will not provide the required level of comfort to result in a positive and proactive safety culture thus leaving your employees open to risks not covered/identified by the general legislation.

5.8 Summary

The key points to derive from the review of existing literature is that primarily there is a link between improved focus on safety and an increase in productivity and quality. The strive for total safety forces companies into a complete review of existing systems and gives reason and encouragement to ensure this in the long term by constant reviews and data analysis. The best facilitators in achieving total safety are primarily communication and visible management commitment. All of which contribute to a positive and proactive safety culture which if nurtured becomes self-perpetuating. The pitfalls in progress measurement and statistical analysis of data have clearly been pointed out with reference to the inverse nature of reporting accident statistics and comprehending their meaning. As clearly defined it is important to focus on 'Safety Culture' as well as "Safety Climate" and to follow-up with the opinions and thoughts of the workforce at all levels rather than relying solely on accident figures as a representation and forecast of the current risk potential present. It is from here that my research will continue into further proof of the link between active HSE and productivity as well as how best to achieve and maintain this philosophy in the long term by promoting a positive and proactive approach to safety management.

6.0 Research Methodology

6.1 Common Methods

The literature review provided a significant source of empirical studies and research methods into this field. By review of the literature previous studies it can be seen to have varying levels of success and also a level of commonality was noted in the majority of the studies. In some cases the outcomes of various methods proved to be not what was required under the given aims of this research however the methods used proved to be sound and should provide better results under different criteria such as those required here. It is important to review the methods based on the context in which they were used originally but more importantly on how they would perform under this study's intended criteria. The ultimate aim of studying and critiquing other methods is to be able to devise the optimum method(s) for use in this study to produce the most viable and meaningful results.

6.1.1 Research Methods

As shown in many of the previous studies into safety performance there are three main methods to research the workplace or company involved in order to obtain data for further analysis. The three main methods are:

1. Obtaining Accident Reporting and Safety Statistics as well as productivity statistics reported and held on record by each company.
2. Physically observe the men and the worksite during normal operating conditions and record data and observations witnessed during these site visits.
3. Interview and survey the employees of the company to ascertain the thoughts and feelings of the individuals' active at the company within the given sample time frame.

Geldart, et al, (2005) & Mearns, et al (2003) in their respective studies used reported data obtained from the companies observed in their studies to great effect. The company reports should reflect concise and accurate data for the given subject and time period as this will be used by the management of the company to review the current situation and plan for the future. If the companies chosen are public companies then the data is legally obliged to be accurate as governed by international and federal laws in all developed nations with regard to data reporting in the interests of protecting shareholders' rights. The laws are in place to ensure accurate and timely reporting of such data to ensure an accurate and accountable record of the company's performance is available to the public domain in the interests of ensuring those invested or investing in the company have sufficient information regarding their shares, therefore official reports issued by a publicly listed company in theory will be the most accurate obtainable due to the legal protection provided. .

The companies chosen for this case study were initially identified by their reputation as being market leaders in their respective fields and having a good global reputation. Both companies were receptive to the intentions and aims of the study and agreed to provide the necessary data and access to their respective premises to conduct observations. Due to their size and global profile as well as being publicly listed companies an assumption was made that the record keeping of both companies would be up to global and international standards which was confirmed after being granted access to the records of each company.

In the cases of both companies it was possible to perform satisfactory and effective analysis based on these results and therefore it was a successful method, potential issues that were raised during the analysis of the data will be discussed in the next chapter. Using this method as shown and as identified by the reasons above will be a very effective method of researching the historical data however the main concern in this situation was, whether the data physically existed within the companies chosen to research. In the Western Hemisphere record keeping and accountability is of major importance to companies either as a legal requirement for listed companies or as a widely acknowledged primary business practice. Also in these countries where legal action is often a course of dispute resolution having current and accurate reporting of historical data over a period of five years and in most cases up to and beyond ten is a vital component of any legal cases.

As a consequence of this most companies and certainly all major corporations will have a procedure and departmental personnel dedicated to the upkeep of all records and therefore all data should be, within reason, readily available. In the Middle East however this is not always the case, due to globalisation and the fast pace of businesses in Eastern Markets modern practices are being actively pursued and in most cases companies will have a robust records management system. This however is a relatively recent concept to the business environment in this region, and in the oil and gas fabrication industry in particular. Therefore while recent records will be in existence and relatively easy to procure, historical data stretching beyond the previous 5 years may prove to be hard to obtain. If these records are present their accuracy may also be questionable as there is little municipal enforcement or auditing to ensure the level of accuracy to which such reports must be maintained and therefore a certain level of reliance on the company's honesty will be required. This can be further assessed by analysis of the data statistically and through corroboration of the reports by surveying of those employed during that period to ensure the reports are admissible into the overall research.

Onsite observation is an often utilised tool in much of the research into fabrication/construction productivity review and safety performance review as the research does not have to rely on data reported from other entities and can instead be witnessed firsthand under the current site conditions. Again the process and reports from such studies has proved to be a very effective method of research and as highlighted in the work by Shannon, et al, (1996) in particular was the source of many observations that would previously have gone unnoticed.

As previously noted purely statistical data will not identify potential risks or hazards or sources of poor productivity, reporting being purely of numerical value can in effect cover up in tangible variables as there is often no method of statistical representation for psychological or behavioural factors. It is hoped to cover for these statistical anomalies by surveying and interviewing the workforce in the hope that they will identify such issues but this is not a guaranteed method for several reasons one such being that the employees themselves may choose to cover up such observations for fear of retributive action if such issues are highlighted to an observer.

Therefore to physically view and assess the prevailing conditions and to endeavour to undertake such observations over a specific period of time will be

necessary in the provision of a complete and accurate body of research to be used for further analysis.

Like most methods of research physical observation is not without its faults and pit falls and therefore necessary steps should be undertaken, such as minimising the impact of presence at site, removing paranoia among the staff and avoiding physically impeding work of causing a hazard by being present, to minimise the potential for errors or irregularities to occur in the results due to outside influences which are not a direct cause of normal site conditions.

On many worksites the presence of an outside party can be sufficient to arouse suspicion and concern in the workforce. Due to the atmosphere and camaraderie that often develops in such working conditions the presence of an outsider can upset the workplace harmony. On many worksites there will be a long established method for conducting work, often this will involve 'short cuts' or work being performed, not necessarily in an unsafe manner, but not specifically as directed in the company procedures. As a result of this the introduction of an outsider may cause the men to act and perform in a manner that is not conducive to their regular daily activities and methods which may prejudice the overall outcome of any research. It is important therefore either to offer reassurances that the observations made during research will not be the source of any direct action taken by management towards the men to alleviate the suspicion on site and try to allow regular work activities and practices to resume. It is also important to establish a relationship or familiarity with those at site so that over time, presence at site will often go unnoticed, and as a consequence normal everyday behaviour should be prevalent.

This issue was identified and encountered by Fuller, (1999) in his research into construction activities and he opted to use the familiarity theory to aid his research. Instead of trying to hide his presence at site or his intentions of the observations in an attempt to witness the site at a natural state by trying to remain unnoticed Fuller adopted the opposite approach. To minimise his impact on the behaviour of other Fuller made his presence and intentions known from the beginning to ensure that as time progressed his presence at site became natural and thus could view the prevailing conditions without being an external influence. As an aside to this problem the observations garnered from the initial visits to the site maybe disregarded from the final findings after later analysis due to the potential for anomalies and irregularities in this data to occur as a direct result of the observer's

introduction to the workplace environment. However if such observations are found to be inconsistent with the main body of the findings while it would be potentially impractical to utilise it in any statistical analysis it may be used in non statistical analysis as an interesting study into the root causes of workplace behaviour and attitudes from a psychological or behavioural point of view and therefore has the potential to have academic merit for the study.

Interviews, surveys and questionnaires have been shown to have significant success in the majority of the research previously conducted into the field of worksite performance and environment study. Studies by Fuller (1999), Marsh, et al (1995) Klein (2005) among other implement interviewing and/or surveying as the core method of data acquisition. This method of direct and general questioning if utilised in an effective manner can be used to corroborate findings from statistical data and observatory data as well as provide insight into deeper issues or points of note that were not previously identified in the process of the other research methods.

The most powerful facet of surveys and questionnaires is that they can be conducted anonymously and therefore have the potential to capture the most accurate reflection of conditions as those surveyed will feel more comfortable to highlight problems or issues under the protection of anonymity. The disadvantage of this is that if any key issues that require further investigation are highlighted other means will have to be devised to undertake such investigations as the identity of those that highlighted such issue should theoretically be untraceable.

Interviews also allow for the psychological factor and the effects of management style to be accounted for in performance assessment and pursuing of root causes to problems. Interviews can also be used to obtain predictions and assessment on the future direction or performance of a company where such statistical data does not exist, statistical projections will be available but as they are incapable of considering as many variables and intangible variables, a human's opinion will in general have more bearing on the validity of such claims. It is important that all research is corroborated amongst more than one person to ensure the findings are not purely opinion or conjecture and actually have some academic merit. Interviews also allow for some flexibility in the research, where a questionnaire will ask specific pre-formulated questions interviews allow for a degree of freedom to dictate a line of questioning based on the respondents answers which cannot be achieved in a questionnaire. Interviews also allow the interviewer to push for a response on certain

issues that may be ignored during a survey or to observe the body language and tone of the respondent to provide a behaviour analysis as well as one based purely on the data.

As noted in the research by Geldart, et al, (2005) it is important to ensure that a sufficient number of employees are chosen in proportion to the overall workforce to provide a sufficient sample of the overall opinion of the workforce. It is also important to ensure there is a sufficient reporting/completion percentage to ensure the sample size is not decreased to level where the results will be questionable and not a true representation of the workforce as a whole. It is important to ensure that all areas of the workforce are represented proportional to their size in the company as well as ensuring tangible representation of each culture through the chosen sample subjects to ensure the outcomes are not influenced by bias or prejudice towards one specific group.

Potential problems arising from the use of questionnaires arise from the eligibility and noteworthiness of the responses, often people faced with a questionnaire will respond quickly and inaccurately as a means of getting the questionnaire out of the way of their normal work commitments or there is the chance the people will answer inaccurately by answering in the way in which they perceive the company would prefer and not based on factual reporting. Also in this particular instance it may be necessary to translate the questionnaire into multiple languages to ensure that enough responses and valid responses are received from those for who English is not their first language.

Interviews also raise a similar concern in the manner of onsite observation whereby in the interim there is the potential for a level of suspicion to have an impact on the responses and outcomes. It is therefore important to reinforce the notion of anonymity and attempt to strike a bond or familiarity with the interviewee over time as a means of establishing trust to gain more truthful responses.

Once again for the benefits of further analysis the interim results of the interviews, while useful for other means, may not provide a consistent pattern with responses gained later in the research after a level of trust has been established and may prove to be more valid if the initial questions are asked again at a later date and the responses compared, to see if consistency prevails or if a potentially more accurate response is given at a later date which could be corroborated with data from other sources. Interviewing and surveying is a consistent source of research data in such

studies as shown in the work by Fuller, (1999) & Geldart, et al, (2005) and therefore will be utilised to provide a considerable source of research for this study.

6.1.2 Data Analysis

The methods used to analyse the data drawn from the research of this study will be a key component of formulating accurate and valid conclusions to construe the overall outcomes of the study. The research methods discussed in the previous chapter should produce a whole wealth of data that will have a requirement to be analysed and interpreted correctly to represent an accurate assessment of the data. Many studies previously have shown the importance of interpreting the data in the correct manner and the ways and causes in which it can be misinterpreted are many and the wrong conclusions drawn as a result. Misinterpretation often occurs not due to lack of data or data taken from the wrong areas but mainly from a misunderstanding of all of the factors that contribute to the overall statistics with particular reference to company reports, as this is the only part of the research where the data is not compiled directly by the researcher and thus some level of reliance is placed on the companies to report accurate data and the researcher to draw the appropriate conclusions from the relevant data which has been presented in the reports.

Arezes & Miguel, (2003) highlights the importance of considering outside factors which may have an influence on overall productivity, or in this scenario safety, performance figures which may not be directly attributable to a safety management system or change in management approach/attitudes. In particular they use the example of a facility involved in mass production of components using a production line, the point made is that if there is any major changes to the manufacturing method in terms of the machinery used or the manufacturing method itself, this may have a significant impact on the performance measurement as the new system maybe significantly safer or vastly more efficient thus having a direct impact that cannot be attributed to any of the study's aims and therefore the results will be inaccurate or totally inadmissible as a result. To ensure this does not happen it is therefore important to study the methods used to manufacture or fabricate the component or structure from which the study is drawing its research data to ensure that there is a commonality and consistency throughout the sample period, or if any changes are made whether these are attributable to any theories purported by the study to ensure the validity of the overall data.

Mearns & Havold, (2003) spearheaded the Balanced Score Card (BSC) approach to data analysis in their study which represents a valid and efficient method of data validation and interpretation compiling inputs from many areas and variables into one combined output. This is a highly desirable method as due to the nature of the oil and gas fabrication industry there are a large amount of internal and external factors to be considered when trying to analyse data drawn from research and identify the root causes of any anomalies or inconsistent data.

Data drawn from surveys and questionnaires will require statistical analysis to allow for the data to be interpreted in a meaningful way. As per the study by Mearns, et al, (2003) it is important to use data levelling methods to reduce anomalies and rationalise the statistical data to provide a level of consistency. At this phase it is important to investigate further any data which appears to be inconsistent with corresponding data to establish the root cause of the anomaly. This first step is to attempt to rationalise the data statistically to establish as to whether the source data itself is inaccurate. If this is not the case and the source cannot be ruled out on statistical grounds, the root cause will require further investigation and validation through interviews to establish the source of the anomaly. This may result in a significant observation which could have an impact on the overall conclusions of the study and act as a stimulus for further research either as part of this study if feasible or as part of future research if required. All consistent deviations from the overall patterns or theoretically concluded outcomes will be addressed further either through interviews or through further more in depth questionnaires relating to the observed anomaly as a means of identifying the cause of such an outcome.

The overall aim is to investigate and research until a suitable explanation or cause can be attributed to allow of the statistical conclusions drawn from analysis of the research data as every potential anomaly can be the source of a key contributory factor or understanding of the effects of safety management on productivity and the reasons for success or failure of the data in the scope of this research.

Responses drawn from interviews will require greater interpretation to convert the responses into statistical representation. While the surveys and questionnaires will have a 1-5 rating system for simple statistical representation numerically the interviews will be in a purely verbal format. It is therefore necessary to tabulate common responses gained from interviews into a numerical format to allow for further analysis and comparison with the survey data. For the purposes of numerical

analysis of verbal responses the occurrence of each similar response will be recorded to ascertain the significance or relevance of the observation. This will also be tabulated against the number of occurrences observed against which level of the company hierarchy or from which background the observation originated from to try to identify the source or those which are acutely affected by the observation. Based on these two forms of analysis a severity/priority factor will be applied by comparing the number of occurrences with the number of people affected to allow for a ranking system for such issues to be concluded which will dictate the direction of future research either through surveys or interviews directed at the respective issues. Unique and significant responses will be considered on a case by case basis to deduce if further investigation is required or if the comment can be disregarded as having no benefit to the study data.

6.2 Chosen Method

The starting point of research will be the safety performance figures for both the companies and comparing them and contrasting them to the productivity figures/rates for the same period. This alone should give a clear indication of the differences between the performances of both companies and the effects that the safety investment had on the company that chose to invest and revitalise its safety approach. However as shown in the literature review safety figures do not show the whole picture. They give no indication of the prevailing attitudes of the men towards safety and it doesn't show the probability of a serious incident to occur. Further research is required to get to the deeper aspects of the prevailing safety climates and culture within each company. This will require hands on observation of the men at work as well as follow up questionnaires and interviews to establish a full picture.

Based on current literature and empirical studies in the field the most effective form of data corroboration is through witnessing the daily site activities over a set timescale and supporting these observations with interviews. This allows the working environment to be observed and any changes will become apparent and will be supported by changes in attitude from the workforce as conveyed in interviews.

Performance factors in relation to safety will be analysed by the development of previously identified methods such as. Productivity measurement is established through time proven methods with the data being taken from both companies over a given time frame. The intent is to primarily review the statistics reported by each of the companies as per their obligations by being listed companies the aim being to analyse the statistics for each year in order to understand if a trend of pattern exists.

After analysis of the reported statistical safety data the productivity performance figures for each company will be analysed for the same time period in order to gain an understanding of the actual performance of the company over the study period by comparing the tonnage output with the resources expended. Again for statistical purposes the reports used will be those that the company are obliged to issue to the public. The reason for relying on public reports in both instances is that there is a large amount of legislation and regulation in place to ensure that the figures released are an accurate account, failure for a company to report accurate figures has significant legal repercussions. Internally within the companies it is common practice

to 'adjust' or amend internal reports to take into account of prevailing circumstances, etc so at times these reports held internally do not show an accurate reflection as there is no legal pressure for them to do so, as such publicly released reports will be used. The productivity report is shown in terms of man-hours expended against the amount of steel tonnage output from each respective yard. A man-hour is indicative of the work by one man for one hour, therefore for example 10 man-hours could be one man working for ten hours or two men working for five hours, man-hour measurement is an industry wide standard and gives a good understanding for the amount of effort that was required to complete a project. The tonnage output is a simple measurement of the weight of each structure that passes out of the yard as completed. Therefore if a company used in year one 1 million man-hours to produce 10,000T of steel output and in year 2 required 2 million man-hours to produce the same 10,000T of steel then the yard in year 2 is half as efficient as it was in years 1 and so on. In the case of this study the productivity figures are being used in conjunction with the surveys and questioning of the personnel, the reason for this being that productivity figures are indicative of the whole performance of the whole yard and as such can have several contributing factors and influencing conditions. In order to reduce the impact of outside influences on the productivity figures the five years chosen for the study reflect a period where both Companies had maintained a similar approach to their fabrication process. This means that the productivity figures used in the analysis will in the most part not be influenced by a major contributing factor such as a revolutionised manufacturing process or similar. As discussed in the previous chapter any influence on the statistics from identified outside sources will be compensated for. The intent of the surveys will in part be to establish whether any in over performance for better or worse were a consequence of a revised safety attitude or if they were the result of some other factor such as better equipment or techniques etc.

Although outside influences cannot be completely eradicated from interfering with the output figures as it is a fact that while both companies have maintained a consistent overall fabrication process throughout the chosen period, both companies have however made investments into facilities and equipment with the intent of optimizing their fabrication capabilities such as better craneage and material handling equipment. While the introduction of such equipment and facilities will not have a dramatic impact on the overall results the impact of external influences occurring as a non direct input of the methods researched in this study will be removed from the

final results. This impact can be calculated from each company's cost validation evaluations made before the purchase or investment in any major asset. The cost of the investment is calculated in payback years to establish the feasibility of such an investment. To produce this payback calculation the company will estimate the man hour savings that will result from implementation or investment in a capital expense. This man hour saving estimate will be verified with the observed impact obtainable from records or during interviews and the equivalent figure will be amended in the overall performance reports to allow for the impact that this investment had on overall productivity to be disregarded from further calculations regarding the impact of the safety system and management methods. This should allow for a situation where after the external factors have been considered and adjusted accordingly, the overall productivity figures will be a true representation of the impact of safety management systems alone and therefore can be used to draw conclusions about the effects the system had on productivity.

The numerical data itself is too ambiguous to satisfy the goals of this study as it only shows indicative performance rather than the reasons or root causes behind the statistics. As mentioned in the work by Marsh, et al, (1995) accident or safety figures do not show a reliable state of the level of safety in a work place as they are incapable of forecasting or predicting future accidents or the potential for an accident to occur. The statistics also don't convey as to whether the company was undergoing a fortunate or unfortunate period or undergoing a period of organisational or operational upheaval therefore the bare numbers and statistics require to be backed up by a study of the prevailing conditions.

The time period for which statistical data will be collected covers a five year operational period however the exposure to the workforce and yard access during the time of this study will be ten to twelve months. Therefore the surveys and questionnaires covering the statistical data for historical years will be based on the memory of those interviewed.

In support of the numerical performance data interviews and surveys will be performed encompassing all levels of the company to support or critique the results found numerically to give a full picture of the safety versus productivity factors. Survey response will be based on a 5 option system, ranging from Strongly Disagree to Strongly Agree. The results will be tabulated and weighted to provide a single take away value; this will be referred to as an agreement factor. This will be calculated by

applying a weighting to the responses with Strongly Disagree having a value of -2, Disagree 1, Neither 0, Agree 1 and Strongly Agree having a value of 2. The responses will be multiplied by their respective weighting and then the total will be factored as a proportion of the total number interviewed to give a final agreement factor.

The intent of the research is twofold primarily to evaluate the effect that taking time, effort and cost to invest in safety has on overall productivity. Secondly the effects of the methods used and how they were implemented will be analysed and their level of performance identified. The ultimate outcome is to confirm or dispel the theory with respect to safety and productivity and advise some identified best practices and provide direction for future research into the subject area. The research will complete the picture provided by the statistics, in the first instance the outcome of the interviews should identify as to whether the safety statistics are an accurate/plausible reflection of the level of safety at site or if they were the result of a period of good fortune. From here it is intended to explore the feelings of the employees towards their day to day exposure and the feeling toward management and the company as a whole. This will give an indication of the level of involvement of key figures in the hierarchy and give an indication of how successful certain implementation strategies were or how well the employees responded to the old and new safety approaches.

6.3 Strategies

The focus of the research will be two Oil & Gas fabrication companies based in the UAE. The two companies are similar in focus, turn over and mentalities and despite operating in the same field. The two companies are not direct competitors as they focus on different types of offshore structures allowing them both to exist in the same market without competing directly for the same projects. The subtle difference is that one company has sought to invest and greatly improve their safety performance while the other operated at the legal minimum requirements until recently. The second company has of late undertaken a major development in safety initiatives which are currently at a very embryonic phase. The level of safety investment of each company was initially identified by industry knowledge and reputation and later corroborated by references to safety initiatives in company literature and confirmed by management/ safety personnel of each respective company

Hence forth the two companies will be referred to as:

Company A: High level of safety investment

Company B: Legal minimum

The previously identified research methods will be deployed in order to obtain and analyse the required data. The original intention was to obtain each company's performance period over a 10 year period; however by admission of both companies this was not possible as the records of years 1-5 of what would comprise the 10 year period were not available or not recorded to a high standard. In light of this the sample period was shortened to 5 years as this provides the longest period from both companies where valid and accurate statistics are held. In the instance of Company A this shows the immediate years after their safety policy changed and for Company B it shows three years prior to the change and two years thereafter.

In the case of Company A statistics were available for the year prior to the 5 year sample period and will be referred to comparatively where required to show the impact that the new safety initiative had when compared to the final year under the old safety management approach. Therefore taking into account the impracticality of

the original plan the new intention is to obtain the accident figures and productivity figures from each company for a period of five years. This should provide a good sample of the work as it covers both the relatively quiet period in the industry through the early 2000's up to the current boom time of the present day which started to occur from 2006 onwards. This gives a good sample rate over both periods and also will show how the safety methods that were introduced performed in a high pressure environment where both work yards were operating at maximum capacity.

The statistical data will be based on these reports as a guideline for performing analysis of the reported data, if the anonymity of the company is jeopardised by using the actual figures then the published data in this report will be disguised using an order of magnitude to alter the statistics so the traceability to the Company will be lost but by virtue of applying the same order of magnitude the accuracy will be maintained truthful to the original reports.

As highlighted in the previous chapter the figures from the overall productivity reports will be amended to account for external factors influencing the overall performance figures. The external factors referred to in this instance are those that have occurred as a result of a new initiative or fabrication process or equipment which has improved the ability of the yard to undertake its daily activities more efficiently. The major impact will come from the procurement of new equipment or new facilities which will allow the companies to produce the same amount of tonnage output for fewer man hours. The man hours attributable to new equipment or processes will be removed from the overall reports based on the impact evaluations and reports produced by the companies and the outcomes of interviews where the actual impact of new equipment will be assessed. This will allow for the reports to show a true representation of the impact of the safety systems alone and implementation methods covered in this study only and therefore will provide a true account of their impact for drawing conclusions.

The intention is to hold interviews and conduct questionnaires in order to gather data; initially the focus will be on the state of the companies over the previous 5 years. Once sufficient data has been obtained over the company's past state the focus will switch toward more recent times and the current state. The purpose of this is to ascertain if any difference has been observed over time with the new implementation methods of company A and to establish the progress that has been made by Company B with their recent initiatives and to leave a stop gap for future

research into the issue after Company B has had more time to implement their new initiatives.

The interviews will start with historical based questioning in order to establish a background and the state of the company at the time of the five year study period. The aim will be to establish the feelings amongst the workforce towards the level of safety they felt and the hazards that they were exposed to on a daily basis. This will also explore their feelings towards the management and attitudes of those in more senior positions and that of the company as a whole. As the interviews progress focus will shift towards how things developed and time will be taken to investigate if forecast/ prophecies made early came true or not and for the reasons why the prediction came to fruition or resulted in failure. The aim is to culminate in the present day and then begin to go into greater depth throughout the rest of the study by covering day to day and week to week instances and conditions as they occur during the course of the study. Each survey will cover a quarterly period for each of the five years, predating each survey a small discussion will take place with those chosen to be surveyed. The purpose of this is to remind them of the ongoing projects at the time and any significant change or incidents that took place at the time in order to provoke the memories and thoughts of those being interviewed to focus on the particular time period that the survey is covering.

Along with the interviews, which will be conducted with a smaller number of employees, to gain a companywide focus of a target sample of approximately 10% of the average over the five years of the study, of employees from the fabrication yard of the company will be surveyed to assess their impressions of past/present/future conditions faced on a day to day basis. This figure was later reduced to 5% due to the practical implications of a survey size of 10% which is discussed at length in the following chapter. The survey will be developed around a series of questions using an 'agreement factor' to gauge their feelings towards the subject matter. Each question will have a range of 5 levels of "agreement" from strongly disagree to strongly agree. The surveys will be conducted regularly over the five year period of research scope and will cover the past back to the first year of the five year period and beyond if required, the present which will reflect conditions over the last day/week/month as appropriate and will culminate towards the end of the exposure time by taking the opportunity to survey aspirations or feeling towards the future for each company as a caveat to future research if time permits. The results of the survey

will be analysed using Matlab software to allow for mathematical analysis and identification of trends and patterns. For the results to be viable a minimum of 90% response rate is targeted. The surveys will also allow comment boxes for the subject to write their responses to certain questions and as a forum to express their own opinions about matters not directly covered by the questions. The comments sections for each questionnaire will be individually analysed and any common themes will be identified along with any significant individual comments that will be of benefit or insight to the study. The intention is to use the interim questionnaires and any common themes to identify and drive areas that will require further research during the study period and as such the questions contained and style of the survey will remain iterative during the course of the study.

To form final conclusions and analysis the outcomes of the statistical data will be compared and contrasted to the output of the survey to verify the data reported in the statistics. The survey data will confirm or dispel the safety statistics and the intention is that the root causes and key factors will have been identifiable from the outcomes of the interviews and surveys.

In summary the five year figures for Company A will show a time period reflecting post implementation of the major safety overhaul which was initially introduced two years prior to the study period. Company B's statistics in this time will give a reflection of normal operating conditions for years 1-3 and then in years 4-5 will show the influence of the new safety system and the effects of the same will be displayed in year 5.

6.4 Problems

A significant stumbling block in ascertaining actual, relevant and truthful views occurred during the research phase of the study, which can be attributed to cultural differences. The primary issue was the language barrier many of the lower level labourers, i.e. the employees who perform the hands on work such as welders, fitters, riggers, etc, are from the Indian Subcontinent and mainly recruited from small villages and rural communities where access and exposure to the English language is limited as it is not a recognised means of communication in these communities.

Therefore while these men maybe highly educated and expertly trained in their technical fields, in all cases English was spoken as a second language and in most cases the standards of English was understandably poor, therefore direct verbal communication was greatly hindered especially with respect to the required level of descriptive insight desired. Secondly there was an unexpected cultural issue encountered due to race. Being of Caucasian European origin it was observed that the behaviour of the labourers would change notably once my presence had been observed also in the interim communications were greatly strained and often probing questions were responded to, in my opinion, with answers that the respondent thought I would want to hear.

In the current expatriate workplace environment in the UAE there appears to be a subconscious class structure evident in the hierarchy of UAE organisations. Currently most of the lower level workforce is of Asian descent while the majority of the management is of 'Western' (European, American, etc) ethnicity. As I fall into the 'Western' side of the East v West divide many of the labourers initially and incorrectly assumed that I was a member of the management that had come to spy on them and report my findings to management.

The language and cultural issues were initially overcome by utilising an Indian colleague who could assimilate and communicate with the men more easily in their own language. My colleague has requested anonymity in return for his assistance, which I intend to fully respect, however his efforts are greatly acknowledged. Once this was established and feedback began to come through I gradually increased my presence at site along with my colleague and my involvement in onsite activities to allow for an easier transition and to begin to gain the trust of the labourers. Once it

was established that I was not present at site in an authoritarian sense the notion that the labourers could be honest with me and not fear retribution propagated and towards the end of the study employees were actively seeking me out as a sounding board as they felt I could be used to pass on their feelings to management in order to improve their environment.

This behaviour was prevalent at all levels of the organisational hierarchy with varying degrees of severity, generally it was noted that the higher up the hierarchy the less prevalent these feelings became. This was an expected occurrence as above the labour level good standards of English communication are a job requirement and in most cases those being interviewed were aware of my position in my career and were often my senior. However a certain level of scepticism and suspicion was noted at all but the highest levels as until my objectives became clear the paranoia that I was reporting directly to executive management was noted in the initial exchanges.

Although this suspicion was observed in both companies, mainly down to human nature and cultural peculiarities, it was interesting to note that the severity was notably different between the two companies. Company A which exhibits a high level of management involvement throughout the organisation, the cultural barriers were easier to overcome and this was achieved in a far shorter time frame than in Company B, where management involvement is limited and often the only time low level labourers interact with management senior or otherwise is in a disciplinary environment. These observations provided a useful side effect in aiding and adding to the safety culture/environment research and although proving to be a hindrance in obtaining data, provided a valuable insight into the attitudes of the workforce towards management.

Company A has a larger workforce than Company B 4,484 employees by 2008 of which just over 1,000 are office based and 3,363 yard based (labourers, foremen, superintendents, etc) compared to 2244 of which just over 500 are office based and 1,683 are yard employees respectively. Therefore in order to have a sample size which represents the full workforce proportionately it was envisaged to survey 10% of the whole labour workforce 336 yard based from Company A with a similar breakdown for Company B. However the desire to survey over 300 yard personnel at Company A and 168 at Company B proved to be impractical when this approach was proposed to both Companies.

Due to production commitments and man power utilisation forecasts at both companies, there was a reluctance to permit such a large number of men to conduct these studies as each company was worried about the adverse effect it would have on their production capacity. Both companies were afraid that removing such a large proportion of the workforce from the worksite for the time required to conduct the surveys and discussion sessions would be too costly for them from a project productivity perspective. Staggered timing of the sessions was proposed to lessen the potential impact of removing the men from the worksite but this received a muted response from both companies and would have had an adverse effect on the group discussions due to the lower number of participants therefore a reduction of the number of survey candidates was the only viable option agreeable to both companies which would allow the study to proceed.

Another unforeseen problem encountered was the issue discussed at length in the previous paragraphs relating to language and cultural issues. The problems that occurred as a result of the language and cultural issues would have been further exacerbated by the increase in survey size and would have proved to be unmanageable over the course of the research period due to the increased time and effort required to accurately source and research the data for the given sample size. In order to conduct the surveys to the desired level a greater amount of translation resources and assistance would have been required which would have been a further drain on the company's resources of which the success of the study was solely reliant upon.

Operating with a larger group, it would have taken far longer to assimilate and build up a rapport with those involved and as highlighted the gaining of trust and acceptance by the workforce was a key component in gaining truthful and meaningful responses and data. Without such responses the study as a whole would have suffered, due to the additional time required to make these relationships the scope and depth of the research would have been impacted and many issues would have gone unexplored as a result of running out of time to conduct the research.

Another primary driver in the decision to reduce the number of candidates came as a result of the high turnover of manpower experienced by both companies in the 5 year period for which the research covered. When research was conducted into the each company's workforce numbers and the lengths of time each employee had been actively employed by the company which was provided from company audit

reports. It was observed that with respect to yard employees in particular there was a dearth of employees who had served for five years or more, with the average for both companies being in the region of 3 years. In order to provide consistency in the results it was proposed to survey only employees that had been in active service for each company over the 5 years researched as part of the study. For both companies the overall percentage of the workforce that had served for five years or longer was in the region of 9%-12% therefore it was necessary to reduce the size of those surveyed to ensure the integrity of the research and not rely on a lower number of respondents to cover the further reaching ends of the research.

In light of both of these implications it was decided to reduce the sample size to a more manageable figure of 5% of the average number of employees operating in the fabrication yard resulting in 150 men from Company A and 105 men from Company B to act as respective survey candidates to ensure the research was conducted in the most feasible manner and to ensure the integrity of the data was at the utmost.

While this amounted to only half of the originally proposed sample size which raised some questions over the validity of the data and the outcomes upon analysis of the data and interpretation of the results, it was found that the results and conclusions drawn were credible enough to be allowed to stand and therefore the study continued with only a 5% sample size. In order to balance this shortage of survey candidates the number of interviews and the depth of questioning was increased appropriately to validate the findings of the statistical data and to explore certain themes on a greater than originally anticipated level to compensate for the less than desired number of survey candidates.

Both companies operate in a very competitive environment and hence performance and reputation is the key to their respective success. As such initial both were hesitant to allow this level of inspection into their past and present safety performance and initiatives. In order to be granted the privilege of access to such sensitive information anonymity of the companies involved had to be assured. Data and information is therefore presented in such a way that the companies cannot be identified as a result of this study. Key information/ details are divulged where necessary to add value to this study but presented in such a way as to protect the company involved. Events and findings in some cases are not described to the full detail available in light of this but without any detrimental effect to the overall work.

A level of reluctance in both companies was observed in the interim regarding obtaining data and discussing significant events or events/actions which potentially showed the company in a negative representation. This took time and effort to reason with the reluctant parties and mitigate their concerns however when both companies learned the value that this research may provide both companies gradually became more forthcoming and eventually a great level of openness and disclosure was observed. In both instances the companies involved were aware that this study was a comparative exercise with the performance of a similar company in the same region but at no point during the research did either company know the identity of the other.

This was to ensure that it would have no further influence on the responses gained or to avoid an atmosphere of conflict emerging whereby if a representative of Company A was being pressed about an issue it would avoid the response of "Company B does this," or "Company B is worse than us in this field," etc. While there is a large amount of competition in this industry and each company tries to protect and maintain a level of privacy from the others to avoid allowing a rival to gain a competitive advantage, due to the high numbers of employee turnover, often between companies, and the industry itself being quite close knit there is a high level of common knowledge between the companies about each other's practices and strengths and weaknesses. Therefore if the companies involved were to have an indication of the other company being compared to them it had a great potential to influence the results as each company would strive to be shown as being 'better' than the other, so anonymity of the companies involved to each other and other companies in the industry was essential to the success of the research.

As highlighted under the 'Strategy' chapter it was originally planned to have a sample period of ten years for each company with respect to their accident reporting and productivity figures. This proved to be impossible to achieve as both companies stated that their figures for years 1-5 of the 10 year study were either unavailable or kept in poor order and as such their accuracy and benefits toward research would be questionable. Therefore it was decided to use a five year sample period to take advantage of readily available and accurate reports issued by both companies. Narrowing down the sample period from 10 to 5 years had the unforeseen benefits of improving the accuracy of the overall study. In hindsight after completing the interviews, using a 10 year period of reflection would have been an unwise decision as many of the men struggled to accurately portray events and conditions five years in

the past, therefore to probe 10 years into the past would have left the study exposed to the potential of inaccurate reporting. It was also found that due to the high turnover of man power at each company only a small number of those surveyed would have been in service 10 years ago therefore the number of men available for comment on those times would have been minimal. Also as was highlighted during the research for this study, both companies have undergone significant changes prior to the 5 years that this study sampled and therefore anomalies would have been likely to have affected the results due to significant paradigm shifts at both companies over the last 10 years prior to the sample period commencing. For example ten years ago Company A was going through a very lean patch in the UAE and only had two major projects on their books, their workforce was down to the bare minimum, approximately 20% of current levels, and the approach to work was very different to what it was some five years in the future. Company B ten years ago was remarkably different to the Company B of even 5 years ago; Company B was a relatively small operation in the Middle East until they floated on the stock market and received a major injection of capital. This extra capital allowed them to open two additional yards in the UAE and operate on a global scale and appeal to clients who previously would have overlooked Company B as being too small an operation. Therefore in hindsight it is my opinion that the study benefited from utilising a smaller focus of 5 years than the originally proposed sample period of 10 years.

7.0 Findings & Discussion

7.1 *Company A*

7.1.1 Background

Company A has piloted a major shift in its attitudes towards health and safety policy since the early 2000s. Prior to the new initiatives being introduced the company had a high accident rate in comparison to its current figures at a much lower productivity rate and man power utilisation. The figures in comparison to local UAE standards were by no means excessive but this shows a poor reflection on the safety standards in the UAE itself rather than the company's performance against similar competitors. As Company A is of American origin, a society which has a very low tolerance for workplace accidents and in particular fatalities the parent company in the organisation set aggressive targets for the world wide reduction in accident rates in all of its companies including Company A in the UAE. This was deemed necessary not only for the human factor but to reduce exposure to bad publicity and reputation within the industry, not only is the company based in the US, it is obliged to make public reports due to its listing on the New York Stock Exchange (NYSE), the company also deals with major players in the oil and gas industry as its clients and who are therefore very interested in reducing any exposure to negative publicity. The company's directors based in the headquarters in Houston came up with a new directive to be followed by all of the worldwide fabrication yards. Target Zero became the byword for the new safety initiatives launched simultaneously at each yard, while the directors had coined the phrase "Target Zero" with the aim of achieving zero accidents, it was the responsibility of the individual operations to devise their own methods and implementation strategies to reach the overall target of zero accidents. Along with the zero accident target the company also devised an internal rating system for the overall safety performance of each yard with awards offered to those reaching the highest safety ratings and the potential for serious repercussions for the yards that that performed poorly.

7.1.2 Target Zero

The first steps the company took as part of the "Target Zero" program was to appoint a new HSE director for their UAE yard, the new director saw about a total paradigm shift for the organisation with respect to their views and approaches to safety management. The initiatives he introduced were based solidly around the total safety theory, based on the Total Quality Management principle (TQM) with the end goal being zero accidents rather than zero defects and as such the initiative was given the moniker "Target Zero." Not only has there been a shift in the initiatives themselves but also a major overhaul of the attitudes towards safety breaches and unsafe acts. Rather than outright punishment or dismissal the company had chosen to take a positive reinforcement attitude, to re-educate and guide rather than punish with the exception of a breach of the company's 'zero tolerance' acts which are widely publicised to employees and throughout the work site and are actions or events that could lead directly to loss of life or limb if a person is to breach any of the guidelines.

The company also adopted incentive schemes to encourage participation in individual and companywide safety initiatives/schemes by holding competitions and handing out rewards for contribution, suggestions or observed good working practices. As shown in the study by Fuller, (1999) promoting healthy competition has positive outcomes with respect to safety performance, employee participation and attitudes. Company A has seen marked improvement in companywide participation in safety campaigns as a result of the incentive plan. One such initiative is the monthly safety competition, a safety theme for a given month is chosen either from a list of target areas or to combat a prevailing problem, employees are then tasked with coming up with a slogan or picture to use in the company wide advertising campaign which promotes awareness of the current safety theme. The top three entries are judged by a panel of managers and receive prizes ranging from company branded t-shirts and caps to mobile phones and personal consumer electronics for the monthly winner.

Another initiative employed by the company is the spot award programme, whereby any employee that is observed working in a way that actively conforms to the safety guidelines is given a token gift, often a company branded item such as a shirt, hat or pen.

The TSM ideology is a relatively new approach to safety management; early studies such as Vassie, (1998) sought to continue the benefits obtained from TQM by transplanting the core ethos into other areas. TSM requires a high level of commitment from all levels of a company if it is to be successful it is also to be noted that the greater the level and transparency of management involvement the greater results are found as a result of implementing TSM. While it would be foolish to assume that a company can achieve 'zero accidents' for a prolonged period, such as 10+ years, as it is an unfortunate aspect of human nature that accidents will always occur at some level and to some severity mainly as a consequence of humans, unlike machines, being fallible and prone to human error despite stringent guidelines and mitigating procedures. However 'zero accidents' is an appropriate target as it forces companies to constantly strive for improvement and thus over time and iteration a company abiding by the laws of TSM will conceivably produce an efficient and effective safety management technique, that constantly adapts to changing conditions and environments as they occur. As in TQM the tools to achieve TSM lie in communication and co-operation with high levels of participation. Everyone within the organisation must be actively involved in aiming towards the ultimate goal of 'zero accidents' for it to have any tangible chance of success. As such TSM is an expensive venture both in terms of time, effort and cost but it is one that if achieved as shown by Donald & Young, (1996) to have the potential to reap great benefits to any company that makes the requisite level of investment to make it a success. Like TQM, which has been around as a concept since the early 80's, TSM is as an effective management tenet, in its infancy and there is much work to be done to identify and ratify the requisite deployment techniques. Studies in this field will only now begin to gain some academic credibility as only after this time has the ideas piloted and theories initiated had time to propagate and show meaningful data as to the successes, if any, which can be achieved as a result of TSM. However despite the lack of significant empirical study and data into the field, as with TQM, the theories are based on sound logic, however as this is no practical guarantee of success, certainly the aspects from which TSM was founded will propagate into some field or ideology that will be of benefit to the safety management field as a whole due to the introspective nature of the work and the level of investigation and auditing that is required in its implementation. While maybe not being the ultimate solution to the ailments of

safety management it will provide companies with a level of analysis into the root causes of many of their safety issues.

In line with the TSM methodology all of the initiatives deployed by the company were given full management backing and often when a new concept was being introduced to the yard, the management would first introduce it in a meeting with the yard superintendents. The superintendents would then filter the new initiative down to the workforce at the lower levels. In the event of a major initiative such as the HSE communication system, described in the next paragraph, this would be introduced to the workforce in a series of large scale presentations held in the yard canteens which would be conducted by the senior managers in the presences of groups of yard employees. The benefits of this being that the yard employees see the senior managers in person delivering this message and thus obtain reassurance of the management's commitment to the program. It also provided a rare forum for the yard employees themselves to question or voice any concerns over the new system and any other prevailing concerns they have directly to senior management. During the interviews it was observed that the lower level employees preferred this forum approach as they felt reassured by the numbers of their peers present to bring up certain issues safe in the knowledge that if they were questioned by anybody about their reasoning or motive they would have plenty of support on hand. The labourers intimated that the fear factor was removed as in a group situation like that they could not be singled out and pressured by their immediate supervisors not to pursue the matter.

The managers at the company noticed this trend for more issues than just the one being presented being discussed at these meetings and made the decision to hold them at least quarterly. The intent of abiding by a quarterly schedule being that it would create pressure to create a new initiative each quarter as well as allowing the management to see firsthand the prevailing issues in the yard. Many of the company's policies and initiatives came to fruition based on the outcome of issues raised at these meetings such as the heat illness awareness campaign and anonymous reporting helpline set up to allow employees to voice their concerns on any subject and in particular to bring it to the attention of the investigating team the unsavoury actions of a site supervisor/superintendent.

Prior to the anonymous helpline being established many employee felt trapped by their immediate supervisors treating them unfairly or acting inappropriately. Many

of the lower level workers did not know who to report to above their supervisor or didn't have the confidence in their ability to use the English language to get their grievance across. The helpline is totally anonymous and operates in all of the languages represented at the company therefore if a supervisor is treating an employee unfairly they can report it to a team who will investigate the matter without revealing the source of the original complaint.

Company A has paid particular time and energy to its HSE communication system, throughout the yard and offices are HSE communication cards and sealed post boxes. Employees are encouraged to fill out the cards with any observed safety violations, safety concerns or ideas for safety improvement. Employees can fill the cards anonymously in the event of highlighting a problem or reporting an unsafe act or in the event of presenting an idea rewards are given at regular intervals to significant contributions. The communication system can also be used to report unethical, unsafe or discriminatory activity by a fellow employee or supervisor again in an anonymous environment if the employee wishes. All reports are investigated and addressed accordingly with retraining and education or disciplinary action depending on the severity. This is backed up by a telephone helpline which operates on the same principle and is operated in all of the noted languages spoken at all levels of the company. The outcomes of any investigations are published on the company's notice boards both in the yard and electronically to promote awareness to all employees.

BBSM or Behavioural Based Safety Management is another aspect that Company A has put significant weight behind in their safety management system. This is in keeping with their intention to abide by proactive safety enforcement. The core ideals behind BBSM are that you approach accident prevention from a basic psychological level by changing the behaviour of the employee and their perceptions of the hazards to which they are exposed. This also translated heavily into educating and enforcing pre-emptive safety measures by educating the employee in good body language and positioning to achieve a safer environment and to communicate hazards or concerns to others. This displays a different approach from standard accident prevention methods which seek to remove the physical risk to a person by removing anything that maybe hazardous to the person from their environment and instead focusing on how the individual can become perceptive or avoid exposure to risk by managing their behaviour in the workplace environment.

Company A has gone to great length to promote within the workforce and any visitors or subcontractors at site that they have the right at any time to stop ongoing work if they believe a risk to be present or witness an unsafe act. The corner stone of this initiative is that retribution will not be meted out against the person that calls a halt to the work for the act of doing so which removes the fear that some employees have that they may face disciplinary action if they halt work and it proves to be unnecessary. Company A is keen to promote a "no blame" culture in all of its safety activities. For example during a spot check if an employee is observed to be working in an unsafe manner the safety officer will advise and educate the employee as to the appropriate way to conduct their work providing the violation is not in breach of the 'zero tolerance' acts. If required the safety officer will recommend the employee to attend a training session or refresher course if required to further educate the employee. The employee will not receive any kind of financial penalty or otherwise for being absent from the job site to attend any training sessions.

Training is a major undertaking for Company A with all employees receiving some form of safety training as part of their induction to the company. All office based employees receive a two day orientation with a further four session course conducted in the yard if they are to be exposed to the yard for extensive periods of time. Labour employees are given a five day training session which covers all of the prevalent yard hazards as well as specialised training for the risks involved in their given discipline. All subcontractors and visitors to site are also required to undergo some level of training which is dependent upon the amount of time they will spend at site. This is part of the company's pre-emptive approach to safety rather than reactive which is seen throughout the industry, the idea being to remove the risk by training prior to exposure to any risks as a means of mitigating the occurrence or potential for accidents to occur.

7.1.3 Target Achieved?

The safety statistics published by the company for each of the five years of the study are at face value consistent. The number of reported incidents in each category is often the same value plus or minus 1 or 2 incidents per year. This however does not show the full picture as it is important to consider the man-hours incurred by the company over the period of the safety report. For example the figures for 2005 and 2007 are almost identical, with the exception of a small increase in Medical Treatment Cases (MTC) in 2007; however the company managed to register over two million more man-hours. This is a key indication of the importance of having a thorough understanding of the context and true value of the safety figures that are often overlooked. It would be easy to look at the two sets of figures and say that as the numbers had increased from 2005 to 2007 that safety performance was in decline however when you consider that there was only a minimal increase in reported incidents for an increase of over two million man-hours then it can be seen that despite a slight increase in the number of reported cases the safety performance of the company has improved remarkably. In 2004 the first year of this study the company saw an immediate improvement on the accidents reported and the overall safety performance.

Year	Manhours Expended	FAT	LTI	RWC	MTC	FAC	Total
2004	4,437,937	0	0	4	6	62	72
2005	5,615,472	0	0	1	2	59	62
2006	7,602,341	0	2	5	5	49	61
2007	8,451,643	0	0	2	7	57	66
2008	10,491,973	0	1	9	9	56	75

FAT-Fatality **LTI**-Lost Time Injury **RWC**- Restricted Work Case
MTC- Medical Treatment Case **FAC**- First Aid Case

Table 7.1: Recordable Incidents and Manhours during study period

Over the remaining four years the reported accidents themselves remained similar within reason however over the next four years the man-hours utilised each year rose significantly and consistently each year. This shows that statistically the safety performance of the company has improved each year since the inception of the

major safety over haul. The increase in man-hours reflects the expansion of the workforce and the company itself to combat the increase in work and projects that the company has undertaken. While this does not give a direct indication of productivity performance over these years as a yearly increase in man-hours can be achieved by increasing the workforce and if you increase the workforce without increasing the amount of output from the yard then this would reflect a decrease in productivity as you would be expending more hours to produce the same output. Therefore to gain an indication of productivity improvement over the five year period the man-hours expended must be compared to the output from the yard for the same period, this is expressed in the tonnage of steel in the structures the yard has handed over as complete which is an industry wide standard of measurement. Over the period of study the tonnage output from the yard has increased disproportionately in relation to the man-hour increase for the same period meaning the company is consistently outputting more tonnes for fewer hours. This is an indication that the company's productivity has increased during the period of safety focus and more importantly productivity has increased as a result of something greater than just increasing the manpower and capacity of the yard.

Year	Labour Workforce Size	Total Workforce	Manhours	Tonnage Out	T/ Man Hr (Productivity)	% Improvement in Productivity
2004	1374	1832	4,287,937	10,209	420	N/A
2005	1784	2378	5,565,472	13,574	410	2.38%
2006	2373	3163	7,402,341	19,480	380	7.32%
2007	2635	3514	8,221,643	24,892	330	13.08%
2008	3363	4484	10,491,973	36,481	288	12.93%

Table 7.2: Productivity performance during study period

The output from the statistical analysis of the 50 questions put to the workforce in the quarterly surveys over the five year period showed consistent fluctuation about all of the issues throughout the period. The statistics for the first year of the study, 2004, reflect a period shortly after the new safety initiatives and the beginnings of project "Target Zero" where still met with disagreement, lack of participation and high levels of scepticism towards the new approach and the management's commitment towards "Target Zero". When employees were given the statement "I believe management fully supports the new safety initiatives" and asked to rate this on a sliding scale from strongly disagree to strongly agree, the results for

the first quarter in 2004 show a disapproval factor of 57% towards management commitment which rose to 65% and 64% respectively in quarters 2 and 3 before subsiding to a slightly improved 51% disapproval rating for the final quarter of 2004. This acted as a clear indicator to Company A's management that although accident rates were improving as a consequence of the program, the rate of improvement could be increased by a more visible showing of management commitment.

Q No.	Question	Agreement Factor (-ve denotes disagreement)			
		Q1	Q2	Q3	Q4
50	I believe management fully supports the new safety initiatives	-57%	-65%	-64%	-51%

Table 7.3: Response to Question 50 for 2004

The lack of commitment observed by the workforce over this period was mirrored in the level of scepticism towards the new approach. Starting at an all time high of 42% factor in agreement that the workforce was sceptical of the longevity and value of "Target Zero" in contrast to the commitment statistics this improved to 25% agreement for the 2nd and 3rd quarters before dropping back to a year end value of 36%. Lack of commitment from the workforce was also clearly identified in the figures reflecting accident reporting, both the failure to report minor accident and the question regarding knowledge of a colleague who had been involved in an accident and failed to report it and shown directly with responses to the question regarding participation in safety initiative for the first quarter 2004 having a low starting value of 35% disagreement factor falling to an all time low of 43% in the following quarter.

Q No.	Question	Agreement Factor (-ve denotes disagreement)			
		Q1	Q2	Q3	Q4
52	I am sceptical of this new approach and don't believe it will last	42%	25%	25%	36%
47	I actively participate in the Company Safety Initiatives	-35%	-43%	-39%	-42%

Table 7.4: Response to Questions 52 & 47 for 2004

The root causes of many of these issues including the lack of perception of management commitment and the lack of participation are encapsulated by the responses to the questions related to the perception of the level of safety in the workplace and the perception that management was actively striving to create a safe workplace. Both of these indices were at their lowest points during 2004 with the

perception of management activity at its lowest in Q1 2004 and the feeling of a safe work place also reaching a low of 24% disagreement in Q3 2004.

Q No.	Question	Agreement Factor (-ve denotes disagreement)			
		Q1	Q2	Q3	Q4
46	I feel safe in my workplace	-2%	-17%	-24%	-15%

Table 7.5: Response to Question 46 for 2004

All of these figures point to the fact that despite the new safety approaches and initiatives having a positive effect on the accident reporting statistics, the behavioural and psychological benefits require more time to take effect. It also provides indication for the key areas that require further focus or development such as the perception of management interest and employee participation which can be developed separately to the new safety approach while attempting to achieve the same overall goal.

Company A had made significant investment in their facilities and equipment during the period of the study and therefore adjustments had to be made to the overall productivity figures prior to comparison to allow for these external inputs to be compensated for. For example Company A almost doubled their craneage capacity thus increasing their material handling capabilities and decreasing their associated manhours. Company A also invested in a new enclosed painting and blasting area which had an impact on the manhours attributed to painting and blasting activities as well as reducing again the resources devoted to material handling as the new facility gave the company a more streamlined approach to such activities. Once these figures were accounted for and removed from the overall outputs there was still a significant increase in the overall performance of the yard which was purely attributable to the safety initiatives and approaches discussed above.

Year	Labour Workforce Size	Total Workforce	Adjusted Manhours	Tonnage Out	T/ Man Hr	% Improvement in Productivity Due to Safety
2004	1374	1832	4,437,937	10,209	435	N/A
2005	1784	2378	5,615,472	13,574	414	1.50%
2006	2373	3163	7,602,341	19,480	390	4.81%
2007	2635	3514	8,451,643	24,892	340	10.65%
2008	3363	4484	10,491,973	36,481	288	12.93%
Year	Reason For Reduction	Description				
2004	Increase in Craneage	Eased Material Handling worth 150,000 manhours				
2005	SPMT Units	Eased Material Handling worth 50,000 manhours				
2006	New Painting Facility	Combined Painting and blasting facility simplified the painting process worth 200,000 manhours				
2007	Facilities Upgrade	General upgrade to facilities increasing capacity of particular processes 230,000 man hours				

Table 7.6: Productivity calculated on reduced manhours for outside influences

The figures used to assess the impact of external factors were drawn from Company A's forecasts into the impact of the relevant facilities and equipments and this was further verified in interviews with fabrication and planning personnel to ensure accuracy. The level of impact of the external factors and the amended statistics was presented to Company A's internal auditing department and confirmed as an accurate representation of the impact that the external factors had and that the impact attributable to the safety initiatives alone was accurate and acceptable based on their calculations of the same.

As stated previously in this study statistics only tell part of the story and while the statistics have shown that both safety performance and productivity have increased in the time the company took a lead role in its safety approach it is important to investigate the outcomes and effects on the employees themselves to obtain the full picture. As noted other studies safety statistics are potentially very ambiguous as they don't reflect the potential for an accident to occur and an observed period of good performance statistically can result purely from a fortunate period that the company had benefited from, therefore it is imperative to understand the safety culture within the company and the prevailing safety climate by interacting with those affected and influencing the prevailing conditions.

The outcomes of the surveys and interviews as an overview of the five years assimilate with Company A's accident statistics in that as the company witnessed a

consistent improvement in safety performance over the years so did the general comfort of the employees improve in line with the safety performance year on year. Making the general workplace environment safer on a consistent basis had a cumulative effect on the years that followed. In accordance with the study by Wong, et al, (2002) provision of a safe working environment leads to a reduction in workplace related stress which has been shown to have a direct contributory effect on the potential for workplace accidents to occur as a result thus helping to reduce the number of accidents reported year on year with any significant additional impetus.

In the interim a wide ranging study of the prevailing conditions and comfort factor of the employees proved to provoke quite strong and polar responses from those canvassed. In general those surveyed were either content with their daily workplace and the company's treatment of them or they were very passionate about the poor conditions and poor treatment. It was unusual findings to say the least as there was no consistency or pattern in the responses. The extremes in the responses came from the young and old, experienced and inexperienced and from all cultural backgrounds and hierarchies. The one thing that these results clearly indicated was the presence of an inharmonious atmosphere present within the workforce which was having an adverse affect on the company's performance.

Changes in attitudes did not occur overnight but when the company's management became more involved in the target zero program this had a uniting effect on the workforce. It wasn't until the beginning of year 3 that the outcomes of the surveys began to show an overwhelming majority of those content with their work and the company's performance but the shift in attitudes began to surface midway through year one. In the initial phases there was much scepticism from those with the most extreme views of the company that "Target Zero" would just be the latest 'flash in the pan' initiative doomed to failure by lack of interest like so many that had preceded it. The doubters were eventually proved wrong, and one of the key initiatives which broke down the walls of doubt was the company's safety competition initiative, outlined in the previous chapter. It was often cited as the one thing which finally broke the resistance of those still trying to distance themselves from actively participating in the new safety ideology. A few of the older more experienced respondents intimated that they were set in their ways and refused to adapt or participate in this new imitative until they were threatened to do so by

disciplinary action, as this was the long time established way of doing things, refuse to change or act until you are forced to do so.

However when the incentives offered to them materialised many of the older more stubborn employees had an immediate change of heart as given their level of experience compared to the others, they were in a prime position to make valid and useful suggestions, and so they did and reaped the rewards for it. The scheme of offering prizes to coax people into participation is not the ideal scenario as the hope is that people will act of their own volition due to their loyalty to the company it certainly proved to be an effective measure to persuade stubborn employees to join in without the management having to threaten employees to do so.

It is interesting to note that responses towards the feeling of motivation mirrored the trends observed to the question regarding the perception of safety in the workplace. As the approval rating of the workplace safety perception increased so did the feelings of motivation.

Strongly Disagree				Disagree				Neither				Agree				Strongly Agree		
2004				2005				2006				2007				2008		
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
-32%	-38%	-38%	-38%	-30%	-29%	-20%	-19%	-7%	-4%	8%	31%	31%	43%	57%	61%	68%	67%	60%
-2%	-17%	-24%	-15%	-11%	-7%	-7%	1%	9%	10%	16%	25%	39%	51%	58%	67%	78%	84%	87%

Table 7.7: Motivation (top line) vs Safety Perception (bottom line) for the survey period

At a base level this correlates to Maslow's hierarchy of needs which dictates that if an employee's base needs are catered for such as the provision of a safe environment then the employee will be more motivated to perform for the company as a result. Employee satisfaction also mirrored the above trends showing a clear correlation between the perception of safety and the level of satisfaction and motivation observed in the work force as a result.

It took time for the employees that had felt used and abused by their superiors under the previous regime to adapt to the new proactive/participation based approach. The tipping point in this scenario came about with the inception of the reporting scheme and promotion of company forums to discuss issues. Once employee felt they had an outlet for their grievances co-operation slowly began to emerge where it once didn't before. Rather than bottle up their issues employees felt more comfortable

coming forward and discussing them and often found that others were affected in the same way. The company made a significant step forward in this issue by introducing an onsite therapist, many organisations employ occupational therapists for their staff, but in this instance the person appointed was not purely an occupational therapist but an actual trained psychiatrist. Working under the conditions in the UAE can be very mentally taxing as often workers are separated from their families for a year at a time, labourers live and work with the same teams of people so they are surrounded by the same people 24 hours a day as well as working a punishing 10 hour day, six day week in high temperatures and hazardous conditions. All of this can add up to some significant mental worries and if not treated can result in a full breakdown. Therefore the introduction of the therapist acted as a release valve for many of the men with pent-up issues and forged a more communicative culture to develop. Increase lines of communication between the men resulted in improved co-operation and team work and the workplace became a more pleasant and productive environment as a result. With employees more freely voicing their issues more problems were identified and dealt with, at times the issues were born from a simple misunderstanding or cultural difference, other were the result of people acting unprofessionally. In the event of an employee acting unprofessionally, the first course of action was to highlight the grievance and the perceived causes, the employee accused was given the chance to explain his side of events and the inspecting team would come to a decision as to whether it was a misunderstanding or something more sinister. In the event of the supervisor being at fault depending on the severity the supervisor would be offered training and coaching to remove the root causes of the problem. If the supervisor purposefully refused to change his actions or sought personal retributions for the accusations then he would be deemed un-trainable and asked to leave the worksite either by transfer to another department or location where his performance would be scrutinised for a review period or asked to seek employment elsewhere. Slowly but surely identifying and rectifying hazards, risks and uncooperative or counterproductive members of the workforce and dealing with them in the appropriate manner began to create the harmonious atmosphere around the worksite that didn't previously exist. That is not to say that further issues did not go on to occur but the company adopted an early identification and prevention culture to deal with issues proactively before they became a reactive event. Most emanating issues were nipped in the bud but for the few they flourished into larger

problems, due to the company's now growing experience and knowledge base for problem solving and corrective action most issues were contained and mitigated before becoming an uncontrollable problem.

Company A never did manage to attain the illustrious title of a "Target Zero" workplace, in practice the goal of reaching zero accidents is one that is unlikely to every be fulfilled but it does provide a goal to drive further improvement toward. Over the five year period which saw the commencement of the "Target Zero" program the company suffered zero fatalities and managed to for a period of three years without suffering an LTI (Lost Time Injury). A Lost Time Injury is often the result of a serious, but not major accident, where the employee affected is prevented from returning to work in any capacity within 24 hours of the incident occurring. Unfortunately for Company A within a week of reaching this formidable milestone the company suffered an LTI, however the Company then went on to complete another year LTI free in midway through year five which again was broken shortly after the milestone. The two examples of the LTI's suffered by Company A was, in the incident that broke the three year incident a member of the rigging crew lost several fingers while attaching a load to an SPMT (Self Propelled Modular Transport) trailer. The workman was securing a load through a pad-eye when his colleague activated the system causing a hydraulically actuated locking bolt to engage into the pad-eye where the labourers hand was causing loss of finger through crushing injury. The accident was found to have occurred due to a breakdown of communication between the riggers and the operators and the operator responsible was disciplined and retrained as he did not follow the procedure which resulted in the injury. The second LTI was the result of a 'freak accident' which was unforeseeable and unpreventable. A pipe fitter was walking by a pipe storage area; the pipes had been stacked and stored correctly as per the procedure, when a wooden chock came loose causing one of the pipes to fall. The pipe fitter's leg was crushed between the ground and the pipe resulting in a compound fracture of his Tibia and Fibula. Investigations after incident revealed that the pipes had been stored as per the prevailing procedure and that the incident occurred due critical structural failure of the wooden chock. In the aftermath of the incident the procedure for pipe storage was revised, stating that as well as chocks the pipes are to be tethered to anchor point on the wall to provide an additional factor of safety. In both cases, the men affected returned to work after

relatively short absences but the severity of the accidents in both cases resulted in an LTI being recorded.

7.1.4 The Future

The achievements of remaining LTI free over a one year period and more importantly a 3 year period are accolades that are highly prized by the company as it proves their safety system is working. Ultimately it means that for four years out of the five years covered by this study the most significant accident suffered by the company was a number of RWC's (Restricted Work Cases) which is by definition a minor accident. An RWC is where an employee is injured to the point that he can't fully perform his daily duties but is still capable of performing in a limited capacity, such as an injured hand or broken arm. The UAE based fabrication yard also reach the highest rating of any other yard on the corporations internal safety auditing and rating program attaining four and a half stars out of five. In the short term future, Company A is committed to further extending their remarkable run of LTI free periods hoping to ultimately break the five year barrier, which would be an unprecedented achievement within the industry. The Company is also actively seeking to attain the final half star to allow them to be the first five star safety rated facility within the corporation, a task which they are in healthy competition with their sister yard in Batam, Indonesia.

After analysis of the performance of company A over the 5 year period that this study focuses on it can be observed that the methods and implementation of the safety management at this company has had a marked improvement on both safety performance and productivity. However a notable area of concern for Company A as highlighted in interviews with the safety personnel is that they are beginning to struggle to maintain the high levels of participation and interest in the safety activities and it is anticipated that this will lead to a stagnation or slump in the future performance. It was observed from the surveys that interest and participation particularly from those that have been with the company for five years and beyond and witnessed the revolution are starting to lose interest in participating in the company's safety initiatives. The older employees are becoming jaded towards the safety competitions and other methods that used to coax activity as they have seen it all before and are not being offered fresh alternatives. This currently is only reflected

in approximately 15-20% of the employees employed for five years or more (30% of the overall workforce.) Those that have maintained interest have either seen their careers progress as a consequence of constant and consistent participation and founding revolutionary approaches and others remain committed through loyalty to the company and the desire to see the company continue to be successful. The final sector of those that remain interested are those that actually enjoy their work and see their participation as a key component, also some take pride in helping to ensure that their colleagues and themselves continue to operate in a safe working environment.

The company is struggling to find innovative ways to continue with their implementation and to further evolve the overall safety management system. The company is aware of this growing shortfall in their safety system and is trying to find new ways and ideologies to prolong and further improve the current upward trend in performance. The general feeling is that after five years of close focus and good performance there is no further areas that can be improved to make significant leaps forward in performance. That is not to say that the company believes they have reached their optimum level of performance because that is an incorrect conclusion to arrive at. The company now has to set about focusing on the smaller more persistent issues such as their high incident rate in relation to hand injuries. The company henceforth must adapt to closing out smaller targets rather than making vast improvements by making sweeping changes, after all TSM is about achieving zero accidents and therefore refining your systems and procedures to eliminate even the most minor of preventable accidents is just as important as removing the plausibility for major incidents to occur.

Most worryingly of all to Company A should be the fact that while levels of participation was beginning to fall crucially the reporting of accidents and the observance of employees noting the failure to report accidents by their colleagues also had a notable down turn towards the end of the study. It is crucial for the ongoing evolution of the safety management system that all, no matter the severity, incidents are reported to take a proactive approach to safety prevention. If a significant number of minor incidents go unreported as the statistics indicate towards the end of the study then an inherent problem or developing root cause that could lead to a significant accident can easily be overlooked. Company A must take all possible measures to ensure that accident reporting levels and the significance of reporting incidents is

maintained at its highest level amongst the workforce to prevent the issue of non reporting of incidents from propagating.

While Company A's survey data pointed to the success of the new safety initiative from a psychological perspective after an initially slow start the overall benefits and positive outcomes of the system had begun to wane towards the end of the sample period. The statistical data reaches its peak values towards the end of year 4 (2007) and begins to regress on a downward trend through 2008. This shows that the ongoing impacts of the system are beginning to decrease as employees become familiar with the new system. Rather than the large gains it was noted that across the full table of statistical data that the quarter on quarter gains had begin to reduce in magnitude and in some cases decrease from quarter to quarter.

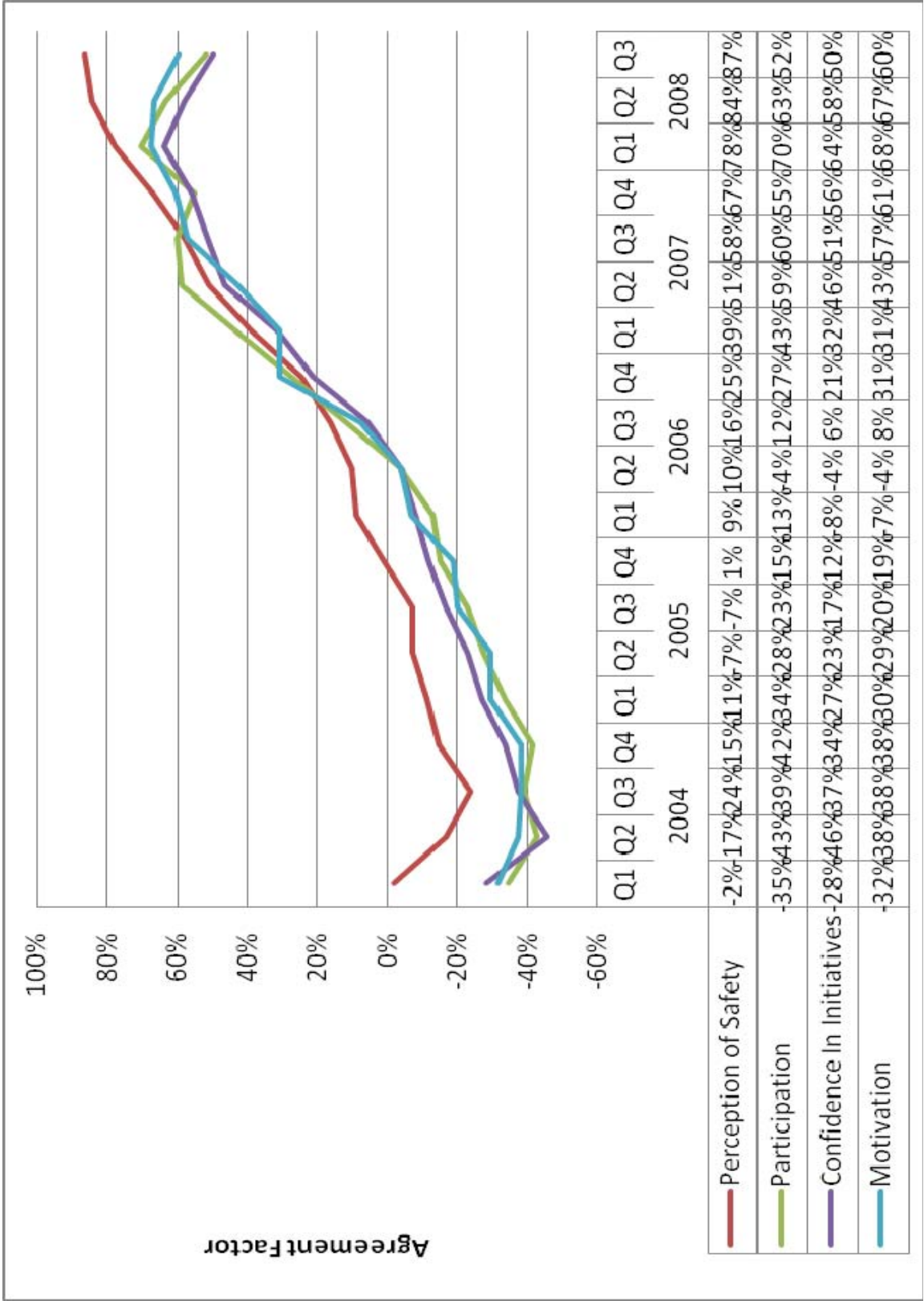


Figure 7.8: Graph showing the trends for motivation, perception of safety, participation and confidence in initiatives across the study period.

One of the key factors with a notable drop off in towards the end of the study was employee participation. The peak of employee participation came in Q1 2008 at 70% however by the end of the study this figure had dropped to 52%. This shows the in the long term the company has to be more creative in their approach to encouraging employee participation as the effects of the current methods begin to wear off. As has been shown a high level of employee participation is a necessary tenet of the overall safety system and therefore maintain employee interest in the initiatives is a crucial focal point for the company to look to in the future.

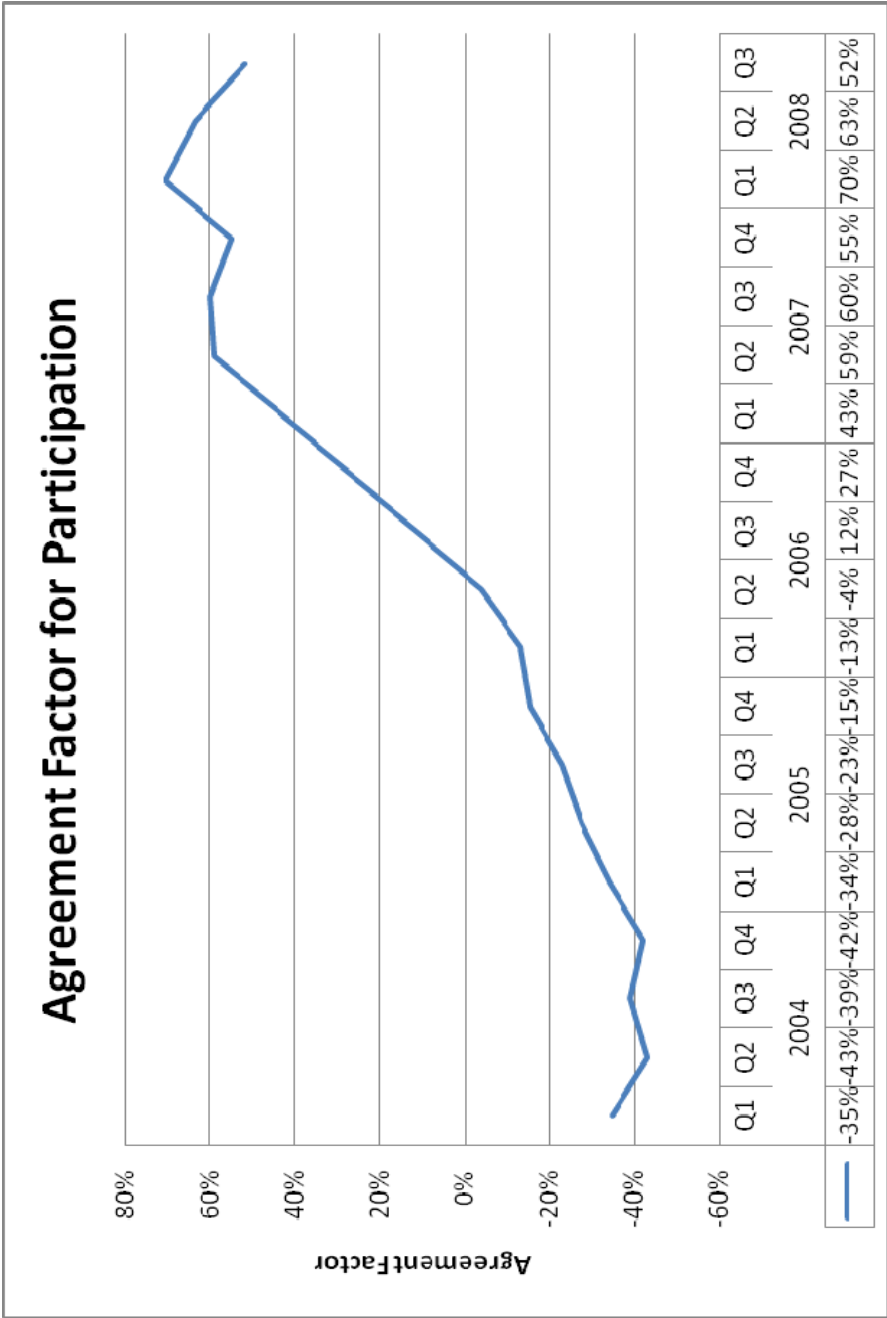


Figure 7.9: Graph showing the trend for participation across the study period

Failure to address the failing participation figures could ultimately result in a decrease in safety performance and a rise in the number of reporting incidents despite having robust safety procedures in place. As observed earlier the field of safety management is one with constantly changing variable and inputs and therefore any approach must be constantly monitored and reviewed to account and react to changing environments and perceptions.

In summary after achieving the original goal of making a significant improvement to their safety performance the company now faces a whole new set of pitfalls in ensuring this level of performance is maintained or improved upon. This point was succinctly covered in an interview with the safety director towards the close of the research phase of this study, as noted by the senior safety director:

“The challenges we overcame in the establishment of our safety management system were many and great, however the challenges that we now face to strive on and further improve are far greater than any we faced before. In the beginning we had a fixed goal and a route map of ideas and plans on how to get there, now we face an uncharted open road ahead and have to be creative and envision the road and pitfalls that lie ahead.”

7.2 Company B

7.2.1 Background

In the outlook towards safety Company B has lagged behind Company A and maintained its safety standards purely to cover the legal minimum. It is only over the last 2 years since the preparations began for the Company to float on the London Stock Exchange (FTSE), just over a year ago, that they have taken the steps to revolutionise their attitudes towards safety due to unwanted exposure to negative reports which may affect the share price. Prior to this only the bare minimum safety initiatives were visible and while each fatality brought with it significant reviews and steps for change, inevitably the company would slump back into old habits and another fatality would ultimately occur. The company a concerted effort in 2006 to revolutionise their safety performance but due to poor application of methods and lack of managerial input this effort failed in the second half of 2006 and accidents rates returned to a high level. The company now is in the very embryonic stage of a major safety overhaul and initiative scheme that is already starting to bear fruit in improved conditions at the work site and improving statistics, however the company needs time to learn and optimise its methods before a similar standard to Company A is reached.

Based on the knowledge on leading industry peers and verified by Company B's safety manager, for Company B from its inception the primary focus was purely on productivity and profit, the only safety initiatives and enforcement conducted by the company was at the very minimum to avoid legal reprisals in the event of an accident that could have repercussions for productivity or against the management of the company. As a consequence of this the company had a healthy productivity rate in comparison to its rivals but along with a high rate of productivity came a significantly high accident rate and in particular fatality rate. Due to the lax safety and liability laws imposed by the local government most accidents were dealt with the least of fuss or repercussions, in the worst cases the yard or affected area would be closed for a day or two for an investigation to take place and the limit of liability ended at the settlement of "blood money" to the sum of \$55,000 paid to the family of the bereaved.

7.2.2 The Old Approach (Years 1-3)

The first three years, 2004-2006, of Company B's statistical analysis shows constantly varying environment with relation to the agreement levels of the Company's work force to the various issues surveyed. Unlike Company A, whose figures in general revealed a steady upward trend in positive indices and a steady downward trend in negative indices, Company B's figures fluctuate through Q1 2004 to Q4 2005. For Q1 2006 there is a significant increase in the approval level of the positive indices this rise is maintained or increased through Q2 2006. This significant increase in factors such as safety performance, participation and management interest is attributable to Company B attempting a major overhaul of the safety management program in 2006 following several poor years of performance and fatalities. However due to poor management and lack of vision, the safety management overhaul was poorly managed and as such all of the gains made in Q1 & Q2 were lost in Q3 and Q4 of 2006 where as a consequence of the failed attempt at revolutionising the safety management system the statistics across the board decreased rapidly and in most cases the recorded approval ratings were lower than Q1 2006 further outlining the total failure of Company B's attempt.

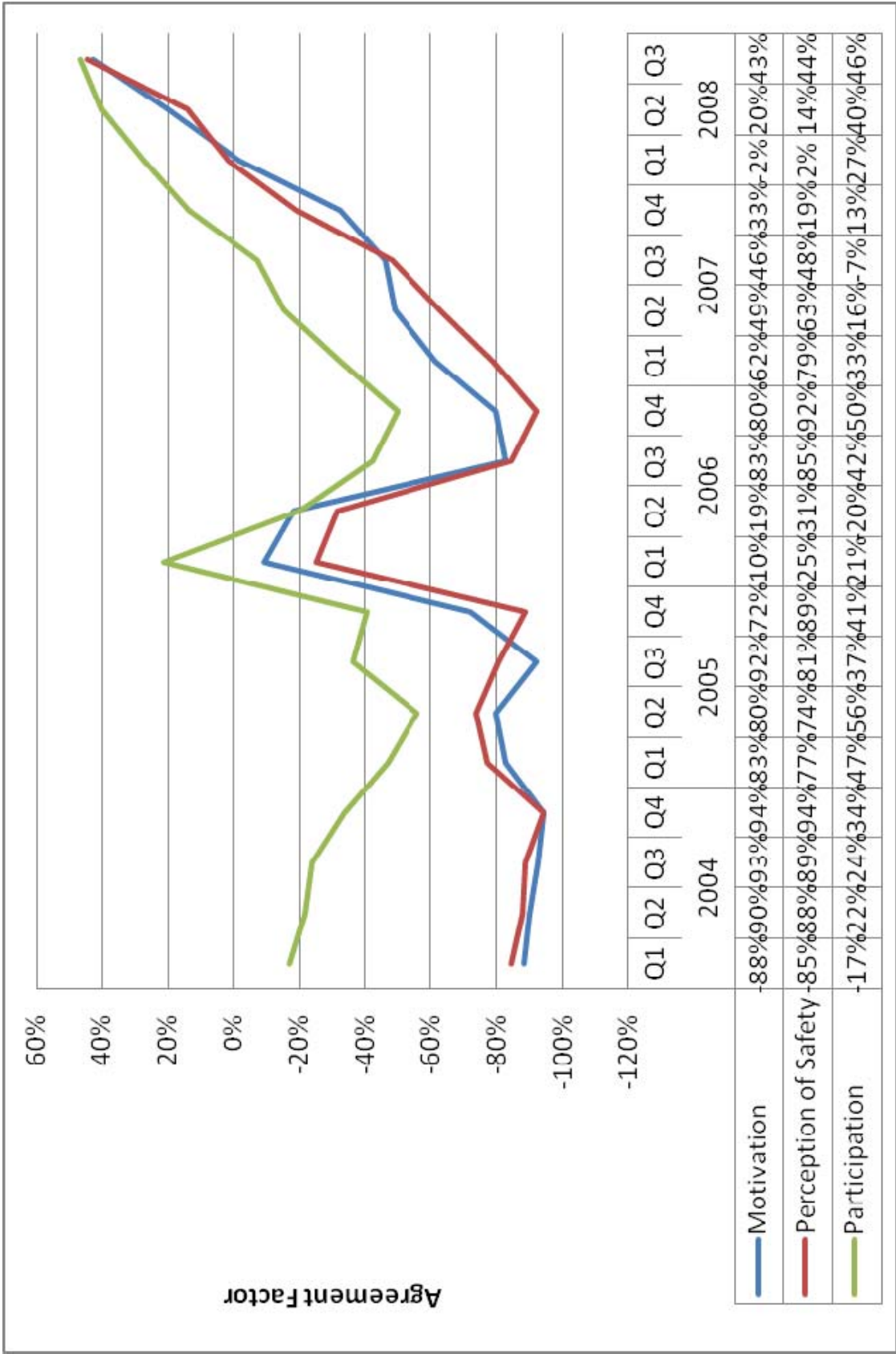


Figure 8.1: Graph showing the trends for motivation, perception of safety and participation across the study period.

In hindsight of the failed attempt to revolutionise the safety system and improve the overall yard safety performance Company B conducted a thorough investigation into the root causes of the failure of the previous effort midway through 2006. Company B found that the main causes of failure occurred due to Company B's failure to convince their workforce about the long term viability of the new safety system. Despite a substantial amount of support from the workforce towards the system, the message was not reciprocated by long term management participation or visible interest and therefore members of the workforce reacted to this by increasing their scepticism of the system and reducing their participation in the safety initiatives and campaigns as a result. As soon as participation begun to fall the new system and the implementation methods became useless due to the lack of interest paid towards them by the workforce.

Company B's approach to safety violations and accidents over the past 5 years has been one of punishment and discipline. In the event of a violation the employee would be disciplined or terminated in proportion to the outcome of the incident. In all but rare cases would, advice and training be meted out to individuals but rather to the whole workforce in the event of significant recurring incidents. This led to a fear culture propagating from the work force in relation to authority figures, minor accidents and near misses often remained unreported due to the fear of potential repercussions. As highlighted in the research by Shannon, et al, (1996) non-reporting of minor accidents and near misses can lead to severe repercussions as it often indicates the presence of a significant failing in the safety management of a given area which will have great probability for a significant accident to occur if ignored.

One of the main causes for inefficient performance of Company B over the first three years was the habit for labourers to stop working when safety officers were present at site. The root causes as identified in the interviews was that if an employee was not working then they could avoid being observed working unsafely and punished as a response. When asked about the consequences of the actions the few men who identified this as a valid excuse to stop working were under the impression that if they stopped working for five minutes it would have little effect in the grand scheme of the project. The crucial point that was missed by the individuals was that it wasn't just them that were doing this, many of the men had the same idea, therefore on a daily basis you would have potentially hundreds of men over the course of the day taking unscheduled breaks or doing menial tasks such as clean up to avoid the

safety officer. When the actions of the workforce are cumulated into the project productivity the insignificant act of the individual will have project wide repercussions.

Company B also suffered on numerous occasions, significant downtime as a direct result of accidents and in some cases major incidents. The occurrence of each fatality would bring about a knock on effect on progress that would cause on average a minimum of a week before full operations were resumed. One of the more major accidents suffered by Company B during this time occurred in year 2. Three welders were working in a confined space in the 'Spud Can' of one of the legs of the structures. The "Spud Can" is essentially the foot of the leg and at a base level is nothing more than a cylindrical steel container. The men had been welding inside the container during the morning shift and stopped for lunch, one of the welders did not follow the necessary protocol and forgot to isolate his gas container prior to leaving the site. During the lunch break the container bled odourless gas in the confined space and when the three men returned to commence work the "Spud Can" was full of flammable gas. Unbeknownst to one of the welders he lit his torch to start work causing the gas in the atmosphere to ignite resulting in a large explosion and the death of the three men in the container. Work onsite was stopped to deal with the initial chaos and the yard remained closed the following day as a mark of respect.

Work on the affected rig had to stop until the damage could be assessed and rectification work could take place. As well as this, further delay was caused by the local authority stopping work on the rig for three days to conduct an investigation into the incident. This one accident cost the company 2 full weeks of production or 24 shifts in total, when the time incurred by rectifying works was taken into account. This also does not take into account the intangible factors such as the psychological and behavioural effects it will have on the rest of the workforce. The consequences of an accident of this magnitude are wide ranging and though there is no feasible measurement for taking into account the full effects that this incident would have had companywide on all projects the impact it is fair to assume was great.

While accidents of this magnitude tend not to happen with great regularity the company's statistics show that they incurred on average 4 annual fatalities for each year of the five year study. Each time losing time directly and indirectly due to the effects on the workforce and this further reinforces the requirement to maintain robust preventative safety management program.

Surveys of the employees who were active at site during the years when fatalities and more serious accidents were occurring all too regularly showed a distinct lack of commitment towards the company and towards their daily activities. The consensus was that if the company would not take the time to protect the employees from these inherent dangers then why should they make the effort and put themselves at risk to meet deadlines and perform the work as quick as they were physically able.

Those surveyed remarked that the only time they did work to their full capabilities was when the company intervened and ensured high productivity levels by threatening the livelihood of their employees. While this would result in short term gains the loss of faith and respect from the workforce towards their managers would often have long term repercussions. Many examples of employees leaving for rival companies for the same or slightly less money were cited. Those opting to take less money it was noted that they would do so for the compromise of working in a safer environment or one in which they felt they would have more job security and not be exposed to a "knee jerk" style of management.

For those that decided to stay regardless of the conditions they noted that the constant upheaval and changes of personnel also had a detrimental effect on productivity. While change management is a challenge that faces all companies in this instance the nucleus of the high staff turnover was a direct result of the company's poor attitudes towards safety. Many of the more experienced site workers and supervisors noted that the detrimental effects of the high turnover off staff had a large effect the potential productivity of the workforce. Each time a batch of new employees came to site to fill in the roles of those who had departed took time to learn the procedures and the ways in which the teams operated. This resulted in a breakdown in team work and communications during the interim periods as the new comers took time to settle into the regime of the long term staff. It took months for the new employees to gain the trust of the existing members and time and project hours were wasted until the new guys became acclimatised and could work effectively and efficiently with the existing staff.

The research of company B provided many insights into the principles that result in an effective efficient fabrication unit. Many of which are not considered when companies investigate the reasons behind poor site performance. These implausible effects are also difficult to accurately measure as there is no physical value that can be attributed to them and no formula to calculate the effect or to

minimise the disruption. In an attempt to mitigate these problems companies will often come to the conclusion that if they recruit and utilise a larger workforce, the result of more hands on the job will produce greater productivity. The surveys however proved that often the opposite occurred the greater the influx of manpower the more the incompatibility issues were multiplied. It would in fact take an almost exponentially longer amount of time for assimilation to take place for the greater the number of men introduced to the worksite.

Taking into account the effects that the company's authoritarian attitude had on productivity due to the high turnover of staff that came as a result, the effects this attitude had on staff that chose to stay was also significant. As previously noted taking a discipline heavy approach caused hazards and accidents to go unreported and introduced a detrimental fear factor into the workforce. One other unwanted outcome was that the communications and cooperation between different disciplines and internally between workmen and supervisors became strained to the point of non existence.

A blame culture resonated throughout the company where instead of cooperating to solve problems as a team, employees would allow mistakes and problems to occur until such a time that management intervened. At which point instead of trying to reasonably solve the problem, once a problem had been identified, employees would stand back and point the finger of blame. This resulted in significant time lost due infighting and office politics where a simple and amicable solution could have been found through communication and team work. This not only applied to the work but also in the aftermath or build up to a work site accident. Rather than intervene and deal with an accident before it happened staff would often let the source of the accident go unidentified, providing it was not a direct result of their influence, the root cause being the employee's feared retribution by association for identifying the problems.

This not only resulted in lost time but also allowed many preventable accidents and suffering to unnecessarily occur. As result tensions and relationships would also deteriorate when those affected became aware that someone had earlier identified the problem and failed to bring it to anyone's attention. The resulted in the formation of a vicious cycle whereby those that had fell afoul of an incident caused directly by the inaction of others would purposely fail to assist those responsible in the future if they were exposed to an identifiably risk as a means of retaliation.

All of the contributing factors above resulted in an inefficient work place all attributable to the nucleus that was the company's approach to worksite safety and their disciplinary attitude. These failings were not identified until a major investigation and audit was ordered by the company's senior executives to identify why the company was not performing as it should be capable of and why it was suffering an unreasonably high accident rate. The survey was commissioned midway through year 3 and the final results were published within the company towards the end of year 3. As a result of these findings the company sought to take a new approach to their health and safety initiatives.

7.2.3 The New System (Years 4 & 5)

Company B's corporate management along with an influx of safety officers that had received extensive training in modern safety practices and implementation strategies, sought to overhaul the company's whole approach to safety as a result of the investigation conducted in year 3 of this study. The new initiative began with an in-depth audit of accident records and reported incidents to establish the key areas of focus.

Learning their lessons from their past failures Company B embarked on a major offensive to revolutionise their safety management program under the insistence of the executive management of the Company with a view to the upcoming stock market floatation. The approval figures for Q1 2007 show an immediate upturn in the reported behavioural and psychological factors consistent with the implementation of a new system by management. In light of the attempt and subsequent failure from the previous year scepticism of the new approach remained high right through until Q2 & Q3 2008 where the general consensus for the yard changed from agreement of scepticism to disagreement this failing all the way to the verge of strong disagreement in Q3 2008 at 54% of disagreement factor.

The Company's second attempt at revitalising their safety system appears to have proved to be successful of the time frame covered under the research. Accident reporting rates had improved consistently from Q1 2007 as have the behavioural and psychological statistics as per the survey data. The most important factor of this is that consistent with the improvements in safety performance, the responses to the question regarding whether an increase in productivity has been observed as consequence of the new safety initiatives received a resounding 70% agreement at the conclusion of the research increasing from a neutral standpoint of a -6% agreement factor. This highlights that the workforce rather than feel increased strain or workload due to the new safety system; they found that their capacity and ability to perform their daily duties became increased due to operating in a safer less hazardous environment; this assimilates with the observed increases in productivity observed in the annual reports for the same period.

Employee satisfaction and motivation also reflected the increase in employee participation and the feeling of workplace safety. The figures for motivation which fluctuated between 80% and 94% disagreement during the years 2004 and 2005,

which is firmly in the strongly disagree category thus showing an inherent problem throughout the workforce of a critical lack in motivation to perform their daily tasks. The corresponding figure for motivation at the conclusion of the surveys was a healthy 43% agreement factor, showing that there is still improvements to be made with regard to motivation but a significant sector of the workforce agree that they feel motivated compared to an almost absolute lack of motivation at the commencement of the research. The same can be said for the responses to the crucial factor of the assessment of the feeling of safety in the workplace.

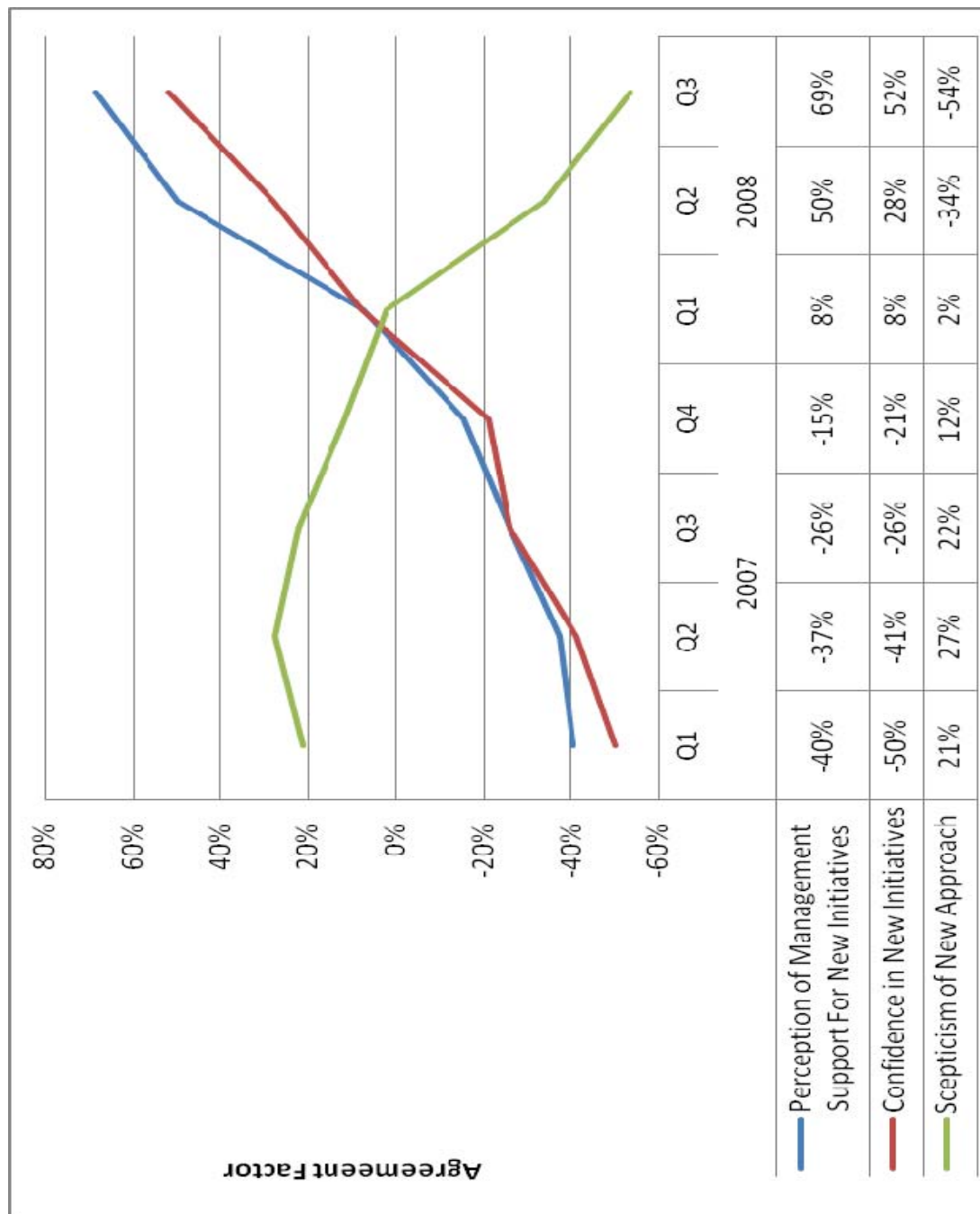


Figure 8.2: Agreement Factors of the new initiative introduced from Q1 2007

Similar to the motivation question during the years 2004 and 2005 saw a constant fluctuation at the strongly disagree end of the scale, fluctuating between 77% and 94% disagreement factor, which represents the majority of the workforce felt their working environment to be unsafe. This feeling was not improved upon, barring a short peak during the first safety revolution attempt, until the commencement of the current safety management plan which began in 2007. Although slow to change the feeling of a safe workplace began to propagate through the work force until it reached its highest value at the conclusion of the study of an agreement factor of 35%. In unison with the statistics for motivation it shows that while there has been noteworthy improvement over the years there is still considerable scope for further improvement in future years.

Along with new areas of focus the company strived to revolutionise their disciplinary approach and enforcement methods. Instead of taking an authoritarian approach to most or all of the incidents and breaches of procedure the company aimed to take a positive reinforcement approach, similar to Company A, company B looked to educate and facilitate rather than reprimand and retaliate against their employees. The interviews with the lower level labour employees of Company B showed a marked change in attitude and comfort level around the time that the positive approach was adopted by Company B.

The effects were not instant as it took time for the message to permeate amongst the workforce, as first some were sceptical and others had reservations about the level of commitment that the management had towards this new initiative. However over a period of a few months the general consensus of the workforce change as can be seen in the upturn in results from the 2nd to 3rd months after the initiative began. One thing in particular that was highlighted in the interviews was that the fear factor that had developed amongst the workforce towards their supervisors and senior management had begun to recede and as such communication improved. The workforce no longer fearing retribution began to discuss issues they had with their working environment and exposure to hazards in an open forum. This in turn lead to numerous safety initiatives with the intent of rectifying several significant issues that had remained untended to as at no point in the past were the issues brought to the management's attention.

Despite the company's perception of good productivity over this 5 year period this could have been improved further as shown in the results from Company A's performance by reducing down time caused by incidents and the knock on effect an incident has on the workforce's morale and behaviour in the aftermath of an incident. This is one of the primary drivers behind Company B's new approach to health and safety not only for the benefit of the employees and the company's reputation but also as a means of further optimising productivity as a whole.

At the time the research for this study concluded, Company B was showing signs of significant improvement. It is notable that immediately prior to the conclusion of the research Company B suffered a fatality. With further investigation (outside of the realms of this particular study) after discussing the incident with people I had been closely involved with during the time of the study and with further study of the official incident report submitted to the local police department, the fatality that occurred was down to human error. Although this fatality is included in the reports covering the study period it is not a direct consequence nor should be considered a negative with respect to the Company's performance under the new regime.

While due to the significance of the event it cannot be merely disregarded the mitigating circumstances surrounding the incident mean it should be treated with special dispensation. The accident occurred towards the end of a night shift and was due to negligence on the part of the supervising officer, who was not present at the time, and poor decision making and carelessness of those involved. The accident was not symptomatic of an unidentified or known problem and was an isolated incident that could not be foreseen neither prevented by further pre-emptive action. As such the incident was purely a result of human error and negligence and consequential of those involved not following the clearly directed safety procedures and instructions for such an act. The incident shows the frailty of safety performance figures as despite Company B showing signs of improvement a significant accident was just around the corner. As highlighted in the explanation above often it's the human input that is the weakest part of any system and despite the Company having all the necessary procedures and initiatives in place, these accidents where despite a company's best effort human error strives to intervene will always occur, in any industry.

By reviewing the performance of Company B over the past two years since the new safety initiatives came to fruition, with the notable exception of the aforementioned incident and reasons for discounting it, the performance of Company B has shown a marked improvement in light of the new initiatives as has the increase in overall productivity from the same period.

Unlike Company A's accident statistics for the same period, Company B's statistics have fluctuated from year to year over the five year period. Company B had some good years and some bad years from a statistical stand point, it was only after the new safety initiatives were introduced in year four that a level of consistency was achieved. Over the study period, similar to Company A, the man-hour figures for Company B has increased year on year however the increases were not at the same magnitude as company A. The one thing you will notice in these statistics that wasn't present in Company A's statistics is the number of fatalities recorded. In the time of the study Company A did not record a single fatality and has not for some time prior to the study period whereas over the five year period company B has suffered a loss of life on 12 occasions. While on the whole with the exception of fatalities if these figures were compared directly to Company A's there is not a large disparity, however if a severity index was applied to the figures giving a large weightage to a serious accident like a fatality and a smaller weightage to a minor injury or First Aid Case (FAC), the difference in the indices for both companies would be notable.

Year	Labour Workforce Size	Total Workforce	Manhours	FAT	LTI	RWC	MTC	FAC	Total
2004	623	831	1,945,226	9	15	18	21	85	148
2005	621	828	1,937,221	6	21	16	17	91	151
2006	996	1328	3,108,234	4	11	18	19	73	125
2007	1436	1915	4,480,282	1	9	12	13	62	97
2008	1683	2244	5,249,912	0	5	10	9	56	80

Table 8.3: Recordable Incidents and Manhours during study period

Repeating the process used to analyse Company B the tonnage output figures over the five years were contrasted with the man-hour figures to give an indication of productivity over the same period. Company B's productivity rates over the period show that there is potential for improvement, they have consistently increased their manpower levels each year however the output has not risen by the same magnitude or greater indicating a loss of efficiency as they are taking the same or marginally less time to perform the same tasks with more men. The statistical results for years 1-3

reveal that there is room for improvement at some level after the introduction of the new safety systems in years four and continuing through year 5 you can see the change in the level of efficiency and productivity increases.

Year	Manhours	Manhours Adjusted	Tonnage Out	% Improvement in Productivity	% Improvement in Productivity Due to Safety
2004	1,945,226	2,095,226	7,205	N/A	N/A
2005	1,937,221	1,937,221	7,451	3.70%	0.00%
2006	3,108,234	3,708,234	14,801	19.23%	3.64%
2007	4,480,282	4,710,282	25,602	16.67%	12.39%
2008	5,249,912	5,249,912	34,943	14.15%	14.15%
Year	Reason For Reduction		Description		
2006	New Plate Cutting Facilities		Increased Material Handling Capability, 600,000 manhours		
2007	General Equipment Upgrade		New yard equipments such as welding machines, 220,000 man hours		
2008	Procurement of new Cranes		Increased capacity for cutting and forming plate, 270,000 man hours		

Table 8.4: Productivity calculated on reduced manhours for outside influences

It is clear to see that the improved performance figures of Company B have come as a result from the new outlook taken. This is also supported by the results of the surveys and interviews with the employees. A marked change in moral, communication and teamwork was observed in the ensuing months after the company revolutionised its approach to safety. As safety incidents decreased productivity increased and the Company's overall performance continued to improve throughout the remaining years of the study and no doubt will improve in the ensuing years. Company B is aware of this fact after a great level of internal review and auditing to establish the success and viability of the new safety program.

As a result of the marked improvements Company B has sought to maintain this upward trend by further investment and evolution into its safety culture which the company hopes to reap the benefit from in the future. Like Company A the level of investment into new equipment and facilities Company B procured equipment and small scale facilities that had an impact on the overall figures. After assessment of the impact of these investments with verification by company records and interviews with fabrication management and Company B's planners and the subsequent removal of these impacts Company B's productivity improvements still showed significant improvement of between 10-14% in the years 2007 & 2008 that was attributable solely to the new safety initiatives as discussed above.

8.0 Conclusions & Recommendation

8.1 Comparisons & Contrasts

In the early years of the five year study the differences between the two companies were remarkable. In contrast at the end of the study period although the companies themselves were still in two very different states they had essentially become one and the same differentiated only by time rather than *modus operandi*.

Company A showed steady and consistent improvement in their accident reporting figures and their productivity performance, while their survey statistics also followed a constant and smooth rise in overall approval which began to tail off and in some cases fall slightly towards the end. In contrast Company B's figures fluctuated considerably over the initial 3 years of the study in accident and productivity as well as survey analysis. However once the new safety management regime was introduced in year 4 those figures became consistent in trend with the early years of Company A's equivalent results. Company B showed significant improvement in their reported accidents and productivity as well as show large gains in the positive behavioural aspects observed from the workforce.

Company B at the end of the 5 years had begun to mirror Company A's initial revolution and at the end of the study showed that it is likely that Company B will continue to follow the same path. It is interesting to note that as a result of the lack of creativity that Company A is beginning to inhibit if this propagates into a total stagnation it may be the case that Company A & Company B reach the same level at the same time in future years. As such if Company B finds an innovative way to maintain the evolutionary process of constant improvement Company A may find itself looking to company B for inspiration rather than the current state which is very much vice versa.

The ideal situation would be for Company A & Company B to work in partnership over their respective safety initiatives. The knowledge and experience already held by Company A would be invaluable to Company B as they travel along the same path and face the same issues. Also Company A could reap significant benefit from studying the implementation ideas employed by Company B and Company B's fresh perspectives on the issue could provide further creativity and reignite Company A's system which is slowly beginning to stagnate. Unfortunately

though due to the perception of individuals at each company that the other company represents a direct competitor despite this not being strictly true any future collaboration between the two companies is likely to remain in the realm of fiction despite the potential for improvement such collaboration would represent to both companies.

Both Companies showed that as management were seen to be observed taking a proactive approach and active participation in the new safety management scheme a positive response was observed in the workforce. As the indices of management involvement and management investment increased in agreement factor this increase was mirrored in factors such as participation, motivation and the feeling of workplace safety. Where the agreement factor for management involvement decreased or stagnated as did the figures for employee participation, accident reporting and work place safety. All of these factors are key to improving productivity, if these factors are not improved upon gains in productivity as a result of a positive safety culture are slight at best. To maximise the gains in productivity from the perspective of adopting new safety management approaches, visible management participation is a key facet in the success or failure of the initiative.

Concurrent with this the levels of employee participation and support are also heavily dependent on the perception that management are taking an interest in their workforce and their ideas and considerations are being considered. In quarters for both companies where accident reporting or the notion of importance behind accident reporting was poor or in decline, these figures were matched by the notion that employee suggestions were being ignored by management. In order to gain the biggest improvements in morale and productivity companies have to make the effort to provide their employees with a means of communicating their grievances and opinions. Subsequent to the management must be seen to act on these issues in order to improve the feeling within the workforce that management cares about the wellbeing of their employees and are taking action to correct the issues. It was shown that just the fact that management were listening to employees was sufficient enough to raise opinion and promote a positive atmosphere, employees were more willing to grant patience towards the management if they were seen to at least be considering taking action without physically doing so. Although as highlighted in the interviews with both companies there is a limit on the amount of patience the employees are

willing to grant the company, which varies dependent upon the severity of the issue and the company's previous track record for rectifying unsafe conditions.

Implementation style and approach from management and senior employees was shown to have a key influence on the success or failure to encourage employees to participate in safety programs. If both companies were perceived to act unfairly or have an over bearing attitude of punishment rather than positive reinforcement then participation and interest was shown to suffer as a result. Employees are shown to feel demotivated towards both work and participation under a punishment based atmosphere where participation and motivation flourished under positive competitive atmospheres and reward systems. If an employee feels there is potential for a reward to be granted for contributing a safety suggestion or highlighting a root cause of a problem rather than be punished for not alerting management to a problem, then the levels of communication and reporting incidences increased. Rather than threaten your workforce into action it has proven to be far more beneficial to incentives them into participating and communicating their suggestions and concerns.

During the research for this study Company B in particular was shown to suffer greatly in the early years of the study from a lack of participation and communication from the workforce with respect to safety and accident reporting. This was attributable to the punishment culture adopted by Company B, when this approach was revised to a more pro-active incentivised approach employee participation increased significantly as did the perception of the management in the opinion of the workforce to that of a management that cared about employee wellbeing and were willing to act. This served as a major turning point in the improvement of Company B's accident performance statistics and helped to increase their overall productivity.

As Company B was changing in management style from reactive to proactive a significant increase in employee opinion was noted, however the gains for Company A were more gradual. Although positive in the main these figures had begun to level off by the conclusion of the research showing that in the long term management must remain creative in their approach or means of displaying a sense of management participation to ensure that the gains made initially are not lost in the long term. This means a constant level of review into the success of safety participation schemes is required to ensure interest levels are maintained. Companies should constantly explore new and more creative ways to maintain employee interest and participation.

This could be anything from increasing the incentives to finding more novel and original challenges or schemes to provoke employee interest and ensure for the success of the safety management scheme that employee participation is maintained.

Of the areas that prompted the most alarming observations was that when the opinion that management was not considering or valuing employee opinion, it was noted that the number of observances where employees did not report incidents or agreed that it was best not to report incidents was alarmingly high. This leads to the conclusion that as noted above when management are not seen to act or take an interest in employee opinion, participation from the workforce in safety initiatives is low; this is more of an inconvenience to the company with regard to their safety management initiative.

However when employees feel it is better not to report incidents or don't feel encouraged to do so, this is an outright dangerous situation for a company to find itself in. The potential for a serious incident to occur is multiplied when incidents, no matter how minor, go unreported as it is an indication that a problem exists but due to this not being highlighted is allowed to remain in existence. If employees are choosing not to report incidents for fear of retribution or because they feel management don't care then a fundamental problem exists in the workplace that management must take immediate action to resolve. It is therefore crucial for the management of any company to ensure they take the consideration to listen to employee concerns to ensure a culture where reporting of accidents is not seen as important is not allowed to propagate. If such a culture does exist it is shown that employees on the whole will not report hazards or incidents or feel the urgency and importance of doing so, leading to a highly unsafe workplace to exist. While both companies suffered from the phenomenon, Company B witnessed the impact to a greater extent than Company A during the research period. It was found that on more than one occasion for Company B the root causes of a serious incident, and in some cases a fatal incident, was through an inherent danger that was observed by the workforce but failed to be reported.

All of these incidents where a prevailing hazard or danger existed and was known to exist could easily have been avoided if the risk was alerted and a chance to take mitigating action occurred as a result. The fact this root cause of none reporting reoccurred at Company B shows that loss of life or injury alone is not enough to encourage workers to advise management of hazards. Therefore it is crucial for the

management of companies to address the issue head on through active participation and visual displays of interest to eradicate this notion that allowing hazards and dangers to remain unreported is an acceptable form of conduct from a company's employees.

The clearest conclusion drawn from both Companies is that an increased focus and a change in approach to safety management in both instances had a noteworthy effect on productivity. For both companies productivity significantly improved as the accident reporting statistics decreased showing a direct correlation between safety and productivity. The main driver for this is that employees felt valued by their managers and that their opinions mattered and so was more willing to assist the company in making the work place safer.

By removing work place incidents and the associated down time from such accidents as well as decreasing employee stress invoked by working in an unsafe environment employees are more capable of improving their output and productivity as a whole. Both Companies improved their productivity by between, 10-12% for Company A and 10-14% for company B, in the final two years of the study due to benefits from the safety management improvements alone. It proves the theory that when you remove or reduce the inherent risk from a workplace productivity is allowed to flourish by the removal of incidents and allowing for employees to feel more motivated by operating in an environment where they feel safe and are cognisant of the fact that management have an interest in their wellbeing.

8.2 Dispelling the Myths

This study was borne from the notion that in a high pressure project environment, time and care dedicated to the implementation of safety management was a potentially fruitless venture from a purely productivity perspective. The general feeling is that benefits reaped from focus on improving productivity by any available means would be lost by 'wasting' time in ensuring the health and safety of those performing the work and producing the much sought after productivity rates. This is a haphazard attitude at best and criminal at worst; to hold company performance and profit over the health of those that help you achieve those goals is callous in the extreme. Thankfully due to a change in attitudes and legislation over time this standpoint is becoming less and less widespread however the practice does still exist and those that choose to ignore the risks in the quest for efficiency are still profiting from this approach despite risks their employees are being exposed to.

The results of the research and analysis of the two companies involved in the study provided evidence that increased health and safety measures leads to impeded productivity is purely conjecture. Company A, which represented a company that had changed their approaches prior to the scope of this study have benefited from year on year improvements in productivity while maintaining a consistently low accident rate. Company B, who changed their philosophy midway through the study, Company B gained a significant improvement in overall performance almost immediately when compared to their productivity rates for the previous years where accident rates were consistently high.

It has been shown that removing and reducing hazards in workplace has a significant psychological effect on those exposed to unsafe working environments, this is consistent with the work of Fuller, (1999). By removing the danger at a base level employees feel valued by those that employ them and are therefore more willing to perform for the company. This idea dates all the way back to Maslow's hierarchy of needs studies into employee behaviour and his subsequent theory of needs.

Furthermore on a more base level if you remove the occurrence of accidents in the workplace you remove the associated downtime that occurs in the aftermath of an incident no matter the severity. When an accident occurs, those nearby will stop working to intervene and help those affected. If the incident causes/results from

equipment or system failure then the affected part of the system or the system itself will require a shut down, in some major manufacturing systems this is measured in days and not minutes. Once the initial aftermath has been dealt with then you have the consequential activities such as inquiries and investigations, recovery plans, crisis meeting, etc all of which take time. All of this can spawn from the most minor of incidents and causes the company hours/days/weeks of lost productivity until full efficiency is reached once again. To put it simply by removing these accidents all of the associated chaos that occurs as a result disappears.

As a final aside it would be unwise to suggest that a positive and active health and safety regime will cure all of the ills of a poorly performing manufacturing system as it is intended to make up one part of the an efficient system and not the whole system. Poor health and safety management will be a large contributing factor to poor performance but rectifying your approach will not revolutionise your system and conversely having a robust safety management system will not be the ideal solution if it is poorly implemented.

A poorly implemented system or a poorly managed system can be just as ineffective as no system at all. If the system introduces too much bureaucracy and pedantry into daily operations then it is highly unlikely that this will improve your overall productivity despite improving your accident statistics. It is important to find a balance between taking the necessary diligence to produce a safe environment without being oppressive and over controlling of the natural flow of work. In practice this is something which may take time and trial and error to find that right balance as it is unlikely that a company will find the right level at the introductory stage however perseverance and auditing of performance should indicate where the system is failing and allow for adjustments to be made.

Aside from the benefits of a safe working environment the study also showed that there are a multitude of positive effects that occur as a consequence of the new approach. It was shown through the interviews that communication at all levels of the hierarchy was improved, particularly from the lower end of the scale towards more senior employees. This improvement in communications allowed for the number of risks that were identified and mitigated to increase significantly. Small issues that if left alone could have combined and contributed to a significant incident started to be identified where previously they would have been ignored as employees had the means of communicating this to those that could act on these issues and without fear

of retribution for highlighting minor problems and not just getting on with their daily duties. Removing small risks before they have the chance to propagate into large risks is a primary goal of TSM as prevention in this incident is far better than corrective action and has a far smaller impact on productivity if it is dealt with proactively.

Other tangible benefits that result in better more efficient productivity such as teambuilding and cooperation also were observed to flourish under the new conditions. The increased levels of communication made things more transparent and as such a level of trust that was not previously observed was present at both companies. The increased trust allowed colleagues to have faith in others and as a result they were more likely to work through problems as a team rather than look to blame and let management get involved.

As highlighted in previous studies Hasle & Jensen, (2006) & Vassie, (2003) and concurrent with the findings here management commitment and influence has a significant effect on the overall effectiveness of a proactive safety management system. One of the key problems highlighted at company A after their first year of evaluation was that employees were limiting their enthusiasm for the new safety objective as they did not believe the management of the company were dedicated enough towards it and the overall feeling was that it would just be a short term fad. In light of these finding Company A's management took a very proactive role in the further implementation of the system which had a significant effect on the overall perception of the system by the company's employees. Without this visible commitment from management many at Company A were under the impression that the system was doomed to failure. In the study by Clarke & Ward, (2006) their research clearly shows that at companies where management is not seen to take and interest, accident figures will often rise to the same or higher levels in the ensuing years where as companies which make a concerted effort to have management involvement the safety programs produce a marked improvement.

This was further witnessed in the failed approach in 2006 made by Company B to revise their approach to the safety management system. While their methods and means of implementation were sound the ultimate cause of failure was noted as the lack of visible management support of the new initiatives. The lack of visible support allowed the feelings of scepticism to grow amongst the workforce towards the value and longevity of the new initiative. If management had become more involved at the

base level and actively sought to drive the scheme forward then the likelihood of the new safety management system approach succeeding at the first attempt would have been increased and likely many serious accidents that followed could have been avoided. Company B revised this attitude after studying the causes of failure for their first attempt and as such in their second attempt in 2007, which proved to be successful, management made it clear that they were behind the new initiatives and participated in events and meetings at all levels of the company.

8.3 Recommendations

As shown at great length in this study management support and visible participation is a pivotal aspect for the success of a proactive safety approach with the intent of increasing productivity through a safety management system. Management must get involved at all levels of the company hierarchy and be seen to take ownership of employee opinions and recommendations.

The more visible management's participation is to the workforce it has been shown to be reflected in the willingness of the employees to contribute to the safety initiatives and assist management in making the work place safer. It also has the benefit of increasing moral and motivation in the workforce both directly and indirectly through making the workplace safer. Whereas a lack of management participation has been shown to have adverse effects ranging from the lack of participation from the work force which could result in the failure of a new safety management system or more significantly the failure of the workforce to report incidents which could lead to a major accident occurring.

Management must take adequate steps to ensure reporting of incidents and hazards are a high priority amongst its workforce to allow for corrective action to mitigate a risk proactively rather than reactively as the result of an incident to prevent unnecessary injury. If risks and hazards remain unidentified then sooner or later an incident of varying severity is likely to occur, therefore it is crucial to promote and encourage the workforce to identify any and all hazards and concerns to ensure management is fully aware of the full prevailing safety conditions on site. Failure to do so could result in an incident occurring and be perceived by the workforce as a lack of interest on the managements side by allowing hazards to exists which as shown above can lead to larger issues.

Promoting a safety culture within a company where employees are encourage to contribute towards safety initiatives through encouragement and rewards from management is shown to have far great results and more benefit than a culture where employees fear retribution or are coerced to participate through the threat of punishment. If an employee feels they will be rewarded for their contributions on any level it has been shown that this will increase the likelihood of employee participation moreover if this comes as part of a competition or reward scheme the validity and

importance of the suggestion is liable to increase as the employee endeavours to 'win' such a reward. Safety competitions can be used to extract valuable insight towards hazards or suggestions of corrective action or better methods from the workforce with very little effort required from management to obtain these suggestions. The simple act of offering a desirable commodity to the participants is sufficient to prompt appropriate and potentially valuable responses as the employees will be driven to provide better suggestions than their peers in a healthy competitive environment in an attempt to gain the commodity on offer.

This approach can also be morphed into a process of increasing site wide safety performance and reducing on site accidents by rewarding the best performing team in terms of productivity and safety. This will act as a motivator to the employees to work together to ensure they are at their most productive and safety conscious in order to be crowned the best performing team and win the prize on offer. All of which can provided significant improvements in productivity and safety performance with minimal input of time and resources.

Management must be committed and pay due diligence to review their current approach and application of safety management before endeavouring to implement a total overhaul of their safety management system. It is important to have a good indication of the current performance factors and the root causes contributing to these outcomes. Once these factors are known focus areas can be identified and targeted accordingly.

Through further iteration of the approach new focus areas can be identified and/ or existing areas improved in implementation to optimise the system. Companies must also be prepared to follow up the initial review with stringent auditing and further reviews to ensure performance levels are maintained and methods to better the approach identified. As the environment will be constantly changing as a result of both outside influences and influences as a result of action taken by management it is vital that approaches are refined to remain current and effective. Health and Safety Management is a constantly evolving life form and therefore it's crucial that the reviewing and implementation ideologies are revised constantly to compensate for the changing environment.

Concurrent with the conclusions of this study, a well managed and well thought out safety management approach can have significant impact on improving the overall productivity of a company. Therefore companies who are looking to

optimise their operation and increase productivity without making significant investment in new facilities or equipment to make a direct impact on their production capacity should take the time to review their approach to safety and management style. While often overlooked as with in depth analysis it is ease to consider safety as an intangible aspect with respect to productivity, however this has been shown to be a foolish stand point to assume and companies should be encouraged to review their mentality as there is great potential for improvement without having to make significant investment.

Reviewing and optimising safety approach can be achieved with a limited financial impact on a company's operating budget as long as the company is willing to provided the commitment and diligence required. As a result a large increase in productivity or an optimisation of current facilities can be gained as a direct result of refining and optimising management's attitudes towards the workforce and their means of safety management implementation.

8.4 Future Research

Ideally this study would have been better conducted over a far greater period of time. Rather than relying on the memories of those surveyed which may or may not have been prejudiced over time it would be better to conduct an active study in the same theme over a lengthy period of say 5 years. While the findings may well be the same of any long term study the data and outcomes will have more gravitas as they were observed during the actual study.

An opportunity remains to break this study down into its key focus areas and develop each theory into its own study to provide a greater depth of understanding in each of the key fields. There is much to be learned from direct studies into productivity versus performance and on a separate note implementation style versus safety performance for them to be treated as two separate fields. While it will be found that there will be a correlation between both fields it would be interesting to isolate both fields with separate research in order to optimise the best practices before reuniting them into one study in an attempt to improve overall efficiency.

It is also important to note that this is a constantly evolving field of work and expertise with regards to safety enforcement, working environments and best practice theories. As such it is important to repeat aspects of this study at future points to keep this work up to date with emerging trends and to allow it to stay current. There is the potential for a major revolution in the industry and the methods used to take place over the next few years and therefore it will be important to re-conduct research into the field to study as per any new initiatives and also to validate their effectiveness.

The true vastness of this area of research only becomes visible when you attempt to undertake a study of this nature. There are so many variables and underlying themes that contribute to the overall perception of safety culture, climate and performance. The causes and consequences can easily be attributed from a project management perspective as much as a psychological perspective and there is much to be observed from a behavioural and psychological perspective. It is of my opinion that a joint study between an academic from an engineering/management background as well as an academic from a behavioural/psychological background would bear the most fruit.

9.0 References

- Ansari, A. and Modarress, B. (1997) World-class strategies for safety: a Boeing approach. *International Journal of Operations & Production Management*. 17 (4), p.389-398
- Arezes, M., & Miguel, A., (2003) The Role Of Safety Culture In Safety Performance Measurement. *Measuring Business Excellence*. 7(4), p20-28
- Armstrong, M. (2003) *A handbook of Human Resource Management Practice*. 9th ed. London. Kogan Page, p827-843.
- Clarke, S., (2003) The Contemporary Workforce Implications For Organisational Safety Culture. *Personnel Review*. 32(1), p40-57
- Clarke, S. & Ward, K. (2006) The Role of Leader Influence Tactics and Safety Climate in Engaging Employees' Safety Participation. *Risk Analysis*, 26(5)
- Cole, B. and Brown, M.P. (1996) Action on Worksite Health and Safety Problems: A Follow-Up Survey of Workers Participating in a Hazardous Waste Worker Training Program. *American Journal of Industrial Medicine*. 30, p730-743
- Cooper, M.D. & Phillips, R.A., (1997) Killing Two Birds With One Stone: Achieving Quality Via Total Safety Management *Facilities*. 15(1/2), p34-41
- Davies, J., Ross, A., Wallace, B., Wright, L., (2003) *Safety Management: A Qualitative Systems Approach*. 1st ed. CRC Press, p111-120
- Donald, I. and Young, S. (1996) Managing safety: an attitudinal-based approach to improving safety in organisations. *Leadership & Organisation Development Journal*. 17(4), p13-20
- Erez, M. and Gati, E.. (2004). A Dynamic, Multi-Level Model of Culture: From the Micro Level of the Individual to the Macro Level of a Global Culture. *Applied Psychology: An International Review*. 53 (4), p583 –598.
- Fuller, C. (1999) Benchmarking Health And Safety Performance Through Company Safety Competitions *Benchmarking: An International Journal*. 6(4), p325-337
- Geldart, S., Shannon, H. & Lohfled, L. (2005) Have Companies Improved Their Health and Safety Approaches Over the Last Decade? A Longitudinal Study. *American Journal of Industrial Medicine*. 47, p227-236
- Hammer, J., (1982) Management Responsibility For Health And Safety *Education & Training*. May-June
- Hasle, P. & Per Langaa, J. (2006) Changing the Internal Health and Safety Organisation through Organisational Learning and Change Management. *Human Factors and Ergonomics in Manufacturing*. 16, p269-284
- Jones, B., Cox, S. & Rycraft, H. (2003) Assessing Employee Attitudes towards Behavioural Approaches to Safety Management within UK Reactor Plants
- Klein, J. (2005) Operational Discipline in the Workplace. *Process Safety Progress*. 24(4)
- Lavack, A. (2007) Enhancing Occupational Health and Safety in Young Workers: The Role of Social Marketing. *International Journal of Nonprofits and Voluntary Sector Marketing*

- MacIntosh, M. and Gough, R. (1998) The Impact of Workplace Change on Occupational Health and Safety: A Study of Four Manufacturing Plants. *Human Factors and Ergonomics in Manufacturing*. 8, p155-175
- Marsh, T.W., Robertson, I.T., Duff, D.R., Phillips, R.A., Cooper, M.D. & Weyman, A. (1995) Improving safety behaviour using goal setting and feedback. *Leadership & Organisation Development Journal*. 16(1), p5-12
- Mearns, K., Whitaker, S.M. & Flin, R. (2003) Safety climate, safety management practice and safety performance in offshore environments. *Safety science*. 41, p641-630
- Mearns, K. & Havold, J.I., (2003) Occupational Health And Safety And The Balanced Scorecard *The TQM Magazine*. 15(6), p408-423
- Miller, A.C., (2002). Changing the face of the organisation: addressing the challenges of work in a multi-ethnic society. *Journal of Family Therapy*. 24, p72-84
- Mitroussi, K., (2003) The Evolution of The Safety Culture Of IMO: A Case Of Organisational Culture Change *Disaster Prevention & Management*. 12(1) p16-23
- Niemla, R., Hannula, M., Rautio, S., Reijula, K.,. (2002) Work Environment Effects on Labour Productivity: An Intervention Study in a Storage Building. *American Journal of Industrial Medicine*. 42, p328-335
- Ridley, J.R., (2003) *Safety at Work* 6th Edition. Butterworth-Heinemann p390-397
- Shannon, H., Walters, V., Lewchuck, W., Richardson, J., Moran, L.A., Haines, T., Verma, D., (1996) Workplace Organisational Correlates of Lost-Time Accident Rates in Manufacturing. *American Journal of Industrial Medicine*. 29, p258-298
- Shannon, H., Robson, L. and Sale, J. (2001) Creating Safer and Healthier Workplaces: Role of Organisational Factors and Job Characteristics. *American Journal of Industrial Medicine*. 40, p319-334
- Shikdar, A.A., Sawaqed, N.M. (2003) Worker productivity, and occupational health and safety issues in selected industries. *Computers & Industrial Engineering*. 45, p563-572
- Shoaf, C., Genaidy, A., Karwowski, W. & Huang, S. (2004) Improving Performance and Quality of Working Life: A Model for Organisational Health Assessment in Emerging Enterprises. *Human Factors and Ergonomics in Manufacturing*. 14, p81-95
- Smallman, C., (1994) Offshore Safety Management Systems: Current Practice And A Prescription For Change *Disaster Prevention & Management*. 3(3), p34-48
- Vassie, L., (1998) A Proactive Team Based Approach To Continuous Improvement In Health & Safety Management *Employee Relations*. 20(6) p577-593
- Wilson-Donnelly, K.A., Priest, H.A., Salas, E. & Burke, C.S. (2005). The Impact of Organisational Practices on Safety in Manufacturing: A Review and Reappraisal. *Human Factors and Ergonomics in Manufacturing*. 15, p135-176
- Wong, T.W., Chen, W.Q., Yu, T., Lin, Y. & Cooper, C.L. (2002) Perceived sources of occupational stress among Chinese off-shore oil installation workers. *Stress and Health*. 18, p217-226

- Yu, S. & Hunt, B., (2002) Safety Management Systems in Hong Kong: Is There Anything Wrong With The Implementation? *Managerial Auditing Journal*, 17(9), p588-592
- Yu, S. & Hunt, B., (2004) A Fresh Approach To Safety Management Systems in Hong Kong. *The TQM Magazine*, 16(3) p210-215
- Zellmer, B., Scott-Cawiezell, J., Vogelmeier, A., McKenny, C., Rantz, M., Hicks, L., (2006) Moving from a Culture of Blame to a Culture of Safety in the Nursing Home Setting. *Nursing Forum*. 41(3)

10.0 Bibliography

TURNER, J.R. 2003, People in Project Management Aldershot: Gower.
MORRIS, P.W.G. 1994 The Management of Projects. London: Thomas Telford.
HEERKENS, G.R. 2002. Project Management. New York: McGraw Hill.
MAYLOR, H. 2003. Project Management 3rd Edition. London: Prentice Hall.
FIELD, M. & KELLER, L. 1998. Project Management. London: The Open University,

Appendix 1

Company A Statistics

Company A Productivity v Safety Performance Figures

Company A												
Year	Labour Workforce Size	Total Workforce	Manhours	Tonnage Out	T/ Man Hr Productivity	% Improvement in Productivity	FAT	LTI	RWC	MTC	FAC	Total
2004	1374	1832	4,287,937	10,209	420	N/A	0	0	4	6	62	72
2005	1784	2378	5,565,472	13,574	410	2.38%	0	0	1	2	59	62
2006	2373	3163	7,402,341	19,480	380	7.32%	0	2	5	5	49	61
2007	2635	3514	8,221,643	24,892	330	13.08%	0	0	2	7	57	66
2008*	3363	4484	10,491,973	36,481	288	12.93%	0	1	9	9	56	75
AVG	2306	3074				Injuries per million manhours			2004	16.79		
5%	115	154							2005	11.14		
									2006	8.24		
									2007	8.03		
									2008	7.15		
Corrected Figures to adjust for Outside Influence												
Year	Labour Workforce Size	Total Workforce	Manhours	Tonnage Out	T/ Man Hr	% Improvement in Productivity Due to Safety	FAT	LTI	RWC	MTC	FAC	Total
2004	1374	1832	4,437,937	10,209	435	N/A	0	0	4	6	62	72
2005	1784	2378	5,615,472	13,574	414	1.50%	0	0	1	2	59	62
2006	2373	3163	7,602,341	19,480	390	4.81%	0	2	5	5	49	61
2007	2635	3514	8,451,643	24,892	340	10.65%	0	0	2	7	57	66
2008*	3363	4484	10,491,973	36,481	288	12.93%	0	1	9	9	56	75

*Figures for 2008 comprise of forecasts for November & December based on projections and historical data

Legend		Description
FAT	Fatality	Fatal Injury
LTI	Lost Time Injury	Injury resulting in absence from work
RWC	Restricted Work Case	Injury which impedes normal work/duties
MTC	Medical Treatment Case	Injury which requires medical treatment (Stitches, etc)
FAC	First Aid Case	Light Injuries, Cuts, Grazes, etc

Year	Reason For Reduction	Description
2004	Increase in Craneage	Eased Material Handling worth 150,000 manhours
2005	SPMT Units	Eased Material Handling worth 50,000 manhours
2006	New Painting Facility	Combined Painting and blasting facility simplified the painting process worth 200,000 manhours
2007	Facilities Upgrade	General upgrade to facilities increasing capacity of particular processes 230,000 man hours

Sr No.	Location	Position	Ethnicity	Age
	1 Yard	Labour	1	1
	2 Yard	Labour	1	1
	3 Yard	Labour	1	1
	4 Yard	Labour	1	1
	5 Yard	Labour	1	1
	6 Yard	Labour	1	1
	7 Yard	Labour	1	1
	8 Yard	Labour	1	1
	9 Yard	Labour	1	1
	10 Yard	Labour	1	1
	11 Yard	Labour	1	1
	12 Yard	Labour	1	1
	13 Yard	Labour	1	1
	14 Yard	Labour	1	1
	15 Yard	Labour	1	1
	16 Yard	Labour	1	1
	17 Yard	Labour	1	1
	18 Yard	Labour	1	1
	19 Yard	Labour	1	1
	20 Yard	Labour	1	1
	21 Yard	Labour	1	1
	22 Yard	Labour	1	2
	23 Yard	Labour	1	2
	24 Yard	Labour	1	2
	25 Yard	Labour	1	2
	26 Yard	Labour	1	2
	27 Yard	Labour	1	2
	28 Yard	Labour	1	2
	29 Yard	Labour	1	2
	30 Yard	Labour	1	2
	31 Yard	Labour	1	2
	32 Yard	Labour	1	2
	33 Yard	Labour	1	2
	34 Yard	Labour	1	2
	35 Yard	Labour	1	3
	36 Yard	Labour	1	3
	37 Yard	Labour	1	3
	38 Yard	Labour	1	3
	39 Yard	Labour	1	3
	40 Yard	Labour	1	4
	41 Yard	Labour	1	4
	42 Yard	Labour	1	4
	43 Yard	Labour	1	4
	44 Yard	Labour	2	1
	45 Yard	Labour	2	1
	46 Yard	Labour	2	1
	47 Yard	Labour	2	1
	48 Yard	Labour	2	1
	49 Yard	Labour	2	1
	50 Yard	Labour	2	2
	51 Yard	Labour	2	2
	52 Yard	Labour	2	2
	53 Yard	Labour	2	3
	54 Yard	Labour	2	3
	55 Yard	Labour	2	3
	56 Yard	Labour	2	4
	57 Yard	Supervisor	1	2
	58 Yard	Supervisor	1	2
	59 Yard	Supervisor	1	2
	60 Yard	Supervisor	1	2

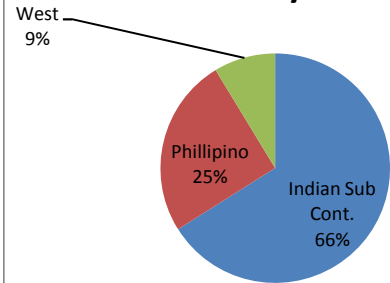
61 Yard	Supervisor	1	3
62 Yard	Supervisor	1	3
63 Yard	Supervisor	1	3
64 Yard	Supervisor	1	3
65 Yard	Supervisor	1	3
66 Yard	Supervisor	1	4
67 Yard	Supervisor	1	4
68 Yard	Supervisor	1	4
69 Yard	Supervisor	1	4
70 Yard	Supervisor	2	2
71 Yard	Supervisor	2	2
72 Yard	Supervisor	2	2
73 Yard	Supervisor	2	2
74 Yard	Supervisor	2	3
75 Yard	Supervisor	2	3
76 Yard	Supervisor	2	3
77 Yard	Foreman	2	4
78 Yard	Foreman	2	4
79 Yard	Foreman	1	3
80 Yard	Foreman	1	4
81 Yard	Foreman	1	4
82 Yard	Foreman	1	4
83 Yard	Foreman	1	4
84 Yard	Foreman	1	5
85 Yard	Foreman	2	3
86 Yard	Foreman	2	4
87 Yard	Foreman	2	4
88 Yard	Superintendent	1	2
89 Yard	Superintendent	1	2
90 Yard	Superintendent	1	2
91 Yard	Superintendent	1	3
92 Yard	Superintendent	1	4
93 Yard	Superintendent	1	4
94 Yard	Superintendent	1	5
95 Yard	Superintendent	2	3
96 Yard	Superintendent	2	3
97 Yard	Superintendent	3	3
98 Yard	Superintendent	3	4
99 Yard	Manager	1	2
100 Yard	Manager	1	3
101 Yard	Manager	1	3
102 Yard	Manager	1	3
103 Yard	Manager	1	4
104 Yard	Manager	2	3
105 Yard	Manager	2	4
106 Yard	Manager	3	2
107 Yard	Manager	3	3
108 Yard	Manager	3	4
109 Yard	Senior Manager	1	4
110 Yard	Senior Manager	1	3
111 Yard	Senior Manager	3	3
112 Yard	Senior Manager	3	4
113 Yard	Senior Manager	3	4
114 Yard	Executive Manager	3	4
115 Yard	Executive Manager	3	4

Company A Survey Sample Data

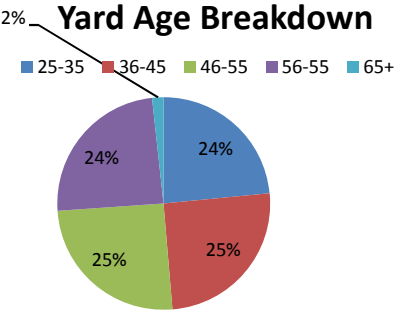
Legend	
Ethnicity	
1	Indian Sub Continent
2	Phillipino
3	Western
Age	
1	25-35
2	36-45
3	46-55
4	56-55
5	65+
Years With Company	
1	5-10
2	11-15
3	16-20
4	21-25
5	26+

Yard					115			Position		
Indian Sub Cont.		76	66%		Labour		56	49%		
Phillipino		29	25%		Supervisor		20	17%		
West		10	9%		Foreman		11	10%		
Age					Superintendant		11	10%		
1	27	25-35		23%	Manager		10	9%		
2	29	36-45		25%	Senior Manager		5	4%		
3	29	46-55		25%	Executive Manager		2	2%		
4	28	56-55		24%						
5	2	65+		2%						

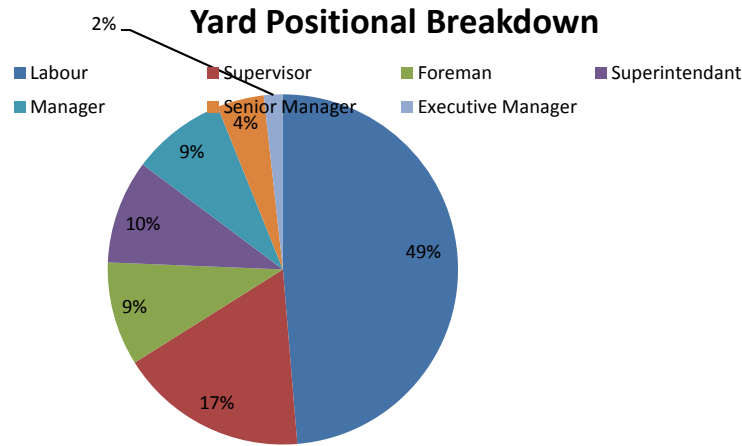
Yard Ethnicity Breakdown



Yard Age Breakdown



Yard Positional Breakdown



Regular Yard Questions

- 1 My Contributions and Sugesstions are valued by the Company
- 2 There is a feeling of coperation an teamwork amongst the members of my work team
- 3 My daily duties interfere with my abilities to comply with safety regulations
- 4 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report th
- 5 Before making a decision my superviror considers all employee concerns and opinions
- 6 My goals and values are a concern of the Company
- 7 The Company has done everything possible to make my workplace safe
- 8 I believe that most managers will keep to their word and do what they say they will do
- 9 Careless work by other members of my team does not increase my daily duties
- 10 The management of the Company is highly informed about the safety issues at site
- 11 I am strongly encouraged to report safety concerns
- 12 Memebers of my team have received enough training and knowledge to perform their daily duties
- 13 Help is available from the company when I have a problem
- 14 Most managers are competent at managing their workers
- 15 Management acts quickly to correct safety issues
- 16 If I Have a concern about safety I will make it known
- 17 If I observe another team member who did not know how to do a certain task safely, I would show them how
- 18 In the last quarter I personally know someone in my work group who had an injury and did not report it
- 19 My supervisor explains and provides additional information when employees request it
- 20 My supervisor would use whatever power they have to help me solve problems in my workplace
- 21 Information about importanrt events and situations are shared within my workteam
- 22 I feel that the Company really takes an interest in my wellbeing
- 23 People in my workplace treat each other with repsect
- 24 Management is presently acting to make the workplace safer
- 25 I feel comfortable discussing safetey issues with my supervisor
- 26 injury
- 27 All job decisions are applied consistently across all affected employees
- 28 My work group wants to meet its objectives successfully
- 29 I believe that managers apply the same rules for all workers
- 30 Management is willing to invest money and effort to improve the level of safety
- 31 Safety procedures/requirements are stopping me from performing my work efficiently
- 32 I regularly suggest ways of improving safety
- 33 Employees are allowed to challenge or appeal job decisions made by the supervisor
- 34 I would defend and justify decisions made by my supervisor if they were not present to do so
- 35 The protection of workers from occupational exposure to hazards is a high priority with management
- 36 We are regularly asked for our ideas and suggestions about job safety
- 37 In the last quarter I was involved in a near miss which I didn't report
- 38 I feel motivated to perfrom work to the best of my ability
- 39 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts
- 40 I feel I am treated fairly but those senior to me
- 41 I feel safe in my workplace
- 42 I activley participate in the Company Safety Initiatives
- 43 I have witnessed an improvement in safety as a result of these inititatives
- 44 intitatives
- 45 I believe management fully supports the new safety inititatives

Regular Yard Questions

- 47 I am sceptical of this new approach and don't believe it will last
- 48 I think the management is making intelligent decisions to protect the safety of the company's employees
- 49 I think the management is making intelligent decisions to protect the future of the company
- 50 I am satisfied with my current employment situation

Summary of Survey Results 1st Quarter 2004						
Q No. Question	Number Surveyed	115 Responses			107	93%
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	26	28	26	27		0
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
2 Years with the Company (During the above Survey Period)	62	27	11	6		1
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	
3 Position (During the above Survey Period)	53	19	9	10		16
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	71	26	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
6 My Contributions and Sugesstions are valued by the Company	28	18	25	20	16	-21%
7 There is a feeling of coperation an teamwork amongst the members of my work team	35	27	23	15	7	-64%
8 My daily duties interfere with my abilities to comply with safety regulations	29	24	34	11	9	-50%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4	11	37	32	23	55%
10 Before making a decision my superviror considers all employee concerns and opinions	32	24	21	20	10	-45%
11 My goals and values are a concern of the Company	28	18	29	20	12	-28%
12 The Company has done everything possible to make my workplace safe	23	34	16	27	7	-36%
13 I believe that most managers will keep to their word and do what they say they will do	18	25	19	29	16	0%
14 Careless work by other members of my team does not increase my daily duties	19	34	31	18	5	-41%
15 The management of the Company is highly informed about the safety issues at site	14	18	37	26	12	4%
16 I am strongly encouraged to report safety concerns	18	18	17	35	19	18%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	21	28	20	29	9	-21%
18 Help is available from the company when I have a problem	14	34	22	23	14	-10%
19 Most managers are competent at managing their workers	9	29	18	38	13	16%
20 Management acts quickly to correct safety issues	22	43	22	13	7	-56%
21 If I Have a concern about safety I will make it known	5	12	32	37	21	53%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	6	35	20	37	9	7%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	9	19	42	27	10	9%
24 My supervisor explains and provides additional information when employees request it	21	32	22	23	9	-31%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	32	26	23	21	5	-55%
26 Information about importanrt events and situations are shared within my workteam	7	16	29	34	21	43%
27 I feel that the Company really takes an interest in my wellbeing	28	34	24	12	9	-56%
28 People in my workplace treat each other with repsect	5	25	35	34	8	14%
29 Management is presently acting to make the workplace safer	32	18	29	20	8	-43%
30 I feel comfortable discussing safetey issues with my supervisor	28	18	17	20	24	-6%

Agreement Factor

Summary of Survey Results 1st Quarter 2004						
Q No. Question	Number Surveyed	115 Responses	107	93%	Agreement Factor	
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)		65+ (0)
1 Age (During the above Survey Period)	26	28	26	27		0
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)		26+ (2)
2 Years with the Company (During the above Survey Period)	62	27	11	6		1
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)		Manager (17)
3 Position (During the above Survey Period)	53	19	9	10		16
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	71	26	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	42	18	35	10	2	-82%
32 All job decisions are applied consistently across all affected employees	27	18	35	17	10	-33%
33 My work group wants to meet its objectives successfully	6	13	27	37	24	56%
34 I believe that managers apply the same rules for all workers	28	39	14	20	6	-59%
35 Management is willing to invest money and effort to improve the level of safety	28	20	23	20	16	-22%
36 Safety procedures/requirements are stopping me from performing my work efficiently	14	29	27	27	10	-9%
37 I regularly suggest ways of improving safety	13	42	26	14	12	-28%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	19	43	27	13	5	-54%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	28	23	29	18	9	-40%
40 The protection of workers from occupational exposure to hazards is a high priority with management	29	32	18	20	8	-50%
41 We are regularly asked for our ideas and suggestions about job safety	37	18	19	17	16	-40%
42 In the last quarter I was involved in a near miss which I didn't report	36	23	34	12	2	-74%
43 I feel motivated to perform work to the best of my ability	29	26	18	18	16	-32%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	23	18	29	24	13	-13%
45 I feel I am treated fairly but those senior to me	18	23	39	14	13	-18%
46 I feel safe in my workplace	24	18	24	18	23	-2%
47 I actively participate in the Company Safety Initiatives	28	24	23	21	11	-35%
48 I have witnessed an improvement in safety as a result of these initiatives	26	31	20	20	10	-40%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	32	18	14	25	18	-20%
50 I believe management fully supports the new safety initiatives	28	33	25	14	7	-57%
51 I have full confidence in the new safety initiatives	28	18	25	28	8	-28%
52 I am sceptical of this new approach and don't believe it will last	9	13	26	42	17	42%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	21	36	25	23	2	-48%
54 I think the management is making intelligent decisions to protect the future of the company	18	38	25	20	6	-39%
55 I am satisfied with my current employment situation	18	19	39	17	14	-9%

Agreement Factor

Summary of Survey Results 2nd Quarter 2004						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					112 97%
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	26	28	29	29		0
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
	62	27	14	8		1
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	
	54	20	11	10		17
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	74	28	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
6 My Contributions and Sugestions are valued by the Company	29	25	25	22	11	-35%
7 There is a feeling of coperation an teamwork amongst the members of my work team	31	32	23	21	5	-56%
8 My daily duties interfere with my abilities to comply with safety regulations	24	24	34	19	11	-28%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	6	18	24	40	24	52%
10 Before making a decision my superviror considers all employee concerns and opinions	28	36	16	24	8	-46%
11 My goals and values are a concern of the Company	28	23	24	28	9	-29%
12 The Company has done everything possible to make my workplace safe	25	37	14	31	5	-41%
13 I believe that most managers will keep to their word and do what they say they will do	19	32	14	40	7	-14%
14 Careless work by other members of my team does not increase my daily duties	16	44	27	19	6	-40%
15 The management of the Company is highly informed about the safety issues at site	19	23	34	28	8	-15%
16 I am strongly encouraged to report safety concerns	18	27	13	38	16	6%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	21	37	17	29	8	-30%
18 Help is available from the company when I have a problem	18	36	18	28	12	-18%
19 Most managers are competent at managing their workers	13	29	21	37	12	5%
20 Management acts quickly to correct safety issues	24	46	18	16	8	-55%
21 If I Have a concern about safety I will make it known	12	16	37	31	16	21%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	14	32	20	37	9	-4%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	8	19	44	30	11	15%
24 My supervisor explains and provides additional information when employees request it	22	35	18	30	7	-31%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	25	36	21	26	4	-46%
26 Information about importanrt events and situations are shared within my workteam	10	17	26	38	21	38%
27 I feel that the Company really takes an interest in my wellbeing	28	38	23	15	8	-56%
28 People in my workplace treat each other with repsect	11	28	31	33	9	1%
29 Management is presently acting to make the workplace safer	32	21	28	22	9	-40%
30 I feel comfortable discussing safetey issues with my supervisor	28	23	14	25	22	-9%

Agreement Factor

Summary of Survey Results 2nd Quarter 2004						
Q No. Question	Number Surveyed	115 Responses			112	97%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	26	28	29	29		0
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
2 Years with the Company (During the above Survey Period)	62	27	14	8		1
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	54	20	11	10		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	74	28	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	36	21	32	15	8	-55%
32 All job decisions are applied consistently across all affected employees	31	34	28	12	7	-63%
33 My work group wants to meet its objectives successfully	7	15	24	41	25	55%
34 I believe that managers apply the same rules for all workers	26	44	11	24	7	-52%
35 Management is willing to invest money and effort to improve the level of safety	29	23	21	25	14	-25%
36 Safety procedures/requirements are stopping me from performing my work efficiently	16	27	23	32	14	1%
37 I regularly suggest ways of improving safety	19	44	28	13	8	-47%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	23	42	25	16	6	-54%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	28	29	27	21	7	-45%
40 The protection of workers from occupational exposure to hazards is a high priority with management	29	41	16	19	7	-59%
41 We are regularly asked for our ideas and suggestions about job safety	24	42	13	19	14	-38%
42 In the last quarter I was involved in a near miss which I didn't report	28	29	30	16	9	-46%
43 I feel motivated to perform work to the best of my ability	29	32	18	18	15	-38%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	27	25	21	27	12	-25%
45 I feel I am treated fairly but those senior to me	19	28	41	15	9	-29%
46 I feel safe in my workplace	24	26	26	17	19	-17%
47 I actively participate in the Company Safety Initiatives	28	32	21	22	9	-43%
48 I have witnessed an improvement in safety as a result of these initiatives	26	38	22	16	10	-48%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	30	38	14	16	14	-48%
50 I believe management fully supports the new safety initiatives	27	43	24	12	6	-65%
51 I have full confidence in the new safety initiatives	28	38	12	25	9	-46%
52 I am sceptical of this new approach and don't believe it will last	13	18	26	38	17	25%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	19	43	25	23	2	-48%
54 I think the management is making intelligent decisions to protect the future of the company	19	46	24	18	5	-50%
55 I am satisfied with my current employment situation	21	28	39	14	10	-32%

Summary of Survey Results 3rd Quarter 2004

Q No. Question	Number Surveyed					115 Responses	105	91%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)			
1 Age (During the above Survey Period)	24	27	26	28				0
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)			2
	58	26	13	6				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)			16
	52	18	10	9				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)					
	72	27	6					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugestions are valued by the Company	26	26	23	24	6			-40%
7 There is a feeling of coperation an teamwork amongst the members of my work team	29	34	18	19	5			-60%
8 My daily duties interfere with my abilities to comply with safety regulations	21	19	30	26	9			-16%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	7	16	22	35	25			52%
10 Before making a decision my superviror considers all employee concerns and opinions	26	33	16	23	7			-46%
11 My goals and values are a concern of the Company	26	24	26	22	7			-38%
12 The Company has done everything possible to make my workplace safe	23	39	11	26	6			-45%
13 I believe that most managers will keep to their word and do what they say they will do	17	34	12	37	5			-20%
14 Careless work by other members of my team does not increase my daily duties	18	41	24	15	7			-46%
15 The management of the Company is highly informed about the safety issues at site	21	26	25	23	10			-24%
16 I am strongly encouraged to report safety concerns	19	26	11	36	13			-2%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	20	39	16	23	7			-40%
18 Help is available from the company when I have a problem	19	37	10	26	13			-22%
19 Most managers are competent at managing their workers	12	31	17	34	11			1%
20 Management acts quickly to correct safety issues	18	47	15	18	7			-49%
21 If I Have a concern about safety I will make it known	14	19	31	28	13			7%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	16	34	7	38	10			-8%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	11	21	40	24	9			-1%
24 My supervisor explains and provides additional information when employees request it	18	31	21	28	7			-24%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	20	38	18	24	5			-42%
26 Information about importanrt events and situations are shared within my workteam	9	21	20	36	19			33%
27 I feel that the Company really takes an interest in my wellbeing	26	37	22	13	7			-59%
28 People in my workplace treat each other with repsect	12	29	25	31	8			-6%
29 Management is presently acting to make the workplace safer	26	29	16	23	11			-34%
30 I feel comfortable discussing safetey issues with my supervisor	23	28	12	22	20			-11%

Agreement Factor

Summary of Survey Results 3rd Quarter 2004						
Q No. Question	Number Surveyed	115 Responses			105	91%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	24	27	26	28		0
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
2 Years with the Company (During the above Survey Period)	58	26	13	6		2
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	52	18	10	9		16
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	72	27	6			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	30	21	26	18	10	-41%
32 All job decisions are applied consistently across all affected employees	28	37	19	13	8	-61%
33 My work group wants to meet its objectives successfully	6	19	19	38	23	50%
34 I believe that managers apply the same rules for all workers	27	41	14	15	8	-61%
35 Management is willing to invest money and effort to improve the level of safety	23	28	15	27	12	-22%
36 Safety procedures/requirements are stopping me from performing my work efficiently	18	26	20	28	13	-8%
37 I regularly suggest ways of improving safety	17	41	22	16	9	-39%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	20	43	14	21	7	-46%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	23	31	18	24	9	-33%
40 The protection of workers from occupational exposure to hazards is a high priority with management	24	43	12	20	6	-56%
41 We are regularly asked for our ideas and suggestions about job safety	21	39	12	19	14	-32%
42 In the last quarter I was involved in a near miss which I didn't report	24	31	25	17	8	-44%
43 I feel motivated to perform work to the best of my ability	26	35	10	21	13	-38%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	24	28	18	25	10	-30%
45 I feel I am treated fairly but those senior to me	15	31	34	17	8	-27%
46 I feel safe in my workplace	24	28	18	19	16	-24%
47 I actively participate in the Company Safety Initiatives	21	35	21	20	8	-39%
48 I have witnessed an improvement in safety as a result of these initiatives	21	36	21	18	9	-40%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	27	39	8	18	13	-47%
50 I believe management fully supports the new safety initiatives	26	41	18	14	6	-64%
51 I have full confidence in the new safety initiatives	21	39	11	26	8	-37%
52 I am sceptical of this new approach and don't believe it will last	12	21	16	41	15	25%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	15	41	24	22	3	-41%
54 I think the management is making intelligent decisions to protect the future of the company	17	48	18	16	6	-51%
55 I am satisfied with my current employment situation	20	31	29	16	9	-35%

Agreement Factor

Summary of Survey Results 4th Quarter 2004						
Q No.	Question	Number Surveyed				
	Employee Background	115 Responses				
		(xx) denotes maximum representation based on totals from sample data				
		25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)
1	Age (During the above Survey Period)	26	28	28	28	0
2	Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)
		60	28	14	7	1
3	Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)
		55	18	10	10	17
5	Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)		
		73	28	9		
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
		1	2	3	4	5
6	My Contributions and Suggestions are valued by the Company	20	24	28	30	8
7	There is a feeling of cooperation and teamwork amongst the members of my work team	26	32	23	23	6
8	My daily duties interfere with my abilities to comply with safety regulations	22	21	35	24	8
9	Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	9	22	22	34	23
10	Before making a decision my supervisor considers all employee concerns and opinions	24	34	17	27	8
11	My goals and values are a concern of the Company	23	28	25	26	8
12	The Company has done everything possible to make my workplace safe	20	41	14	28	7
13	I believe that most managers will keep to their word and do what they say they will do	18	36	12	39	5
14	Careless work by other members of my team does not increase my daily duties	16	38	30	17	9
15	The management of the Company is highly informed about the safety issues at site	22	28	23	26	11
16	I am strongly encouraged to report safety concerns	19	28	13	37	13
17	Members of my team have received enough training and knowledge to perform their daily duties	22	36	19	25	8
18	Help is available from the company when I have a problem	16	39	13	31	11
19	Most managers are competent at managing their workers	13	34	15	36	12
20	Management acts quickly to correct safety issues	16	46	18	21	9
21	If I have a concern about safety I will make it known	15	23	28	32	12
22	If I observe another team member who did not know how to do a certain task safely, I would show them how	18	36	9	38	9
23	In the last quarter I personally know someone in my work group who had an injury and did not report it	13	24	46	21	6
24	My supervisor explains and provides additional information when employees request it	17	29	21	35	8
25	My supervisor would use whatever power they have to help me solve problems in my workplace	19	42	18	27	4
26	Information about important events and situations are shared within my workteam	11	23	24	34	18
27	I feel that the Company really takes an interest in my wellbeing	25	38	23	16	8
28	People in my workplace treat each other with respect	14	31	25	31	9
29	Management is presently acting to make the workplace safer	24	33	17	24	12
30	I feel comfortable discussing safety issues with my supervisor	23	31	12	27	17

Agreement Factor

-16%
-45%
-23%
36%
-35%
-29%
-35%
-21%
-32%
-22%
-3%
-35%
-16%
0%
-35%
3%
-15%
-15%
-11%
-41%
23%
-51%
-9%
-30%
-15%

Summary of Survey Results 4th Quarter 2004						
Q No.	Question	Number Surveyed				115 Responses
	Employee Background	(xx) denotes maximum representation based on totals from sample data				110
		25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)
1	Age (During the above Survey Period)	26	28	28	28	0
2	Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)
		60	28	14	7	1
3	Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)
		55	18	10	10	17
5	Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)		
		73	28	9		
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
		1	2	3	4	5
31	I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable injury	32	24	28	19	7
32	All job decisions are applied consistently across all affected employees	26	41	22	15	6
33	My work group wants to meet its objectives successfully	8	23	23	34	22
34	I believe that managers apply the same rules for all workers	26	43	14	18	9
35	Management is willing to invest money and effort to improve the level of safety	21	26	13	34	16
36	Safety procedures/requirements are stopping me from performing my work efficiently	21	30	22	26	11
37	I regularly suggest ways of improving safety	15	39	24	21	11
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	21	46	13	22	8
39	I would defend and justify decisions made by my supervisor if they were not present to do so	18	36	18	27	11
40	The protection of workers from occupational exposure to hazards is a high priority with management	23	44	13	22	8
41	We are regularly asked for our ideas and suggestions about job safety	18	38	14	24	16
42	In the last quarter I was involved in a near miss which I didn't report	26	33	25	19	7
43	I feel motivated to perform work to the best of my ability	25	39	11	23	12
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	25	31	16	27	11
45	I feel I am treated fairly but those senior to me	16	36	34	15	9
46	I feel safe in my workplace	22	29	19	23	17
47	I actively participate in the Company Safety Initiatives	23	38	19	22	8
48	I have witnessed an improvement in safety as a result of these initiatives	20	39	18	23	10
49	I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	26	39	10	21	14
50	I believe management fully supports the new safety initiatives	25	39	21	17	8
51	I have full confidence in the new safety initiatives	21	41	11	28	9
52	I am sceptical of this new approach and don't believe it will last	9	22	16	46	17
53	I think the management is making intelligent decisions to protect the safety of the company's employees	13	43	21	27	6
54	I think the management is making intelligent decisions to protect the future of the company	14	46	16	25	9
55	I am satisfied with my current employment situation	18	31	28	21	12

Agreement Factor

-50%
-60%
35%
-54%
-2%
-22%
-24%
-45%
-21%
-47%
-16%
-47%
-38%
-29%
-32%
-15%
-42%
-33%
-38%
-51%
-34%
36%
-27%
-28%
-20%

Summary of Survey Results 2004										
Q No. Question	Number Surveyed					115 Responses				
Employee Background	(xx) denotes maxmium representation based on totals from sample data					108.5				
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	94%				
1 Age (During the above Survey Period)	26	28	27	28	0					
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)					
2 Years with the Company (During the above Survey Period)	60.5	27	13	6.75	1.25					
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)					
3 Position (During the above Survey Period)	53.5	18.75	10	9.75	16.5					
	Indian Sub Con. (76)	Phillip (29)	West (10)	Approval Factor						
5 Ethnicity	72.5	27.25	8.75	Green denotes improvement						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease				
	1	2	3	4	5	Q1	Q2	Q3	Q4	
6 My Contributions and Sugestions are valued by the Company	25.75	23.25	25.25	24	10.25	-21%	-35%	-40%	-16%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	30.25	31.25	21.75	19.5	5.75	-64%	-56%	-60%	-45%	
8 My daily duties interfere with my abilities to comply with safety regulations	24	22	33.25	20	9.25	-50%	-28%	-16%	-23%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	6.5	16.75	26.25	35.25	23.75	55%	52%	52%	36%	
10 Before making a decision my superviror considers all employee concerns and opinions	27.5	31.75	17.5	23.5	8.25	-45%	-46%	-46%	-35%	
11 My goals and values are a concern of the Company	26.25	23.25	26	24	9	-28%	-29%	-38%	-29%	
12 The Company has done everything possible to make my workplace safe	22.75	37.75	13.75	28	6.25	-36%	-41%	-45%	-35%	
13 I believe that most managers will keep to their word and do what they say they will do	18	31.75	14.25	36.25	8.25	0%	-14%	-20%	-21%	
14 Careless work by other members of my team does not increase my daily duties	17.25	39.25	28	17.25	6.75	-41%	-40%	-46%	-32%	
15 The management of the Company is highly informed about the safety issues at site	19	23.75	29.75	25.75	10.25	4%	-15%	-24%	-22%	
16 I am strongly encouraged to report safety concerns	18.5	24.75	13.5	36.5	15.25	18%	6%	-2%	-3%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	21	35	18	26.5	8	-21%	-30%	-40%	-35%	
18 Help is available from the company when I have a problem	16.75	36.5	15.75	27	12.5	-10%	-18%	-22%	-16%	
19 Most managers are competent at managing their workers	11.75	30.75	17.75	36.25	12	16%	5%	1%	0%	
20 Management acts quickly to correct safety issues	20	45.5	18.25	17	7.75	-56%	-55%	-49%	-35%	
21 If I Have a concern about safety I will make it known	11.5	17.5	32	32	15.5	53%	21%	7%	3%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13.5	34.25	14	37.5	9.25	7%	-4%	-8%	-15%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	10.25	20.75	43	25.5	9	9%	15%	-1%	-15%	
24 My supervisor explains and provides additional information when employees request it	19.5	31.75	20.5	29	7.75	-31%	-31%	-24%	-11%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	24	35.5	20	24.5	4.5	-55%	-46%	-42%	-41%	
26 Information about importanrt events and situations are shared within my workteam	9.25	19.25	24.75	35.5	19.75	43%	38%	33%	23%	
27 I feel that the Company really takes an interest in my wellbeing	26.75	36.75	23	14	8	-56%	-56%	-59%	-51%	
28 People in my workplace treat each other with repsect	10.5	28.25	29	32.25	8.5	14%	1%	-6%	-9%	
29 Management is presently acting to make the workplace safer	28.5	25.25	22.5	22.25	10	-43%	-40%	-34%	-30%	
30 I feel comfortable discussing safetey issues with my supervisor	25.5	25	13.75	23.5	20.75	-6%	-9%	-11%	-15%	

Summary of Survey Results 2004									
Q No. Question	Number Surveyed		115 Responses		108.5		94%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	26	28	27	28	0				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	60.5	27	13	6.75	1.25				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	53.5	18.75	10	9.75	16.5				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	72.5	27.25	8.75	Approval Factor					
						Green denotes improvement			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	35	21	30.25	15.5	6.75	-82%	-55%	-41%	-50%
32 All job decisions are applied consistently across all affected employees	28	32.5	26	14.25	7.75	-33%	-63%	-61%	-60%
33 My work group wants to meet its objectives successfully	6.75	17.5	23.25	37.5	23.5	56%	55%	50%	35%
34 I believe that managers apply the same rules for all workers	26.75	41.75	13.25	19.25	7.5	-59%	-52%	-61%	-54%
35 Management is willing to invest money and effort to improve the level of safety	25.25	24.25	18	26.5	14.5	-22%	-25%	-22%	-2%
36 Safety procedures/requirements are stopping me from performing my work efficiently	17.25	28	23	28.25	12	-9%	1%	-8%	-22%
37 I regularly suggest ways of improving safety	16	41.5	25	16	10	-28%	-47%	-39%	-24%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	20.75	43.5	19.75	18	6.5	-54%	-54%	-46%	-45%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	24.25	29.75	23	22.5	9	-40%	-45%	-33%	-21%
40 The protection of workers from occupational exposure to hazards is a high priority with management	26.25	40	14.75	20.25	7.25	-50%	-59%	-56%	-47%
41 We are regularly asked for our ideas and suggestions about job safety	25	34.25	14.5	19.75	15	-40%	-38%	-32%	-16%
42 In the last quarter I was involved in a near miss which I didn't report	28.5	29	28.5	16	6.5	-74%	-46%	-44%	-47%
43 I feel motivated to perfrom work to the best of my ability	27.25	33	14.25	20	14	-32%	-38%	-38%	-38%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	24.75	25.5	21	25.75	11.5	-13%	-25%	-30%	-29%
45 I feel I am treated fairly but those senior to me	17	29.5	37	15.25	9.75	-18%	-29%	-27%	-32%
46 I feel safe in my workplace	23.5	25.25	21.75	19.25	18.75	-2%	-17%	-24%	-15%
47 I activley participate in the Company Safety Initiatives	25	32.25	21	21.25	9	-35%	-43%	-39%	-42%
48 I have witnessed an improvement in safety as a result of these inititiatives	23.25	36	20.25	19.25	9.75	-40%	-48%	-40%	-33%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	28.75	33.5	11.5	20	14.75	-20%	-48%	-47%	-38%
50 I believe management fully supports the new safety intitatives	26.5	39	22	14.25	6.75	-57%	-65%	-64%	-51%
51 I have full confidence in the new safety intitatives	24.5	34	14.75	26.75	8.5	-28%	-46%	-37%	-34%
52 I am sceptical of this new approach and don't believe it will last	10.75	18.5	21	41.75	16.5	42%	25%	25%	36%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	17	40.75	23.75	23.75	3.25	-48%	-48%	-41%	-27%
54 I think the management is making intelligent decisions to protect the future of the company	17	44.5	20.75	19.75	6.5	-39%	-50%	-51%	-28%
55 I am satisfied with my current employment situation	19.25	27.25	33.75	17	11.25	-9%	-32%	-35%	-20%

Summary of Survey Results 1st Quarter 2005						
Q No. Question	Number Surveyed	115 Responses			115	100%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	27	29	29	30		0
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
2 Years with the Company (During the above Survey Period)	62	29	14	8		2
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	56	20	11	11		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	76	29	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
6 My Contributions and Sugesstions are valued by the Company	19	26	24	36	10	-7%
7 There is a feeling of coperation an teamwork amongst the members of my work team	24	30	27	26	8	-31%
8 My daily duties interfere with my abilities to comply with safety regulations	23	24	35	26	7	-26%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	13	25	23	32	22	22%
10 Before making a decision my superviror considers all employee concerns and opinions	21	34	18	32	10	-21%
11 My goals and values are a concern of the Company	26	31	23	26	9	-34%
12 The Company has done everything possible to make my workplace safe	21	44	9	33	8	-32%
13 I believe that most managers will keep to their word and do what they say they will do	20	39	8	41	7	-21%
14 Careless work by other members of my team does not increase my daily duties	18	38	33	16	10	-33%
15 The management of the Company is highly informed about the safety issues at site	23	29	28	23	12	-24%
16 I am strongly encouraged to report safety concerns	18	28	15	39	15	4%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	23	37	20	26	9	-34%
18 Help is available from the company when I have a problem	16	36	18	33	12	-10%
19 Most managers are competent at managing their workers	15	35	17	37	11	-5%
20 Management acts quickly to correct safety issues	15	47	19	23	11	-28%
21 If I Have a concern about safety I will make it known	14	26	28	36	11	3%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	18	38	11	39	9	-15%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	15	27	46	21	6	-21%
24 My supervisor explains and provides additional information when employees request it	19	33	19	33	11	-14%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	21	43	16	29	6	-38%
26 Information about importanrt events and situations are shared within my workteam	12	26	20	37	20	23%
27 I feel that the Company really takes an interest in my wellbeing	23	39	25	19	9	-42%
28 People in my workplace treat each other with repsect	14	31	25	36	9	-4%
29 Management is presently acting to make the workplace safer	24	35	18	25	13	-28%
30 I feel comfortable discussing safetey issues with my supervisor	25	31	13	29	17	-16%

Agreement Factor

Summary of Survey Results 1st Quarter 2005						
Q No. Question	Number Surveyed	115 Responses			115	100%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	27	29	29	30		0
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
	62	29	14	8		2
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
	56	20	11	11		17
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	76	29	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	32	28	28	22	5	-52%
32 All job decisions are applied consistently across all affected employees	23	49	24	12	7	-60%
33 My work group wants to meet its objectives successfully	8	25	24	36	22	34%
34 I believe that managers apply the same rules for all workers	28	45	14	18	10	-55%
35 Management is willing to invest money and effort to improve the level of safety	20	28	14	35	18	3%
36 Safety procedures/requirements are stopping me from performing my work efficiently	22	32	22	28	11	-23%
37 I regularly suggest ways of improving safety	16	44	14	27	14	-18%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	21	41	17	26	10	-32%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	18	36	23	27	11	-20%
40 The protection of workers from occupational exposure to hazards is a high priority with management	21	46	15	23	10	-39%
41 We are regularly asked for our ideas and suggestions about job safety	18	34	18	28	17	-7%
42 In the last quarter I was involved in a near miss which I didn't report	29	36	26	19	5	-57%
43 I feel motivated to perform work to the best of my ability	23	40	13	26	13	-30%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	27	33	13	29	13	-28%
45 I feel I am treated fairly but those senior to me	15	40	32	19	9	-29%
46 I feel safe in my workplace	22	29	20	28	16	-11%
47 I actively participate in the Company Safety Initiatives	21	41	20	22	11	-34%
48 I have witnessed an improvement in safety as a result of these initiatives	20	37	21	25	12	-24%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	25	40	12	22	16	-31%
50 I believe management fully supports the new safety initiatives	31	43	6	22	13	-50%
51 I have full confidence in the new safety initiatives	18	43	14	32	8	-27%
52 I am sceptical of this new approach and don't believe it will last	10	20	21	46	18	37%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	11	40	32	25	7	-20%
54 I think the management is making intelligent decisions to protect the future of the company	16	46	18	25	10	-29%
55 I am satisfied with my current employment situation	17	32	29	24	13	-14%

Agreement Factor

Summary of Survey Results 2nd Quarter 2005						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					109 95%
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	24	28	29	28	0	
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
	60	28	13	7	1	
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	
	54	19	10	9	17	
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	73	27	9			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Agreement Factor
	1	2	3	4	5	
6 My Contributions and Sugesstions are valued by the Company	15	27	21	37	9	-2%
7 There is a feeling of coperation an teamwork amongst the members of my work team	24	30	21	26	8	-33%
8 My daily duties interfere with my abilities to comply with safety regulations	19	27	29	29	5	-24%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	15	27	18	30	19	10%
10 Before making a decision my superviror considers all employee concerns and opinions	18	30	22	28	11	-15%
11 My goals and values are a concern of the Company	22	34	18	29	6	-34%
12 The Company has done everything possible to make my workplace safe	18	36	23	25	7	-30%
13 I believe that most managers will keep to their word and do what they say they will do	19	34	14	35	7	-21%
14 Careless work by other members of my team does not increase my daily duties	16	34	26	24	9	-22%
15 The management of the Company is highly informed about the safety issues at site	19	33	21	26	10	-23%
16 I am strongly encouraged to report safety concerns	18	28	9	39	15	5%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	20	38	16	27	8	-32%
18 Help is available from the company when I have a problem	14	38	17	29	11	-14%
19 Most managers are competent at managing their workers	14	28	26	32	9	-6%
20 Management acts quickly to correct safety issues	15	35	25	23	11	-18%
21 If I Have a concern about safety I will make it known	13	29	15	42	10	6%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	16	28	24	31	10	-8%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	18	27	38	21	5	-29%
24 My supervisor explains and provides additional information when employees request it	20	26	24	28	11	-15%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	18	38	19	26	7	-31%
26 Information about importanrt events and situations are shared within my workteam	10	22	24	35	18	27%
27 I feel that the Company really takes an interest in my wellbeing	22	37	20	21	9	-39%
28 People in my workplace treat each other with repsect	12	33	17	38	9	-1%
29 Management is presently acting to make the workplace safer	22	31	15	27	14	-18%
30 I feel comfortable discussing safetey issues with my supervisor	22	27	20	25	15	-15%

Summary of Survey Results 2nd Quarter 2005						
Q No. Question	Number Surveyed	115 Responses			109	95%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
1 Age (During the above Survey Period)	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
	24	28	29	28		0
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
	60	28	13	7		1
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
	54	19	10	9		17
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	73	27	9			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	32	30	24	19	4	-61%
32 All job decisions are applied consistently across all affected employees	24	42	19	18	6	-55%
33 My work group wants to meet its objectives successfully	8	24	19	36	22	37%
34 I believe that managers apply the same rules for all workers	25	41	12	23	8	-48%
35 Management is willing to invest money and effort to improve the level of safety	18	26	15	33	17	5%
36 Safety procedures/requirements are stopping me from performing my work efficiently	23	33	16	26	11	-28%
37 I regularly suggest ways of improving safety	14	40	14	28	13	-13%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	19	40	12	27	11	-27%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	17	30	24	27	11	-14%
40 The protection of workers from occupational exposure to hazards is a high priority with management	20	38	21	21	9	-36%
41 We are regularly asked for our ideas and suggestions about job safety	15	31	20	27	16	-2%
42 In the last quarter I was involved in a near miss which I didn't report	31	38	16	20	4	-66%
43 I feel motivated to perform work to the best of my ability	18	34	29	18	10	-29%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	25	28	22	23	11	-30%
45 I feel I am treated fairly but those senior to me	16	38	26	21	8	-30%
46 I feel safe in my workplace	18	31	16	29	15	-7%
47 I actively participate in the Company Safety Initiatives	20	37	17	23	12	-28%
48 I have witnessed an improvement in safety as a result of these initiatives	16	33	22	29	9	-17%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	20	34	23	19	13	-27%
50 I believe management fully supports the new safety initiatives	26	38	15	18	12	-44%
51 I have full confidence in the new safety initiatives	16	38	19	27	9	-23%
52 I am sceptical of this new approach and don't believe it will last	11	22	23	38	15	22%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	10	32	36	22	9	-11%
54 I think the management is making intelligent decisions to protect the future of the company	16	38	17	27	11	-19%
55 I am satisfied with my current employment situation	15	32	22	26	14	-7%

Summary of Survey Results 3rd Quarter 2005						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					109 95%
1 Age (During the above Survey Period)	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	0
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	2
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	17
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	72	27	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5	3%
7 There is a feeling of coperation an teamwork amongst the members of my work team	13	28	19	41	8	-33%
8 My daily duties interfere with my abilities to comply with safety regulations	23	34	17	26	9	-30%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	21	24	34	27	3	5%
10 Before making a decision my superviror considers all employee concerns and opinions	14	29	21	28	17	-14%
11 My goals and values are a concern of the Company	16	34	17	33	9	-28%
12 The Company has done everything possible to make my workplace safe	20	33	21	28	7	-23%
13 I believe that most managers will keep to their word and do what they say they will do	14	33	34	20	8	-14%
14 Careless work by other members of my team does not increase my daily duties	20	28	19	31	11	-23%
15 The management of the Company is highly informed about the safety issues at site	13	33	29	24	10	11%
16 I am strongly encouraged to report safety concerns	18	39	11	32	9	-21%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	15	23	22	33	16	-7%
18 Help is available from the company when I have a problem	19	31	22	28	9	4%
19 Most managers are competent at managing their workers	12	39	14	33	11	-17%
20 Management acts quickly to correct safety issues	13	26	26	32	12	7%
21 If I Have a concern about safety I will make it known	14	42	13	28	12	-8%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	25	22	39	10	-39%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	16	28	24	31	10	-17%
24 My supervisor explains and provides additional information when employees request it	19	30	38	18	4	-27%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	18	32	19	30	10	27%
26 Information about importanrt events and situations are shared within my workteam	18	34	25	23	9	-31%
27 I feel that the Company really takes an interest in my wellbeing	11	25	16	38	19	-5%
28 People in my workplace treat each other with repsect	20	36	21	22	10	-11%
29 Management is presently acting to make the workplace safer	13	31	22	34	9	-15%
30 I feel comfortable discussing safetey issues with my supervisor	21	29	14	31	14	
	22	27	20	25	15	

Summary of Survey Results 3rd Quarter 2005						
Q No. Question	Number Surveyed	115 Responses			109	95%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	
1 Age (During the above Survey Period)	24	29	29	27		0
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	
2 Years with the Company (During the above Survey Period)	58	29	13	7		2
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	
3 Position (During the above Survey Period)	53	19	11	9		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	72	27	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	33	31	26	15	4	-68%
32 All job decisions are applied consistently across all affected employees	24	38	18	21	8	-45%
33 My work group wants to meet its objectives successfully	9	26	16	38	20	31%
34 I believe that managers apply the same rules for all workers	25	38	12	26	8	-42%
35 Management is willing to invest money and effort to improve the level of safety	17	26	14	35	17	8%
36 Safety procedures/requirements are stopping me from performing my work efficiently	22	34	20	25	8	-34%
37 I regularly suggest ways of improving safety	13	36	19	26	15	-6%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	15	35	31	17	11	-24%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	20	25	26	26	12	-14%
40 The protection of workers from occupational exposure to hazards is a high priority with management	17	35	29	19	9	-29%
41 We are regularly asked for our ideas and suggestions about job safety	14	27	24	34	10	-1%
42 In the last quarter I was involved in a near miss which I didn't report	28	34	29	14	4	-62%
43 I feel motivated to perform work to the best of my ability	16	32	30	20	11	-20%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	23	31	16	28	11	-25%
45 I feel I am treated fairly but those senior to me	19	38	18	24	10	-29%
46 I feel safe in my workplace	18	31	16	29	15	-7%
47 I actively participate in the Company Safety Initiatives	18	35	22	22	12	-23%
48 I have witnessed an improvement in safety as a result of these initiatives	15	38	16	30	10	-17%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	19	31	27	19	13	-22%
50 I believe management fully supports the new safety initiatives	27	32	16	22	12	-37%
51 I have full confidence in the new safety initiatives	13	41	14	33	8	-17%
52 I am sceptical of this new approach and don't believe it will last	12	22	23	39	13	17%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	12	35	26	25	11	-11%
54 I think the management is making intelligent decisions to protect the future of the company	17	34	17	29	12	-14%
55 I am satisfied with my current employment situation	16	32	18	29	14	-6%

Agreement Factor

Summary of Survey Results 3rd Quarter 2005

Q No. Question	Number Surveyed					115 Responses	111	97%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
1 Age (During the above Survey Period)	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)			
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)			
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)			
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)					
	74	28	9					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugestions are valued by the Company	12	32	21	38	8			
7 There is a feeling of coperation an teamwork amongst the members of my work team	21	33	20	29	8			
8 My daily duties interfere with my abilities to comply with safety regulations	24	29	24	27	7			
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	13	33	18	31	16			
10 Before making a decision my superviror considers all employee concerns and opinions	15	35	19	32	10			
11 My goals and values are a concern of the Company	16	38	19	29	9			
12 The Company has done everything possible to make my workplace safe	10	38	32	24	7			
13 I believe that most managers will keep to their word and do what they say they will do	15	32	28	25	11			
14 Careless work by other members of my team does not increase my daily duties	18	28	19	30	16			
15 The management of the Company is highly informed about the safety issues at site	16	41	14	30	10			
16 I am strongly encouraged to report safety concerns	14	23	28	30	16			
17 Memebers of my team have received enough training and knowledge to perform their daily duties	16	35	20	32	8			
18 Help is available from the company when I have a problem	12	36	21	31	11			
19 Most managers are competent at managing their workers	13	31	23	31	13			
20 Management acts quickly to correct safety issues	14	38	17	30	12			
21 If I Have a concern about safety I will make it known	12	23	28	37	11			
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	14	28	26	32	11			
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	19	33	38	16	5			
24 My supervisor explains and provides additional information when employees request it	15	36	19	32	9			
25 My supervisor would use whatever power they have to help me solve problems in my workplace	18	38	20	26	9			
26 Information about importanrt events and situations are shared within my workteam	11	26	18	39	17			
27 I feel that the Company really takes an interest in my wellbeing	17	36	28	20	10			
28 People in my workplace treat each other with repsect	13	30	23	34	11			
29 Management is presently acting to make the workplace safer	19	31	13	33	15			
30 I feel comfortable discussing safetey issues with my supervisor	21	27	20	28	15			

Agreement Factor

-2%
-27%
-32%
4%
-12%
-21%
-18%
-14%
-2%
-21%
10%
-17%
-6%
0%
-11%
11%
-2%
-41%
-14%
-27%
23%
-27%
0%
-5%
-10%

Summary of Survey Results 3rd Quarter 2005						
Q No.	Question	Number Surveyed				115 Responses
	Employee Background	(xx) denotes maxmium representation based on totals from sample data				111 97%
		25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)
1	Age (During the above Survey Period)	26	28	28	29	0
2	Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)
3	Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)
5	Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)		
		74	28	9		
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
		1	2	3	4	5
31	I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	36	30	18	20	7 -61%
32	All job decisions are applied consistently across all affected employees	24	33	25	21	8 -40%
33	My work group wants to meet its objectives successfully	9	23	17	41	21 38%
34	I believe that managers apply the same rules for all workers	23	36	20	24	8 -38%
35	Management is willing to invest money and effort to improve the level of safety	13	28	14	39	17 17%
36	Safety procedures/requirements are stopping me from performing my work efficiently	22	36	24	22	7 -40%
37	I regularly suggest ways of improving safety	13	40	19	23	16 -10%
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	15	42	25	17	12 -28%
39	I would defend and justify decisions made by my supervisor if they were not present to do so	18	26	26	29	12 -8%
40	The protection of workers from occupational exposure to hazards is a high priority with management	12	41	29	19	10 -23%
41	We are regularly asked for our ideas and suggestions about job safety	12	28	25	36	10 4%
42	In the last quarter I was involved in a near miss which I didn't report	28	34	29	16	4 -59%
43	I feel motivated to perfrom work to the best of my ability	15	34	30	21	11 -19%
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	23	31	16	29	12 -22%
45	I feel I am treated fairly but those senior to me	18	38	17	26	12 -22%
46	I feel safe in my workplace	14	34	16	31	16 1%
47	I activley participate in the Company Safety Initiatives	18	35	19	24	15 -15%
48	I have witnessed an improvement in safety as a result of these inititatives	15	32	19	35	10 -6%
49	I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	14	31	37	16	13 -15%
50	I believe management fully supports the new safety intitatives	24	32	18	22	15 -25%
51	I have full confidence in the new safety intitatives	13	36	21	33	8 -12%
52	I am sceptical of this new approach and don't believe it will last	10	24	26	36	15 20%
53	I think the management is making intelligent decisions to protect the safety of the company's employees	11	35	26	27	12 -5%
54	I think the management is making intelligent decisions to protect the future of the company	16	34	17	31	13 -8%
55	I am satisfied with my current employment situation	16	32	16	33	14 -3%

Agreement Factor

Summary of Survey Results 2005										
Q No. Question	Number Surveyed					115 Responses				
Employee Background	(xx) denotes maximum representation based on totals from sample data					111				
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	97%				
1 Age (During the above Survey Period)	25	29	29	29	29	0				
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)	1.75				
	60	28.5	13.25	7.5		1.75				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	16.75				
	54.5	19.25	10.5	10		16.75				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			9.5				
	73.75	27.75	9.5			9.5				
						Approval Factor				
						Green denotes improvement				
						Red indicates a decrease				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Q1	Q2	Q3	Q4	
6 My Contributions and Suggestions are valued by the Company	1	2	3	4	5	8.75	-7%	-2%	3%	-2%
7 There is a feeling of cooperation and teamwork amongst the members of my work team	14.75	28.25	21.25	38	8.25	-31%	-33%	-33%	-27%	
8 My daily duties interfere with my abilities to comply with safety regulations	23	31.75	21.25	26.75	5.5	-26%	-24%	-30%	-32%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	21.75	26	30.5	27.25	18.5	22%	-10%	5%	4%	
10 Before making a decision my supervisor considers all employee concerns and opinions	13.75	28.5	20	30.25	10	-21%	-15%	-14%	-12%	
11 My goals and values are a concern of the Company	17.5	33.25	19	31.25	7.75	-34%	-34%	-28%	-21%	
12 The Company has done everything possible to make my workplace safe	21	34	20.25	28	7.5	-32%	-30%	-23%	-18%	
13 I believe that most managers will keep to their word and do what they say they will do	15.75	37.75	24.5	25.5	9	-21%	-21%	-14%	-14%	
14 Careless work by other members of my team does not increase my daily duties	18.5	33.25	17.25	33	11.25	-33%	-22%	-14%	-2%	
15 The management of the Company is highly informed about the safety issues at site	16.25	33.25	26.75	23.5	10.25	-24%	-23%	-23%	-21%	
16 I am strongly encouraged to report safety concerns	19	35.5	18.5	27.75	15.5	4%	5%	11%	10%	
17 Members of my team have received enough training and knowledge to perform their daily duties	16.25	25.5	18.5	35.25	8.5	-34%	-32%	-21%	-17%	
18 Help is available from the company when I have a problem	19.5	35.25	19.5	28.25	11.25	-10%	-14%	-7%	-6%	
19 Most managers are competent at managing their workers	13.5	37.25	17.5	31.5	11.25	-5%	-6%	4%	0%	
20 Management acts quickly to correct safety issues	13.75	30	23	33	10	-15%	-8%	-8%	-2%	
21 If I have a concern about safety I will make it known	14.5	40.5	18.5	26	11.5	-28%	-18%	-17%	-11%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	25.75	23.25	38.5	10.5	3%	6%	7%	11%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	16	30.5	21.25	33.25	5	-21%	-29%	-39%	-41%	
24 My supervisor explains and provides additional information when employees request it	17.75	29.25	40	19	10.25	-14%	-15%	-17%	-14%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	18	31.75	20.25	30.75	7.75	-38%	-31%	-27%	-27%	
26 Information about important events and situations are shared within my workteam	18.75	38.25	20	26	18.5	23%	27%	27%	23%	
27 I feel that the Company really takes an interest in my wellbeing	11	24.75	19.5	37.25	9.5	-42%	-39%	-31%	-27%	
28 People in my workplace treat each other with respect	20.5	37	23.5	20.5	9.5	-4%	-1%	-5%	0%	
29 Management is presently acting to make the workplace safer	13	31.25	21.75	35.5	14	-28%	-18%	-11%	-5%	
30 I feel comfortable discussing safety issues with my supervisor	21.5	31.5	15	29	15.5	-16%	-15%	-15%	-10%	
	22.5	28	18.25	26.75						

Summary of Survey Results 2005									
Q No. Question	Number Surveyed		115 Responses		111		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	25	29	29	29	29	0			
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	60	28.5	13.25	7.5	1.75				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	54.5	19.25	10.5	10	16.75				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	73.75	27.75	9.5						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Approval Factor			
						Green denotes improvement			
						Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	33.25	29.75	24	19	5	-52%	-61%	-68%	-61%
32 All job decisions are applied consistently across all affected employees	23.75	40.5	21.5	18	7.25	-60%	-55%	-45%	-40%
33 My work group wants to meet its objectives successfully	8.5	24.5	19	37.75	21.25	34%	37%	31%	38%
34 I believe that managers apply the same rules for all workers	25.25	40	14.5	22.75	8.5	-55%	-48%	-42%	-38%
35 Management is willing to invest money and effort to improve the level of safety	17	27	14.25	35.5	17.25	3%	5%	8%	17%
36 Safety procedures/requirements are stopping me from performing my work efficiently	22.25	33.75	20.5	25.25	9.25	-23%	-28%	-34%	-40%
37 I regularly suggest ways of improving safety	14	40	16.5	26	14.5	-18%	-13%	-6%	-10%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	17.5	39.5	21.25	21.75	11	-32%	-27%	-24%	-28%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	18.25	29.25	24.75	27.25	11.5	-20%	-14%	-14%	-8%
40 The protection of workers from occupational exposure to hazards is a high priority with management	17.5	40	23.5	20.5	9.5	-39%	-36%	-29%	-23%
41 We are regularly asked for our ideas and suggestions about job safety	14.75	30	21.75	31.25	13.25	-7%	-2%	-1%	4%
42 In the last quarter I was involved in a near miss which I didn't report	29	35.5	25	17.25	4.25	-57%	-66%	-62%	-59%
43 I feel motivated to perfrom work to the best of my ability	18	35	25.5	21.25	11.25	-30%	-29%	-20%	-19%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	24.5	30.75	16.75	27.25	11.75	-28%	-30%	-25%	-22%
45 I feel I am treated fairly but those senior to me	17	38.5	23.25	22.5	9.75	-29%	-30%	-29%	-22%
46 I feel safe in my workplace	18	31.25	17	29.25	15.5	-11%	-7%	-7%	1%
47 I activley participate in the Company Safety Initiatives	19.25	37	19.5	22.75	12.5	-34%	-28%	-23%	-15%
48 I have witnessed an improvement in safety as a result of these inititatives	16.5	35	19.5	29.75	10.25	-24%	-17%	-17%	-6%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety inititatives	19.5	34	24.75	19	13.75	-31%	-27%	-22%	-15%
50 I believe management fully supports the new safety inititatives	27	36.25	13.75	21	13	-50%	-44%	-37%	-25%
51 I have full confidence in the new safety inititatives	15	39.5	17	31.25	8.25	-27%	-23%	-17%	-12%
52 I am sceptical of this new approach and don't believe it will last	10.75	22	23.25	39.75	15.25	37%	22%	17%	20%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	11	35.5	30	24.75	9.75	-20%	-11%	-11%	-5%
54 I think the management is making intelligent decisions to protect the future of the company	16.25	38	17.25	28	11.5	-29%	-19%	-14%	-8%
55 I am satisfied with my current employment situation	16	32	21.25	28	13.75	-14%	-7%	-6%	-3%

Summary of Survey Results 1st Quarter 2006

Q No. Question	Number Surveyed	115 Responses				115	100%	Agreement Factor	
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)				
1 Age (During the above Survey Period)	23	32	29	29	2				
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)				
	58	32	15	8	2				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	56	20	11	11	17				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)						
	76	29	10						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree				
	1	2	3	4	5				
6 My Contributions and Sugestions are valued by the Company	10	33	21	42	9	6%			
7 There is a feeling of coperation an teamwork amongst the members of my work team	16	37	22	31	9	-17%			
8 My daily duties interfere with my abilities to comply with safety regulations	29	33	23	24	6	-48%			
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	14	35	26	27	13	-9%			
10 Before making a decision my superviror considers all employee concerns and opinions	14	36	18	36	11	-5%			
11 My goals and values are a concern of the Company	13	35	25	33	9	-9%			
12 The Company has done everything possible to make my workplace safe	8	38	33	28	8	-9%			
13 I believe that most managers will keep to their word and do what they say they will do	14	35	26	27	13	-9%			
14 Careless work by other members of my team does not increase my daily duties	15	28	23	33	16	6%			
15 The management of the Company is highly informed about the safety issues at site	14	38	19	34	10	-10%			
16 I am strongly encouraged to report safety concerns	14	24	30	31	16	10%			
17 Memebers of my team have received enough training and knowledge to perform their daily duties	13	36	23	33	10	-8%			
18 Help is available from the company when I have a problem	11	34	18	40	12	7%			
19 Most managers are competent at managing their workers	12	33	25	31	14	2%			
20 Management acts quickly to correct safety issues	14	35	23	31	12	-7%			
21 If I Have a concern about safety I will make it known	12	23	30	38	12	13%			
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	14	28	30	32	11	-2%			
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	20	40	32	18	5	-45%			
24 My supervisor explains and provides additional information when employees request it	14	34	23	34	10	-7%			
25 My supervisor would use whatever power they have to help me solve problems in my workplace	15	39	23	27	11	-17%			
26 Information about importanrt events and situations are shared within my workteam	9	27	20	42	17	27%			
27 I feel that the Company really takes an interest in my wellbeing	13	38	31	22	11	-17%			
28 People in my workplace treat each other with repsect	12	30	26	36	11	3%			
29 Management is presently acting to make the workplace safer	16	32	18	34	15	0%			
30 I feel comfortable discussing safetey issues with my supervisor	21	25	24	30	15	-6%			

Summary of Survey Results 1st Quarter 2006						
Q No. Question	Number Surveyed	115 Responses			115	100%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	23	32	29	29	2	
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	
2 Years with the Company (During the above Survey Period)	58	32	15	8	2	
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	56	20	11	11	17	
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	76	29	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	36	30	27	15	7	-63%
32 All job decisions are applied consistently across all affected employees	20	34	29	24	8	-30%
33 My work group wants to meet its objectives successfully	9	23	21	41	21	37%
34 I believe that managers apply the same rules for all workers	21	34	24	27	9	-27%
35 Management is willing to invest money and effort to improve the level of safety	13	28	14	43	17	20%
36 Safety procedures/requirements are stopping me from performing my work efficiently	23	38	29	18	7	-45%
37 I regularly suggest ways of improving safety	13	36	24	26	16	-3%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	13	43	27	19	13	-21%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	16	27	29	31	12	-3%
40 The protection of workers from occupational exposure to hazards is a high priority with management	12	37	33	22	11	-15%
41 We are regularly asked for our ideas and suggestions about job safety	12	27	27	39	10	7%
42 In the last quarter I was involved in a near miss which I didn't report	28	34	33	16	4	-57%
43 I feel motivated to perform work to the best of my ability	13	32	32	26	12	-7%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	20	31	16	33	15	-7%
45 I feel I am treated fairly but those senior to me	14	39	22	27	13	-12%
46 I feel safe in my workplace	14	30	19	36	16	9%
47 I actively participate in the Company Safety Initiatives	18	35	22	24	16	-13%
48 I have witnessed an improvement in safety as a result of these initiatives	12	33	21	38	11	3%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	12	33	37	19	14	-9%
50 I believe management fully supports the new safety initiatives	20	36	18	25	16	-17%
51 I have full confidence in the new safety initiatives	13	38	19	35	10	-8%
52 I am sceptical of this new approach and don't believe it will last	12	25	32	33	13	9%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	10	32	34	27	12	-1%
54 I think the management is making intelligent decisions to protect the future of the company	16	33	17	36	13	-3%
55 I am satisfied with my current employment situation	16	32	20	33	14	-3%

Summary of Survey Results 2nd Quarter 2006						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					100 87%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	2
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	2
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	15
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	66	26	8			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5	7%
7 There is a feeling of coperation an teamwork amongst the members of my work team	7	27	24	36	6	-14%
8 My daily duties interfere with my abilities to comply with safety regulations	12	31	22	29	6	-53%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	25	29	23	20	3	-17%
10 Before making a decision my supervisor considers all employee concerns and opinions	14	28	28	21	9	2%
11 My goals and values are a concern of the Company	10	31	18	29	12	-4%
12 The Company has done everything possible to make my workplace safe	11	28	25	26	10	-6%
13 I believe that most managers will keep to their word and do what they say they will do	8	29	31	25	7	-4%
14 Careless work by other members of my team does not increase my daily duties	9	30	27	24	10	8%
15 The management of the Company is highly informed about the safety issues at site	11	26	20	30	13	-5%
16 I am strongly encouraged to report safety concerns	12	26	26	27	9	21%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	12	20	20	31	17	-6%
18 Help is available from the company when I have a problem	13	25	26	27	9	8%
19 Most managers are competent at managing their workers	8	28	21	34	9	15%
20 Management acts quickly to correct safety issues	9	28	16	33	14	-5%
21 If I Have a concern about safety I will make it known	13	30	17	29	11	18%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	9	18	30	32	11	0%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	12	26	24	26	12	-49%
24 My supervisor explains and provides additional information when employees request it	17	36	29	15	3	-5%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	12	31	15	34	8	-10%
26 Information about importanrt events and situations are shared within my workteam	13	30	22	24	11	27%
27 I feel that the Company really takes an interest in my wellbeing	9	27	9	38	17	-3%
28 People in my workplace treat each other with repsect	10	27	30	22	11	4%
29 Management is presently acting to make the workplace safer	10	26	24	30	10	4%
30 I feel comfortable discussing safetey issues with my supervisor	13	28	13	34	12	-5%
	17	21	24	26	12	

31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	36	29	17	13	5	-78%
32 All job decisions are applied consistently across all affected employees	16	26	31	19	8	-23%
33 My work group wants to meet its objectives successfully	8	22	13	38	19	38%
34 I believe that managers apply the same rules for all workers	14	28	25	23	10	-13%
35 Management is willing to invest money and effort to improve the level of safety	9	23	16	36	16	27%
36 Safety procedures/requirements are stopping me from performing my work efficiently	22	34	19	18	7	-46%
37 I regularly suggest ways of improving safety	11	28	24	24	13	0%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	13	31	29	16	11	-19%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	13	23	25	29	10	0%
40 The protection of workers from occupational exposure to hazards is a high priority with management	9	31	29	22	9	-9%
41 We are regularly asked for our ideas and suggestions about job safety	10	24	22	34	10	10%
42 In the last quarter I was involved in a near miss which I didn't report	24	30	31	12	3	-60%
43 I feel motivated to perform work to the best of my ability	11	28	25	26	10	-4%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	19	24	13	29	15	-3%
45 I feel I am treated fairly but those senior to me	11	34	19	24	12	-8%
46 I feel safe in my workplace	12	24	22	26	16	10%
47 I actively participate in the Company Safety Initiatives	16	28	16	24	16	-4%
48 I have witnessed an improvement in safety as a result of these initiatives	9	25	26	31	9	6%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	12	33	30	15	10	-22%
50 I believe management fully supports the new safety initiatives	13	28	27	18	14	-8%
51 I have full confidence in the new safety initiatives	11	32	17	30	10	-4%
52 I am sceptical of this new approach and don't believe it will last	11	21	31	28	9	3%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	8	26	32	24	10	2%
54 I think the management is making intelligent decisions to protect the future of the company	13	28	19	29	11	-3%
55 I am satisfied with my current employment situation	14	25	22	27	12	-2%

Summary of Survey Results 3rd Quarter 2006						
Q No. Question	Number Surveyed	115 Responses	104	90%		
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	22	28	27	25		2
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	
2 Years with the Company (During the above Survey Period)	56	27	12	6		3
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	50	18	10	9		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	68	27	9			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
6 My Contributions and Suggestions are valued by the Company	9	26	22	38	9	12%
7 There is a feeling of cooperation and teamwork amongst the members of my work team	10	30	22	33	9	1%
8 My daily duties interfere with my abilities to comply with safety regulations	26	33	26	16	3	-61%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	18	28	28	21	9	-24%
10 Before making a decision my supervisor considers all employee concerns and opinions	10	24	24	33	13	14%
11 My goals and values are a concern of the Company	9	24	31	29	11	9%
12 The Company has done everything possible to make my workplace safe	8	29	25	33	9	6%
13 I believe that most managers will keep to their word and do what they say they will do	9	24	28	33	10	11%
14 Careless work by other members of my team does not increase my daily duties	10	23	26	32	13	14%
15 The management of the Company is highly informed about the safety issues at site	10	22	33	30	9	6%
16 I am strongly encouraged to report safety concerns	11	18	22	35	18	30%
17 Members of my team have received enough training and knowledge to perform their daily duties	11	23	31	29	10	4%
18 Help is available from the company when I have a problem	8	24	25	38	9	15%
19 Most managers are competent at managing their workers	9	23	22	35	15	23%
20 Management acts quickly to correct safety issues	11	28	20	32	13	8%
21 If I Have a concern about safety I will make it known	9	15	33	35	12	25%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	12	26	24	30	12	4%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	20	36	33	12	3	-56%
24 My supervisor explains and provides additional information when employees request it	11	27	20	37	9	6%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	12	26	26	28	12	2%
26 Information about important events and situations are shared within my workteam	9	24	12	42	17	33%
27 I feel that the Company really takes an interest in my wellbeing	8	24	32	29	11	11%
28 People in my workplace treat each other with respect	9	24	27	33	11	13%
29 Management is presently acting to make the workplace safer	11	31	12	37	13	10%
30 I feel comfortable discussing safety issues with my supervisor	15	18	29	29	13	7%

Agreement Factor

Summary of Survey Results 3rd Quarter 2006						
Q No.	Question	Number Surveyed				
	Employee Background	115 Responses				
		(xx) denotes maximum representation based on totals from sample data				
		25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)
1	Age (During the above Survey Period)	22	28	27	25	2
2	Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)
		56	27	12	6	3
3	Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)
		50	18	10	9	17
5	Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)		
		68	27	9		
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
		1	2	3	4	5
31	I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	36	30	23	10	5
32	All job decisions are applied consistently across all affected employees	13	24	35	22	10
33	My work group wants to meet its objectives successfully	8	22	15	39	20
34	I believe that managers apply the same rules for all workers	12	26	28	28	10
35	Management is willing to invest money and effort to improve the level of safety	9	19	21	38	17
36	Safety procedures/requirements are stopping me from performing my work efficiently	22	39	24	13	6
37	I regularly suggest ways of improving safety	9	24	28	29	14
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	13	26	34	19	12
39	I would defend and justify decisions made by my supervisor if they were not present to do so	11	18	39	25	11
40	The protection of workers from occupational exposure to hazards is a high priority with management	9	24	32	29	10
41	We are regularly asked for our ideas and suggestions about job safety	8	23	24	38	11
42	In the last quarter I was involved in a near miss which I didn't report	25	33	33	10	3
43	I feel motivated to perform work to the best of my ability	9	26	28	30	11
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	19	22	13	33	17
45	I feel I am treated fairly but those senior to me	10	30	22	29	13
46	I feel safe in my workplace	11	22	26	29	16
47	I actively participate in the Company Safety Initiatives	13	26	18	30	17
48	I have witnessed an improvement in safety as a result of these initiatives	9	18	31	36	10
49	I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	12	28	34	19	11
50	I believe management fully supports the new safety initiatives	11	22	32	24	15
51	I have full confidence in the new safety initiatives	10	29	21	33	11
52	I am sceptical of this new approach and don't believe it will last	11	26	36	24	7
53	I think the management is making intelligent decisions to protect the safety of the company's employees	8	21	35	29	11
54	I think the management is making intelligent decisions to protect the future of the company	11	25	20	36	12
55	I am satisfied with my current employment situation	12	23	25	31	13

Agreement Factor

-79%
-8%
39%
-2%
34%
-56%
14%
-9%
7%
7%
20%
-64%
8%
7%
5%
16%
12%
19%
-11%
10%
6%
-10%
13%
13%
10%

Summary of Survey Results 4th Quarter 2006						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					113 98%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	2
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	3
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	17
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	76	27	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
6 My Contributions and Sugesstions are valued by the Company	1	2	3	4	5	
7 There is a feeling of coperation an teamwork amongst the members of my work team	10	27	21	45	10	16%
8 My daily duties interfere with my abilities to comply with safety regulations	10	28	28	36	11	9%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	28	36	27	19	3	-59%
10 Before making a decision my superviror considers all employee concerns and opinions	19	32	37	18	7	-34%
11 My goals and values are a concern of the Company	9	25	29	36	14	19%
12 The Company has done everything possible to make my workplace safe	9	21	33	37	13	21%
13 I believe that most managers will keep to their word and do what they say they will do	8	24	33	38	10	16%
14 Careless work by other members of my team does not increase my daily duties	9	24	29	39	12	19%
15 The management of the Company is highly informed about the safety issues at site	9	20	32	38	14	25%
16 I am strongly encouraged to report safety concerns	8	20	35	40	10	21%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	10	17	25	42	19	38%
18 Help is available from the company when I have a problem	11	23	33	34	12	12%
19 Most managers are competent at managing their workers	8	20	24	48	13	34%
20 Management acts quickly to correct safety issues	9	20	27	41	16	31%
21 If I Have a concern about safety I will make it known	11	19	27	41	15	27%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	9	15	32	41	16	35%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	10	23	27	39	14	21%
24 My supervisor explains and provides additional information when employees request it	24	39	38	9	3	-64%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	9	25	26	43	10	18%
26 Information about importanrt events and situations are shared within my workteam	8	23	31	38	13	22%
27 I feel that the Company really takes an interest in my wellbeing	9	24	17	45	18	35%
28 People in my workplace treat each other with repsect	7	20	35	38	13	27%
29 Management is presently acting to make the workplace safer	9	18	32	41	13	27%
30 I feel comfortable discussing safetey issues with my supervisor	9	27	20	43	14	23%
	12	15	32	41	13	25%

Agreement Factor

Summary of Survey Results 4th Quarter 2006						
Q No. Question	Number Surveyed	115 Responses			113	98%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	23	31	29	28		2
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	
2 Years with the Company (During the above Survey Period)	56	32	15	7		3
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	55	19	11	11		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	76	27	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	37	33	30	9	4	-80%
32 All job decisions are applied consistently across all affected employees	10	21	42	28	12	10%
33 My work group wants to meet its objectives successfully	8	20	22	41	22	43%
34 I believe that managers apply the same rules for all workers	10	23	33	35	12	14%
35 Management is willing to invest money and effort to improve the level of safety	9	16	28	42	18	39%
36 Safety procedures/requirements are stopping me from performing my work efficiently	26	42	29	10	6	-64%
37 I regularly suggest ways of improving safety	9	20	33	36	15	25%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	12	20	36	31	14	13%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	9	16	44	31	13	20%
40 The protection of workers from occupational exposure to hazards is a high priority with management	9	18	31	41	14	29%
41 We are regularly asked for our ideas and suggestions about job safety	8	18	31	44	12	30%
42 In the last quarter I was involved in a near miss which I didn't report	27	38	37	8	3	-69%
43 I feel motivated to perform work to the best of my ability	9	20	26	43	15	31%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	19	22	13	40	19	16%
45 I feel I am treated fairly but those senior to me	8	27	27	36	15	20%
46 I feel safe in my workplace	11	19	31	35	17	25%
47 I actively participate in the Company Safety Initiatives	9	23	27	36	18	27%
48 I have witnessed an improvement in safety as a result of these initiatives	5	15	33	47	13	42%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	12	20	38	29	14	12%
50 I believe management fully supports the new safety initiatives	10	16	37	32	18	28%
51 I have full confidence in the new safety initiatives	8	24	29	40	12	21%
52 I am sceptical of this new approach and don't believe it will last	13	31	44	20	5	-24%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	8	15	35	40	15	35%
54 I think the management is making intelligent decisions to protect the future of the company	10	23	26	38	16	24%
55 I am satisfied with my current employment situation	10	20	26	39	18	31%

Agreement Factor

Summary of Survey Results 2006										
Q No. Question	Number Surveyed					115 Responses				
Employee Background	(xx) denotes maxmium representation based on totals from sample data					108				
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)	94%				
1 Age (During the above Survey Period)	22	30	28	27	2					
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)					
	55.5	29.5	13.75	6.75	2.5					
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)					
	52.25	18.75	10.5	10	16.5					
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)	Approval Factor						
	71.5	27.25	9.25	Green denotes improvement						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease				
	1	2	3	4	5	Q1	Q2	Q3	Q4	
6 My Contributions and Sugesstions are valued by the Company	9	28.25	22	40.25	8.5	6%	7%	12%	16%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	12	31.5	23.5	32.25	8.75	-17%	-14%	1%	9%	
8 My daily duties interfere with my abilities to comply with safety regulations	27	32.75	24.75	19.75	3.75	-48%	-53%	-61%	-59%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	16.25	30.75	29.75	21.75	9.5	-9%	-17%	-24%	-34%	
10 Before making a decision my superviror considers all employee concerns and opinions	10.75	29	22.25	33.5	12.5	-5%	2%	14%	19%	
11 My goals and values are a concern of the Company	10.5	27	28.5	31.25	10.75	-9%	-4%	9%	21%	
12 The Company has done everything possible to make my workplace safe	8	30	30.5	31	8.5	-9%	-6%	6%	16%	
13 I believe that most managers will keep to their word and do what they say they will do	10.25	28.25	27.5	30.75	11.25	-9%	-4%	11%	19%	
14 Careless work by other members of my team does not increase my daily duties	11.25	24.25	25.25	33.25	14	6%	8%	14%	25%	
15 The management of the Company is highly informed about the safety issues at site	11	26.5	28.25	32.75	9.5	-10%	-5%	6%	21%	
16 I am strongly encouraged to report safety concerns	11.75	19.75	24.25	34.75	17.5	10%	21%	30%	38%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	12	26.75	28.25	30.75	10.25	-8%	-6%	4%	12%	
18 Help is available from the company when I have a problem	8.75	26.5	22	40	10.75	7%	8%	15%	34%	
19 Most managers are competent at managing their workers	9.75	26	22.5	35	14.75	2%	15%	23%	31%	
20 Management acts quickly to correct safety issues	12.25	28	21.75	33.25	12.75	-7%	-5%	8%	27%	
21 If I Have a concern about safety I will make it known	9.75	17.75	31.25	36.5	12.75	13%	18%	25%	35%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	12	25.75	26.25	31.75	12.25	-2%	0%	4%	21%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	20.25	37.75	33	13.5	3.5	-45%	-49%	-56%	-64%	
24 My supervisor explains and provides additional information when employees request it	11.5	29.25	21	37	9.25	-7%	-5%	6%	18%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	12	29.5	25.5	29.25	11.75	-17%	-10%	2%	22%	
26 Information about importanrt events and situations are shared within my workteam	9	25.5	14.5	41.75	17.25	27%	27%	33%	35%	
27 I feel that the Company really takes an interest in my wellbeing	9.5	27.25	32	27.75	11.5	-17%	-3%	11%	27%	
28 People in my workplace treat each other with repsect	10	24.5	27.25	35	11.25	3%	4%	13%	27%	
29 Management is presently acting to make the workplace safer	12.25	29.5	15.75	37	13.5	0%	4%	10%	23%	
30 I feel comfortable discussing safetey issues with my supervisor	16.25	19.75	27.25	31.5	13.25	-6%	-5%	7%	25%	

Summary of Survey Results 2006									
Q No. Question	Number Surveyed					115 Responses		108 94%	
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	22	30	28	27	2				
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
	55.5	29.5	13.75	6.75	2.5				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	52.25	18.75	10.5	10	16.5				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)						
	71.5	27.25	9.25						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Approval Factor			
						Green denotes improvement			
						Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	36.25	30.5	24.25	11.75	5.25	-63%	-78%	-79%	-80%
32 All job decisions are applied consistently across all affected employees	14.75	26.25	34.25	23.25	9.5	-30%	-23%	-8%	10%
33 My work group wants to meet its objectives successfully	8.25	21.75	17.75	39.75	20.5	37%	38%	39%	43%
34 I believe that managers apply the same rules for all workers	14.25	27.75	27.5	28.25	10.25	-27%	-13%	-2%	14%
35 Management is willing to invest money and effort to improve the level of safety	10	21.5	19.75	39.75	17	20%	27%	34%	39%
36 Safety procedures/requirements are stopping me from performing my work efficiently	23.25	38.25	25.25	14.75	6.5	-45%	-46%	-56%	-64%
37 I regularly suggest ways of improving safety	10.5	27	27.25	28.75	14.5	-3%	0%	14%	25%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	12.75	30	31.5	21.25	12.5	-21%	-19%	-9%	13%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	12.25	21	34.25	29	11.5	-3%	0%	7%	20%
40 The protection of workers from occupational exposure to hazards is a high priority with management	9.75	27.5	31.25	28.5	11	-15%	-9%	7%	29%
41 We are regularly asked for our ideas and suggestions about job safety	9.5	23	26	38.75	10.75	7%	10%	20%	30%
42 In the last quarter I was involved in a near miss which I didn't report	26	33.75	33.5	11.5	3.25	-57%	-60%	-64%	-69%
43 I feel motivated to perfrom work to the best of my ability	10.5	26.5	27.75	31.25	12	-7%	-4%	8%	31%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	19.25	24.75	13.75	33.75	16.5	-7%	-3%	7%	16%
45 I feel I am treated fairly but those senior to me	10.75	32.5	22.5	29	13.25	-12%	-8%	5%	20%
46 I feel safe in my workplace	12	23.75	24.5	31.5	16.25	9%	10%	16%	25%
47 I activley participate in the Company Safety Initiatives	14	28	20.75	28.5	16.75	-13%	-4%	12%	27%
48 I have witnessed an improvement in safety as a result of these inititatives	8.75	22.75	27.75	38	10.75	3%	6%	19%	42%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety inititatives	12	28.5	34.75	20.5	12.25	-9%	-22%	-11%	12%
50 I believe management fully supports the new safety inititatives	13.5	25.5	28.5	24.75	15.75	-17%	-8%	10%	28%
51 I have full confidence in the new safety inititatives	10.5	30.75	21.5	34.5	10.75	-8%	-4%	6%	21%
52 I am sceptical of this new approach and don't believe it will last	11.75	25.75	35.75	26.25	8.5	9%	3%	-10%	-24%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	8.5	23.5	34	30	12	-1%	2%	13%	35%
54 I think the management is making intelligent decisions to protect the future of the company	12.5	27.25	20.5	34.75	13	-3%	-3%	13%	24%
55 I am satisfied with my current employment situation	13	25	23.25	32.5	14.25	-3%	-2%	10%	31%

Summary of Survey Results 1st Quarter 2007

Q No. Question	Number Surveyed					115 Responses	113	98%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)			
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)			
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)			
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugesstions are valued by the Company	1	2	3	4	5			
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	25	19	48	12			26%
8 My daily duties interfere with my abilities to comply with safety regulations	9	25	28	38	13			19%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	29	39	26	17	2			-67%
10 Before making a decision my superviror considers all employee concerns and opinions	17	39	37	15	5			-42%
11 My goals and values are a concern of the Company	8	21	26	42	16			33%
12 The Company has done everything possible to make my workplace safe	6	17	29	48	13			40%
13 I believe that most managers will keep to their word and do what they say they will do	8	19	28	46	12			31%
14 Careless work by other members of my team does not increase my daily duties	8	20	28	42	15			32%
15 The management of the Company is highly informed about the safety issues at site	6	17	30	44	16			42%
16 I am strongly encouraged to report safety concerns	7	17	30	46	13			36%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	8	13	24	49	19			51%
18 Help is available from the company when I have a problem	10	19	28	44	12			26%
19 Most managers are competent at managing their workers	7	18	19	53	16			47%
20 Management acts quickly to correct safety issues	8	15	27	44	19			45%
21 If I Have a concern about safety I will make it known	9	13	17	60	14			50%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	4	11	26	53	19			64%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	9	18	27	47	12			31%
24 My supervisor explains and provides additional information when employees request it	28	42	36	6	1			-80%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8	23	23	47	12			28%
26 Information about importanrt events and situations are shared within my workteam	8	19	26	38	22			42%
27 I feel that the Company really takes an interest in my wellbeing	9	17	16	53	18			48%
28 People in my workplace treat each other with repsect	6	14	31	46	16			46%
29 Management is presently acting to make the workplace safer	9	14	29	46	15			39%
30 I feel comfortable discussing safetey issues with my supervisor	9	23	17	49	15			34%
	7	9	29	53	15			53%

Agreement Factor

Summary of Survey Results 1st Quarter 2007						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					113 98%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	28
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	7
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	11
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			10
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	32	34	34	9	4	-72%
32 All job decisions are applied consistently across all affected employees	10	23	38	29	13	11%
33 My work group wants to meet its objectives successfully	8	16	22	41	26	54%
34 I believe that managers apply the same rules for all workers	12	24	32	34	11	7%
35 Management is willing to invest money and effort to improve the level of safety	9	13	25	47	19	48%
36 Safety procedures/requirements are stopping me from performing my work efficiently	25	48	29	7	4	-73%
37 I regularly suggest ways of improving safety	7	15	33	42	16	40%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	12	17	30	38	16	26%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	8	14	40	37	14	31%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	15	26	49	18	53%
41 We are regularly asked for our ideas and suggestions about job safety	8	15	26	50	14	42%
42 In the last quarter I was involved in a near miss which I didn't report	29	46	30	6	2	-83%
43 I feel motivated to perfrom work to the best of my ability	9	25	16	48	15	31%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	17	23	10	44	19	22%
45 I feel I am treated fairly but those senior to me	8	30	25	36	14	16%
46 I feel safe in my workplace	9	15	31	39	19	39%
47 I activley participate in the Company Safety Initiatives	9	16	25	43	20	43%
48 I have witnessed an improvement in safety as a result of these inititatives	3	12	29	53	16	59%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	9	16	37	35	16	29%
50 I believe management fully supports the new safety intitatives	6	14	37	37	19	43%
51 I have full confidence in the new safety intitatives	8	21	25	45	14	32%
52 I am sceptical of this new approach and don't believe it will last	16	40	38	15	4	-43%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	7	13	29	47	17	48%
54 I think the management is making intelligent decisions to protect the future of the company	9	18	34	34	18	30%
55 I am satisfied with my current employment situation	9	18	23	44	19	41%

Agreement Factor

Summary of Survey Results 2nd Quarter 2007						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					112 97%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	28
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)	26+ (3)	7
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	11
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			10
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
6 My Contributions and Sugesstions are valued by the Company	1	2	3	4	5	
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	23	16	51	13	32%
8 My daily duties interfere with my abilities to comply with safety regulations	8	22	29	40	13	25%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	30	43	23	14	2	-76%
10 Before making a decision my superviror considers all employee concerns and opinions	17	42	36	13	4	-49%
11 My goals and values are a concern of the Company	8	18	22	45	19	44%
12 The Company has done everything possible to make my workplace safe	6	13	26	53	14	50%
13 I believe that most managers will keep to their word and do what they say they will do	8	18	26	47	13	35%
14 Careless work by other members of my team does not increase my daily duties	8	15	24	49	16	45%
15 The management of the Company is highly informed about the safety issues at site	6	14	26	47	19	53%
16 I am strongly encouraged to report safety concerns	6	14	29	49	14	46%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	8	11	19	53	21	61%
18 Help is available from the company when I have a problem	7	17	24	51	13	41%
19 Most managers are competent at managing their workers	7	15	19	54	17	53%
20 Management acts quickly to correct safety issues	6	12	24	49	21	60%
21 If I Have a concern about safety I will make it known	9	12	13	64	14	55%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	3	9	21	58	21	76%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6	14	22	57	13	51%
24 My supervisor explains and provides additional information when employees request it	28	44	34	5	1	-83%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	7	21	22	49	13	36%
26 Information about importanrt events and situations are shared within my workteam	7	14	26	42	23	54%
27 I feel that the Company really takes an interest in my wellbeing	7	17	14	56	18	54%
28 People in my workplace treat each other with repsect	6	12	31	49	14	47%
29 Management is presently acting to make the workplace safer	9	13	26	48	16	44%
30 I feel comfortable discussing safetey issues with my supervisor	9	19	13	55	16	45%
	8	12	20	56	16	54%

Agreement Factor

Summary of Survey Results 2nd Quarter 2007						
Q No. Question	Number Surveyed	115 Responses	112	97%	Agreement Factor	
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)		65+ (2)
1 Age (During the above Survey Period)	23	30	29	28		2
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (8)		26+ (3)
2 Years with the Company (During the above Survey Period)	56	31	15	7		3
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)		Manager (17)
3 Position (During the above Survey Period)	55	18	11	11		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	76	26	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	32	37	36	5	2	-82%
32 All job decisions are applied consistently across all affected employees	10	18	35	35	14	22%
33 My work group wants to meet its objectives successfully	6	13	17	49	27	70%
34 I believe that managers apply the same rules for all workers	10	20	27	43	12	24%
35 Management is willing to invest money and effort to improve the level of safety	9	11	23	49	20	54%
36 Safety procedures/requirements are stopping me from performing my work efficiently	25	53	26	5	3	-82%
37 I regularly suggest ways of improving safety	7	14	26	49	16	47%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	14	28	43	18	42%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6	14	31	47	14	44%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	15	17	57	18	61%
41 We are regularly asked for our ideas and suggestions about job safety	8	15	16	57	16	52%
42 In the last quarter I was involved in a near miss which I didn't report	33	53	16	7	3	-95%
43 I feel motivated to perform work to the best of my ability	8	21	14	53	16	43%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	19	21	5	44	23	28%
45 I feel I am treated fairly but those senior to me	8	25	29	36	14	21%
46 I feel safe in my workplace	5	15	29	44	19	51%
47 I actively participate in the Company Safety Initiatives	6	13	23	49	21	59%
48 I have witnessed an improvement in safety as a result of these initiatives	3	12	18	62	17	70%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	8	14	30	44	16	41%
50 I believe management fully supports the new safety initiatives	6	13	29	41	23	55%
51 I have full confidence in the new safety initiatives	7	16	22	52	15	46%
52 I am sceptical of this new approach and don't believe it will last	18	46	28	14	6	-50%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	6	12	23	53	18	58%
54 I think the management is making intelligent decisions to protect the future of the company	8	17	26	42	19	42%
55 I am satisfied with my current employment situation	9	15	24	41	23	48%

Agreement Factor

Summary of Survey Results 3rd Quarter 2007

Q No. Question	Number Surveyed					115 Responses	115	100%	Agreement Factor
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)				
	23	32	29	29	2				
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)				
	58	32	15	7	3				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	56	20	11	11	17				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)						
	76	29	10						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree				
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5				
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	20	14	57	15				43%
8 My daily duties interfere with my abilities to comply with safety regulations	7	20	29	45	14				34%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	32	46	25	10	2				-83%
10 Before making a decision my superviror considers all employee concerns and opinions	17	49	36	9	4				-57%
11 My goals and values are a concern of the Company	6	14	16	56	23				66%
12 The Company has done everything possible to make my workplace safe	6	11	25	59	14				56%
13 I believe that most managers will keep to their word and do what they say they will do	7	16	25	54	13				43%
14 Careless work by other members of my team does not increase my daily duties	5	13	23	56	18				60%
15 The management of the Company is highly informed about the safety issues at site	6	12	22	52	23				64%
16 I am strongly encouraged to report safety concerns	5	16	21	56	17				56%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	7	9	20	57	22				68%
18 Help is available from the company when I have a problem	7	14	25	53	16				50%
19 Most managers are competent at managing their workers	7	12	20	59	17				58%
20 Management acts quickly to correct safety issues	7	13	15	57	23				66%
21 If I Have a concern about safety I will make it known	9	11	13	64	18				62%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	4	10	18	58	25				78%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	7	15	20	59	14				50%
24 My supervisor explains and provides additional information when employees request it	30	45	32	6	2				-83%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8	16	24	56	11				40%
26 Information about importanrt events and situations are shared within my workteam	9	12	19	53	22				58%
27 I feel that the Company really takes an interest in my wellbeing	8	19	9	61	18				54%
28 People in my workplace treat each other with repsect	7	13	27	53	15				49%
29 Management is presently acting to make the workplace safer	7	11	27	55	15				52%
30 I feel comfortable discussing safetey issues with my supervisor	8	16	14	59	18				55%
	8	12	13	63	19				63%

Summary of Survey Results 3rd Quarter 2007						
Q No. Question	Number Surveyed	115 Responses	115	100%		
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	23	32	29	29		2
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	
2 Years with the Company (During the above Survey Period)	58	32	15	7		3
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	56	20	11	11		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	76	29	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	35	38	30	8	4	-80%
32 All job decisions are applied consistently across all affected employees	11	21	23	47	13	26%
33 My work group wants to meet its objectives successfully	6	13	11	54	31	79%
34 I believe that managers apply the same rules for all workers	10	16	27	49	13	34%
35 Management is willing to invest money and effort to improve the level of safety	11	8	18	54	24	63%
36 Safety procedures/requirements are stopping me from performing my work efficiently	28	59	11	9	8	-78%
37 I regularly suggest ways of improving safety	9	15	21	54	16	46%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	8	13	18	53	23	61%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	8	13	22	53	19	54%
40 The protection of workers from occupational exposure to hazards is a high priority with management	4	16	15	57	23	69%
41 We are regularly asked for our ideas and suggestions about job safety	6	13	17	62	17	62%
42 In the last quarter I was involved in a near miss which I didn't report	34	54	15	9	3	-93%
43 I feel motivated to perform work to the best of my ability	6	14	21	56	18	57%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	14	26	15	40	20	23%
45 I feel I am treated fairly but those senior to me	12	21	27	39	16	23%
46 I feel safe in my workplace	7	14	20	53	21	58%
47 I actively participate in the Company Safety Initiatives	9	16	12	53	25	60%
48 I have witnessed an improvement in safety as a result of these initiatives	3	12	17	65	18	72%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	7	15	20	54	19	55%
50 I believe management fully supports the new safety initiatives	8	11	14	55	27	71%
51 I have full confidence in the new safety initiatives	8	13	23	54	17	51%
52 I am sceptical of this new approach and don't believe it will last	23	56	16	14	6	-66%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	8	13	15	58	21	62%
54 I think the management is making intelligent decisions to protect the future of the company	10	19	17	46	23	46%
55 I am satisfied with my current employment situation	12	18	14	44	27	49%

Agreement Factor

Summary of Survey Results 4th Quarter 2007

Q No. Question	Number Surveyed					115 Responses	109	95%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)			
	22	32	27	27	27			1
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)			
	56	30	15	6				2
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)			
	53	19	11	10				16
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)					
	75	26	8					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugestions are valued by the Company	8	19	14	55	13			42%
7 There is a feeling of coperation an teamwork amongst the members of my work team	7	23	19	46	14			34%
8 My daily duties interfere with my abilities to comply with safety regulations	32	47	14	14	2			-85%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	17	51	26	10	5			-60%
10 Before making a decision my superviror considers all employee concerns and opinions	7	13	9	58	22			69%
11 My goals and values are a concern of the Company	8	13	11	62	15			58%
12 The Company has done everything possible to make my workplace safe	8	19	14	56	12			41%
13 I believe that most managers will keep to their word and do what they say they will do	7	12	13	58	19			64%
14 Careless work by other members of my team does not increase my daily duties	7	14	9	57	22			67%
15 The management of the Company is highly informed about the safety issues at site	5	16	15	56	17			59%
16 I am strongly encouraged to report safety concerns	7	9	14	57	22			72%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	8	12	16	57	16			56%
18 Help is available from the company when I have a problem	6	13	10	64	16			65%
19 Most managers are competent at managing their workers	8	11	10	59	21			68%
20 Management acts quickly to correct safety issues	8	13	4	67	17			66%
21 If I Have a concern about safety I will make it known	4	16	6	58	25			77%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	7	13	16	59	14			55%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	33	48	18	6	4			-92%
24 My supervisor explains and provides additional information when employees request it	8	14	14	62	11			50%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	9	10	15	53	22			63%
26 Information about importanrt events and situations are shared within my workteam	4	25	7	54	19			54%
27 I feel that the Company really takes an interest in my wellbeing	4	16	15	57	17			61%
28 People in my workplace treat each other with repsect	8	13	14	56	18			58%
29 Management is presently acting to make the workplace safer	8	14	10	59	18			60%
30 I feel comfortable discussing safetey issues with my supervisor	6	13	4	67	19			73%

Agreement Factor

Summary of Survey Results 4th Quarter 2007

Q No.	Question	Number Surveyed	115 Responses				109	95%
	Employee Background	(xx) denotes maxmium representation based on totals from sample data						
		25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)		
1	Age (During the above Survey Period)	22	32	27	27		1	
2	Years with the Company (During the above Survey Period)	56	30	15	6	26+ (3)	2	
3	Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	16	
5	Ethnicity	53	19	11	10			
		Indian Sub Con. (76)	Phillip (29)	West (10)				
		75	26	8				
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
		1	2	3	4	5		
31	I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	35	38	25	7	4	-85%	
32	All job decisions are applied consistently across all affected employees	14	21	8	53	13	28%	
33	My work group wants to meet its objectives successfully	5	12	3	57	32	91%	
34	I believe that managers apply the same rules for all workers	11	17	18	51	12	33%	
35	Management is willing to invest money and effort to improve the level of safety	9	11	14	53	22	62%	
36	Safety procedures/requirements are stopping me from performing my work efficiently	29	57	6	10	7	-83%	
37	I regularly suggest ways of improving safety	7	13	18	54	17	56%	
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	7	15	11	52	24	65%	
39	I would defend and justify decisions made by my supervisor if they were not present to do so	9	12	19	50	19	53%	
40	The protection of workers from occupational exposure to hazards is a high priority with management	5	19	3	60	22	69%	
41	We are regularly asked for our ideas and suggestions about job safety	5	14	8	66	16	68%	
42	In the last quarter I was involved in a near miss which I didn't report	31	57	9	9	3	-95%	
43	I feel motivated to perfrom work to the best of my ability	6	14	15	56	18	61%	
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	13	29	8	41	18	20%	
45	I feel I am treated fairly but those senior to me	11	24	22	37	15	19%	
46	I feel safe in my workplace	6	15	11	54	23	67%	
47	I activley participate in the Company Safety Initiatives	10	17	8	51	23	55%	
48	I have witnessed an improvement in safety as a result of these inititatives	3	16	6	65	19	74%	
49	I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	9	16	5	58	21	61%	
50	I believe management fully supports the new safety initiatives	7	9	14	53	26	75%	
51	I have full confidence in the new safety intitatives	7	17	11	56	18	56%	
52	I am sceptical of this new approach and don't believe it will last	23	56	10	14	6	-70%	
53	I think the management is making intelligent decisions to protect the safety of the company's employees	9	10	11	58	21	66%	
54	I think the management is making intelligent decisions to protect the future of the company	7	25	9	47	21	46%	
55	I am satisfied with my current employment situation	11	17	14	42	25	49%	

Agreement Factor

Summary of Survey Results 2007										
Q No. Question	Number Surveyed		115 Responses		112.25		98%			
Employee Background	(xx) denotes maxmium representation based on totals from sample data									
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)					
1 Age (During the above Survey Period)	23	31	29	28	2					
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)					
2 Years with the Company (During the above Survey Period)	56.5	31.25	15	6.75	2.75					
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)					
3 Position (During the above Survey Period)	54.75	19	11	10.75	16.75					
	Indian Sub Con. (76)	Phillip (29)	West (10)							
5 Ethnicity	75.75	27	9.5	Approval Factor						
						Green denotes improvement				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease				
	1	2	3	4	5	Q1	Q2	Q3	Q4	
6 My Contributions and Sugesstions are valued by the Company	8.75	21.75	15.75	52.75	13.25	26%	32%	43%	42%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	7.75	22.5	26.25	42.25	13.5	19%	25%	34%	34%	
8 My daily duties interfere with my abilities to comply with safety regulations	30.75	43.75	22	13.75	2	-67%	-76%	-83%	-85%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	17	45.25	33.75	11.75	4.5	-42%	-49%	-57%	-60%	
10 Before making a decision my superviror considers all employee concerns and opinions	7.25	16.5	18.25	50.25	20	33%	44%	66%	69%	
11 My goals and values are a concern of the Company	6.5	13.5	22.75	55.5	14	40%	50%	56%	58%	
12 The Company has done everything possible to make my workplace safe	7.75	18	23.25	50.75	12.5	31%	35%	43%	41%	
13 I believe that most managers will keep to their word and do what they say they will do	7	15	22	51.25	17	32%	45%	60%	64%	
14 Careless work by other members of my team does not increase my daily duties	6.25	14.25	21.75	50	20	42%	53%	64%	67%	
15 The management of the Company is highly informed about the safety issues at site	5.75	15.75	23.75	51.75	15.25	36%	46%	56%	59%	
16 I am strongly encouraged to report safety concerns	7.5	10.5	19.25	54	21	51%	61%	68%	72%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	8	15.5	23.25	51.25	14.25	26%	41%	50%	56%	
18 Help is available from the company when I have a problem	6.75	14.5	17	57.5	16.5	47%	53%	58%	65%	
19 Most managers are competent at managing their workers	7.25	12.75	19	52.25	21	45%	60%	66%	68%	
20 Management acts quickly to correct safety issues	8.75	12.25	11.75	63.75	15.75	50%	55%	62%	66%	
21 If I Have a concern about safety I will make it known	3.75	11.5	17.75	56.75	22.5	64%	76%	78%	77%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	7.25	15	21.25	55.5	13.25	31%	51%	50%	55%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	29.75	44.75	30	5.75	2	-80%	-83%	-83%	-92%	
24 My supervisor explains and provides additional information when employees request it	7.75	18.5	20.75	53.5	11.75	28%	36%	40%	50%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8.25	13.75	21.5	46.5	22.25	42%	54%	58%	63%	
26 Information about importanrt events and situations are shared within my workteam	7	19.5	11.5	56	18.25	48%	54%	54%	54%	
27 I feel that the Company really takes an interest in my wellbeing	5.75	13.75	26	51.25	15.5	46%	47%	49%	61%	
28 People in my workplace treat each other with repsect	8.25	12.75	24	51.25	16	39%	44%	52%	58%	
29 Management is presently acting to make the workplace safer	8.5	18	13.5	55.5	16.75	34%	45%	55%	60%	
30 I feel comfortable discussing safetey issues with my supervisor	7.25	11.5	16.5	59.75	17.25	53%	54%	63%	73%	

Summary of Survey Results 2007										
Q No. Question	Number Surveyed					115 Responses		112.25		98%
Employee Background	(xx) denotes maxmium representation based on totals from sample data									
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)					
1 Age (During the above Survey Period)	23	31	29	28	2					
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)					
	56.5	31.25	15	6.75	2.75					
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)					
	54.75	19	11	10.75	16.75					
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)							
	75.75	27	9.5							
						Approval Factor				
						Green denotes improvement				
						Red denotes a decrease				
						Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
	1	2	3	4	5	Q1	Q2	Q3	Q4	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	33.5	36.75	31.25	7.25	3.5	-72%	-82%	-80%	-85%	
32 All job decisions are applied consistently across all affected employees	11.25	20.75	26	41	13.25	11%	22%	26%	28%	
33 My work group wants to meet its objectives successfully	6.25	13.5	13.25	50.25	29	54%	70%	79%	91%	
34 I believe that managers apply the same rules for all workers	10.75	19.25	26	44.25	12	7%	24%	34%	33%	
35 Management is willing to invest money and effort to improve the level of safety	9.5	10.75	20	50.75	21.25	48%	54%	63%	62%	
36 Safety procedures/requirements are stopping me from performing my work efficiently	26.75	54.25	18	7.75	5.5	-73%	-82%	-78%	-83%	
37 I regularly suggest ways of improving safety	7.5	14.25	24.5	49.75	16.25	40%	47%	46%	56%	
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	14.75	21.75	46.5	20.25	26%	42%	61%	65%	
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7.75	13.25	28	46.75	16.5	31%	44%	54%	53%	
40 The protection of workers from occupational exposure to hazards is a high priority with management	4.75	16.25	15.25	55.75	20.25	53%	61%	69%	69%	
41 We are regularly asked for our ideas and suggestions about job safety	6.75	14.25	16.75	58.75	15.75	42%	52%	62%	68%	
42 In the last quarter I was involved in a near miss which I didn't report	31.75	52.5	17.5	7.75	2.75	-83%	-95%	-93%	-95%	
43 I feel motivated to perfrom work to the best of my ability	7.25	18.5	16.5	53.25	16.75	31%	43%	57%	61%	
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	15.75	24.75	9.5	42.25	20	22%	28%	23%	20%	
45 I feel I am treated fairly but those senior to me	9.75	25	25.75	37	14.75	16%	21%	23%	19%	
46 I feel safe in my workplace	6.75	14.75	22.75	47.5	20.5	39%	51%	58%	67%	
47 I activley participate in the Company Safety Initiatives	8.5	15.5	17	49	22.25	43%	59%	60%	55%	
48 I have witnessed an improvement in safety as a result of these intitatives	3	13	17.5	61.25	17.5	59%	70%	72%	74%	
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	8.25	15.25	23	47.75	18	29%	41%	55%	61%	
50 I believe management fully supports the new safety intitatives	6.75	11.75	23.5	46.5	23.75	43%	55%	71%	75%	
51 I have full confidence in the new safety intitatives	7.5	16.75	20.25	51.75	16	32%	46%	51%	56%	
52 I am sceptical of this new approach and don't believe it will last	20	49.5	23	14.25	5.5	-43%	-50%	-66%	-70%	
53 I think the management is making intelligent decisions to protect the safety of the company's employees	7.5	12	19.5	54	19.25	48%	58%	62%	66%	
54 I think the management is making intelligent decisions to protect the future of the company	8.5	19.75	21.5	42.25	20.25	30%	42%	46%	46%	
55 I am satisfied with my current employment situation	10.25	17	18.75	42.75	23.5	41%	48%	49%	49%	

Summary of Survey Results 1st Quarter 2008						
Q No. Question	Number Surveyed	115 Responses	108	94%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	22	31	27	27		1
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	
2 Years with the Company (During the above Survey Period)	55	30	15	6		2
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	
3 Position (During the above Survey Period)	53	19	10	10		16
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	74	26	8			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
6 My Contributions and Sugesstions are valued by the Company	7	18	13	56	14	48%
7 There is a feeling of coperation an teamwork amongst the members of my work team	6	24	14	49	15	40%
8 My daily duties interfere with my abilities to comply with safety regulations	31	49	13	14	1	-88%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	21	54	27	5	1	-82%
10 Before making a decision my superviror considers all employee concerns and opinions	5	11	8	61	23	80%
11 My goals and values are a concern of the Company	6	10	12	65	15	68%
12 The Company has done everything possible to make my workplace safe	8	14	14	56	16	54%
13 I believe that most managers will keep to their word and do what they say they will do	4	7	12	63	22	85%
14 Careless work by other members of my team does not increase my daily duties	4	10	11	61	22	81%
15 The management of the Company is highly informed about the safety issues at site	5	13	13	59	18	67%
16 I am strongly encouraged to report safety concerns	5	8	11	61	23	82%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6	9	16	59	18	69%
18 Help is available from the company when I have a problem	4	9	15	64	16	73%
19 Most managers are competent at managing their workers	9	9	4	63	23	76%
20 Management acts quickly to correct safety issues	8	13	3	67	17	67%
21 If I Have a concern about safety I will make it known	4	11	10	58	25	82%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	7	13	15	59	14	56%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	33	48	19	6	2	-96%
24 My supervisor explains and provides additional information when employees request it	5	12	14	65	12	62%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	6	11	13	56	22	71%
26 Information about importanrt events and situations are shared within my workteam	7	17	5	58	21	64%
27 I feel that the Company really takes an interest in my wellbeing	4	10	16	61	17	71%
28 People in my workplace treat each other with repsect	6	11	15	58	18	66%
29 Management is presently acting to make the workplace safer	9	16	4	61	18	58%
30 I feel comfortable discussing safetey issues with my supervisor	5	12	5	67	19	77%

Agreement Factor

Summary of Survey Results 1st Quarter 2008						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maximum representation based on totals from sample data					108 94%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	1
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	2
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	16
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	74	26	8			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	35	38	26	5	4	-88%
32 All job decisions are applied consistently across all affected employees	13	21	15	47	12	22%
33 My work group wants to meet its objectives successfully	3	14	1	59	31	94%
34 I believe that managers apply the same rules for all workers	8	17	17	54	12	42%
35 Management is willing to invest money and effort to improve the level of safety	7	10	13	56	22	70%
36 Safety procedures/requirements are stopping me from performing my work efficiently	31	59	6	6	6	-95%
37 I regularly suggest ways of improving safety	4	9	18	62	15	69%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	5	13	10	56	24	75%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6	10	18	53	21	68%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	14	4	62	23	78%
41 We are regularly asked for our ideas and suggestions about job safety	5	12	8	66	17	72%
42 In the last quarter I was involved in a near miss which I didn't report	31	59	9	6	3	-101%
43 I feel motivated to perform work to the best of my ability	5	12	14	59	18	68%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	13	23	13	41	18	26%
45 I feel I am treated fairly but those senior to me	13	22	22	35	16	18%
46 I feel safe in my workplace	4	8	19	54	23	78%
47 I actively participate in the Company Safety Initiatives	7	14	7	56	24	70%
48 I have witnessed an improvement in safety as a result of these initiatives	3	12	6	68	19	81%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	7	13	6	58	24	73%
50 I believe management fully supports the new safety initiatives	5	9	14	57	23	78%
51 I have full confidence in the new safety initiatives	6	13	13	58	18	64%
52 I am sceptical of this new approach and don't believe it will last	26	59	11	9	3	-89%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	4	7	12	62	23	86%
54 I think the management is making intelligent decisions to protect the future of the company	7	21	5	52	23	58%
55 I am satisfied with my current employment situation	8	15	14	45	26	61%

Agreement Factor

Summary of Survey Results 2nd Quarter 2008						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					115 100%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5	
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	21	7	62	16	48%
8 My daily duties interfere with my abilities to comply with safety regulations	7	22	18	53	15	41%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	32	53	19	10	1	-91%
10 Before making a decision my superviror considers all employee concerns and opinions	23	60	23	7	2	-83%
11 My goals and values are a concern of the Company	6	13	4	69	23	78%
12 The Company has done everything possible to make my workplace safe	7	11	10	71	16	68%
13 I believe that most managers will keep to their word and do what they say they will do	8	12	20	59	16	55%
14 Careless work by other members of my team does not increase my daily duties	5	9	10	68	23	83%
15 The management of the Company is highly informed about the safety issues at site	4	8	18	63	22	79%
16 I am strongly encouraged to report safety concerns	5	9	20	63	18	70%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	4	9	15	61	26	83%
18 Help is available from the company when I have a problem	7	11	10	68	19	70%
19 Most managers are competent at managing their workers	3	7	21	67	17	77%
20 Management acts quickly to correct safety issues	9	9	8	64	25	76%
21 If I Have a concern about safety I will make it known	7	13	10	68	17	65%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	4	8	18	58	27	83%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5	15	18	63	14	57%
24 My supervisor explains and provides additional information when employees request it	37	52	14	9	3	-97%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	5	10	20	68	12	63%
26 Information about importanrt events and situations are shared within my workteam	6	11	13	65	20	71%
27 I feel that the Company really takes an interest in my wellbeing	6	17	10	58	24	67%
28 People in my workplace treat each other with repsect	2	8	23	62	20	78%
29 Management is presently acting to make the workplace safer	5	12	19	61	18	65%
30 I feel comfortable discussing safetey issues with my supervisor	5	21	9	64	16	57%
	5	8	10	71	21	83%

Agreement Factor

Summary of Survey Results 2nd Quarter 2008						
Q No. Question	Number Surveyed	115 Responses	115	100%		
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	23	32	29	29	2	
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	
2 Years with the Company (During the above Survey Period)	58	32	15	7	3	
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	56	20	11	11	17	
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	76	29	10			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Agreement Factor
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	37	39	34	3	2	-92%
32 All job decisions are applied consistently across all affected employees	14	24	13	51	13	22%
33 My work group wants to meet its objectives successfully	4	14	5	62	30	87%
34 I believe that managers apply the same rules for all workers	9	20	13	60	13	42%
35 Management is willing to invest money and effort to improve the level of safety	7	13	14	59	22	66%
36 Safety procedures/requirements are stopping me from performing my work efficiently	31	59	13	6	6	-90%
37 I regularly suggest ways of improving safety	5	14	14	66	16	64%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	5	15	14	59	22	68%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	5	9	22	56	23	72%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	16	12	58	24	70%
41 We are regularly asked for our ideas and suggestions about job safety	5	12	15	66	17	68%
42 In the last quarter I was involved in a near miss which I didn't report	35	63	3	11	3	-101%
43 I feel motivated to perform work to the best of my ability	6	14	14	59	22	67%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	13	25	13	43	21	30%
45 I feel I am treated fairly but those senior to me	13	22	25	38	17	21%
46 I feel safe in my workplace	3	7	21	58	26	84%
47 I actively participate in the Company Safety Initiatives	8	21	3	56	27	63%
48 I have witnessed an improvement in safety as a result of these initiatives	3	9	13	71	19	82%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	6	10	11	64	24	78%
50 I believe management fully supports the new safety initiatives	5	9	21	57	23	73%
51 I have full confidence in the new safety initiatives	6	15	19	56	19	58%
52 I am sceptical of this new approach and don't believe it will last	31	55	17	9	3	-89%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	3	9	18	60	25	83%
54 I think the management is making intelligent decisions to protect the future of the company	8	19	13	51	24	56%
55 I am satisfied with my current employment situation	8	15	21	45	26	57%

Summary of Survey Results 3rd Quarter 2008						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					112 97%
1 Age (During the above Survey Period)	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	1
2 Years with the Company (During the above Survey Period)	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	2
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)	17
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)			
	75	28	9			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5	
7 There is a feeling of coperation an teamwork amongst the members of my work team	11	23	5	58	15	38%
8 My daily duties interfere with my abilities to comply with safety regulations	6	21	14	57	14	46%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	32	52	19	7	2	-94%
10 Before making a decision my superviror considers all employee concerns and opinions	23	60	23	4	2	-88%
11 My goals and values are a concern of the Company	4	16	3	65	24	79%
12 The Company has done everything possible to make my workplace safe	6	11	11	69	15	68%
13 I believe that most managers will keep to their word and do what they say they will do	8	15	19	54	16	49%
14 Careless work by other members of my team does not increase my daily duties	4	7	10	71	20	86%
15 The management of the Company is highly informed about the safety issues at site	4	8	14	65	21	81%
16 I am strongly encouraged to report safety concerns	3	9	15	66	19	79%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	4	11	14	57	26	80%
18 Help is available from the company when I have a problem	7	11	4	68	22	78%
19 Most managers are competent at managing their workers	3	7	16	67	19	82%
20 Management acts quickly to correct safety issues	4	9	7	67	25	89%
21 If I Have a concern about safety I will make it known	7	16	8	64	17	61%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	4	8	15	58	27	86%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5	13	18	62	14	60%
24 My supervisor explains and provides additional information when employees request it	37	52	14	7	2	-103%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	4	9	20	68	11	65%
26 Information about importanrt events and situations are shared within my workteam	4	10	13	65	20	78%
27 I feel that the Company really takes an interest in my wellbeing	5	16	5	62	24	75%
28 People in my workplace treat each other with repsect	3	11	23	57	18	68%
29 Management is presently acting to make the workplace safer	5	8	19	61	19	72%
30 I feel comfortable discussing safetey issues with my supervisor	6	25	9	57	15	45%
	5	8	4	71	24	90%

Agreement Factor

Summary of Survey Results 3rd Quarter 2008						
Q No. Question	Number Surveyed					115 Responses
Employee Background	(xx) denotes maximum representation based on totals from sample data					112 97%
	25-35 (23)	36-45 (32)	46-55 (29)	56-65 (29)	65+ (2)	
1 Age (During the above Survey Period)	23	32	29	27		1
	5-10 (58)	11-15 (32)	16-20 (15)	21-25 (7)	26+ (3)	
2 Years with the Company (During the above Survey Period)	57	31	15	7		2
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)	
3 Position (During the above Survey Period)	55	19	11	10		17
	Indian Sub Con. (76)	Phillip (29)	West (10)			
5 Ethnicity	75	28	9			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	37	38	32	3	2	-94%
32 All job decisions are applied consistently across all affected employees	15	27	6	51	13	18%
33 My work group wants to meet its objectives successfully	2	15	2	63	30	93%
34 I believe that managers apply the same rules for all workers	9	20	10	60	13	43%
35 Management is willing to invest money and effort to improve the level of safety	8	17	6	61	20	61%
36 Safety procedures/requirements are stopping me from performing my work efficiently	35	59	13	3	2	-109%
37 I regularly suggest ways of improving safety	6	17	11	63	15	57%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	5	17	14	55	21	63%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	3	9	26	51	23	73%
40 The protection of workers from occupational exposure to hazards is a high priority with management	7	18	8	58	21	61%
41 We are regularly asked for our ideas and suggestions about job safety	6	15	11	64	16	62%
42 In the last quarter I was involved in a near miss which I didn't report	33	61	3	11	4	-96%
43 I feel motivated to perform work to the best of my ability	6	16	16	53	21	60%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	13	23	8	47	21	36%
45 I feel I am treated fairly but those senior to me	14	24	13	42	19	25%
46 I feel safe in my workplace	3	7	18	58	26	87%
47 I actively participate in the Company Safety Initiatives	9	23	5	51	24	52%
48 I have witnessed an improvement in safety as a result of these initiatives	2	9	9	71	21	89%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	6	10	8	64	24	80%
50 I believe management fully supports the new safety initiatives	7	13	17	54	21	62%
51 I have full confidence in the new safety initiatives	7	18	16	54	17	50%
52 I am sceptical of this new approach and don't believe it will last	31	55	17	6	3	-94%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	4	11	16	57	24	77%
54 I think the management is making intelligent decisions to protect the future of the company	9	22	9	48	24	50%
55 I am satisfied with my current employment situation	6	18	21	44	23	54%

Agreement Factor

Summary of Survey Results 2008									
Q No. Question	Number Surveyed		115 Responses		111.6666667		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	23	32	28	28	1				
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
	56.67	31.00	15.00	6.67	2.33				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	54.67	19.33	10.67	10.33	16.67				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)	Approval Factor					
	75	27.66666667	9	Green denotes improvement					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	
6 My Contributions and Sugestions are valued by the Company	9.00	20.67	8.33	58.67	15.00	48%	48%	38%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	6.33	22.33	15.33	53.00	14.67	40%	41%	46%	
8 My daily duties interfere with my abilities to comply with safety regulations	31.67	51.33	17.00	10.33	1.33	-88%	-91%	-94%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	22.33	58.00	24.33	5.33	1.67	-82%	-83%	-88%	
10 Before making a decision my superviror considers all employee concerns and opinions	5.00	13.33	5.00	65.00	23.33	80%	78%	79%	
11 My goals and values are a concern of the Company	6.33	10.67	11.00	68.33	15.33	68%	68%	68%	
12 The Company has done everything possible to make my workplace safe	8.00	13.67	17.67	56.33	16.00	54%	55%	49%	
13 I believe that most managers will keep to their word and do what they say they will do	4.33	7.67	10.67	67.33	21.67	85%	83%	86%	
14 Careless work by other members of my team does not increase my daily duties	4.00	8.67	14.33	63.00	21.67	81%	79%	81%	
15 The management of the Company is highly informed about the safety issues at site	4.33	10.33	16.00	62.67	18.33	67%	70%	79%	
16 I am strongly encouraged to report safety concerns	4.33	9.33	13.33	59.67	25.00	82%	83%	80%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6.67	10.33	10.00	65.00	19.67	69%	70%	78%	
18 Help is available from the company when I have a problem	3.33	7.67	17.33	66.00	17.33	73%	77%	82%	
19 Most managers are competent at managing their workers	7.33	9.00	6.33	64.67	24.33	76%	76%	89%	
20 Management acts quickly to correct safety issues	7.33	14.00	7.00	66.33	17.00	67%	65%	61%	
21 If I Have a concern about safety I will make it known	4.00	9.00	14.33	58.00	26.33	82%	83%	86%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	5.67	13.67	17.00	61.33	14.00	56%	57%	60%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	35.67	50.67	15.67	7.33	2.33	-96%	-97%	-103%	
24 My supervisor explains and provides additional information when employees request it	4.67	10.33	18.00	67.00	11.67	62%	63%	65%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	5.33	10.67	13.00	62.00	20.67	71%	71%	78%	
26 Information about importanrt events and situations are shared within my workteam	6.00	16.67	6.67	59.33	23.00	64%	67%	75%	
27 I feel that the Company really takes an interest in my wellbeing	3.00	9.67	20.67	60.00	18.33	71%	78%	68%	
28 People in my workplace treat each other with repsect	5.33	10.33	17.67	60.00	18.33	66%	65%	72%	
29 Management is presently acting to make the workplace safer	6.67	20.67	7.33	60.67	16.33	58%	57%	45%	
30 I feel comfortable discussing safetey issues with my supervisor	5.00	9.33	6.33	69.67	21.33	77%	83%	90%	

Summary of Survey Results 2008										
Q.No. Question	Number Surveyed		115 Responses		111.6666667		97%			
Employee Background	(xx) denotes maxmium representation based on totals from sample data									
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)					
1 Age (During the above Survey Period)	23	32	28	28						1
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)					
	56.67	31.00	15.00	6.67						2.33
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)					
	54.67	19.33	10.67	10.33	16.67					
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)							
	75	27.66666667	9							
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Approval Factor				
						Green denotes improvement				
						Red indicates a decrease				
	1	2	3	4	5	Q1	Q2	Q3		
31 I've had an injury in the last quarter that I did not report that probably would have been classifdied as a recordable	36.33	38.33	30.67	3.67	2.67	-88%	-92%	-94%		
32 All job decisions are applied consistently across all affected employees	14.00	24.00	11.33	49.67	12.67	22%	22%	18%		
33 My work group wants to meet its objectives successfully	3.00	14.33	2.67	61.33	30.33	94%	87%	93%		
34 I believe that managers apply the same rules for all workers	8.67	19.00	13.33	58.00	12.67	42%	42%	43%		
35 Management is willing to invest money and effort to improve the level of safety	7.33	13.33	11.00	58.67	21.33	70%	66%	61%		
36 Safety procedures/requirements are stopping me from performing my work efficiently	32.33	59.00	10.67	5.00	4.67	-95%	-90%	-109%		
37 I regularly suggest ways of improving safety	5.00	13.33	14.33	63.67	15.33	69%	64%	57%		
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	5.00	15.00	12.67	56.67	22.33	75%	68%	63%		
39 I would defend and justify decisions made by my supervisor if they were not present to do so	4.67	9.33	22.00	53.33	22.33	68%	72%	73%		
40 The protection of workers from occupational exposure to hazards is a high priority with management	5.67	16.00	8.00	59.33	22.67	78%	70%	61%		
41 We are regularly asked for our ideas and suggestions about job safety	5.33	13.00	11.33	65.33	16.67	72%	68%	62%		
42 In the last quarter I was involved in a near miss which I didn't report	33.00	61.00	5.00	9.33	3.33	-101%	-101%	-96%		
43 I feel motivated to perfrom work to the best of my ability	5.67	14.00	14.67	57.00	20.33	68%	67%	60%		
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	13.00	23.67	11.33	43.67	20.00	26%	30%	36%		
45 I feel I am treated fairly but those senior to me	13.33	22.67	20.00	38.33	17.33	18%	21%	25%		
46 I feel safe in my workplace	3.33	7.33	19.33	56.67	25.00	78%	84%	87%		
47 I activley participate in the Company Safety Initiatives	8.00	19.33	5.00	54.33	25.00	70%	63%	52%		
48 I have witnessed an improvement in safety as a result of these inititatives	2.67	10.00	9.33	70.00	19.67	81%	82%	89%		
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety inititatives	6.33	11.00	8.33	62.00	24.00	73%	78%	80%		
50 I believe management fully supports the new safety inititatives	5.67	10.33	17.33	56.00	22.33	78%	73%	62%		
51 I have full confidence in the new safety inititatives	6.33	15.33	16.00	56.00	18.00	64%	58%	50%		
52 I am sceptical of this new approach and don't believe it will last	29.33	56.33	15.00	8.00	3.00	-89%	-89%	-94%		
53 I think the management is making intelligent decisions to protect the safety of the company's employees	3.67	9.00	15.33	59.67	24.00	86%	83%	77%		
54 I think the management is making intelligent decisions to protect the future of the company	8.00	20.67	9.00	50.33	23.67	58%	56%	50%		
55 I am satisfied with my current employment situation	7.33	16.00	18.67	44.67	25.00	61%	57%	54%		

Summary of Survey Results Company A

Q No. Question

	Strongly Disagree				Disagree				Neither				Agree				Strongly Agree		
	2004				2005				2006				2007				2008		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
6 My Contributions and Sugestions are valued by the Company	-21%	-35%	-40%	-16%	-7%	-2%	3%	-2%	6%	7%	12%	16%	26%	32%	43%	42%	48%	48%	38%
7 There is a feeling of coperation an teamwork amongst the members of my work team	-64%	-56%	-60%	-45%	-31%	-33%	-33%	-27%	-17%	-14%	1%	9%	19%	25%	34%	34%	40%	41%	46%
8 My daily duties interfere with my abilities to comply with safety regulations	-50%	-28%	-16%	-23%	-26%	-24%	-30%	-32%	-48%	-53%	-61%	-59%	-67%	-76%	-83%	-85%	-88%	-91%	-94%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	55%	52%	52%	36%	22%	10%	5%	4%	-9%	-17%	-24%	-34%	-42%	-49%	-57%	-60%	-82%	-83%	-88%
10 Before making a decision my superviror considers all employee concerns and opinions	-45%	-46%	-46%	-35%	-21%	-15%	-14%	-12%	-5%	2%	14%	19%	33%	44%	66%	69%	80%	78%	79%
11 My goals and values are a concern of the Company	-28%	-29%	-38%	-29%	-34%	-34%	-28%	-21%	-9%	-4%	9%	21%	40%	50%	56%	58%	68%	68%	68%
12 The Company has done everything possible to make my workplace safe	-36%	-41%	-45%	-35%	-32%	-30%	-23%	-18%	-9%	-6%	6%	16%	31%	35%	43%	41%	54%	55%	49%
13 I believe that most managers will keep to their word and do what they say they will do	0%	-14%	-20%	-21%	-21%	-21%	-14%	-14%	-9%	-4%	11%	19%	32%	45%	60%	64%	85%	83%	86%
14 Careless work by other members of my team does not increase my daily duties	-41%	-40%	-46%	-32%	-33%	-22%	-14%	-2%	6%	8%	14%	25%	42%	53%	64%	67%	81%	79%	81%
15 The management of the Company is highly informed about the safety issues at site	4%	-15%	-24%	-22%	-24%	-23%	-23%	-21%	-10%	-5%	6%	21%	36%	46%	56%	59%	67%	70%	79%
16 I am strongly encouraged to report safety concerns	18%	6%	-2%	-3%	4%	5%	11%	10%	10%	21%	30%	38%	51%	61%	68%	72%	82%	83%	80%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	-21%	-30%	-40%	-35%	-34%	-32%	-21%	-17%	-8%	-6%	4%	12%	26%	41%	50%	56%	69%	70%	78%
18 Help is available from the company when I have a problem	-10%	-18%	-22%	-16%	-10%	-14%	-7%	-6%	7%	8%	15%	34%	47%	53%	58%	65%	73%	77%	82%
19 Most managers are competent at managing their workers	16%	5%	1%	0%	-5%	-6%	4%	0%	2%	15%	23%	31%	45%	60%	66%	68%	76%	76%	89%
20 Management acts quickly to correct safety issues	-56%	-55%	-49%	-35%	-28%	-18%	-17%	-11%	-7%	-5%	8%	27%	50%	55%	62%	66%	67%	65%	61%
21 If I Have a concern about safety I will make it known	53%	21%	7%	3%	3%	6%	7%	11%	13%	18%	25%	35%	64%	76%	78%	77%	82%	83%	86%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	7%	-4%	-8%	-15%	-15%	-8%	-8%	-2%	-2%	0%	4%	21%	31%	51%	50%	55%	56%	57%	60%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	9%	15%	-1%	-15%	-21%	-29%	-39%	-41%	-45%	-49%	-56%	-64%	-80%	-83%	-83%	-92%	-96%	-97%	-103%
24 My supervisor explains and provides additional information when employees request it	-31%	-31%	-24%	-11%	-14%	-15%	-17%	-14%	-7%	-5%	6%	18%	28%	36%	40%	50%	62%	63%	65%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	-55%	-46%	-42%	-41%	-38%	-31%	-27%	-27%	-17%	-10%	2%	22%	42%	54%	58%	63%	71%	71%	78%
26 Information about importanrt events and situations are shared within my workteam	43%	38%	33%	23%	23%	27%	27%	23%	27%	27%	33%	35%	48%	54%	54%	54%	64%	67%	75%
27 I feel that the Company really takes an interest in my wellbeing	-56%	-56%	-59%	-51%	-42%	-39%	-31%	-27%	-17%	-3%	11%	27%	46%	47%	49%	61%	71%	78%	68%
28 People in my workplace treat each other with repsect	14%	1%	-6%	-9%	-4%	-1%	-5%	0%	3%	4%	13%	27%	39%	44%	52%	58%	66%	65%	72%
29 Management is presently acting to make the workplace safer	-43%	-40%	-34%	-30%	-28%	-18%	-11%	-5%	0%	4%	10%	23%	34%	45%	55%	60%	58%	57%	45%
30 I feel comfortable discussing safetey issues with my supervisor	-6%	-9%	-11%	-15%	-16%	-15%	-15%	-10%	-6%	-5%	7%	25%	53%	54%	63%	73%	77%	83%	90%

Summary of Survey Results Company A

Q No. Question

	Strongly Disagree				Disagree				Neither				Agree				Strongly Agree		
	2004				2005				2006				2007				2008		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	-82%	-55%	-41%	-50%	-52%	-61%	-68%	-61%	-63%	-78%	-79%	-80%	-72%	-82%	-80%	-85%	-88%	-92%	-94%
32 All job decisions are applied consistently across all affected employees	-33%	-63%	-61%	-60%	-60%	-55%	-45%	-40%	-30%	-23%	-8%	10%	11%	22%	26%	28%	22%	22%	18%
33 My work group wants to meet its objectives successfully	56%	55%	50%	35%	34%	37%	31%	38%	37%	38%	39%	43%	54%	70%	79%	91%	94%	87%	93%
34 I believe that managers apply the same rules for all workers	-59%	-52%	-61%	-54%	-55%	-48%	-42%	-38%	-27%	-13%	-2%	14%	7%	24%	34%	33%	42%	42%	43%
35 Management is willing to invest money and effort to improve the level of safety	-22%	-25%	-22%	-2%	3%	5%	8%	17%	20%	27%	34%	39%	48%	54%	63%	62%	70%	66%	61%
36 Safety procedures/requirements are stopping me from performing my work efficiently	-9%	1%	-8%	-22%	-23%	-28%	-34%	-40%	-45%	-46%	-56%	-64%	-73%	-82%	-78%	-83%	-95%	-90%	-109%
37 I regularly suggest ways of improving safety	-28%	-47%	-39%	-24%	-18%	-13%	-6%	-10%	-3%	0%	14%	25%	40%	47%	46%	56%	69%	64%	57%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	-54%	-54%	-46%	-45%	-32%	-27%	-24%	-28%	-21%	-19%	-9%	13%	26%	42%	61%	65%	75%	68%	63%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	-40%	-45%	-33%	-21%	-20%	-14%	-14%	-8%	-3%	0%	7%	20%	31%	44%	54%	53%	68%	72%	73%
40 The protection of workers from occupational exposure to hazards is a high priority with management	-50%	-59%	-56%	-47%	-39%	-36%	-29%	-23%	-15%	-9%	7%	29%	53%	61%	69%	69%	78%	70%	61%
41 We are regularly asked for our ideas and suggestions about job safety	-40%	-38%	-32%	-16%	-7%	-2%	-1%	4%	7%	10%	20%	30%	42%	52%	62%	68%	72%	68%	62%
42 In the last quarter I was involved in a near miss which I didn't report	-74%	-46%	-44%	-47%	-57%	-66%	-62%	-59%	-57%	-60%	-64%	-69%	-83%	-95%	-93%	-95%	-101%	-101%	-96%
43 I feel motivated to perform work to the best of my ability	-32%	-38%	-38%	-38%	-30%	-29%	-20%	-19%	-7%	-4%	8%	31%	31%	43%	57%	61%	68%	67%	60%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	-13%	-25%	-30%	-29%	-28%	-30%	-25%	-22%	-7%	-3%	7%	16%	22%	28%	23%	20%	26%	30%	36%
45 I feel I am treated fairly but those senior to me	-18%	-29%	-27%	-32%	-29%	-30%	-29%	-22%	-12%	-8%	5%	20%	16%	21%	23%	19%	18%	21%	25%
46 I feel safe in my workplace	-2%	-17%	-24%	-15%	-11%	-7%	-7%	1%	9%	10%	16%	25%	39%	51%	58%	67%	78%	84%	87%
47 I actively participate in the Company Safety Initiatives	-35%	-43%	-39%	-42%	-34%	-28%	-23%	-15%	-13%	-4%	12%	27%	43%	59%	60%	55%	70%	63%	52%
48 I have witnessed an improvement in safety as a result of these initiatives	-40%	-48%	-40%	-33%	-24%	-17%	-17%	-6%	3%	6%	19%	42%	59%	70%	72%	74%	81%	82%	89%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	-20%	-48%	-47%	-38%	-31%	-27%	-22%	-15%	-9%	-22%	-11%	12%	29%	41%	55%	61%	73%	78%	80%
50 I believe management fully supports the new safety initiatives	-57%	-65%	-64%	-51%	-50%	-44%	-37%	-25%	-17%	-8%	10%	28%	43%	55%	71%	75%	78%	73%	62%
51 I have full confidence in the new safety initiatives	-28%	-46%	-37%	-34%	-27%	-23%	-17%	-12%	-8%	-4%	6%	21%	32%	46%	51%	56%	64%	58%	50%
52 I am sceptical of this new approach and don't believe it will last	42%	25%	25%	36%	37%	22%	17%	20%	9%	3%	-10%	-24%	-43%	-50%	-66%	-70%	-89%	-89%	-94%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	-48%	-48%	-41%	-27%	-20%	-11%	-11%	-5%	-1%	2%	13%	35%	48%	58%	62%	66%	86%	83%	77%
54 I think the management is making intelligent decisions to protect the future of the company	-39%	-50%	-51%	-28%	-29%	-19%	-14%	-8%	-3%	-3%	13%	24%	30%	42%	46%	46%	58%	56%	50%
55 I am satisfied with my current employment situation	-9%	-32%	-35%	-20%	-14%	-7%	-6%	-3%	-3%	-2%	10%	31%	41%	48%	49%	49%	61%	57%	54%

Appendix 2

Company B Statistics

Company B Productivity v Safety Performance Figures

Company B																		
Year	Labour Workforce Size	Total Workforce	Manhours	Tonnage Out	T/ Man Hr Productivity	% Improvement in Productivity	FAT	LTi	RWC	MTC	FAC	Total						
2004	623	831	1,945,226	7,205	270	N/A	9	15	18	21	85	148						
2005	621	828	1,937,221	7,451	260	3.70%	6	21	16	17	91	151						
2006	996	1328	3,108,234	14,801	210	19.23%	4	11	18	19	73	125						
2007	1436	1915	4,480,282	25,602	175	16.67%	1	9	12	13	62	97						
2008*	1683	2244	5,249,912	34,943	150	14.15%	0	5	10	9	56	80						
AVG	1072	1429	Injuries per million manhours						2004	76.08								
5%	54	71							2005	77.95								
									2006	40.22								
									2007	21.65								
									2008	15.24								
Corrected Figures to adjust for Outside Influence																		
Year	Labour Workforce Size	Total Workforce	Manhours Adjusted As Per Table	Tonnage Out	T/ Man Hr	% Improvement in Productivity Due to Safety	FAT	LTi	RWC	MTC	FAC	Total						
2004	623	831	2,095,226	7,205	291	N/A	9	15	18	21	85	148						
2005	621	828	1,937,221	7,451	260	0.00%	6	21	16	17	91	151						
2006	996	1328	3,708,234	14,801	251	3.64%	4	11	18	19	73	125						
2007	1436	1915	4,710,282	25,602	184	12.39%	1	9	12	13	62	97						
2008*	1683	2244	5,249,912	34,943	150	14.15%	0	5	10	9	56	80						

*Figures for 2008 comprise of forecasts for November & December based on projections and historical data

Legend		Description
FAT	Fatality	Fatal Injury
LTi	Lost Time Injury	Injury resulting in absence from work
RWC	Restricted Work Case	Injury which impedes normal work/duties
MTC	Medical Treatment Case	Injury which requires medical treatment (Stitches, etc)
FAC	First Aid Case	Light Injuries, Cuts, Grazes, etc

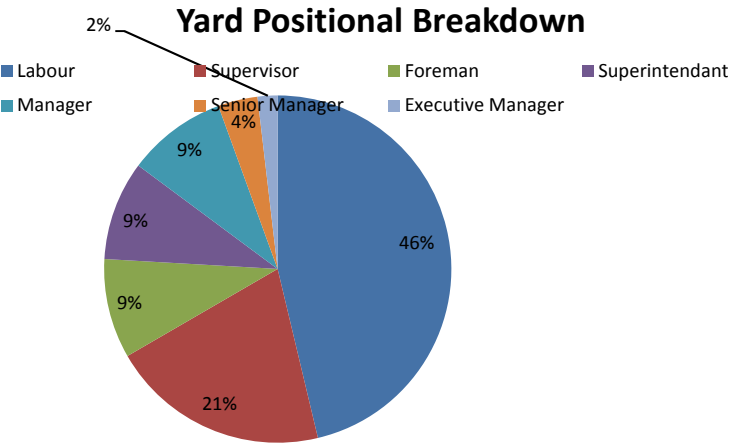
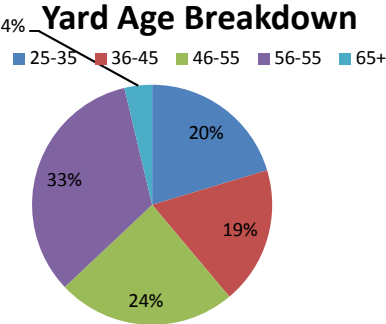
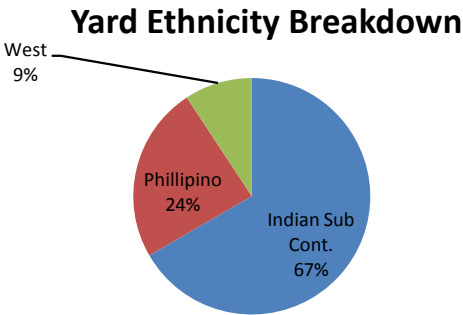
Year	Reason For Reduction	Description
2006	New Plate Cutting Facilities	Increased Material Handling Capability, 600,000 manhours
2007	General Equipment Upgrade	New yard equipments such as welding machines, 220,000 man hours
2008	Procurement of new Cranes	Increased capacity for cutting and forming plate, 270,000 man hours

Sr No.	Location	Position	Ethnicity	Age
	1 Yard	Labour	Indian	1
	2 Yard	Labour	Indian	1
	3 Yard	Labour	Indian	1
	4 Yard	Labour	Indian	1
	5 Yard	Labour	Indian	1
	6 Yard	Labour	Indian	1
	7 Yard	Labour	Indian	1
	8 Yard	Labour	Indian	2
	9 Yard	Labour	Indian	2
	10 Yard	Labour	Indian	2
	11 Yard	Labour	Indian	2
	12 Yard	Labour	Indian	2
	13 Yard	Labour	Indian	2
	14 Yard	Labour	Indian	3
	15 Yard	Labour	Indian	3
	16 Yard	Labour	Indian	4
	17 Yard	Labour	Indian	4
	18 Yard	Labour	Indian	4
	19 Yard	Labour	Indian	5
	20 Yard	Labour	Phillip	1
	21 Yard	Labour	Phillip	1
	22 Yard	Labour	Phillip	1
	23 Yard	Labour	Phillip	2
	24 Yard	Labour	Phillip	2
	25 Yard	Labour	Indian	4
	26 Yard	Supervisor	Indian	1
	27 Yard	Supervisor	Indian	2
	28 Yard	Supervisor	Indian	3
	29 Yard	Supervisor	Indian	3
	30 Yard	Supervisor	Indian	3
	31 Yard	Supervisor	Indian	4
	32 Yard	Supervisor	Indian	4
	33 Yard	Supervisor	Indian	4
	34 Yard	Supervisor	Phillip	2
	35 Yard	Supervisor	Phillip	3
	36 Yard	Supervisor	Phillip	4
	37 Yard	Foreman	Indian	3
	38 Yard	Foreman	Indian	3
	39 Yard	Foreman	Indian	4
	40 Yard	Foreman	Phillip	3
	41 Yard	Foreman	Phillip	4
	42 Yard	Superintendant	Indian	3
	43 Yard	Superintendant	Indian	4
	44 Yard	Superintendant	Indian	4
	45 Yard	Superintendant	Phillip	3
	46 Yard	Superintendant	Phillip	4
	47 Yard	Manager	Indian	3
	48 Yard	Manager	Indian	4
	49 Yard	Manager	Phillip	3
	50 Yard	Manager	West	4
	51 Yard	Manager	West	4
	52 Yard	Senior Manager	West	3
	53 Yard	Senior Manager	West	4
	54 Yard	Executive Manager	West	4

Company B Survey Sample Data

Legend	
Ethnicity	
1	Indian Sub Continent
2	Philipino
3	Western
Age	
1	25-35
2	36-45
3	46-55
4	56-55
5	65+
Years With Company	
1	5-10
2	11-15
3	16-20
4	21-25
5	26+

Yard				54			Position		
Indian Sub Cont.				36	67%		Labour	25	46%
Phillipino				13	24%		Supervisor	11	20%
West				5	9%		Foreman	5	9%
Age							Superintendant	5	9%
	1	11	25-35	20%	Manager		5	9%	
	2	10	36-45	19%	Senior Manager		2	4%	
	3	13	46-55	24%	Executive Manager		1	2%	
	4	18	56-55	33%					
	5	2	65+	4%					



Regular Yard Questions

- 1 My Contributions and Sugestions are valued by the Company
- 2 There is a feeling of cooperation and teamwork amongst the members of my work team
- 3 My daily duties interfere with my abilities to comply with safety regulations
- 4 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them
- 5 Before making a decision my supervisor considers all employee concerns and opinions
- 6 My goals and values are a concern of the Company
- 7 The Company has done everything possible to make my workplace safe
- 8 I believe that most managers will keep to their word and do what they say they will do
- 9 Careless work by other members of my team does not increase my daily duties
- 10 The management of the Company is highly informed about the safety issues at site
- 11 I am strongly encouraged to report safety concerns
- 12 Members of my team have received enough training and knowledge to perform their daily duties
- 13 Help is available from the company when I have a problem
- 14 Most managers are competent at managing their workers
- 15 Management acts quickly to correct safety issues
- 16 If I Have a concern about safety I will make it known
- 17 If I observe another team member who did not know how to do a certain task safely, I would show them how
- 18 In the last quarter I personally know someone in my work group who had an injury and did not report it
- 19 My supervisor explains and provides additional information when employees request it
- 20 My supervisor would use whatever power they have to help me solve problems in my workplace
- 21 Information about important events and situations are shared within my workteam
- 22 I feel that the Company really takes an interest in my wellbeing
- 23 People in my workplace treat each other with respect
- 24 Management is presently acting to make the workplace safer
- 25 I feel comfortable discussing safety issues with my supervisor
- 26 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable injury
- 27 All job decisions are applied consistently across all affected employees
- 28 My work group wants to meet its objectives successfully
- 29 I believe that managers apply the same rules for all workers
- 30 Management is willing to invest money and effort to improve the level of safety
- 31 Safety procedures/requirements are stopping me from performing my work efficiently
- 32 I regularly suggest ways of improving safety
- 33 Employees are allowed to challenge or appeal job decisions made by the supervisor
- 34 I would defend and justify decisions made by my supervisor if they were not present to do so
- 35 The protection of workers from occupational exposure to hazards is a high priority with management
- 36 We are regularly asked for our ideas and suggestions about job safety
- 37 In the last quarter I was involved in a near miss which I didn't report
- 38 I feel motivated to perform work to the best of my ability
- 39 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts
- 40 I feel I am treated fairly but those senior to me
- 41 I feel safe in my workplace
- 42 I actively participate in the Company Safety Initiatives
- 43 I have witnessed an improvement in safety as a result of these initiatives
- 44 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives
- 45 I believe management fully supports the new safety initiatives
- 46 I have full confidence in the new safety initiatives
- 47 I am sceptical of this new approach and don't believe it will last
- 48 I think the management is making intelligent decisions to protect the safety of the company's employees
- 49 I think the management is making intelligent decisions to protect the future of the company

Summary of Survey Results 1st Quarter 2004

Q No. Question	Number Surveyed					54 Responses	52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	11	9	14	18	0			
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
	27	13	7	4	1			
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	24	11	5	5	7			
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	35	12	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugestions are valued by the Company	9	26	7	6	4			
7 There is a feeling of coperation an teamwork amongst the members of my work team	7	31	6	4	4			
8 My daily duties interfere with my abilities to comply with safety regulations	4	14	12	18	4			
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	2	11	9	21	9			
10 Before making a decision my superviror considers all employee concerns and opinions	9	21	7	12	3			
11 My goals and values are a concern of the Company	11	16	5	16	4			
12 The Company has done everything possible to make my workplace safe	19	21	2	7	3			
13 I believe that most managers will keep to their word and do what they say they will do	9	18	4	13	8			
14 Careless work by other members of my team does not increase my daily duties	13	21	6	11	1			
15 The management of the Company is highly informed about the safety issues at site	18	21	3	8	2			
16 I am strongly encouraged to report safety concerns	16	24	2	5	5			
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5	19	5	17	6			
18 Help is available from the company when I have a problem	11	24	2	9	6			
19 Most managers are competent at managing their workers	8	15	10	13	6			
20 Management acts quickly to correct safety issues	17	25	3	6	1			
21 If I Have a concern about safety I will make it known	18	28	1	3	2			
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	27	3	7	2			
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	8	11	7	17	9			
24 My supervisor explains and provides additional information when employees request it	9	18	9	14	2			
25 My supervisor would use whatever power they have to help me solve problems in my workplace	13	21	9	6	3			
26 Information about importanrt events and situations are shared within my workteam	7	14	6	17	8			
27 I feel that the Company really takes an interest in my wellbeing	20	23	6	2	1			
28 People in my workplace treat each other with repsect	10	17	10	11	4			
29 Management is presently acting to make the workplace safer	16	24	4	6	2			
30 I feel comfortable discussing safetey issues with my supervisor	7	31	4	9	1			

Agreement Factor

-58%
-63%
8%
46%
-40%
-27%
-88%
-13%
-65%
-87%
-79%
0%
-48%
-12%
-98%
-110%
-81%
15%
-35%
-67%
10%
-113%
-35%
-88%
-65%

Summary of Survey Results 1st Quarter 2004

Q No.	Question	Number Surveyed	54 Responses				52	96%
Employee Background		(xx) denotes maximum representation based on totals from sample data						
		25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)		
1	Age (During the above Survey Period)	11	9	14	18	0		
2	Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		
		27	13	7	4	1		
3	Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)		
		24	11	5	5	7		
5	Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)				
		35	12	5				
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
		1	2	3	4	5		
31	I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	4	5	9	23	11	62%	
32	All job decisions are applied consistently across all affected employees	14	23	8	5	2	-81%	
33	My work group wants to meet its objectives successfully	6	10	11	17	8	21%	
34	I believe that managers apply the same rules for all workers	18	25	5	3	1	-108%	
35	Management is willing to invest money and effort to improve the level of safety	11	19	11	9	2	-54%	
36	Safety procedures/requirements are stopping me from performing my work efficiently	5	16	2	25	4	13%	
37	I regularly suggest ways of improving safety	15	17	11	7	2	-69%	
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	8	22	9	8	5	-38%	
39	I would defend and justify decisions made by my supervisor if they were not present to do so	6	19	15	8	4	-29%	
40	The protection of workers from occupational exposure to hazards is a high priority with management	4	17	14	15	2	-12%	
41	We are regularly asked for our ideas and suggestions about job safety	9	26	7	6	4	-58%	
42	In the last quarter I was involved in a near miss which I didn't report	4	6	10	21	11	56%	
43	I feel motivated to perform work to the best of my ability	13	28	5	4	2	-88%	
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	6	11	23	8	4	-13%	
45	I feel I am treated fairly but those senior to me	12	25	3	8	4	-63%	
46	I feel safe in my workplace	15	23	7	5	2	-85%	
47	I actively participate in the Company Safety Initiatives	2	21	17	8	4	-17%	
48	I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
49	I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
50	I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
51	I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
52	I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A	
53	I think the management is making intelligent decisions to protect the safety of the company's employees	11	26	9	4	2	-77%	
54	I think the management is making intelligent decisions to protect the future of the company	8	23	11	6	4	-48%	
55	I am satisfied with my current employment situation	8	12	19	9	4	-21%	

Agreement Factor

Summary of Survey Results 2nd Quarter 2004

Q No. Question	Number Surveyed					54 Responses	50	93%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	10	9	13	18	0			
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
	26	13	7	3	1			
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	23	10	5	5	7			
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	33	12	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugesstions are valued by the Company	10	25	7	5	3			-68%
7 There is a feeling of coperation an teamwork amongst the members of my work team	8	29	5	5	3			-68%
8 My daily duties interfere with my abilities to comply with safety regulations	4	12	9	19	6			22%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	3	13	2	21	11			48%
10 Before making a decision my supervisor considers all employee concerns and opinions	11	23	3	11	2			-60%
11 My goals and values are a concern of the Company	10	17	5	15	3			-32%
12 The Company has done everything possible to make my workplace safe	19	20	3	5	3			-94%
13 I believe that most managers will keep to their word and do what they say they will do	9	18	4	11	8			-18%
14 Careless work by other members of my team does not increase my daily duties	12	20	9	7	2			-66%
15 The management of the Company is highly informed about the safety issues at site	18	22	2	6	2			-96%
16 I am strongly encouraged to report safety concerns	17	22	2	6	3			-88%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6	15	10	13	6			-4%
18 Help is available from the company when I have a problem	11	19	9	7	4			-52%
19 Most managers are competent at managing their workers	8	18	5	13	6			-18%
20 Management acts quickly to correct safety issues	16	27	2	4	1			-106%
21 If I Have a concern about safety I will make it known	18	28	1	2	1			-120%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	10	30	3	5	2			-82%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6	11	6	17	10			28%
24 My supervisor explains and provides additional information when employees request it	10	18	9	10	3			-44%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	14	20	8	5	3			-74%
26 Information about importanrt events and situations are shared within my workteam	6	14	7	16	7			8%
27 I feel that the Company really takes an interest in my wellbeing	19	25	3	2	1			-118%
28 People in my workplace treat each other with repsect	10	17	8	11	4			-36%
29 Management is presently acting to make the workplace safer	16	24	3	5	2			-94%
30 I feel comfortable discussing safetey issues with my supervisor	8	28	4	9	1			-66%

Agreement Factor

Summary of Survey Results 2nd Quarter 2004						
Q No. Question	Number Surveyed	54 Responses			50	93%
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	10	9	13	18		0
	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
2 Years with the Company (During the above Survey Period)	26	13	7	3		1
	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	
3 Position (During the above Survey Period)	23	10	5	5		7
	Indian Sub Con. (36)	Phillip (13)	West (5)			
5 Ethnicity	33	12	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	4	5	6	24	11	66%
32 All job decisions are applied consistently across all affected employees	14	21	10	3	2	-84%
33 My work group wants to meet its objectives successfully	6	8	14	15	7	18%
34 I believe that managers apply the same rules for all workers	22	19	3	3	3	-108%
35 Management is willing to invest money and effort to improve the level of safety	11	19	11	7	2	-60%
36 Safety procedures/requirements are stopping me from performing my work efficiently	5	15	2	21	7	20%
37 I regularly suggest ways of improving safety	18	17	4	8	3	-78%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	22	7	7	5	-46%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	5	19	15	8	3	-30%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	17	11	14	3	-14%
41 We are regularly asked for our ideas and suggestions about job safety	10	26	3	7	4	-62%
42 In the last quarter I was involved in a near miss which I didn't report	3	5	8	21	13	72%
43 I feel motivated to perfrom work to the best of my ability	14	26	3	5	2	-90%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7	13	21	7	2	-32%
45 I feel I am treated fairly but those senior to me	13	23	3	7	4	-68%
46 I feel safe in my workplace	15	23	5	5	2	-88%
47 I activley participate in the Company Safety Initiatives	3	21	14	8	4	-22%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	11	28	5	4	2	-84%
54 I think the management is making intelligent decisions to protect the future of the company	9	24	7	6	4	-56%
55 I am satisfied with my current employment situation	10	13	13	10	4	-30%

Summary of Survey Results 3rd Quarter 2004

Q No. Question	Number Surveyed	54 Responses				54	100%	Agreement Factor
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	11	10	14	19			0	
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		2	
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	25	11	5	5			8	
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	36	13	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugesstions are valued by the Company	1	2	3	4	5			
7 There is a feeling of coperation an teamwork amongst the members of my work team	12	28	4	6	4		-70%	
8 My daily duties interfere with my abilities to comply with safety regulations	10	30	4	6	4		-67%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4	13	10	19	8		26%	
10 Before making a decision my superviror considers all employee concerns and opinions	4	14	2	21	13		46%	
11 My goals and values are a concern of the Company	12	25	3	11	3		-59%	
12 The Company has done everything possible to make my workplace safe	14	18	6	12	4		-48%	
13 I believe that most managers will keep to their word and do what they say they will do	22	20	3	5	4		-94%	
14 Careless work by other members of my team does not increase my daily duties	9	24	4	10	7		-33%	
15 The management of the Company is highly informed about the safety issues at site	12	23	10	7	2		-67%	
16 I am strongly encouraged to report safety concerns	20	23	2	7	2		-96%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	19	22	5	5	3		-91%	
18 Help is available from the company when I have a problem	7	17	13	11	6		-15%	
19 Most managers are competent at managing their workers	12	22	9	7	4		-57%	
20 Management acts quickly to correct safety issues	11	18	5	14	6		-26%	
21 If I Have a concern about safety I will make it known	17	28	2	5	2		-98%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	20	28	1	3	2		-113%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	13	30	3	5	3		-83%	
24 My supervisor explains and provides additional information when employees request it	6	11	6	21	10		33%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	10	19	14	8	3		-46%	
26 Information about importanrt events and situations are shared within my workteam	15	22	9	4	4		-74%	
27 I feel that the Company really takes an interest in my wellbeing	6	16	8	16	8		7%	
28 People in my workplace treat each other with repsect	21	26	3	2	2		-115%	
29 Management is presently acting to make the workplace safer	11	17	11	11	4		-37%	
30 I feel comfortable discussing safetey issues with my supervisor	18	25	3	5	3		-93%	
	10	29	4	9	2		-67%	

Agreement Factor

Summary of Survey Results 3rd Quarter 2004						
Q No. Question	Number Surveyed	54 Responses			54	100%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
1 Age (During the above Survey Period)	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
	11	10	14	19		0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
	27	14	7	4		2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
	25	11	5	5		8
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	36	13	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	3	5	7	27	12	74%
32 All job decisions are applied consistently across all affected employees	15	24	10	3	2	-87%
33 My work group wants to meet its objectives successfully	6	9	17	15	7	15%
34 I believe that managers apply the same rules for all workers	21	24	3	3	3	-106%
35 Management is willing to invest money and effort to improve the level of safety	13	20	11	7	3	-61%
36 Safety procedures/requirements are stopping me from performing my work efficiently	5	16	4	20	9	22%
37 I regularly suggest ways of improving safety	19	21	4	6	4	-83%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	11	22	8	7	6	-46%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6	20	16	9	3	-31%
40 The protection of workers from occupational exposure to hazards is a high priority with management	8	17	12	14	3	-24%
41 We are regularly asked for our ideas and suggestions about job safety	11	28	3	8	4	-63%
42 In the last quarter I was involved in a near miss which I didn't report	3	6	8	23	14	72%
43 I feel motivated to perform work to the best of my ability	20	21	5	5	3	-93%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7	17	21	6	3	-35%
45 I feel I am treated fairly but those senior to me	15	23	4	8	4	-69%
46 I feel safe in my workplace	17	24	6	4	3	-89%
47 I actively participate in the Company Safety Initiatives	5	21	14	10	4	-24%
48 I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	14	28	5	4	3	-85%
54 I think the management is making intelligent decisions to protect the future of the company	10	26	7	7	4	-57%
55 I am satisfied with my current employment situation	12	14	13	10	5	-33%

Summary of Survey Results 4th Quarter 2004

Q No. Question	Number Surveyed					54 Responses	53	98%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
1 Age (During the above Survey Period)	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugestions are valued by the Company	12	28	4	5	4			
7 There is a feeling of coperation an teamwork amongst the members of my work team	10	29	4	6	4			
8 My daily duties interfere with my abilities to comply with safety regulations	4	10	10	21	8			
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4	13	2	21	13			
10 Before making a decision my superviror considers all employee concerns and opinions	13	25	3	9	3			
11 My goals and values are a concern of the Company	15	16	6	12	4			
12 The Company has done everything possible to make my workplace safe	22	20	3	3	5			
13 I believe that most managers will keep to their word and do what they say they will do	9	24	3	10	7			
14 Careless work by other members of my team does not increase my daily duties	13	23	10	5	2			
15 The management of the Company is highly informed about the safety issues at site	21	22	2	6	2			
16 I am strongly encouraged to report safety concerns	17	22	9	3	2			
17 Memebers of my team have received enough training and knowledge to perform their daily duties	8	17	14	9	5			
18 Help is available from the company when I have a problem	13	22	9	4	5			
19 Most managers are competent at managing their workers	11	16	5	15	6			
20 Management acts quickly to correct safety issues	16	28	2	4	3			
21 If I Have a concern about safety I will make it known	20	26	1	4	2			
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	17	25	3	5	3			
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5	12	4	21	11			
24 My supervisor explains and provides additional information when employees request it	12	17	14	6	4			
25 My supervisor would use whatever power they have to help me solve problems in my workplace	13	26	4	7	3			
26 Information about importanrt events and situations are shared within my workteam	6	16	7	16	8			
27 I feel that the Company really takes an interest in my wellbeing	18	22	4	6	3			
28 People in my workplace treat each other with repsect	11	17	11	10	4			
29 Management is presently acting to make the workplace safer	18	25	3	4	3			
30 I feel comfortable discussing safetey issues with my supervisor	13	23	5	9	3			

Agreement Factor

-74%
-66%
36%
49%
-68%
-49%
-96%
-34%
-75%
-102%
-92%
-26%
-64%
-21%
-94%
-109%
-91%
40%
-51%
-74%
8%
-87%
-40%
-96%
-64%

Summary of Survey Results 4th Quarter 2004						
Q No. Question	Number Surveyed					98%
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	11	9	14	19	0	
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
	26	14	7	4	2	
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	
	24	11	5	5	8	
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	35	13	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Agreement Factor
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	4	6	2	29	12	74%
32 All job decisions are applied consistently across all affected employees	16	25	5	4	3	-89%
33 My work group wants to meet its objectives successfully	5	8	20	14	6	15%
34 I believe that managers apply the same rules for all workers	19	22	3	5	4	-89%
35 Management is willing to invest money and effort to improve the level of safety	13	20	10	7	3	-62%
36 Safety procedures/requirements are stopping me from performing my work efficiently	3	17	5	18	10	28%
37 I regularly suggest ways of improving safety	19	22	3	6	3	-91%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	25	8	6	5	-51%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	8	17	13	11	4	-26%
40 The protection of workers from occupational exposure to hazards is a high priority with management	10	16	9	13	5	-25%
41 We are regularly asked for our ideas and suggestions about job safety	7	32	3	7	4	-58%
42 In the last quarter I was involved in a near miss which I didn't report	3	6	11	20	13	64%
43 I feel motivated to perfrom work to the best of my ability	20	21	4	5	3	-94%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	15	20	6	3	-40%
45 I feel I am treated fairly but those senior to me	13	26	4	7	3	-74%
46 I feel safe in my workplace	18	24	4	4	3	-94%
47 I activley participate in the Company Safety Initiatives	7	21	13	7	5	-34%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	14	28	5	3	3	-89%
54 I think the management is making intelligent decisions to protect the future of the company	11	25	6	7	4	-60%
55 I am satisfied with my current employment situation	11	14	15	9	4	-36%

Summary of Survey Results 2004									
Q No. Question	Number Surveyed		54 Responses		52.25		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	11	9	14	19	0				
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
	26.5	13.5	7	3.75	1.5				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	24	10.75	5	5	7.5				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)	Approval Factor					
	34.75	12.5	5	Green denotes improvement					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
6 My Contributions and Sugestions are valued by the Company	10.75	26.75	5.5	5.5	3.75	-58%	-68%	-70%	-74%
7 There is a feeling of coperation an teamwork amongst the members of my work team	8.75	29.75	4.75	5.25	3.75	-63%	-68%	-67%	-66%
8 My daily duties interfere with my abilities to comply with safety regulations	4	12.25	10.25	19.25	6.5	8%	22%	26%	36%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	3.25	12.75	3.75	21	11.5	46%	48%	46%	49%
10 Before making a decision my superviror considers all employee concerns and opinions	11.25	23.5	4	10.75	2.75	-40%	-60%	-59%	-68%
11 My goals and values are a concern of the Company	12.5	16.75	5.5	13.75	3.75	-27%	-32%	-48%	-49%
12 The Company has done everything possible to make my workplace safe	20.5	20.25	2.75	5	3.75	-88%	-94%	-94%	-96%
13 I believe that most managers will keep to their word and do what they say they will do	9	21	3.75	11	7.5	-13%	-18%	-33%	-34%
14 Careless work by other members of my team does not increase my daily duties	12.5	21.75	8.75	7.5	1.75	-65%	-66%	-67%	-75%
15 The management of the Company is highly informed about the safety issues at site	19.25	22	2.25	6.75	2	-87%	-96%	-96%	-102%
16 I am strongly encouraged to report safety concerns	17.25	22.5	4.5	4.75	3.25	-79%	-88%	-91%	-92%
17 Memembers of my team have received enough training and knowledge to perform their daily duties	6.5	17	10.5	12.5	5.75	0%	-4%	-15%	-26%
18 Help is available from the company when I have a problem	11.75	21.75	7.25	6.75	4.75	-48%	-52%	-57%	-64%
19 Most managers are competent at managing their workers	9.5	16.75	6.25	13.75	6	-12%	-18%	-26%	-21%
20 Management acts quickly to correct safety issues	16.5	27	2.25	4.75	1.75	-98%	-106%	-98%	-94%
21 If I Have a concern about safety I will make it known	19	27.5	1	3	1.75	-110%	-120%	-113%	-109%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13.25	28	3	5.5	2.5	-81%	-82%	-83%	-91%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6.25	11.25	5.75	19	10	15%	28%	33%	40%
24 My supervisor explains and provides additional information when employees request it	10.25	18	11.5	9.5	3	-35%	-44%	-46%	-51%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	13.75	22.25	7.5	5.5	3.25	-67%	-74%	-74%	-74%
26 Information about importanrt events and situations are shared within my workteam	6.25	15	7	16.25	7.75	10%	8%	7%	8%
27 I feel that the Company really takes an interest in my wellbeing	19.5	24	4	3	1.75	-113%	-118%	-115%	-87%
28 People in my workplace treat each other with repsect	10.5	17	10	10.75	4	-35%	-36%	-37%	-40%
29 Management is presently acting to make the workplace safer	17	24.5	3.25	5	2.5	-88%	-94%	-93%	-96%
30 I feel comfortable discussing safetey issues with my supervisor	9.5	27.75	4.25	9	1.75	-65%	-66%	-67%	-64%

Summary of Survey Results 2004									
Q.No. Question	Number Surveyed		54 Responses		52.25		97%		
Employee Background	(xx) denotes maximum representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	11	9	14	19	0				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
	26.5	13.5	7	3.75	1.5				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	24	10.75	5	5	7.5				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	34.75	12.5	5	Approval Factor					
						Green denotes improvement			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classifidied as a recordable	3.75	5.25	6	25.75	11.5	62%	66%	74%	74%
32 All job decisions are applied consistently across all affected employees	14.75	23.25	8.25	3.75	2.25	-81%	-84%	-87%	-89%
33 My work group wants to meet its objectives successfully	5.75	8.75	15.5	15.25	7	21%	18%	15%	15%
34 I believe that managers apply the same rules for all workers	20	22.5	3.5	3.5	2.75	-108%	-108%	-106%	-89%
35 Management is willing to invest money and effort to improve the level of safety	12	19.5	10.75	7.5	2.5	-54%	-60%	-61%	-62%
36 Safety procedures/requirements are stopping me from performing my work efficiently	4.5	16	3.25	21	7.5	13%	20%	22%	28%
37 I regularly suggest ways of improving safety	17.75	19.25	5.5	6.75	3	-69%	-78%	-83%	-91%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9.25	22.75	8	7	5.25	-38%	-46%	-46%	-51%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6.25	18.75	14.75	9	3.5	-29%	-30%	-31%	-26%
40 The protection of workers from occupational exposure to hazards is a high priority with management	6.75	16.75	11.5	14	3.25	-12%	-14%	-24%	-25%
41 We are regularly asked for our ideas and suggestions about job safety	9.25	28	4	7	4	-58%	-62%	-63%	-58%
42 In the last quarter I was involved in a near miss which I didn't report	3.25	5.75	9.25	21.25	12.75	56%	72%	72%	64%
43 I feel motivated to perfrom work to the best of my ability	16.75	24	4.25	4.75	2.5	-88%	-90%	-93%	-94%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7.25	14	21.25	6.75	3	-13%	-32%	-35%	-40%
45 I feel I am treated fairly but those senior to me	13.25	24.25	3.5	7.5	3.75	-63%	-68%	-69%	-74%
46 I feel safe in my workplace	16.25	23.5	5.5	4.5	2.5	-85%	-88%	-89%	-94%
47 I activley participate in the Company Safety Initiatives	4.25	21	14.5	8.25	4.25	-17%	-22%	-24%	-34%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety inititatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	12.5	27.5	6	3.75	2.5	-77%	-84%	-85%	-89%
54 I think the management is making intelligent decisions to protect the future of the company	9.5	24.5	7.75	6.5	4	-48%	-56%	-57%	-60%
55 I am satisfied with my current employment situation	10.25	13.25	15	9.5	4.25	-21%	-30%	-33%	-36%

Summary of Survey Results 1st Quarter 2005

Q No. Question	Number Surveyed	54 Responses				53	98%
Employee Background	(xx) denotes maxmium representation based on totals from sample data						
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)		
1 Age (During the above Survey Period)	11	10	14	18	0		
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		
	27	14	6	4	2		
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)		
	24	11	5	5	7		
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)				
	36	13	4				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
	1	2	3	4	5		
6 My Contributions and Sugesstions are valued by the Company	11	29	3	6	4		
7 There is a feeling of coperation an teamwork amongst the members of my work team	11	28	3	7	4		
8 My daily duties interfere with my abilities to comply with safety regulations	5	10	8	22	8		
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	5	11	3	24	10		
10 Before making a decision my superviror considers all employee concerns and opinions	14	25	3	9	2		
11 My goals and values are a concern of the Company	15	17	7	11	3		
12 The Company has done everything possible to make my workplace safe	21	21	3	4	4		
13 I believe that most managers will keep to their word and do what they say they will do	9	25	4	9	6		
14 Careless work by other members of my team does not increase my daily duties	12	22	12	4	3		
15 The management of the Company is highly informed about the safety issues at site	18	23	2	7	3		
16 I am strongly encouraged to report safety concerns	16	22	7	5	3		
17 Memebers of my team have received enough training and knowledge to perform their daily duties	9	15	14	10	5		
18 Help is available from the company when I have a problem	11	24	8	6	4		
19 Most managers are competent at managing their workers	9	19	6	14	5		
20 Management acts quickly to correct safety issues	12	22	6	9	4		
21 If I Have a concern about safety I will make it known	16	23	4	7	3		
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	30	3	4	3		
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5	11	7	16	14		
24 My supervisor explains and provides additional information when employees request it	10	19	14	6	4		
25 My supervisor would use whatever power they have to help me solve problems in my workplace	12	24	5	8	4		
26 Information about importanrt events and situations are shared within my workteam	7	14	10	14	8		
27 I feel that the Company really takes an interest in my wellbeing	15	24	5	7	2		
28 People in my workplace treat each other with repsect	11	17	10	10	5		
29 Management is presently acting to make the workplace safer	14	25	3	8	3		
30 I feel comfortable discussing safetey issues with my supervisor	11	23	6	9	4		

Agreement Factor

Summary of Survey Results 1st Quarter 2005						
Q No. Question	Number Surveyed	54 Responses			53	98%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	11	10	14	18		0
	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
2 Years with the Company (During the above Survey Period)	27	14	6	4		2
	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
3 Position (During the above Survey Period)	24	11	5	5		7
	Indian Sub Con. (36)	Phillip (13)	West (5)			
5 Ethnicity	36	13	4			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	4	7	3	27	12	68%
32 All job decisions are applied consistently across all affected employees	10	31	5	4	3	-77%
33 My work group wants to meet its objectives successfully	3	11	19	13	7	19%
34 I believe that managers apply the same rules for all workers	15	19	7	7	5	-60%
35 Management is willing to invest money and effort to improve the level of safety	7	22	12	8	4	-38%
36 Safety procedures/requirements are stopping me from performing my work efficiently	5	14	7	15	12	28%
37 I regularly suggest ways of improving safety	16	23	3	7	4	-75%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	12	22	8	8	3	-60%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6	16	17	9	5	-17%
40 The protection of workers from occupational exposure to hazards is a high priority with management	8	14	11	14	6	-8%
41 We are regularly asked for our ideas and suggestions about job safety	11	28	3	7	4	-66%
42 In the last quarter I was involved in a near miss which I didn't report	5	8	13	16	11	38%
43 I feel motivated to perform work to the best of my ability	16	27	2	5	5	-83%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7	16	19	7	4	-28%
45 I feel I am treated fairly but those senior to me	9	28	3	8	5	-53%
46 I feel safe in my workplace	15	26	2	5	5	-77%
47 I actively participate in the Company Safety Initiatives	9	21	12	8	3	-47%
48 I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	11	28	5	5	4	-70%
54 I think the management is making intelligent decisions to protect the future of the company	14	22	5	9	3	-66%
55 I am satisfied with my current employment situation	12	14	14	8	5	-38%

Summary of Survey Results 2nd Quarter 2005

Q No. Question	Number Surveyed	54 Responses				50	93%	Agreement Factor
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	9	9	14	18		0		
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
	25	14	7	2		2		
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	23	11	4	4		8		
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	34	12	4					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugesstions are valued by the Company	1	2	3	4	5			
7 There is a feeling of coperation an teamwork amongst the members of my work team	13	25	5	4	3		-82%	
8 My daily duties interfere with my abilities to comply with safety regulations	9	27	3	8	3		-62%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	6	11	4	19	10		32%	
10 Before making a decision my superviror considers all employee concerns and opinions	4	10	3	22	11		52%	
11 My goals and values are a concern of the Company	11	22	8	6	3		-64%	
12 The Company has done everything possible to make my workplace safe	13	21	5	7	4		-64%	
13 I believe that most managers will keep to their word and do what they say they will do	16	23	3	5	3		-88%	
14 Careless work by other members of my team does not increase my daily duties	8	23	6	8	5		-42%	
15 The management of the Company is highly informed about the safety issues at site	9	22	10	6	3		-56%	
16 I am strongly encouraged to report safety concerns	15	24	2	6	3		-84%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	8	22	8	8	4		-44%	
18 Help is available from the company when I have a problem	6	16	10	12	6		-8%	
19 Most managers are competent at managing their workers	9	22	9	7	3		-54%	
20 Management acts quickly to correct safety issues	8	16	6	15	5		-14%	
21 If I Have a concern about safety I will make it known	13	22	5	6	4		-68%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	12	26	2	6	4		-72%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	10	27	3	7	3		-68%	
24 My supervisor explains and provides additional information when employees request it	7	14	4	18	7		8%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	6	22	9	9	4		-34%	
26 Information about importanrt events and situations are shared within my workteam	10	26	2	9	3		-62%	
27 I feel that the Company really takes an interest in my wellbeing	5	15	8	13	9		12%	
28 People in my workplace treat each other with repsect	12	25	5	6	2		-78%	
29 Management is presently acting to make the workplace safer	9	16	10	9	6		-26%	
30 I feel comfortable discussing safetey issues with my supervisor	12	23	3	8	4		-62%	
	8	21	7	10	4		-38%	

Agreement Factor

Summary of Survey Results 2nd Quarter 2005						
Q No. Question	Number Surveyed					93%
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	9	9	14	18	0	
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
	25	14	7	2	2	
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	
	23	11	4	4	8	
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	34	12	4			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Agreement Factor
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	3	8	6	23	10	58%
32 All job decisions are applied consistently across all affected employees	8	28	8	4	2	-72%
33 My work group wants to meet its objectives successfully	4	9	17	15	5	16%
34 I believe that managers apply the same rules for all workers	11	23	2	8	6	-50%
35 Management is willing to invest money and effort to improve the level of safety	5	23	11	8	3	-38%
36 Safety procedures/requirements are stopping me from performing my work efficiently	3	16	7	15	9	22%
37 I regularly suggest ways of improving safety	13	24	3	8	2	-76%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	23	8	7	3	-56%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	8	16	15	9	2	-38%
40 The protection of workers from occupational exposure to hazards is a high priority with management	8	14	12	10	6	-16%
41 We are regularly asked for our ideas and suggestions about job safety	12	18	8	8	4	-52%
42 In the last quarter I was involved in a near miss which I didn't report	3	6	19	13	9	38%
43 I feel motivated to perfrom work to the best of my ability	13	25	4	5	3	-80%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	8	13	14	11	4	-20%
45 I feel I am treated fairly but those senior to me	6	25	6	8	5	-38%
46 I feel safe in my workplace	12	26	2	7	3	-74%
47 I activley participate in the Company Safety Initiatives	9	25	5	7	4	-56%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	11	25	5	5	4	-68%
54 I think the management is making intelligent decisions to protect the future of the company	10	24	5	7	4	-58%
55 I am satisfied with my current employment situation	9	18	9	9	5	-34%

Summary of Survey Results 3rd Quarter 2005

Q No. Question	Number Surveyed					54 Responses	52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	10	10	13	19	0			
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
	27	13	7	3	2			
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	24	11	5	4	8			
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	36	11	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugestions are valued by the Company	11	29	3	6	3			-75%
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	31	2	7	3			-69%
8 My daily duties interfere with my abilities to comply with safety regulations	3	11	10	19	9			38%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	5	10	2	21	14			56%
10 Before making a decision my superviror considers all employee concerns and opinions	11	26	2	9	4			-60%
11 My goals and values are a concern of the Company	11	21	3	11	6			-38%
12 The Company has done everything possible to make my workplace safe	17	23	4	5	3			-88%
13 I believe that most managers will keep to their word and do what they say they will do	8	22	6	11	5			-33%
14 Careless work by other members of my team does not increase my daily duties	10	24	8	7	3			-60%
15 The management of the Company is highly informed about the safety issues at site	17	24	2	6	3			-88%
16 I am strongly encouraged to report safety concerns	13	26	5	5	3			-79%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	9	15	14	11	3			-31%
18 Help is available from the company when I have a problem	11	22	9	7	3			-60%
19 Most managers are competent at managing their workers	9	18	6	15	4			-25%
20 Management acts quickly to correct safety issues	12	27	3	7	3			-73%
21 If I Have a concern about safety I will make it known	15	23	4	7	3			-77%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	21	6	8	4			-60%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5	16	6	18	7			12%
24 My supervisor explains and provides additional information when employees request it	9	19	12	8	4			-40%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	10	23	6	9	4			-50%
26 Information about importanrt events and situations are shared within my workteam	7	18	8	14	5			-15%
27 I feel that the Company really takes an interest in my wellbeing	13	23	5	8	3			-67%
28 People in my workplace treat each other with repsect	7	14	11	16	4			-8%
29 Management is presently acting to make the workplace safer	13	27	3	6	3			-79%
30 I feel comfortable discussing safetey issues with my supervisor	13	21	4	10	4			-56%

Agreement Factor

Summary of Survey Results 3rd Quarter 2005						
Q No. Question	Number Surveyed	54 Responses			52	96%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	10	10	13	19		0
	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
2 Years with the Company (During the above Survey Period)	27	13	7	3		2
	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
3 Position (During the above Survey Period)	24	11	5	4		8
	Indian Sub Con. (36)	Phillip (13)	West (5)			
5 Ethnicity	36	11	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	4	9	6	24	9	48%
32 All job decisions are applied consistently across all affected employees	11	25	6	6	4	-63%
33 My work group wants to meet its objectives successfully	5	13	13	14	7	10%
34 I believe that managers apply the same rules for all workers	14	20	6	8	4	-62%
35 Management is willing to invest money and effort to improve the level of safety	11	21	7	9	4	-50%
36 Safety procedures/requirements are stopping me from performing my work efficiently	3	14	7	21	7	29%
37 I regularly suggest ways of improving safety	13	24	4	8	3	-69%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	10	25	6	8	3	-60%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	5	15	14	14	4	-6%
40 The protection of workers from occupational exposure to hazards is a high priority with management	8	20	7	13	4	-29%
41 We are regularly asked for our ideas and suggestions about job safety	10	27	4	8	3	-63%
42 In the last quarter I was involved in a near miss which I didn't report	4	8	13	20	7	35%
43 I feel motivated to perform work to the best of my ability	15	27	3	5	2	-92%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	4	15	22	8	3	-17%
45 I feel I am treated fairly but those senior to me	7	26	5	9	5	-40%
46 I feel safe in my workplace	14	24	7	4	3	-81%
47 I actively participate in the Company Safety Initiatives	7	19	15	8	3	-37%
48 I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	10	24	8	7	3	-60%
54 I think the management is making intelligent decisions to protect the future of the company	7	22	10	9	4	-37%
55 I am satisfied with my current employment situation	7	14	16	11	4	-17%

Summary of Survey Results 4th Quarter 2005

Q No. Question	Number Surveyed					54 Responses	54	100%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	11	10	14	19	0			
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
	27	14	7	4	2			
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	25	11	5	5	8			
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	36	13	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugesstions are valued by the Company	10	29	5	6	4			-65%
7 There is a feeling of coperation an teamwork amongst the members of my work team	11	29	3	7	4			-67%
8 My daily duties interfere with my abilities to comply with safety regulations	3	12	8	22	9			41%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	3	12	5	23	11			50%
10 Before making a decision my superviror considers all employee concerns and opinions	13	26	2	10	3			-67%
11 My goals and values are a concern of the Company	12	17	7	13	5			-33%
12 The Company has done everything possible to make my workplace safe	16	28	4	4	2			-96%
13 I believe that most managers will keep to their word and do what they say they will do	9	22	5	12	6			-30%
14 Careless work by other members of my team does not increase my daily duties	7	26	11	7	3			-50%
15 The management of the Company is highly informed about the safety issues at site	16	24	2	9	3			-76%
16 I am strongly encouraged to report safety concerns	13	26	7	5	3			-76%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5	19	15	11	4			-19%
18 Help is available from the company when I have a problem	10	24	11	6	3			-59%
19 Most managers are competent at managing their workers	8	18	7	15	6			-13%
20 Management acts quickly to correct safety issues	13	32	1	5	3			-87%
21 If I Have a concern about safety I will make it known	14	29	3	6	2			-87%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	14	29	3	5	3			-85%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6	14	11	16	7			7%
24 My supervisor explains and provides additional information when employees request it	8	19	13	10	4			-31%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	11	28	4	8	3			-67%
26 Information about importanrt events and situations are shared within my workteam	6	14	11	18	5			4%
27 I feel that the Company really takes an interest in my wellbeing	13	27	4	7	3			-74%
28 People in my workplace treat each other with repsect	11	19	12	9	3			-48%
29 Management is presently acting to make the workplace safer	14	27	4	6	3			-80%
30 I feel comfortable discussing safetey issues with my supervisor	8	24	7	12	3			-41%

Agreement Factor

Summary of Survey Results 4th Quarter 2005

Q No.	Question	Number Surveyed	54 Responses				54	100%
Employee Background		(xx) denotes maximum representation based on totals from sample data						
		25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)		
1	Age (During the above Survey Period)	11	10	14	19		0	
2	Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		
3	Position (During the above Survey Period)	27	14	7	4		2	
		Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)		
5	Ethnicity	25	11	5	5		8	
		Indian Sub Con. (36)	Phillip (13)	West (5)				
		36	13	5				
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
		1	2	3	4	5		
31	I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	2	8	6	30	8	63%	
32	All job decisions are applied consistently across all affected employees	12	26	6	7	3	-69%	
33	My work group wants to meet its objectives successfully	6	12	13	17	6	9%	
34	I believe that managers apply the same rules for all workers	14	23	5	9	3	-67%	
35	Management is willing to invest money and effort to improve the level of safety	10	21	11	9	3	-48%	
36	Safety procedures/requirements are stopping me from performing my work efficiently	4	19	7	16	8	9%	
37	I regularly suggest ways of improving safety	13	26	3	9	3	-69%	
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	9	27	7	7	4	-56%	
39	I would defend and justify decisions made by my supervisor if they were not present to do so	8	19	13	10	4	-31%	
40	The protection of workers from occupational exposure to hazards is a high priority with management	10	20	8	13	3	-39%	
41	We are regularly asked for our ideas and suggestions about job safety	7	28	8	8	3	-52%	
42	In the last quarter I was involved in a near miss which I didn't report	4	9	11	19	11	44%	
43	I feel motivated to perform work to the best of my ability	16	23	3	8	4	-72%	
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	20	15	8	2	-48%	
45	I feel I am treated fairly but those senior to me	10	28	6	7	3	-65%	
46	I feel safe in my workplace	14	29	4	5	2	-89%	
47	I actively participate in the Company Safety Initiatives	7	24	11	8	4	-41%	
48	I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
49	I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
50	I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
51	I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	
52	I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A	
53	I think the management is making intelligent decisions to protect the safety of the company's employees	9	32	5	5	3	-72%	
54	I think the management is making intelligent decisions to protect the future of the company	7	25	7	11	4	-37%	
55	I am satisfied with my current employment situation	7	14	20	9	4	-20%	

Agreement Factor

Summary of Survey Results 2005									
Q No. Question	Number Surveyed		54 Responses		52.25		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	10	10	14	19	0				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	26.5	13.75	6.75	3.25	2				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	24	11	4.75	4.5	7.75				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	35.5	12.25	4.5	Approval Factor					
						Green denotes improvement			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
6 My Contributions and Sugestions are valued by the Company	11.25	28	4	5.5	3.5	-70%	-82%	-75%	-65%
7 There is a feeling of coperation an teamwork amongst the members of my work team	10	28.75	2.75	7.25	3.5	-66%	-62%	-69%	-67%
8 My daily duties interfere with my abilities to comply with safety regulations	4.25	11	7.5	20.5	9	34%	32%	38%	41%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4.25	10.75	3.25	22.5	11.5	43%	52%	56%	50%
10 Before making a decision my superviror considers all employee concerns and opinions	12.25	24.75	3.75	8.5	3	-75%	-64%	-60%	-67%
11 My goals and values are a concern of the Company	12.75	19	5.5	10.5	4.5	-57%	-64%	-38%	-33%
12 The Company has done everything possible to make my workplace safe	17.5	23.75	3.5	4.5	3	-96%	-88%	-88%	-96%
13 I believe that most managers will keep to their word and do what they say they will do	8.5	23	5.25	10	5.5	-42%	-42%	-33%	-30%
14 Careless work by other members of my team does not increase my daily duties	9.5	23.5	10.25	6	3	-68%	-56%	-60%	-50%
15 The management of the Company is highly informed about the safety issues at site	16.5	23.75	2	7	3	-87%	-84%	-88%	-76%
16 I am strongly encouraged to report safety concerns	12.5	24	6.75	5.75	3.25	-81%	-44%	-79%	-76%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	7.25	16.25	13.25	11	4.5	-25%	-8%	-31%	-19%
18 Help is available from the company when I have a problem	10.25	23	9.25	6.5	3.25	-60%	-54%	-60%	-59%
19 Most managers are competent at managing their workers	8.5	17.75	6.25	14.75	5	-25%	-14%	-25%	-13%
20 Management acts quickly to correct safety issues	12.5	25.75	3.75	6.75	3.5	-55%	-68%	-73%	-87%
21 If I Have a concern about safety I will make it known	14.25	25.25	3.25	6.5	3	-79%	-72%	-77%	-87%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	12.5	26.75	3.75	6	3.25	-87%	-68%	-60%	-85%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5.75	13.75	7	17	8.75	43%	8%	12%	7%
24 My supervisor explains and provides additional information when employees request it	8.25	19.75	12	8.25	4	-47%	-34%	-40%	-31%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	10.75	25.25	4.25	8.5	3.5	-60%	-62%	-50%	-67%
26 Information about importanrt events and situations are shared within my workteam	6.25	15.25	9.25	14.75	6.75	4%	12%	-15%	4%
27 I feel that the Company really takes an interest in my wellbeing	13.25	24.75	4.75	7	2.5	-81%	-78%	-67%	-74%
28 People in my workplace treat each other with repsect	9.5	16.5	10.75	11	4.5	-36%	-26%	-8%	-48%
29 Management is presently acting to make the workplace safer	13.25	25.5	3.25	7	3.25	-74%	-62%	-79%	-80%
30 I feel comfortable discussing safetey issues with my supervisor	10	22.25	6	10.25	3.75	-53%	-38%	-56%	-41%

Summary of Survey Results 2005									
Q No. Question	Number Surveyed		54 Responses		52.25		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	10	10	14	19	0				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	26.5	13.75	6.75	3.25	2				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	24	11	4.75	4.5	7.75				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	35.5	12.25	4.5						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Approval Factor			
						Green denotes improvement			
						Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classifidied as a recordable	3.25	8	5.25	26	9.75	68%	58%	48%	63%
32 All job decisions are applied consistently across all affected employees	10.25	27.5	6.25	5.25	3	-77%	-72%	-63%	-69%
33 My work group wants to meet its objectives successfully	4.5	11.25	15.5	14.75	6.25	19%	16%	10%	9%
34 I believe that managers apply the same rules for all workers	13.5	21.25	5	8	4.5	-60%	-50%	-62%	-67%
35 Management is willing to invest money and effort to improve the level of safety	8.25	21.75	10.25	8.5	3.5	-38%	-38%	-50%	-48%
36 Safety procedures/requirements are stopping me from performing my work efficiently	3.75	15.75	7	16.75	9	28%	22%	29%	9%
37 I regularly suggest ways of improving safety	13.75	24.25	3.25	8	3	-75%	-76%	-69%	-69%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	10	24.25	7.25	7.5	3.25	-60%	-56%	-60%	-56%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6.75	16.5	14.75	10.5	3.75	-17%	-38%	-6%	-31%
40 The protection of workers from occupational exposure to hazards is a high priority with management	8.5	17	9.5	12.5	4.75	-8%	-16%	-29%	-39%
41 We are regularly asked for our ideas and suggestions about job safety	10	25.25	5.75	7.75	3.5	-66%	-52%	-63%	-52%
42 In the last quarter I was involved in a near miss which I didn't report	4	7.75	14	17	9.5	38%	38%	35%	44%
43 I feel motivated to perfrom work to the best of my ability	15	25.5	3	5.75	3.5	-83%	-80%	-92%	-72%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7	16	17.5	8.5	3.25	-28%	-20%	-17%	-48%
45 I feel I am treated fairly but those senior to me	8	26.75	5	8	4.5	-53%	-38%	-40%	-65%
46 I feel safe in my workplace	13.75	26.25	3.75	5.25	3.25	-77%	-74%	-81%	-89%
47 I activley participate in the Company Safety Initiatives	8	22.25	10.75	7.75	3.5	-47%	-56%	-37%	-41%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety inititatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety inititatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety inititatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	10.25	27.25	5.75	5.5	3.5	-70%	-68%	-60%	-72%
54 I think the management is making intelligent decisions to protect the future of the company	9.5	23.25	6.75	9	3.75	-66%	-58%	-37%	-37%
55 I am satisfied with my current employment situation	8.75	15	14.75	9.25	4.5	-38%	-34%	-17%	-20%

Summary of Survey Results 1st Quarter 2006

Q No. Question	Number Surveyed	54 Responses				52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data						
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)		
1 Age (During the above Survey Period)	11	9	14	18	0		
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		
	27	14	7	2	2		
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)		
	25	11	4	5	7		
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)				
	36	12	5				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
	1	2	3	4	5		
6 My Contributions and Sugesstions are valued by the Company	6	27	7	8	4	-44%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	7	25	6	10	4	-40%	
8 My daily duties interfere with my abilities to comply with safety regulations	3	10	12	18	9	38%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4	16	8	15	9	17%	
10 Before making a decision my superviror considers all employee concerns and opinions	9	23	5	11	4	-42%	
11 My goals and values are a concern of the Company	9	16	3	18	6	-8%	
12 The Company has done everything possible to make my workplace safe	11	23	6	9	3	-58%	
13 I believe that most managers will keep to their word and do what they say they will do	6	20	5	15	6	-10%	
14 Careless work by other members of my team does not increase my daily duties	5	20	12	11	4	-21%	
15 The management of the Company is highly informed about the safety issues at site	10	20	7	10	5	-38%	
16 I am strongly encouraged to report safety concerns	9	21	7	9	6	-35%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5	13	9	17	8	19%	
18 Help is available from the company when I have a problem	7	19	7	14	5	-17%	
19 Most managers are competent at managing their workers	6	15	5	21	5	8%	
20 Management acts quickly to correct safety issues	9	26	6	7	4	-56%	
21 If I Have a concern about safety I will make it known	8	21	9	9	5	-35%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	9	23	7	9	4	-46%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	9	17	16	9	1	-46%	
24 My supervisor explains and provides additional information when employees request it	6	14	11	15	6	2%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8	19	5	17	3	-23%	
26 Information about importanrt events and situations are shared within my workteam	3	10	12	23	4	29%	
27 I feel that the Company really takes an interest in my wellbeing	8	17	5	19	3	-15%	
28 People in my workplace treat each other with repsect	7	16	9	15	5	-10%	
29 Management is presently acting to make the workplace safer	8	18	6	14	6	-15%	
30 I feel comfortable discussing safetey issues with my supervisor	5	17	4	21	5	8%	

Agreement Factor

Summary of Survey Results 1st Quarter 2006							
Q No. Question	Number Surveyed					54 Responses	52
Employee Background	(xx) denotes maxmium representation based on totals from sample data						96%
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)		
1 Age (During the above Survey Period)	11	9	14	18			0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		
	27	14	7	2			2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)		
	25	11	4	5			7
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)				
	36	12	5				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		Agreement Factor
	1	2	3	4	5		
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	7	15	15	13	2		-23%
32 All job decisions are applied consistently across all affected employees	9	20	8	11	4		-37%
33 My work group wants to meet its objectives successfully	4	12	7	21	8		33%
34 I believe that managers apply the same rules for all workers	9	20	8	11	4		-37%
35 Management is willing to invest money and effort to improve the level of safety	7	16	8	15	6		-6%
36 Safety procedures/requirements are stopping me from performing my work efficiently	8	18	10	12	4		-27%
37 I regularly suggest ways of improving safety	7	18	3	21	3		-10%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	4	17	6	21	4		8%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	4	12	10	22	4		19%
40 The protection of workers from occupational exposure to hazards is a high priority with management	6	14	5	24	3		8%
41 We are regularly asked for our ideas and suggestions about job safety	4	15	8	21	4		12%
42 In the last quarter I was involved in a near miss which I didn't report	11	15	13	11	2		-42%
43 I feel motivated to perfrom work to the best of my ability	8	16	6	17	5		-10%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	18	10	12	3		-35%
45 I feel I am treated fairly but those senior to me	6	23	7	12	4		-29%
46 I feel safe in my workplace	9	18	5	17	3		-25%
47 I activley participate in the Company Safety Initiatives	3	15	7	22	5		21%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A		N/A
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A		N/A
50 I believe management fully supports the new safety intitatives	N/A	N/A	N/A	N/A	N/A		N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A		N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A		N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	5	16	7	21	3		2%
54 I think the management is making intelligent decisions to protect the future of the company	4	17	7	19	5		8%
55 I am satisfied with my current employment situation	4	11	12	21	4		19%

Summary of Survey Results 2nd Quarter 2006

Q No. Question	Number Surveyed					54 Responses	54	100%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	11	10	14	19				0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			8
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	36	13	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugestions are valued by the Company	7	27	11	6	3			-54%
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	29	5	8	3			-61%
8 My daily duties interfere with my abilities to comply with safety regulations	4	8	11	21	10			46%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4	14	8	16	12			33%
10 Before making a decision my superviror considers all employee concerns and opinions	9	27	4	11	3			-52%
11 My goals and values are a concern of the Company	10	19	3	17	5			-22%
12 The Company has done everything possible to make my workplace safe	11	28	6	7	2			-72%
13 I believe that most managers will keep to their word and do what they say they will do	7	22	7	13	5			-24%
14 Careless work by other members of my team does not increase my daily duties	6	24	10	10	4			-33%
15 The management of the Company is highly informed about the safety issues at site	11	23	7	9	4			-52%
16 I am strongly encouraged to report safety concerns	9	27	6	8	4			-54%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6	17	10	14	7			-2%
18 Help is available from the company when I have a problem	7	22	8	12	5			-26%
19 Most managers are competent at managing their workers	7	18	6	19	4			-9%
20 Management acts quickly to correct safety issues	9	29	6	7	3			-63%
21 If I Have a concern about safety I will make it known	9	23	8	11	3			-44%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	12	23	7	8	4			-57%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	7	16	14	13	4			-17%
24 My supervisor explains and provides additional information when employees request it	8	18	11	13	4			-24%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	7	23	5	15	4			-26%
26 Information about importanrt events and situations are shared within my workteam	4	16	11	18	5			7%
27 I feel that the Company really takes an interest in my wellbeing	9	24	3	14	4			-37%
28 People in my workplace treat each other with repsect	8	20	10	13	3			-31%
29 Management is presently acting to make the workplace safer	11	22	5	12	4			-44%
30 I feel comfortable discussing safetey issues with my supervisor	7	19	5	19	4			-11%

Agreement Factor

Summary of Survey Results 2nd Quarter 2006							
Q No.	Question	Number Surveyed					100%
	Employee Background	(xx) denotes maximum representation based on totals from sample data					
		25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1	Age (During the above Survey Period)	11	10	14	19		0
2	Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
		27	14	7	4		2
3	Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
		25	11	5	5		8
5	Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
		36	13	5			
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Agreement Factor
		1	2	3	4	5	
31	I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	4	9	16	20	5	24%
32	All job decisions are applied consistently across all affected employees	9	25	6	11	3	-48%
33	My work group wants to meet its objectives successfully	4	18	10	17	5	2%
34	I believe that managers apply the same rules for all workers	8	24	5	14	3	-37%
35	Management is willing to invest money and effort to improve the level of safety	9	21	8	13	3	-37%
36	Safety procedures/requirements are stopping me from performing my work efficiently	4	14	15	13	8	13%
37	I regularly suggest ways of improving safety	8	23	3	16	4	-28%
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	5	22	6	17	4	-13%
39	I would defend and justify decisions made by my supervisor if they were not present to do so	5	17	10	18	4	-2%
40	The protection of workers from occupational exposure to hazards is a high priority with management	8	19	4	19	4	-15%
41	We are regularly asked for our ideas and suggestions about job safety	6	17	11	17	3	-11%
42	In the last quarter I was involved in a near miss which I didn't report	5	9	12	21	7	30%
43	I feel motivated to perform work to the best of my ability	7	18	12	12	5	-19%
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7	24	10	10	3	-41%
45	I feel I am treated fairly but those senior to me	8	25	8	10	3	-46%
46	I feel safe in my workplace	9	20	7	15	3	-31%
47	I actively participate in the Company Safety Initiatives	7	22	5	15	5	-20%
48	I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A
49	I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
50	I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
51	I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
52	I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53	I think the management is making intelligent decisions to protect the safety of the company's employees	6	18	10	17	3	-13%
54	I think the management is making intelligent decisions to protect the future of the company	6	20	9	14	5	-15%
55	I am satisfied with my current employment situation	6	17	10	17	4	-7%

Summary of Survey Results 3rd Quarter 2006

Q No. Question	Number Surveyed					54 Responses	52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
1 Age (During the above Survey Period)	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5			
7 There is a feeling of coperation an teamwork amongst the members of my work team	7	29	6	7	3			
8 My daily duties interfere with my abilities to comply with safety regulations	14	26	3	6	3			
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	4	13	4	22	9			
10 Before making a decision my superviror considers all employee concerns and opinions	3	10	3	26	10			
11 My goals and values are a concern of the Company	11	27	2	8	4			
12 The Company has done everything possible to make my workplace safe	12	19	6	11	4			
13 I believe that most managers will keep to their word and do what they say they will do	14	31	4	2	1			
14 Careless work by other members of my team does not increase my daily duties	10	23	4	11	4			
15 The management of the Company is highly informed about the safety issues at site	7	28	8	7	2			
16 I am strongly encouraged to report safety concerns	16	24	2	7	3			
17 Memebers of my team have received enough training and knowledge to perform their daily duties	13	28	5	4	2			
18 Help is available from the company when I have a problem	5	23	11	9	4			
19 Most managers are competent at managing their workers	9	25	10	6	2			
20 Management acts quickly to correct safety issues	8	20	7	12	5			
21 If I Have a concern about safety I will make it known	12	31	1	5	3			
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	30	3	4	2			
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	12	26	4	7	3			
24 My supervisor explains and provides additional information when employees request it	4	10	11	18	9			
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8	19	11	10	4			
26 Information about importanrt events and situations are shared within my workteam	11	26	4	8	3			
27 I feel that the Company really takes an interest in my wellbeing	5	15	11	16	5			
28 People in my workplace treat each other with repsect	13	28	3	6	2			
29 Management is presently acting to make the workplace safer	11	21	6	10	4			
30 I feel comfortable discussing safetey issues with my supervisor	11	29	4	5	3			
	8	25	4	12	3			

Agreement Factor

-58%
-81%
37%
58%
-63%
-46%
-106%
-46%
-60%
-83%
-88%
-31%
-63%
-27%
-85%
-92%
-71%
35%
-33%
-65%
2%
-85%
-48%
-77%
-44%

Summary of Survey Results 3rd Quarter 2006						
Q No. Question	Number Surveyed					96%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	9	10	14	19		0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
	25	14	7	4		2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
	23	11	5	5		8
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	34	13	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	2	7	6	32	5	60%
32 All job decisions are applied consistently across all affected employees	11	27	5	6	3	-71%
33 My work group wants to meet its objectives successfully	6	13	13	15	5	0%
34 I believe that managers apply the same rules for all workers	14	25	6	5	2	-85%
35 Management is willing to invest money and effort to improve the level of safety	11	22	9	7	3	-60%
36 Safety procedures/requirements are stopping me from performing my work efficiently	4	15	6	17	10	27%
37 I regularly suggest ways of improving safety	11	28	3	6	4	-69%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	11	25	6	7	3	-65%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	8	19	11	10	4	-33%
40 The protection of workers from occupational exposure to hazards is a high priority with management	10	22	8	9	3	-52%
41 We are regularly asked for our ideas and suggestions about job safety	8	30	5	6	3	-65%
42 In the last quarter I was involved in a near miss which I didn't report	5	8	9	21	9	40%
43 I feel motivated to perform work to the best of my ability	17	22	3	7	3	-83%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	25	8	7	3	-58%
45 I feel I am treated fairly but those senior to me	11	29	4	5	3	-77%
46 I feel safe in my workplace	12	29	4	5	2	-85%
47 I actively participate in the Company Safety Initiatives	7	24	9	8	4	-42%
48 I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	9	29	5	6	3	-67%
54 I think the management is making intelligent decisions to protect the future of the company	6	24	7	11	4	-33%
55 I am satisfied with my current employment situation	7	14	18	9	4	-21%

Summary of Survey Results 4th Quarter 2006

Q No. Question	Number Surveyed					54 Responses	50	93%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)			
1 Age (During the above Survey Period)	9	9	14	18				0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			1
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			7
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	35	11	4					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugesstions are valued by the Company	9	26	5	6	4			-60%
7 There is a feeling of coperation an teamwork amongst the members of my work team	11	28	3	5	3			-78%
8 My daily duties interfere with my abilities to comply with safety regulations	2	11	7	22	8			46%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	2	11	4	24	9			54%
10 Before making a decision my superviror considers all employee concerns and opinions	12	25	2	9	2			-72%
11 My goals and values are a concern of the Company	12	16	7	11	4			-42%
12 The Company has done everything possible to make my workplace safe	13	27	3	5	2			-88%
13 I believe that most managers will keep to their word and do what they say they will do	9	20	4	11	6			-30%
14 Careless work by other members of my team does not increase my daily duties	7	25	9	6	3			-54%
15 The management of the Company is highly informed about the safety issues at site	14	24	3	7	2			-82%
16 I am strongly encouraged to report safety concerns	11	23	8	6	2			-70%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6	22	9	9	4			-34%
18 Help is available from the company when I have a problem	10	24	7	6	3			-64%
19 Most managers are competent at managing their workers	8	18	3	15	6			-14%
20 Management acts quickly to correct safety issues	12	31	1	4	2			-94%
21 If I Have a concern about safety I will make it known	12	29	3	4	2			-90%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	28	3	4	2			-92%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6	14	7	16	7			8%
24 My supervisor explains and provides additional information when employees request it	7	19	13	8	3			-38%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	11	27	3	6	3			-74%
26 Information about importanrt events and situations are shared within my workteam	6	14	9	17	4			-2%
27 I feel that the Company really takes an interest in my wellbeing	13	27	3	5	2			-88%
28 People in my workplace treat each other with repsect	10	18	12	7	3			-50%
29 Management is presently acting to make the workplace safer	13	25	4	6	2			-82%
30 I feel comfortable discussing safetey issues with my supervisor	8	24	3	12	3			-44%

Agreement Factor

Summary of Survey Results 4th Quarter 2006						
Q No. Question	Number Surveyed	54 Responses			50	93%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	9	9	14	18		0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	
5 Ethnicity	23	10	5	5		7
	Indian Sub Con. (36)	Phillip (13)	West (5)			
	35	11	4			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	3	7	5	28	7	58%
32 All job decisions are applied consistently across all affected employees	12	26	4	5	3	-78%
33 My work group wants to meet its objectives successfully	7	11	13	15	4	-4%
34 I believe that managers apply the same rules for all workers	15	23	4	6	2	-86%
35 Management is willing to invest money and effort to improve the level of safety	10	23	8	6	3	-62%
36 Safety procedures/requirements are stopping me from performing my work efficiently	4	15	7	16	8	18%
37 I regularly suggest ways of improving safety	13	25	3	6	3	-78%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	28	4	5	4	-66%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7	19	13	7	4	-36%
40 The protection of workers from occupational exposure to hazards is a high priority with management	9	22	9	7	3	-54%
41 We are regularly asked for our ideas and suggestions about job safety	7	28	7	6	2	-64%
42 In the last quarter I was involved in a near miss which I didn't report	3	8	11	18	10	48%
43 I feel motivated to perfrom work to the best of my ability	16	22	2	6	4	-80%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	10	20	11	7	2	-58%
45 I feel I am treated fairly but those senior to me	10	28	5	5	2	-78%
46 I feel safe in my workplace	13	28	3	4	2	-92%
47 I activley participate in the Company Safety Initiatives	7	26	5	9	3	-50%
48 I have witnessed an improvement in safety as a result of these inititatives	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	9	28	5	5	3	-70%
54 I think the management is making intelligent decisions to protect the future of the company	7	24	5	10	4	-40%
55 I am satisfied with my current employment situation	7	14	18	7	4	-26%

Summary of Survey Results 2006									
Q No. Question	Number Surveyed		54 Responses		52		96%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	10	10	14	19	0				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	26.25	14	6.75	3.25	1.75				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	24	10.75	4.75	5	7.5				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	35.25	12.25	4.75	Approval Factor					
						Green denotes improvement			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
6 My Contributions and Sugestions are valued by the Company	7.25	27.25	7.25	6.75	3.5	-44%	-54%	-58%	-60%
7 There is a feeling of coperation an teamwork amongst the members of my work team	10.25	27	4.25	7.25	3.25	-40%	-61%	-81%	-78%
8 My daily duties interfere with my abilities to comply with safety regulations	3.25	10.5	8.5	20.75	9	38%	46%	37%	46%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	3.25	12.75	5.75	20.25	10	17%	33%	58%	54%
10 Before making a decision my superviror considers all employee concerns and opinions	10.25	25.5	3.25	9.75	3.25	-42%	-52%	-63%	-72%
11 My goals and values are a concern of the Company	10.75	17.5	4.75	14.25	4.75	-8%	-22%	-46%	-42%
12 The Company has done everything possible to make my workplace safe	12.25	27.25	4.75	5.75	2	-58%	-72%	-106%	-88%
13 I believe that most managers will keep to their word and do what they say they will do	8	21.25	5	12.5	5.25	-10%	-24%	-46%	-30%
14 Careless work by other members of my team does not increase my daily duties	6.25	24.25	9.75	8.5	3.25	-21%	-33%	-60%	-54%
15 The management of the Company is highly informed about the safety issues at site	12.75	22.75	4.75	8.25	3.5	-38%	-52%	-83%	-82%
16 I am strongly encouraged to report safety concerns	10.5	24.75	6.5	6.75	3.5	-35%	-54%	-88%	-70%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5.5	18.75	9.75	12.25	5.75	19%	-2%	-31%	-34%
18 Help is available from the company when I have a problem	8.25	22.5	8	9.5	3.75	-17%	-26%	-63%	-64%
19 Most managers are competent at managing their workers	7.25	17.75	5.25	16.75	5	8%	-9%	-27%	-14%
20 Management acts quickly to correct safety issues	10.5	29.25	3.5	5.75	3	-56%	-63%	-85%	-94%
21 If I Have a concern about safety I will make it known	10.5	25.75	5.75	7	3	-35%	-44%	-92%	-90%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	11.5	25	5.25	7	3.25	-46%	-57%	-71%	-92%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6.5	14.25	12	14	5.25	-46%	-17%	35%	8%
24 My supervisor explains and provides additional information when employees request it	7.25	17.5	11.5	11.5	4.25	2%	-24%	-33%	-38%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	9.25	23.75	4.25	11.5	3.25	-23%	-26%	-65%	-74%
26 Information about importanrt events and situations are shared within my workteam	4.5	13.75	10.75	18.5	4.5	29%	7%	2%	-2%
27 I feel that the Company really takes an interest in my wellbeing	10.75	24	3.5	11	2.75	-15%	-37%	-85%	-88%
28 People in my workplace treat each other with repsect	9	18.75	9.25	11.25	3.75	-10%	-31%	-48%	-50%
29 Management is presently acting to make the workplace safer	10.75	23.5	4.75	9.25	3.75	-15%	-44%	-77%	-82%
30 I feel comfortable discussing safetey issues with my supervisor	7	21.25	4	16	3.75	8%	-11%	-44%	-44%

Summary of Survey Results 2006									
Q No. Question	Number Surveyed		54 Responses		52		96%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	10	10	14	19	0				
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
	26.25	14	6.75	3.25	1.75				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	24	10.75	4.75	5	7.5				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)						
	35.25	12.25	4.75						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Approval Factor Green denotes improvement Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	4	9.5	10.5	23.25	4.75	-23%	24%	60%	58%
32 All job decisions are applied consistently across all affected employees	10.25	24.5	5.75	8.25	3.25	-37%	-48%	-71%	-78%
33 My work group wants to meet its objectives successfully	5.25	13.5	10.75	17	5.5	33%	2%	0%	-4%
34 I believe that managers apply the same rules for all workers	11.5	23	5.75	9	2.75	-37%	-37%	-85%	-86%
35 Management is willing to invest money and effort to improve the level of safety	9.25	20.5	8.25	10.25	3.75	-6%	-37%	-60%	-62%
36 Safety procedures/requirements are stopping me from performing my work efficiently	5	15.5	9.5	14.5	7.5	-27%	13%	27%	18%
37 I regularly suggest ways of improving safety	9.75	23.5	3	12.25	3.5	-10%	-28%	-69%	-78%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	7.25	23	5.5	12.5	3.75	8%	-13%	-65%	-66%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	6	16.75	11	14.25	4	19%	-2%	-33%	-36%
40 The protection of workers from occupational exposure to hazards is a high priority with management	8.25	19.25	6.5	14.75	3.25	8%	-15%	-52%	-54%
41 We are regularly asked for our ideas and suggestions about job safety	6.25	22.5	7.75	12.5	3	12%	-11%	-65%	-64%
42 In the last quarter I was involved in a near miss which I didn't report	6	10	11.25	17.75	7	-42%	30%	40%	48%
43 I feel motivated to perfrom work to the best of my ability	12	19.5	5.75	10.5	4.25	-10%	-19%	-83%	-80%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	8.75	21.75	9.75	9	2.75	-35%	-41%	-58%	-58%
45 I feel I am treated fairly but those senior to me	8.75	26.25	6	8	3	-29%	-46%	-77%	-78%
46 I feel safe in my workplace	10.75	23.75	4.75	10.25	2.5	-25%	-31%	-85%	-92%
47 I activley participate in the Company Safety Initiatives	6	21.75	6.5	13.5	4.25	21%	-20%	-42%	-50%
48 I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50 I believe management fully supports the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51 I have full confidence in the new safety intitatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
53 I think the management is making intelligent decisions to protect the safety of the company's employees	7.25	22.75	6.75	12.25	3	2%	-13%	-67%	-70%
54 I think the management is making intelligent decisions to protect the future of the company	5.75	21.25	7	13.5	4.5	8%	-15%	-33%	-40%
55 I am satisfied with my current employment situation	6	14	14.5	13.5	4	19%	-7%	-21%	-26%

Summary of Survey Results 1st Quarter 2007

Q No. Question	Number Surveyed	54 Responses				52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data						
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)		
1 Age (During the above Survey Period)	9	10	14	19		0	
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		
	27	14	7	3		1	
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)		
	25	10	5	5		7	
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)				
	35	13	4				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
	1	2	3	4	5		
6 My Contributions and Sugestions are valued by the Company	7	24	9	9	3	-44%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	9	23	8	7	5	-46%	
8 My daily duties interfere with my abilities to comply with safety regulations	3	12	11	19	7	29%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	3	13	5	24	7	37%	
10 Before making a decision my superviror considers all employee concerns and opinions	10	23	7	9	3	-54%	
11 My goals and values are a concern of the Company	11	14	9	13	5	-25%	
12 The Company has done everything possible to make my workplace safe	12	27	5	5	3	-77%	
13 I believe that most managers will keep to their word and do what they say they will do	9	17	7	12	7	-17%	
14 Careless work by other members of my team does not increase my daily duties	7	25	8	8	4	-44%	
15 The management of the Company is highly informed about the safety issues at site	11	23	7	8	3	-60%	
16 I am strongly encouraged to report safety concerns	9	24	9	7	3	-56%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6	22	9	11	4	-29%	
18 Help is available from the company when I have a problem	9	24	8	8	3	-54%	
19 Most managers are competent at managing their workers	8	17	3	17	7	-4%	
20 Management acts quickly to correct safety issues	12	28	2	7	3	-75%	
21 If I Have a concern about safety I will make it known	12	25	5	7	3	-69%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	13	28	3	6	2	-85%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	6	12	14	15	5	2%	
24 My supervisor explains and provides additional information when employees request it	7	18	14	10	3	-31%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	10	27	4	8	3	-63%	
26 Information about importanrt events and situations are shared within my workteam	6	14	9	19	4	2%	
27 I feel that the Company really takes an interest in my wellbeing	11	24	8	6	3	-65%	
28 People in my workplace treat each other with repsect	8	17	15	9	3	-35%	
29 Management is presently acting to make the workplace safer	11	23	7	8	3	-60%	
30 I feel comfortable discussing safetey issues with my supervisor	8	22	7	12	3	-38%	

Agreement Factor

Summary of Survey Results 1st Quarter 2007						
Q No. Question	Number Surveyed					96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (14)	56-65 (19)	65+ (0)	
1 Age (During the above Survey Period)	9	10	14	19		0
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
	27	14	7	3		1
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	
	25	10	5	5		7
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	35	13	4			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Agreement Factor
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	4	9	10	25	4	31%
32 All job decisions are applied consistently across all affected employees	12	26	6	5	3	-75%
33 My work group wants to meet its objectives successfully	7	11	13	16	5	2%
34 I believe that managers apply the same rules for all workers	15	23	5	7	2	-81%
35 Management is willing to invest money and effort to improve the level of safety	9	20	11	9	3	-44%
36 Safety procedures/requirements are stopping me from performing my work efficiently	5	16	11	14	6	0%
37 I regularly suggest ways of improving safety	11	23	6	9	3	-58%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	26	8	5	4	-60%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7	19	15	7	4	-35%
40 The protection of workers from occupational exposure to hazards is a high priority with management	9	20	9	9	5	-37%
41 We are regularly asked for our ideas and suggestions about job safety	7	24	7	10	4	-38%
42 In the last quarter I was involved in a near miss which I didn't report	4	10	15	16	7	23%
43 I feel motivated to perfrom work to the best of my ability	14	21	4	9	4	-62%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	19	13	8	3	-44%
45 I feel I am treated fairly but those senior to me	10	26	6	7	3	-63%
46 I feel safe in my workplace	12	27	5	6	2	-79%
47 I activley participate in the Company Safety Initiatives	6	24	7	11	4	-33%
48 I have witnessed an improvement in safety as a result of these inititatives	9	11	12	14	6	-6%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	8	15	5	16	8	2%
50 I believe management fully supports the new safety intitatives	11	18	9	9	5	-40%
51 I have full confidence in the new safety intitatives	13	21	3	9	6	-50%
52 I am sceptical of this new approach and don't believe it will last	7	11	7	18	9	21%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	7	25	8	8	4	-44%
54 I think the management is making intelligent decisions to protect the future of the company	7	22	5	13	5	-25%
55 I am satisfied with my current employment situation	7	13	18	9	5	-15%

Summary of Survey Results 2nd Quarter 2007

Q No. Question	Number Surveyed					54 Responses	51	94%
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (15)	56-65 (19)	65+ (1)			
1 Age (During the above Survey Period)	10	9	14	17				1
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)			2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			7
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	35	11	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5			
7 There is a feeling of coperation an teamwork amongst the members of my work team	8	24	5	9	5			-41%
8 My daily duties interfere with my abilities to comply with safety regulations	10	20	3	13	5			-33%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	3	14	7	20	7			27%
10 Before making a decision my superviror considers all employee concerns and opinions	5	13	7	20	6			18%
11 My goals and values are a concern of the Company	11	20	3	14	3			-43%
12 The Company has done everything possible to make my workplace safe	10	13	5	17	6			-8%
13 I believe that most managers will keep to their word and do what they say they will do	13	24	4	8	2			-75%
14 Careless work by other members of my team does not increase my daily duties	8	18	5	12	8			-12%
15 The management of the Company is highly informed about the safety issues at site	7	23	7	9	5			-35%
16 I am strongly encouraged to report safety concerns	12	21	4	10	4			-53%
17 Memebbers of my team have received enough training and knowledge to perform their daily duties	9	21	8	9	4			-43%
18 Help is available from the company when I have a problem	6	18	8	15	4			-14%
19 Most managers are competent at managing their workers	9	18	11	9	4			-37%
20 Management acts quickly to correct safety issues	8	14	3	19	7			6%
21 If I Have a concern about safety I will make it known	10	26	2	9	4			-57%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	11	24	4	8	4			-59%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	11	24	5	8	3			-63%
24 My supervisor explains and provides additional information when employees request it	7	14	10	13	7			-2%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	6	15	13	14	3			-14%
26 Information about importanrt events and situations are shared within my workteam	10	26	4	6	5			-59%
27 I feel that the Company really takes an interest in my wellbeing	5	14	8	19	5			10%
28 People in my workplace treat each other with repsect	11	22	5	9	4			-53%
29 Management is presently acting to make the workplace safer	8	16	14	9	4			-29%
30 I feel comfortable discussing safetey issues with my supervisor	12	19	4	14	2			-49%
	8	20	4	12	7			-20%

Agreement Factor

Summary of Survey Results 2nd Quarter 2007						
Q No. Question	Number Surveyed					94%
Employee Background	(xx) denotes maxmium representation based on totals from sample data					
	25-35 (11)	36-45 (10)	46-55 (15)	56-65 (19)	65+ (1)	
1 Age (During the above Survey Period)	10	9	14	17		1
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	7
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	35	11	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	4	11	8	21	7	31%
32 All job decisions are applied consistently across all affected employees	12	23	4	9	3	-63%
33 My work group wants to meet its objectives successfully	7	11	11	18	4	2%
34 I believe that managers apply the same rules for all workers	13	23	5	8	2	-73%
35 Management is willing to invest money and effort to improve the level of safety	9	21	8	9	4	-43%
36 Safety procedures/requirements are stopping me from performing my work efficiently	7	15	7	14	8	2%
37 I regularly suggest ways of improving safety	10	24	3	6	8	-43%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	27	4	7	4	-59%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7	16	13	11	4	-22%
40 The protection of workers from occupational exposure to hazards is a high priority with management	7	22	7	12	3	-35%
41 We are regularly asked for our ideas and suggestions about job safety	7	20	10	11	3	-33%
42 In the last quarter I was involved in a near miss which I didn't report	6	8	9	18	10	35%
43 I feel motivated to perfrom work to the best of my ability	14	18	3	11	5	-49%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	8	21	10	9	3	-43%
45 I feel I am treated fairly but those senior to me	10	25	5	9	2	-63%
46 I feel safe in my workplace	11	25	3	9	3	-63%
47 I activley participate in the Company Safety Initiatives	6	22	3	14	6	-16%
48 I have witnessed an improvement in safety as a result of these inititatives	7	10	8	19	7	18%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	8	13	4	18	8	10%
50 I believe management fully supports the new safety intitatives	10	18	9	9	5	-37%
51 I have full confidence in the new safety intitatives	11	21	3	10	6	-41%
52 I am sceptical of this new approach and don't believe it will last	7	11	5	17	11	27%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	7	24	7	9	4	-41%
54 I think the management is making intelligent decisions to protect the future of the company	6	21	5	14	5	-18%
55 I am satisfied with my current employment situation	7	12	16	9	7	-6%

Agreement Factor

Summary of Survey Results 3rd Quarter 2007

Q No. Question	Number Surveyed	54 Responses				54	100%	Agreement Factor
Employee Background	(xx) denotes maxmium representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)			
1 Age (During the above Survey Period)	11	10	13	18			2	
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		2	
	27	14	7	4				
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)			
	25	11	5	5			8	
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	36	13	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
6 My Contributions and Sugesstions are valued by the Company	7	21	9	11	6		-22%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	6	21	10	13	4		-22%	
8 My daily duties interfere with my abilities to comply with safety regulations	3	15	11	18	7		20%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	5	18	8	16	7		4%	
10 Before making a decision my superviror considers all employee concerns and opinions	9	21	4	15	5		-26%	
11 My goals and values are a concern of the Company	9	13	8	18	6		-2%	
12 The Company has done everything possible to make my workplace safe	8	25	7	10	4		-43%	
13 I believe that most managers will keep to their word and do what they say they will do	9	16	9	12	8		-11%	
14 Careless work by other members of my team does not increase my daily duties	7	22	9	12	4		-30%	
15 The management of the Company is highly informed about the safety issues at site	10	20	8	14	2		-41%	
16 I am strongly encouraged to report safety concerns	8	23	8	11	4		-37%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	6	22	5	15	6		-13%	
18 Help is available from the company when I have a problem	8	16	17	9	4		-28%	
19 Most managers are competent at managing their workers	7	17	3	20	7		6%	
20 Management acts quickly to correct safety issues	10	27	1	12	4		-50%	
21 If I Have a concern about safety I will make it known	10	22	3	15	4		-35%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	9	28	4	10	3		-56%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	10	18	9	12	5		-30%	
24 My supervisor explains and provides additional information when employees request it	7	15	13	15	4		-11%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	9	23	8	10	4		-43%	
26 Information about importanrt events and situations are shared within my workteam	6	14	8	21	5		9%	
27 I feel that the Company really takes an interest in my wellbeing	9	25	3	13	4		-41%	
28 People in my workplace treat each other with repsect	8	16	13	13	4		-20%	
29 Management is presently acting to make the workplace safer	7	25	4	14	4		-31%	
30 I feel comfortable discussing safetey issues with my supervisor	8	18	5	19	4		-13%	

Summary of Survey Results 3rd Quarter 2007

Q No. Question	Number Surveyed	54 Responses				54	100%	Agreement Factor
Employee Background	(xx) denotes maximum representation based on totals from sample data							
	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)			
1 Age (During the above Survey Period)	11	10	13	18			2	
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		2	
	27	14	7	4				
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)			
	25	11	5	5			8	
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)					
	36	13	5					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree			
	1	2	3	4	5			
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	6	14	8	19	7	13%		
32 All job decisions are applied consistently across all affected employees	12	24	4	11	3	-57%		
33 My work group wants to meet its objectives successfully	7	11	14	16	6	6%		
34 I believe that managers apply the same rules for all workers	12	18	6	16	2	-41%		
35 Management is willing to invest money and effort to improve the level of safety	8	17	13	11	5	-22%		
36 Safety procedures/requirements are stopping me from performing my work efficiently	4	23	6	14	7	-6%		
37 I regularly suggest ways of improving safety	10	23	3	12	6	-35%		
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	23	6	11	5	-37%		
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7	19	8	13	7	-11%		
40 The protection of workers from occupational exposure to hazards is a high priority with management	7	22	7	15	3	-28%		
41 We are regularly asked for our ideas and suggestions about job safety	7	22	7	14	4	-26%		
42 In the last quarter I was involved in a near miss which I didn't report	5	15	13	14	7	6%		
43 I feel motivated to perfrom work to the best of my ability	14	20	2	13	5	-46%		
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	10	20	15	7	2	-54%		
45 I feel I am treated fairly but those senior to me	10	26	5	9	4	-54%		
46 I feel safe in my workplace	10	25	4	11	4	-48%		
47 I activley participate in the Company Safety Initiatives	7	18	4	22	3	-7%		
48 I have witnessed an improvement in safety as a result of these intitatives	7	10	5	27	5	24%		
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety intitatives	8	13	5	18	10	17%		
50 I believe management fully supports the new safety intitatives	10	18	7	14	5	-26%		
51 I have full confidence in the new safety intitatives	10	20	4	14	6	-26%		
52 I am sceptical of this new approach and don't believe it will last	6	15	5	17	11	22%		
53 I think the management is making intelligent decisions to protect the safety of the company's employees	9	24	5	9	7	-35%		
54 I think the management is making intelligent decisions to protect the future of the company	6	21	7	12	8	-9%		
55 I am satisfied with my current employment situation	7	14	13	15	5	-6%		

Agreement Factor

Summary of Survey Results 4th Quarter 2007

Q No. Question	Number Surveyed	54 Responses				52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data						
	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)		
1 Age (During the above Survey Period)	10	9	14	18			1
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)		
5 Ethnicity	24	10	5	5			8
	Indian Sub Con. (36)	Phillip (13)	West (5)				
	35	12	5				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
	1	2	3	4	5		
6 My Contributions and Sugestions are valued by the Company	7	16	8	15	6		-6%
7 There is a feeling of coperation an teamwork amongst the members of my work team	5	11	9	21	6		23%
8 My daily duties interfere with my abilities to comply with safety regulations	5	21	5	16	5		-10%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	7	22	8	11	4		-33%
10 Before making a decision my superviror considers all employee concerns and opinions	8	14	4	19	7		6%
11 My goals and values are a concern of the Company	7	12	8	19	6		10%
12 The Company has done everything possible to make my workplace safe	7	21	4	14	6		-17%
13 I believe that most managers will keep to their word and do what they say they will do	6	15	9	13	9		8%
14 Careless work by other members of my team does not increase my daily duties	7	17	3	21	4		-4%
15 The management of the Company is highly informed about the safety issues at site	8	17	2	21	4		-8%
16 I am strongly encouraged to report safety concerns	8	18	4	17	5		-13%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5	17	5	17	8		12%
18 Help is available from the company when I have a problem	8	14	12	12	6		-12%
19 Most managers are competent at managing their workers	7	13	3	20	9		21%
20 Management acts quickly to correct safety issues	8	21	2	17	4		-23%
21 If I Have a concern about safety I will make it known	8	16	6	17	5		-10%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	9	21	4	14	4		-33%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	10	24	5	9	4		-52%
24 My supervisor explains and provides additional information when employees request it	6	10	14	17	5		10%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8	18	6	16	4		-19%
26 Information about importanrt events and situations are shared within my workteam	6	13	5	23	5		15%
27 I feel that the Company really takes an interest in my wellbeing	8	19	3	17	5		-15%
28 People in my workplace treat each other with repsect	7	15	10	15	5		-8%
29 Management is presently acting to make the workplace safer	6	21	4	18	3		-17%
30 I feel comfortable discussing safetey issues with my supervisor	8	15	5	19	5		-4%

Agreement Factor

31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	6	14	11	15	6	2%
32 All job decisions are applied consistently across all affected employees	9	21	4	14	4	-33%
33 My work group wants to meet its objectives successfully	5	11	6	24	6	29%
34 I believe that managers apply the same rules for all workers	9	14	6	17	6	-6%
35 Management is willing to invest money and effort to improve the level of safety	8	14	7	18	5	-4%
36 Safety procedures/requirements are stopping me from performing my work efficiently	6	23	6	12	5	-25%
37 I regularly suggest ways of improving safety	8	18	3	17	6	-10%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	19	5	14	5	-25%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7	15	6	17	7	4%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	17	6	19	5	4%
41 We are regularly asked for our ideas and suggestions about job safety	6	17	5	18	6	2%
42 In the last quarter I was involved in a near miss which I didn't report	6	19	11	11	5	-19%
43 I feel motivated to perform work to the best of my ability	12	18	4	11	7	-33%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	17	13	7	6	-31%
45 I feel I am treated fairly but those senior to me	8	23	5	12	4	-37%
46 I feel safe in my workplace	8	19	4	17	4	-19%
47 I actively participate in the Company Safety Initiatives	6	15	3	22	6	13%
48 I have witnessed an improvement in safety as a result of these initiatives	4	9	5	27	7	46%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	7	12	4	18	11	27%
50 I believe management fully supports the new safety initiatives	9	17	5	15	6	-15%
51 I have full confidence in the new safety initiatives	9	19	4	14	6	-21%
52 I am sceptical of this new approach and don't believe it will last	7	15	5	15	10	12%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	9	22	5	8	8	-31%
54 I think the management is making intelligent decisions to protect the future of the company	6	18	6	12	10	4%
55 I am satisfied with my current employment situation	7	12	12	15	6	2%

Summary of Survey Results 2007									
Q No. Question	Number Surveyed		54 Responses		52.25		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	10	10	14	18	1				
2 Years with the Company (During the above Survey Period)	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
	26.5	14	6.75	3.25	1.75				
3 Position (During the above Survey Period)	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
	24.25	10.5	5	5	7.5				
5 Ethnicity	Indian Sub Con. (76)	Phillip (29)	West (10)	Approval Factor					
	35.25	12.25	4.75	Green denotes improvement					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
6 My Contributions and Sugesstions are valued by the Company	7.25	21.25	7.75	11	5	-44%	-41%	-22%	-6%
7 There is a feeling of coperation an teamwork amongst the members of my work team	7.5	18.75	7.5	13.5	5	-46%	-33%	-22%	23%
8 My daily duties interfere with my abilities to comply with safety regulations	3.5	15.5	8.5	18.25	6.5	29%	27%	20%	-10%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	5	16.5	7	17.75	6	37%	18%	4%	-33%
10 Before making a decision my superviror considers all employee concerns and opinions	9.5	19.5	4.5	14.25	4.5	-54%	-43%	-26%	6%
11 My goals and values are a concern of the Company	9.25	13	7.5	16.75	5.75	-25%	-8%	-2%	10%
12 The Company has done everything possible to make my workplace safe	10	24.25	5	9.25	3.75	-77%	-75%	-43%	-17%
13 I believe that most managers will keep to their word and do what they say they will do	8	16.5	7.5	12.25	8	-17%	-12%	-11%	8%
14 Careless work by other members of my team does not increase my daily duties	7	21.75	6.75	12.5	4.25	-44%	-35%	-30%	-4%
15 The management of the Company is highly informed about the safety issues at site	10.25	20.25	5.25	13.25	3.25	-60%	-53%	-41%	-8%
16 I am strongly encouraged to report safety concerns	8.5	21.5	7.25	11	4	-56%	-43%	-37%	-13%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5.75	19.75	6.75	14.5	5.5	-29%	-14%	-13%	12%
18 Help is available from the company when I have a problem	8.5	18	12	9.5	4.25	-54%	-37%	-28%	-12%
19 Most managers are competent at managing their workers	7.5	15.25	3	19	7.5	-4%	6%	6%	21%
20 Management acts quickly to correct safety issues	10	25.5	1.75	11.25	3.75	-75%	-57%	-50%	-23%
21 If I Have a concern about safety I will make it known	10.25	21.75	4.5	11.75	4	-69%	-59%	-35%	-10%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	10.5	25.25	4	9.5	3	-85%	-63%	-56%	-33%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	8.25	17	9.5	12.25	5.25	2%	-2%	-30%	-52%
24 My supervisor explains and provides additional information when employees request it	6.5	14.5	13.5	14	3.75	-31%	-14%	-11%	10%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	9.25	23.5	5.5	10	4	-63%	-59%	-43%	-19%
26 Information about importanrt events and situations are shared within my workteam	5.75	13.75	7.5	20.5	4.75	2%	10%	9%	15%
27 I feel that the Company really takes an interest in my wellbeing	9.75	22.5	4.75	11.25	4	-65%	-53%	-41%	-15%
28 People in my workplace treat each other with repsect	7.75	16	13	11.5	4	-35%	-29%	-20%	-8%
29 Management is presently acting to make the workplace safer	9	22	4.75	13.5	3	-60%	-49%	-31%	-17%
30 I feel comfortable discussing safetey issues with my supervisor	8	18.75	5.25	15.5	4.75	-38%	-20%	-13%	-4%

Summary of Survey Results 2007									
Q No. Question	Number Surveyed		54 Responses		52.25		97%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	10	10	14	18	1				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	26.5	14	6.75	3.25	1.75				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	24.25	10.5	5	5	7.5				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	35.25	12.25	4.75	Approval Factor					
						Green denotes improvement			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	Q4
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	5	12	9.25	20	6	31%	31%	13%	2%
32 All job decisions are applied consistently across all affected employees	11.25	23.5	4.5	9.75	3.25	-75%	-63%	-57%	-33%
33 My work group wants to meet its objectives successfully	6.5	11	11	18.5	5.25	2%	2%	6%	29%
34 I believe that managers apply the same rules for all workers	12.25	19.5	5.5	12	3	-81%	-73%	-41%	-6%
35 Management is willing to invest money and effort to improve the level of safety	8.5	18	9.75	11.75	4.25	-44%	-43%	-22%	-4%
36 Safety procedures/requirements are stopping me from performing my work efficiently	5.5	19.25	7.5	13.5	6.5	0%	2%	-6%	-25%
37 I regularly suggest ways of improving safety	9.75	22	3.75	11	5.75	-58%	-43%	-35%	-10%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	9	23.75	5.75	9.25	4.5	-60%	-59%	-37%	-25%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	7	17.25	10.5	12	5.5	-35%	-22%	-11%	4%
40 The protection of workers from occupational exposure to hazards is a high priority with management	7	20.25	7.25	13.75	4	-37%	-35%	-28%	4%
41 We are regularly asked for our ideas and suggestions about job safety	6.75	20.75	7.25	13.25	4.25	-38%	-33%	-26%	2%
42 In the last quarter I was involved in a near miss which I didn't report	5.25	13	12	14.75	7.25	23%	35%	6%	-19%
43 I feel motivated to perfrom work to the best of my ability	13.5	19.25	3.25	11	5.25	-62%	-49%	-46%	-33%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	19.25	12.75	7.75	3.5	-44%	-43%	-54%	-31%
45 I feel I am treated fairly but those senior to me	9.5	25	5.25	9.25	3.25	-63%	-63%	-54%	-37%
46 I feel safe in my workplace	10.25	24	4	10.75	3.25	-79%	-63%	-48%	-19%
47 I activley participate in the Company Safety Initiatives	6.25	19.75	4.25	17.25	4.75	-33%	-16%	-7%	13%
48 I have witnessed an improvement in safety as a result of these inititatives	6.75	10	7.5	21.75	6.25	-6%	18%	24%	46%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety inititatives	7.75	13.25	4.5	17.5	9.25	2%	10%	17%	27%
50 I believe management fully supports the new safety inititatives	10	17.75	7.5	11.75	5.25	-40%	-37%	-26%	-15%
51 I have full confidence in the new safety inititatives	10.75	20.25	3.5	11.75	6	-50%	-41%	-26%	-21%
52 I am sceptical of this new approach and don't believe it will last	6.75	13	5.5	16.75	10.25	21%	27%	22%	12%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	8	23.75	6.25	8.5	5.75	-44%	-41%	-35%	-31%
54 I think the management is making intelligent decisions to protect the future of the company	6.25	20.5	5.75	12.75	7	-25%	-18%	-9%	4%
55 I am satisfied with my current employment situation	7	12.75	14.75	12	5.75	-15%	-6%	-6%	2%

Summary of Survey Results 1st Quarter 2008

Q No. Question	Number Surveyed	54 Responses				52	96%
Employee Background	(xx) denotes maxmium representation based on totals from sample data						
	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)		
1 Age (During the above Survey Period)	11	9	14	17			1
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)		1
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)		
	25	10	4	5			8
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)				
	35	13	4				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
	1	2	3	4	5		
6 My Contributions and Sugestions are valued by the Company	6	13	8	18	7		13%
7 There is a feeling of coperation an teamwork amongst the members of my work team	5	9	6	26	6		37%
8 My daily duties interfere with my abilities to comply with safety regulations	8	19	6	14	5		-21%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	11	22	4	11	4		-48%
10 Before making a decision my superviror considers all employee concerns and opinions	7	13	6	16	10		17%
11 My goals and values are a concern of the Company	7	12	4	22	7		19%
12 The Company has done everything possible to make my workplace safe	6	17	7	14	8		2%
13 I believe that most managers will keep to their word and do what they say they will do	6	12	6	16	12		31%
14 Careless work by other members of my team does not increase my daily duties	6	14	5	22	5		12%
15 The management of the Company is highly informed about the safety issues at site	5	15	5	21	6		15%
16 I am strongly encouraged to report safety concerns	5	14	7	19	7		17%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	5	17	5	17	8		12%
18 Help is available from the company when I have a problem	4	15	12	15	6		8%
19 Most managers are competent at managing their workers	6	11	5	20	10		33%
20 Management acts quickly to correct safety issues	5	16	6	18	7		12%
21 If I Have a concern about safety I will make it known	6	11	10	19	6		15%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	9	17	4	16	6		-13%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	14	24	4	7	3		-75%
24 My supervisor explains and provides additional information when employees request it	6	10	11	20	5		15%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	8	15	6	17	6		-4%
26 Information about importanrt events and situations are shared within my workteam	5	11	6	25	5		27%
27 I feel that the Company really takes an interest in my wellbeing	7	15	5	19	6		4%
28 People in my workplace treat each other with repsect	5	14	11	16	6		8%
29 Management is presently acting to make the workplace safer	5	16	4	22	5		12%
30 I feel comfortable discussing safetey issues with my supervisor	6	13	5	22	6		17%

Agreement Factor

Summary of Survey Results 1st Quarter 2008						
Q No. Question	Number Surveyed					54 Responses
Employee Background	(xx) denotes maxmium representation based on totals from sample data					52 96%
1 Age (During the above Survey Period)	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)	1
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	1
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)	8
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	35	13	4			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	7	16	13	13	3	-21%
32 All job decisions are applied consistently across all affected employees	9	21	4	14	4	-33%
33 My work group wants to meet its objectives successfully	4	11	6	25	6	35%
34 I believe that managers apply the same rules for all workers	8	14	6	18	6	0%
35 Management is willing to invest money and effort to improve the level of safety	4	12	6	25	5	29%
36 Safety procedures/requirements are stopping me from performing my work efficiently	8	23	6	10	5	-37%
37 I regularly suggest ways of improving safety	7	15	4	19	7	8%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	8	14	5	20	5	0%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	4	9	12	19	8	35%
40 The protection of workers from occupational exposure to hazards is a high priority with management	5	13	6	22	6	21%
41 We are regularly asked for our ideas and suggestions about job safety	6	13	4	23	6	19%
42 In the last quarter I was involved in a near miss which I didn't report	7	21	11	9	4	-35%
43 I feel motivated to perfrom work to the best of my ability	7	17	6	14	8	-2%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	9	16	10	10	7	-19%
45 I feel I am treated fairly but those senior to me	8	17	6	15	6	-12%
46 I feel safe in my workplace	7	15	4	22	4	2%
47 I activley participate in the Company Safety Initiatives	5	13	3	25	6	27%
48 I have witnessed an improvement in safety as a result of these inititatives	4	9	4	27	8	50%
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety intitatives	7	11	6	15	13	31%
50 I believe management fully supports the new safety intitatives	8	14	5	16	9	8%
51 I have full confidence in the new safety intitatives	7	15	4	19	7	8%
52 I am sceptical of this new approach and don't believe it will last	7	16	7	13	9	2%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	7	19	5	9	12	0%
54 I think the management is making intelligent decisions to protect the future of the company	6	15	6	14	11	17%
55 I am satisfied with my current employment situation	5	11	12	16	8	21%

Agreement Factor

Summary of Survey Results 2nd Quarter 2008							
Q No.	Question	Number Surveyed	54 Responses			50	93%
	Employee Background	(xx) denotes maximum representation based on totals from sample data					
		25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)	
1	Age (During the above Survey Period)	11	9	12	17	1	
2	Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
		26	13	6	4	1	
3	Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
		24	9	4	5	8	
5	Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
		33	12	5			
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
		1	2	3	4	5	
6	My Contributions and Sugestions are valued by the Company	4	10	7	21	8	38%
7	There is a feeling of coperation an teamwork amongst the members of my work team	5	7	4	26	8	50%
8	My daily duties interfere with my abilities to comply with safety regulations	9	19	5	13	4	-32%
9	Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	12	24	3	8	3	-68%
10	Before making a decision my superviror considers all employee concerns and opinions	5	10	7	18	10	36%
11	My goals and values are a concern of the Company	6	10	4	22	8	32%
12	The Company has done everything possible to make my workplace safe	6	14	5	15	10	18%
13	I believe that most managers will keep to their word and do what they say they will do	4	11	7	16	12	42%
14	Careless work by other members of my team does not increase my daily duties	4	12	6	22	6	28%
15	The management of the Company is highly informed about the safety issues at site	4	13	6	21	6	24%
16	I am strongly encouraged to report safety concerns	5	12	6	20	7	24%
17	Memebers of my team have received enough training and knowledge to perform their daily duties	5	13	6	17	9	24%
18	Help is available from the company when I have a problem	4	13	10	16	7	18%
19	Most managers are competent at managing their workers	5	11	4	20	10	38%
20	Management acts quickly to correct safety issues	5	13	5	18	9	26%
21	If I Have a concern about safety I will make it known	6	9	9	20	6	22%
22	If I observe another team member who did not know how to do a certain task safely, I would show them how	9	14	4	16	7	-4%
23	In the last quarter I personally know someone in my work group who had an injury and did not report it	14	21	4	7	4	-68%
24	My supervisor explains and provides additional information when employees request it	4	9	11	20	6	30%
25	My supervisor would use whatever power they have to help me solve problems in my workplace	7	13	6	18	6	6%
26	Information about importanrt events and situations are shared within my workteam	5	8	4	28	5	40%
27	I feel that the Company really takes an interest in my wellbeing	5	11	6	20	8	30%
28	People in my workplace treat each other with repsect	5	12	11	16	6	12%
29	Management is presently acting to make the workplace safer	6	13	5	18	8	18%
30	I feel comfortable discussing safetey issues with my supervisor	6	13	3	22	6	18%
							Agreement Factor

Summary of Survey Results 2nd Quarter 2008							
Q No.	Question	Number Surveyed	54 Responses			50	93%
	Employee Background	(xx) denotes maximum representation based on totals from sample data					
		25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)	
1	Age (During the above Survey Period)	11	9	12	17	1	
2	Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	
		26	13	6	4	1	
3	Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	
		24	9	4	5	8	
5	Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
		33	12	5			
		Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
		1	2	3	4	5	
31	I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	9	16	12	11	2	-38%
32	All job decisions are applied consistently across all affected employees	7	19	5	13	6	-16%
33	My work group wants to meet its objectives successfully	4	7	5	26	8	54%
34	I believe that managers apply the same rules for all workers	6	12	5	20	7	20%
35	Management is willing to invest money and effort to improve the level of safety	3	7	7	25	8	56%
36	Safety procedures/requirements are stopping me from performing my work efficiently	10	23	4	9	4	-52%
37	I regularly suggest ways of improving safety	6	13	5	19	7	16%
38	Employees are allowed to challenge or appeal job decisions made by the supervisor	7	11	7	20	5	10%
39	I would defend and justify decisions made by my supervisor if they were not present to do so	4	9	6	19	12	52%
40	The protection of workers from occupational exposure to hazards is a high priority with management	5	7	6	24	8	46%
41	We are regularly asked for our ideas and suggestions about job safety	4	11	3	25	7	40%
42	In the last quarter I was involved in a near miss which I didn't report	10	21	9	7	3	-56%
43	I feel motivated to perform work to the best of my ability	5	15	4	17	9	20%
44	I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	8	13	8	12	9	2%
45	I feel I am treated fairly but those senior to me	6	15	4	17	8	12%
46	I feel safe in my workplace	6	13	4	22	5	14%
47	I actively participate in the Company Safety Initiatives	4	11	3	25	7	40%
48	I have witnessed an improvement in safety as a result of these initiatives	3	6	4	29	8	66%
49	I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	5	9	4	18	14	54%
50	I believe management fully supports the new safety initiatives	4	9	6	20	11	50%
51	I have full confidence in the new safety initiatives	5	12	5	20	8	28%
52	I am sceptical of this new approach and don't believe it will last	9	19	6	12	4	-34%
53	I think the management is making intelligent decisions to protect the safety of the company's employees	7	15	4	10	14	18%
54	I think the management is making intelligent decisions to protect the future of the company	5	11	6	16	12	38%
55	I am satisfied with my current employment situation	3	9	11	14	13	50%

Agreement Factor

Summary of Survey Results 3rd Quarter 2008

Q No. Question	Number Surveyed					54 Responses	54	100%	Agreement Factor
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
1 Age (During the above Survey Period)	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)				
	11	10	13	18	2				
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)				
	27	14	7	4	2				
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendant (5)	Manager (8)				
	25	11	5	5	8				
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)						
	36	13	5						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree				
6 My Contributions and Sugestions are valued by the Company	1	2	3	4	5				
7 There is a feeling of coperation an teamwork amongst the members of my work team	4	9	7	25	9				48%
8 My daily duties interfere with my abilities to comply with safety regulations	4	7	3	30	10				65%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	11	23	6	10	4				-50%
10 Before making a decision my superviror considers all employee concerns and opinions	13	27	2	9	3				-70%
11 My goals and values are a concern of the Company	4	9	5	22	14				61%
12 The Company has done everything possible to make my workplace safe	3	8	5	27	11				65%
13 I believe that most managers will keep to their word and do what they say they will do	4	12	6	19	13				46%
14 Careless work by other members of my team does not increase my daily duties	3	11	6	20	14				57%
15 The management of the Company is highly informed about the safety issues at site	3	15	4	24	8				35%
16 I am strongly encouraged to report safety concerns	4	10	7	25	8				43%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	4	10	7	24	9				44%
18 Help is available from the company when I have a problem	3	9	7	24	11				57%
19 Most managers are competent at managing their workers	4	13	11	14	12				31%
20 Management acts quickly to correct safety issues	4	10	3	26	11				56%
21 If I Have a concern about safety I will make it known	4	13	4	22	11				43%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	2	6	5	32	9				74%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	5	11	6	21	11				41%
24 My supervisor explains and provides additional information when employees request it	15	28	6	4	1				-96%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	2	6	8	28	10				70%
26 Information about importanrt events and situations are shared within my workteam	7	13	10	18	6				6%
27 I feel that the Company really takes an interest in my wellbeing	5	8	5	29	7				46%
28 People in my workplace treat each other with repsect	4	10	7	24	9				44%
29 Management is presently acting to make the workplace safer	5	14	10	17	8				17%
30 I feel comfortable discussing safetey issues with my supervisor	4	11	4	26	9				46%
	5	12	3	26	8				37%

Summary of Survey Results 3rd Quarter 2008						
Q No. Question	Number Surveyed					100%
Employee Background	(xx) denotes maximum representation based on totals from sample data					
1 Age (During the above Survey Period)	25-35 (11)	36-45 (10)	46-55 (13)	56-65 (18)	65+ (2)	2
2 Years with the Company (During the above Survey Period)	5-10 (27)	11-15 (14)	16-20 (7)	21-25 (4)	26+ (2)	2
3 Position (During the above Survey Period)	Labour (25)	Supervisor (11)	Foreman (5)	Superintendent (5)	Manager (8)	8
5 Ethnicity	Indian Sub Con. (36)	Phillip (13)	West (5)			
	36	13	5			
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
	1	2	3	4	5	
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	8	27	9	9	1	-59%
32 All job decisions are applied consistently across all affected employees	7	16	7	18	6	0%
33 My work group wants to meet its objectives successfully	4	7	9	26	8	50%
34 I believe that managers apply the same rules for all workers	6	12	9	20	7	19%
35 Management is willing to invest money and effort to improve the level of safety	3	7	7	28	9	61%
36 Safety procedures/requirements are stopping me from performing my work efficiently	11	28	4	8	3	-67%
37 I regularly suggest ways of improving safety	5	10	6	24	9	41%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	7	11	11	20	5	9%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	4	9	6	23	12	56%
40 The protection of workers from occupational exposure to hazards is a high priority with management	3	7	4	31	9	67%
41 We are regularly asked for our ideas and suggestions about job safety	4	8	4	29	9	57%
42 In the last quarter I was involved in a near miss which I didn't report	13	27	6	5	3	-78%
43 I feel motivated to perform work to the best of my ability	5	12	3	23	11	43%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	7	12	6	20	9	22%
45 I feel I am treated fairly but those senior to me	4	13	6	22	9	35%
46 I feel safe in my workplace	5	11	4	23	11	44%
47 I actively participate in the Company Safety Initiatives	4	11	3	28	8	46%
48 I have witnessed an improvement in safety as a result of these initiatives	3	6	4	32	9	70%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	2	9	3	23	17	81%
50 I believe management fully supports the new safety initiatives	3	8	5	25	13	69%
51 I have full confidence in the new safety initiatives	4	8	7	26	9	52%
52 I am sceptical of this new approach and don't believe it will last	10	24	8	9	3	-54%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	6	14	4	16	14	33%
54 I think the management is making intelligent decisions to protect the future of the company	5	11	7	19	12	41%
55 I am satisfied with my current employment situation	3	8	10	19	14	61%

Agreement Factor

Summary of Survey Results 2007									
Q No. Question	Number Surveyed		54 Responses		52		96%		
Employee Background	(xx) denotes maximum representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	11	9	13	17	1				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	26.33	13.67	6.67	4.00	1.33				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendent (11)	Manager (17)				
3 Position (During the above Survey Period)	24.67	10.00	4.33	5.00	8.00				
	Indian Sub Con. (76)	Phillip (29)	West (10)			Approval Factor			
5 Ethnicity	34.67	12.67	4.67	Green denotes improvement					
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	
6 My Contributions and Sugesstions are valued by the Company	4.67	10.67	7.33	21.33	8.00	13%	38%	48%	
7 There is a feeling of coperation an teamwork amongst the members of my work team	4.67	7.67	4.33	27.33	8.00	37%	50%	65%	
8 My daily duties interfere with my abilities to comply with safety regulations	9.33	20.33	5.67	12.33	4.33	-21%	-32%	-50%	
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	12.00	24.33	3.00	9.33	3.33	-48%	-68%	-70%	
10 Before making a decision my superviror considers all employee concerns and opinions	5.33	10.67	6.00	18.67	11.33	17%	36%	61%	
11 My goals and values are a concern of the Company	5.33	10.00	4.33	23.67	8.67	19%	32%	65%	
12 The Company has done everything possible to make my workplace safe	5.33	14.33	6.00	16.00	10.33	2%	18%	46%	
13 I believe that most managers will keep to their word and do what they say they will do	4.33	11.33	6.33	17.33	12.67	31%	42%	57%	
14 Careless work by other members of my team does not increase my daily duties	4.33	13.67	5.00	22.67	6.33	12%	28%	35%	
15 The management of the Company is highly informed about the safety issues at site	4.33	12.67	6.00	22.33	6.67	15%	24%	43%	
16 I am strongly encouraged to report safety concerns	4.67	12.00	6.67	21.00	7.67	17%	24%	44%	
17 Memebers of my team have received enough training and knowledge to perform their daily duties	4.33	13.00	6.00	19.33	9.33	12%	24%	57%	
18 Help is available from the company when I have a problem	4.00	13.67	11.00	15.00	8.33	8%	18%	31%	
19 Most managers are competent at managing their workers	5.00	10.67	4.00	22.00	10.33	33%	38%	56%	
20 Management acts quickly to correct safety issues	4.67	14.00	5.00	19.33	9.00	12%	26%	43%	
21 If I Have a concern about safety I will make it known	4.67	8.67	8.00	23.67	7.00	15%	22%	74%	
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	7.67	14.00	4.67	17.67	8.00	-13%	-4%	41%	
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	14.33	24.33	4.67	6.00	2.67	-75%	-68%	-96%	
24 My supervisor explains and provides additional information when employees request it	4.00	8.33	10.00	22.67	7.00	15%	30%	70%	
25 My supervisor would use whatever power they have to help me solve problems in my workplace	7.33	13.67	7.33	17.67	6.00	-4%	6%	6%	
26 Information about importanrt events and situations are shared within my workteam	5.00	9.00	5.00	27.33	5.67	27%	40%	46%	
27 I feel that the Company really takes an interest in my wellbeing	5.33	12.00	6.00	21.00	7.67	4%	30%	44%	
28 People in my workplace treat each other with repsect	5.00	13.33	10.67	16.33	6.67	8%	12%	17%	
29 Management is presently acting to make the workplace safer	5.00	13.33	4.33	22.00	7.33	12%	18%	46%	
30 I feel comfortable discussing safetey issues with my supervisor	5.67	12.67	3.67	23.33	6.67	17%	18%	37%	

Summary of Survey Results 2007									
Q No. Question	Number Surveyed		54 Responses		52		96%		
Employee Background	(xx) denotes maxmium representation based on totals from sample data								
	25-35 (27)	36-45 (29)	46-55 (29)	56-65 (30)	65+ (0)				
1 Age (During the above Survey Period)	11	9	13	17	1				
	5-10 (62)	11-15 (29)	16-20 (14)	21-25 (8)	26+ (2)				
2 Years with the Company (During the above Survey Period)	26.33	13.67	6.67	4.00	1.33				
	Labour (56)	Supervisor (20)	Foreman (11)	Superintendant (11)	Manager (17)				
3 Position (During the above Survey Period)	24.67	10.00	4.33	5.00	8.00				
	Indian Sub Con. (76)	Phillip (29)	West (10)						
5 Ethnicity	34.67	12.67	4.67						
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Approval Factor			
						Green denotes improvement			
						Red indicates a decrease			
	1	2	3	4	5	Q1	Q2	Q3	
31 I've had an injury in the last quarter that I did not report that probably would have been classidfied as a recordable	8.00	19.67	11.33	11.00	2.00	-21%	-38%	-59%	
32 All job decisions are applied consistently across all affected employees	7.67	18.67	5.33	15.00	5.33	-33%	-16%	0%	
33 My work group wants to meet its objectives successfully	4.00	8.33	6.67	25.67	7.33	35%	54%	50%	
34 I believe that managers apply the same rules for all workers	6.67	12.67	6.67	19.33	6.67	0%	20%	19%	
35 Management is willing to invest money and effort to improve the level of safety	3.33	8.67	6.67	26.00	7.33	29%	56%	61%	
36 Safety procedures/requirements are stopping me from performing my work efficiently	9.67	24.67	4.67	9.00	4.00	-37%	-52%	-67%	
37 I regularly suggest ways of improving safety	6.00	12.67	5.00	20.67	7.67	8%	16%	41%	
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	7.33	12.00	7.67	20.00	5.00	0%	10%	9%	
39 I would defend and justify decisions made by my supervisor if they were not present to do so	4.00	9.00	8.00	20.33	10.67	35%	52%	56%	
40 The protection of workers from occupational exposure to hazards is a high priority with management	4.33	9.00	5.33	25.67	7.67	21%	46%	67%	
41 We are regularly asked for our ideas and suggestions about job safety	4.67	10.67	3.67	25.67	7.33	19%	40%	57%	
42 In the last quarter I was involved in a near miss which I didn't report	10.00	23.00	8.67	7.00	3.33	-35%	-56%	-78%	
43 I feel motivated to perfrom work to the best of my ability	5.67	14.67	4.33	18.00	9.33	-2%	20%	43%	
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	8.00	13.67	8.00	14.00	8.33	-19%	2%	22%	
45 I feel I am treated fairly but those senior to me	6.00	15.00	5.33	18.00	7.67	-12%	12%	35%	
46 I feel safe in my workplace	6.00	13.00	4.00	22.33	6.67	2%	14%	44%	
47 I activley participate in the Company Safety Initiatives	4.33	11.67	3.00	26.00	7.00	27%	40%	46%	
48 I have witnessed an improvement in safety as a result of these inititatives	3.33	7.00	4.00	29.33	8.33	50%	66%	70%	
49 I feel that overall my productivity or ability to perfrom my daily duties has improved as a result of safety inititatives	4.67	9.67	4.33	18.67	14.67	31%	54%	81%	
50 I believe management fully supports the new safety inititatives	5.00	10.33	5.33	20.33	11.00	8%	50%	69%	
51 I have full confidence in the new safety inititatives	5.33	11.67	5.33	21.67	8.00	8%	28%	52%	
52 I am sceptical of this new approach and don't believe it will last	8.67	19.67	7.00	11.33	5.33	2%	-34%	-54%	
53 I think the management is making intelligent decisions to protect the safety of the company's employees	6.67	16.00	4.33	11.67	13.33	0%	18%	33%	
54 I think the management is making intelligent decisions to protect the future of the company	5.33	12.33	6.33	16.33	11.67	17%	38%	41%	
55 I am satisfied with my current employment situation	3.67	9.33	11.00	16.33	11.67	21%	50%	61%	

Summary of Survey Results Company A

Q No. Question

Q No. Question	Strongly Disagree				Disagree				Neither				Agree				Strongly Agree		
	2004				2005				2006				2007				2008		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
6 My Contributions and Sugestions are valued by the Company	-58%	-68%	-70%	-74%	-70%	-82%	-75%	-65%	-44%	-54%	-58%	-60%	-44%	-41%	-22%	-6%	13%	38%	48%
7 There is a feeling of coperation an teamwork amongst the members of my work team	-63%	-68%	-67%	-66%	-66%	-62%	-69%	-67%	-40%	-61%	-81%	-78%	-46%	-33%	-22%	23%	37%	50%	65%
8 My daily duties interfere with my abilities to comply with safety regulations	8%	22%	26%	36%	34%	32%	38%	41%	38%	46%	37%	46%	29%	27%	20%	-10%	-21%	-32%	-50%
9 Reporting minor injuries creates too many problems that me and/or my supervisor feel its best to not report them	46%	48%	46%	49%	43%	52%	56%	50%	17%	33%	58%	54%	37%	18%	4%	-33%	-48%	-68%	-70%
10 Before making a decision my superviror considers all employee concerns and opinions	-40%	-60%	-59%	-68%	-75%	-64%	-60%	-67%	-42%	-52%	-63%	-72%	-54%	-43%	-26%	6%	17%	36%	61%
11 My goals and values are a concern of the Company	-27%	-32%	-48%	-49%	-57%	-64%	-38%	-33%	-8%	-22%	-46%	-42%	-25%	-8%	-2%	10%	19%	32%	65%
12 The Company has done everything possible to make my workplace safe	-88%	-94%	-94%	-96%	-96%	-88%	-88%	-96%	-58%	-72%	-106%	-88%	-77%	-75%	-43%	-17%	2%	18%	46%
13 I believe that most managers will keep to their word and do what they say they will do	-13%	-18%	-33%	-34%	-42%	-42%	-33%	-30%	-10%	-24%	-46%	-30%	-17%	-12%	-11%	8%	31%	42%	57%
14 Careless work by other members of my team does not increase my daily duties	-65%	-66%	-67%	-75%	-68%	-56%	-60%	-50%	-21%	-33%	-60%	-54%	-44%	-35%	-30%	-4%	12%	28%	35%
15 The management of the Company is highly informed about the safety issues at site	-87%	-96%	-96%	-102%	-87%	-84%	-88%	-76%	-38%	-52%	-83%	-82%	-60%	-53%	-41%	-8%	15%	24%	43%
16 I am strongly encouraged to report safety concerns	-79%	-88%	-91%	-92%	-81%	-44%	-79%	-76%	-35%	-54%	-88%	-70%	-56%	-43%	-37%	-13%	17%	24%	44%
17 Memebers of my team have received enough training and knowledge to perform their daily duties	0%	-4%	-15%	-26%	-25%	-8%	-31%	-19%	19%	-2%	-31%	-34%	-29%	-14%	-13%	12%	12%	24%	57%
18 Help is available from the company when I have a problem	-48%	-52%	-57%	-64%	-60%	-54%	-60%	-59%	-17%	-26%	-63%	-64%	-54%	-37%	-28%	-12%	8%	18%	31%
19 Most managers are competent at managing their workers	-12%	-18%	-26%	-21%	-25%	-14%	-25%	-13%	8%	-9%	-27%	-14%	-4%	6%	6%	21%	33%	38%	56%
20 Management acts quickly to correct safety issues	-98%	-106%	-98%	-94%	-55%	-68%	-73%	-87%	-56%	-63%	-85%	-94%	-75%	-57%	-50%	-23%	12%	26%	43%
21 If I Have a concern about safety I will make it known	-110%	-120%	-113%	-109%	-79%	-72%	-77%	-87%	-35%	-44%	-92%	-90%	-69%	-59%	-35%	-10%	15%	22%	74%
22 If I observe another team member who did not know how to do a certain task safely, I would show them how	-81%	-82%	-83%	-91%	-87%	-68%	-60%	-85%	-46%	-57%	-71%	-92%	-85%	-63%	-56%	-33%	-13%	-4%	41%
23 In the last quarter I personally know someone in my work group who had an injury and did not report it	15%	28%	33%	40%	43%	8%	12%	7%	-46%	-17%	35%	8%	2%	-2%	-30%	-52%	-75%	-68%	-96%
24 My supervisor explains and provides additional information when employees request it	-35%	-44%	-46%	-51%	-47%	-34%	-40%	-31%	2%	-24%	-33%	-38%	-31%	-14%	-11%	10%	15%	30%	70%
25 My supervisor would use whatever power they have to help me solve problems in my workplace	-67%	-74%	-74%	-74%	-60%	-62%	-50%	-67%	-23%	-26%	-65%	-74%	-63%	-59%	-43%	-19%	-4%	6%	6%
26 Information about importanrt events and situations are shared within my workteam	10%	8%	7%	8%	4%	12%	-15%	4%	29%	7%	2%	-2%	2%	10%	9%	15%	27%	40%	46%
27 I feel that the Company really takes an interest in my wellbeing	-113%	-118%	-115%	-87%	-81%	-78%	-67%	-74%	-15%	-37%	-85%	-88%	-65%	-53%	-41%	-15%	4%	30%	44%
28 People in my workplace treat each other with repsect	-35%	-36%	-37%	-40%	-36%	-26%	-8%	-48%	-10%	-31%	-48%	-50%	-35%	-29%	-20%	-8%	8%	12%	17%
29 Management is presently acting to make the workplace safer	-88%	-94%	-93%	-96%	-74%	-62%	-79%	-80%	-15%	-44%	-77%	-82%	-60%	-49%	-31%	-17%	12%	18%	46%
30 I feel comfortable discussing safetey issues with my supervisor	-65%	-66%	-67%	-64%	-53%	-38%	-56%	-41%	8%	-11%	-44%	-44%	-38%	-20%	-13%	-4%	17%	18%	37%

Summary of Survey Results Company A

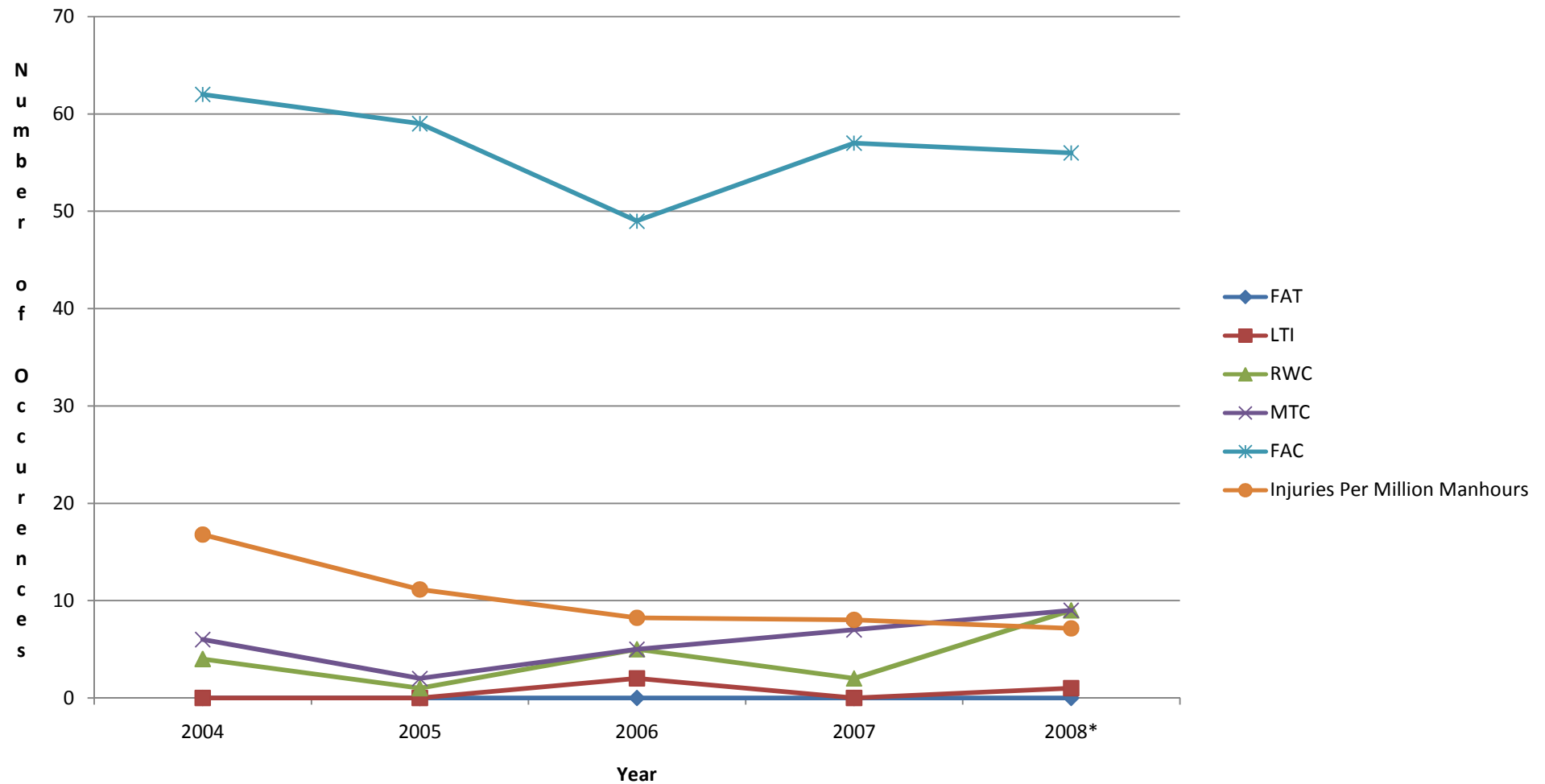
Q No. Question

Q No. Question	Strongly Disagree				Disagree				Neither				Agree				Strongly Agree		
	2004				2005				2006				2007				2008		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
31 I've had an injury in the last quarter that I did not report that probably would have been classified as a recordable	62%	66%	74%	74%	68%	58%	48%	63%	-23%	24%	60%	58%	31%	31%	13%	2%	-21%	-38%	-59%
32 All job decisions are applied consistently across all affected employees	-81%	-84%	-87%	-89%	-77%	-72%	-63%	-69%	-37%	-48%	-71%	-78%	-75%	-63%	-57%	-33%	-33%	-16%	0%
33 My work group wants to meet its objectives successfully	21%	18%	15%	15%	19%	16%	10%	9%	33%	2%	0%	-4%	2%	2%	6%	29%	35%	54%	50%
34 I believe that managers apply the same rules for all workers	-108%	-108%	-106%	-89%	-60%	-50%	-62%	-67%	-37%	-37%	-85%	-86%	-81%	-73%	-41%	-6%	0%	20%	19%
35 Management is willing to invest money and effort to improve the level of safety	-54%	-60%	-61%	-62%	-38%	-38%	-50%	-48%	-6%	-37%	-60%	-62%	-44%	-43%	-22%	-4%	29%	56%	61%
36 Safety procedures/requirements are stopping me from performing my work efficiently	13%	20%	22%	28%	28%	22%	29%	9%	-27%	13%	27%	18%	0%	2%	-6%	-25%	-37%	-52%	-67%
37 I regularly suggest ways of improving safety	-69%	-78%	-83%	-91%	-75%	-76%	-69%	-69%	-10%	-28%	-69%	-78%	-58%	-43%	-35%	-10%	8%	16%	41%
38 Employees are allowed to challenge or appeal job decisions made by the supervisor	-38%	-46%	-46%	-51%	-60%	-56%	-60%	-56%	8%	-13%	-65%	-66%	-60%	-59%	-37%	-25%	0%	10%	9%
39 I would defend and justify decisions made by my supervisor if they were not present to do so	-29%	-30%	-31%	-26%	-17%	-38%	-6%	-31%	19%	-2%	-33%	-36%	-35%	-22%	-11%	4%	35%	52%	56%
40 The protection of workers from occupational exposure to hazards is a high priority with management	-12%	-14%	-24%	-25%	-8%	-16%	-29%	-39%	8%	-15%	-52%	-54%	-37%	-35%	-28%	4%	21%	46%	67%
41 We are regularly asked for our ideas and suggestions about job safety	-58%	-62%	-63%	-58%	-66%	-52%	-63%	-52%	12%	-11%	-65%	-64%	-38%	-33%	-26%	2%	19%	40%	57%
42 In the last quarter I was involved in a near miss which I didn't report	56%	72%	72%	64%	38%	38%	35%	44%	-42%	30%	40%	48%	23%	35%	6%	-19%	-35%	-56%	-78%
43 I feel motivated to perform work to the best of my ability	-88%	-90%	-93%	-94%	-83%	-80%	-92%	-72%	-10%	-19%	-83%	-80%	-62%	-49%	-46%	-33%	-2%	20%	43%
44 I feel I receive adequate rewards (salary, bonus, recognition) for my efforts	-13%	-32%	-35%	-40%	-28%	-20%	-17%	-48%	-35%	-41%	-58%	-58%	-44%	-43%	-54%	-31%	-19%	2%	22%
45 I feel I am treated fairly but those senior to me	-63%	-68%	-69%	-74%	-53%	-38%	-40%	-65%	-29%	-46%	-77%	-78%	-63%	-63%	-54%	-37%	-12%	12%	35%
46 I feel safe in my workplace	-85%	-88%	-89%	-94%	-77%	-74%	-81%	-89%	-25%	-31%	-85%	-92%	-79%	-63%	-48%	-19%	2%	14%	44%
47 I actively participate in the Company Safety Initiatives	-17%	-22%	-24%	-34%	-47%	-56%	-37%	-41%	21%	-20%	-42%	-50%	-33%	-16%	-7%	13%	27%	40%	46%
48 I have witnessed an improvement in safety as a result of these initiatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-6%	18%	24%	46%	50%	66%	70%
49 I feel that overall my productivity or ability to perform my daily duties has improved as a result of safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2%	10%	17%	27%	31%	54%	81%
50 I believe management fully supports the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-40%	-37%	-26%	-15%	8%	50%	69%
51 I have full confidence in the new safety initiatives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-50%	-41%	-26%	-21%	8%	28%	52%
52 I am sceptical of this new approach and don't believe it will last	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21%	27%	22%	12%	2%	-34%	-54%
53 I think the management is making intelligent decisions to protect the safety of the company's employees	-77%	-84%	-85%	-89%	-70%	-68%	-60%	-72%	2%	-13%	-67%	-70%	-44%	-41%	-35%	-31%	0%	18%	33%
54 I think the management is making intelligent decisions to protect the future of the company	-48%	-56%	-57%	-60%	-66%	-58%	-37%	-37%	8%	-15%	-33%	-40%	-25%	-18%	-9%	4%	17%	38%	41%
55 I am satisfied with my current employment situation	-21%	-30%	-33%	-36%	-38%	-34%	-17%	-20%	19%	-7%	-21%	-26%	-15%	-6%	-6%	2%	21%	50%	61%

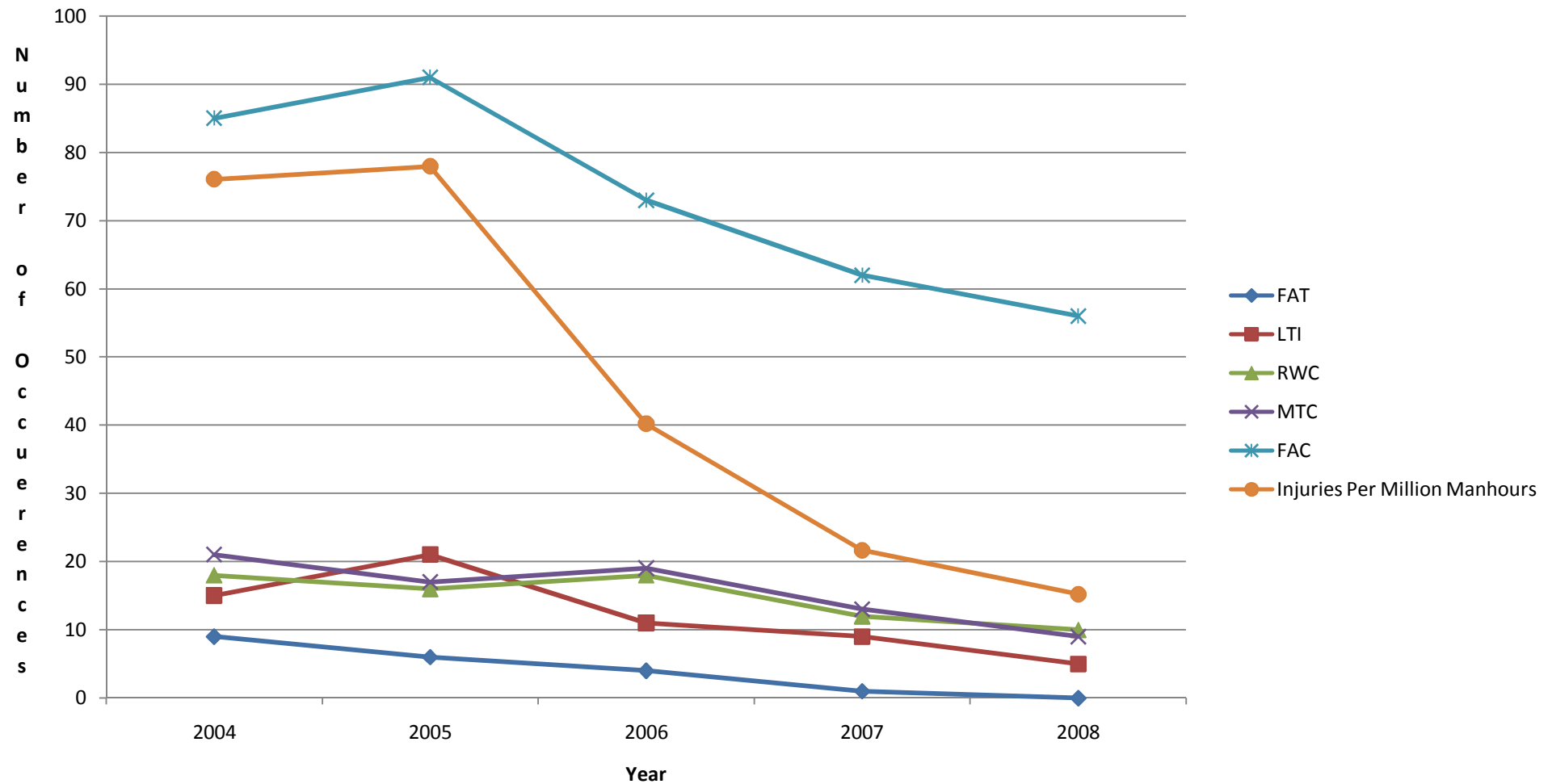
Appendix 3

Comparative Tables

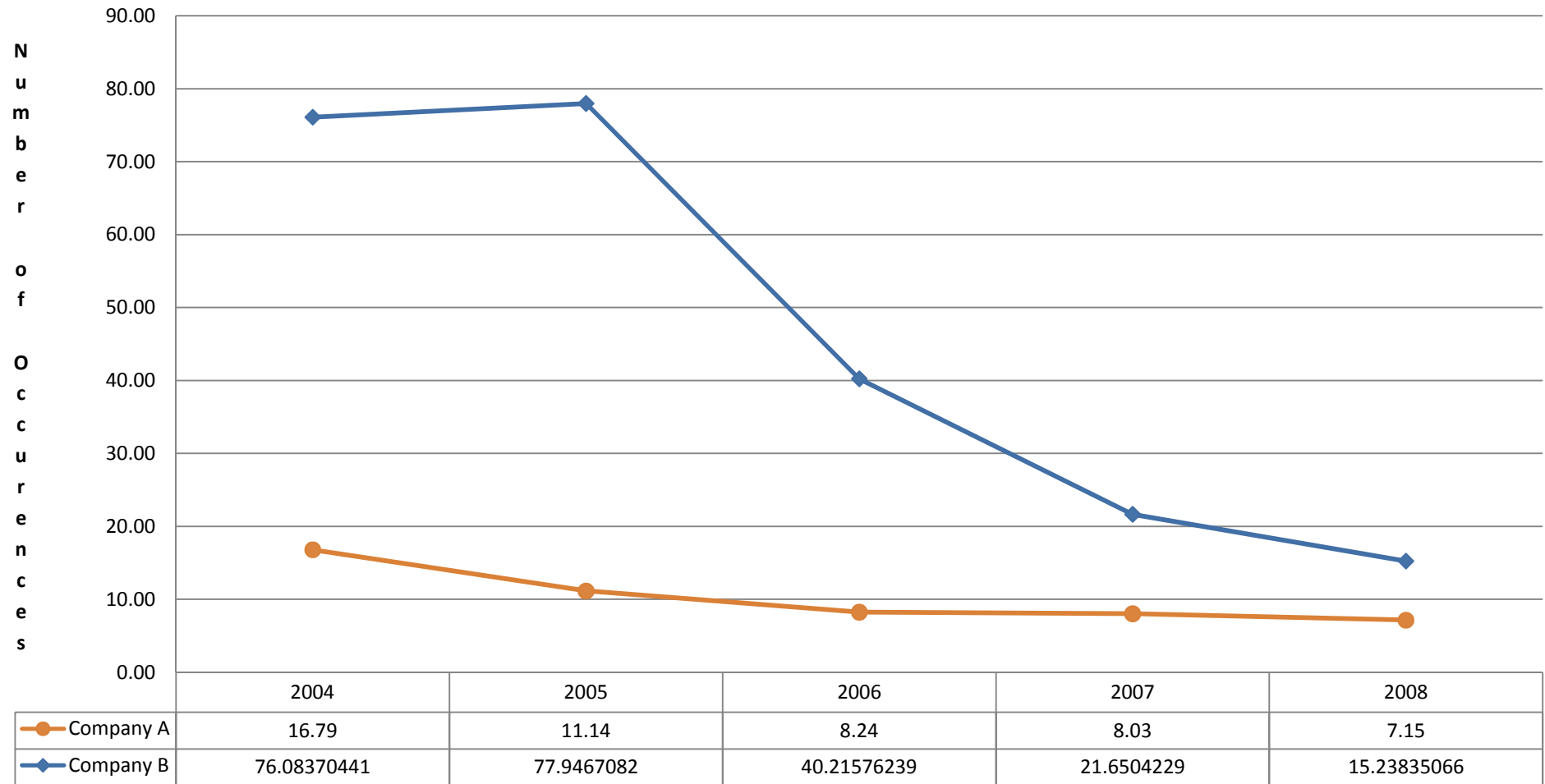
Comapny A Accident Figures for Study Period Including Injuries Per Million Manhours (Accident Rate)



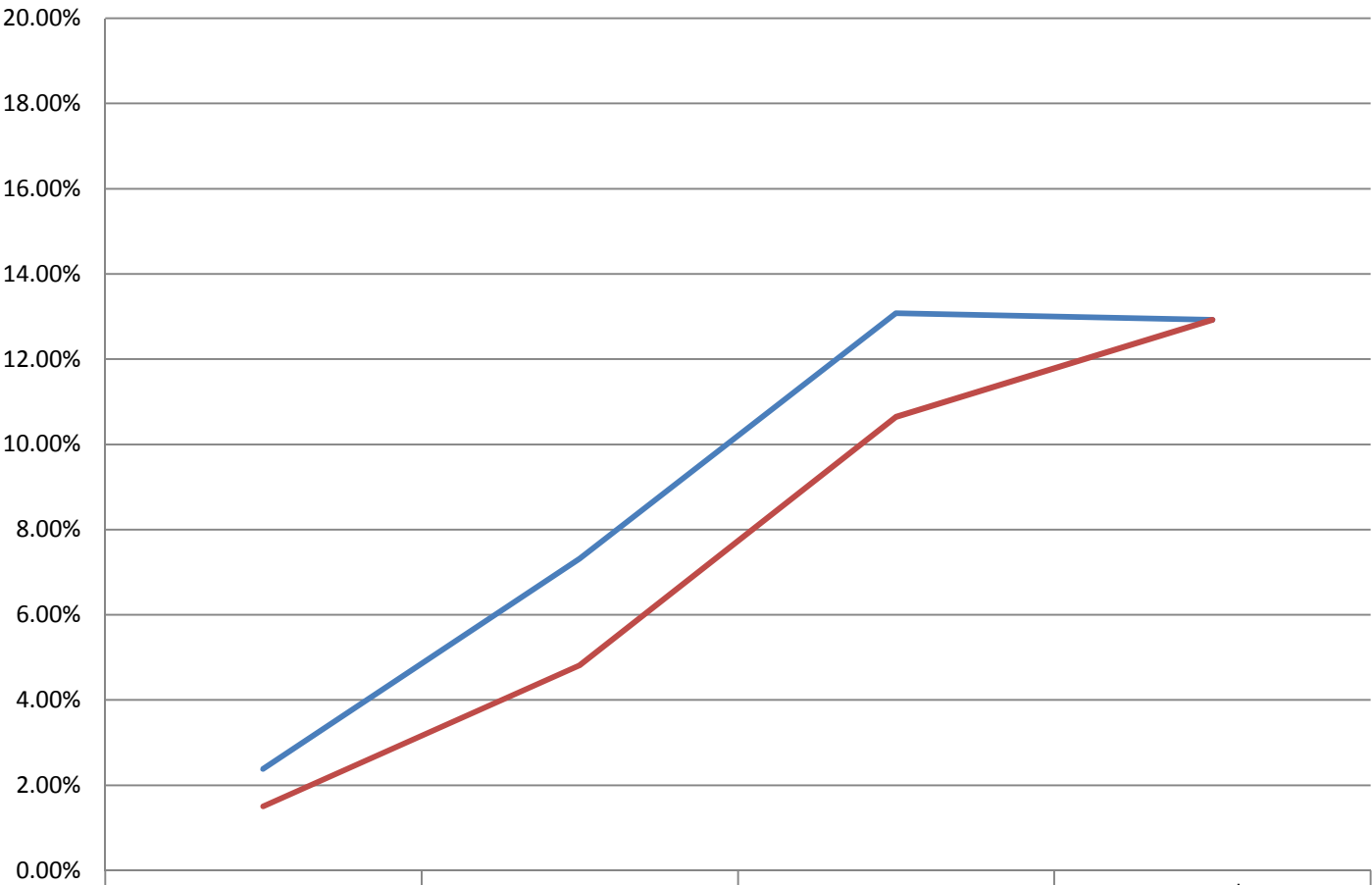
Comapny B Accident Figures for Study Period Including Injuries Per Million Manhours (Accident Rate)



Comapny A Vs Company B Accident Figures for Study Period Injuries Per Million Manhours (Accident Rate)

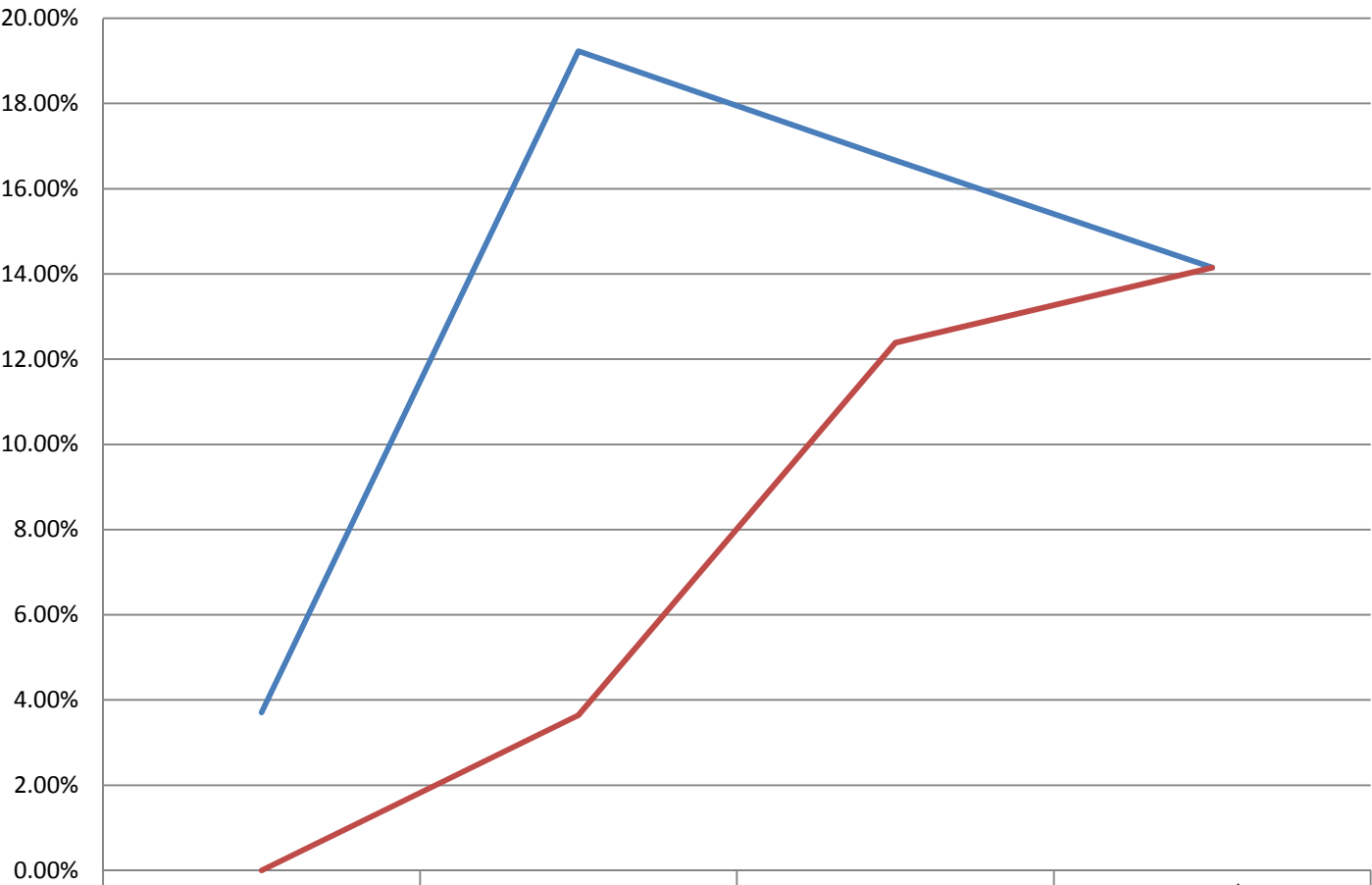


Company A % Improvement in Productivity



% Improvement in Productivity N/A	2.38%	7.32%	13.08%	12.93%
% Improvement in Productivity Due to Safety	1.50%	4.81%	10.65%	12.93%

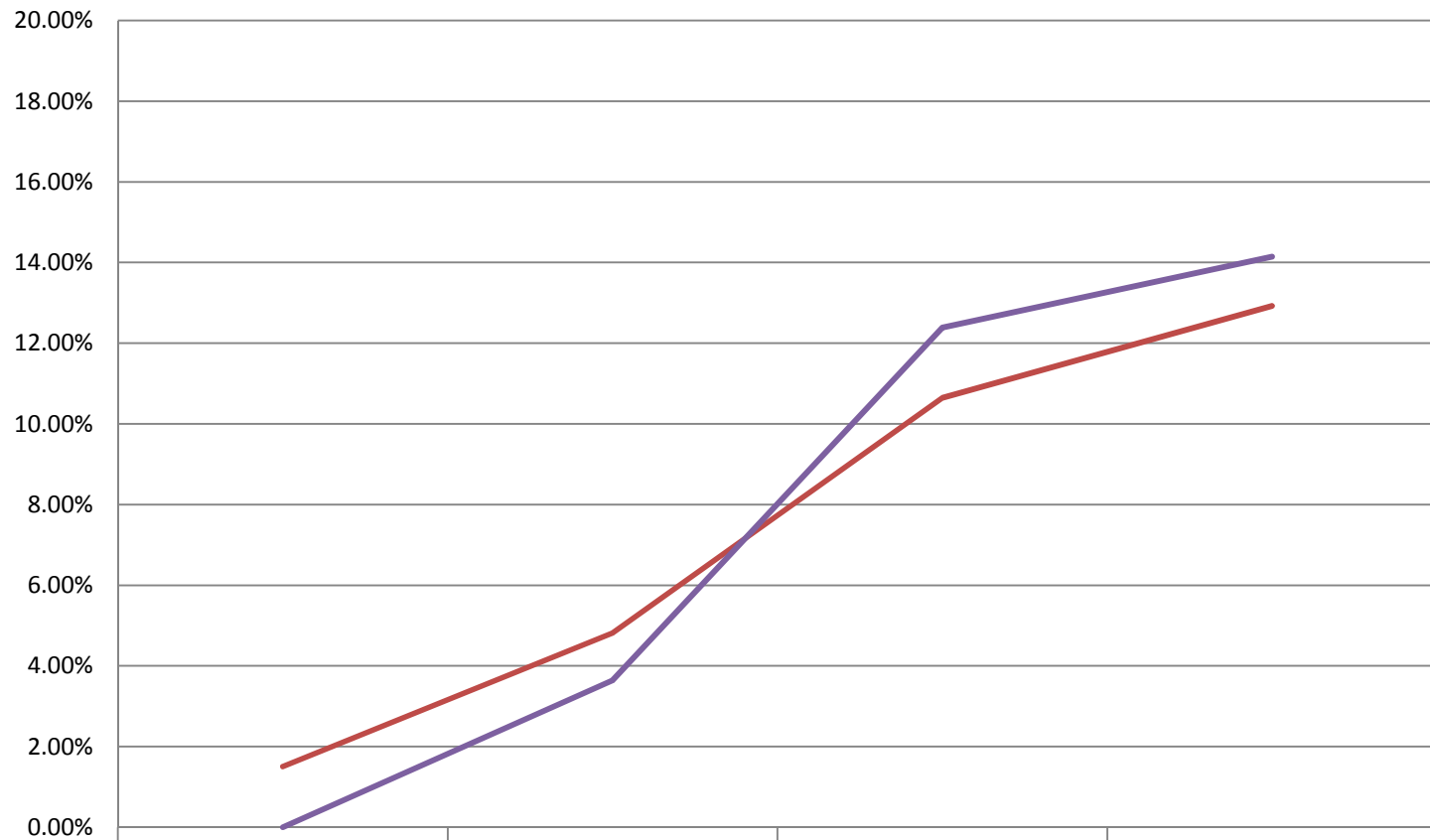
Company B Annual % Productivity Increase



% Improvement in Productivity	3.70%	19.23%	16.67%	14.15%
% Improvement in Productivity Due to Safety	0.00%	3.64%	12.39%	14.15%

Company A Vs Company B

% Improvement in Productivity Due To Safety



Company A % Improvement Due To Safety	1.50%	4.81%	10.65%	12.93%
Company B % Improvement Due To Safety	0	0.036394275	0.123886621	0.141473338