



Longwall Specialty Services



The mining industry is constantly changing due to market conditions, retention of employee skill sets and improvements of mining machinery in regards to automation.

Current Longwall Mining Operations have seen improvements to Longwall Mining Units thus increasing the extraction rates as compared to years past. This has created a problem in regards to Gate Development. Continuous Miner Units development rates have fallen in recent years due to retention of experienced operators (retirement) and geological conditions. In years past Development has kept the LW Units a panel ready to mine.



Longwall Specialty Services



In past practices the mine would shut down gate development due to positive lead times and utilize the development mining crews to assist with the recovery and installation of the Longwall Unit.

In today's longwall mines especially with mines that have multiple Longwall Units it's been a detriment to the mine to temporarily suspend mining in the development units to assist the Longwall Department with Longwall Recovery and Installation. This is where the opportunity for Specialized Longwall Contractor Services has come into play.

WWW.GMSMINERREPAIR.COM



Longwall Specialty Services



Why utilize Longwall Specialty Crew Contractor Services?

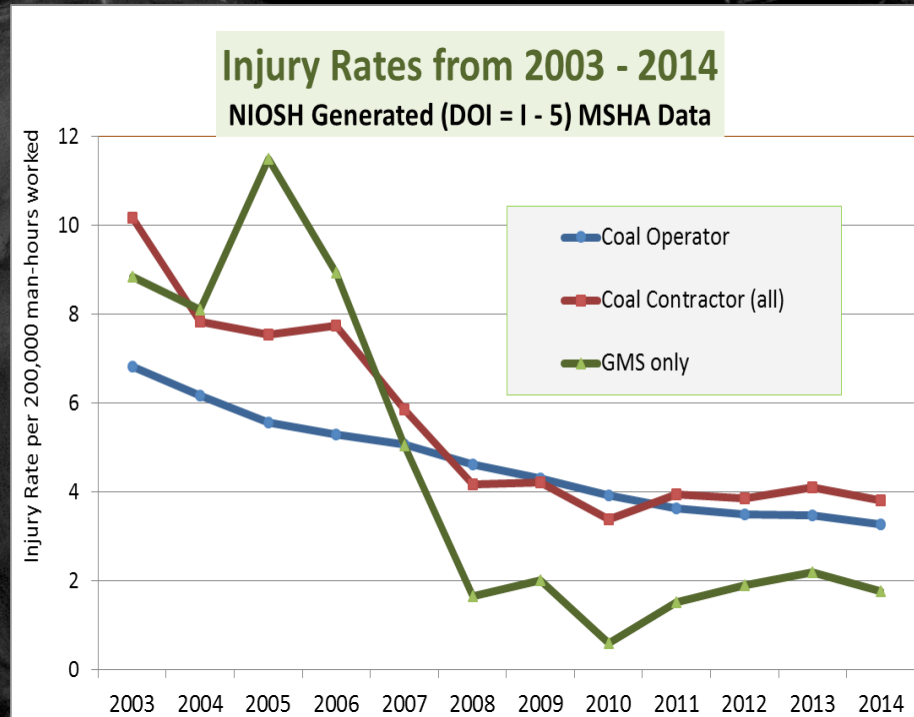
- Contractor employees specialize in specific skills set directly related to Longwall recovery and installation services. This is their core job 365 days a year. Current GMS LW Core group has an average of 4.5 years of continuous longwall install and recovery experience with an average of 6 to 9 longwall moves per year and in various coal mines with different geological conditions and recovery methods.
- With specialized experience and a unique set of skills, our crews quickly develop a routine that allows them to recognize AND minimize exposure to workplace hazards.
- Efficiencies in Longwall Relocations and installs is maximized through continuous repetition.

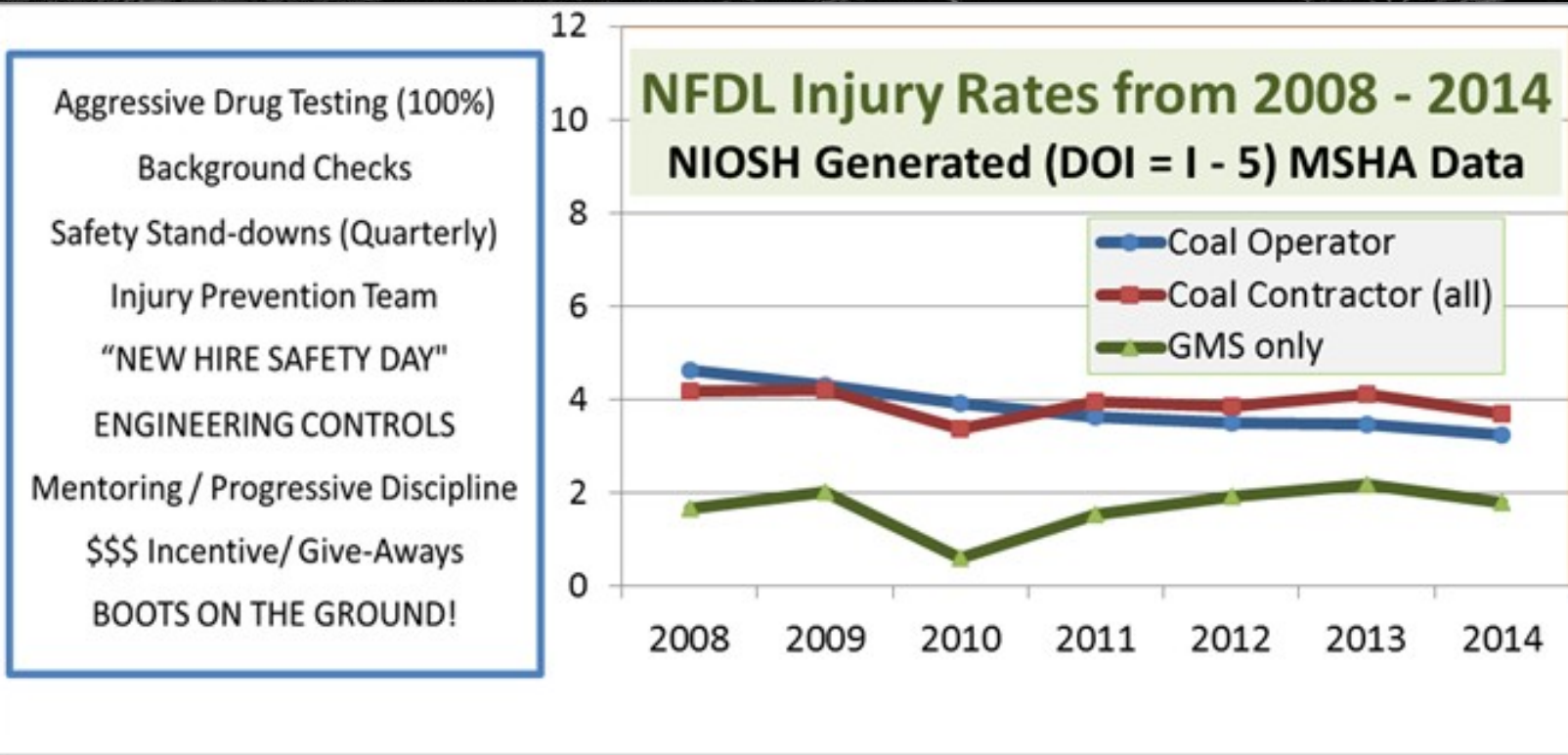


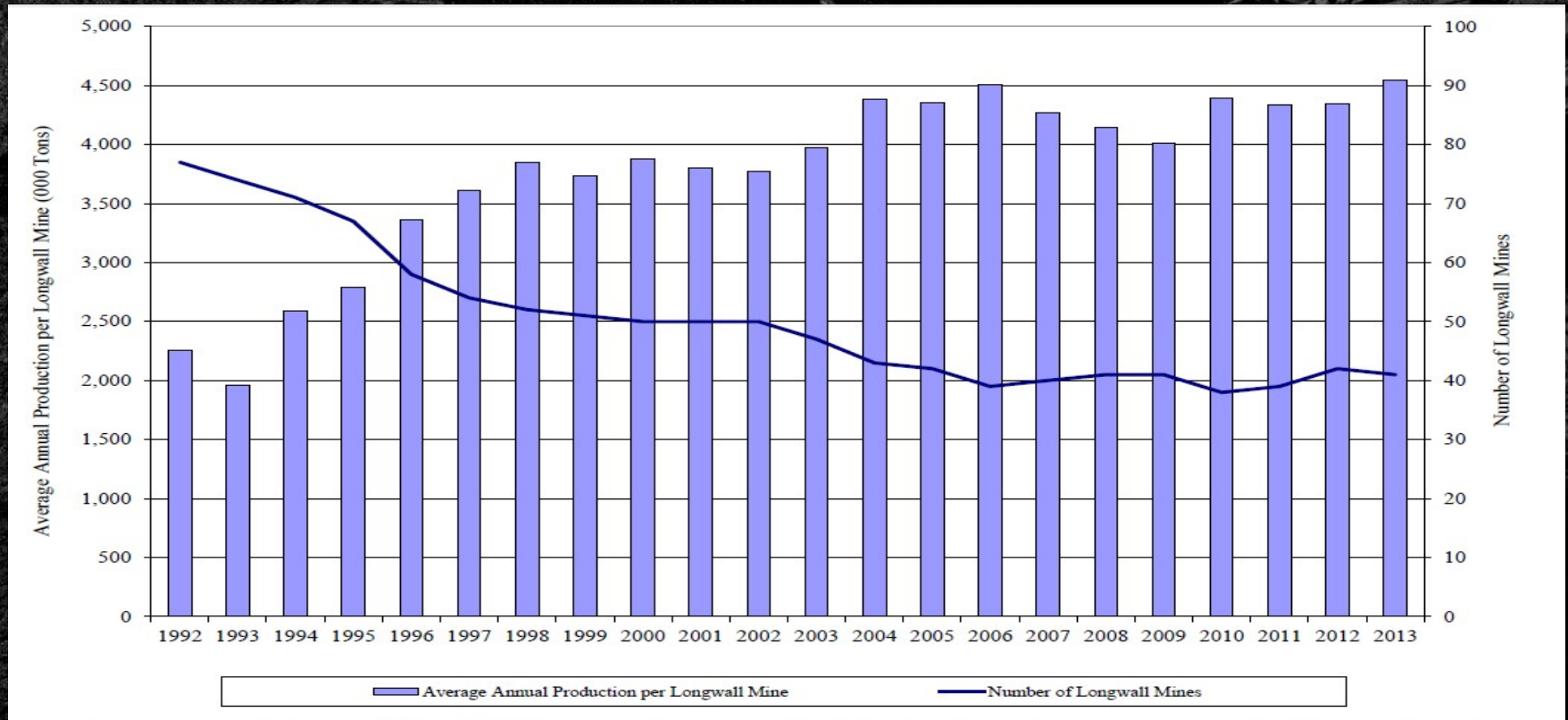
Introduction



- GMS logged over 2.1 million man hours
- GMS achieved a 1.7 IR rate for 2015
- GMS currently has over 1,300 employees







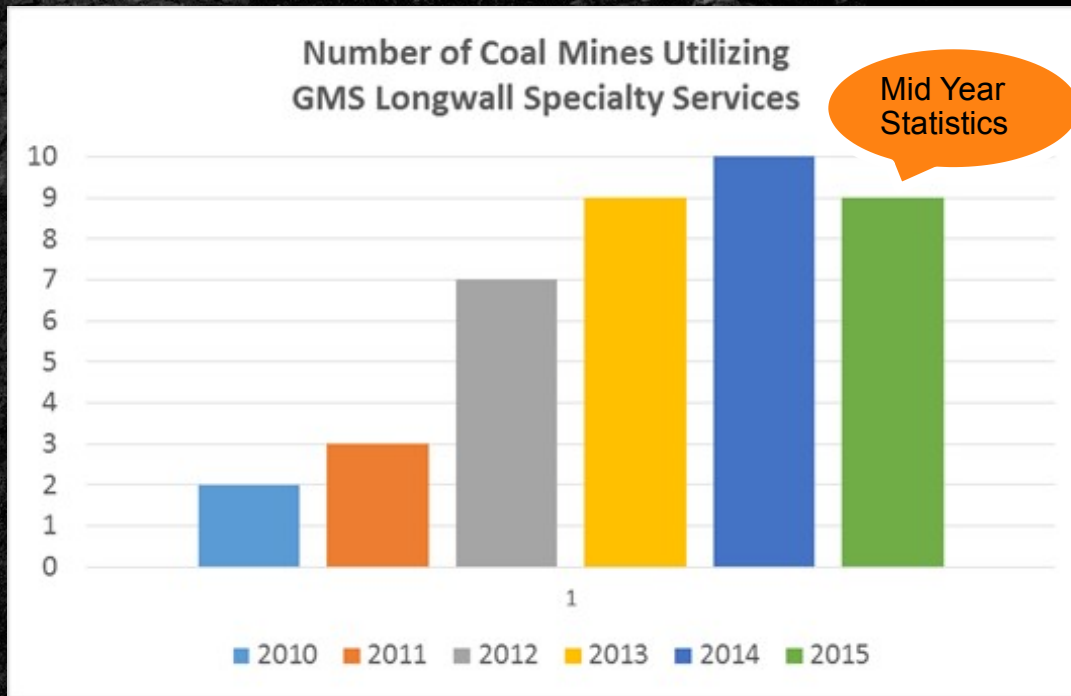


LW Specialty Services



- LW Recovery Crews
- LW Setup Crews
- LW Outby Utility Crews
- Glue Injection Crews
- Pumpable Crib Crews
- LW Consultancy Services
- LW Shield Techs
- LW Maintenance Services







Longwall Lease Equipment



- Longwall Lease equipment
 - Scoops
 - Shield Haulers
 - Shield Chariot





LW Consulting



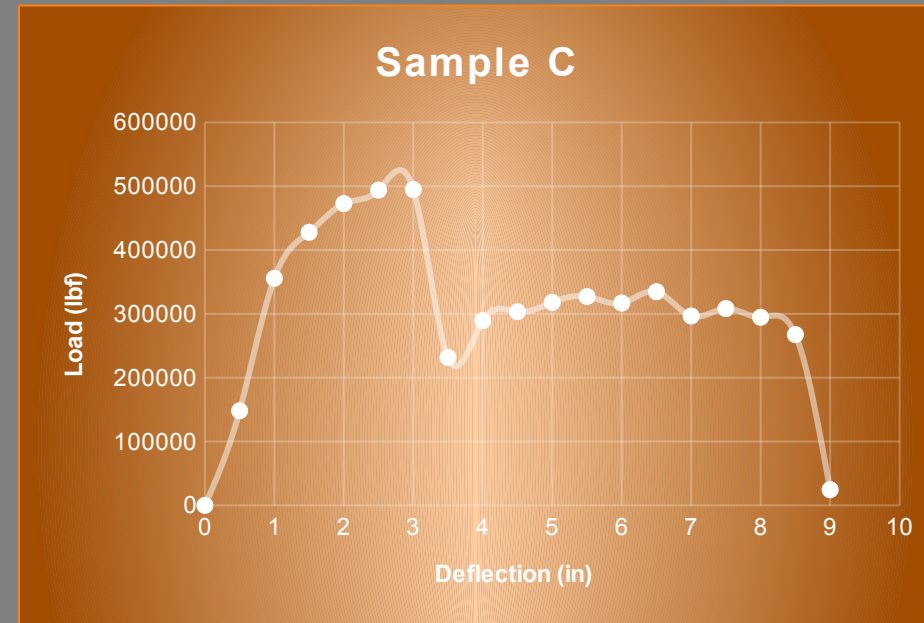
- **Longwall Best Practice Consulting:**
 - Helped customer beat production record after 6 weeks of GMS onsite consulting
 - Increased LW Production 10%
 - Shaved 2 Days off LW Move

WWW.GMSMINERREPAIR.COM

Pumpable Cribs



Failure Analysis





GMS Gluing Process:

- Scope Holes prior and during installation
- Map with amount of glue in each hole and information on area during process
- Daily Report submitted to mine people
- Close out Report signed by mine responsible person

