



COAA Safety Workshop

Dave Keating & Greg Lefevre

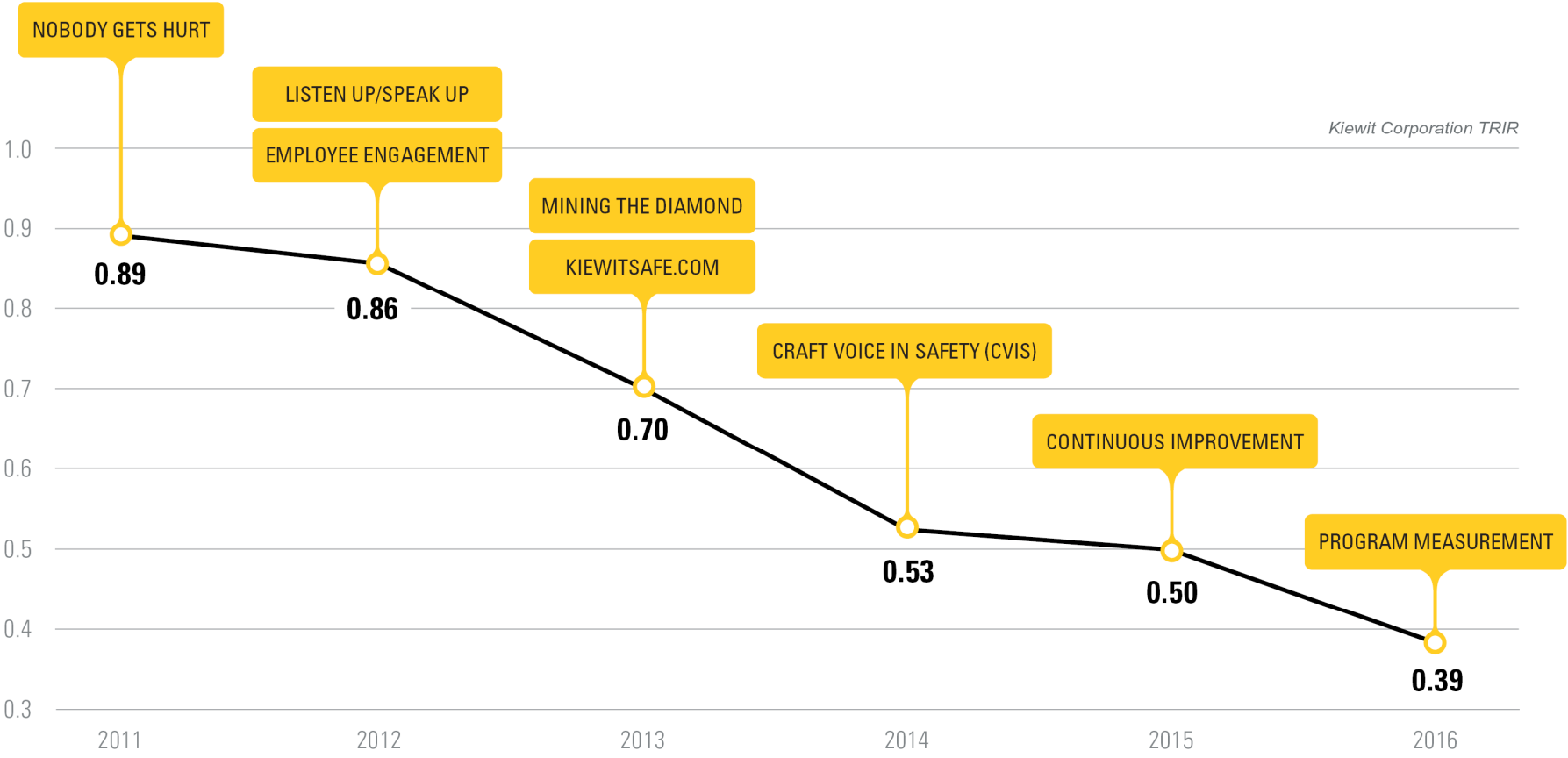
OBJECTIVES

- Outline the components of our craft led safety program
- Discuss how we implemented the program
- Challenges
- Q & A

COMPONENTS OF CRAFT LED SAFETY


- SOS program
- Craft Safety Advisors (CSA)
- Craft Voice in Safety (CVIS)
- Craft Lead Training/Orientations
- Mining the Diamond
- Mentoring
- Detailed Execution Planning
- Management Commitment and Support

SAFETY PERFORMANCE



SAFETY OBSERVATION SYSTEM (SOS)

- Allows all employees to participate
- Hazard Recognition / Intervention
- Source of leading indicator data

Name of observer:	Date:	Employee #	Your Department:	Worker Observed:
What did you discuss with the worker(s), and did your action(s) result in a safer work place?	Shift: <input type="radio"/> Night <input type="radio"/> Day	0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000	<input type="radio"/> Concrete <input type="radio"/> Electrician / Instrumentation <input type="radio"/> Insulator <input type="radio"/> Maintenance <input type="radio"/> Mechanical <input type="radio"/> Piling <input type="radio"/> Out / Earthworks <input type="radio"/> Piping <input type="radio"/> Scaffold <input type="radio"/> Site Services <input type="radio"/> Staff <input type="radio"/> Structural / Heavy Lift <input type="radio"/> Subcontractor <input type="radio"/> Survey <input type="radio"/> Warehouse <input type="radio"/> Wildlife <input type="radio"/> General (includes OVT)	<input type="radio"/> Concrete <input type="radio"/> Electrician / Instrumentation <input type="radio"/> Insulator <input type="radio"/> Maintenance <input type="radio"/> Mechanical <input type="radio"/> Piling <input type="radio"/> Out / Earthworks <input type="radio"/> Piping <input type="radio"/> Scaffold <input type="radio"/> Site Services <input type="radio"/> Staff <input type="radio"/> Structural / Heavy Lift <input type="radio"/> Subcontractor <input type="radio"/> Survey <input type="radio"/> Warehouse <input type="radio"/> Wildlife <input type="radio"/> General (includes OVT)
Did you have a meaningful interaction with a co-worker? <input type="radio"/> YES <input type="radio"/> NO		<p>"If not for luck, focus on the diamond..."</p> 		

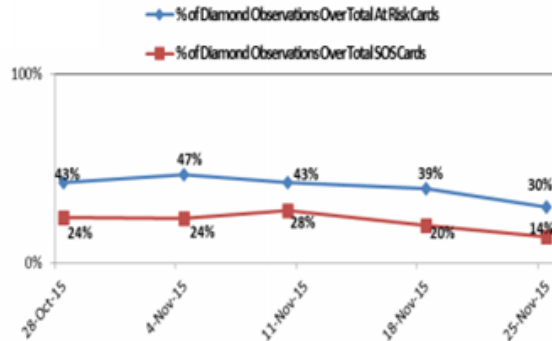
Kiewit ENERGY CANADA KFTT Project		S.O.S. - Safety Observation System	
Must select at least 1 bullet	Other	SAFE	AT RISK
<input type="checkbox"/> Hoses-Equipment Interface	Other		
<input type="checkbox"/> Positive communication with operator?			
<input type="checkbox"/> Adequate spacing? (airline used?)			
<input type="checkbox"/> Swing radius respected?			
<input type="checkbox"/> Used as intended and not overloaded?			
<input type="checkbox"/> Traffic accommodation plan followed?			
<input type="checkbox"/> Designated parking? Clearly identified?			
<input type="checkbox"/> Incomplete Rigging / Dropped Objects	Other		
<input type="checkbox"/> Hazards communicated to others in the area?			
<input type="checkbox"/> Rigging is appropriate size? Rigged properly?			
<input type="checkbox"/> Rigging is in good condition?			
<input type="checkbox"/> LIFT plan correct for the task?			
<input type="checkbox"/> Proper signals used? Gauntlet used?			
<input type="checkbox"/> Excavation	Other		
<input type="checkbox"/> 4:1 access ramp for excavator? Or stairs? Used correctly?			
<input type="checkbox"/> Slope as per temporary shoring plan?			
<input type="checkbox"/> Top of steel identified?			
<input type="checkbox"/> Stored Energy / Crush Points	Other		
<input type="checkbox"/> Hazard properly identified? Specific hazards on JHA?			
<input type="checkbox"/> Work performed out of the line of fire?			
<input type="checkbox"/> Good communication and control?			
<input type="checkbox"/> Failures to occur?			
<input type="checkbox"/> Safety area identified and in use?	Other		
<input type="checkbox"/> Material Handling	Other		
<input type="checkbox"/> Load properly received?			
<input type="checkbox"/> Trailer pins in place?			
<input type="checkbox"/> Crush side of unloading area protected?			
<input type="checkbox"/> Working at Heights / Overhead work	Other		
<input type="checkbox"/> Fall protection equipment in good shape? Inspected?			
<input type="checkbox"/> Worker tied off correctly?			
<input type="checkbox"/> Tools / Materials secured?			
<input type="checkbox"/> Area barricaded and tagged? Adequate sign?			
<input type="checkbox"/> Tool Safety	Other		
<input type="checkbox"/> Proper tool for the job? Free of defects?			
<input type="checkbox"/> Tool used safely? Worker properly trained?			
<input type="checkbox"/> Scaffolds / Ladders / Stairs	Other		
<input type="checkbox"/> Scaffold inspected? Tag current?			
<input type="checkbox"/> Proper ladder / stair use? Facing ladder?			
<input type="checkbox"/> Ladder secured properly?			
<input type="checkbox"/> Welding / Cutting / Grinding Activities	Other		
<input type="checkbox"/> Fire extinguisher within 25 ft? Inspected?			
<input type="checkbox"/> Screens / blankets available and being used?			
<input type="checkbox"/> Personal restraint & equipment out of line of fire?			
<input type="checkbox"/> Access / Egress	Other		
<input type="checkbox"/> Good access / egress available and being used?			
<input type="checkbox"/> Material staged to allow safe access?			
<input type="checkbox"/> LOTO - Lock Out Tag Out	Other		
<input type="checkbox"/> PPE - Personal Protective Equipment	Other		
<input type="checkbox"/> All required PPE being worn correctly?			
<input type="checkbox"/> In usable condition? Inspected?			
<input type="checkbox"/> Confined / Restricted Space	Other		
<input type="checkbox"/> Craft Ownership in Safety	Other		
<input type="checkbox"/> JHA adequate for task and being followed?			
<input type="checkbox"/> Does worker know the detailed execution plan?			
<input type="checkbox"/> Positive Safety Monitoring Involvement?			
<input type="checkbox"/> Ergonomics & Body Positioning	Other		
<input type="checkbox"/> Proper work setup?			
<input type="checkbox"/> Rotating workers for repetitive tasks?			
<input type="checkbox"/> Proper lifting techniques used?			
PLEASE COMPLETE BACK OF FORM			
"Never Work, Feed An Unwell Act"			

LEADING INDICATOR DASHBOARD

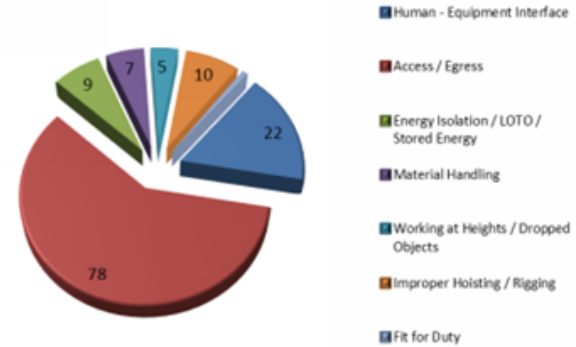
Diamond Observations KFTT



Percentage of Diamond Observations

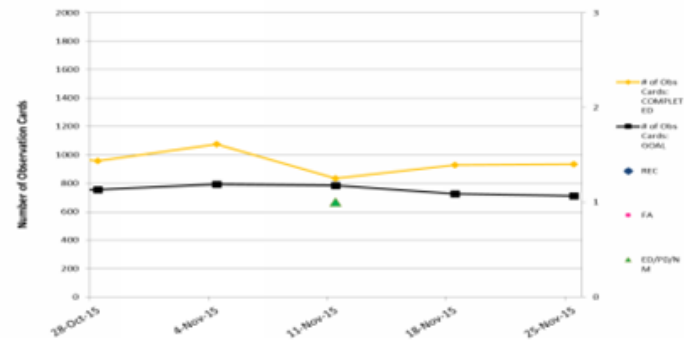


Diamond Observation Categories

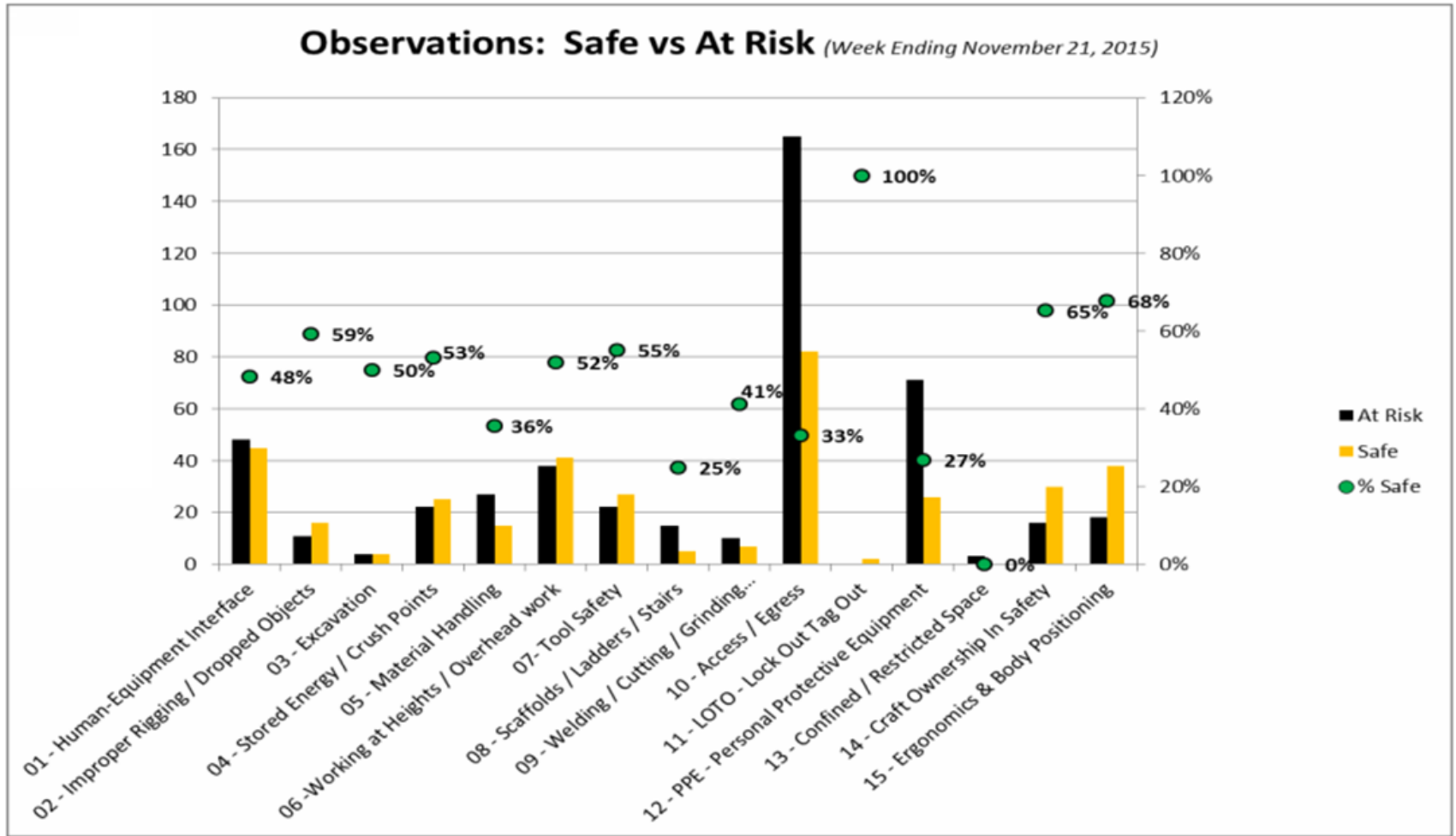


Human - Equipment Interface	22
Access / Egress	78
Energy Isolation / LOTO / Stored Energy	9
Material Handling	7
Working at Heights / Dropped Objects	5
Improper Hoisting / Rigging	10
Fit for Duty	1
TOTAL DIAMOND SOS	132
TOTAL SOS	933
TOTAL AT RISK SOS	445
% of Diamond Observations Over Total At Risk Cards	30%
Total Diamond Interventions	132

KFTT Safety Observation System (SOS) Cards Goals Vs. Results



LEADING INDICATORS



CRAFT SAFETY ADVISORS (CSAs)

- Full time in field as part of safety department (not on tools)
- Experienced trades professional (safety designation not required)
- Promote safety awareness
- Perform orientations and training



CRAFT VOICE IN SAFETY (CVIS)

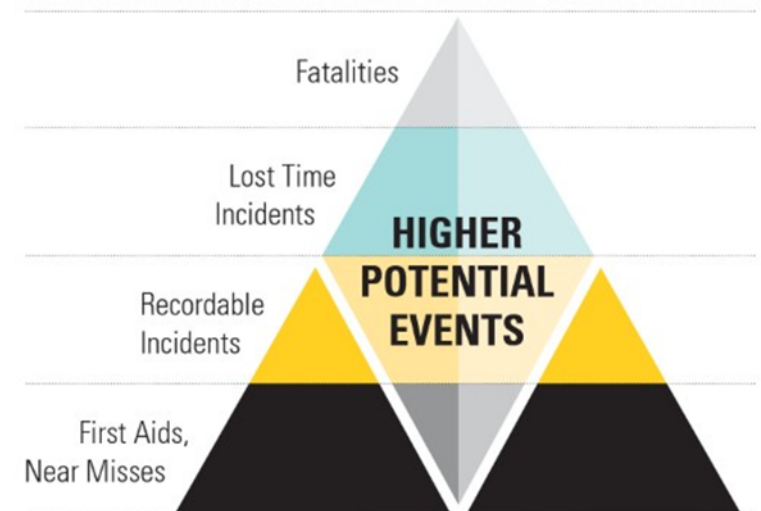
- Full time on tools
- Voice craft concerns to management
- Mentors to employees
- Bridge gap between management and craft



MINING THE DIAMOND

- Focusing on the potential outcome of safety observations or an incident regardless of the actual outcome
- Overreact to things before an injury occurs
- Categories inside this program are based on CVIS input, SOS card data, and lagging indicators

MINING THE DIAMOND } Diamond events are events that **IF NOT FOR LUCK** could have a serious outcome.



MINING THE DIAMOND

- One of Kiewit's first diamond near misses
- A subcontractor self reported dropping an insulation knife 40ft. The knife landed 12 feet away from a co-worker
- What normally would have been a regular near miss was treated as a big deal
- The extra attention to this incident identified:
 - Wrong knife was used
 - The knife was not tied off
 - No red tape used
 - The plan for this operation did not address hazards and mitigations



CLIENT INVOLVEMENT

- Program Alignment
- One team / One Message
- Active Participation



CHALLENGES

- Observations cards vs “rat” cards
- CVIS does not discuss labor management issues or logistics (bussing, flights, camps, etc)
- CVIS does not discuss non safety related disciplinary or personnel matters
- Be selective who joins CVIS, however, do not limit who is part of CVIS – chances are your best workers are also the best CVIS members
- Management to support but not lead or take over
- Too many or incorrect diamond categories
- Selecting the right mentors
- Getting crew involved with planning



QUESTIONS?