

## Ensign USD Improves Safety Culture and Performance with Behavior-Based Safety Implementation

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### **Abstract**

This article provides information about Ensign United States Drilling's successful implementation and maintenance of a Behavior-Based Safety process. Specific information is provided about the obstacles, challenges, lessons learned and successes with BBS implementation since 2002. Future goals and expectations for Ensign's BBS process are also provided.

**Key Words:** Behavior-Based Safety, Total Safety Culture, Behavior Observation Checklist

### Ensign's Behavior-Based Safety Process

Ensign United States Drilling (Ensign) is a leading oil and gas drilling contractor with 2000 employees and 70 drilling rigs operating in 7 western states. In order to reduce injuries and improve safety culture beyond conventional methods, Ensign (formerly CAZA Drilling) chose to implement a behavior-based safety (BBS) process with guidance from Safety Performance Solutions (SPS). In 2002, Ensign field employees completed a Safety Culture Survey and structured interviews from SPS. Although Ensign's responses were well above the SPS norm on most areas of the survey, improvement opportunities were identified (along with strengths) which helped guide Ensign BBS implementation strategy. Survey and interview responses were shared with Ensign executives at their Denver headquarters in conjunction with their BBS training.

In the Spring of 2003, Ensign put together a BBS Implementation Team (I-Team) of 20 hourly employees and 3<sup>rd</sup> party safety consultants (Safety Coaches) who received comprehensive BBS training. Hourly employees "own" the BBS program at Ensign, with management involvement limited to a support role. SPS personnel guided the team in designing the BBS process, including creating the: name (and logo) of the process, mission statement for the process, behavioral observation checklist (**see Figure 1**), rules for using the checklist, methods for analyzing and disseminating BBS information to all employees, roles and responsibilities of key groups (e.g., Managers, Drillers) to ensure BBS success, and training schedules/materials for training employees at all rigs. Following completion of this training, in-house Ensign trainers provided BBS training to all remaining employees on all company rigs.

The objectives of the BBS process put forward by the I-Team state:

*"Ensign employees are committed to achieving a Total Safety Culture through a positive attitude towards teamwork, training, and participation. We believe safety is a core value, not simply a priority to be compromised by any business objective. We believe this can be accomplished by utilizing communication and feedback to achieve a common goal: Committed to Achieving Zero Accidents."*

The BBS process for Ensign is therefore called the CAZA Process. I-Team members also said BBS success would be achieved by maintaining: commitment to success, safety as a

value, positive attitudes, effective safety communication/feedback, participation in safety efforts, comprehensive safety training, teamwork, and continual efforts to achieve a Total Safety Culture.

#### BBS: A Key to Achieving a Total Safety Culture

Improving the frequency, openness, and effectiveness of safety communication at all organizational levels is required to achieve a Total Safety Culture. This is encouraged through a behavior observation and feedback process within BBS. With BBS, employees define key safety-related behaviors and then develop a company specific checklist containing those behaviors.

Using the unique checklist, employees observe each other on the job and then provide positive and respectful one-on-one coaching feedback for both safe and at-risk behaviors observed. This peer-to-peer conversation (not confrontation) is instrumental in changing at-risk work practices as well as reinforcing safe behaviors. Also, the feedback allows the observer and observee to analyze tasks together to identify and remove any barriers to safe work performance such as lack of knowledge, uncomfortable PPE, or poor ergonomics.

Observation data from individual checklists are regularly collected, compiled, and shared with the employees as group feedback. This information is analyzed to identify behavioral categories needing special attention (and identifying current strengths). Work teams then develop intervention strategies to improve areas of weakness.

#### Sustaining the Behavioral Safety Process

From 2004-2006, an SPS representative visited the I-Team for a 2-day annual follow-up visit to assess strengths and opportunities for improvement with the BBS process. Improvement efforts based on the visits included: refining the observation card, streamlining the BBS data dissemination process, continuing BBS training on all rigs, encouraging Supervisors to conduct more observations, and for increased feedback from managers on specific issues identified on the observation cards.

#### BBS Success and Future Objectives


In 2004, the first full year of the CAZA Process, over 16,000 observations were submitted. By mid-2007 Ensign employees were on track to conduct over 40,000 observations by years end. In that time Ensign's Total Recordable Incident Rate has decreased nearly 40% and the severity of incidents has significantly dropped. For an industry with high turnover (~50%), working in remote locations 24/7 with elevated risk of serious injury relative to other industries, Ensign and its employees have achieved significant benefit from its BBS program.

Looking to the future, Ensign continues its Drive to Zero incidents with further training and enhancements in CAZA Process/BBS. The process has been shared with additional divisions of the company and is a significant contributor to an overall culture change within the company. The CAZA Process has shifted the safety culture from an individualistic to a "brother's keeper," or team, approach to safety. This approach has become the single most important aspect of Ensign's safety culture and will be a cornerstone of long term results.

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Figure 1. Ensign USD's Behavioral Observation Card.

Behavioral I.D.	Additional Comments:	<p><b>ENSIGN</b> United States Drilling</p> <p>Committed to <b>A</b>chieving <b>Z</b>ero <b>A</b>ccidents</p>  <p><b>Driving to Zero</b> <i>Injuries - Incidents</i></p> <p><b>Safety Observation</b> <b>Checklist</b></p>
Behavioral I.D.	Your Recommended Solutions:	

Outer

Inner

Behaviors	
<b>1. PPE</b>	
a. Head	Safe
	At-Risk
b. Eyes/Face	Safe
	At-Risk
c. Foot	Safe
	At-Risk
d. Hand	Safe
	At-Risk
e. Hearing	Safe
	At-Risk
f. Proper Clothing	Safe
	At-Risk
g. Fall Protection	Safe
	At-Risk
h. Respirator	Safe
	At-Risk
i. Other	Safe
	At-Risk
<b>2. TOOLS/EQUIPMENT</b>	
a. Proper Tool	Safe
	At-Risk
b. Proper Use	Safe
	At-Risk
c. Good Condition	Safe
	At-Risk
d. Other	Safe
	At-Risk
<b>3. BODY POSITION/PROTECTION</b>	
a. Lifting, Bending	Safe
	At-Risk
b. Reaching, Twisting	Safe
	At-Risk
c. Pushing, Pulling	Safe
	At-Risk
d. Line of Fire	Safe
	At-Risk
e. Pinch Points	Safe
	At-Risk
<b>Behaviors</b>	
<b>3. BODY POSITION/PROTECTION - Continued from previous column</b>	
f. Climbing	Safe
	At-Risk
g. Other	Safe
	At-Risk
<b>4. HOUSEKEEPING</b>	
a. Slip/Trip Hazards	Safe
	At-Risk
b. Orderly Storage	Safe
	At-Risk
c. Clear Walkways/Stairs	Safe
	At-Risk
d. Other	Safe
	At-Risk
<b>5. PERMITS</b>	
a. Lockout/Tagout	Safe
	At-Risk
b. Confined Space	Safe
	At-Risk
c. Hot Work	Safe
	At-Risk
d. Other	Safe
	At-Risk
<b>6. VEHICLE OPERATIONS</b>	
a. Equipment Repairs	Safe
	At-Risk
b. Trucks	Safe
	At-Risk
c. Other	Safe
	At-Risk
<b>7. FORKLIFT OPERATIONS</b>	
a. Proper Speed	Safe
	At-Risk
b. Position of Forks	Safe
	At-Risk
c. Spotters Present	Safe
	At-Risk
d. Chocked Tires	Safe
	At-Risk