



SPE 120923-PP

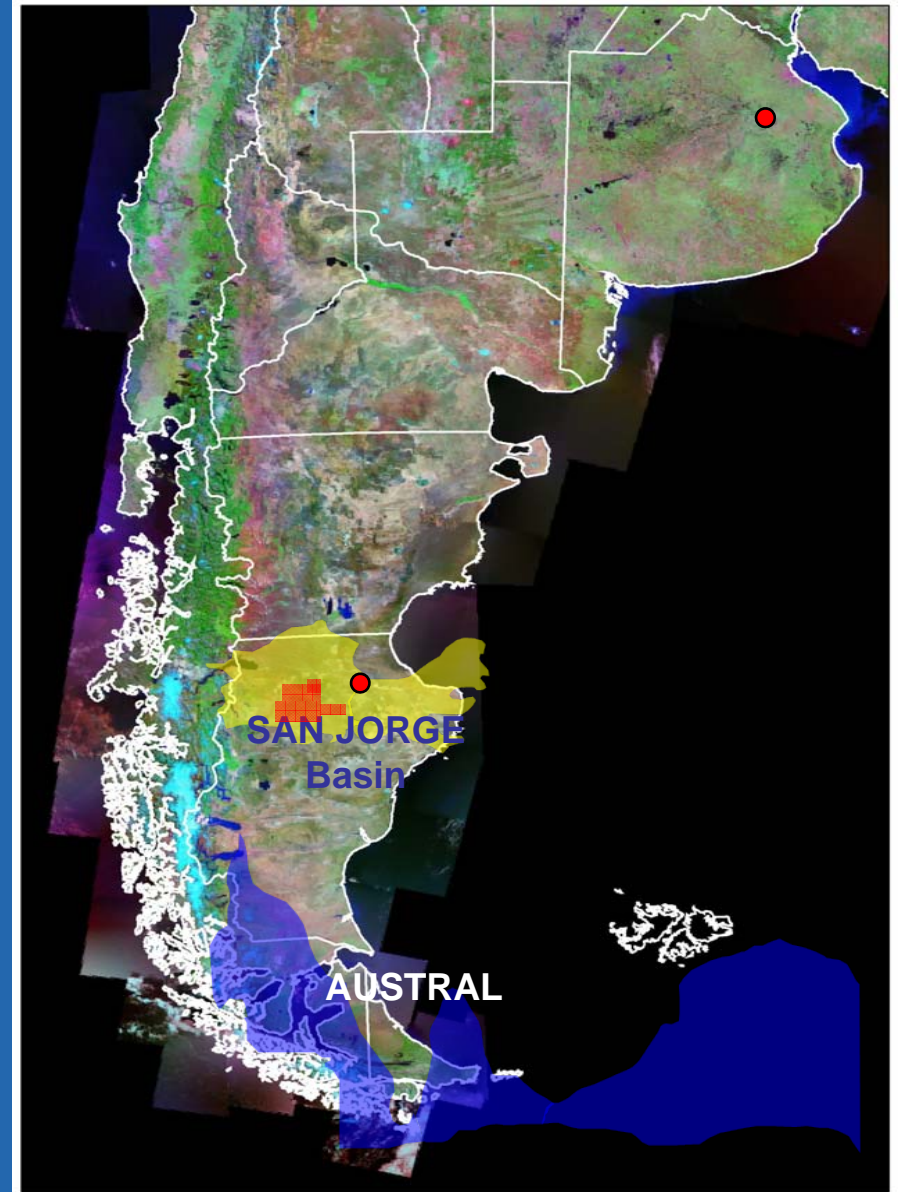
Improving Safety Management in the Exploitation of Mature Fields in a Complex Social Environment

L Torraca, SPE, M Ferrari, SPE – UNAS YPF SA

UNAS - Unit of Bussiness Argentina South - YPF



Area (sq. kilometers) : 22,684
Operating Fields: 21
Starting Operation Year: 1907
Production Wells: 4,300
Injector Wells : 1,350
Oil Production (barrel/day): 95,000
Daily Workers: 10,000
Vehicles/day: 2,000



Introduction

2003 Operation Context:

- Daily activity involves ten thousand workers under rigorous climatic conditions.
- Mature Oil Fields (1907).
- Low Safety Performance.
- New Government Regulations to deal with
- Increasing Union Conflicts.
- Increasing Social Claims.
- Poorly Qualified Workforce Replacement.
- Increasing Labour Costs Related to Low Safety Performance.

In 2003 things were looking grim !

The Challenge: Organization faces new opportunities of improving Safety Performance in a Complex Social Environment.

Improving Safety Management

- UNAS developed its new and challenging Safety Model based on the definition and application of a solid Health, Safety and Environment Corporate Policy based on four premises considered as key issues intended to reach safety culture as a sustainable value.
- The application of this model has been possible through the commitment and dedication of the whole management team, with a specific focus on proactive “line responsibility”, continuous risks assessment and transversal training programmes.

What We Did ?

Leadership
and
Permanet
Safety
Criteria



Continuos
Improvement



Comunication
and Support
to Social
Concerns



Fulfillment of
the
Regulation
and High
Standards



**Four Key Issues Intended to Reach Safety
Culture as a Sustainable Value**



Leadership and Permanent Safety Criteria - I

UNAS Safety Precept considers the performance is dependent on leadership from top to bottom and the commitment of management. Individuals also have to take a responsible behavior to their own safety performance in any work activity.

Proactive Safety

- ✓ Safety Recognition Programs have been satisfactorily developed.
- ✓ Proactive recognition programs emphasize working safely as a behavior.
- ✓ Participating on Investigation Accident Committees.
- ✓ Reporting Injuries or Safety Deviations.
- ✓ Using Safety Procedures and Normative.
- ✓ Safety Driving Performance.

Leadership and Permanent Safety Criteria - II

■ Safety Observations of Work

Safety Observations of Work method is used as a preventive, predictive and corrective safety mechanism.

Workers have responsibility, to observe work safety deviations and to talk with employees about the safety of their job.

Correlation between Safety Observations and the reduction of accidents has been demonstrated to be a key element of the achieved success.

■ Prevention and Investigation Programs

Accident investigations provide not only what happened, but also how and why. The information gained from investigations can prevent recurrence of similar or perhaps more severe accidents.

Formations Programs in Prevention Injuries and Specialists in Investigation of Accidents have been carried out with the intention of focusing the detection of the root causes as a previous step of eliminate them.

Leadership and Permanent Safety Criteria - III

■ Permit To Work Procedure

Permit to Work Procedure was assumed as a formal written system used to control certain types of potentially hazardous works.

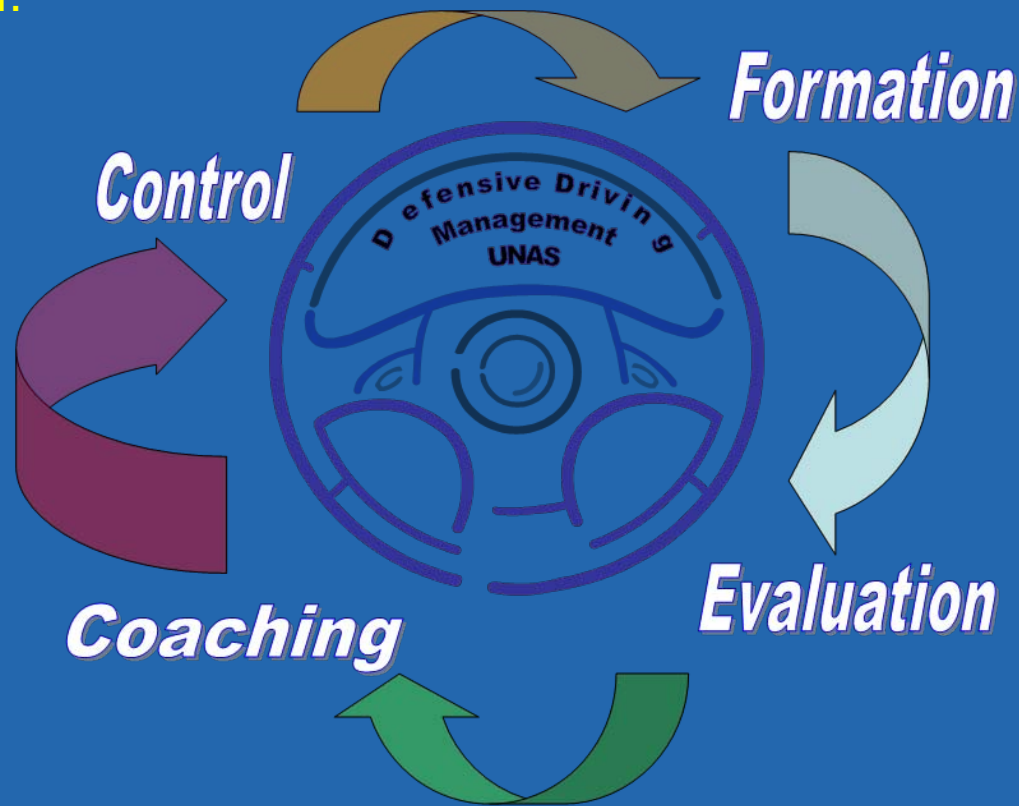
Scheduling, communication and understanding tasks between personnel requiring the work to be done, personnel who is responsible of assets and the personnel or contractors.

■ Defensive Driving Management

- ✓ Defensive Driving School.
- ✓ Satellite On-Line Car tracking.
- ✓ Psychic Test for drivers.
- ✓ Advanced Driving School.
- ✓ Speed tracking and Control.
- ✓ Monthly Activity Reports.
- ✓ 0-800 Free Public Call (Traffic violations and unsafe driving).

Leadership and Permanent Safety Criteria - IV

The UNAS Defensive Driving Management is a program aimed to form, to evaluate and to monitor driver's performance under a continuous cycle for every driver.



✓ Right application of new elements of technology has shown improving results.

Continuous Improvement

Continuous improvement refers to the ongoing constant but gradual improvement of value methods in Safety Management.

■ Management of Change and Exemption Procedure

The management of change and exemption processes was introduced in order to manage operational risk and grant and control exemptions to policies and procedures, to assure:

- ✓ Workers, assets and the environment are protected to perform operations beyond standard practices.
- ✓ Risk is adequately managed.

■ Risk Management Solution

GAMA is a corporate Risk Management Solution for:

- ✓ Tracks incidents, investigations and responsibilities.
- ✓ Encourages the creation of remedies, for pro-active and reactive situations.
- ✓ Assessment of Corrective Actions.
- ✓ Safety Observations of Work.

Continuous Improvement

■ Inter-Company Best Practices

Sharing good practices is one of the drivers of successful innovation for companies. Meetings and workshops allow companies to meet each other, have informal discussions on common safety problems like better practices, analysis of accidents, conformation and practices for emergency plans.

■ Safety Open Web

Open Safety Intranet Sites are used as the primary way for employees to obtain and share work-related documents and home safety prevention.

■ Reports

Monthly Safety reports also provide the guiding principles that ensure high standards are achieved at all sites around the UNAS and afford a means of promoting continuous improvement based on careful risk assessment and a comprehensive HSQ management system.

Communication and Support to Social Concerns

UNAS considers that Safety-Culture concept becomes much more solid when it is considered at the community and along the different levels of the society pyramid.

- ✓ Participation by diverse interest groups including Unions and Contractors.
- ✓ Safety Actions Plan is supported by the involved organizations including Contractors, Unions and Workers.
- ✓ Open Safety Exhibitions to different groups of Interest including, independent Professionals, Universities and Schools.
- ✓ Operations Training.
- ✓ Injury and Illness Prevention Program.

Fulfillment of the Regulation

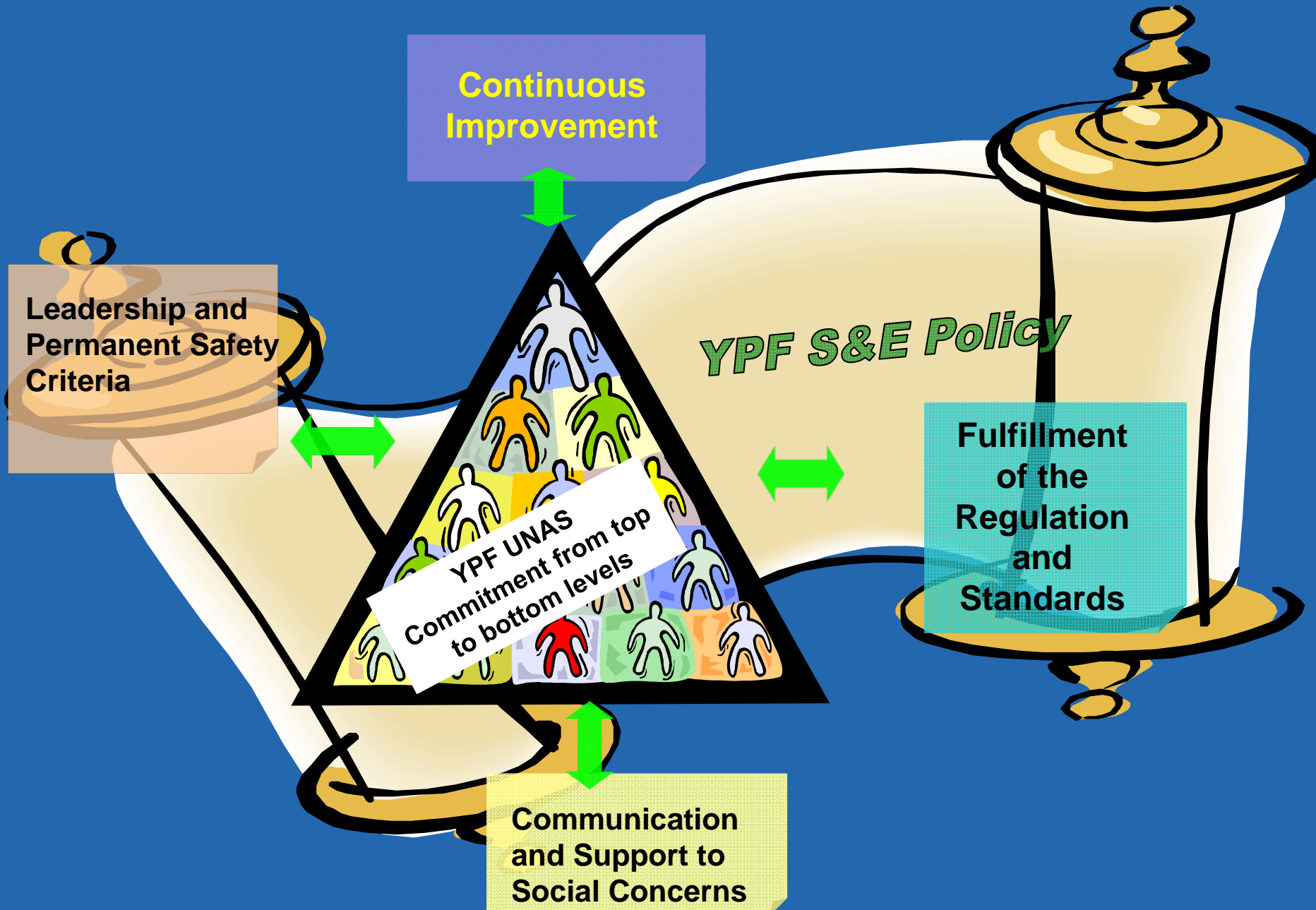
“Complying with and Ensuring the Fulfillment of the Regulation and High Standards” is the responsibility of everyone who takes part in UNAS YPF activities.

Revision and updating of the National and Provincials regulations required specific consideration for harmonization of legislation with internal standards.

Mature fields operation must consider life extension issues related to existing facilities, when those facilities are coming to the end of their design life but not the useful life.

- **Technical Integrity.**
- **HAZOP Risk Studies.**
- **Safety Instrumented Systems (SIS).**
- **Emergency Plans.**
- **Hazardous Atmospheres.**
- **Fire Protection.**
- **Labor Risk/ Risk Analysis.**

YPF Safety and Environment Corporate Policy





POLÍTICA DE SEGURIDAD, SALUD Y MEDIO AMBIENTE DE REPSOL YPF

Repsol YPF asume el compromiso de desarrollar sus actividades considerando como valores esenciales la seguridad, la salud de las personas y la protección del medio ambiente.

Para lograrlo Repsol YPF se guiará por los siguientes principios:

LIDERAZGO Y GESTIÓN INTEGRADA

La Dirección liderará los programas de seguridad, salud y medio ambiente y proporcionará los recursos necesarios asegurándose de que todo el personal conoce y trabaja de acuerdo con los principios establecidos.

La línea de mando integrará la seguridad, la salud y el medio ambiente en la gestión del negocio y será responsable de la aplicación del sistema de gestión y de la obtención de sus resultados.

INCORPORACIÓN DE CRITERIOS DE SEGURIDAD, SALUD Y MEDIO AMBIENTE EN TODO EL CICLO DE LAS ACTIVIDADES

Repsol YPF tendrá presente criterios de seguridad, salud y medio ambiente en su estrategia, en todas sus actividades y durante todo el ciclo de vida de las mismas con el propósito de prevenir daños en las personas y en los bienes y minimizar el impacto sobre el entorno y los efectos en el cambio climático, respetando la biodiversidad y a las comunidades locales.

CUMPLIMIENTO DE LAS NORMAS

Repsol YPF cumplirá los requisitos legales vigentes en cada lugar, así como definirá la normativa interna necesaria estableciendo estándares comunes de comportamiento en materia de seguridad, salud y de medio ambiente, con independencia del área geográfica donde lleve a cabo su actividad.

De igual manera, planificará considerando las tendencias legislativas y los estándares internacionales.

MEJORA CONTINUA

Repsol YPF establecerá objetivos de mejora y metas en seguridad, salud y medio ambiente de forma sistemática, evaluará el desempeño y aplicará las correcciones necesarias para alcanzar los logros propuestos.

Asimismo trabajará en la búsqueda de nuevas soluciones técnicas, sobre cuestiones de seguridad, salud y protección ambiental.

COMUNICACIÓN Y RELACIONES CON LA SOCIEDAD

Repsol YPF mantendrá canales de comunicación con los grupos de interés, trabajará conjuntamente con la sociedad aportando su conocimiento e informando de manera fiable y transparente sobre su desempeño y el efecto que sus actividades y productos causan sobre las personas y el entorno.

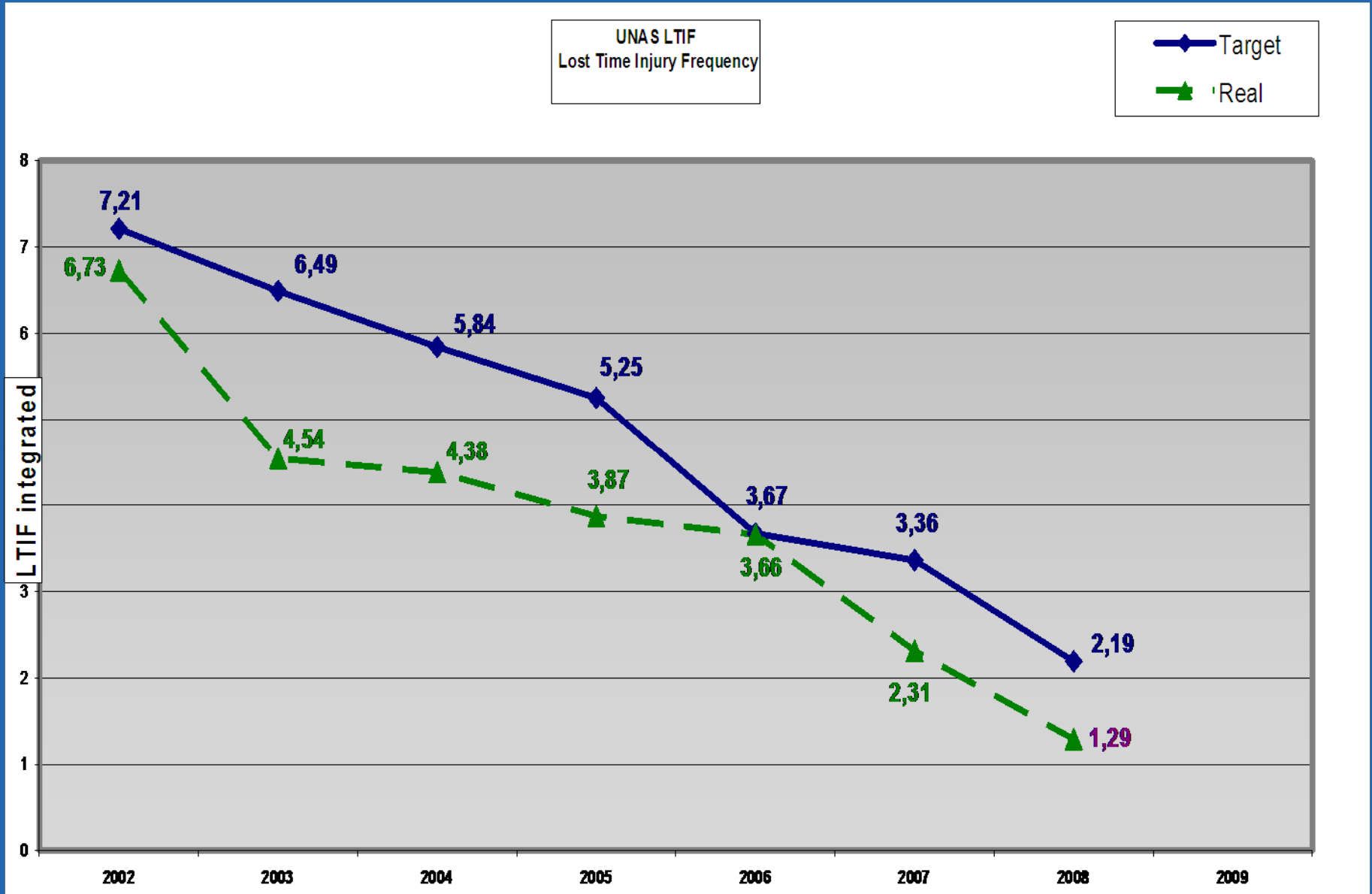
Sea cual sea el puesto o ubicación geográfica, todos los empleados son responsables de su propia seguridad así como de contribuir a la seguridad, salud y desempeño ambiental individual y colectivo.

Repsol YPF considera que "Cumplir y hacer cumplir esta Política" es responsabilidad de todas las personas que participan en sus actividades.



Antonio Brufau Niubó, Presidente Ejecutivo
28 de julio de 2006

UNAS Safety Performance 2003-Today



UNAS Performance Lost Time Injury Frequency: The number of Lost Time Injuries (Fatalities + Lost Work Day Cases) per 1,000,000 man-hours worked

Conclusions

- ✓ From the year 2003 to the present time, “UNAS” YPF has demonstrated a model of Safety success.
- ✓ The effective and efficient implementation of its model has shown outstanding results in terms of safety behavior and performance, reaching the highest standards and placing UNAS as a “World Class” Safety E&P Company.
- ✓ Labor Risk/ Risk Analysis has created higher confidence at customers, employees, authorities and investors.
- ✓ Total Injury Rate has demonstrated sustainable reduction.
- ✓ The benefits and value for the company are obvious: from the drastic reduction of lost time injuries, automotive accidents and associated costs, to gain in prestige, pride and sense of ownership of employees and contractors.
- ✓ UNAS has taken decisive actions to address the extraordinary challenges based on the practice application of its Safety Corporate Policy.

