

Oil & Gas

Mobile Solutions

INNOVISIÓN

Oil & Gas Mobile Solutions

Mobile Applications optimize oil and gas production, allowing a higher productivity of the involved staff

These applications can transfer information to corporate systems from any point in Oil and Gas Fields, and they can also provide information in the field, where decisions have to be made. Mobile information systems are of great help in measuring and improving Operational, Environmental and Maintenance Tasks.

Different types of portable computers or Hand-Helds can be used. This equipment is connected through wireless networks or updated asynchronously when the personnel steps into the office. These applications have been designed and tested for the operational realities in Oil & Gas Fields.

Implementing these applications contributes to:

- ▶ *Have access to updated information at oil well sites and production facilities.*
- ▶ *Load data on site in order to maximize personnel's time at operational tasks.*
- ▶ *Improve work procedures.*
 - ▶ *Distribute and assure work routines.*
 - ▶ *Assure the performance of assigned*

tasks.

- ▶ *Automatically update the information in legacy systems, avoiding duplicity of information.*
- ▶ *Consult Corporate data, on time and on site.*
- ▶ *Eliminate paper documents.*
- ▶ *Automate administrative requirements necessary for the completion of works.*

Using these applications results in tangible improvement for the Operation since they make production conditions more effective, save time, reduce costs and assure Quality and Environmental Control.

Applications

- ▶ Production Control
- ▶ Well File
- ▶ Field Maintenance
- ▶ Security and Environment Checklist





Well File

Well File allows access, from any spot in the Oil and Gas Field, to all the information referring to the oil well characteristics, the operations made, and the oil well equipment. This information is automatically updated from corporate databases. As we are dealing with an electronic device and not with a printed copy, the information that your staff have, is always updated and complete.

These applications will help you in the access to information about:

- ▶ Oil wells identification
- ▶ Drilling, work-over and pulling
- ▶ Downhole and surface facilities
- ▶ Physical Measurements (Level Measurements, Dynamometric Analysis, etc)
- ▶ Production Analysis

Using this database allows you to make the best decisions about your production, in real time.

Production Control

Mobile applications for production control involve well-testing workflow, well stops and losses records. The process is configured according to each customer's way of work and it is also adaptable to the existing volume-control systems. The applications include:

- ▶ Carrying out Oil and Gas production well-test.
- ▶ Incorporating data referring to lab samples.
- ▶ Transferring the information to Volume-Control systems.

Using these applications helps in the planning and carrying out of well-tests, makes loading possible on the site and secures the quality of the information loaded.

Depending on the type of implementation, these applications may be complemented with SCADA systems.

Control de Producción				
Batería LP 08				
Pozo	St.Cl.	Nt(m3)	Ag(m3)	Fec.UC.
LP-1405(00)	R	2.39		5/15/11/2
LP-1408(00)	R	3.8		6/2/10/11/2
LP-1447(00)	R	3.17		1/23/07/11/2
LP-1672(00)	F	4.57	16.88	03/11/2
LP-555(00)	R	1		19/17/10/2

Cerrar Control LP-1672(00)a			
Fecha:	05/12/2008	Fec.Fin:	05/12/2008
P.Bruta(m3):	18.48	% Agua:	65
Petróleo(m3):	6.48	Agua(m3):	12
Gas:	7161.8		
Observ.		Aceptar	Cancelar
<input type="text"/>		<input type="button" value="Enter"/>	<input type="button" value="Esc"/>

Fig. 1 y 2 | Production Control



Field Maintenance

This family of applications is focused on easing the maintenance job of facilities and equipment, and to assure its completion in the field. With these applications, maintenance personnel daily receive the tasks plan, registers its completion and requests the execution of corrective routines.

These applications can be used together with Equipment Identification Elements (Solid State Memory Buttons, Bar Codes or RF Tags), assuring the presence of your staff at the place the equipment is located and at the time the loading takes place.

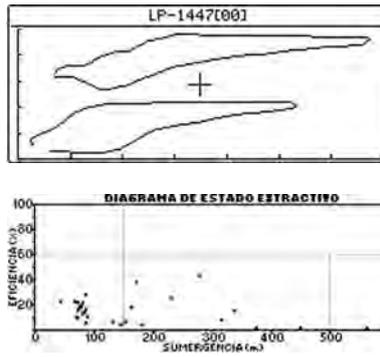


Fig. 3, 4 y 5 | **Oil Well Data Base**

This also minimizes data loading. Field Maintenance applications connect with Computerized Maintenance Management Systems (SAP/PM, Mantec/Win, etc) The main tasks they carry out are:

Eficiencia Volumétrica		
Pozo	Sunerg.	Efic.Vol. %
LP-1443(00)	278.4	48.9
LP-814(00)	178.8	36.4
LP-1331(00)	93.8	26.8
LW-527(00)	229.8	24.5
LP-1224(00)	85.1	21.7
LW-489(00)	48.7	21.1

- ▶ Maintenance routines
- ▶ Work Orders
- ▶ Maintenance Alerts
- ▶ Equipment Survey/inventory control in the field
- ▶ Measurement points

Mobile applications for Field Maintenance secure equipment and facilities maintenance, making it possible to measure the effectiveness of the tasks programs and the resources involved.



Security and Environmental Checklist

These applications are oriented to secure the completion of frequent Security and Environmental Controls. Starting from the definition of checklists, the system lets you assign the people that will be accountable for carrying out these controls and their frequency. From the office, you can carry out a follow-up of the conditions of all the elements and have access to routines statistics. If you complement



Fig. 6, 7 y 8 | **Security and Environmental Checklist**

this with Equipment Identifying Elements (Solid State Memory Buttons, Bar Codes and RF tags) you can guaranty its performance on the site.

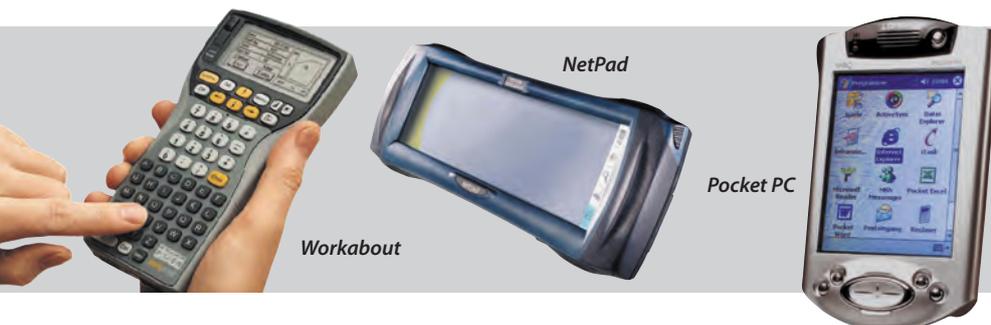
These applications are of great help in the implementation of ISO 9000 and ISO 14000 rules.



Oil & Gas Mobile Solutions

INNOVISIÓN has recognized experience in the implementation of these platforms in Oil and Gas Companies.

Their implementation is not limited to a simple "IT project" since it implies a cultural change in the way the technical personnel perform their tasks. To secure the success of its implementation, Innovision provides a Consulting and Training team with thorough knowledge of the oil business and the working culture.



Handhelds Computers

- ▶ Workabout
- ▶ NetPad
- ▶ Pocket PC