



A Rockwell Automation Company

## Mobil Oil Canada Wimborne Field Monitoring System

### The Client:

Mobil Oil Canada is one of Canada's largest and most successful Oil and Gas exploration and producing companies. It is a dynamic organization with interests onshore in Western Canada, the MacKenzie Delta, offshore on the West Coast, the Grand Banks, the Scotian Shelf, and the Beaufort Sea.

The Wimborne field is located 120km northeast of Calgary, AB. The Wimborne production field consists of numerous well sites feeding 3 main battery sites, supplying the Wimborne Plant with both conventional oil and natural gas.

### The Requirement:

The original battery sites contained PLCs and radio equipment that was obsolete and limited in their ability to supply specific and valuable information from each battery to the Plant Operator. There was a need to update and improve the integrity of the SCADA System at both the remote sites and the host site. A decision was made to replace the old PLCs and radio equipment at the 3 remote sites. At the host site, a new PLC and PC based SCADA software package was to be installed. The SCADA software would be required to perform historical and real time logging and

trending, graphical display of equipment status, analog value display, alarm handling, and be capable of control functions. There was also a requirement for 3 terminals at the plant site for plant personnel to monitor information received from the remote sites. Communication was to be upgraded between the 3 remote sites and host site. New modem and radios would be installed at the 3 remote sites. The existing radio, with a new modem, would be installed at the host site.

### The Design Solution:

The solution was to install an Intellution DMACS for Windows graphics package with one SCADA Node and two View Nodes. The SCADA Node would run on a 486/66 MHz personal computer with a Novell Ethernet LAN to connect to the 2 managers View Nodes. The SCADA Node also communicated to the Plant PLC via RS-232. A number of Graphic screens were developed to give the Operators and other plant personnel valid and updated process and alarm data from all three of the remote sites. A tabular representation of the RTU communications summary is generated to display the health of the RTU communication system. Trending capabilities, both historical and RealTime are available for use by the

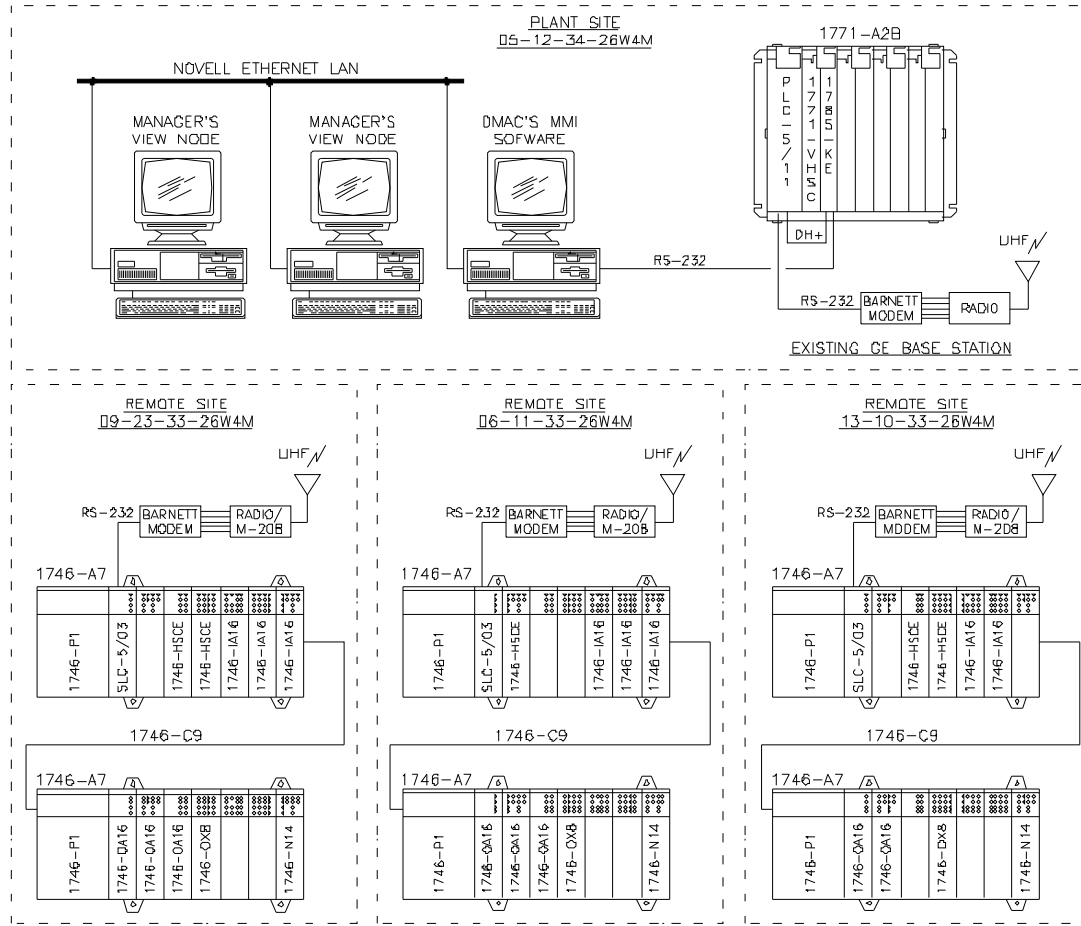
operator. The plant site PLC is a new Allen-Bradley 5/11 and is configured to perform as the host for the three remote sites to report and pass information to DMACS for display. The plant site PLC communicates to the remote site PLCs by RS-232 via Barnett Modem's to a GE Base Station Radio.

The three remote sites have new Motorola Radio M-208, Barnett Modem's, and Allen-Bradley SLC-5/03 PLCs. Each site has approximately ninety-six 24VDC I/O's, eight Analog Inputs, and two High Speed Pulse Counters connected to Schlumberger 7960 Mass Flow Computer.



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## System Specifications:

- 3 - DMACS for Windows
- 1 - SCADA Node
- 2 - View Nodes
- 10 - Graphic Pages
- 1 - Novell Ethernet LAN
- 1 - Allen-Bradley 5/11 PLC
- 4 - Barnett Engineering Radio Modems
- 1 - GE Base Station Radio
- 3 - Motorola M-208 Radios
- 3 - Allen-Bradley SLC-5/03 PLCs
- 96 - 24VDC DI/DO per site
- 8 - Analog Inputs per site
- 2 - High Speed Inputs per site
- 1 - Schlumberger 7960 Mass Flow Computer per site

For further information or to contact a Hinz office near you, please check our website at:

[www.hinz.com](http://www.hinz.com)