

LIFTING YOUR
BOTTOM LINE
WITH INNOVATIVE
OIL & GAS
SOLUTIONS



**RML-2.0 Surface
Casing Patch**

www.revelmgt.com

Customer needs a result!

Revelation Management is pleased to introduce the renewed

RML-2.0 Surface Casing Patch

It was specifically designed for sealing shallow casing failures.

Its unique design provides a large internal diameter for downhole access.

The RML 2.0 Surface Casing Patch is:

1. More cost-effective than cementing operations;
2. Eliminates the need to treat the casing failure by excavating the wellhead.
3. Demonstrating 100% success rate;
4. Ensuring long-term sealing reliability beyond what cementing can achieve.

Product Specifications

- Multiple sizes: 5" to 7" (127,0 mm to 177,8 mm)
- Elements tested to a pressure of 3150 psi (21.7 MPa)
- Can be dressed for an Element rating of 343 °C (650 °F) for Thermal Applications.
- Element stack will be determined by well/ field parameters (T, P, gas composition).
- Product Composition:
 - AISI 4130 HTSR/L-80, 80 KSI Min Yield.
 - AISI 4140 HTSR/P-110, 110 KSI Min Yield.
 - AISI 1018 Mild Steel, 50 KSI Min Yield.
 - AISI 1026 Mild Steel, 50 KSI Min Yield

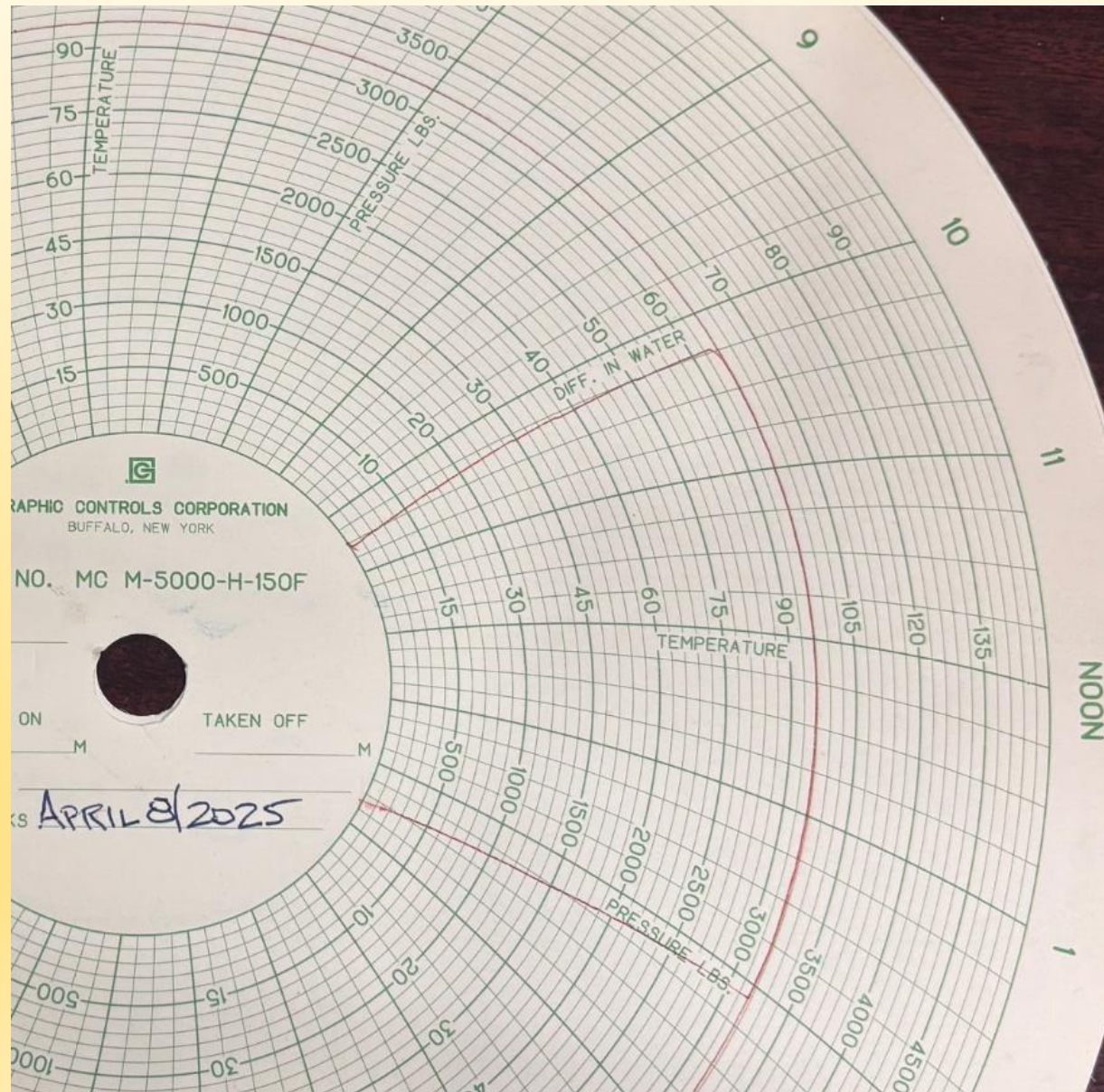
RML-2.0 Surface Casing Patch Advantages:

- **Predictable installation time.** The Casing Patch installation takes 5.5–6 hours, which is less time than cementing technologies or repairs that require digging out the wellhead.
- **Long-term isolation.** Our mechanical sealing system delivers consistent, controlled setting and ensures long-term, dependable isolation for the full service life of the well.
- **Can be removed** from the well with minimal cost when required using standard fishing equipment.

Unlike competing technologies, it does not require

- **a bridge plug** (which later needs milling out),
- **corrugated pipe** (which has low collapse resistance),
- **cone-expanded end fittings** (which may fail to provide full casing contact or can get stuck during installation).
- **Inflatable packers** for pressure testing.

Pressure integrity testing of the Elements



RML-2.0 Surface Casing Patch Technical Features

- Utilizes only hydraulic setting tool to set the Elements. No mechanical manipulation required for setting the Elements.
- By design the Surface Casing Patch Elements cannot be accidentally set under any circumstances.
- **Tested to 22.2 daN (50,000 lb) downward force** with zero force applied to the Elements.
- ID of 108.61 mm (4.275") on the 127 mm x 168,3 mm (5 x 6 5/8") Surface Casing Patch.
- Half-muled and beveled lower entry guide.
- Allows the Client to maintain well control via pumping of fluids down the annulus during RIH & Setting of Casing Patch.

RML-2.0 Surface Casing Patch

7

Upper Element



Upper Dognut

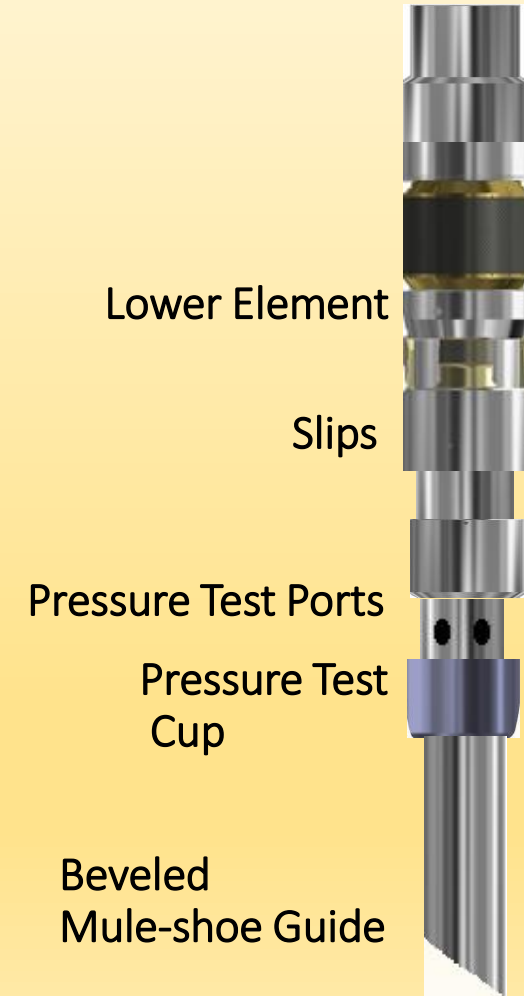
Ported Sleeve

Upper Element

Spacer Patch Pipe



Patch Pipe



Lower Element

Slips

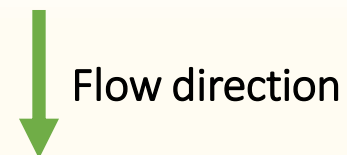
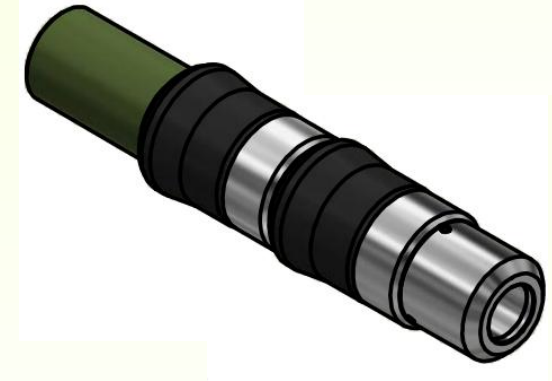
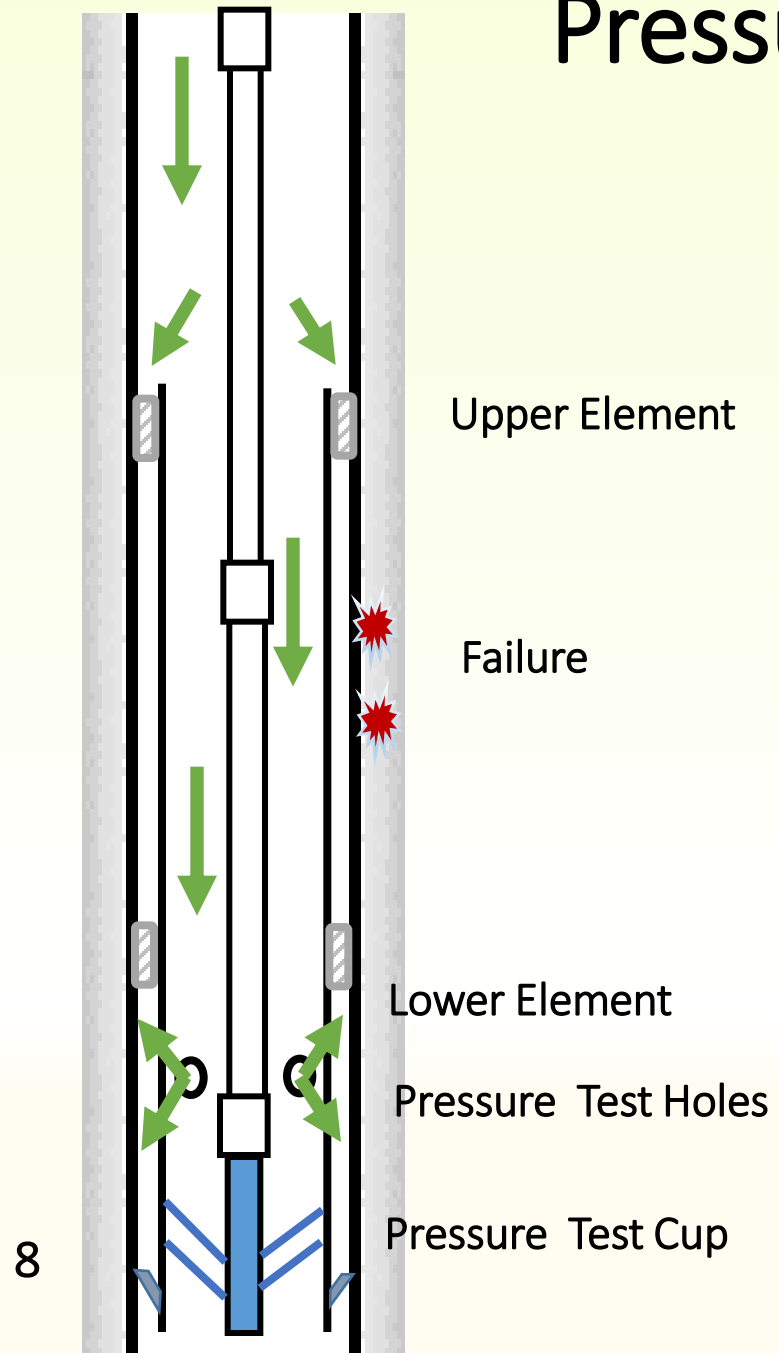
Pressure Test Ports

Pressure Test
Cup

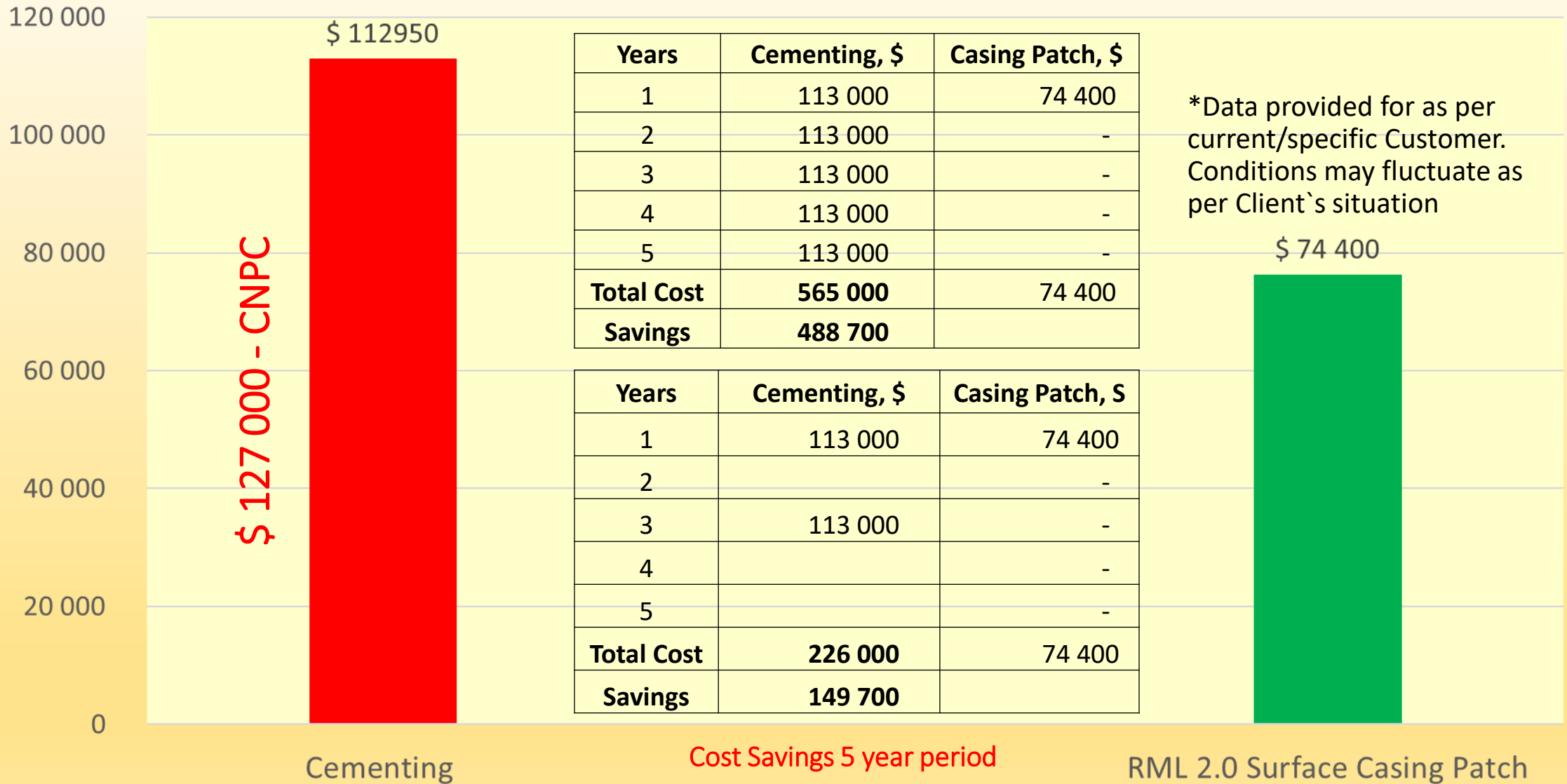
Beveled
Mule-shoe Guide

Lower Element w/ Slip Assembly

Pressure Test Schematic



Cost Saving Analysis RML 2.0 Surface Casing Patch



What Can RML-2.0 Surface Casing Patch do for you?

Benefits:

- **Can be removed** from the well with minimal cost when required using standard fishing equipment.
- **Predictable installation time.** The Casing Patch installation takes 5.5–6 hours, which is less time than cementing technologies or repairs that require digging out the wellhead.
- **Long-term isolation.** Eliminates the risks of re-cementing operations. Our mechanical sealing system delivers consistent, controlled setting and ensures long-term, dependable isolation for the full service life of the well.
- **Well control** via pumping of fluids down the annulus during RIH & Setting of Casing Patch.
- **Increased safety** to personnel.
- **Reduces costs** and minimizes production downtime. Eliminates costly cementing technology repairs.

With 5+ years of installation, durability and success, the Element design has been proven in 250+ wells with no equipment failure.



For more information about our technologies and services, please visit our website at:

Thank You!

www.revelmgt.com

www.linkedin.com/company/rml-revelmgt

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Kyle Slipchuk, Chief Operational Officer

Vasilii Nikitin, Head of Technical Operations

MANUFACTURING

API & ISO 9001 CERTIFIED

 American Petroleum Institute

REGISTRATION NO. Q1-3192

Certificate of Registration

The American Petroleum Institute certifies that the quality management system of

SABRE MACHINING LTD.
6602 - 56 Street
Lloydminster, AB
Canada

has been assessed by the American Petroleum Institute and found to be in conformance with the following:

API Spec Q1, 9th Edition

The scope of this registration and the approved quality management system applies to the

Contract Machining, Fabrication and Repair of Oilfield Equipment and Downhole Tools Per Customer Orders

API approves the organization's justification for excluding

Design and Development



API Spec Q1
Registered

Effective Date: JUNE 8, 2022
Expiration Date: JULY 27, 2025
Registered Since: JULY 27, 2016

Anchal Liddar
Senior Vice President of Global Industry Services

This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of API Spec Q1, Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry, and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. This certificate has been issued from API offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A. It is the property of API and must be returned upon request. To verify the authenticity of this certificate, go to www.api.org/compositelist.

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 **QMS REGISTERED**

Certificate of Registration

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3137

This certifies that the quality management system of

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ISO 9001:2015

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APIQR® approves the organization's justification for excluding:

8.3 Design and Development of Products and Services

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