CASE STUDY #1

Packer Isolation Test
PACKER ISOLATION TEST CASE #1
Case 1: Casing pressure is greater than 1400 kPa upon arrival

<table>
<thead>
<tr>
<th>Company</th>
<th>Golden Company Ltd.</th>
<th>Pressure Truck Company</th>
<th>Field Name</th>
<th>Black Gold</th>
<th>Pressure Company</th>
<th>Well Location</th>
<th>H2S Content</th>
<th>Logger serial #</th>
<th>Pass or Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>xxxx-08-27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pass</td>
</tr>
</tbody>
</table>

Casing Pressure (kPa) = 3721
Tubing Pressure (kPa) = 952
Well Type (see note A) = 1

Bled pressure to 0.0 kPa and recovered: 79.0 litres of diesel.
Let well stabilize at 0.0 kPa for: 15 minutes. (minimum of 5 minutes)

Started a 24 hour pressure build up on xxxx-08-27 at 10:13:00 (date & time) (See Graph)
Initial pressure at start of build up was 0 kPa.
Finished a 24 hour pressure build up on xxxx-08-28 at 10:54:40 (date & time) (See Graph)
Final Pressure was 24.0 kPa. (less than 3% is a pass)

Please Note: All class 1 & 2 wells must be pressure tested to 1400 kPa EXCEPT class 1A disposal wells which must be pressured up to 7000 kPa.

<table>
<thead>
<tr>
<th>NOTE A Well Type</th>
<th>NOTE B Fluid Recovery Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WATER INJECTION/DISPOSAL (OPERATING)</td>
<td>1. GAS (SWEET)</td>
</tr>
<tr>
<td>2. WATER INJECTION/DISPOSAL (SHUT-IN/SUSPENDED)</td>
<td>2. GAS (SOUR)</td>
</tr>
<tr>
<td>3. H2S &gt; 5% (PRODUCING)</td>
<td>3. OIL</td>
</tr>
<tr>
<td>4. H2S &gt; 5% (SHUT-IN SUSPENDED)</td>
<td>4. WATER (FRESH)</td>
</tr>
<tr>
<td>5. GAS INJECTION</td>
<td>5. WATER (SALT)</td>
</tr>
<tr>
<td>6. OTHER (SPECIFY)</td>
<td>7. INHIBITED WATER</td>
</tr>
<tr>
<td>8. OTHER (SPECIFY)</td>
<td></td>
</tr>
</tbody>
</table>
Started 24 hours pressure buildup on xxxx-08-27 at 10:13:00. Initial pressure was at 0.0 kPa.

Casing pressure was 3721 kPa upon arrival. Bled pressure to 0.0 kPa and recovered 79 litres of diesel.

Finished 24 hour pressure buildup on xxxx-08-28 at 10:54:40. Final pressure was 24 kPa.
CASE STUDY #2

Packer Isolation Test
PACKER ISOLATION TEST CASE #2
Case 2: Casing pressure is between 1 and 1400 kPa upon arrival

Casing Pressure (kPa) = 51  Tubing Pressure (kPa) = 5.7  Well Type (see note A) = 1

Bled Casing Pressure to 0.0 kPa in 0.5 minutes.
Recovered 0.0 litres of fluid.
Injected 5.0 litres of diesel fluid pressuring annulus up to 2509.0 kPa.

Let well stabilize for 24.0 minutes. (minimum 15 minutes)

Finished a 24 hour build up on xxxx-07-21 at 14:28:10 (date & time) (See Graph#2)
Initial pressure at start of build up was 7.0 kPa.

Final Pressure was 13.0 kPa. (less than 3% is a pass)

Comments

Please Note: All class 1 & 2 wells must be pressure tested to 1400 kPa EXCEPT class 1A disposal wells which must be pressured up to 7000 kPa.
Company: Golden Company Ltd.
Field: Packer Isolation Test (graph #1)
Surface Location: 00-00-000-00 WOM
Downhole Location: 100/00-000-00 WOM0D
Start Date: xxxx-07-20 13:22:30
End Date: xxxx-07-20 14:12:00
Logger ID: P107

- Pressured up casing to 2509 kPa and used 5.0 litres of diesel fluid.
- Let well stabilize for 24 minutes.
- Started 15 minutes pressure monitoring at 13:54:00 with pressure at 2003 kPa.
- Finished 15 minutes pressure monitoring at 14:09:00. Final pressure was at 1969 kPa. Change in pressure was 34 kPa.
- Casing pressure was at 51 kPa upon arrival. Bled pressure to 0.0 kPa and no fluid was recovered.
- Bled pressure to 0.0 kPa and recovered 2.0 litres of diesel fluid.
Company: Golden Company Ltd.
Field: Packer Isolation Test (graph #2)
Surface Location: 00-00-000-00 WOM
Downhole Location: 100/00-00-000-00 WOM/00
Start Date: xxxx-07-20 14:28:10
End Date: xxxx-07-21 14:52:30

Finished 24 hour pressure buildup on xxxx-07-20 at 14:28:10. Initial pressure was at 7 kPa.

Started 24 hour pressure buildup on xxxx-07-20 at 14:28:10. Final pressure was at 13 kPa.
CASE STUDY #3

Packer Isolation Test
Company: Golden Company Ltd.  Pressure Truck Company: Logger serial # & Filename: P642
Field Name: Black Gold  H2S Content: 0
Well Location: 100/00-00-000-00 W0M/00  Pass or Fail: Pass
Date: xxxx-06-24

Casing Pressure (kPa) = -2  Tubing Pressure (kPa) = -77  Well Type (see note A) =

Injected 340.0 litres of Diesel/Inhibited Water mixture pressuring annulus up to 1897 kPa.

Let well stabilize for 15.0 minutes. (minimum 15 minutes)

Started 15 minutes of pressure monitoring at 14:05:00 hrs:min:sec at 1870 kPa. (See Graph)

Finished 15 minutes of pressure monitoring at 14:20:00 hrs:min:sec at 1877 kPa.

Change in pressure was 7 kPa. (less than 3% in a pass)

Bled pressure to 0.0 kPa and recovered 45.0 litres of Diesel & Inhibited water mixture.

Comments

Please Note: All class 1 & 2 wells must be pressure tested to 1400 kPa EXCEPT class 1A disposal wells which must be pressured up to 7000 kPa.

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Let well stabilize for 15 minutes.

Started 15 minutes pressure monitoring at 14:05:00 at 1870 kPa.

Pressured up casing to 1897 kPa and used 340 litres of diesel and inhibited water.

Finished 15 minutes pressure monitoring at 14:20:00 at 1877 kPa. Change in pressure was 7 kPa.

Casing pressure was -2 kPa upon arrival.

Bled pressure to 0 kPa and recovered 45 litres of diesel and inhibited water.