

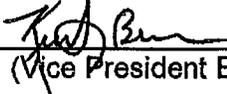
**ADDENDUM MP-D:
MECHANICAL INTEGRITY TESTING (SOP)**

November 2007

URANERZ ENERGY CORPORATION
STANDARD OPERATING PROCEDURES

Revision No.: New
Effective Date: 5/1/2008

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Approved By: 
(Vice President Exploration)

Date: 4/28/08

MECHANICAL INTEGRITY TESTING PROCEDURE

PURPOSE: This procedure defines the operating standards for Mechanical Integrity (MI) testing of wells.

SCOPE: All injection and recovery wells shall be MI tested, and documented by the provisions of this procedure. The wells shall be tested before being put into service and then tested every five years until the well is abandoned or sealed.

Wells must also be tested after any incident involving insertion of the drill rods, under reaming tools or steel cutting tools. Wells shall also be tested if an attempt to recover a pump that is stuck in the well casing occurs. An MI test is not required after pump installation, packer installation, air lifting, routine acid addition, standard well logging techniques, or swabbing. If there are other types of well activity not mentioned above, or activity that might have damaged the casing, the Wellfield Supervisor or designee will determine if MI testing is warranted.

SAFETY:

- All personnel, including company employees, contractors, and visitors, shall use personnel protective equipment (PPE) when working in proximity of the well.
- Minimum PPE shall consist of head, eye, and foot protection. Personnel engaged in handling testing materials shall use the manufacturer recommended PPE which may include hand and respiratory protection.
- All personnel engaged in testing materials or preparation of equipment shall be trained in the tasks involved including the provisions of this procedure.
- Remove all trash from the drill site at the completion of the test.
- When the upper packer is inflated, it is critical that the metal cage is always kept in front of the well head and that no work is done over the well head. If a well head ruptures, exploded pieces of casing can cause injury. Notify supervisor of any well head ruptures.
- If alpha radiation surveys indicate contamination problems, then rubber gloves or complete protective clothing will be required when removing packers from operated production wells.
- All electrical power to the wellhead must be shut off and tagged out.

RESPONSIBILITY:

1. The Uranerz Wellfield Supervisor will determine the need for integrity testing and will arrange for the testing. This includes the routine scheduled 5 year testing and any non-routine testing.

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2. The Wellfield Supervisor will ensure the Mechanical Integrity Testing Logsheet (EXP-LOG-004) is completed properly.
3. The Wellfield Supervisor will notify the Production Manager of any well that does not pass the MI test. If the well is currently being used, it will be taken out of service until it does pass. A weekly MI summary will be completed by the Wellfield.
4. The Wellfield Database will show dates of MI tests, and wells that need MI tested based on the 5 year rotation can be identified.

PROCEDURE:

1. Relieve all pressure from the accumulator. Open accumulator pressure valve and leave open while filling the accumulator with water.
2. Connect the packer cable and hose to the packer. The positioning of the packer is determined by the depth of the under reamed zone and the depth of the closest casing connection. Preferably the packer should be set between the opening to the aquifer and the last casing joint. However, if the connection is so close that a good seal of the packer may be jeopardized, the packer may be set above this point. The packer can be lowered with a ¾ inch steel pipe.
3. Fill the packer and the hydraulic hose (used to inflate it) with water. This is to prevent differences in hydrostatic pressure, which can lead to deformation of the packer while it is lowered into the well.
4. When the appropriate amount of steel pipe has been added to the packer, the pipe and hydraulic hose are connected to the acrylon cap. This cap seals the top of the casing.
5. Install safety cage.
6. Pressurize the packer and open the water valve on the acrylon cap. Fill casing with water.
7. The water level should stabilize, and this is an indication that the packer seated properly. If the water level does not stabilize, the packer can be repositioned, until a sufficient seal is obtained.
8. Open well pressure line and fill well to the appropriate pressure (approximately 150 PSI, but this will be site specific). Adjust accumulator pressure as needed.
9. Hold pressure for ten (10) minutes, and after equalization shut the valve and disconnect the well from the source of pressure. Record information on the Mechanical Integrity Testing Logsheet – EXP-LOG-004. Continue recording for at least 30 additional minutes.
10. A well is considered satisfactory if a pressure drop of less than 10 percent occurs over 60 minutes, or less than 5 percent pressure drop occurs over 30 minutes.

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11. If the well fails, the packer may need to be resealed. If each successive test is better than the previous test, continue resealing the packer and if the pressure falls to less than 90% of the original shut-in pressure, reseal the packer and repeat the test. Pressurize the casing until the well passes or until the loss of pressure no longer improves.
12. If, after successive attempts to set the packer and test the well, the pressure still drops below 90% of the original shut-in pressure, deem the casing incompetent for injection. Record all data on the Mechanical Integrity Test Logsheet EXP-LOG-004. Either repair or retest the incompetent well until deemed competent, or plug and abandon according to acceptable practices EXP-SOP-01.
13. After completion of the MI test, bleed the accumulator pressure and well pressure to zero
14. Open well cap and bleed valve on the accumulator.
15. Disconnect cable and hose from the well cap, and pull the packer out of the hole.

QUALITY ASSURANCE/QUALITY CONTROL:

1. The Mechanical Integrity Test Logsheet EXP-LOG-004 shall be documentation for proof of conformance with WDEQ regulations regarding mechanical integrity testing.
2. Logsheets of Mechanical Integrity Testing will be maintained by Uranerz management and shall be retained in the individual well files.

REFERENCES:

1. Wyoming DEQ/LQD, Noncoal Rules, Chapter 8, Noncoal Exploration by Drilling
2. Wyoming DEQ/LQD, Noncoal Rules, Chapter 11, In Situ Mining
3. Uranerz Energy Corporation, EXP-SOP-001, Exploration Hole and DNC Procedure.

ATTACHMENTS

1. Uranerz Energy Corporation, Mechanical Integrity Testing Logsheet, EXP-LOG-004

Mechanical Integrity Testing Logsheet

EXP-LOG-004

Well Identification:

Well Number:

Project Area:

Reason for Test:

Under Reamed Interval Depth

Date

Casing Type

Casing Bottom Depth (feet)

Casing I.D.

to

Packer Information:

Type (Brand Name)

Deflated O.D.

Inflated O.D.

Packer Depth:

Inflation Pressure

psi

psi

feet

psi

Test Results:

	1st Test	2nd Test	3rd Test	4th Test
Initial Pressure				
PSI @ _____ min				
PSI @ _____ min				
PSI @ _____ min				
PSI @ _____ min				
PSI @ _____ min				
PSI @ _____ min				
Total Pressure Loss				
% of Initial Pressure				

Comments:

Status of Well:

Pass	
Fail	