



9 Line Response Matrix

1. Basic POC/Rig Information:
 - A. Individual's Name (POC)
 - B. POC Phone #
 - C. POC Email
 - D. Rig Name
 - E. Operator Name
 - F. Rig Location
2. Is perceived problem screen related or equipment related?
3. If screen related, what is the screen size, vendor, and shaker type?
 - A. Screen Size
 - B. Shaker Type
 - C. Screen Vendor
4. If screen related, what are some of the mud parameters?
 - A. Mud Weight
 - B. Oil/Water Ratio
 - C. Mud Type
 - D. Horiz/Vertical Drilling
 - E. Mud Temperature
 - F. Elec. Stab.
 - G. PV/YP
 - H. Formation Type
5. If equipment related, what is the equipment brand, model, and unit number?
 - A. Equipment Brand
 - B. Equipment Model
 - C. Unit #
6. What is the customer's perception of the root cause of the problem (specific details required)?
7. What do you (Derrick Field Representative) determine to be the root cause of the problem (specific details required)?
8. What is the rig's drilling timeframe over the next 24-48 hours?
9. When will the rig complete the present well?
 - A. Date

SCREEN WEAR CONSIDERATIONS AND TROUBLESHOOTING

The following items are checks that you can do at your level to help you resolve screen related issues, or to help gather additional information for your Technical Services Department. Please call Technical Services for any issues that you cannot resolve at your level, or should you have any questions regarding the checks listed below.

Derrick Equipment Company
Attn: Technical Services Department
15630 Export Plaza Drive • Houston, Texas 77032
Office: 281-590-3003 • Fax: 281-590-6187
Email: derrick@derrickequipment.com

1. Check for screen usage trends:
(review your ticket books to verify an increase in # of screens used)
2. Check for near size blinding/plugging:
 - a. Wait for connection and clean screens
 - b. When flow begins, watch screens for ½ hour - 1 hour to observe fluid end points
 - c. If fluid end-point migrates towards discharge end of shaker, near-size blinding/plugging may exist
 - d. With Company's permission, you may consider screening by 2X finer to try to screen out those near-sized solids
3. Check screen for proper seal with shaker:
 - a. Proper tensioning (fingers are 40-1/8" apart)
 - b. Wear on cross and side supports
 - c. Notching of tension fingers
4. Check for proper vibration of basket:
 - a. Use vibration analysis kit to check for proper shaker motion
 - b. Check to see if solids are conveying off end of shaker/rate of solids conveyance between multiple shakers
 - c. Ensure that both motors are on and operationally correct
 - d. Check for swelling and/or cracking of float mounts
 - e. Check for odd noises coming from shaker and describe noises to a Technical Services Representative
5. Review mud reports to check for:
 - a. High PV/YP (viscosity and yield point)
 - b. Increasing chlorides content (>50,000 mg/l of whole mud)
 - c. Increasing low gravity solids (check % LGS on mud report)
 - d. Low Electrical Stability if OBM
(E.S. < 500 volts may cause water-wet solids to occur)
 - e. Presence of PHPA additions in the mud (polymer)
 - f. Recent additions of LCM
 - g. If time permits, review previous well reports and look for differences in drilling parameters or drilling practices.
For example: differences in amount of time taken to drill a well, differences in the amount of lost circulation time, etc.