

FLUIDDETECTION

The temperature observation turn-key process begins with a fluid level detection test. Having a known fluid level provides the knowledge of potential casing hole depths or cross referenced data for the temperature survey.

FES uses a wireless fluid level detection device that keeps our employees at safe work distances during testing. Typically used for observation, idle and or producing wells. Fluid detection is mandated for idle wells per CALGEM.

Equipment Used: Echometer Wireless Remote Gas Gun & TAM software.



WATERTOPOFF

After a known fluid level is established, FES is already prepared to follow up with the next step of the operation with the water top off.

Temperature observation water top offs are an essential piece to the operation as acclimated water in observation wells provide the most accuracy for temperature survey readings.

FES Water truck is typically utilized for TO top offs, SAPT/MIT 1, and low pressure casing tests.

PRESSURE TESTING

Fact: Per CALGEM rules and regulations, all observation wells must have a casing pressure test completed once every 60 months or fewer. SAPT/MIT 1 tests are also needed outside of observation wells.

FES utilizes pressure gauges with live pressure readings and memory functions to create CALGEM approved pressure test presentations. As a part of the "turn-key" process, no extra equipment need be requested as our pressure gauges are easily connected into our water truck pressure system.

Equipment Used: NVision Crystal 3000 PSI Pressure Gauge.

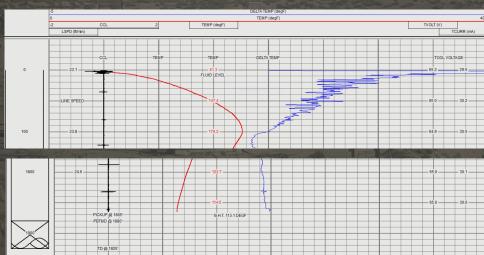


TEMPERATURESURVEYS

FES ends the turn-key operation with a temperature survey. We utilize our full size wireline trucks to ensure the preparation and safety for any job.

We are very attentive toward CALGEM rules and regulations in order to produce accurate survey testing and quality presentations. In all of our Tempearture surveys, we include the following data:

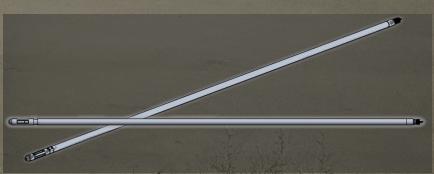
Temperature (DEGF), Delta Temperature, Line Speed, Fluid Level, Tool Voltage, Pickup and Bottom Hole Temperature



Calibrations are completed on a strict weekly schedule using a calibration station in a controlled environment located at the FES office. Once calibrated FES temperature tool will log data within 2 Degrees F accuracy (+1,-1 Degree F). Calibration receipts are presented for each specific logging tool used for survey:

Calibration Report Database File FIN-RS385 (03-10-2021).db Dataset Pathname MWSS/FIN-RS385/run1/TEMP Dataset Creation Wed Mar 10 06:50:09 2021			
Temperature Calibration Report			
Serial Number: Tool Model: Performed:	T-8 TITAN Tue Mar 9 10:14:4 Reference	10 2021 Reading	
Low Reference: High Reference: Gain: Offset Delta Spacing	61.50 degF 212.80 degF 0.10 0.66 1	605.74 cps 2112.09cps	

Toolstrings used for temperature surveys consist of temperature tool/probe and collar locator tool contained within a custom sized pressure barrel. FES temperature toolstrings are 1" OD with a heat rating of 400 Degrees F.





WHYFES?

Management of Work:

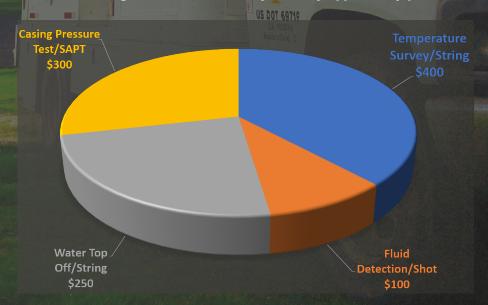
FES provides all the services and utilizes the equipment you need to test and stay in compliance for CALGEM rules and regulations. Time sensitive jobs are not an issue when working with FES, if needed we can perform all mentioned services same day with next day turnaround results. Your priorities are our priorities. No more scheduling conflicts, miscommunication or CALGEM issues.

Safety:

Safety is important to us, so working under the highest safety standards according to the customers and our own guidelines is our highest priority. From management to our entry level workers we are instilled with the importance of a balanced safety and production relationship. Our entire fleet is equipped with all the necessary safety documents including SOPs for every part of the turn-key process, equipment certificates and rating references which allows all FES employees to work in a safe environment at any jobsite.

Competitive Pricing:

At FES, we pride ourselves in the quality of work we provide for all our customers. We are also proud to bring that same quality of work at a fair and competitive price. FES maintains a great relationship with our business partners by bringing consistent work ethic and saving their time and money at every opportunity possible.



Additional charges may include: High Temperature (>300 DEGF), Energy Control, Depth (>3000') and Travel Charges. *Not all services are required to schedule work with FES.*