ALERT 1-18: WIRELINE TOOL MANIFOLD SHEARS – RESULTING IN DROPPED OBJECT

WHAT HAPPENED:

While making up a wireline tool assembly, the rig heaved while the wireline string was being lowered by a rig floor winch. As the rig heaved, a needle valve bleed off manifold on the Coil Tubing Lift Frame (CTLF) made contact with the tool string lifting bridle. Upon contact with the bridle, the needle valve bleed off manifold sheared off at the threaded coupling and fell directly to the rig floor. The needle valve bleed off manifold weighed 7lb. and fell 30ft. No injury to personnel resulted from this incident.

CONTRIBUTING FACTORS:

The needle valve manifold had been put together in a linear fashion and protruded too much from the lubricator (approx. 18”). This had not been identified as a hazard by the Service Provider or the rig crews. The requirement for; and method of pulling back and securing the lubricator to the CTLF was not specified in the procedure. Not securing the lubricator to the CTLF allowed lateral movement of the lubricator which contributed to its close proximity to the tool string.

LESSONS LEARNED:

- There was no secondary retention fitted to the valve manifold at the time of the incident. On the initial rig-up secondary retention had been fitted. However following various rig-ups the secondary retention had been omitted. This omission had not been identified through subsequent dropped object inspections.
A Safety Alert can consist of any type of health, safety & environment (HSE) notification or Near Miss/Near Hit alert. Proactive Alerts on jobs well done are also encouraged.

- The requirement to ensure that Service Providers had a daily dropped object prevention checklist (to include secondary retention) prior to installing Service Provider temporary equipment at height was not followed.
- The Service Provider did not have a dropped object inspection checklist for this rig-up.
- Following the incident, it was possible to fit a right-angle fitting and rig up the needle valves in such a way that the protrusion was reduced considerably and the majority of the valves could be operated from the rig floor without the need for man-riding. Valves and gauges are now located at the bottom of the hose at drill floor level as per the picture below.