



Washed Conventional Elbow “To Atmosphere”. Well shut in immediately. 5000psi Fitting / First Elbow off Well-head While performing coil-clean-out.



Bottom view of Conventional Elbow Above. Wear also occurred on bottom half of Elbow. Thinning all around Elbow



Aggressive wash present on this 5000psi Conventional Elbow. Elbow spotted during Shut-down. Immediately removed from service.



Washed Conventional Cross. 10000psi rating. Washed to Atmosphere. Wash pattern similar to that of an Elbow. Flowing from left to right. Sand cushion length seems to have not to made a difference in wear pattern.



Another Conventional 5000psi fitting. Sand Cushion damage minimal. Again showing wear on both Bottom and Top side of Elbow



Washed Integral Elbow 5000psi. Wear Patterns are the same as Conventional Elbow. Washed to Atmosphere.



Washed Integral 5000psi fittings. Wear patterns don't seem to change with length of Sand Cushion. Still fittings are washing to Atmosphere.





Worldwide Matrix Early Warning System. We don't claim to be able to stop the wash. We just want to warn Operators of impending Wash-out before release to Atmosphere.

