

Abstract Submitted  
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**Thermo-Oxidation Experiments in the DIII-D Tokamak**<sup>1</sup> C.P. CHROBAK, P.L. TAYLOR, N.H. BROOKS, G.L. JACKSON, D.R. WALL, General Atomics, E.A. UNTERBERG, ORNL, B. FITZPATRICK, J.W. DAVIS, A.A. HAASZ, A.G. MCLEAN, P.C. STANGEBY, C. TSUI, U. Toronto, K.R. UMSTADTER, UCSD, S.L. ALLEN, LLNL, W.R. WAMPLER, SNL — To evaluate the effectiveness of removing carbon co-deposits and trapped deuterium from tokamak surfaces by thermo-oxidation and to demonstrate the recovery of high performance plasmas, two independent thermo-oxidations of the DIII-D tokamak were performed. Graphite tiles containing <sup>13</sup>C rich co-deposits and various witness samples were installed on passively heated, flange-mounted platforms for the first exposure. Plasma operations were recovered and followed by a series of <sup>13</sup>C-seeded plasma shots. A second thermo-oxidation was performed, followed by a removal of select wall and divertor tiles. Results show a decrease in co-deposited <sup>13</sup>C and D content on precharacterized tiles, and a temperature dependent uptake of D on stainless steel witness samples. Preliminary results, as well as operational and experimental details of the thermo-oxidation exposures are presented.

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