# WELL EXAMINATION AND RECERTIFICATION
# Well Tubulars, Cementing and Barrier Check

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| **Well Name** | Atwater Valley 617 SA01 ST01 - OCS-G1-08037 #2 – Neptune Development |
| **Program Description** | Well Casing Design, Cement Program and Barrier Reviews |
| **Program Revision Number / Date** | BHP-U211-019 Rev B / 12 January 2012 |
| **Well Examiner** | David B. Lewis |

The well program referenced above has been examined and is fit for purpose to achieve the stated objectives as per the BSEE requirements for the well casing design and cement program for the 11-3/4" drilling liner and 9-5/8" production liner. Should there be any deviations from the well design assumptions or stated purpose the Examiner must be contacted to check the potential implications.

There are at least two independent tested barriers, including one mechanical barrier, across each flow path during well completion activities and the casing and cementing design is appropriate for the purpose for which it is intended under expected wellbore conditions.

This recertification replaces Revision A dated 10 August 2011 and addresses setting the 11-3/4" shallower.

| **Requirements CFR 250.418 (h) CFR 250.420 (a)(6)** | **Documents Reviewed** | **Deemed Appropriate** |
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| Casing | • SA01 ST01 Wellbore Schematic 20121012 rev12 DEV.pdf – 12 January 2012<br>• SA01 ST01 Casing Run Sequence 20120112 DV.pdf – 12 January 2012<br>• Exhibit A SA001ST01 WCST L1 REV 1 18 12Jan12.pdfd – 12 January 2012<br>• SA01ST01_MMS123S_Form and calculations Rev3.pdf – 12 January 2012<br>• BOWD W2p7_August_2011.docx – 7 August 2011<br>• SA01 ST1 Sundry Procedure rev2.docx – 1 August 2011<br>• SA001 ST1_PPFG_20110801.ppt – 1 August 2011<br>• SA01ST1-W2_ProfileforDrilling.xls – 1 July 2011<br>• 8x11 – AT617 #2 SA001 ST01BP00 Option (W2.7) Rev 2.2.pdf – 20 July 2011<br>• AT617 #2 SA001 ST01BP00 Option (W2.7) Rev 2.2 rg 20July11 Proposal Report.xlsx – 20 July 2011<br>• Neptune Temperature Profile.pdf – 1 July 2010<br>• SA01ST01_MASP_MAWP_Casing_Design.xls – 1 August 2011<br>• Blade CLAP Program File – Neptune SA01 ST01.CLP – 10 August 2011 | Yes |

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| Cementing | • SA01ST01 AT617 Cementing Best Practices Rev4 General Question 20.pdf – 12 January 2012<br>• Neptune SA01 ST01 11 34 in Liner Cement Program Final_rev1.doc – 12 January 2012<br>• 080111 Neptune SA-01 ST1 Sidetrack 9 58 x 9 78 Liner Cemcade rev.2.doc – 1 August 2011 | Yes |
| Two independent tested barriers | • CFR 250.420(a)(6) SA01ST1 Suspension Barrier Analysis.pdf – 2 August 2011<br>• (20) SA01ST01 AT617 Well integrity Considerations.pdf – 4 August 2011 | Yes |

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| **Signed:** David B. Lewis |
| **Date:** 12 January 2012 |

# QUALIFICATIONS OF DAVID B. LEWIS

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| **General** | David has thirty years of domestic and international experience in oil & gas exploration and production. He has an engineering and an operational background in drilling, completions, offshore structures and experience in deepwater, big bore (mono bore) and high pressure-high temperature wells. He is a Registered Professional Engineer in the State of Texas, a member of ASCE, SPE, and serves on numerous API and ISO committees. |
| **Education** | MS degree in Civil Engineering - Structures / Engineering Mechanics – 1980 - University of Missouri-Rolla<br>BS degree in Civil Engineering - Structures / Engineering Mechanics – 1978 - University of Missouri-Rolla<br>Post-graduate doctoral work in finite element methods, continuum mechanics, vibrations, and structural dynamics. |
| **Employment** | 2001 – Present President and CEO - Blade Energy Partners<br>2000 – 2001 Section Manager – Well Construction Technology - ExxonMobil<br>1997 – 2000 Section Manager – Drilling Technology - Mobil Technology Company<br>1992 – 1997 Senior Drilling Engineering Advisor - Mobil Drilling<br>1988 – 1992 Senior Drilling Engineer - Mobil Drilling<br>1981 – 1988 Senior Structural Engineer - Mobil Technology Company |
| **Affiliations** | Registered Professional Engineer – Texas #59664<br>API – American Petroleum Institute<br>• API Executive Board Member of Committee 5 – Tubular Goods<br>• Chairman API RP 5-EX Resource Group on Solid Expandable Development<br>• Chairman API Resource Group on Tubular Properties Software Development<br>• Technical Member of API 5CT - Specifications for Casing and Tubing<br>• Technical Member of API TR 5C3 - Bulletin on Formulas and Calculations for Casing, Tubing, Drill Pipe, and Line Pipe Properties<br>• API Executive Board Member of Committee 16 - Drilling Well Control Equipment<br>• Chairman 16Q - Recommended Practice for Design, Selection, Operation and Maintenance of Marine Drilling Riser Systems<br>• Chairman 16R - Specification for Marine Drilling Riser Couplings<br>• Technical Member of API RP 6HP (PER 15K) - Greater than 15 ksi Equipment<br>• Technical Member API RP 96 – Deepwater Design Considerations<br>ISO – International Standardization Organization<br>• Technical Member WG2A and WG2B for ISO TR 10400 - Petroleum and natural gas industries — Equations and calculations for the properties of casing, tubing, drill pipe and line pipe used as casing or tubing<br>Authored or co-authored 25 technical publications in the upstream oil and gas industry. |