Candidate Profile

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| Candidate Name: | Lee Kay Heong | | |
| Client Name: | **Exxonmobil** | | |
| Position Applied: | Inspection Engineer | | |
| Consultant Name: | Jerusha Lieow Lengse | | EA Personnel Registration No. R1543596 |
| Consultant Contact Details: | Jerusha\_Lieow@kellyservices.com.sg | | |
| O (65) 6709 3441 | M (65) 9750 4536 | F (65) 6337 1950 |

**Candidate Summary**

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| Gender: | Male |
| Date of Birth: | 21st Nov 1976 |
| Marital Status: | Married |
| Nationality: | Singaporean |
| Languages: | English |
| Availability: | 3 Months |
| Salary: | Current basic – SGD 8749 x 15 months ( 3 months fixed AWS )  Allowances – SGD 250 per month  Variable Bonus – 3 months on average  Expected Salary – 10% increase from current annual package |

**Kelly Consultant’s Comments**

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| * Candidate had graduated from NUS in 2010 with Master of Science in Materials and Science and obtained his certified API 571/653/570/510. ASW-CWI certification, certified international welding engineer by IIW and NACE Corrosion Technologist. * Has more than 10 years of experience in working as an inspection engineer since 2005 in SGS, Total Petrochemical and Shell Chemical Seraya till now. In Total and Shell, mainly deal with the in-service inspection to ensure that the static equipment is fit-for-operation. Knowledgeable in various internal code and standards such as NACE, API, ASME Section VIII D1 and B31.3 etc. Also involved in the new static equipment design reviewed. |

**EMPLOYMENT HISTORY**

**Aug 2008 – Present**

**Shell Chemical Seraya Pte Ltd**

**Project Quality Lead**

Key Responsibilities:

* Work as a Project Quality Lead, leading a section with 2 staffs. This section consists of Project Quality Assurance and project equipment /piping inspection.
* In charge of the project quality assurance program and project inspection for static equipment.
* Responsible to setup and implement the project quality assurance framework for CAPEX/ plant change projects is to ensure that the all equipment have meet its Design / quality aspect to ensure the equipment are fit for purpose.
* For project inspection is to ensure that the static equipment and piping quality plan are compiled as per Shell DEPs and international standard and code.
* Work as a Lead Inspection engineer, I am leading a section with 3 staffs and 20 NDT contract staffs. This section consists of Pressure relief valve (PRV), storage tank inspection, project inspection, piping inspection and NDT activity.
* Manage the pressure relief valve program to ensure that the pressure relief valve are properly inspected and tested. Review and approve the testing report include the new testing interval after testing.
* For Storage tank, to work out the inspection planning strategy as per risk based assessment. Manage the inspection activity and review the recommendation by inspection engineer.
* For project inspection is to ensure that the static equipment and piping quality plan are compiled as per Shell DEPs and international standard and code.
* Develop and manage the piping inspection program include the inspection activity as per API 570. Review and approve the inspection report by inspection engineer.
* Manage the in-house NDT team, ensure that their quality and qualification system are properly in-place and to provide this NDT support to the site inspection, project and maintenance activity.
* Perform and/or review of the static equipment design and/or modification work to ensure that the equipment are fitness for purpose.
* Perform mechanical review/calculation for re-rating / repair / new equipment as per ASME Section VIII D1 and ASME B31.3 and TEMA for the capital and growth projects. As well as the plant change projects.
* To perform the Level II Fitness For Service as per API 579 to ensure that static equipment are fitness for purpose
* Involve Root cause analysis related to static equipment failure in term of stress analysis
* Review and approved the method statement submitted by the contractor.
* Review the technical specification as Subject Matter Expert to compliance the technical code and DEPs
* Knowledge of using the PVElite and CAESAR II software to perform the analysis.
* Performed as a Custodian Inspection Engineer to ensure that the reliability and integrity of the static equipment
* Performed mechanical review/calculation for re-rating / repair / new equipment as per ASME Section VIII D1 and ASME B31.3 and TEMA. As well as perform the Fitness for Service as per API 579.
* Assist the Corrosion and Materials Engineer to review the corrosion study.
* Act as a Lead inspection engineer for the SMPO1 Turnaround in 2011 / MEG Turnaround in 2012 / EGS Turnaround 2013 to provide the necessary support and work out the details inspection plan to be carried out.
* Plan, Implement and review the plant inspection plan for the existing fixed equipment such as Process piping, Heat exchanger, Vessel, Reactor and column.
* Conduct the failure analysis and provide the appropriate recommendation of the inspection findings based on the damaged mechanism
* Performed as Quality Manager in the SAC-Inspection bodies
* Involved Root cause analysis related to static equipment failure
* Reviewed and approved the method statement submitted by the contractor.

Reason for Leaving: Seeking new challenges for personal and career growth

**Jul 2006 – Jul 2008**

**Total Petro Chemical SEA Pte Ltd.**

**Inspection Engineer**

Key Responsibilities:

* Plan, Implement and follow the plant inspection plan for the existing fixed equipment by identity the damages mechanism and determine the inspection effectiveness as per API Code.
* Review and approve the welding procedure submitted by contractors, witness the welding procedure qualification test. As well as Welding Procedure Specification (WPS) for Carbon Steel and Stainless Steel.
* Plan, organize and execute inspection activities for plant shutdowns.
* Provide the appropriate recommendation of the inspection findings.
* Plan & implement the repair work according to the inspection recommendation.
* Review and update the inspection program for individual equipment in the CIS program and Inspection Program Database.
* Provide an input for engineering specification for new equipment purchase to ensure compliance to applicable codes
* Liaise with authorize persons person for compliance of the statutory equipment according to Workplace Safety Health Act.
* Liaise and coordinating with other departments to implement the investment projects
* Planning and supervise of all investment projects.

**Jun 2005 – Jul 2006**

**SGS Testing & Control Services Pte Ltd**

**Inspection Engineer**

Key Responsibilities:

* Ensure the integrity of the products by reviewing documents such as WPS, WPRQ and PQR, verifying, inspecting and testing products according to client’s specifications, applicable drawings, codes and standards such as API 6A - Specification for Wellhead and Christmas Tree Equipment, API 5CT - Specification for Casing & Tubing and shop fabrication Inspection as per ASME Section VIII D1 and B31.3.
* Area of Inspection involved as follows:
* Third party inspection of Wellhead Equipment & Oil Country Tubular Goods as per API 6A, NACE-MR0175, ACT 5CT and customer’s specifications.
* Vendor Surveillance
* Quality Assurance and Quality Control Inspection
* Shop fabrication Inspection as per ASME etc.
* Pre-shipment Inspection

**Oct 2002 – Jun 2005**

**DSO National Laboratories**

**Assistant Engineer**

Key Responsibilities:

* Assistant Engineer in Smart Structure Group of Advance Materials Laboratory. Smart Structure Group specialized in developing underwater acoustics materials for defense purposes.
* Conducting experiments for the in-house fabricated acoustics materials.
* Design and draw the mold and fixture for in-house fabrication process.
* Liaise with contractors to build our testing facility, as we are new in this area.
* Source for all mechanical components as well as other components required in our work.
* Handle all mechanical issue within the group including review and approved the welding procedure specification involve in the fabrication.

**Feb 2000 – Sep 2002**

**Det Norske Verities Pte Ltd**

**Engineering Assistant**

Key Responsibilities:

* Engineering Assistant in verification, analysis, and testing and calibration department. Have been assigned projects in the field of materials testing, components testing, weighting in marine, offshore and land-based industry.
* In Det Norske Verities from 2000 to 2002 as Engineering Assistant and involvement as follows:
* Conduct Mechanical and CTOD testing for welding procedure qualification
* Fatigue Testing of Welded Rail Joint (AS 1085.15 1995, Appendix C, Section C2) for Alstom Transportation Services Ltd.
* Rail Slow Bend Test, Rail Compression and Tension test, Fatigue Stroke Rolling Testing of Rail for North-East Rail MRT Line
* Some examples of projects undertaken are:
* Mechanical and CTOD testing for welding procedure qualification for our client in the mainly marine and offshore industry.
* Load Testing on different components in marine, offshore and land-based industry.
* Weighting of offshore structure to determine actual weight and plan centre of gravity for load out purposes.
* Involved in the following testing projects:
* External pressure for Fiberglass Reinforce Pipes (ASTM D2924) and Fatigue Testing on Double O-Ring Expansion Coupling 2” and 6” Diameter Fiberglass Reinforce Pipes for Ameron Pte Ltd.
* Testing of Prestressed Concrete Sleepers (AS 1085.14 1990 Specification) for Associated Concrete Products (M) Sdn Bhd.
* Fatigue Testing of Welded Rail Joint (AS 1085.15 1995, Appendix C, Section C2) for Alstom Transportation Services Ltd.
* Rail Slow Bend Test, Rail Compression and Tension test, Fatigue Stroke Rolling Testing of Rail for North-East Rail MRT Line.
* Designing an in-house 400 tonnes tensile rig for calibrating of load-link. It can use to conduct other testing purpose.
* Calibration of testing machine, force-measuring device, hydraulic jack and pressure gauge.
* Conduct magnetic particles and dye penetrant test in presence of the engineer for in-house testing.

**EDUCATION & PROFESSIONAL DEVELOPMENT**

**Master of Science in Materials Science and Engineering Jul 2008 – Dec 2010**

National University of Singapore

**Bachelor of Technology in Mechanical Engineering Jan 2002 – Dec 2005**

National University of Singapore

**Diploma in Mechanical Engineering Jul 1998 – May 2001**

Singapore Polytechnic

**ITC in Mechanical Engineering Jul 1996 – Jun 1998**

ITE Dover

**NTC-2 & 3 in Motor Vehicle Mechanics Jan 1993 – Dec 1994**

ITE Balestier

**Professional Qualifications**:

* IIW Certified International Welding Engineer [Cert No. SGP-IWE-0019 (May 2012)
* NACE Corrosion Technologists [Cert No. 36100, Expiry on 31 Jan 2018] (Jan 2012)
* API 571 Corrosion Mechanisms [Cert No. 40544, Expiry on 31 May 2017] (Mar 2011)
* API 653 Storage Tank Inspector [Cert No. 38355, Expiry on 31 May 2016] (Mar 2010)
* API 570 Piping Inspector [Cert No. 37079, Expiry on 31 Jan 2016] (Dec 2009)
* API 510 Pressure Vessel Inspector [Cert No. 32975, Expiry on 31 July 2017] (Jul 2008)
* American Welding Society – Certified Welding Inspector [Cert No. 08012261, Expiry on 1 Jan 2017] (Jan 2008)
* ASNT Radiograph Interpretation Level II [Cert No. 11441, Expiry on 7 Jan 2013] (Jan 2008)
* WSQ Magnetic Particle Testing II (Apr 2008)

**Seminar/ Course Attend:**

* Attended the CAESAR II Pipe Stress Analysis (Jul 2013)
* Intergraph Coade
* Attended the ASME B31.3: Design of Process Piping (May 2012)
* EDSA ASIA
* ASME Section VIII Division 1 & 2: Design & Fabrication of Pressure Vessels (Feb 2011)
* EDSA ASIA
* Fitness for Service Assessment (Jul 2009)
* TWI Malaysia [Cert No. ATC116/KL/09/07/027]
* Inspection Body Management Course (Mar 2009)