

Total Valve Care.

Company | Profile

ON-LINE VALVE LUBRICATION AND SEALING SERVICE

Version 12 / 2021



PRESSURELUBE
INTERNATIONAL

www.pressurelube.com.au



PRESSURELUBE
INTERNATIONAL

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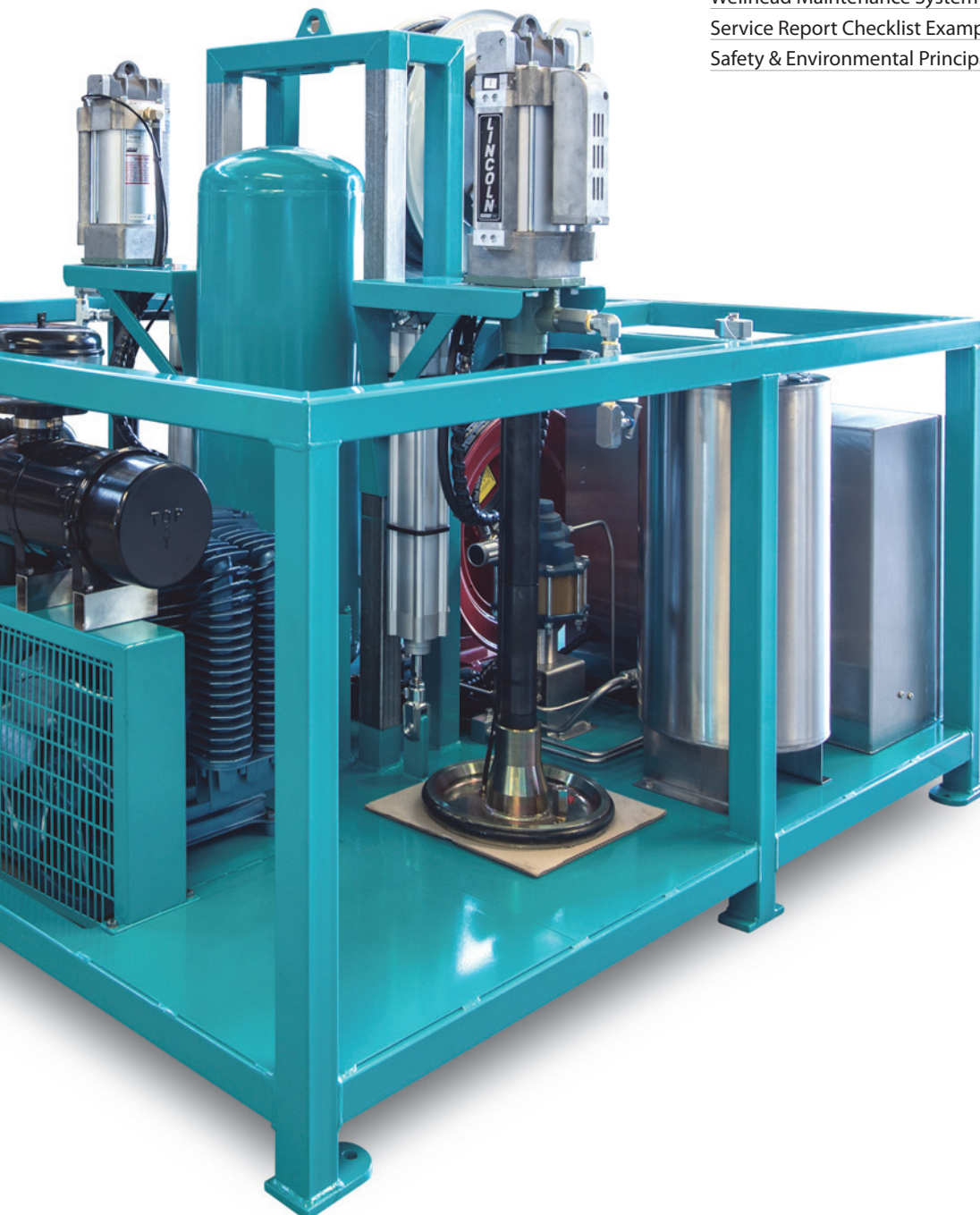
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Company Overview

Pressure Lube International (PLI) has been providing expertise in on-line valve lubrication, sealing services & equipment since 1993. Over the years our products have been continually upgraded to ensure optimum level performance. We specialize in on-site repairs for both large and small operations in Australia, New Zealand, UK and the Middle East. We also manufacture fittings, adaptors, safety tools, pumps and equipment for valve maintenance.

Over the years PLI has made countless innovations in the valve service market. One of our key capabilities is our unique method of flushing, lubricating and sealing a valve on-line without having to close in the valve. Since the obvious objective of a valve is to be in control of a process without passing or leaking, our process helps to ensure valves remain easy to operate and personnel can continue to manage the system.

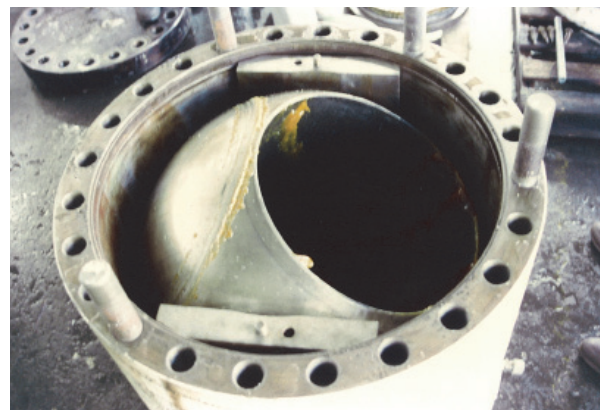
Any valve which has a PLI lubrication / emergency sealing fitting can be serviced by PLI. A passing or seized valve can be kept on line by a method of cleaning risers or lube lines, to allow the injection of 100% synthetic lubricants or sealants. Whether on wellheads, production platform or pipeline, the PLI valve healthcare program has proven to increase valve integrity and reduce costs.

In 2003 Pressure Lube recognized the opportunity for valve repair, testing, modifications and design. Through this service, Pressure Lube can offer a superior range of products to clients throughout the world.

Pressure Lube prides itself on service and to meet our customers needs we offer three service options:

- Short term (repair maintenance and testing)
- Long term (development of preventative maintenance programmes)
- Comprehensive valve refurbishment and repair.

Products, equipment and personnel are available on 24 hour call out for offshore / onshore. All work is fully documented and training is available.



Focus On Service

Pressure Lube understands that different clients have different service needs. Below is a brief description of our service options. In all cases we fully document our procedures from start to finish to assist in tracking and planning future works. We also tag all the valves, showing which products were injected and when they are due for their next service.

Quality control for our products is also stringently carried out by means of a batch numbering system. All Products are supplied with Material Safety Data Sheets (download MSDS pdf), prepared according to O.S.H.A., showing all relevant health and safety features as required by today's oil and gas companies.

Please do not hesitate to contact us for further details.

Range of Services

- Flushing and sealing of passing valves
- Setting up of preventative valve maintenance programmes
- Setting up of valve lubrication systems
- Training
- Sales of equipment & products
- Valve repair & testing

Short Term

Valves are flushed with our liquid Valve Flush and then injected with Synthetic Valve Lubricant. This process maintains the valve and its sealing integrity. If the valve does not pass a test, sealant is injected and the valve is sealed until a planned shutdown. This valve is tagged and should be removed for repair.



Long term (P.M.)

The Pressure Lube team will design a tailor-made preventative maintenance programme based on the customer's needs according to their unique operating environment and frequency of valve operations. We can implement this as a system to be operated by the customer or one that we operate as a turnkey contractor.

Valve Repair

We can now offer comprehensive valve repair and testing services on various types of valves including ball, gate, plug, and wellhead valves.

New Valves

We offer a large range of valves, actuators and accessories through our extensive supply chain networks and agency agreements. Catering for on demand supply or for project packages, we have solutions for all process demands. Please visit www.valvesales.com.au for more information.





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Products Overview

Maintenance Products

We have developed a full range of specialised valve maintenance products for the oil and gas industry. Our LIQUID VALVE FLUSH is developed to remove even the most stubborn of hydrocarbon deposits and old hydrocarbon sealants from the seal and spring areas of a valve, without damaging elastomers or seals. It will also dissolve waxes produced in oil production, thus allowing the valves to be effectively flushed prior to lubrication and sealing. It is applied with an air operated liquid injection pump.

We developed our SYNTHETIC VALVE LUBRICANT to be used in continual P.M. systems as a cheaper alternative to costly sealants. PLI's synthetic lubricant is resilient to all products coming up a production string or produced in a gas processing plant. This reduces the need to stock various types of lubricants and therefore reduces costs. Since it is fully synthetic it will also not harden or block up the injection ports reducing torque and giving a perfect seal even after repeated cycling. This lubricant can be used in ball gate and plug valves. For geothermal valves, you may use the specially formulated SYNTHETIC GEOTHERMAL LUBRICANT, a high temperature (up to 900F) lubricant, developed for geothermal use.

PLI's SYNTHETIC VALVE SEALANT is a last line of defence in valve maintenance, i.e. a valve must be sealed at all costs to eliminate the need for an untimely shut down. Our valve sealant contains no PTFE-fillers, will not harden and is excellent for emergency seat renewal and low pressure sealing problems. It comes in various grades, but the standard grade is good for H₂S and CO₂ services. It comes in various grades, however, the standard grade is suitable for use with H₂S and CO₂ service, and is immiscible in condensate.

PLI's SELF-MOULD stick packing is used in stem packing glands on valves and packing boxes on pumps. It will mould to any shape and outlasts conventional packing considerably. It is also synthetic and has properties similar to our sealant.

Fittings and Adaptors

With our 316 SS EASI FLOW VENT CAP LUBRICATION FITTING with Inconel 600 spring and monel K 500 ball the heaviest of sealants can be pumped and will flow freely due to the "EASI FLOW" concept. We also manufacture pressure relief tools and a full range of adaptors. Please consult the literature and drawings in the Fittings and Adaptors sections.

Pumps and Equipment

The HIGH PRESSURE AIR OPERATED LUBRICATION PUMP is designed to be the lightest and most mobile, but is still heavy duty enough for the oil and gas market's toughest locations onshore or offshore. The pump system with 75:1 ratio air motor is capable of producing 7,500-psi lubricant/sealant pressure and has a flow rate that will thoroughly lubricate any valve. We also have an optional 140:1 ratio air motor for those higher-pressure applications that will product up to 14,000-psi lubrication pressure.

We have installed FIXED WELLHEAD LUBRICATION SYSTEMS where we installed a stationary pump with SS piping to a hose reel central to the wellhead deck area, enabling wellhead valves and diverter valves to be lubricated without the need to move equipment.

The PORTABLE 9649L BUCKET PUMP is a small unit developed to do those one off valve jobs where bigger pumps are not ideal or where an emergency occurs and a quick response with a helicopter is required.

Our liquid injection air operated high volume mounted pump with stainless steel TANK TROLLY is designed to inject our liquid valve flush into valves. This unit can produce controllable injection pressures up to 10,000 psi, enabling the flush to cut the most stubborn of hardened materials.

Pressure Lube can also make lubrication equipment to suit an individual customer's needs and requirements. Some options we offer are skid mounted with compressors and mobile units mounted in 4 X 4 trucks for pipeline applications. In our range we can offer a Zone2 compressor unit, uniquely designed for complete safety in hazardous areas.





Project History

COMPANY	PROJECT DETAILS	LOCATION	DATES
Alinta Gas	Alinta Asset Services are currently purchasing PLI's Marine Grade 316 Stainless steel Vent Cap Fittings.	Australia	1998
Amserve	Training on all aspects of Pressurelube International products and equipment	Malaysia	2015 - present
Apache Energy	Service 2"1/6 to 5"1/8 wellhead gate, 2"to 16" ball, repairs to ball valves, at Varanus Island and Double Island, also including RIGS: Alpha, Charlie, Bravo, Simbad, Camball, Wonnich, Agincourt, Simson A, Simson B, Gibson and Victoria	Varanus Island, Double Island	1998 - 2003
Aramco	PLI designed and manufactured self contained lubrication and sealing skid for pipeline maintenance. Aramco have purchased more than 20 units, which will be a standard order over the next few years in all fields. In June 1998 PLI was contracted to look after 200 wells on a full time basis.	Saudi Arabia	1998 - present
BHP Petroleum	Supply Valve lube fittings in 1996, Service valves on Griffin Venture F.P.S.O., service 6" ball valves	Western Australia	1996
BP Refinery Kwinana	Service 1996 to current, wedge gate, plug, ball, repair to plug valve gear box's	Western Australia	1996 - present
Conoco Phillips	Purchases equipment and all products. Changing out all lubrication fittings for 316 SS Vent Cap Fittings.	Australia	1998
Edeco	Purchases on a regular basis our high pressure lubrication equipment PLI Synthetic Sealant, Lubricant, Valve Flush and our 316SS Vent Cap Fittings.	Australia	1999 - present
ESSO	Purchasing of PLI Services	Australia	
GGT (Gold Field Gas Transmission)	Supply equipment, fittings and service products, 1996. Service valves along the entire gas pipe line consisting of valves and gas pump and metering stations from Mt Keith to Coolgardie.	Western Australia	1996
Grove	Commision service new valves, in house	Australia	2000
Gulf Kvaener	Service passing valves in 1999, JABIRU VENTURE, F.P.S.O.	Timor Sea	1999
Jord Engineering	Pre-commission valves 1996, 6" - 8" ball	Australia	1996
Kalgoorlie Nickel Smelter	See Western Mining Corporation	Kalgoorlie	1996
La Nouvell	La Nouvelle Oil Gas are currently purchasing equipment and Pressure Lube's SS Vent Cap Fittings.		1996
Maersk Oil	Maersk successfully demonstrated sealing a bottom aster valve offshore and allowed work over to start.	UAE	1998
McConnell Dowell	Manufacture complete valve service kit and send to Bangladesh to service damaged launcher 30" ball valves on the Ashuganj to Bakhrabad gas pipe line, 1997	Bangladesh	1997
N.T. Gas	Northern Territory Australia Gas 1994 - current, purchase service equipment and products	Northern Territory Australia	1994

COMPANY	PROJECT DETAILS	LOCATION	DATES
New Zealand Natural Gas	Kaitoke Gas Compressor Station, service valves and well head gate valves, 2" – 12" ball valve	New Zealand	1994
OXY	Occidental Petroleum of Qatar are responsible for all valve preventative maintenance on offshore platform PSI. All lubrication fittings changed out and new Dbase in place. All valves for new projects pre-commissioned by PLI before installation	Qatar	1999
MIR Valves	Pre-commission and service ball valves up to 36", 2013 , Kota Kinabalu, Kimanis Metering & Compressor Station, Beaufort, Bintulu, Long Bedian Limbung, Lawas Sarawak	Malaysia	2013
Qatar General Petroleum Company	Qatar General Petroleum Company started PM program in 1998 on offshore platforms PS2, PS3 & PS4. During shutdown periods all Lubrication Fittings changed out for 316SS Vent Cap Fittings.	Qatar	1998
QatarGas	Qatar Gas are purchases a range of equipment and products	Qatar	2000
RWE	Bacton Power Station Great Yarmouth are currently using all equipment and products.	Australia	2001
Santos	Moomba S.A. service valves 1995 to current day: Gate, Plug and Ball Valves, 2"to 30"	South Australia	1995 - present
Saudi Aramco	PLI Products are tested and certified by Saudi Aramco and listed on their approved product register. PLI supplied trolley mounted and skid mounted service equipment, training and service contracts in dammam Uthamanya field, Udhailiyah field, Abqaiq, Shedgum field, Tanajib, Safaniya, Shaiba, Mubarazz, Hawiyah, Al-Shuwar, Ghawar, Al-Khafji, Qatif, Tarjan Rig in the gulf. Well head gate, 2" to 40"ball, plug	Saudi Arabila	1995 - present
SHELL	Shell in Todd, NZ Purchase of PLI equipment, fittings and products	New Zealand	1994 - present
TKM Wellhead Services	PLI was requested to modify the PLI-PRT to suit requirements for TKM	Western Australia	2015 - present
WAPET	West Australian Petroleum required PLI to service their valves	Western Australia	1993
West Australia Natural Gas	Service valves 1996 -1997, 8" to 14" ball valves	Western Australia	1996 - 1997
Western Mining Corporation (WMC)	Pre-commission and top service in 1996 to ball valves in compressor station along the goldfields Gas pipe line from Mt Keith , Leinster station to Kalgoorlie Nickel Smelter to Kambalda	Western Australia	1996
Western Power	Pre-commission 6" to 14" ball valves, purchases PLI products	Western Australia	1999
Woodside	Service valves, 1994, North Rankin A, plant form rig, Goodwyn A, plant form rig	Western Australia	1994
Worley Alumina	Servicing valves from 2012 to present day, 6" to 18" ball valves	Western Australia	2012 - present



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Project History continued

COMPANY	PROJECT DETAILS	LOCATION	DATES
Saudi Aramco	Greasing SGPD Valves	Eastern Province, KSA - Haradh, Hawiyah, Udh,Uthm	2011 - 2014
Saudi Aramco	Cleaning & Greasing for SWID Wellhead	Mubarratz, Shedgum, Haiyah, Uth	2013 - 2016
Saudi Aramco	Cleaning, Greasing, Stroking & Repairing of Isolation Valves	Khurais Area	2013 - 2016
Saudi Aramco	Valve Services @ HAGOSP-4, Cleaning, Greasing & Repair of Valves	Hawiyah GOSP-4	2013
Saudi Aramco	Cleaning, Greasing, Stroking of SWID WIP main Valves	North Ghawar, South Ghawar	2016 -2019
Saudi Aramco	NGPD on-plot Valve Services, Cleaning, Greasing, Repair of NGPD Valves	Abqaiq, Aindar, Shedgum	2017 - 2020
Saudi Aramco	KHPD SFC, Online Valve Sealing Services	Khurais Plants	2018 - 2019
Saudi Aramco	KHPD MFC, Online Cleaning, Greasing, Stroking & Repair of NGPD Valves	KHPD, CAPD	2018 - 2021
Saudi Aramco	Khuff gas Emergency, Online Repair Of Valves	Uthmaniyah	2018
Saudi Aramco	SWID MFC, Online Cleaning, Greasing, Stroking Of Isolation Valves	onplot facilities	2016 - 2019
Saudi Aramco	SWID MFC, Online Cleaning, Greasing, Stroking Of Isolation Valves	All SWID onplot facilities & offplot valves	2019 - 2022
Saudi Aramco	UR Gas Wells MFC, Gas wells valve greasing & repair	UR Gas Wells	2019 - 2022



Clients

Please read below to learn about some of our many satisfied customers:

AUSTRALIA



B.P. OIL KWINANA REFINERY
Pressure Lube was contracted to carry out all work relating to lubricating/sealing valves in all areas. Work included replacing lubrication fittings with 316 SS Vent Cap Fittings manufactured by PLI.



ALINTA ASSET SERVICES
Currently purchasing our 316SS Vent Cap Fittings.



SANTOS
Currently purchasing on a monthly basis PLI Synthetic Sealant/Synthetic Lubricant & Valve Flush. High Pressure Lubrication equipment is already in use.



McCONNELL DOWELL
After Pressure Lube successfully sealed operations on 3 client valves in Bangladesh, the company purchased a full Lubricating/Sealing package including a compressor.



APACHE ENERGY
Contracted to change all lubrication fittings, body drain and body bleeds for offshore platforms and main island terminal. Currently requested to carry out full lubrication and sealing PM program for platforms and terminal on a regular basis.

QATAR



OCCIDENTAL PETROLEUM OF QATAR
Responsible for all valve preventative maintenance on offshore platform PSI. All lubrication fittings changed out and new Dbase in place. All valves for new projects pre-commissioned by PLI before installation.



LA NOUVELLE OIL GAS
Currently purchasing equipment and Pressure Lube's SS Vent Cap Fittings.



MAERSK
Successfully demonstrated sealing a bottom aster valve offshore and allowed work over to start.



QATAR GENERAL PETROLEUM COMPANY
Started PM program in 1998 on offshore platforms PS2, PS3 & PS4. During shutdown periods all Lubrication Fittings changed out for 316SS Vent Cap Fittings.



QATAR GAS
Currently purchasing equipment and products.



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Clients continued

SAUDI ARABIA



ARAMCO

Largest oil and gas producer in the world. PLI designed and manufactured self contained lubrication and sealing skid for pipeline maintenance. Aramco have purchased more than 20 units, which will be a standard order over the next few years in all fields. In June 1998 PLI was contracted to look after 200 wells on a full time basis.



U.K.



EDECO

Currently purchasing on a regular basis our high pressure lubrication equipment PLI Synthetic Sealant, Lubricant, Valve Flush and our 316SS Vent Cap Fittings.



CONOCO

Currently purchasing equipment and all products. Changing out all lubrication fittings for 316 SS Vent Cap Fittings.



SHELL OIL

Currently purchasing equipment and all products. Changing out all lubrication fittings for 316 SS Vent Cap Fittings.



BACTON POWER STATION GREAT YARMOUTH

Currently using all equipment and products.

REFERENCES



A Halliburton Company

Stasi Prandalos
Deputy General Manager

GROVE-TK LIMITED
Pitreavie Business Park, Pitreavie Way,
Queensferry Road, Dunfermline, Fife
Scotland KY11 8UP
Tel No: +44 (0) 1383 731611
Executive Fax No: +44 (0) 1383 624344
Email : prandalos@tkvalve.co.uk

TO	:	Pressure Lube	DATE	:	18/3/99
ATTN	:	John Worner	PAGES	:	1 of 1
CC	:		FAX	:	0061 8 92799929
	:		REF	:	SPGTK88-99
SUBJECT	:	<u>Approval of Pressure Lube Products</u>			

John,

As a reference we hereby certify that the synthetic lubricants, sealants and fittings produced and/or supplied by your company are approved and used on the range of Grove and TK Ball, Gate and Plug Valves.

You are welcome to issue this letter to your customers.

Thank you

A handwritten signature in black ink, appearing to read "Prandalos", written over a horizontal line.

Stasi Prandalos



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13000



MEMORANDUM
OCCIDENTAL PETROLEUM OF QATAR LTD

March 21, 1999

TO: To whom it may concern

FROM: Paul Cain, Senior Maintenance Planning Engineer

SUBJECT: Letter of Reference.

In 1996 a program commenced on PS-1 utilizing the services of Pressure Lube -- Middle East (PLME) for valve lubrication and sealing services. The pilot program commenced on the wellhead jackets and success led to a full maintenance program being implemented on the main production facility (PS-1, Idd El Shargi North Dome).

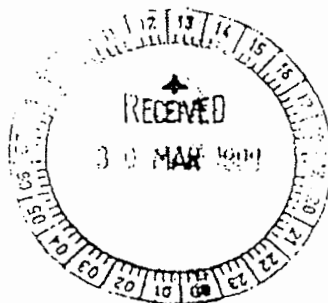
On the remote well head jackets all valves associated with the Xmas tree, flow lines and ESD valves were serviced and retro fitted with the PLME vent cap fittings. Following this a full program commenced on all oil-related processes as well as on the NGL liquid condensate and gas system on the platform. All valves were tagged and marked and a full report was then submitted reported all valve details, process parameters, etc. Again the PLME vent cap grease nipples were retro-fitted.

All staff working on the contract showed a high degree of technical competence, hard work and dedication to the job. As a company support services were comprehensive professional and prompt ensure that there were no delays at any time during the program. All staff on the contract both offshore and in Doha worked well and efficiently with Oxy.

I have no hesitation in recommending the services of Pressure Lub Middle-East to any operator or contractor in our business.

Regards


Paul Cain





Acknowledgment of Aramco Overseas Company BV

Supplier Code of Conduct

(Applicable to Vendors, Manufacturers, and Contractors)

Aramco Overseas Company BV (AOC) is committed to the highest ethical and legal standards in the conduct of its business. AOC requires all registered vendors, manufacturers, contractors and sub-contractors with which AOC conducts business to acknowledge and agree to abide by the policies and principles set forth in the Aramco Overseas Company Supplier Code of Conduct.

This acknowledgment shall be submitted to AOC at the time of registration or, if previously and currently registered, at the time of submitting bids and proposals in response to AOC's invitations and solicitations to bid.

ACKNOWLEDGMENT

I, on behalf of PRESSURELUBE INTERNATIONAL Pty Ltd, hereby acknowledge and
[the name of the vendor/manufacture/contractor/sub-contractor]

agree to abide by the policies and principles of Aramco Overseas Company's Supplier Code of Conduct and ensure that the employees, officers, directors, agents, representatives of

PRESSURELUBE INTERNATIONAL Pty Ltd are aware of and abide by such policies and
[the name of the vendor/manufacture/contractor/sub-contractor]

principles in the process of preparing and submitting bids and proposals for AOC work, for provision of goods and services to Aramco Overseas Company, and during the performance of all agreements entered into with Aramco Overseas Company for such purposes.

Authorized Signatory: Name (printed) J. R. WOLNER Signature [Signature]

Title MANAGING DIRECTOR Date 8/AUG/2011

AOC Vendor Number 10024523



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Pressure Lube International Valve Service

Objectives

Pressure Lube International have been servicing the power generation petrochemical resource and process industries for the past 20 years. Since conception they have provided technical expertise in valve refurbishment, procurement, modifications, design and general machining and manufacture. Their machining and manufacturing capability allows them to overhaul an extensive range of valves for power generation, oil and gas, petrochemical, process, water and general industries.

Pressure Lube can offer general refurbishment work consisting of pressure safety valves, high and low pressure gates and globe checks. Pressure Lube's facility and in house professional engineering personnel complete full modification, design, manufacture and service selection criteria of valves. They are also able to undertake site work and can mobilize anywhere on or offshore within Australia and the Asia Pacific rim.

One key capability is reengineering. Valve repair and testing involves extensive knowledge not just in valve design but process condition engineering. They have a documented history of rebuilding valves entailing trim modification, seat redesign and total remanufacture. Combined with their knowledge of process operating conditions the team "turnkey valve solutions".

Other services can provide:

- In-house actuation and automation fitting and testing of new products
- Modify products as required to suit client q/a standards and specific needs
- Supply Cad drawings that illustrate schematic piping arrangements
- Specialist painting, sub-sea
- Pre-test and recertification of new valves
- Tagging, packaging and logistics
- Field personnel that can provide engineering solutions



Summary of Services

Onsite Services

- Pressure Safety Valve Testing (Online)
- Control valve diagnostics and maintenance
- Valve Maintenance, Seat Machining Gate, Globe, Parallel Slide valves
- High Pressure Sealant and Lubrication on Plug and Ball valves and Well Head
- Installation, Bolt Tensioning
- Removal, Supply, Installation, Flange Machining Joint Integrity Management

Design Manufacture

- Onsite Safety Valve Testing Equipment
- High Pressure Injection, Flushing Equipment Well head, Plug, Ball valves
- Valve Spares Design and Manufacture

Product Range and Manufacturers

- Gate / Globe / Check Cast and Forged 150# = 1500#
- Check / Duo and Piston Design
- Gate: Wedge and Through Conduit
- Butterfly Valves: Eccentric / Metal Seated and Fully Lined / Wafer / Lugged
- Pressure Safety Valves: Flanged and Screwed
- Steam: Pressure Reducing, Steam Traps, Blowdown valves
- Plug valves: Lined, Lubricated, Flanged and Screwed
- Diaphragm valves
- Steam reducing, traps and Pressure Safety Valves

All valves are available in various trim and body material configurations to suit service pressure, temperature, operational and automation requirements.

Product Supply and Selection Objectives

1. Valve Fit for Purpose
2. Ongoing Maintenance Cost
3. Initial Purchase Cost
4. Spares availability and pricing
5. Repeatability of supply at known cost
6. Availability of all Manufactures Maintenance and Technical Date
7. Where possible supply Australian Engineered Product

Equipment

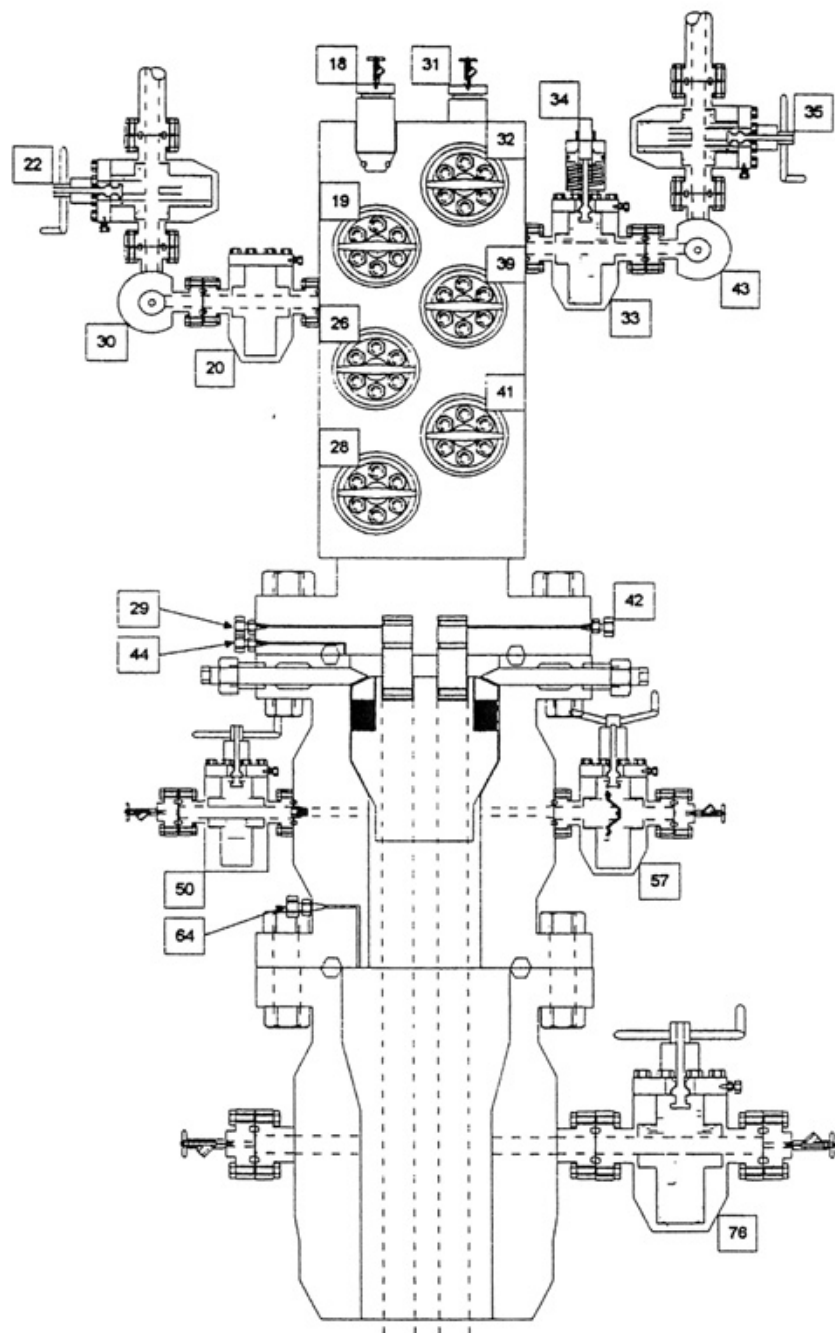
- Factory Area of 2200 square metres
- 2ea Cranes = Gantry = 5 ton / Forklift 1 ton / Forklift 4 ton
- 2 x Compressors providing plant air (1 reserve)
- Horizontal boring capacity 15 ton
- Vertical boring 2 metre diameter with spherical turning capacity
- Turning capacity to 1.2 metre x 6 metre
- Radial grinding ball diameters = 900mm N.B
- Surface grinding
- Milling, Slotting, Broaching
- Drilling up to 3¼" Dia
- Grit Blasting Machine full recovery system (Air Fed Booth)
- Painting to any specification
- Internal Vertical Lapping Machines with Inclined tables
- Horizontal lapping to 1.2 metre diameter
- Optical flatness @ Monochromatic light source
- Stress relieving to 790Cel
- Welding: TIG / Internal MIG / MIG / MMAW / PTA
- Hydraulic Bolting Equipment
- Hydrostatic Pressure Test Rig -: Mechanical valves
- Pressure Test Rig-: Pressure Safety valve test and set
- On site Valve Machining Equipment / Pressure Safety Valve Test Rig
- On site Valve Sealant, Flushing and Lubrication





Wellhead Maintenance System Overview

This is an outline of the Pressure Lube International's (PLI) wellhead & ball valve maintenance system.



CONTRACTOR Pressure Lube International	DRAWN BY	INITIALS	DATE 6 December 97	DESCRIPTION Wellhead As Built
OPERATOR	APPROVED BY	INITIALS	SCALE Not to scale	TITLE IS - 023

Wellhead Maintenance System Overview continued

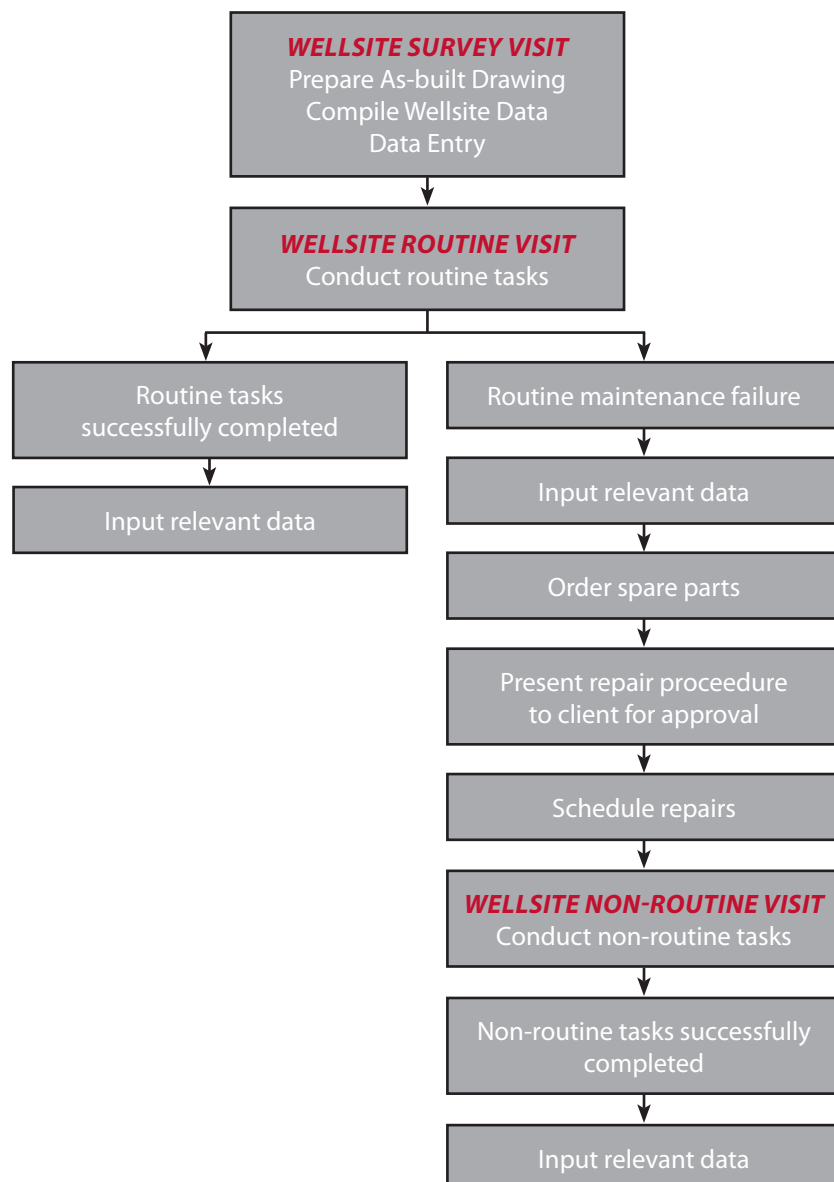
The objective of the system is to provide and/or improve:

- Accountability
- Traceability
- Cost saving
- Safety awareness
- Wellhead integrity

In most cases, wellhead completions will have at least two asset operators – Drilling, who drill, install and complete the well and secondly, production who utilize the various specialized functions of each wellhead. It is also quite common to find that wellheads will be “handed back” to the drilling department to carry out work-over or remedial

work of some kind. During this transfer it is also common to find that information from one asset operator to another has not been accurately passed on.

At PLI, we have successfully developed a computerised, reporting database, which ensures that all our wellhead surveys are thoroughly documented and accurately recorded. Each record on our database requires acceptance by a suitably authorised and approved person. We are therefore able to demonstrate system information accuracy to the appropriate management levels. Furthermore, we are able to trace any work carried out on a wellhead by any of our maintenance teams. On completion of any wellhead





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Wellhead Maintenance System Overview continued

maintenance visits, our clients are able to see a detailed report giving relevant information of the work completed, materials used, work outstanding and have confirmation of the wells integrity and readiness for operation. Over time we demonstrate to our clients an increase in safety by improving well integrity.

Using PLI well services, the cost performance of each well can be accurately monitored. A typical system encompasses all the relevant information for each valve, Part Number, Serial number, Pressure rating, Valve Size and Type, Gasket Size and Type, when the valve should next be serviced.

Items not directly concerning wellhead maintenance have also been included, as some of our clients request that tubing and annulus pressures also be logged, surface controlled sub-surface safety valve information, high and low pressure pilot information, choke settings are also included.

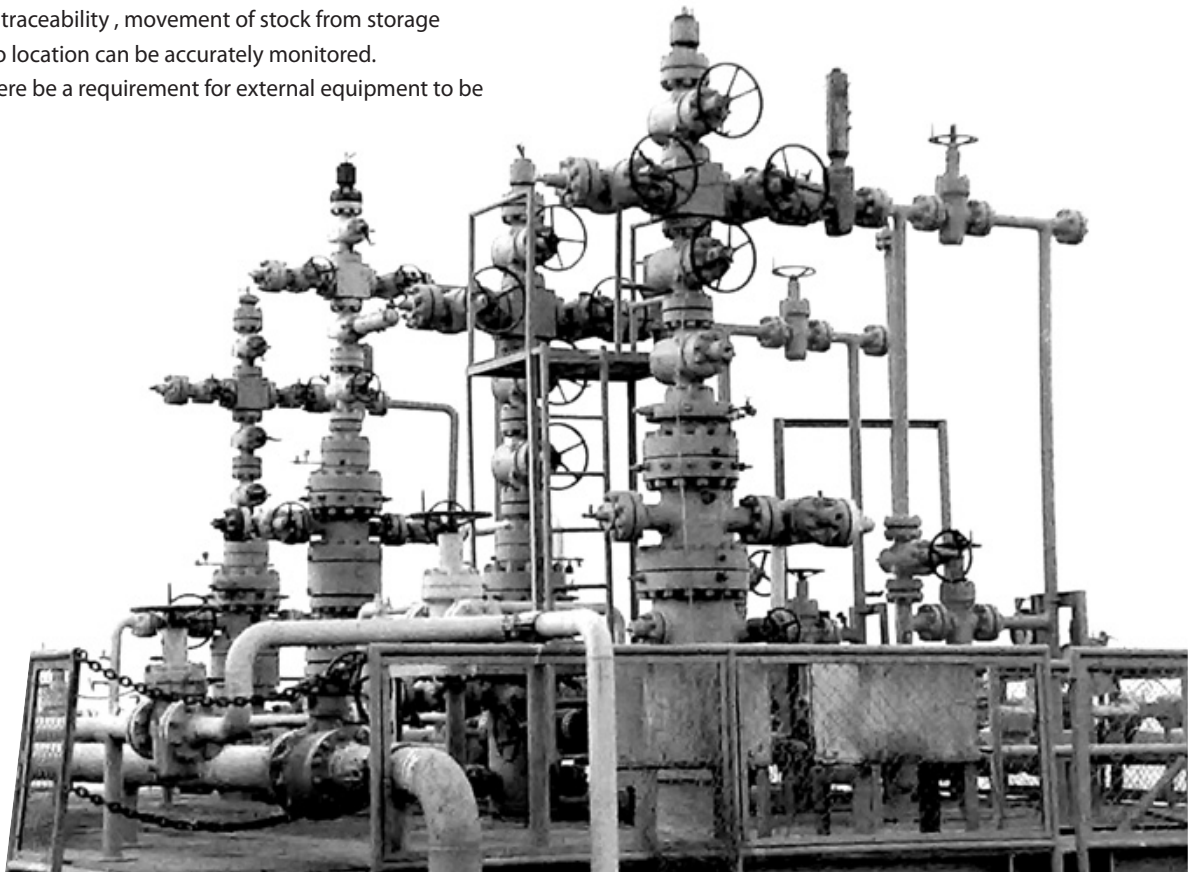
With so much information available, our clients are able to plan with greater confidence knowing exactly what is needed, where the work is and when it is necessary. With improved traceability, movement of stock from storage facilities to location can be accurately monitored. Should there be a requirement for external equipment to be

hooked up onto a wellhead, anyone with the appropriate security level will be able to ascertain the exact status of each item in advance.

Pressure Lube International promotes safety as having priority over all aspects of any operation. Our detailed reporting internal auditing system will highlight particular areas that require special attention and raise safety levels to the customer's specifications.

We apply the same methods to the servicing of process ball valves and achieve the same high standards. Our excellence has been established in South East Asia over a number of years.

At the start of any maintenance program, it is of course essential that good solid information be built into our database to allow any type of system enquiry from a technical, commercial or product reliability point of view to return accurate data. Our database system is very flexible and can be designed to cater for all client requirements.



Service Report Checklist Example

The following is a simple example of a “service report checklist” which is currently being used for one of Pressure Lube’s clients. In addition to the use of this checklist, valve statistics would be recorded and the valve would be tagged with a product number according to its corresponding drawing.

If the maintenance crew observes additional work is necessary on both the ball valves and the wellheads, routine work would be carried out first, and then information would be gathered on future non-routine task.

[illegible]



Safety & Environmental Principals

HEALTH & SAFETY POLICY

Pressure Lube International is committed to protecting the health and safety of its employees, clients and others who may be affected by the activities of our company.

To accomplish this, we take every effort to maintain a suitable working environment that provides:

- Adequate information on hazards
- Instruction, training, leadership and supervision of employees regarding safe procedures
- Products that are designed and manufactured, fit for purpose and are safe to operate

Pressure Lube International believes training is one of the key methods of achieving its safety objectives. Training methods include:

- Safety Promotion
- Hazard Minimisation
- Facilities and Equipment Design
- Equipment Documentation
- Management of Change
- Incident Management
- Management of Contractor Services
- Conformance to State/Federal Legislation and Clients Established SMS

By achieving these safety objectives, all involved parties can benefit from:

- Minimised hazardous incidents
- Minimised accidents
- A happy and healthy workforce
- Increased productivity
- Increased competitiveness in the market place
- Decrease of overhead expenditure
- Increased Profit

HEALTH & SAFETY RULES

1. Know and observe workplace health and safety rules and procedures.
2. Observe all warning signs and danger tags, keep all safety guards in place
3. Abide by housekeeping standards
4. Use safety glasses and other protective equipment where required
5. Report all injuries or potential hazards immediately

6. No SMOKING on the job
7. No DRINKING on the job
8. No HORSEPLAY

JOB HAZARD ANALYSIS

Job Hazard Analysis (J.H.A.) is a technique for identifying individual job hazards and devising an appropriate method to manage those hazards i.e. plan a job to be safe, so those involved know what to do and how to do it safely and efficiently.

J.H.A. PROCEDURE

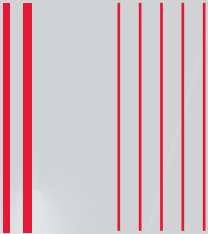
1. Identify task or job
2. Divide job/task into logical steps
3. Identify potential hazards
4. Devise suitable solutions for working with or eliminating the hazard
5. Record the J.H.A. procedure
6. At completion of works, revalidate the J.H.A procedure for accurate record and future use.

ENVIRONMENT POLICY

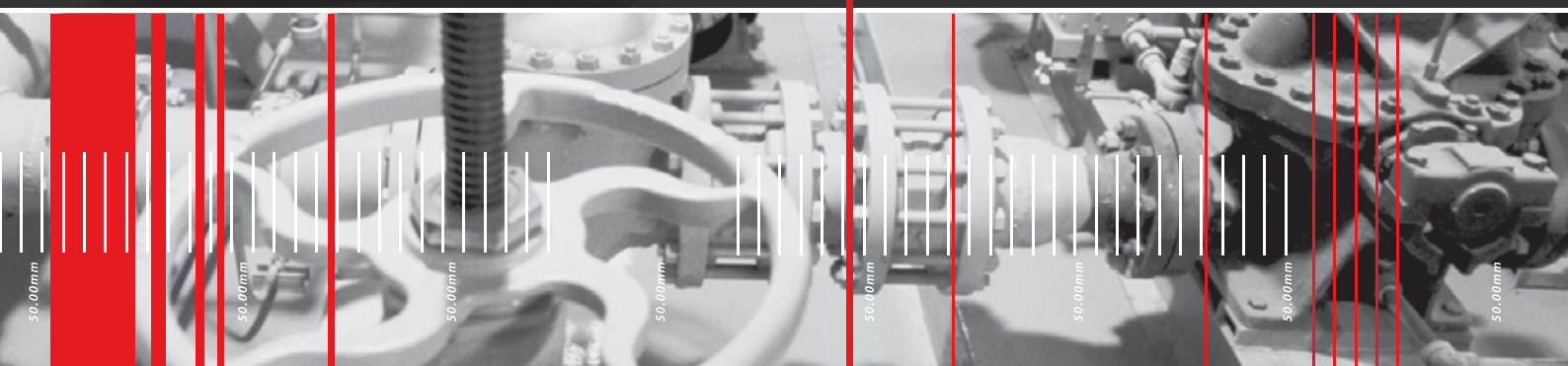
Pressure Lube International is committed to acting in a responsible manner concerning all issues of the preservation and enhancement of the environment. The Company aims to achieve this by careful assessment of all installation design work, liaising with clients on environmental issues and if necessary, carrying out specific performance and environment impact studies. Pressure Lube also reviews all substances prior to use and where practical, substitutes products for more environmentally friendly replacements.

Routine Environmental Considerations

- Sensitivity of client site
- Control of emissions
- Client's environment requirements
- Handling of general chemical
- Disposal of industrial waste
- Disposal of hydrocarbon product
- Disposal of coolant and additive
- Design of equipment to meet all statutory or higher requirements



Total Valve Care.



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