

**Appendix E**

**Relief Valve Group Factual Report**

**Olympic Pipe Line Purchase Order dated January 6, 1998,  
Instrument Specification Sheet for RV 1919,  
Submitted by Fisher Rosemount**



# OLYMPIC PIPE LINE COMPANY

1283 Ovenell Road, Mount Vernon, WA 98273  
Telephone: (360) 424-3854 Fax: (360) 424-5926

Date: January 6, 1998  
Page: 1 of 7

ACKNOWLEDGEMENT  
COPY

SHIP TO: Olympic Pipe Line Company  
See Below

27803

PURCHASE ORDER <b>05-P881-01-P64-0024</b> Revision Number 0
<b>Full Flow Relief Valves</b>

Matl Req. No. MR-000248, P.O. Register No. 25

SELLER: FISHER-ROSEMOUNT PETROLEUM  
c/o Meter & Valve  
8100 South Parkway  
Bldg A-3  
Littleton CO 80120

Contact: Fred Cabbage  
Tel.: (303) 730-7600  
Fax: (303) 730-7930  
SIS: METER.LIT

### SPECIAL INSTRUCTIONS

- The acceptance copy of this order must be returned immediately.
- The PO and item numbers must be referred to on all shipments.
- Enclose the packing slip with the shipment.
- This order is subject to the attached terms and conditions.

This confirms our verbal Purchase Order of January 6, 1998 to Fred Cabbage by Greg Gardner.

Please mail your original bill and three copies to:  
OLYMPIC PIPE LINE COMPANY, c/o Jacobs Engineering Group Inc., 1670 Broadway, Suite 3200,  
Denver, CO 80202  
Attention: Greg Gardner

Issue Date: January 13, 1998  
Shipping Date: See Below  
Ship Via: Best Way

Shipping Terms: FOB Jobsite, FFA  
Payment Terms: Net 30 days

Item	RV	QTY UNIT	DESCRIPTION	COST CODE	PRICE	EXT
1	0	4 EA	<u>CONFIRMING ORDER - DO NOT DUPLICATE</u> Brooks 8" 300# RFF Model 760 Full Flow Relief Valve per Following Jacobs Engineering Specifications:  Instrument Data Sheet: RV-1919 Instrument Data Sheet: RV-1923 Instrument Data Sheet: RV-1932 Instrument Data Sheet: RV-1941	00200032		

RECEIVED  
JAN 19 1998  
SALES DEPT



# OLYMPIC PIPE LINE COMPANY

1283 Ovenell Road, Mount Vernon, WA 98273  
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Date: January 6, 1998  
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SELLER: METER & VALVE

**PURCHASE ORDER**  
**05-P881-01-P64-0024**  
Revision Number 0

Item	RV	QTY UNIT	DESCRIPTION	COST CODE	PRICE	EXT
2	0	7 EA	<p>Tag Number(s): RV-1919 RV-1923 RV-1932 RV-1941</p> <p>Brooks 8" 150# RFF Model 760 Full Flow Relief Valve per Following Jacobs Engineering Specifications:</p> <p>Instrument Data Sheet: RV-2005 Instrument Data Sheet: RV-2065 Instrument Data Sheet: RV-2082 Instrument Data Sheet: RV-2072 Instrument Data Sheet: RV-2077 Instrument Data Sheet: RV-2088 Instrument Data Sheet: RV-2002</p> <p>Tag Number(s): RV-2002 RV-2005 RV-2065 RV-2072 RV-2077 RV-2082 RV-2088</p> <p>Line Item Subtotal</p> <p>Documentation &amp; Materials Certification</p> <p>Freight</p> <p>Total Value</p>	00200032	[REDACTED]	[REDACTED]



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Date: January 6, 1998  
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SELLER: METER & VALVE

**PURCHASE ORDER**  
**05-P881-01-P64-0024**  
Revision Number 0

Item	RV	QTY UNIT	DESCRIPTION	COST CODE	PRICE	EXT
			<p><u>Attachments:</u></p> <p>The following data sheets, Rev. 0, dated 12/17/97:</p> <p>Instrument Data Sheet RV-1919  Instrument Data Sheet RV-1923  Instrument Data Sheet RV-1932  Instrument Data Sheet RV-1941  Instrument Data Sheet RV-2002  Instrument Data Sheet RV-2005  Instrument Data Sheet RV-2065  Instrument Data Sheet RV-2072  Instrument Data Sheet RV-2077  Instrument Data Sheet RV-2082  Instrument Data Sheet RV-2088</p> <p>Olympic Pipe Line Company Terms and Conditions, 1 page.</p>			

Entire Agreement:

These terms and conditions together with any other terms stated herein constitute the entire Agreement for this transaction. All discussions and negotiations are merged herein. "Buyer" as used herein refers to the company referenced as "Buyer" above. "Seller" refers to the named Seller providing goods or services pursuant to this Purchase Order

NOTES:

This Purchase Order is placed by Olympic Pipe Line Company (OPL) also referred to as Buyer or Owner. Jacobs Engineering Group, Inc. (Jacobs) is under contract to OPL and is Owner's Representative.

Schedule:

Seller has provided and agreed to the following schedule:

Approval Drawings: Not Required  
Shipment: Twelve (12) to Sixteen (16) weeks after receipt of order; ie. 4/5/98 to 5/1/98



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SELLER: METER & VALVE

PURCHASE ORDER  
05-P881-01-P64-0024  
Revision Number 0

Shipping Point: Statesboro, GA

Ship Instructions:

Shipment shall be made to:

**OLYMPIC PIPE LINE COMPANY**

1283 Ovenell Road  
Mount Vernon, WA 98273

Notify Greg Gardner 48 hours prior to shipment at (303) 830-6933. *Note on Order.*

Shipping Terms:

FOB Jobsite, FFA

Payment Terms:

Net thirty (30) days after material/equipment delivery and receipt of satisfactory invoice and all required vendor data, whichever is later.

Sales Tax and/or Use Taxes:

This order is subject to applicable Washington State sales and/or use taxes, which shall be shown as a separate item on all invoices submitted.

Invoicing:

An original invoice is to be mailed to:

OLYMPIC PIPE LINE COMPANY  
c/o Jacobs Engineering Group, Inc.  
1670 Broadway, Suite 3200  
Denver, CO 80202  
Attn: Greg Gardner

Purchase Order Number must be referenced on all invoices.

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Date: January 6, 1998  
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# OLYMPIC PIPE LINE COMPANY

1283 Ovenell Road, Mount Vernon, WA 98273  
Telephone: (360) 424-3854 Fax: (360) 424-5926

SELLER: METER & VALVE

<p>PURCHASE ORDER 05-P881-01-P64-0024 Revision Number 0</p>
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Acknowledgement:

The acknowledgement copy of this Purchase Order must be signed and returned within five (5) working days to:

Jacobs Engineering Group, Inc.  
1670 Broadway, Suite 3200  
Denver, CO 80202  
Attn: Greg Gardner

Inspection - Expediting:

This Purchase Order is subject to inspection/expediting by the Buyer, the Owner and their authorized representatives. Seller shall allow reasonable access to Seller's plants and those of subsuppliers during normal working hours.

All technical, inspection and expediting requirements of this Purchase Order shall be applicable to any and all subvendors the Seller will utilize in performance of this work. Unpriced copies of purchase orders to major subvendors are to be provided to JEG upon request.

Seller shall notify Greg Gardner at (303) 830-6955, not less than five (5) working days before equipment/material is ready for inspection or testing. Seller shall fax copies of all shipping documents to Greg Gardner (303) 830-6911 on the day of shipment.

In the event of ANY schedule change, the Seller SHALL phone or fax Greg Gardner the same day the schedule change occurs. Seller will confirm phone conversation in writing within two (2) days stating, in detail, the reason for the schedule change and Seller's proposal to recover the original schedule or minimize the delay.

The inspection, testing, approval or acceptance by Buyer of any goods and services provided hereunder shall not relieve the Seller of its obligations with respect thereto.

Correspondence and/or Communications:

All correspondence and/or communication concerning this Purchase Order shall be directed to:

Jacobs Engineering Group, Inc.  
1670 Broadway, Suite 3200  
Denver, CO 80202  
Attn: Greg Gardner



Date: January 6, 1998  
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# OLYMPIC PIPE LINE COMPANY

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SELLER: METER & VALVE

PURCHASE ORDER  
05-P881-01-P64-0024  
Revision Number 0

## Change/Revision:

Buyer may at any time, by written order and without notice, suspend or cancel performance, make changes in quantities, drawings, design, specifications, delivery schedule, method of shipment or packaging of the supplies, or any combination of the foregoing. In the event Buyer cancels performance for a reason other than Seller's breach of this Agreement, Seller's expenses shall be prorated based on reasonable costs associated with performance to date of cancellation. If any change order results in an increase or decrease in the cost of, or time required for performance of this order, an equitable adjustment may be made in the purchase order price, delivery schedule, or both. Any claim for such adjustment or for cancellation charges shall be deemed waived by Seller unless asserted by Seller in writing within thirty days of Seller's receipt of the change order or notice of cancellation. Seller shall proceed without delay to perform this order as changed or to effect its cancellation if so requested.

## Drawings, Data:

Seller agrees to furnish, as a requirement of this Purchase Order, all documentation in the quantities indicated on the Vendor Drawing and Data Request Form attached.

Drawings, Data are to be mailed to:

Jacobs Engineering Group, Inc.  
1670 Broadway, Suite 3200  
Denver, CO 80202  
Attn: Greg Gardner

## Subcontracted Fabrication:

It is understood that the equipment furnished hereunder will be fabricated and assembled in Seller owned facilities. Seller shall not have the right or power to assign or subcontract its rights or obligations hereunder without the express written consent of Buyer. Any attempt to do so without such consent shall be null and void and shall give buyer the right to cancel and terminate this Agreement. In the event consent is properly given, the provisions of this Agreement shall bind and benefit the parties hereto and their representatives, successors and assigns.

## Disclosure of Information:

Any specifications, drawings, business or technical information that may be furnished or disclosed to Seller in conjunction with this Agreement or that Seller may be exposed to as a result of entering Buyer's property to deliver goods or to perform work hereunder shall remain Buyer's property, shall be kept confidential, shall not be used for other purposes and shall be returned at Buyer's request. Seller shall not, without prior written consent of Buyer, in any manner advertise or publish the fact that Buyer has placed this order, or that Seller has transacted business with Buyer.



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SELLER: METER & VALVE

**PURCHASE ORDER**  
**05-P881-01-P64-0024**  
Revision Number 0

Chemicals and Lubricants:

Where chemicals and lubricants are applicable, Seller shall supply the specifications and required quantities of the first fill of lubricants, oil, grease, etc. required for start-up operation of the equipment.

MSDS Required Information:

Where applicable, Material Safety Data Sheets on all material purchase must be provided. One (1) must accompany the acknowledgement of this Purchase Order and one (1) copy with material shipment.

Seller Status Reports:



Seller shall submit on a bi-weekly basis, a written status report which addresses engineering, drawings, material and production status, as may be applicable, for the materials/equipment ordered.

Such reports shall be addressed to:

Jacobs Engineering Group, Inc.  
1670 Broadway, Suite 3200  
Denver, CO 80202  
Attn: Greg Gardner

Fax reports to (303) 830-6911 are acceptable.

SELLER	BUYER
<p><b>IMPORTANT:</b> The Seller accepts this order at the prices stated and subject to all terms and conditions shown hereon, or incorporated by reference herein.</p>	<p>Olympic Pipe Line Company</p> <p><i>Karl Aker for Frank Hoff</i></p>
<p>Name: Title: Date:</p>	<p>Name: <i>Karl Aker for Frank Hoff</i> Title: <i>Proj Mgr / V.P.</i> Date: <i>1/9/98</i></p>



GENERAL	1	Tag Number	Item No.	RV-1919	
	2	Manufacturer	Model	BROOKS	8" 300# RFF Model 760
	3	P&ID No.	Requisition Item No.	D-1902	
	4	Service		Full flow relief	
	5	Line No. / Vessel No.		16-0-106-300A	/
	5	Nozzle (Full, Semi)			
DESIGN DATA	3	Design Code		P	
	9	Governing Conditions	Design Purpose	Blocked Outlet	
	10	Type			
	11	Calculated Orifice Area			
	12	Selected Orifice Area			
	13	Orifice Designation			
	14	Inlet Size	Rating	8 in	300# RF Flange
	15	Outlet Size	Rating	8 in	300# RF Flange
	16	Bonnet Type			
	17	Cap Type	Lever		
	18	Gag	Bel lows		
MATERIALS	19	Flange Finish			
	20	Body		Steel	
	21	Nozzle / Disc			
	22	Nozzle Ring			
	23	Disc Holder			
	24	Guide			
	25	Bel lows			
PROCESS CONDITIONS	25	Spring			
	27	Bonnet Stud Bolt ing			
	28	Fluid	Phase	Diesel	
	29	Flow Units		US gal/min	
	30	Flow @ Relieving Conditions		8400	
	31	Required Capacity			
	32	Molecular Weight			
	33	Pressure	Operating		
	34	psi-g	Process Set   Spring Set	740	
	35	Temperature °F	Operating   Design   Relief		
	36	Back Pressure (Constant)		64 psi-g	
	37	Back Pressure (Variable)		psi-g	
	38	Back Pressure (Built-up)			
	39	% Accumulation	% Reset	10	
	40	Compressibility Factor Z			
41	Latent Heat of Vaporization		cal IT/kg		
42	Specific Heat Ratio Cv/Cp				
43	Specific Gravity @ Conditions		0.87		
44	Viscosity		3.7 cP		
45	Barometric Pressure				
46	Reaction Force				
47					

70-180  
100

Notes: 1. ASME certified Calculations are to be supplied with bid.  
2. Materials are to be suitable for 15% MTBE service.

				INSTRUMENT SPECIFICATION			
				Relief Valve style 2			
0	GR	12/17/97	FOR PURCHASE				
B	GR	8/25/97	FOR BID				
A	GR	8/20/97	FOR REVIEW				
No.	By	Date	Revision	Code: 63	Dwg. No.:	Sheet	of
							Rev.: 0