

**Customer:** Husky Oil Operations Ltd.  
**Facility/Loc:**  
**Cust PO:** TBA  
**Cust Ref:**  
**Tag :** **PSV 172**

**Product:** Relief Valve  
**Service Req'd:** Repair  
**Received:** 11-Sep-2017  
**Seal:** Intact  
**Seal ID:** RMV

**Code Case :** NB  
**Code Symbol:** UV

## EQUIPMENT DATA

**Mfr :** Taylor  
**Model:** 82E4351311  
**CRN #:** 0G1316.2C  
**Serial No:** 33143-54  
**Inlet Size:** 1" MNPT  
**Orifice:** E  
**Outlet Size:** 1" FNPT

**Body Mat:** Carbon Steel  
**Bonnet Mat:** Carbon Steel  
**Trim Mat:**  
**Soft Seat Mat:** Viton  
**Cap Type:** Plain  
**Spring:** LT.GREEN

**Service:** Compressible  
**Set Pressure:** 175.00 PSIG  
**CDTP:** 0.00  
**Capacity:** 671 SCFM  
**Temp:** 0  
**Constant BP:** 0  
**Variable BP:** 0

## PRE-TEST

**Pre-tested:** YES  
**Pre-test By:** Josh Bougie  
**Leaked:** NO  
**Pre-test Note:** PWL

**Pre-test 1:** 180 PSIG  
**Pre-test 2:** 175 PSIG  
**Pre-test 3:** 178 PSIG

**Fittings:** NO  
**Inlet:** Oily  
**Outlet:** Oily  
**Shipping Crate:** NO

## CRITICAL DIMENSIONS

<u>NOZZLE</u>	<u>Mfr Spec</u>	<u>As Found</u>	<u>DISC</u>	<u>Mfr Spec</u>	<u>As Found</u>	<u>OTHER</u>	<u>Mfr Spec</u>	<u>As Found</u>
Length	0.000		Thickness	0.000		Spindle/Collar	0.000	
Seat Step	0.000		Inside Step	0.000				
Seat ID	0.000		OutsideStep	0.000				
Seat OD	0.000		Seat	0.000				

## PARTS EVALUATION

<u>PARTNAME</u>	<u>CLEAN</u>	<u>OILY</u>	<u>RUSTY</u>	<u>CARBON</u>	<u>OTHER</u>	<u>CONDITION</u>	<u>WORK PERFORMED</u>
Disc	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Worn	Replace
Nozzle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Worn	Replace
Cap-lever Assy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Comp Screw And Locknut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Spring And Buttons	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dirty	Cleaned/Reuse
Spindle / Stem	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dirty	Cleaned/Reuse
Stem Retainer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Disc Holder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Guide / Upper Ring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dirty	Cleaned/Reuse
Lower Ring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ring Pin(S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Gasket / Seals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Worn	Replace
Connection Ends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TAG ID #S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Body	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dirty	Cleaned/Reuse
Base	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dirty	Cleaned/Reuse

Disassembled By: Josh Bougie

Inspected By: Savannah Feist

Assembled By: Josh Bougie

## FINAL TEST

**Date Tested:** 12-Sep-2017  
**Test Method:** Bench  
**Set Definition:** Pop  
**Test Media:** Air  
**Tested By:** Savannah Feist

**Gauge 1:** TW4D  
**Gauge 2:** TW16  
**Perform BP Test:** Yes  
**Back Pressure:** 30 PSIG  
**BP Gauge:** TW19D

**Final Set Pressure:** 175.00 PSIG  
**Leakage Rate:** 0 BPM  
**Upper BlowDown Ring:** N/A  
**Lower BlowDown Ring:** N/A  
**Seat Tightness Test:** 160.00 PSIG

**Pilot Type:**  
**Pilot Test Fluid:**

**Pilot Gauge 1:**  
**Pilot Gauge 2:**

**Pilot Final Set Pressure:** 0  
**Pilot Leakage Rate:** 0  
**Pilot Seat Tightness Test:** 0

## FINAL INSPECTION

Shipment Check : Seals Intact, End Protectors Installed, Painted, Service/Repair Tags Verified

Final Inspection : Josh Bougie

VR Tag Applied By:

( no photo )

**Part Name:** TAG ID #S

**Condition:**

**Work Perf'd:**

**Notes:** W-38527  
LSD:  
BIG STONE

## Definitions

### Wear and Conditions

**Bent** - Altered from an originally straight or even condition.

**Blown** - (Specific to bellows) pressure has exceeded the operational limits of the bellows and has resulted in the catastrophic failure of the part.

**Catastrophic Wear** - Rapidly occurring or accelerating surface damage, deterioration, or change of shape caused by wear to such a degree that the service life of the part is appreciably shortened or its function is destroyed.

**Collapsed** - (Specific to Farris gaskets) the corrugations in the metal gasket are no longer functioning to form part of the seal.

**Corrosion** - the gradual destruction of metal due to a chemical reaction with the environment characterized by rust, pitting and pinhole porosity

**Cracked** - a break without the complete separation of parts.

**Dirty** -requires cleaning only.

**Eroded** - a form of wear in which there is a progressive loss of original material from a solid surface due to mechanical interaction between that surface and a fluid.

**Galling** - A form of surface damage arising between two sliding solids, distinguished by roughening, and the creation of protrusions above the original surface and may involve material transfer.

**Marked** -surface is showing abrasions that will alter or hinder valve performance.

**Missing** - There is a part listed on the manufacturers parts list, critical to the designed operation, which has been found absent and unaccounted for.

**Nonconcentric** - the deformation of a circular part in which there is an absence of a common center.

**Non-OEM** - a part identified as not being from the original equipment manufacturer.

**Out of Tolerance** - a specific dimension has been determined to be out of the stated acceptable range listed by the manufacturer.

**Pinhole Porosity** - small spaces in a material characterized by small holes appearing porous; compromising the isolation of a pressure zone.

**Pitting** - A form of wear characterized by the presence of surface cavities the formation of which is attributed to processes such as fatigue, local adhesion, or cavitation.

**Requires Replacement** - The particular part needs to be changed out in order to meet the construction and/or operational requirements as specified by the valve owner.

**Scoring** - A severe form of wear characterized by the formation of extensive grooves and scratches in the direction of sliding.

**Seized** - Two parts are jammed together to become stuck and cannot be removed by conventional means.

**Spalling** - (Specific to seats) the separation of material from a surface in the form of flakes or chips resulting from an impact event.