#### REPAIR SUMMARY REPORT



Whitecourt, AB

Job#: 2883097SR-3.0



**Customer:** 

Husky Oil Operations Ltd.

Relief Valve Product:

Facility/Loc:

**TBA** 

Service Reg'd: Received:

Repair 12-Sep-2017

**RMV** 

**Cust PO: Cust Ref:** Tag:

Mfr:

Model:

CRN #:

Serial No:

Leaked:

Seal: Intact

As Found

Code Case: Code Symbol:

Service:

**PSV 169** 

**EQUIPMENT DATA** 

Farris 26HC12-120/SP

0G8442 5CL CE-59646-A10 **Bonnet Mat:** Trim Mat:

**Body Mat:** 

Seal ID:

Carbon Steel Carbon Steel

Set Pressure: CDTP: Capacity:

720.00 PSIG 0.00 11060 SCFM

Compressible

As Found

.002

Inlet Size: Orifice:

2" 300# RF

**Soft Seat Mat:** Cap Type: Spring:

Buna Plain G251

Temp: Constant BP: Variable BP:

0 0 0

**Outlet Size:** 

3" 125# RF

PRE-TEST

Pre-tested: YES Pre-test By:

Josh Bougie NO

Pre-test 1: Pre-test 2: Pre-test 3: **722 PSIG 715 PSIG** 714 PSIG

NO Fittings: Oily Inlet: Oily

**OTHER** 

Spindle/Collar

Outlet:

Shipping Crate: NO

Mfr Spec

0.007

NB

UV

**PWL** Pre-test Note:

**CRITICAL DIMENSIONS** 

**NOZZLE DISC** Mfr Spec As Found Mfr Spec Length 4.125 4.260 **Thickness** 0.000 Inside Step 0.000 Seat Step 0.078 0.098

**Seat ID** 1.110 1.108 **OutsideStep** 0.000 **Seat OD** 1.255 1.252 Seat 0.000

**PARTS EVALUATION** 

**CLEAN** OILY RUSTY CARBON OTHER **CONDITION** WORK PERFORMED **PARTNAME** П Dirty, Worn Disc V Replace П Nozzle Dirty, Marked Cleaned/Reuse  $\sqrt{}$ Cap-lever Assy П П Cleaned/Reuse  $\square$ Dirty Comp Screw And Locknut  $\overline{\Box}$  $\Box$ Cleaned/Reuse  $\sqrt{}$ Dirty

Spring And Buttons  $\overline{\mathbf{Q}}$ Dirty Cleaned/Reuse  $\Box$ Spindle / Stem  $\overline{\mathbf{V}}$ Dirty, Marked Polished Cleaned/Reuse Stem Retainer  $\sqrt{}$ Dirty Disc Holder Cleaned/Reuse  $\overline{\mathbf{Q}}$ Dirty Guide / Upper Ring Cleaned/Reuse  $\sqrt{}$ Dirty Lower Ring  $\square$ Dirty Cleaned/Reuse  $\Box$  $\overline{\Box}$ Ring Pin(S) Gasket / Seals  $\sqrt{}$ Worn Replace

Connection Ends  $\Box$ Cleaned/Reuse Body  $\overline{\mathbf{Q}}$ Dirty Bonnet  $\overline{\mathbf{V}}$ Dirty Cleaned/Reuse  $\overline{\Box}$ 百 百 TAG

Disassembled By: Josh Bougie Inspected By: Savannah Feist Assembled By: Josh Bougie

**FINAL TEST** 

TW8

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

**Back Pressure:** Savannah Feist **BP Gauge:** 

Gauge 1: Gauge 2: TW17A Perform BP Test: Yes 30 PSIG TW19D

**Final Set Pressure:** 720.00 PSIG Leakage Rate: Upper BlowDown Ring: Lower BlowDown Ring: **Seat Tightness Test:** 

N/A -9 NOTCH 650.00 PSIG

0

0

0

0 BPM

Pilot Type: **Pilot Test Fluid:** 

Tested By:

Pilot Gauge 1: Pilot Gauge 2: **Pilot Final Set Pressure:** Pilot Leakage Rate:

**Pilot Seat Tightness Test:** 

**FINAL INSPECTION** 

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

Final Inspection: Josh Bougie

VR Tag Applied By:

# **REPAIR SUMMARY REPORT**

SPARTAN Controls

Whitecourt, AB

Job#: 2883097SR-3.0

(0)

( no photo )

Part Name: Disc
Condition: Dirty; Worn
Work Perf'd: Replace
Notes: SOFT SEATED

Part Name: TAG Condition:

Work Perf'd:

Notes: W-38503 BIGSTONE 04-16-060-22W5M MAIN

INLET

## REPAIR SUMMARY REPORT

SPARTAN Controls

Whitecourt, AB

Job#: 2883097SR-3.0



## **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.