

## INSPECTION SERVICES AND ENGINEERING CERTIFICATION

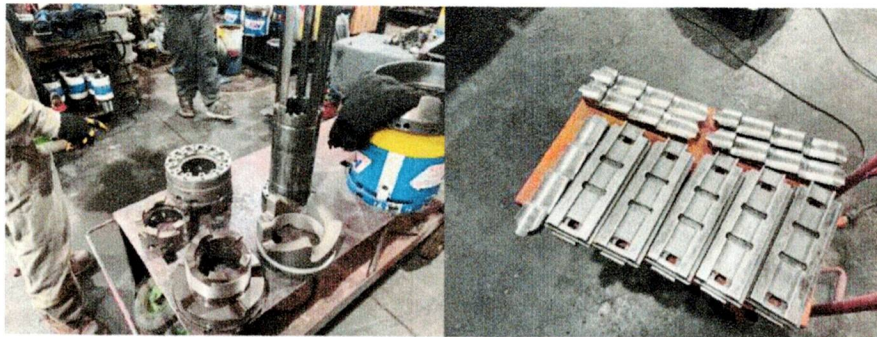
PHONE: 780.870.1547 EMAIL: operations@indexndt.ca Head Office Mail: P.O. Box 10524, Lloydminster, AB T9V 3A6

### INSPECTION REPORT


<b>EQUIPMENT LOCATION:</b>	Lloydminster, Alberta				<b>NDT PROCEDURE#:</b>	INSP-001			
<b>EXAMINATION COVERAGE:</b>	RANDOM:	5%	10%	25%	50%	75%	100%	X	
<b>ACCEPTANCE CRITERIA:</b>	CSA W59	ISO 9927-1			CAOEC RP		OTHER:	X	
<b>INSPECTION METHOD:</b>	VT	X	UT	X	MT WET FLOURESCENT	X	MT WET BLACK	MT DRY RED	
<b>EQUIPMENT INFO:</b>	BLACK LIGHT MAKE - INOVA			LIGHT METER # 1822158		MAG COIL # RC1-30120121			

<b>CLIENT:</b>	K&S Power Tongs	<b>UNIT/RIG:</b>	KSV012
<b>EQUIPMENT:</b>	Volant Tool	<b>MAKE/MODEL:</b>	Volant CRTi3-7.0
<b>REPORT#:</b>	IDX-5156	<b>SERIAL NUMBER:</b>	KSV012

### EQUIPMENT PHOTOS



### INSPECTION RESULTS

<b>ACCEPTABLE:</b>	X	<b>REJECTED:</b>		<b>DATE OF INSPECTION:</b>	March 26, 2024																																
<b>TECHNICIAN:</b>  		<b>COMMENTS:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><b>Part:</b></td> <td style="width: 50%;"><b>Serial#:</b></td> </tr> <tr> <td>Cage-</td> <td>82856-3J6718-7</td> </tr> <tr> <td>Upper Cam -</td> <td>102348-3J6700-06</td> </tr> <tr> <td>Lower Cam -</td> <td>104338-3J5476-07</td> </tr> <tr> <td>Cam Latch -</td> <td>102351-3J6522-03</td> </tr> <tr> <td>Cam Int -</td> <td>102349-3J5834-10</td> </tr> <tr> <td>Jaw-</td> <td>80929-01-3J4155-70</td> </tr> <tr> <td>Jaw-</td> <td>80929-01-4486A01-28</td> </tr> <tr> <td>Jaw-</td> <td>80929-01-3J4155-68</td> </tr> <tr> <td>Jaw-</td> <td>80929-03-3J7864-08</td> </tr> <tr> <td>Jaw-</td> <td>80929-03-3J7864-09</td> </tr> <tr> <td>Die-</td> <td>82749-02-4473A12-04</td> </tr> <tr> <td>Die-</td> <td>82749-02-4473A12-08</td> </tr> <tr> <td>Die-</td> <td>82749-02-4473A12-06</td> </tr> <tr> <td>Die-</td> <td>82749-02-4473A12-09</td> </tr> <tr> <td>Die-</td> <td>82749-02-4473A12-10</td> </tr> </table>				<b>Part:</b>	<b>Serial#:</b>	Cage-	82856-3J6718-7	Upper Cam -	102348-3J6700-06	Lower Cam -	104338-3J5476-07	Cam Latch -	102351-3J6522-03	Cam Int -	102349-3J5834-10	Jaw-	80929-01-3J4155-70	Jaw-	80929-01-4486A01-28	Jaw-	80929-01-3J4155-68	Jaw-	80929-03-3J7864-08	Jaw-	80929-03-3J7864-09	Die-	82749-02-4473A12-04	Die-	82749-02-4473A12-08	Die-	82749-02-4473A12-06	Die-	82749-02-4473A12-09	Die-	82749-02-4473A12-10
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		<b>REPAIRS:</b> NA																																			

#### QUALITY ASSURED INSPECTIONS FOR QUALITY ASSURED BUSINESSES

Except as provided herein, Index NDT Inspections Ltd. makes no warranty, express or implied with respect to the mechanical or other conditions of the equipment inspected by us. Index NDT Inspections Ltd. shall only be responsible in the event of damage resulting directly from their inspection, and in no event, shall the liability of Index NDT Inspections Ltd. exceed the cost of inspection. Our organization assumes only the responsibility of locating defects in the inspected components and welds made accessible at the time of inspection. All equipment should be cleaned to allow access to all welds and critical components. It is of the utmost importance that the unit's owner be aware that excessive coating over 10 mils can severely mask the detection of discontinuities while utilizing standard inspection techniques. We are not responsible for the mechanical or other conditions assembled condition except at customer's request.

# Certificate of Testing

Volant Oil Tools Inc. t +1 780.490.5185  
 4110 56 Avenue NW f +1 780.437.2187  
 Edmonton AB T6B 3R8 info@volantproducts.ca  
 Canada www.volantproducts.ca



## Load Testing

### Test Parameters

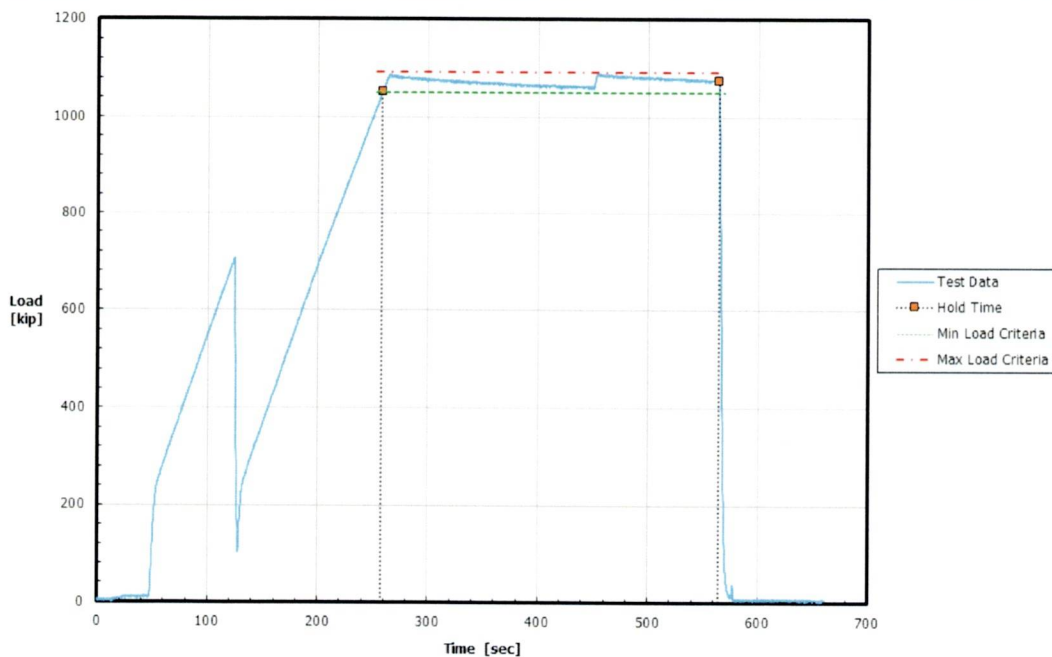
Target Test Load: 1050 kips Minimum Hold Time: 300 s

### Test Summary

Test Components									Test Equipment	
Part Number	Part Name	Serial Number	Passed	Procedure	Actual Test Load	Hold Time	Test ID	Test Date	Identifier	Calibration Due
82306-12	Mandrel,CRTI2-7.0,350T,4.5IF,SR2	3J00013444-15	Passed	102870	1051 kips	306 s	L01-002005	Oct 11, 2023	VLF-01	Sep 30, 2024

Test Approved By: Steven Hargreaves Test Approved On: Thursday, October 12, 2023

### Test Graph for L01-002005



This is to certify that the equipment listed was tested in accordance with the referenced Procedure(s) to meet the Proof testing requirements of API-8C, 5th Edition

Signed: Steven Hargreaves,  
 Manager, Quality Assurance,  
 Volant Oil Tools Inc.

Date: Mar 28, 2024



intertek

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## Test Certificate Package

**Unit Name: Mandrel,CRTi2-7.0,350T,4.5IF,SR2**

**Unit Description: Mandrel-06, CRTi2-7.0, 4-1/2 IF Box, 350 Ton, SR2(-40C)**

**Part Number: 82306-12**

**ID Number: 3J00013444-15**

This is to certify that the equipment listed was tested in accordance with the referenced Procedure(s)

Signed: Steven Hargreaves,  
Manager, Quality Assurance,  
Volant Oil Tools Inc.

Date: Mar 28, 2024



intertek



## MAGNETIC PARTICLE TESTING REPORT - 339342

CLIENT: **VOLANT OIL TOOLS (MAIN)**  
**4110 56 Avenue**  
**Edmonton, Alberta T6B 3R8**

DATE: **October 17, 2023**  
INVOICE #:  
JOB #: **3J00013444**  
P.O. #: **3PO0018291**

EQUIPMENT OWNER: **VOLANT OIL TOOLS (MAIN)**  
LOCATION: **VOLANT OIL TOOLS (MAIN)**

WORK ORDERS: **64500**

### TECHNIQUE DETAILS

PROCEDURE #: **MTP-01 REV 8**  
TEST METHOD: **ASTM E709 (2021)**  
ACCEPTANCE STANDARD: **API 8C (5TH ED) (2014) 8.4.7.2 / 8.4.7.3 & 8.4.7.4/ VOLANT SPEC.40068 REV.C /**

### EQUIPMENT

Manufacturer:	<b>PARKER CONTOUR PROBE</b>	Type:	<b>B300</b>	Serial #:	<b>30145</b>
Last Calibration:	<b>Oct-17-2023</b>	Calibration Due:	<b>Oct-18-2023</b>		
Manufacturer:	<b>REL</b>	Type:	<b>NOMAD C4</b>	Serial #:	<b>18103109</b>
Last Calibration:	<b>Oct-17-2023</b>	Calibration Due:	<b>Oct-18-2023</b>		
Manufacturer:	<b>rees</b>	Type:	<b>10 LB Weight</b>	Serial #:	<b>0071</b>
Last Calibration:	<b>Oct-11-2023</b>	Calibration Due:	<b>Oct-11-2024</b>		
Manufacturer:	<b>MAGNAFLUX</b>	Type:	<b>L-10</b>	Serial #:	<b>35</b>
Last Calibration:	<b>Oct-17-2023</b>	Calibration Due:	<b>Oct-18-2023</b>		

**MAGNETIZING METHOD:**  AC  DC  Continuous  Residual  Yoke  Coil  
**MAGNETIC PARTICLES:**  Wet  Fluorescent  Non-Fluorescent Bath Concentration: **FIXEDml/100ml**  
 Dry Color: **FLUORESCENT GREEN**

Manufacturer: **SERM** Type: **FLUXO 6** Batch/Lot #: **L220114**  
**LIGHT SOURCE:**  Halogen 250W  Incandescent 100W  Maglite 6 Volt Serial: **117**  
**SURFACE CONDITION:**  Bare Metal  Ground  Machined  Blasted  Painted  Welded  Loose Scale Removed  
MATERIAL TYPE: **FE/CS** MATERIAL THICKNESS: **VARIOUS** SURFACE TEMP: **22.0°C**

### ITEMS TESTED

WET FLUORESCENT MAGNETIC PARTICLE TESTING WAS PERFORMED ON THE FOLLOWING ITEMS:

**QTY.(15) 82306-12 Mandrel,CRTi2-7.0,350T,4.5IF,SR2**

PART NAME	SERIAL #	Accept	Reject
MANDRELS	82306-12-3J00013444-1 to 15	✓	

### TEST RESULTS & COMMENTS

START TIME @ 10 00  
NO RELEVANT INDICATIONS WERE DETECTED AT TIME OF TESTING.  
YOKE VERIFIED BY SUSTAINED LIFT ALTERNATING CURRENT USING 10LB. WEIGHT  
BLACK LIGHT INTENSITY VERIFIED ON UV LIGHT METER PRIOR TO INSPECTION AND WAS GREATER THAN 1000µW² AT INSPECTION SURFACE.  
SEE PICTURES FOR REFERENCE

*Continued on next page . . .*

**SIGNATURES** \* Client representative's signature indicates acceptance of the reports and results. Nortech Advanced NDT Ltd. is liable for examination costs only.

CLIENT REP. /

Technician (PRINT) Bradley Churchill

CGSB:

CGSB REG#:

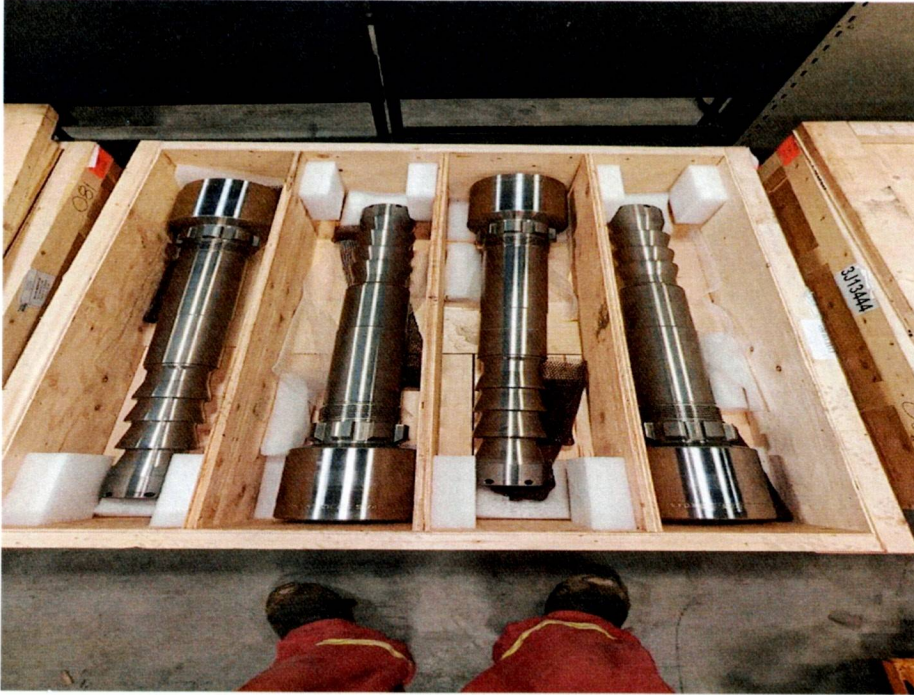
SNT-TC-1A: II

Technician (SIGN)

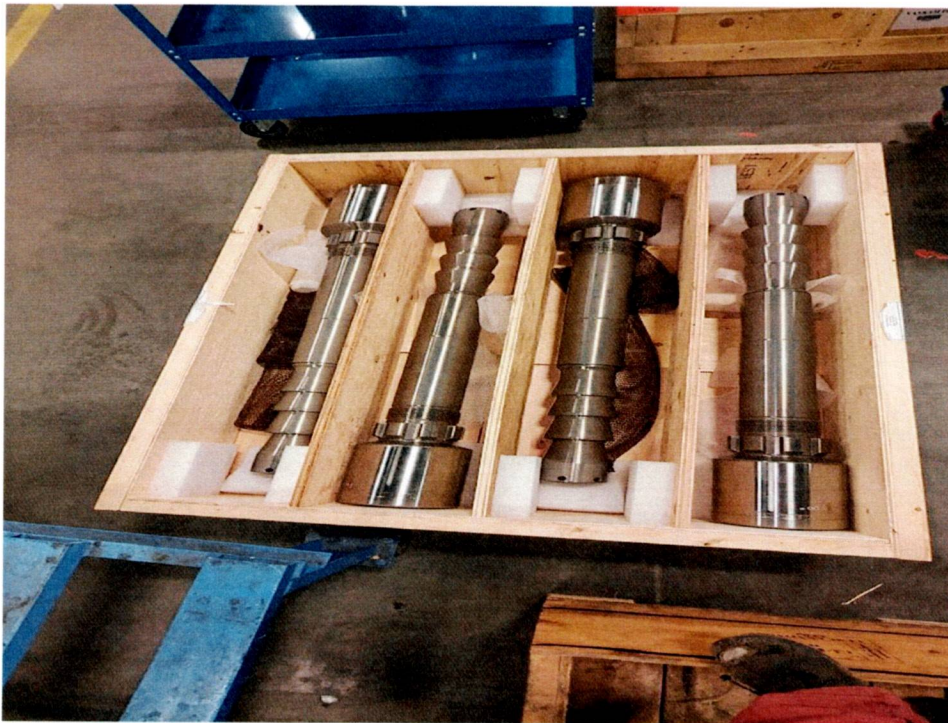


## MAGNETIC PARTICLE TESTING REPORT - 339342

3J00013444 box 1



3J00013444 box 2



*Continued on next page . . .*

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**CLIENT REP. /**

**Technician (PRINT)** Bradley Churchill

CGSB:

CGSB REG#:

SNT-TC-1A: II

Technician (SIGN)

A rectangular box containing a handwritten signature in black ink.



## MAGNETIC PARTICLE TESTING REPORT - 339342

3J00013444 box 3



3J00013444 box 4



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### SIGNATURES

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CLIENT REP. /

Technician (PRINT) Bradley Churchill

CGSB:

CGSB REG#:

SNT-TC-1A: II

Technician (SIGN)

