



## 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

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

CLIENT:	K&S Power Tongs	UNIT/RIG:	KSV012
EQUIPMENT:	Volant Tool	MAKE/MODEL:	Volant CRTI3-7.0
REPORT#:	IDX-3175	SERIAL NUMBER:	KSV012

### EQUIPMENT PHOTOS



### INSPECTION RESULTS

ACCEPTABLE:	X	REJECTED:		DATE OF INSPECTION:	April 4, 2023
TECHNICIAN:		COMMENTS:			
		<b>Part:</b> Mandrel- 82306-03-3J5031-09 Cage- 82856-3J6718-7 Upper Cam - 102348-3J6700-06 Lower Cam - 104338-3J5476-07 Cam Latch - 102351-3J6522-03 Cam Int - 102349-3J5834-10 Die- 82749-02-4473A12-04 Die- 82749-02-4473A12-11 Die- 82749-02-4473A12-06 Die- 82749-02-4473A12-08 Die- 82749-02-4473A12-09			
		<b>Serial#:</b> 82306-03-3J5031-09 82856-3J6718-7 102348-3J6700-06 104338-3J5476-07 102351-3J6522-03 102349-3J5834-10 82749-02-4473A12-04 82749-02-4473A12-11 82749-02-4473A12-06 82749-02-4473A12-08 82749-02-4473A12-09			
		MANDREL THICKNESS: 1.312"/ 1.308"/ 1.311"/ 1.307"/ 1.310"			
		REPAIRS: 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.

INCLUSION P-POROSITY IUC-INTERNAL UNDERCUT EUC-EXTERNAL UNDERCUT S-SLAG C-CRACK IP-INCOMPLETE PENETRATION NF-NON-FUSION CR-CRACK PH-PIN HOLE D-DISCONTINUITY



# Certificate of Testing

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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: 960 kips Minimum Hold Time: 300 s

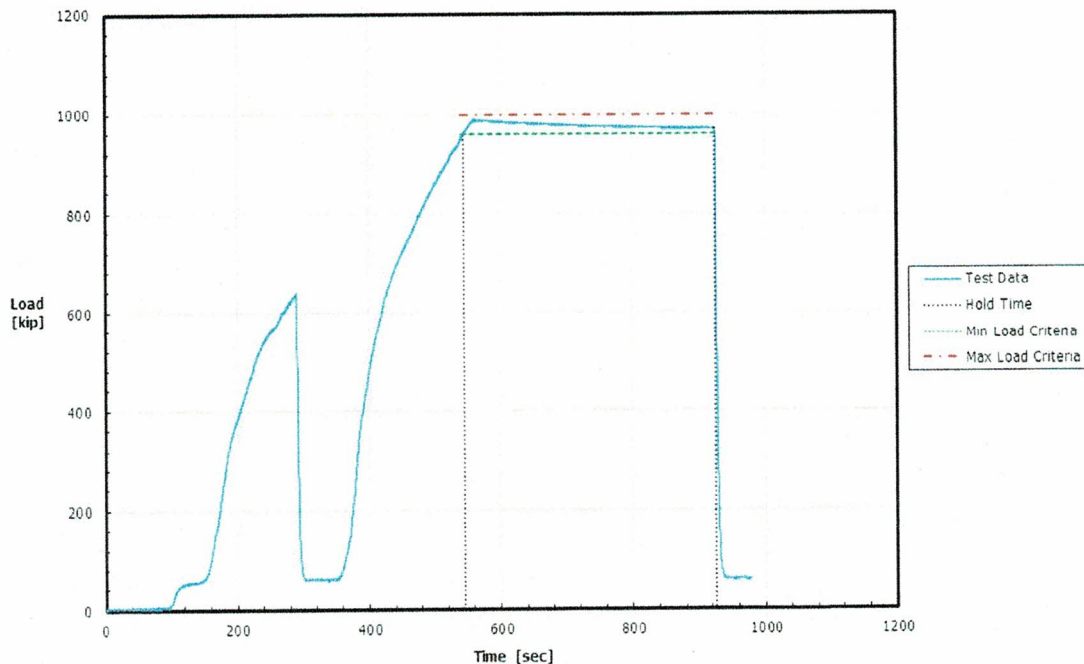
### Test Summary

Test Components									Test Equipment	
Part Number	Part Name	Serial Number	Passed	Procedure	Actual Test Load	Hold Time	Test ID	Test Date	Identifier	Calibration Due
82306-03	Mandrel,CRTi2-7.0,320T,4.5IF,SR2	3J00005031-09	Passed	102870	963 kips	379 s	L01-001412	Oct 9, 2019	VLF-01	Mar 11, 2020

Test Approved By: Steven Hargreaves

Test Approved On: Tuesday, October 15, 2019

### Test Graph for L01-001412



### DELAYED USE

Date of 1st Use: July 9, 2021

Job #: 23317

Signed By: [Signature]

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: [Signature]  
Steven Hargreaves,  
Manager, Quality Assurance,  
Volant Oil Tools Inc.

Date: Jun 16, 2021





7108 - 8th Street NW  
Edmonton, AB T6P 1V1  
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## MAGNETIC PARTICLE TESTING REPORT - 269653

CLIENT: **VOLANT OIL TOOLS INC.**  
**4110-56 AVENUE**  
**Edmonton, Alberta T6B 3R8**

DATE: **October 18, 2019**  
INVOICE #:  
JOB #: **3J5031**  
P.O. #: **3P07539**

EQUIPMENT OWNER: **VOLANT OIL TOOLS INC.**  
LOCATION: **VOLANT OIL TOOLS INC.**

WORK ORDERS: **28595**

### TECHNIQUE DETAILS

PROCEDURE #: **MTP-01 REV 4**  
TEST METHOD: **ASTM E709 (2015)**  
ACCEPTANCE STANDARD: **API 8C (5TH ED) (2014) 8.4.7.2 / 8.4.7.3 & 8.4.7.4/ VOLANT SPEC.40068 REV.A**

### EQUIPMENT

Manufacturer: <b>PARKER CONTOUR PROBE</b>	Type: <b>B300</b>	Serial #: <b>27685</b>
Last Calibration: <b>Oct-18-2019</b>	Calibration Due: <b>Oct-19-2019</b>	
Manufacturer: <b>REL</b>	Type: <b>C4-NOMAD</b>	Serial #: <b>18052202</b>
Last Calibration: <b>Oct-18-2019</b>	Calibration Due: <b>Oct-19-2019</b>	
Manufacturer: <b>WI</b>	Type: <b>W-PT</b>	Serial #: <b>1029</b>
Last Calibration: <b>Sep-01-2015</b>	Calibration Due: <b>Sep-01-2025</b>	
Manufacturer: <b>MAGNAFLUX</b>	Type: <b>UV LIGHT METER</b>	Serial #: <b>120382</b>
Last Calibration: <b>Jun-18-2019</b>	Calibration Due: <b>Jun-18-2020</b>	
Manufacturer: <b>PARKER</b>	Type: <b>COIL</b>	Serial #: <b>35</b>
Last Calibration: <b>Oct-18-2019</b>	Calibration Due: <b>Oct-19-2019</b>	

MAGNETIZING METHOD: ☒ AC ☐ DC ☒ Continuous ☒ Residual ☒ Yoke ☒ Coil

MAGNETIC PARTICLES: ☒ Wet ☒ Fluorescent ☐ Non-Fluorescent  
☐ Dry Color: **FLUORESCENT GREEN**

Manufacturer: **SERM** Type: **FLUXO 14AM** Batch/Lot #: **32RS2W**  
LIGHT SOURCE: ☐ Halogen 250W ☐ Incandescent 100W ☒ Maglite 6 Volt Serial: **RC666**  
SURFACE CONDITION: ☐ Bare Metal ☐ Ground ☒ Machined ☐ Blasted ☐ Painted ☐ Welded ☐ Loose Scale Removed  
MATERIAL TYPE: **CS** MATERIAL THICKNESS: **VARIOUS** SURFACE TEMP: **23.0°C**

### ITEMS TESTED

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

**MANDREL, CRTi 2-7.0, 320 TON, 4.5 IF, SR2**

PART NAME	SERIAL #	Accept	Reject
10) MANDRELS	82306-03-3J5031-01 THRU TO 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### TEST RESULTS & COMMENTS

NO RELEVANT INDICATIONS WERE DETECTED AT TIME OF TESTING.  
BLACK LIGHT INTENSITY AT INSPECTION SURFACE WAS GREATER THAN 1200 MICRO WATTS.

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### SIGNATURES

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

CLIENT REPRESENTATIVE\* (PRINT/SIGN) NELSON /

Technician (PRINT) Ryan Cherwoniak

CGSB: 2

CGSB REG#: 13189

SNT-TC-1A: II

Technician (SIGN)