

MAGNETIC PARTICLE EXAMINATION REPORT

REPORT No.: **MT - 1829 - 01 - EDP**

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Client: TAQA North Ltd.
District: Northern LSD: C-32-H / 94-H-08
Facility: Chinchaga Gas Plant
Item(s) Examined: **All Nozzles and 100% Circumferential and Longitudinal Welds**
Acceptance Criteria: ASME Sec VIII Rev. / Date: 2010
Procedure No.: ITS-MT04 Rev. / Date: Rev. 1 / Oct-11
Technique No.: Tech 03 Rev. / Date: Rev. 1 / Oct-11

ITS Job No.: 1829
Date: July 12, 2012
Time: 14:30
W.O. No.: N/A
P.O. No.: N/A
Cost Code: N/A
AFE: 11200624
Other: N/A

Equipment Data:

PRN: (A) **601541** Serial No.: **393508** Equip. No.: **603VP005** CRN: **K0576.1**
Material: **Carbon Steel** Thickness: **Shell - 0.6733" / Head - 0.436"** Other: **N/A**

Surface Condition:

☐ Base Metal ☐ Machined ☐ Shot Blasted ☒ Wire Wheeled ☐ As Ground ☐ As Welded ☐ Painted ☐ Coated ☐ Other: **N/A**
☐ < -20°C (-5°F) ☒ -20°C (-5°F) to 54°C (130°F) ☐ 55°C (131°F) to 315°C (600°F) ☐ > 315°C (600°F)

Equipment:

Equipment	Serial No.	Cal. Due Date	MT Technique and Examination Medium:	
<input checked="" type="checkbox"/> Hand Yoke: Contour	17414	18-Nov-12	<input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	
<input type="checkbox"/> Perm. Magnet:			<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Fluorescent <input type="checkbox"/> Visible	
<input type="checkbox"/> Coil:			Manufacturer: MagnaFlux Batch No.:	
<input checked="" type="checkbox"/> Blacklight: Spectroline	1795689	Mar.20 2013	<input type="checkbox"/> Cleaner:	
<input checked="" type="checkbox"/> Light Meter: Spectroline	1822513	3-Jul-13	<input type="checkbox"/> Color Contrast:	
<input type="checkbox"/> Visible Light: >		Footcandles	<input checked="" type="checkbox"/> Particles: MagnaGlo 14AM	07K07K
Fluorescent Examination Blacklight Intensity Check; Pre: 5780 $\mu\text{W}/\text{cm}^2$ Post: 4890 $\mu\text{W}/\text{cm}^2$			<input type="checkbox"/> Other:	

Examination Details:

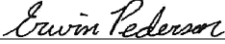

SCOPE: A wet fluorescent Magnetic Particle Examination was performed on all nozzles and 100% circumferential and longitudinal welds.

RESULTS: On the C2 weld (north side of vessel) at the 8 O'clock position, an indication was found in the start/stop of a weld. The indication was buffed out and re-examined. No relevant indication was found.
Weld spatter was removed from N1, N2, N3 and N4 prior to do WFMP1 - N1 was found to have 2 indications just below it on the head. These indications were removed by lightly buffing and re-examined. No relevant indications were found. N4 was found to have 2 indications, one on the edge of weld and one in head. These indications were removed by lightly buffing and re-examined. No relevant indications were found.
1 indication was found 24 inches west of C2 at the C2/T2 tee weld in the start/stop of a weld. The indication was buffed out and re-examined. No relevant indication was found.
1 indication was found 23 inches east of C2 at the C2/T3 tee weld in the start/stop of a weld. The indication was buffed out and re-examined. No relevant indication was found.
1 indication was found 12 inches up from T4 tee weld in the shell in can 3. The indication was buffed out and re-examined. No relevant indication was found. Approximately 0.010" was removed from shell wall.
1 indication was found 26 inches west of C5 at the C5/T8 tee weld in the start/stop of a weld. The indication was buffed out and re-examined. No relevant indication was found.
1 indication was found 12 inches up from T9 tee weld in the start/stop of a weld. The indication was buffed out and re-examined. No relevant indication was found.
1 indication was found 26 inches west of C6 at the C6/T10 tee weld in the start/stop of a weld. The indication was buffed out and re-examined. No relevant indication was found.
2 indications were found on either side of a weld repair on WHT2 on the West Head by C1. Both indications were buffed out and re-examined. No relevant indications were found. Approximately 0.010" was removed from the head wall.
The outer circumference weld between WHT3 and WHT4 an indication was found and could not be removed. Shear wave was done see **UT-1828-01-MAJ** for the results.

CONCLUSION: Based on the results of this examination, the above mentioned items were found to contain no relevant indications and is acceptable to the above mentioned standard **except** the West head outer circumference weld between WHT3 and WHT4.

Client Representative: _____ Sign: _____ Date: _____

Technician(s):

Sign: 	Sign: 	Report Review: 
Print: Erwin Pederson	Print: Andrew Soto	
1 st Technician	2 nd Technician / Assistant	
CGSB: _____ SNT: _____ ACCP/ASNT: _____	CGSB: _____ SNT: _____ ACCP/ASNT: _____	
Level: 2	Level: _____	
Certification No.: 11157	Certification No.: _____	

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CONTINUATION EXAMINATION REPORT

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ITS Job No.: 1829

Item(s) Examined: All Nozzles and 100% Circumferential and Longitudinal Welds

Date: July 12, 2012

PHOTOS



NAME PLATE



OVERALL VIEW

1st Technician:

Print: Erwin Pederson

Sign: Erwin Pederson

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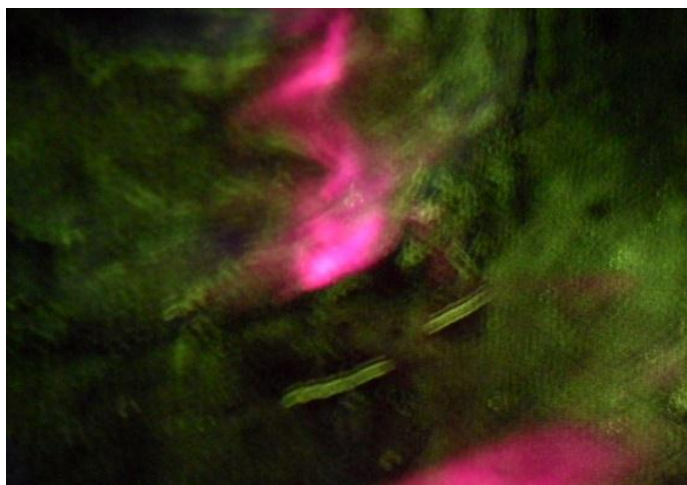
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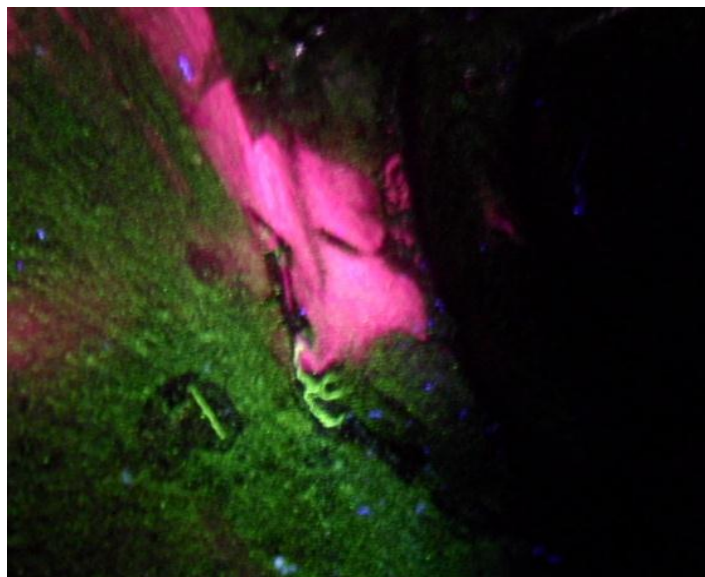
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N1 - 2 Indications Just Below the Nozzle Weld



N4 - 2 Indications, 1 in the Head and the Other is in the Weld

1st Technician:

Print: Erwin Pederson

Sign: *Erwin Pederson*

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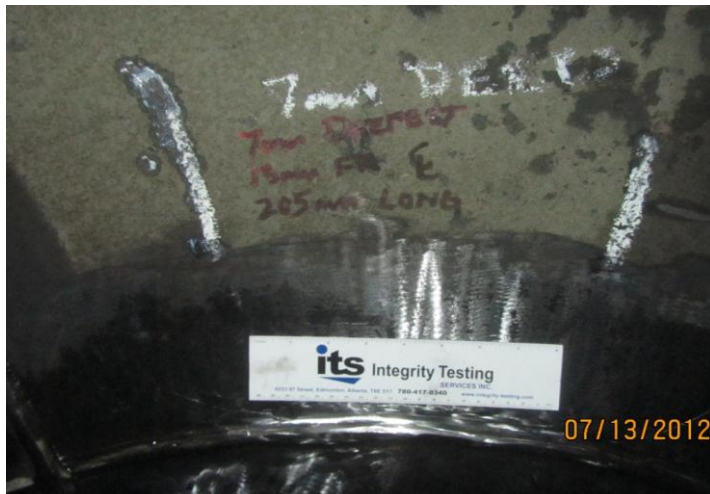
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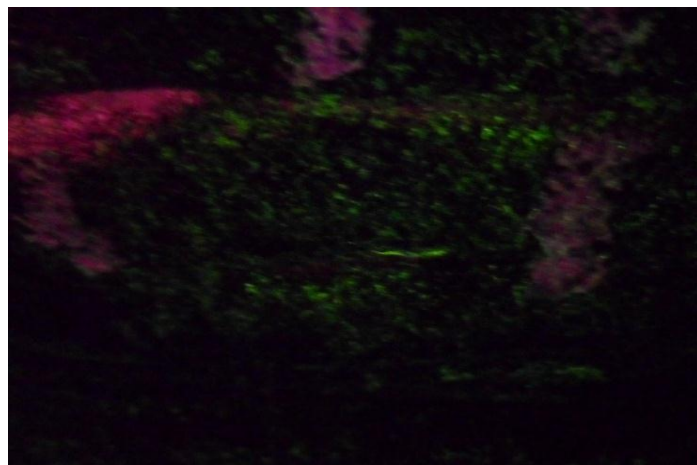
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West Head Crack In - Between WHT3 and WHT4



T10 / C6 Tee Weld - Start / Stop of the Weld

1st Technician:

Print: Erwin Pederson

Sign: *Erwin Pederson*