

MAGNETIC PARTICLE EXAMINATION REPORT

REPORT No.: **MT - 1829 - 02 - 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 15, 2012
Time: 9:14
W.O. No.: N/A
P.O. No.: N/A
Cost Code: N/A
AFE: 11200624
Other: N/A

Equipment Data:

PRN: (A) **601537** Serial No.: 393504 Equip. No.: 603VP006 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:
 < -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 type="checkbox"/> Perm. Magnet:			<input checked="" type="checkbox"/> Wet	<input type="checkbox"/> Dry
<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 μW/cm² Post: 4890 μW/cm²			<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 C1 weld, a repair area up 7 - 10 inches from the T1 tee weld 2 indications were found in the start/stop of a weld. The indications were buffed out and re-examined. No relevant indications were found. Weld splatter was removed from N1, N2, N3 and N4 prior to do WFMP - no relevant indications were found. 1 indication was found 24 inches east of C6 at the C6/T11 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 at the C6/T10 tee weld in the start/stop of a weld 8 inches down from T10 and the other was 1 1/2 inches from C6. Both indications were buffed out and re-examined. No relevant indications were found. 1 indication was found on the C6 weld at the 5 O'clock position 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 the C4 weld at the 7 & 8 O'clock position in the start/stop of a weld. The indications were buffed out and re-examined. No relevant indications were found. 3 indications were found at the C5/T8 tee weld in the start/stop of a weld right at the tee weld. The other was 7 inches up from T8, and the other is 25 inches west from the C5 weld, all 3 indications were buffed out and re-examined. No relevant indications were found. 1 arc strike was found 10 inches below of T5 on the C3 weld in can 2. The arc strike and indication were buffed out and re-examined. No relevant indication was found. Approximately 0.010" was removed from the shell wall. 1 indication was found 21 inches west of the C2/T2 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 24 inches east of the C2/T3 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 24 inches west of the C5/T9 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 at the C7/T12 tee weld in the start/stop of a weld 7 inches up from T12 and the other was 2 - 5 inches from the last indication on the head side of the weld C7. Both indications were buffed out and re-examined. No relevant indications were found. Approximately 0.020" was removed from the east head wall. 2 indications were found in the west head of the WHT6 weld, up 16 inches from C1 and went perpendicular into the head. The other is 3 inches from the inner small diameter circumferential weld. Both indications were buffed out and re-examined. No relevant indications were found. Approximately 0.010" was removed from the head wall and the other was 0.030" deep respectively.

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.

Client Representative: _____ Sign: _____ Date: _____

Technician(s):

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

Scope of Services
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PHOTOS



NAME PLATE



OVERALL VIEW

1st Technician:

Print: Erwin Pederson

Sign: Erwin Pederson

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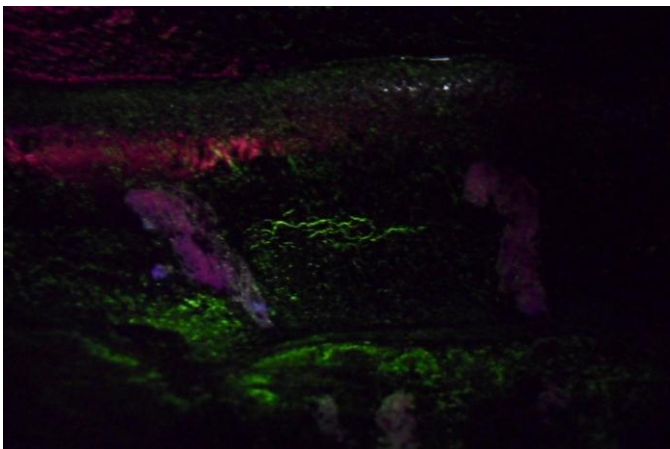
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T10 / C6 - 2 Indications in the Start / Stop of the Weld



1 of the Indications From C5 / T8

1st Technician:

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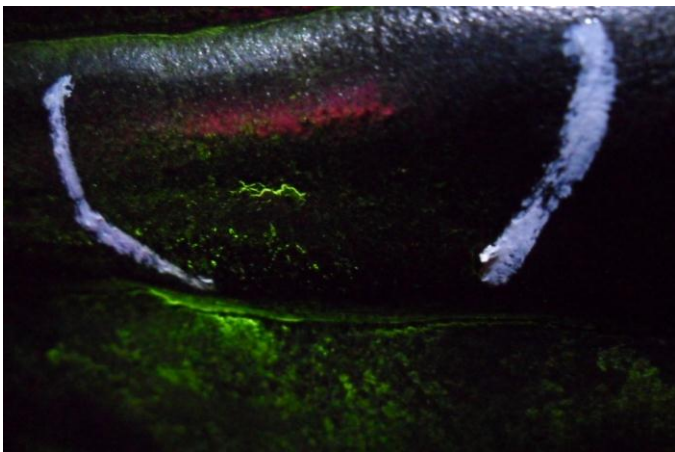
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C1 / T1 Tee Weld Intersection Repair Weld in C2 Up 7" - 10" From T1



C5 / T9 Indication in Start / Stop 24" West of C5

1st Technician:

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Sign: *Erwin Pederson*

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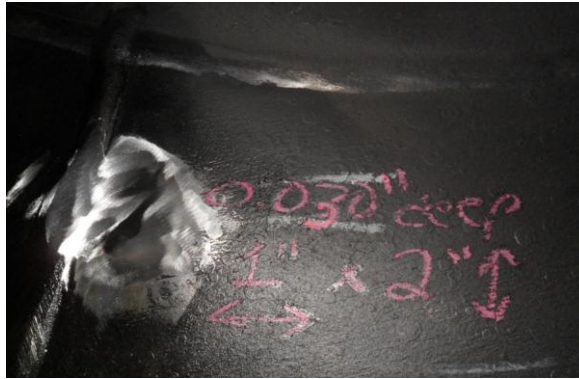
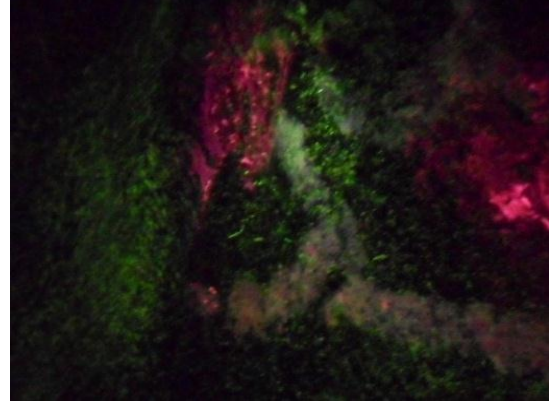
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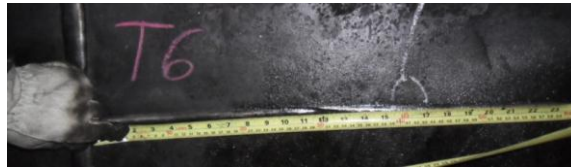
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**West Head - WHT6
Up by the Smaller Diameter Circ. Weld**



West Head - WHT1: 6" From the C1 Weld

1st Technician:

Print: Erwin Pederson

Sign: *Erwin Pederson*