

NDT Inspection
<https://tuboafrika.nov.com/>



Client
Suez Canal Container Terminal

RTG Crane
CR 16

Location
Port Said

Date of Inspection
September 21, 2017

Work Order No.
SO-019839

Tuboscope | NOV Wellbore Technologies

Tuboscope Vetco International - Egypt Branch

Summary of Inspection

Client : Suez Canal Container Terminal (SCCT)

Location : STS Crane # CR 16- Port Said

Scope of work : NDT Inspection according to Structural Maintenance Program, AWS D1.1, ASTM E709 & Tuboscope Standard Working Procedures.

Date of Inspection: 21/09/2017 to 25/09/2017

Project Summary :

The work included NDT survey (Visual, MPI and UT) to create a safe work place.

Visual Testing was carried out on all bolted and welded joints in areas free of dirt and grease.

Magnetic Particle Testing areas were cleaned using power tools (buffing) and inspected using magnetic field (Permanent Magnet).

Ultrasonic Testing were carried out in areas confirmed by standards and specification of Ultrasonic testing.

Inspection report includes sketches from the Maintenance program, photos, Inspection location, method of testing, and conclusion.

All areas where paint has been removed were repainted after inspection was completed.

During inspection found cracks in 10 areas, mentioned in our defect report. Any cracks shall be unacceptable, regardless of size or location as per AWS D1.1. These cracks shall be repaired before putting crane back into service using manufacture's repair procedure/recommendation.

Regards,

Mohamed Asaad (NDT Team)

Tamer Salah (Rope Access Team)




Attached Report

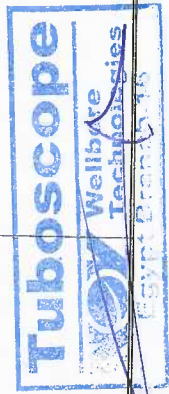
SP-019839
SUEZ CANAL CONTAINER TERMINAL

T.V.I Work Order No. :
Customer :





Customer W.O. No.
Work location

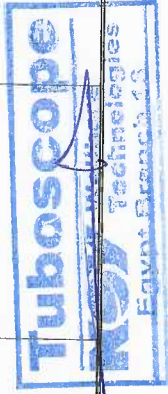
SCCT (CR-16)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	22/09/2017	DRAW NO. JL1190301A	NO-1 RIGHT LEG OF ELECTRIC HOUSE SIDE (FRONT)	2 EA CRACKS MIN 3 cm	M. Asaad	
RIGHT LEG OF ELECTRIC HOUSE SIDE (FRONT)						
1						
2						





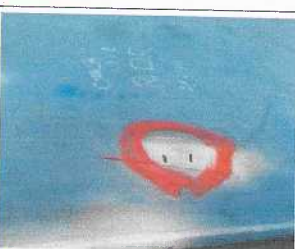


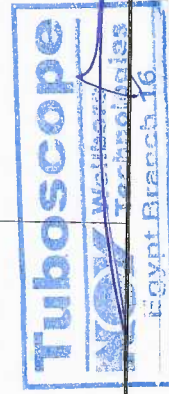
Attached Report

#	DATE	T.V.I Work Order No. : Customer :	SO-019539 SUEZ CANAL CONTAINER TERMINAL	Customer W.O. No. Work location	SCCT (CR-18)
	DATE	Customer	Work location	Inspector	Pic. of defect
0	22/09/2017		NO-1 RIGHT LEG OF ELECTRIC HOUSE SIDE (REAR)	M. Asaad	
		DRAW NO. JL1190301A			
			RIGHT LEG OF ELECTRIC HOUSE SIDE (REAR)		
1			No:1 R.E.R CRACK 6CM		
			No:2 R.E.R CRACK 4CM		
			No:3 R.E.R CRACK 5CM		
2					



Attached Report

#	DATE	T.V. Work Order No. : Customer :	SD-119039 SUZUKI CANAL CONTAINER TERMINAL	Customer W.O. No. Work location	Inspector	Defect description	Pic. of defect
0	23/09/2017	DRAW NO. : DRAW NO. JL1190301A	NO-2 RIGHT LEG OF DIESEL HOUSE SIDE (IN SIDE & RAER)		M. Asaad	03 EA CRACKS MIN 2 cm & MIX 4cm	
RIGHT LEG OF DIESEL HOUSE SIDE (IN SIDE)							
1							
RIGHT LEG OF DIESEL HOUSE SIDE (RAER)							
2							












Attached Report

SO:019839
SUEZ CANAL CONTAINER TERMINAL

T.V.I Work Order No. :
Customer :

Customer W.O. No.
Work location

SCT (CR-16)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	23/09/2017	DRAW NO.JL1190301A	NO-2 RIGHT LEG OF DIESEL HOUSE SIDE (FORNT)	(05 EA CRACKS MIN 2 cm & MIX 5 cm)	M. Asaad	
RIGHT LEG OF DIESEL HOUSE SIDE (FORNT)						
1						
						
						
						
2						

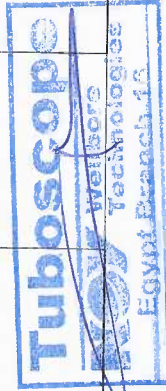


Attached Report

T.V.I Work Order No. : 18328
Customer : SUEZ CANAL CONTAINER TERMINAL

Customer W.O. No.
Work location

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	8CCT (CR-16) Pic. of defect
0	22/02/2017	DRAW NO. JL1190301A	LEFT LEG NO-3 OF ELECTRIC HOUSE SID (FRONT)	01 EA CRACK 7cm	M. Asaad	
LEFT LEG ELECTRIC HOUSE SIDE (FRONT)						
1						
2						

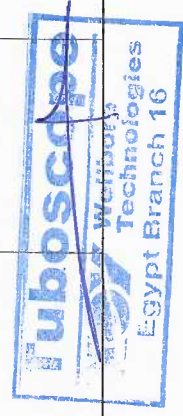


Attached Report

T.V. Work Order No. : 9859 SUEZ CANAL CONTAINER TERMINAL
 Customer :
 Customer W.O. No. :
 Work Location :




SCT (CR-16)
 Pk. of defect

DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pk. of defect
23/09/2017	DRAW NO. JL1190301A	LEFT LEG NO-4 OF DIESEL HOUSE SID (IN SIDE)	01 EA CRACK 4 cm	M. Asaad	
		LEFT LEG OF DIESEL HOUSE SID (IN SIDE)			






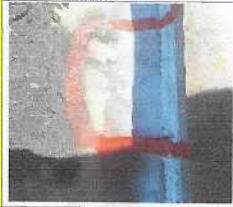



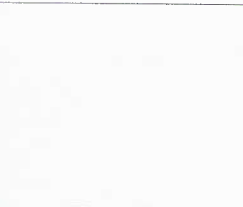

Defects summary report

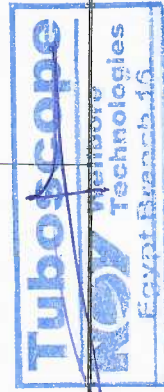
T.V.I Work Order No. : 19839 SUEZ CANAL CONTAINER TERMINAL Customer W.O. No. Work location : SCCT (CR-16)

DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
22/08/2017	DRAW NO-JL11908	RIGHT RAILS OF THE TROLLEY RUNWAY ARE LOCATED ON THE ENERGYCHAIN MECHAISM	05 EA CRACKS MIN 2 cm & MIX 8 cm	M. Asaad	    
RIGHT RAILS OF THE TROLLEY RUNWAY ARE LOCATED ON THE ENERGYCHAIN MECHAISM)					
					    
					    



Defects summary report

DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
22/08/2017	DRAW NO.-JL11908	LEFT RAILS OF THE TROLLEY RUNWAY ARE LOCATED ON THE ENERGYCHAIN MECHAISM	6 EA CRACKS MIN 5 cm & MAX 20 cm	M.ASAMAD	
(LEFT RAILS OF THE TROLLEY RUNWAY ARE LOCATED ON THE ENERGYCHAIN MECHAISM)					
					
					







Defects summary report



Customer W.O. No.
Work location

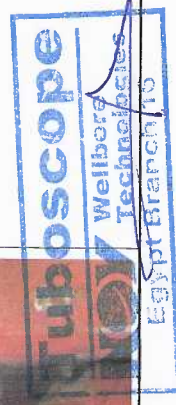
18839
SUEZ CANAL CONTAINER TERMINAL

T.V.I Work Order No. :
Customer :

SCCT (CR-16)



#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	25/09/2017	DRAW NO-JL11901-1	LEFT ELECTRIC HOUSE SIDE CENTRY TRAVELING MECHANISM - Idel carriage JL-1190106	1 EA CRACK 12 CM	M. Asaad	
LEFT ELECTRIC HOUSE SIDE CENTRY TRAVELING MECHANISM - Idel carriage JL-1190106						
1						
2						

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	25/09/2017	DRAW NO. JL11901B	RIGHT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (OUTER)	1 EA CRACK 4 cm	M. Asaad	
RIGHT DIESEL MOTOR SUPPORT B6 (OUTER)						
1						
2						





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#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	25/09/2017	DRAW NO. JL11901B	RIGHT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (IN SIDE)	1 EA CRACK 2 cm	M. Asaad	
RIGHT DIESEL MOTOR SUPPORT B6 (IN SIDE)						
1						
2						



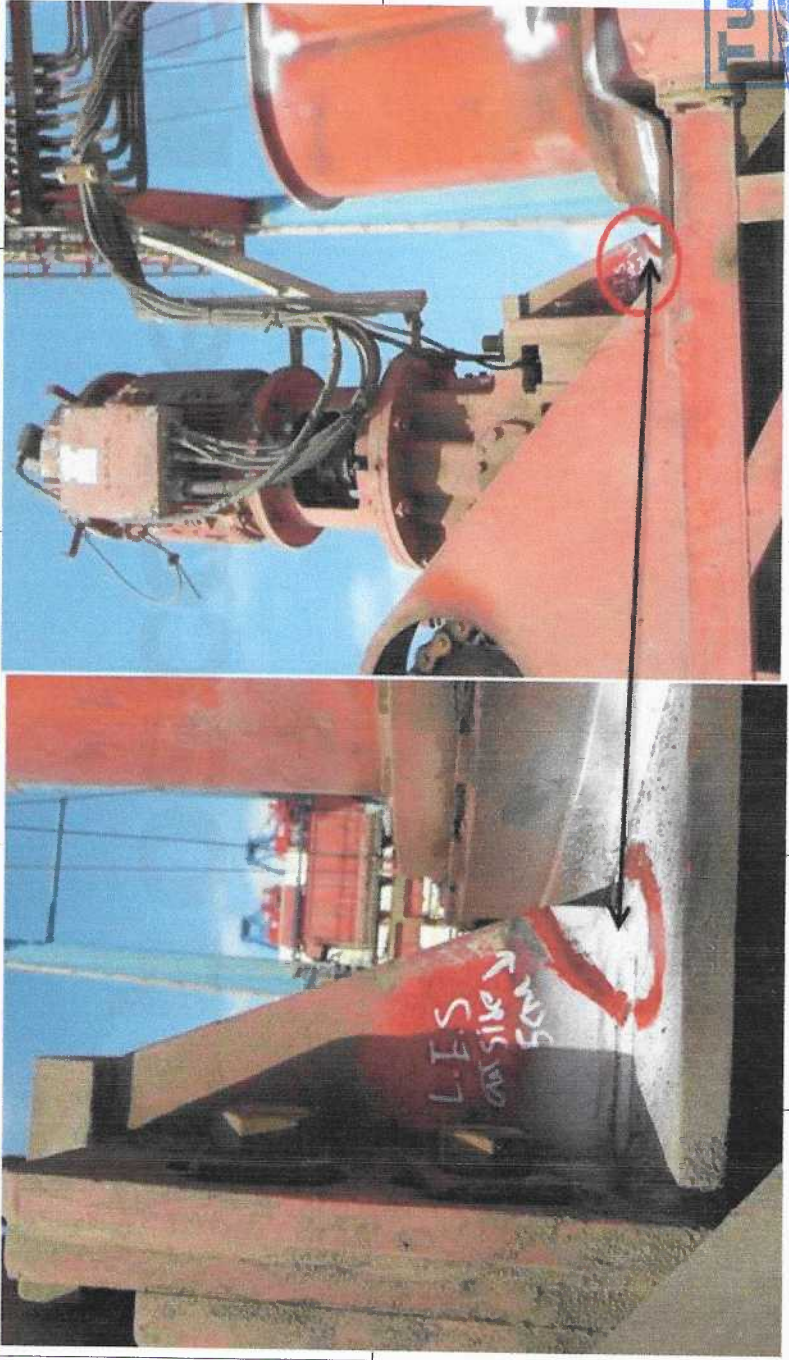

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	24/09/2017	DRAW NO. JL11901B	LEFT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (IN SIDE)	1 EA CRACK 2 cm	M. Asaad	
LEFT DIESEL MOTOR SUPPORT B6 (IN SIDE)						
1						
2						



#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	24/09/2017	DRAW NO. JL11901B	LEFT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (OUTER)	1 EA CRACK 2 cm	M. Asaad	
LEFT DIESEL MOTOR SUPPORT B6 (OUTER)						



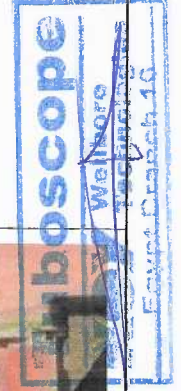
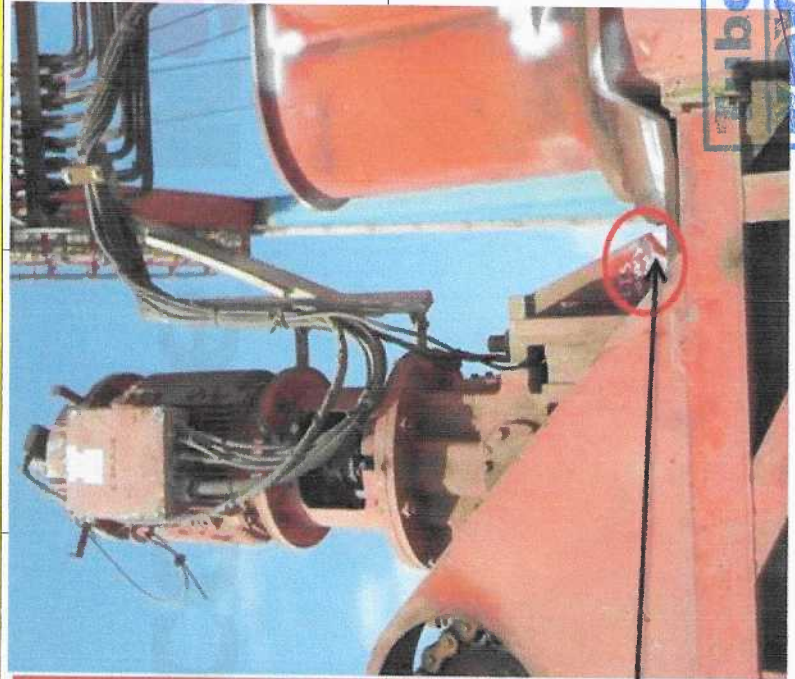
Wellbore Technologies

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	24/09/2017	DRAW NO. JL11901B	LEFT ELECTRIC HOUSE SIDE MOTOR SUPPORT B6 (OUTER)	1 EA CRACK 5 cm	M. Asaad	
LEFT ELECTRIC MOTOR SUPPORT B6 (OUTER)						
1						
2						




DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
24/05/2017	DRAW NO. JL11901B	LEFT ELECTRIC HOUSE SIDE MOTOR SUPPORT B6 (OUTER)	1 EA CRACK 5 cm	M. Asaad	

LEFT ELECTRIC MOTOR SUPPORT B6 (OUTER)



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#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	24/09/2017	DRAW NO. JL11901B	RIGHT ELECTRIC HOUSE SIDE MOTOR SUPPORT B6 (OUTER)	1 EA CRACK 6 cm	M. Asaad	
RIGHT ELECTRIC MOTOR SUPPORT B6 (OUTER)						
1						
2						



Defects summary report

T.V.I Work Order No. : 19839
Customer : SUEZ CANAL CONTAINER TERMINAL

Customer W.O. No. :
Work location : SCCT (CR-18)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	24/09/2017	DRAW NO-JL119060801	DRUM ASS	01 EA CRACK 6 CM	M. Asaad	
DRUM ASS						
						
						




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Defects summary report

T.V.1 Work Order No. : 19839
Customer : SUEZ CANAL CONTAINER TERMINAL

Customer W.O. No.
Work location

SCCT (CR-16)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	Pic. of defect
0	23/09/2017	DRAW NO-JL9060804	REDUCER BASE	1 EA CRACK 3 cm	M. Asaad	
REDUCER BASE						
						
						
						


Defects summary report

T.V.I Work Order No. :
Customer :

SO-019838
SUEZ CANAL CONTAINER TERMINAL

Customer: W.O. No.
Work location

SCCT (CR-18)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector
0	25/09/2017	DRAW NO-JL 1190104-A	LEFT ELECTRIC HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401	2 EA CRACKS (Length = 2 cm & 4 cm)	M. Asaad
LEFT ELECTRIC HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401					
1					
2					






Defects summary report

T.V.I Work Order No. :
Customer :

SC-019639
SUEZ CANAL CONTAINER TERMINAL

Customer W.O. No.
Work location

SCCT (CR-16)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector	
0	25/09/2017	DRAW NO-JL1190104-A	LEFT DEISEL HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401	3 EA CRACKS Length From 2cm TO 3cm TO 2 cm	M. Asaad	
LEFT DEISEL HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401						
1						
2						

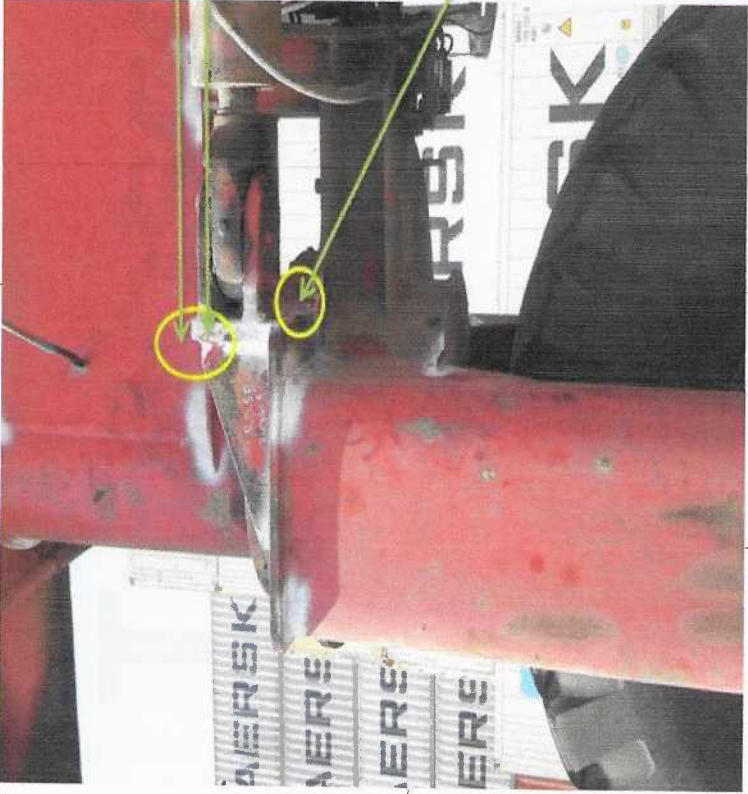
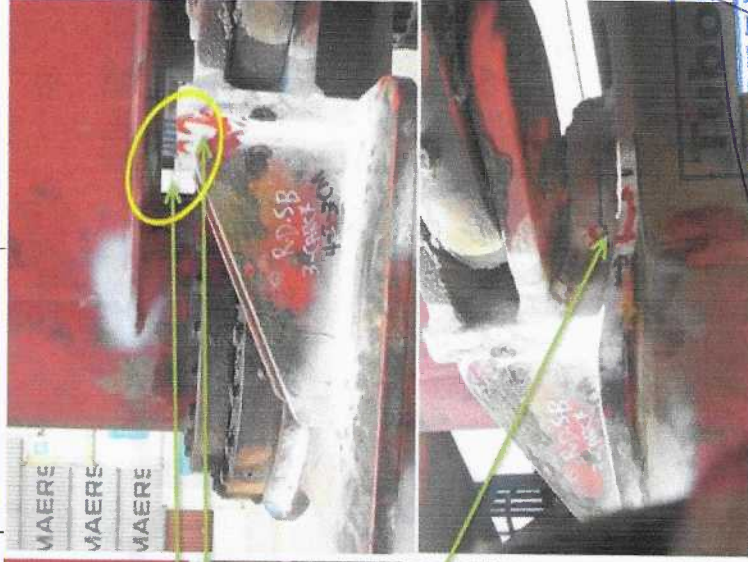
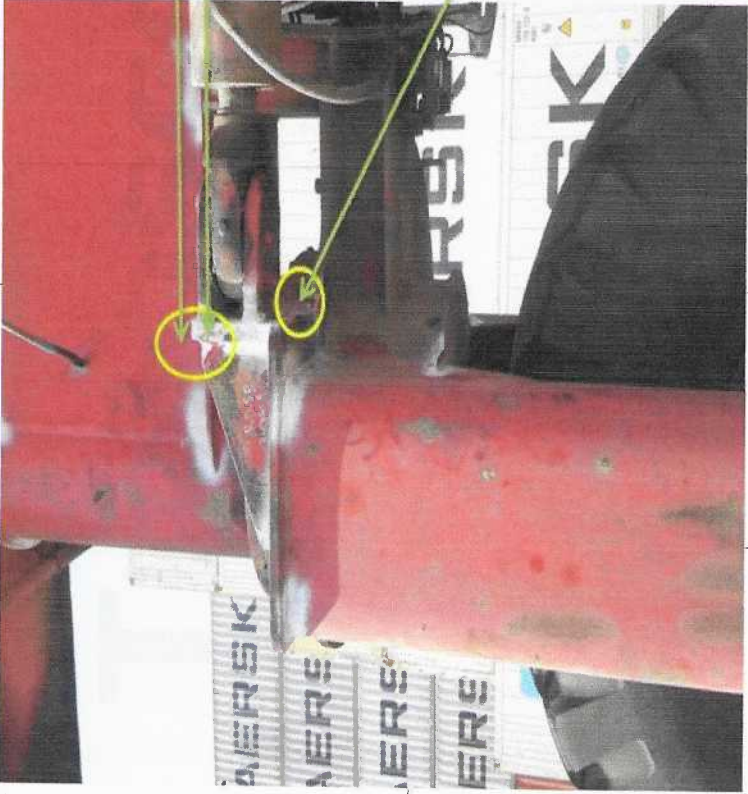
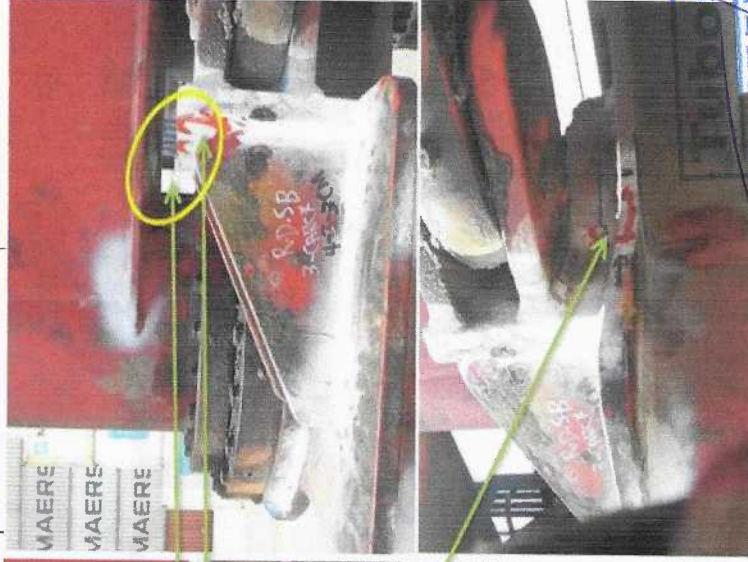
Defects summary report

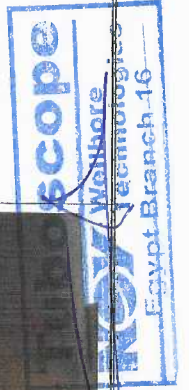
T.V. Work Order No. :
Customer :

SO-019839
SUEZ CANAL CONTAINER TERMINAL

Customer W.O. No.
Work location

SCCT (CR-16)

#	DATE	DRAW NO. :	Exact location	Defect description	Inspector
0	25/06/2017	DRAW NO-JL-1190104-A	RIGHT DEISEL HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401	3 EA CRACKS Length From 4cm & 3cm & 3cm	M. Asaad
RIGHT DEISEL HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401					
1					
2					



Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	21/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	01
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification:	<input type="checkbox"/> API <input type="checkbox"/> DS1 <input type="checkbox"/> Customer spec. <input checked="" type="checkbox"/> Other <small>AWS.D1.1 & ASTM E.709</small>	Edition: 2010 & 2015
Inspection method:	<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry <input type="checkbox"/> Dye Penetrant <input checked="" type="checkbox"/> Other BLACK INK AND WHITE CONTRAST	
Equipment used:	<input type="checkbox"/> UV light <input type="checkbox"/> AC yoke <input type="checkbox"/> DC coil <input checked="" type="checkbox"/> Other PERMANENT MAGNET	
Extent:	Welding Areas	

Serial no:	Description:
DRAW NO. JL1080202	KNEE BRACE OF SIDE WITH BRIDGE GIRDERS

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

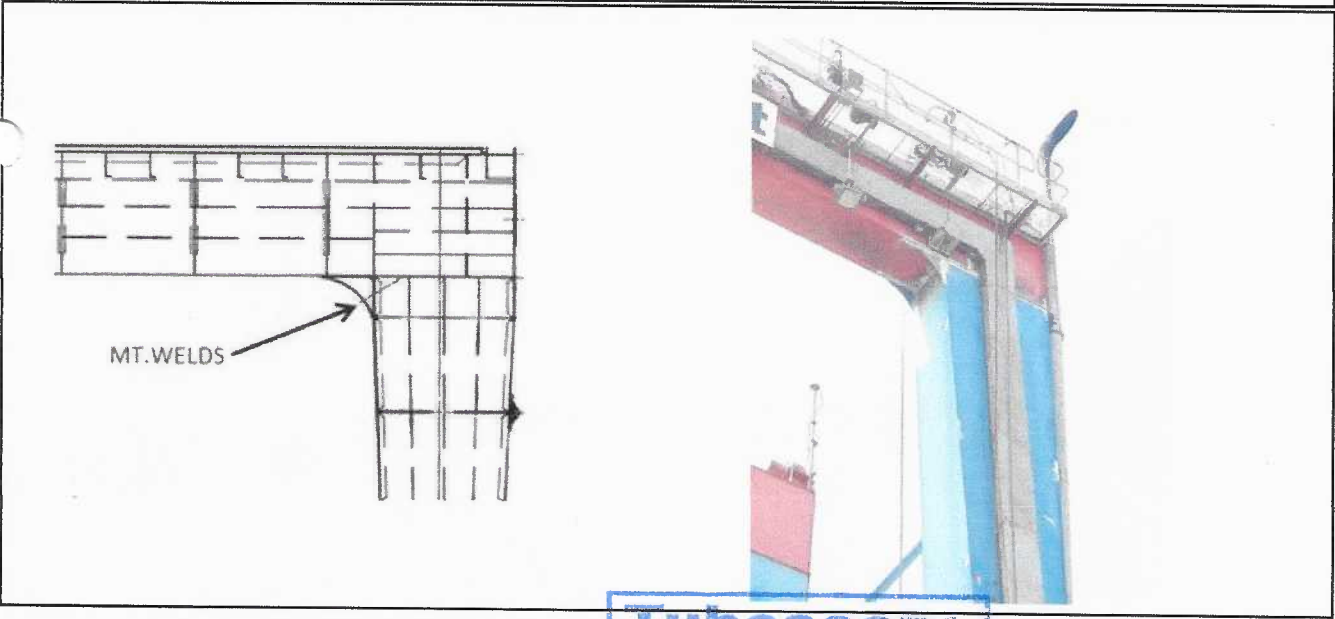
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor



M. Asaad

Inspector

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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.: SO-019839 **Date of Inspection:** 21/09/2017
Customer: SUEZ CANAL CONTAINER TERMINAL **Inspection Report No.:** 02
Work Location: SCCT (CR- 16) **Customer W.O. No.:** CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**
 No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL-1190305	TWO SILL BEAMS

Results:

**NDT Inspection was carried out on available welding area for above description
and found :**

**** VISUAL :**

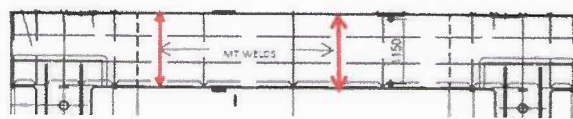
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI**

**MPI carried out on available welding areas and found free from surface crack at
time of inspection**

ACCEPTED



Osama Sobhy

Supervisor



M. Asaad

Inspector

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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.: _____ **SO-019839** _____ **Date of Inspection:** _____ **21/09/2017** _____
Customer: _____ **SUEZ CANAL CONTAINER TERMINAL** _____ **Inspection Report No.:** _____ **03** _____
Work Location: _____ **SCCT (CR- 16)** _____ **Customer W.O. No.:** _____ **CONTRACT** _____

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** **2010 & 2015**

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**
 No: _____ No: _____ No: _____ No: 0646 & 00399 _____

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL11901	CANTRY TRAVELING MECHANISM

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

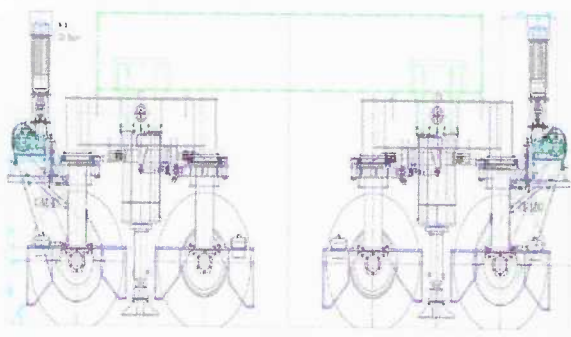
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

M. Asaad
Inspector

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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.: _____	SO-019839	Date of Inspection: _____	21/09/2017
Customer: _____	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.: _____	04
Work Location: _____	SCCT (CR- 16)	Customer W.O. No.: _____	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL11912	STAIRS ON THE ELECTRIC HOUSE SIDE

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

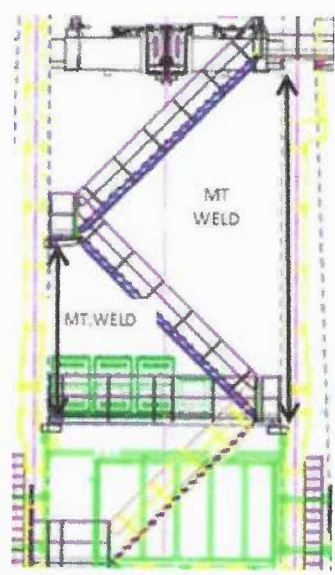
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

M. Asaad

Inspector



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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	21/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	05
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D11.1&ASTME.709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399 _____

Extent: Welding Areas

Serial no:	Description:
SUB NO. JL-1190306	BUFFER STOPPER (GANTRY FRAME) DRAW NO-11903A

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

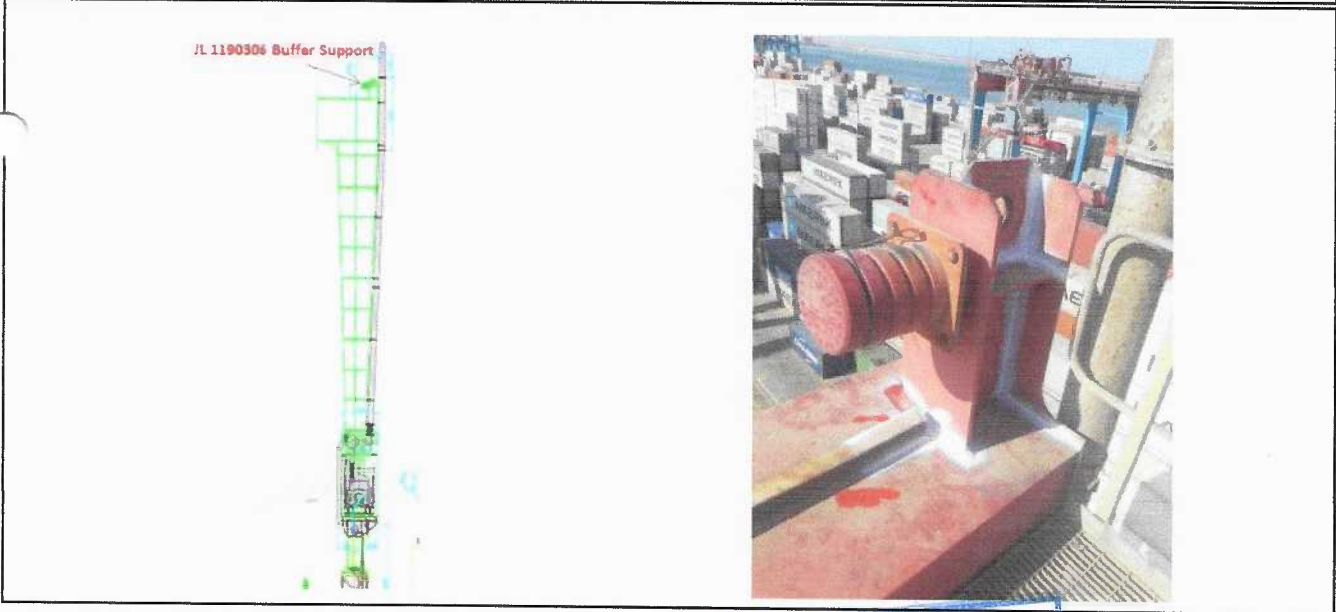
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor



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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	21/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	06
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
SUB. NO -1190302	BRACE BAR (GANTRY FRAME) DRAW NO-11903A

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

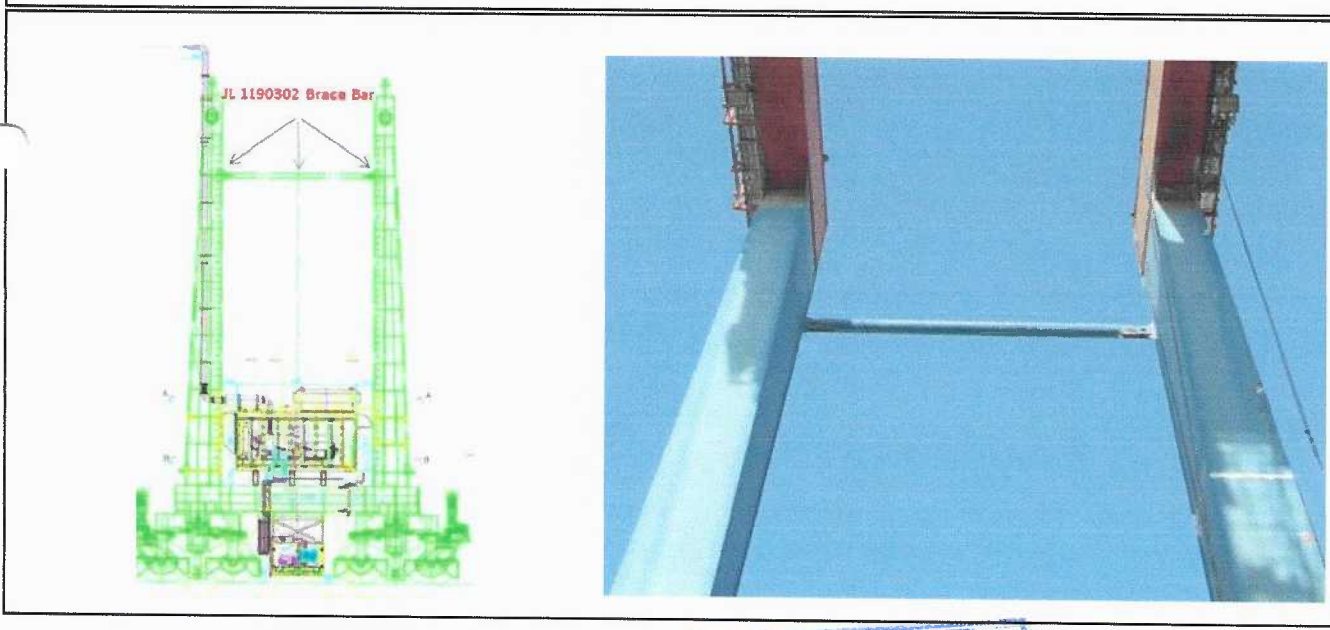
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor



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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.: SO-019839 **Date of Inspection:** 22/09/2017
Customer: SUEZ CANAL CONTAINER TERMINAL **Inspection Report No.:** 07
Work Location: SCCT (CR- 16) **Customer W.O. No.:** CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**
 No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL11906	TROLLEY ARRANGEMENT

Results:

**NDT Inspection was carried out on available welding area for above description
and found :**

**** VISUAL :**

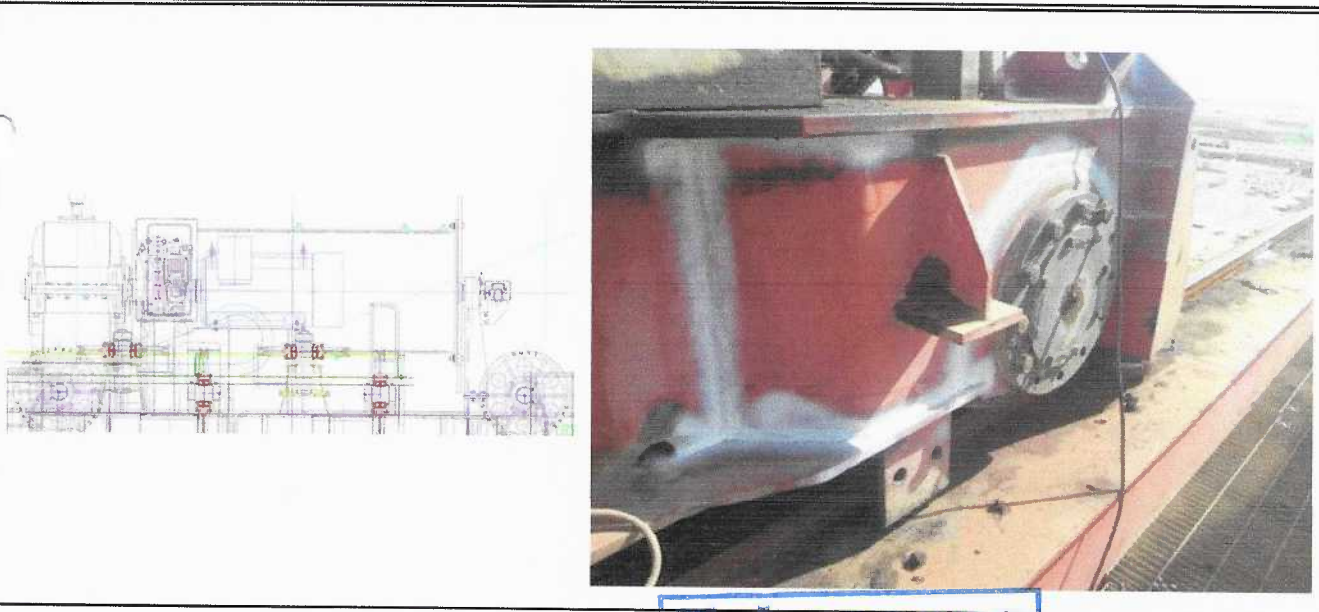
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

**MPI carried out on available welding areas and found free from surface crack at
time of inspection**

ACCEPTED



Osama Sobhy

Supervisor



M. Asaad

Inspector

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SD = Shoulder Damage
TD = Thread Damage

TE = Thread Elongation
BW = Box Widening

CO = Corrosion
P = Pitting

W = Washout
C = Crack

M = Flatspot / Mash
RF = Refaced Connection

B.B = Bore Back
S.R.G = Stress Relief Groove

Non destructive Test (NDT) Report

T.V.I Work Order No.: _____	SO-019839	Date of Inspection: _____	22/09/2017
Customer: _____	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.: _____	08
Work Location: _____	SCCT (CR- 16)	Customer W.O. No.: _____	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO. JL1190303A	ONE BRIDGE GIRDERS

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

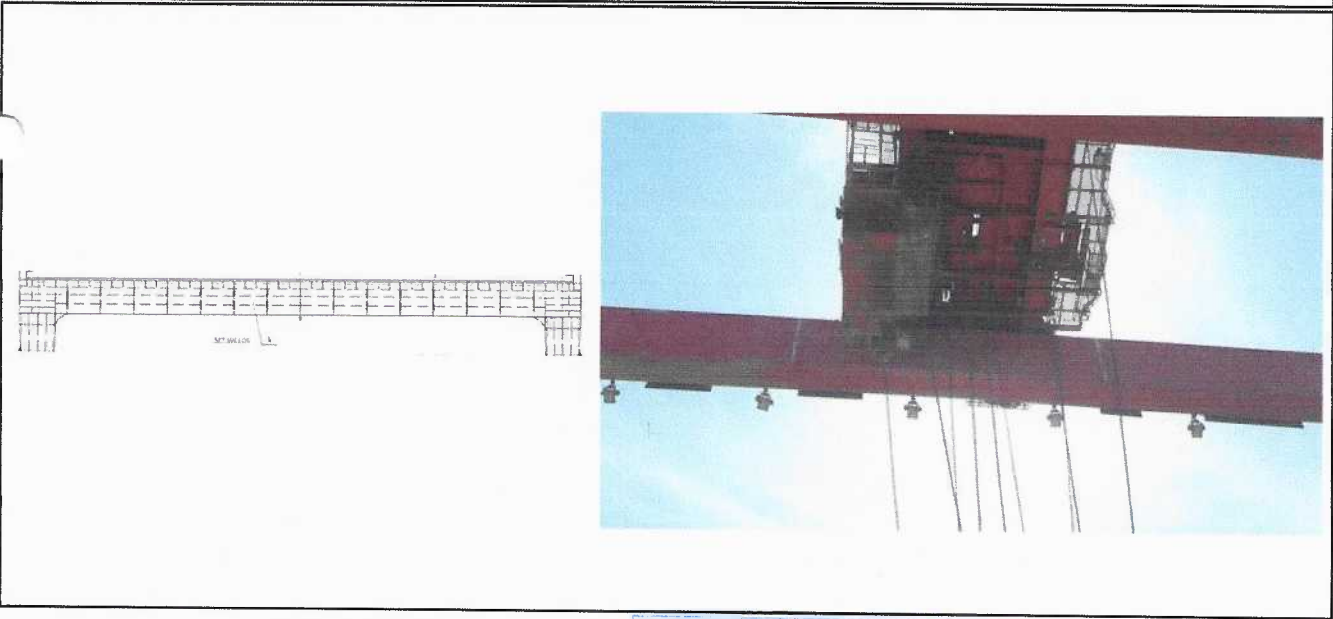
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.: SO-019839 **Date of Inspection:** 22/09/2017
Customer: SUEZ CANAL CONTAINER TERMINAL **Inspection Report No.:** 09
Work Location: SCCT (CR- 16) **Customer W.O. No.:** CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**
 No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL1190606	OPERATOR CAP

Results:

**NDT Inspection was carried out on available welding area for above description
and found :**

**** VISUAL :**

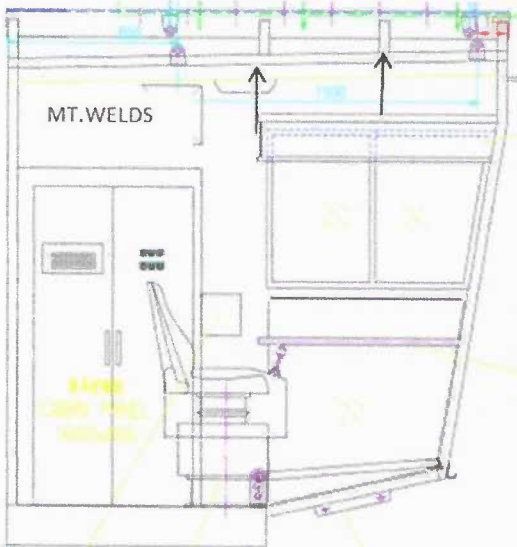
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

**MPI carried out on available welding areas and found free from surface crack at
time of inspection**

ACCEPTED



Osama Sobhy

Supervisor

M. Asaad

Inspector



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Non destructive Test (NDT) Report

T.V.I Work Order No.: _____	SO-019839	Date of Inspection: _____	22/09/2017
Customer: _____	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.: _____	10
Work Location: _____	SCCT (CR- 16)	Customer W.O. No.: _____	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399 _____

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL11908	RIGHT RAILS OF THE TROLLEY RUNWAY ARE LOCATED ON THE ENERGYCHAIN MECHAISM

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

ACCEPTED

***** MPI :**

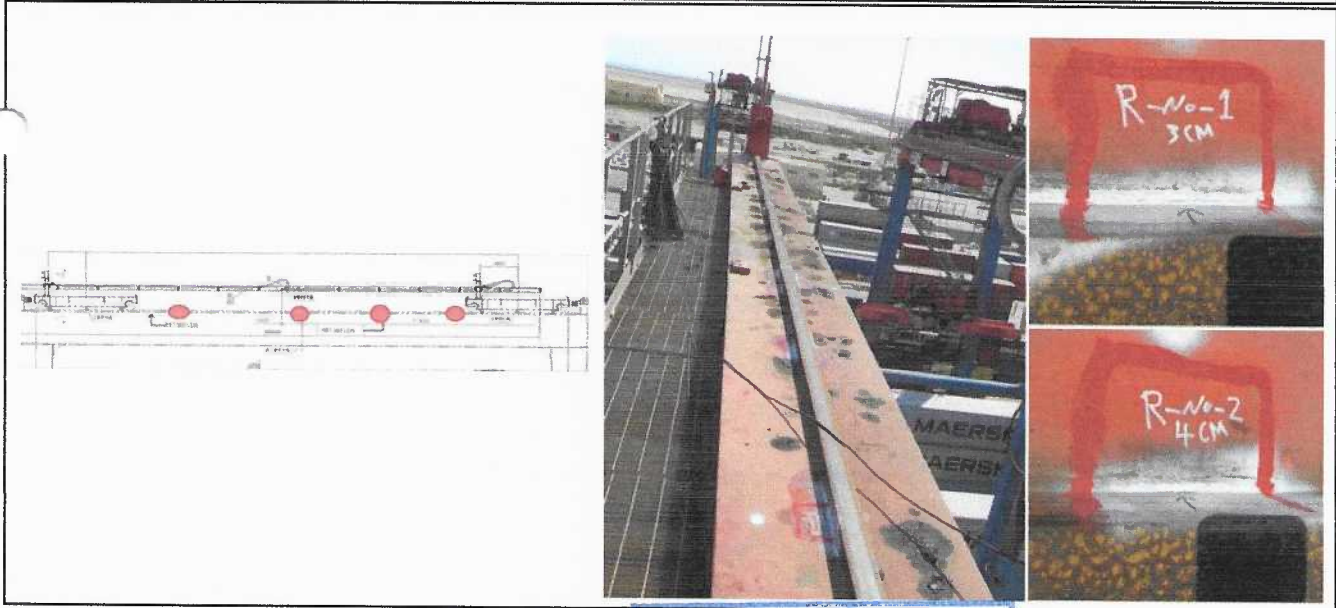
MPI carried out on available welding areas and found :

05 EA. Crack which referred by arrow as below (Length= From 2 cm To 8 cm)

Need Repair

***** NOTE :**

After regular inspection(10% random check) several cracks we found So we decided to increase percentage of inspection to be 50 %



Osama Sobhy

Supervisor



M. Asaad

Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	22/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	11
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification:	<input type="checkbox"/> API <input type="checkbox"/> DS1 <input type="checkbox"/> Customer spec. <input checked="" type="checkbox"/> Other <small>AWS D1.1 & ASTM E 709</small>	Edition:	2010 & 2015
Inspection method:	<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry <input type="checkbox"/> Dye Penetrant <input checked="" type="checkbox"/> Other BLACK INK AND WHITE CONTRAST		
Equipment used:	<input type="checkbox"/> UV light <input type="checkbox"/> AC yoke <input type="checkbox"/> DC coil <input checked="" type="checkbox"/> Other PERMANENT MAGNET		
Extent:	Welding Areas		

Serial no:	Description:
DRAW NO-JL11908	LEFT RAILS OF THE TROLLEY RUNWAY ARE LOCATED ON THE ENERGYCHAIN MECHAISM

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

ACCEPTED

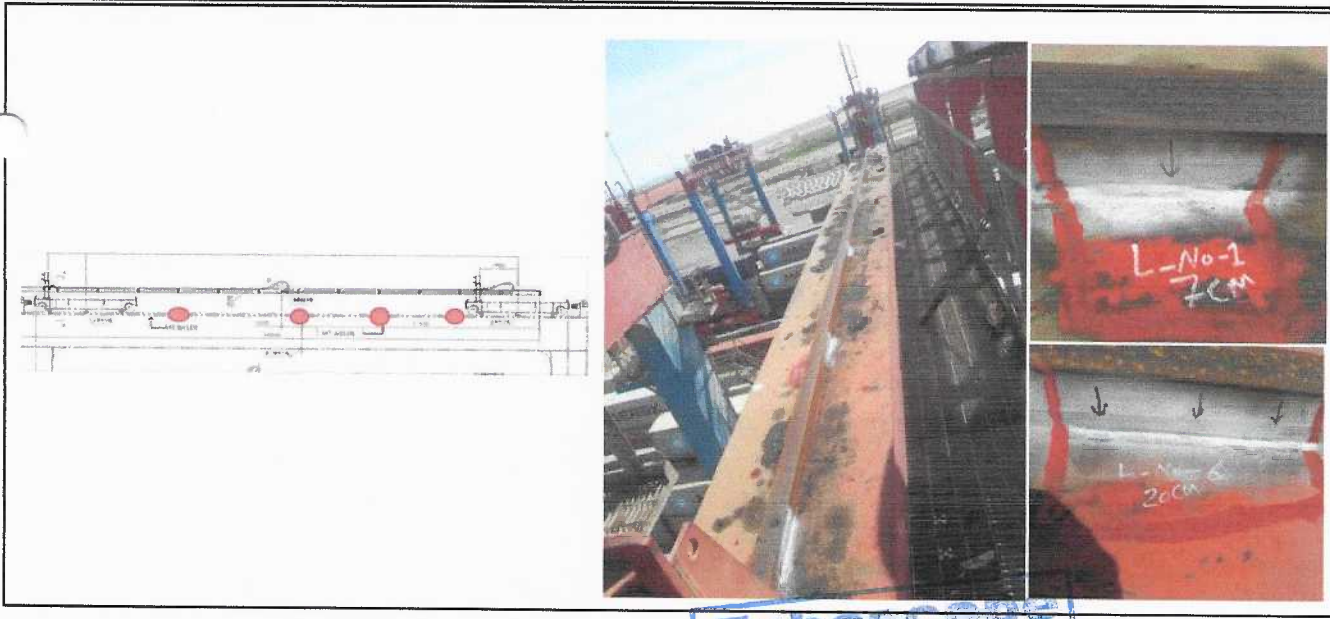
***** MPI :**

MPI carried out on available welding areas and found :

**06 EA. Crack which referred by arrow as below (Length= From 4 cm To 20 cm)
Need Repair**

***** NOTE :**

After regular inspection(10% random check) several cracks we found So we decided to increase percentage of inspection to be 50 %



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	22/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	12
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: _____

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL1190301A	NO-1 RIGHT LEG OF ELECTRIC HOUSE SIDE

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

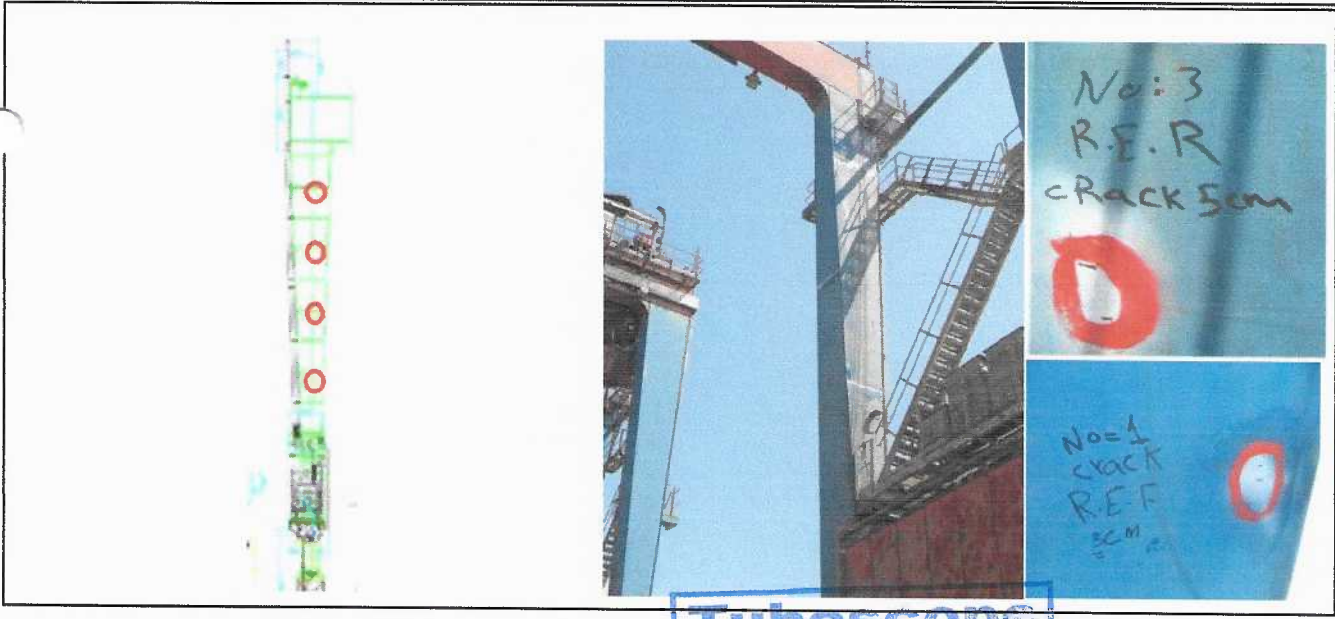
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

05 EA. Crack which referred by arrow as below (Length = Form 03 cm To 6 cm)

Need Repair



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	23/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	13
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL1190301A	NO-2 RIGHT LEG OF DIESEL HOUSE SIDE

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

08 EA. Crack which referred by arrow as below (Length = Form 2 cm To 5 cm)

Need Repair



Osama Sobhy

Supervisor

Tuboscope M: Asaad
NOV Wellbore TechnoInspector
Egypt Branch

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	23/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	14
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL1190301A	NO-3 LEFT LEG OF ELECTRIC HOUSE SID

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

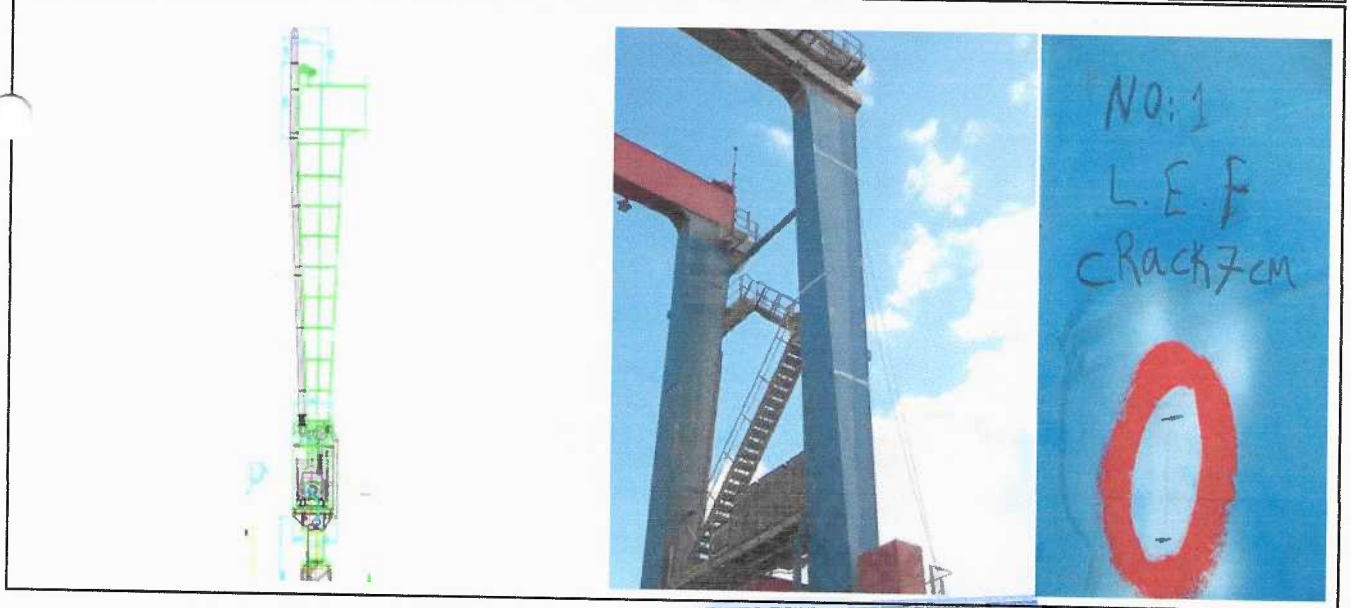
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 7 cm)

Need Repair



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	23/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	15
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM.E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL1190301A	NO-4 LEFT LEG OF DIESEL HOUSE SID

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

05 EA. Crack which referred by arrow as below (Length= From 3 cm To 6 cm)

Need Repair



Osama Sobhy

Supervisor

Tuboscope
M. Asaad
Inspector
Wellbore Technologies
Egypt Branch 16

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	23/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	16
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM.E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO. JL9060305	SHEAVE ASSEMBLY 5

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

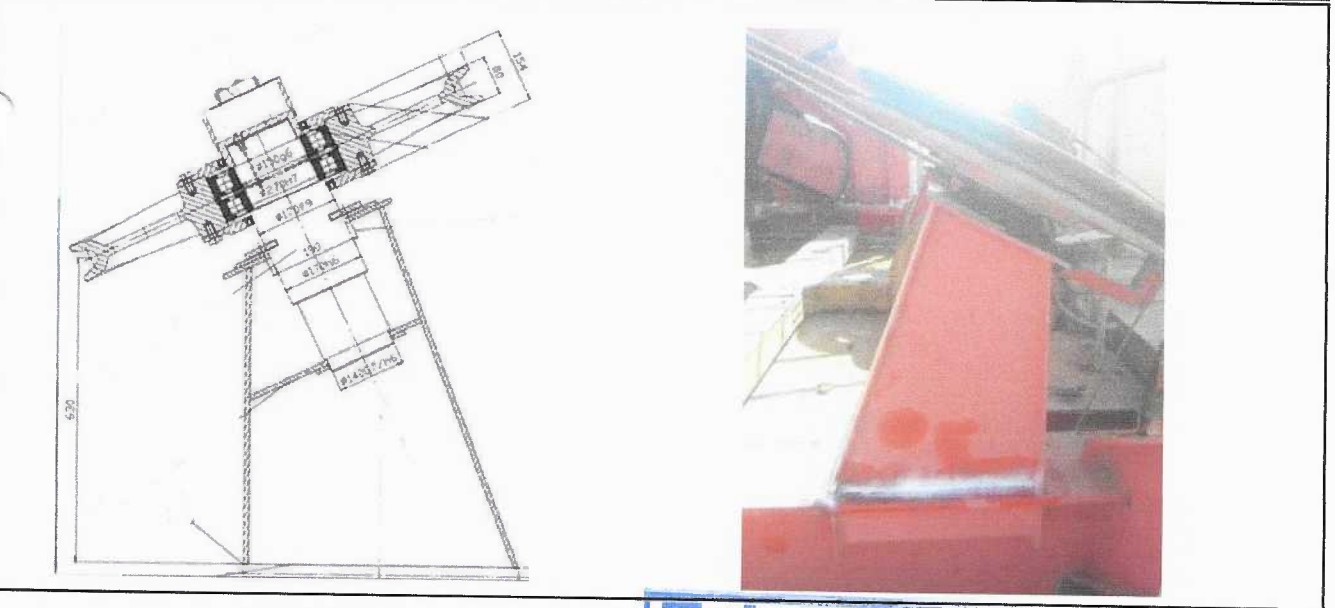
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

Tuboscope | NOV Wellbore Technologies
Egypt Branch
M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	23/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	17
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL9060804	REDUCER BASE

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

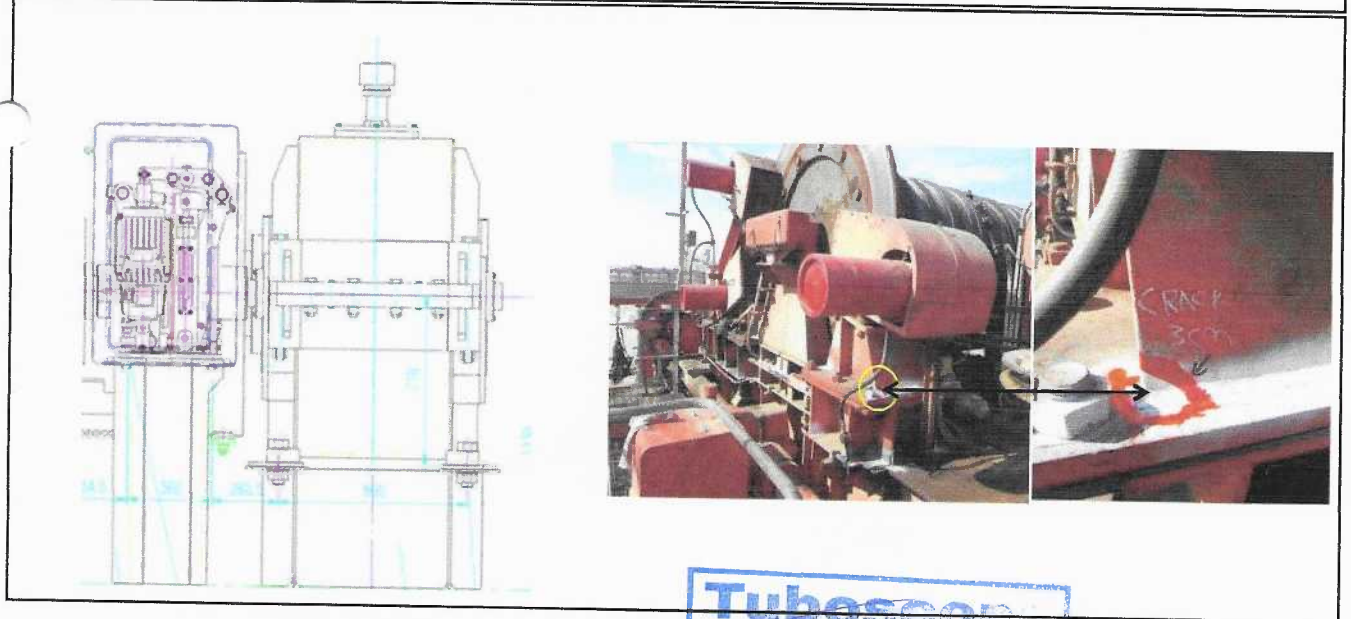
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

1 EA. Crack which referred by arrow as below (Length 3 cm)

Need Repair



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	23/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	18
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL1190603	WIRE ROPE REEVING SYS

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

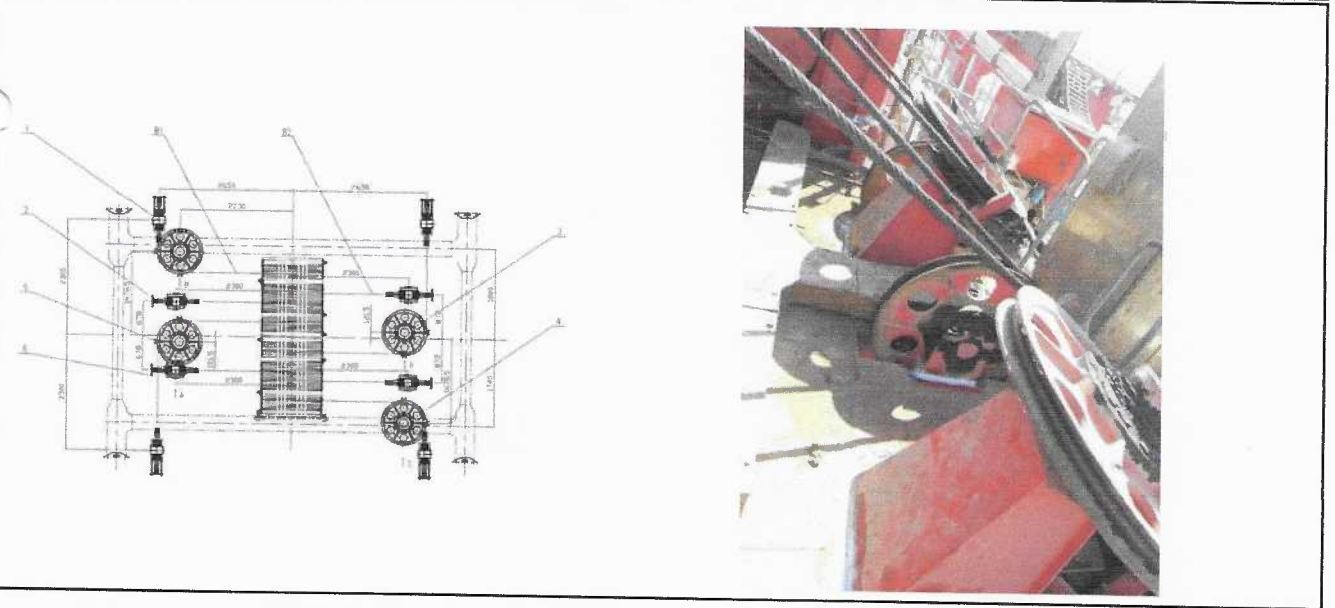
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.: SO-019839 Date of Inspection: 24/09/2017
 Customer: SUEZ CANAL CONTAINER TERMINAL Inspection Report No.: 19
 Work Location: SCCT (CR- 16) Customer W.O. No.: CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 Edition: 2010 & 2015
 Inspection method: Wet Dry Dye Penetrant Other BLACK INK AND WHITE CONTRAST
 Equipment used: UV light AC yoke DC coil Other PERMANENT MAGNET
 No: _____ No: _____ No: _____ No: 0646 & 00399
 Extent: Welding Areas

Serial no:	Description:
DRAW NO. JL9060303	SHEAVE ASSEMBLY 3

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

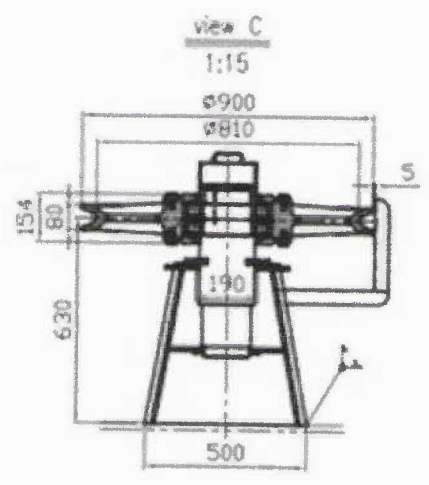
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

M Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	24/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	20
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL119060801	DRUM ASS

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

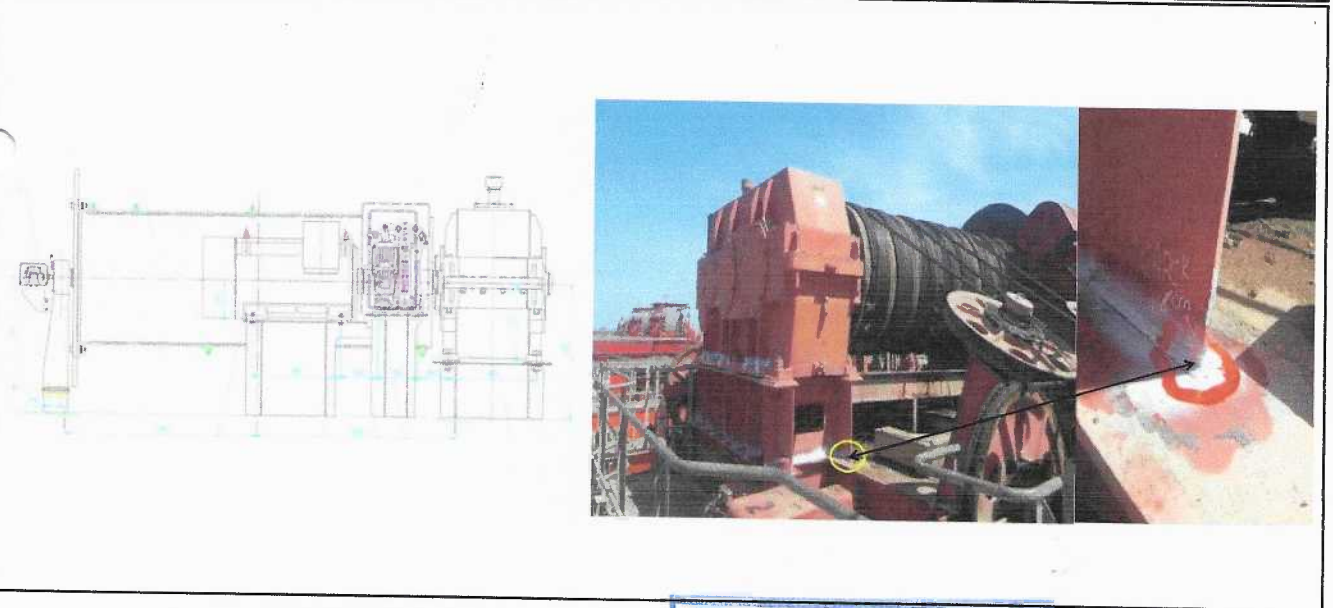
ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 6 cm)

Need Repair



Osama Sobhy

Supervisor



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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	24/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	21
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00389

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL11901B	LEFT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (OUTER)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

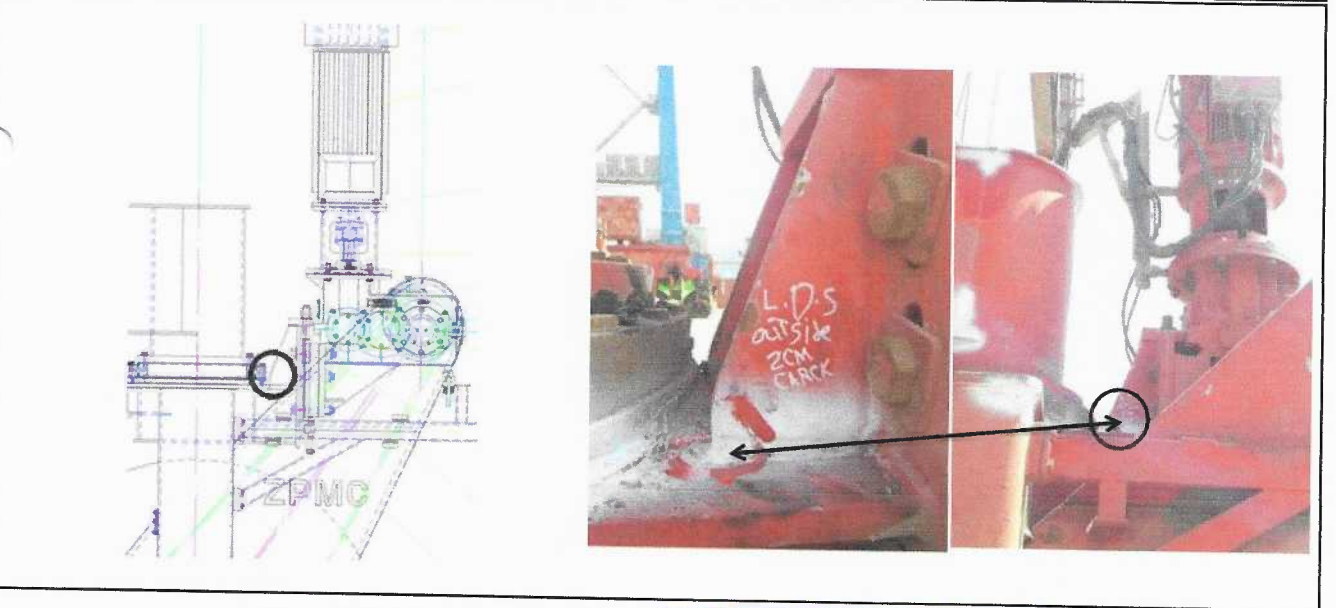
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 2 cm)

Need Repair



Osama Sobhy

Supervisor



M. Asaad

Inspector

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SD = Shoulder Damage
TD = Thread Damage

TE = Thread Elongation
BW = Box Widening

CO = Corrosion
P = Pitting

W = Washout
C = Crack

M = Flatspot / Mash
RF = Refaced Connection

B.B = Bore Back
S.R.G= Stress Relief Groove

Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	24/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	22
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399 _____

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL11901B	LEFT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (IN SIDE)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

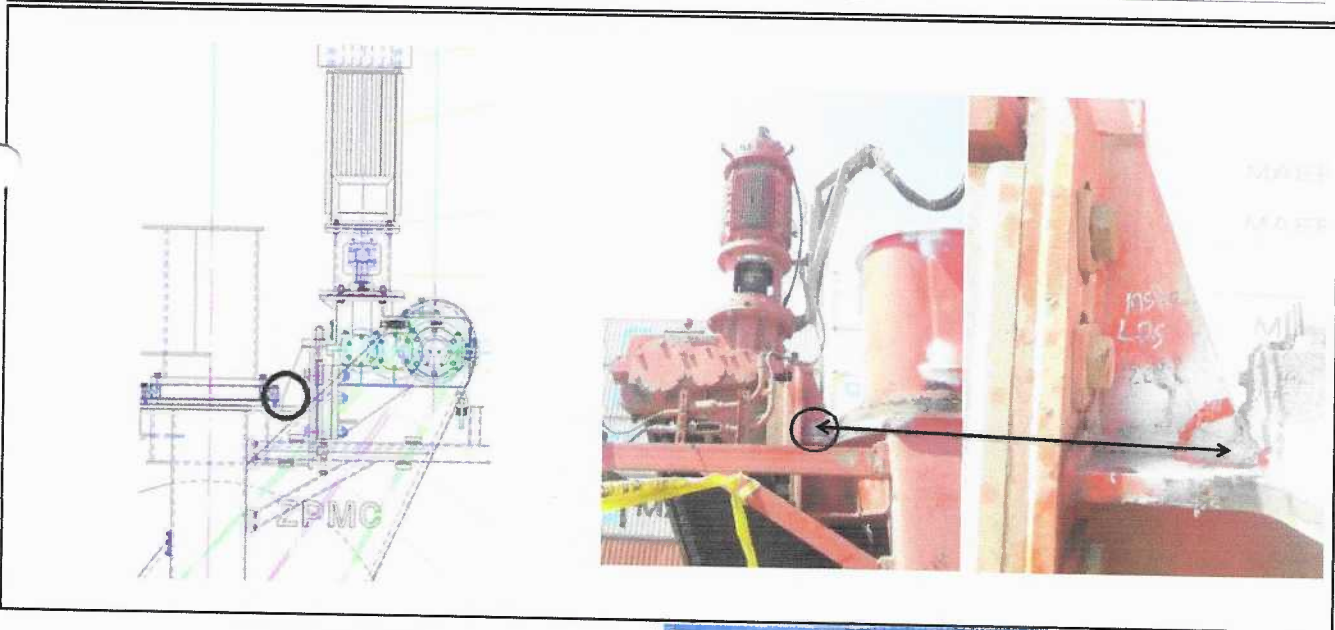
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 2 cm)

Need Repair



Osama Sobhy

Supervisor



M. Asaad

Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	24/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	23
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399 _____

Extent: Welding Areas

Serial no:	Description:
DRAW NO.JL11901A	RIGHT ELECTRIC HOUSE SIDE MOTOR SUPPORT B6 (OUTER)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

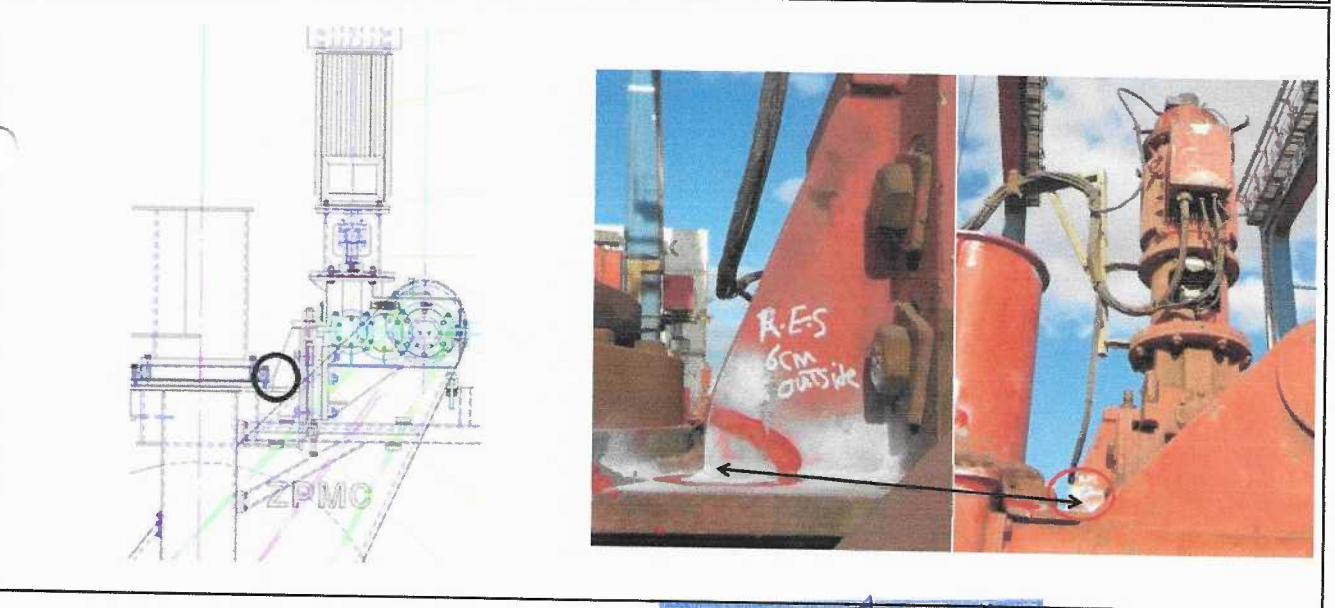
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 6 cm)

Need Repair



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	24/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	24
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS.D1.1 & ASTM E.709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other BLACK INK AND WHITE CONTRAST

Equipment used: UV light AC yoke DC coil Other PERMANENT MAGNET

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NOJL11901A	LEFT ELECTRIC HOUSE SIDE MOTOR SUPPORT B6 (OUTER)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

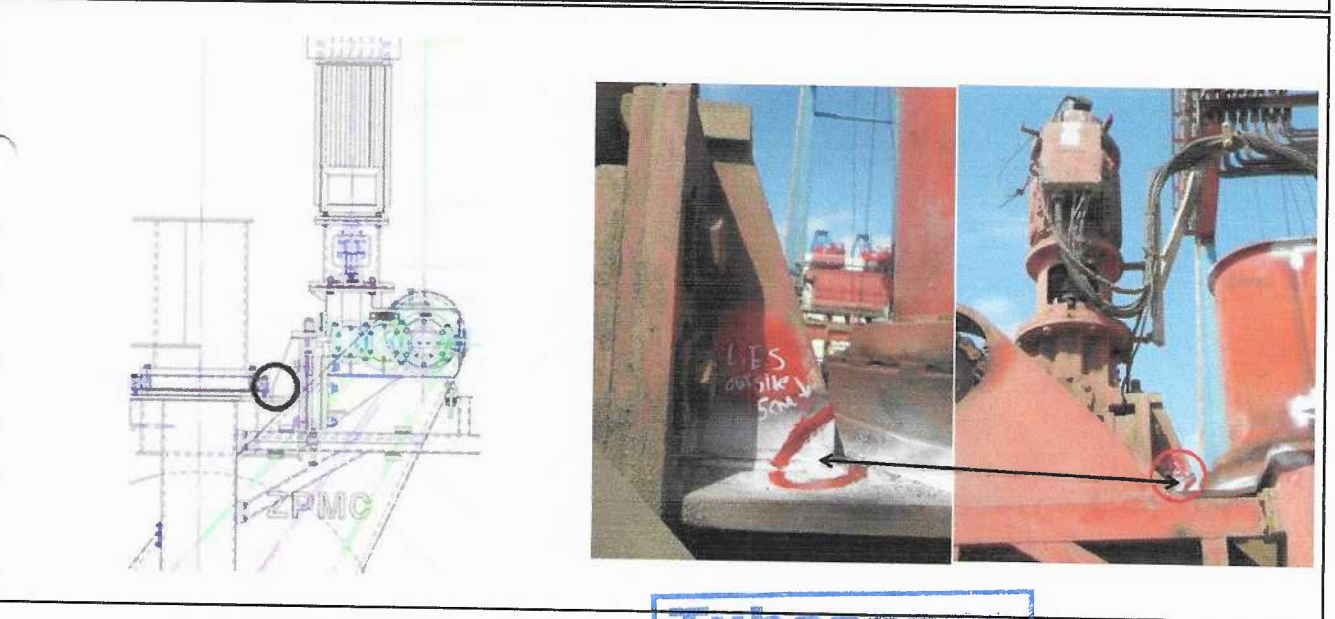
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 5 cm)

Need Repair



Osama Sobhy

Supervisor



M. Asaad

Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	25
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**
No: No: No: No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO. JL11901A	LEFT ELECTRIC HOUSE SIDE MOTOR SUPPORT B6 (IN SIDE)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

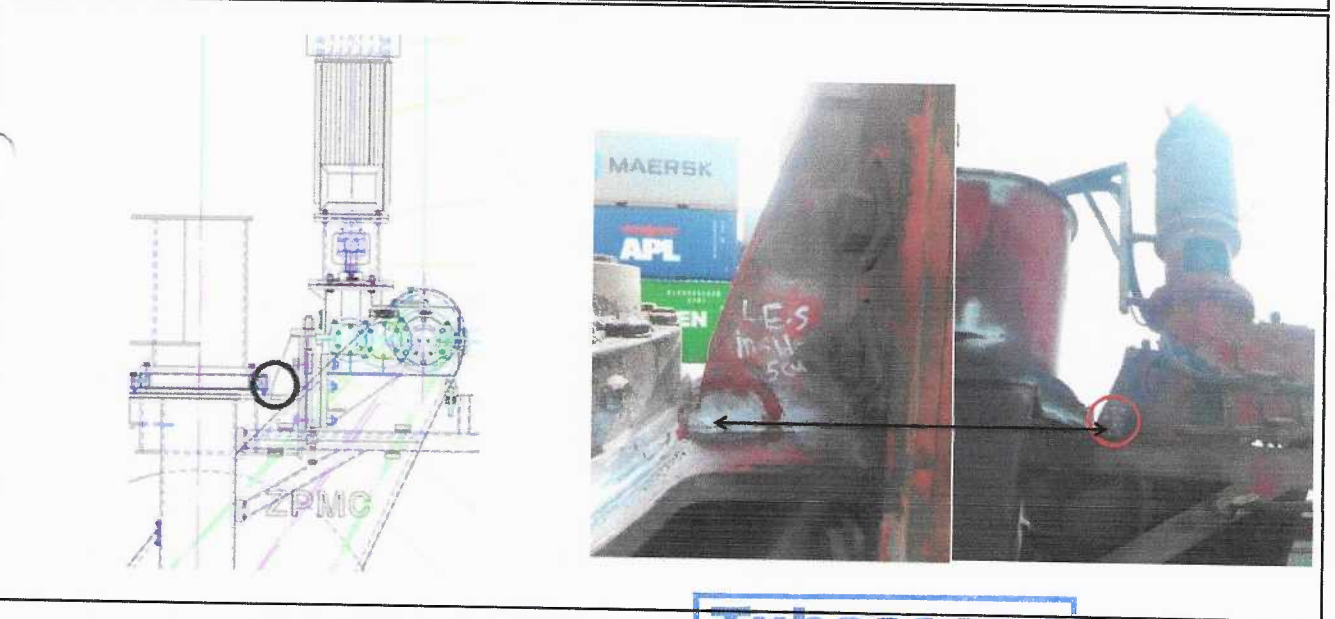
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 5 cm)

Need Repair



Osama Sobhy
Supervisor

Tuboscope
NOV Wellbore Technologies
Egypt Branch 46
Inspector
M. Asaad

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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.: _____ **SO-019839** _____ **Date of Inspection:** 25/09/2017
Customer: SUEZ CANAL CONTAINER TERMINAL _____ **Inspection Report No.:** 26
Work Location: SCCT (CR- 16) _____ **Customer W.O. No.:** CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other BLACK INK AND WHITE CONTRAST

Equipment used: UV light AC yoke DC coil Other PERMANENT MAGNET
 No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NOJL11901A	RIGHT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (IN SIDE)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

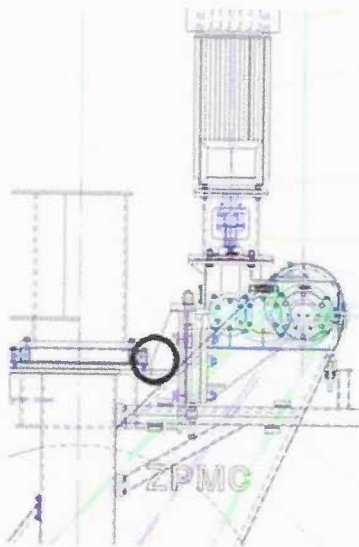
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 2 cm)

Need Repair



Osama Sobhy

Supervisor



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QAF 103 Rev. 0 Date: 01.01.2011

SD = Shoulder Damage
TD = Thread Damage

TE = Thread Elongation
BW = Box Widening

CO = Corrosion
P = Pitting

W = Washout
C = Crack

M = Flatspot / Mesh
RF = Refaced Connection

B.B = Bore Back
S.R.G = Stress Relief Groove

Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	27
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NOJL11901A	RIGHT DIESEL HOUSE SIDE MOTOR SUPPORT B6 (OUTER)

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

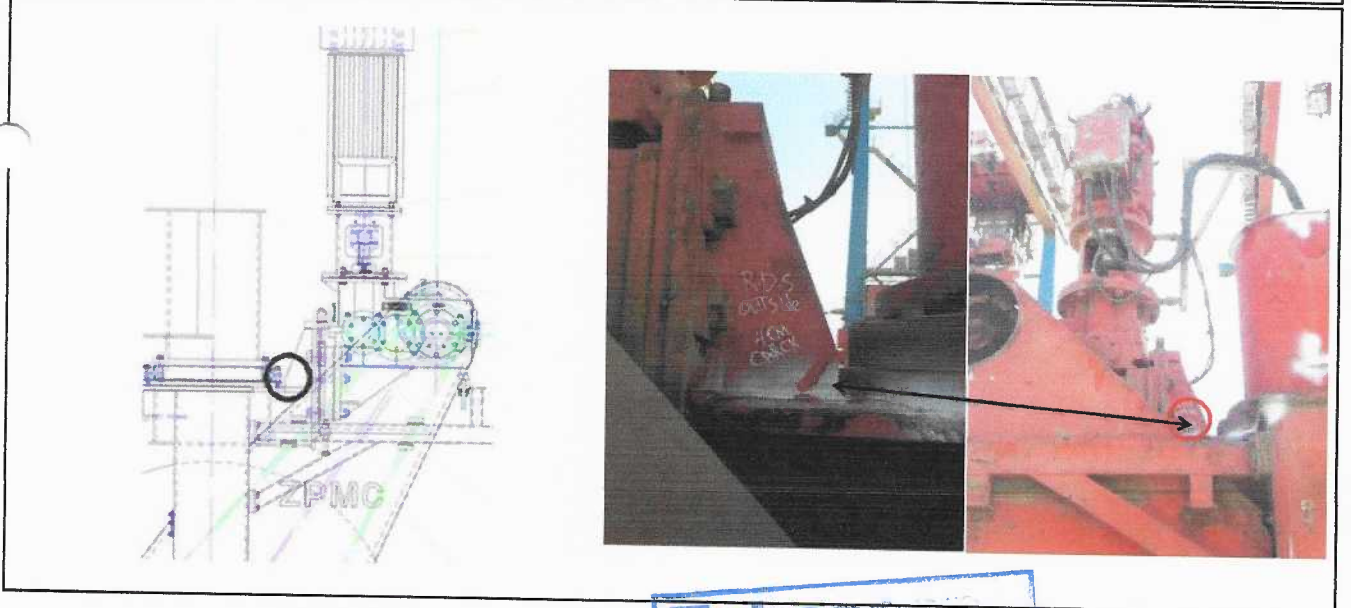
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

01 EA. Crack which referred by arrow as below (Length 4 cm)

Need Repair



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	28
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL11901-1	LEFT ELECTRIC HOUSE SIDE CANTRY TRAVELING MECHANISM - Idel carriage JL-1190106

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

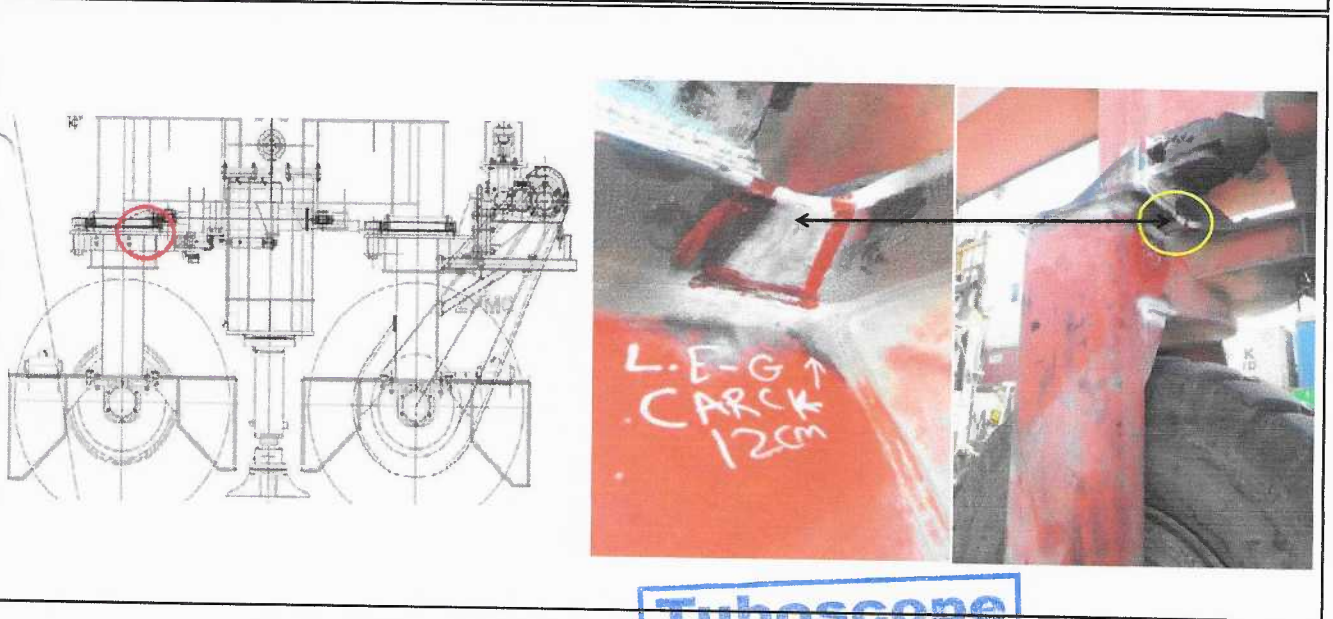
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

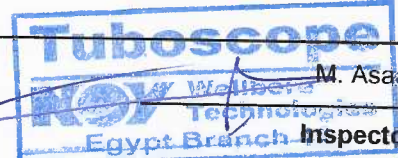
01 EA. Crack which referred by arrow as below (Length 12 cm)

Need Repair



Osama Sobhy

Supervisor



M. Asaad

Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	29
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification:	<input type="checkbox"/> API <input type="checkbox"/> DS1 <input type="checkbox"/> Customer spec. <input checked="" type="checkbox"/> Other <small>AWS D1.1 & ASTM E 709</small>	Edition:	2010 & 2015
Inspection method:	<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry <input type="checkbox"/> Dye Penetrant <input checked="" type="checkbox"/> Other BLACK INK AND WHITE CONTRAST		
Equipment used:	<input type="checkbox"/> UV light <input type="checkbox"/> AC yoke <input type="checkbox"/> DC coil <input checked="" type="checkbox"/> Other PERMANENT MAGNET		
Extent:	Welding Areas		

Serial no:	Description:
DRAW NO-HR23100	HEADBLOCK

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

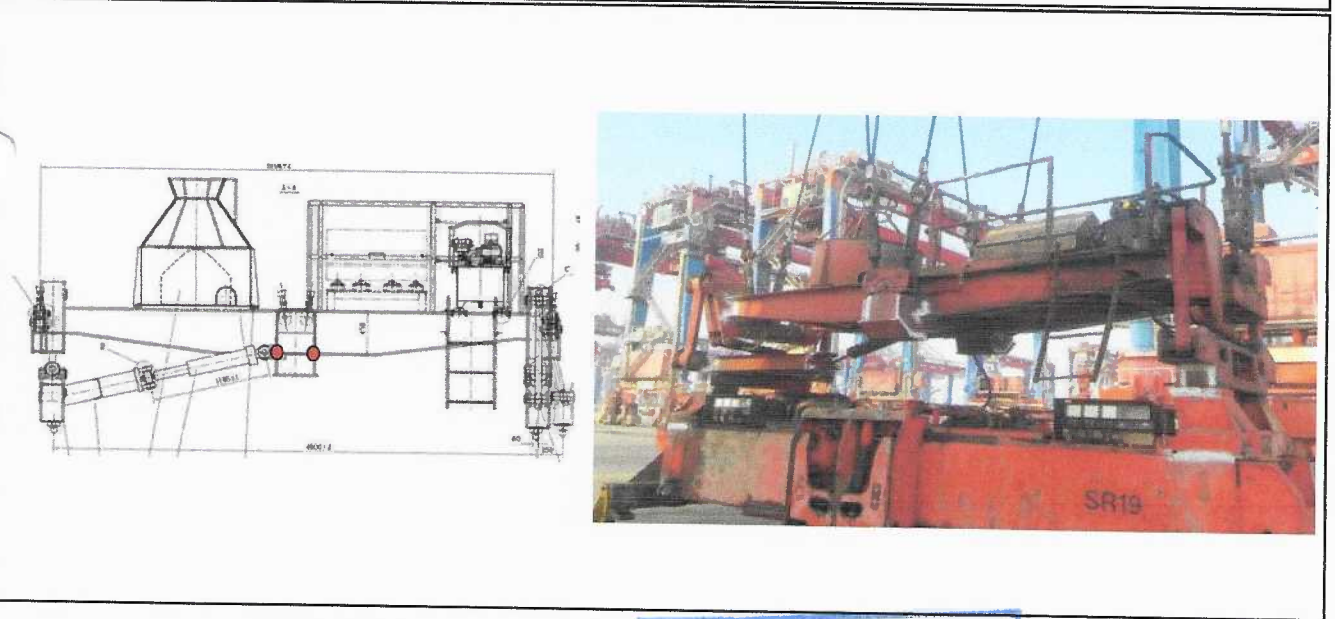
Visual Inspection of welding areas found free from surface defects

ACCEPTED

**** MPI :**

MPI carried out on available welding areas and found free from surface crack at time of inspection

ACCEPTED



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	30
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL1190104-A	RIGHT DIESEL HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

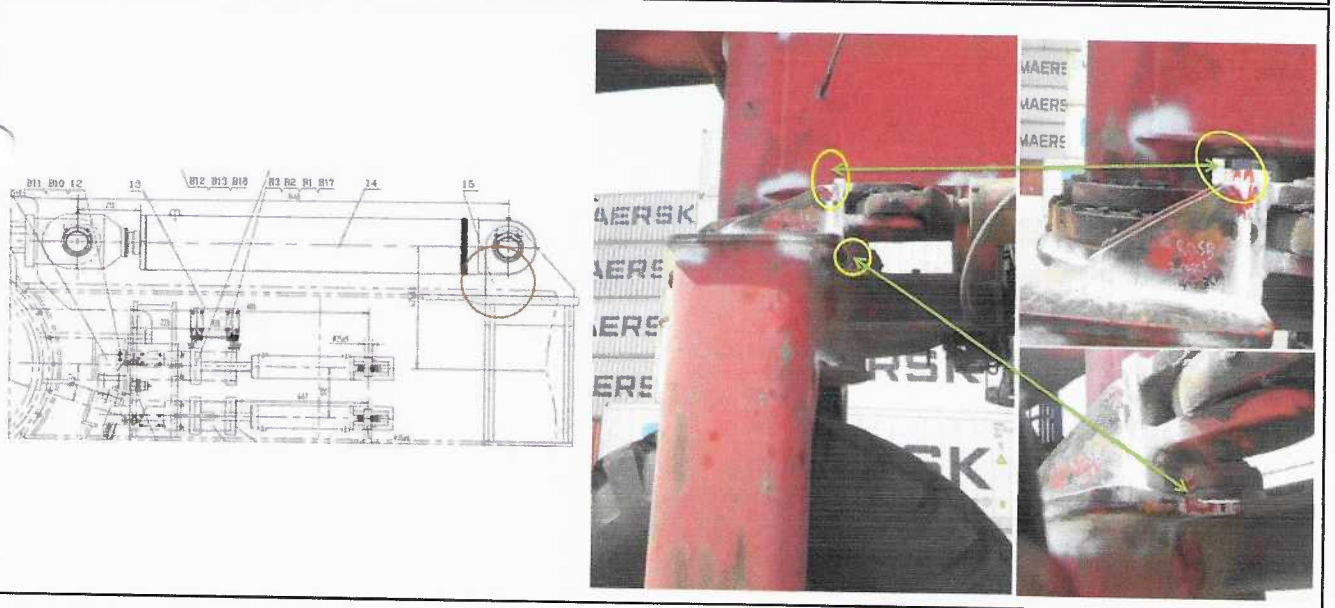
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

3 EA. Crack which referred by arrow as below (Length = Form 04 cm - 3 cm - 3 cm)

Need Repair



Osama Sobhy

Supervisor

M. Asaad
Inspector

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Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	31
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM E 709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL1190104-A	LEFT DIESEL HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

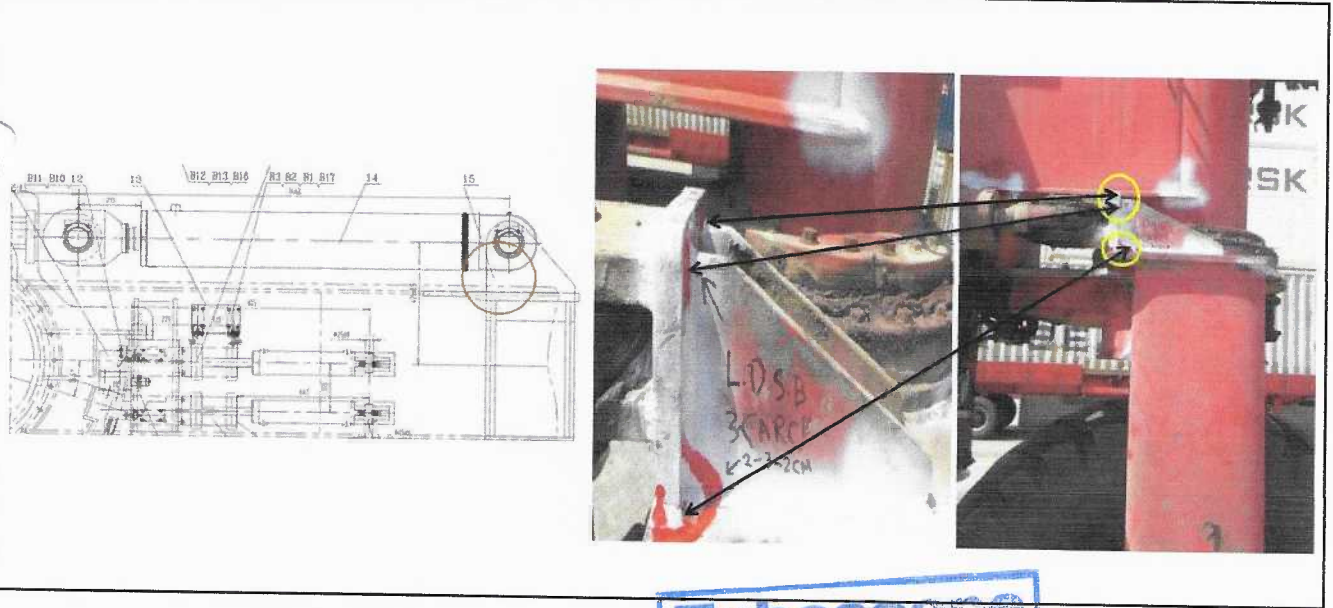
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

3 EA. Crack which referred by arrow as below (Length = Form 2 cm - 3 cm - 2 cm)

Need Repair



Osama Sobhy

Supervisor

Tuboscope
NOV Technologies
Egypt Branch
Inspector

M. Asaad

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QAF 103 Rev. 0 Date: 01.01.2011

Non destructive Test (NDT) Report

T.V.I Work Order No.:	SO-019839	Date of Inspection:	25/09/2017
Customer:	SUEZ CANAL CONTAINER TERMINAL	Inspection Report No.:	32
Work Location:	SCCT (CR- 16)	Customer W.O. No.:	CONTRACT

Specification: API DS1 Customer spec. Other AWS D1.1 & ASTM.E.709 **Edition:** 2010 & 2015

Inspection method: Wet Dry Dye Penetrant Other **BLACK INK AND WHITE CONTRAST**

Equipment used: UV light AC yoke DC coil Other **PERMANENT MAGNET**

No: _____ No: _____ No: _____ No: 0646 & 00399

Extent: Welding Areas

Serial no:	Description:
DRAW NO-JL1190104-A	LEFT ELECTRIC HOUSE SIDE STEERING & LOCKING CYLINDER - CYLINDER SUPPORT JL-1190401

Results:

NDT Inspection was carried out on available welding area for above description and found :

**** VISUAL :**

Visual Inspection of welding areas found free from surface defects

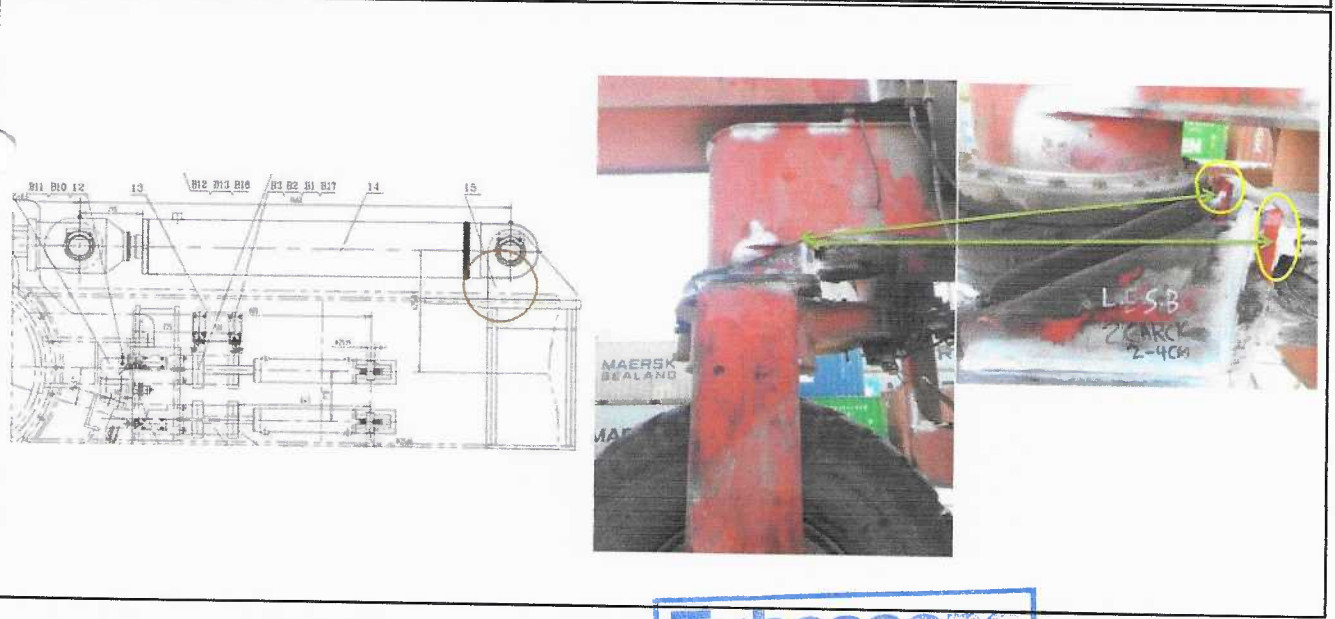
ACCEPTED

***** MPI :**

MPI carried out on available welding areas and found :

2 EA. Crack which referred by arrow as below (Length = Form 2 cm - 4 cm)

Need Repair



Osama Sobhy

Supervisor



M. Asaad

Inspector

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ULTRASONIC TEST (FLAW DETECTION) REPORT

T.V.I Work Order No.: SO-019839 **Date of Inspection:** 23/09/2017
Customer: SUEZ CANAL CONTAINER TERMINAL **Inspection Report No.:** 33
Work Location: SCCT (CR-16) **Customer W.O. No.:** CONTRACT

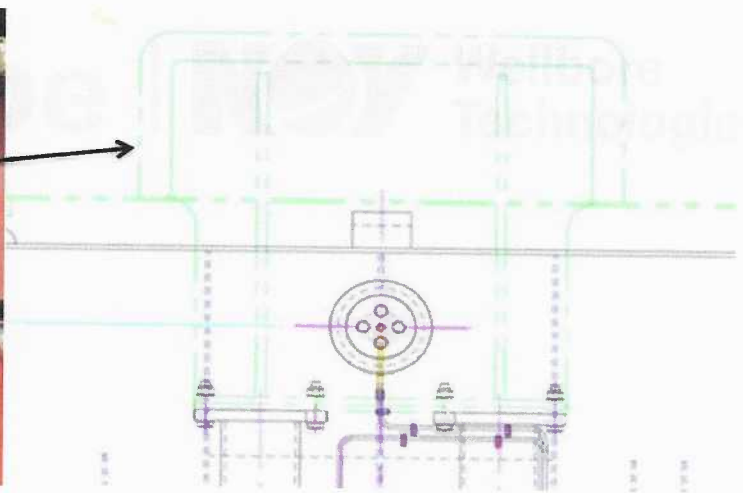
Specification: API Customer spec. Other AWS D1-1 **Edition:** 2010
Inspection method: U.T-W.T Other Share wave TEST
Equipment used: Type: USM-35 Unit No: 14215a Probe No: 2385 Frequency: 5 MHz

Part Examination: TWO SILL BEAMS -DRAW NO. JL-1190305 INSPECTION LOCATIONS **Surface Condition:** BRUSHED
Examination Procedure: NOV TUBOSCOPE VIII-007 **Acceptance Standard:** AWS D1-1

Probes	Frequency Mhz	Single Crystal	Twin Crystal	Calibration Range 0-100 mm	Scanning Procedure ZIG - ZAG
0	5 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Couplant grease Equipment	Test Blocks V2 BLOCK
45		<input type="checkbox"/>	<input type="checkbox"/>		
70	5 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

DETAILS OF INSPECTION

**** UT . SHEAR WAVE (FLAW DETECTION) WAS CARRIED OUT ON TWO SILL BEAMS -DRAW NO. JL-1190305 INSPECTION LOCATIONS**
***** NOTE: WALL THICKNESS 12mm .**



Results:

****THE ABOVE INSPECTED AREAS FOUND FREE FROM INTERNAL DEFECTS AT THE TIME OF INSPECTION**

ACCEPTED

Recommendation:

Osama Sobhy

Supervisor



M. Asaad

Inspector

ULTRASONIC TEST (FLAW DETECTION) REPORT

T.V.I Work Order No.: SO-019839 Date of Inspection: 23/09/2017
 Customer: SUEZ CANAL CONTAINER TERMINAL Inspection Report No.: 34
 Work Location: SCCT (CR-16) Customer W.O. No.: CONTRACT

Specification: API Customer spec. Other AWS D1-1 Edition: 2010
 Inspection method: U.T-W.T Other LAMINATION TEST
 Equipment used: Type: USM-35 Unit No: 14215a Probe No: 2385 Frequency: 5 MHz

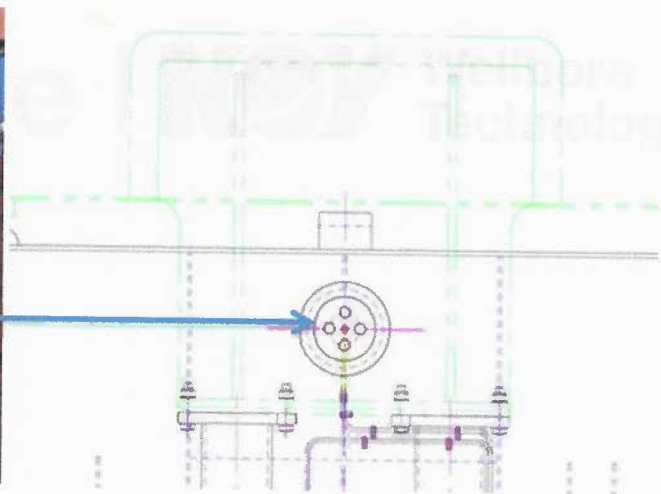
Part Examination: TWO SILL BEAMS -DRAW NO.JL-1190305 INSPECTION LOCATIONS Surface Condition: BRUSHED
 Examination Procedure: NOV TUBOSCOPE VIII-007 Acceptance Standard: AWS D1-1

Probes	Frequency Mhz	Single Crystal	Twin Crystal	Calibration Range 0-100 mm	Scanning Procedure
0	5 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Couplant <u>grease</u> Equipment	<u>ZIG - ZAG</u> Test Blocks <u>V2 BLOCK</u>
45		<input type="checkbox"/>	<input type="checkbox"/>		
70		<input type="checkbox"/>	<input type="checkbox"/>		

DETAILS OF INSPECTION

** UT . SHEAR WAVE (FLAW DETECTION) WAS CARRIED OUT ON SHAFTS OF SILL BEAMS

*** NOTE: WALL THICKNESS 790 mm .



Results:

**THE ABOVE INSPECTED AREAS FOUND FREE FROM INTERNAL DEFECTS AT THE TIME OF INSPECTION

ACCEPTED

Recommendation:

Osama Sobhy

Supervisor



M. Asaad

Inspector

上海振华重工(集团)股份有限公司

SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

ZPMC

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA

Postcode(邮编): 200125 Telephone(电话): +86 21 58396666 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#35 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #35 crane)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #35) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #35) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is Nov 6th, 2018.

Issued on behalf of ZPMC

Name: XIONG SHAOJUN

Title: Project manager

Date: 6/11/2018

Confirmed by Crane and Engineering Services (CES)

Name: Zeng Guangqun

Title: Engineer

Date: 6/11/2018

Received by SCCT

Name: Mohamed M. Dorra

Title: Terminal Civil Facility Manager

Date: 6/11/2018

上海振华重工(集团)股份有限公司 **ZPMC**
SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA
Postcode(邮编): 200125 Telephone(电话): +86 21 58306668 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#37 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #37 crane)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #37) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #37) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is Dec 9th, 2018.

Issued on behalf of ZPMC

Name: XIONG SHAO JUN

Title: Project Manager

Date: 9/12/2018

Confirmed by Crane and Engineering Services (CES)

Name: Dany Kwany Kwao

Title: Engineer

Date: 9/12/2018

Received by SCCT

Name: Mohamed H. Dorra

Title: Terminal Civil & Facility Manager

Date: 9/12/2018

上海振华重工(集团)股份有限公司

SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

ZPMC

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA

Postcode(邮编): 200125 Telephone(电话): +86 21 58396666 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#35 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #35 crane)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #35) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #35) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is Nov 6th, 2018.

Issued on behalf of ZPMC

Name: XIONG SHAOJUN

Title: Project manager

Date: 6/11/2018

Confirmed by Crane and Engineering Services (CES)

Name: Zeng Guangqun

Title: Engineer

Date: 6/11/2018

Received by SCCT

Name: Mohamed M. Doros

Title: Terminal Civil Facility Manager

Date: 6/11/2018

上海振华重工(集团)股份有限公司 **ZPMC**
SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA
Postcode(邮编): 200125 Telephone(电话): +86 21 58306668 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#37 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #37 crane)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #37) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #37) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is Dec 9th, 2018.

Issued on behalf of ZPMC

Name: XIONG SHAO JUN

Title: Project Manager

Date: 9/12/2018

Confirmed by Crane and Engineering Services (CES)

Name: Dany Kwany Kwao

Title: Engineer

Date: 9/12/2018

Received by SCCT

Name: Mohamed H. Dorra

Title: Terminal Civil & Facility Manager

Date: 9/12/2018

INSPECTION DEFECT REPORT

Date of Inspection	3/3/2020	Report Number	SCCT-CR/30
Client	Suez Canal Container Terminal (SCCT)	Location	Port Said Eastern Port
Identification Number	CR 30	Date of Next Inspection	N/A

Description: First Attempt of each 3-month visual checking and measuring of randomly chosen cracks located at 4 RTG {Rubber Tire Gantry Crane} legs. As per SCCT request.

Rubber Tire Gantry Crane S/N: CR30

- Left Land Sea Side Leg {LLS}:
 - Crack No. (1): Length: **3.0 cm**, Crack No. (2): **4.0 cm**, Crack No. (3): **4.5 cm**, Crack No. (4): **3.0 cm**
- Left Sea Side {LSS}
 - Crack No. (9): Length: **5.0 cm**, Crack No. (10): **5.0 cm**, Crack No. (11): **3.0 cm**, Crack No. (12): **3.0 cm**
- Right Sea Side Leg {RSS}:
 - Crack No. (17): Length: **5.0 cm**, Crack No. (18): **5.0 cm**, Crack No. (19): **6.5 cm**
- Right Land Side {RLS}
 - Crack No. (23): **2.5 cm**, Crack No. (24): **2.0 cm**, Crack No. (25): **3.0 cm**

OBSERVATION

Crack No.:	Length (cm)	Location	Figure No.:	CORRECTIVE ACTION
1	3.0	{LLS}	1	As per SCCT Recommendations
2	4.0	{LLS}	2	As per SCCT Recommendations
3	4.5	{LLS}	3	As per SCCT Recommendations
4	3.0	{LLS}	4	As per SCCT Recommendations

9	5.0	{LSS}	9	As per SCCT Recommendations
10	5.0	{LSS}	10	As per SCCT Recommendations
11	3.0	{LSS}	11	As per SCCT Recommendations
12	3.0	{LSS}	12	As per SCCT Recommendations
17	5.0	{RSS}	17	As per SCCT Recommendations
18	5.0	{RSS}	18	As per SCCT Recommendations
19	6.5	{RSS}	19	As per SCCT Recommendations
23	2.5	{RLS}	23	9 As per SCCT Recommendations
24	2.0	{RLS}	24	As per SCCT Recommendations
25	3.0	{RLS}	25	As per SCCT Recommendations



Figure No. (1)



Figure No. (2)



Figure No. (3)



Figure No. (4)



Figure No. (9)



Figure No. (10)



Figure No. (11)



Figure No. (12)

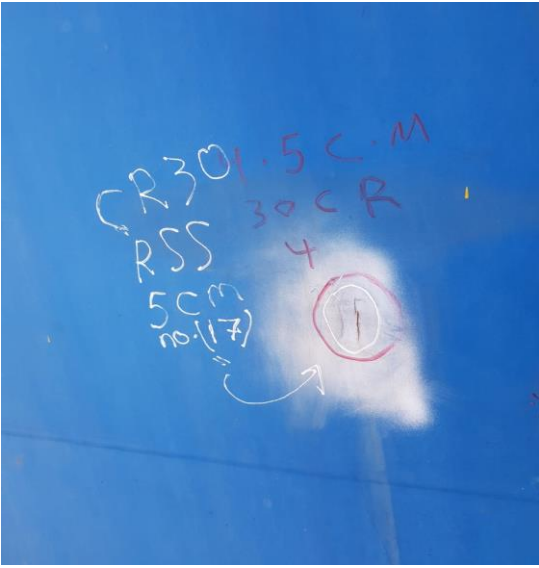


Figure No. (17)



Figure No. (18)



Figure No. (19)



Figure No. (23)



Figure No. (24)



Figure No. (25)

Inspector Name / Signature	Authorized Name / Signature	Company Stamp
Kareem Mohsen	Mohamed Serafy	

INSPECTION DEFECT REPORT

Date of Inspection	2/3/2020	Report Number	SCCT-CR/22
Client	Suez Canal Container Terminal (SCCT)	Location	Port Said Eastern Port
Identification Number	CR 22	Date of Next Inspection	N/A

Description: First Attempt of each 3-month visual checking and measuring of randomly chosen cracks located at 4 RTG {Rubber Tire Gantry Crane} legs. As per SCCT request.

Rubber Tire Gantry Crane S/N: CR22

- Right Sea Side Leg {RSS}:
 - Crack No. (1): Length: **3.0 cm**
- Right Land Side {RLS}
 - Crack No. (2): **4.0 cm**
- Left Land Side Leg {LLS}:
 - Crack No. (3): **3.0 cm**
- Left Sea Side {LSS}
 - Crack No. (4): **4.0 cm**, Crack No. (5): **2.0 cm**

OBSERVATION

Crack No.:	Length (cm)	Location	Figure No.:	CORRECTIVE ACTION
1	3.0	{RSS}	1	As per SCCT Recommendations
2	4.0	{RLS}	2	As per SCCT Recommendations
3	3.0	{LLS}	3	As per SCCT Recommendations
4	4.0	{LSS}	4	As per SCCT Recommendations
5	2.0	{LSS}	5	As per SCCT Recommendations



Figure No. (1)



Figure No. (2)



Figure No. (3)



Figure No. (4)

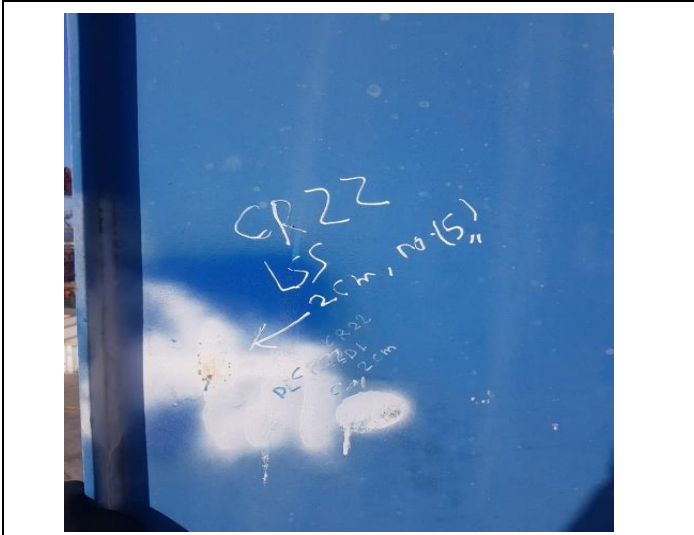


Figure No. (5)

Inspector Name / Signature	Authorized Name / Signature	Company Stamp
Kareem Mohsen	Mohamed Serafy	

INSPECTION DEFECT REPORT

Date of Inspection	9/3/2020	Report Number	SCCT-CR/26
Client	Suez Canal Container Terminal (SCCT)	Location	Port Said Eastern Port
Identification Number	CR 26	Date of Next Inspection	N/A

Description: First Attempt of each 3-month visual checking and measuring of randomly chosen cracks located at 4 RTG {Rubber Tire Gantry Crane} legs. As per SCCT request.

Rubber Tire Gantry Crane S/N: CR26

- Right Sea Side Leg {RSS}:
 - Crack No. (1): Length: **3.0 cm**, Crack No. (2): Length: **2.5 cm**
- Right Land Side {RLS}
 - No similar Cracks found at the time of inspection.
- Left Land Side Leg {LLS}:
 - No similar Cracks found at the time of inspection.
- Left Sea Side {LSS}
 - Crack No. (3): **1.25 cm**

OBSERVATION

Crack No.:	Length (cm)	Location	Figure No.:	CORRECTIVE ACTION
1	3.0	{RSS}	1	As per SCCT Recommendations
2	2.5	{RSS}	2	As per SCCT Recommendations
3	1.25	{LSS}	3	As per SCCT Recommendations



Figure No. (1)



Figure No. (2)

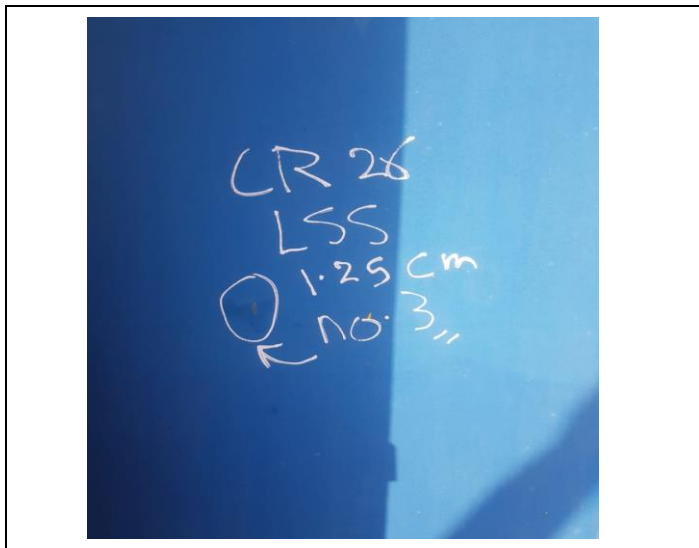


Figure No. (3)

Inspector Name / Signature	Authorized Name / Signature	Company Stamp
Kareem Mohsen	Mohamed Serafy	

上海振华重工(集团)股份有限公司 **ZPMC**
SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA
Postcode(邮编): 200125 Telephone(电话): +86 21 58396668 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#36 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #36 cranes)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #36) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #36) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is August the 1th, 2018.

Issued on behalf of ZPMC

Name: 孙家强 SunJiaqiang

Title: Project Manager

Date: 2018.8.28

Confirmed by Crane and Engineering Services (CES)

Name: 杨帆 Allen Yang

Title: QA inspector of CES

Date: 2018.8.28

Received by SCCT

Name: Mohamed M. Dorra

Title: Engineering Tech. Sp. Mg.

Date: 28/08/2018

上海振华重工(集团)股份有限公司

SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

ZPMC

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA

Postcode(邮编): 200125 Telephone(电话): +86 21 58396666 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#33 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #33 cranes)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #33) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #33) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is January the 22th, 2019.

Issued on behalf of ZPMC

Name: Sun Jialiang 孙家亮

Title: Project Manager

Date 2019.2.25



Confirmed by Crane and Engineering Services (CES)

Name: Felicia Xu

Title: Engineer

Date 2019-02-25

Received by SCCT

Name: M. J. Dorra

Title: M&R Civil Facility Mng.

Date 25 02 2019

上海振华重工(集团)股份有限公司 **ZPMC**
SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA
Postcode(邮编): 200125 Telephone(电话): +86 21 58396668 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#36 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-686 (RTG #36 cranes)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #36) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #36) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is August the 1th, 2018.

Issued on behalf of ZPMC

Name: 孙家强 SunJiaqiang

Title: Project Manager

Date 2018.8.28

Confirmed by Crane and Engineering Services (CES)

Name: 杨帆 Allen yang

Title: QA inspector of CES

Date 2018.8.28

Received by SCCT

Name: Mohamed M. Dorra

Title: Engineering Tech. Sp. Mg.

Date 28/08/2018

上海振华重工(集团)股份有限公司

ZPMC

SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.

地址: 中华人民共和国上海市东方路3261号 ADDRESS: 3261 DONGFANG ROAD, SHANGHAI 200125, P.R.CHINA

Postcode(邮编): 200125 Telephone(电话): +86 21 58396666 Fax(传真): +86 21 58397000 E-mail(电子邮件): mail@zpmc.com

RTG#17 Legs Crack Repair Accomplishment Certificate

ZPMC project number as ZP05-586 (RTG #17 crane)

We, ZPMC hereby certify and confirm that all legs cracks' repair work for (RTG #17) has been accomplished as identified by attached Crack Repair Procedures, and accordingly (RTG #17) is restored to the normal operational conditions hence can be released back to operations.

The issuance of this document triggers the detail Warranty scope and Warranty period reference to contract no. _____ (will be amended later)

Date of Certificate is February 25th, 2019.

Issued on behalf of ZPMC

Name: Sun Jia Liang 孙家亮

Title: Project Manager

Date 2019.2.25



Confirmed by Crane and Engineering Services (CES)

Name: Jehise Xu

Title: Engineer

Date 2019-02-25

Received by SCCT

Name: M. Devra

Title: M.S.R. Civil Facility Mng.

Date 25-02-2019