



Invoice	19-121
File	CTI121 (BASELINE DEMO)
Date	9/16/2019

Coil String baseline demo

INSPECTION REPORT

Name	Demo Company
Address	987 Yourroad Ave. Your City, AB. 12345
Contact	Garrett Sears

Coiled Tubing baseline demo

Size	60.30mm	2.375"
Wall	5.18mm	.204" - .175"
Length	6350m	
Grade	HT-95-C	
Direction	Inspection performed core to tail	

SUMMARY

Baseline inspection was performed tail to core from a xxx shipping spool to xxxxx Energy work reel 110R02. All Bias welds were manually measured and compared to the supplied WLR. Multiple external anomalies indicated throughout this entire inspection.

On all sides of the tubing. Multiple repairs were performed.

Measurments in the repaired notes are Pre repair (max) and Post repair (min). Please refer to inspection notes, graph, and pictures for further details.

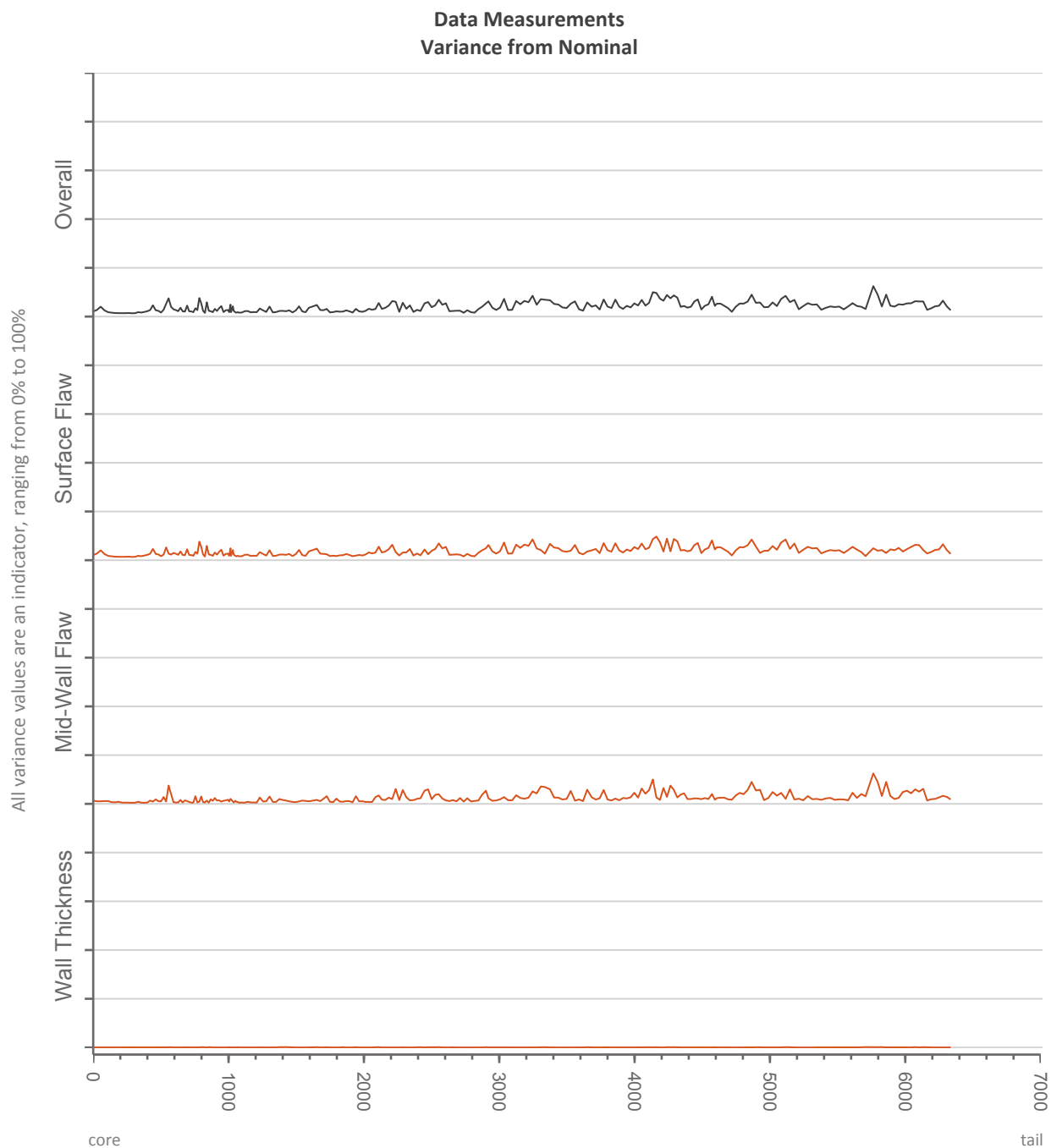
For more detailed and interactive analysis, view this inspection on your secure CTI Portal.

[\[ctiportal.ca\]](#)



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DATA CHARTS

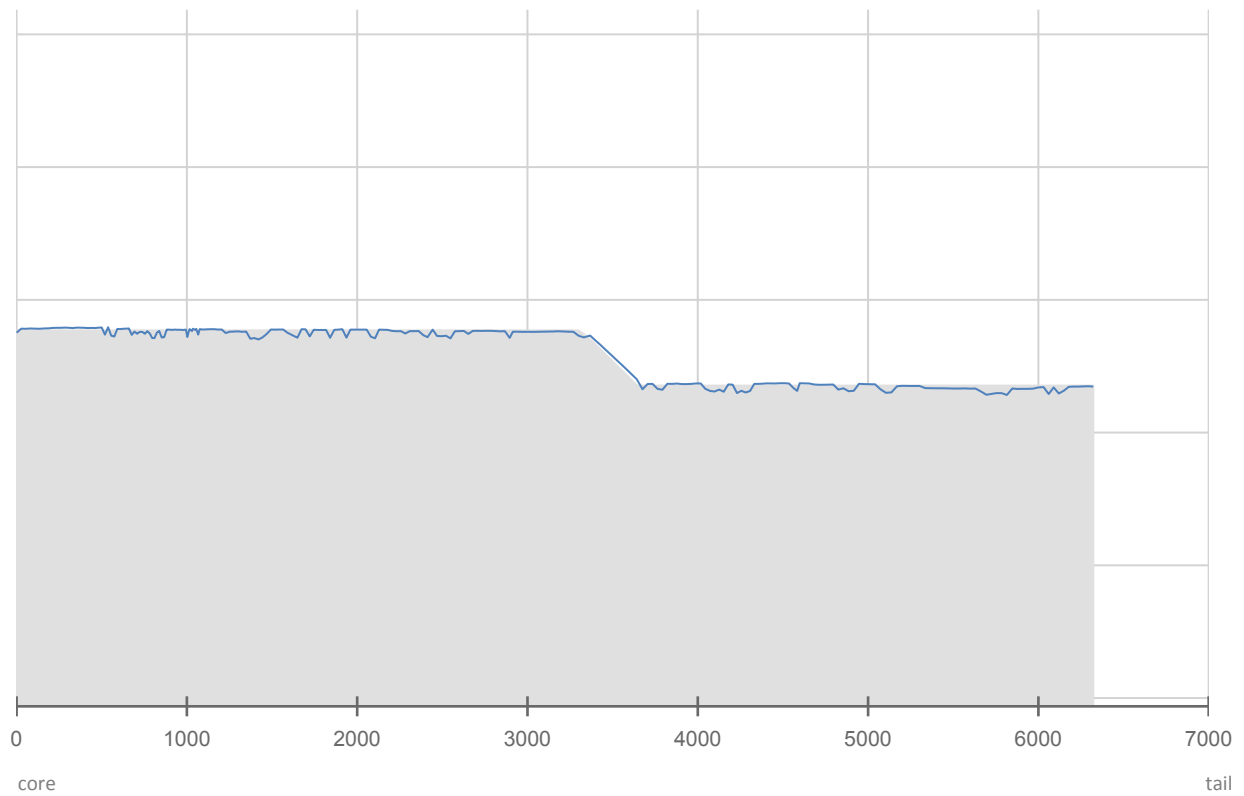




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**Wall Thickness
Compared to Nominal**

baseline demo Specification: 5.18mm (.204" - .175")





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INSPECTION RESULTS

1m - 2m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.38mm (2.377")	59.97mm (2.361")	0.680%	5.29mm (0.208")	5.10mm (0.201")
Start of inspection.					
62m - 63m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.32mm (2.375")	60.24mm (2.372")	0.133%	5.23mm (0.206")	5.13mm (0.202")
Bias weld.					
534m - 535m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.27mm (2.373")	59.97mm (2.361")	0.498%	5.35mm (0.211")	5.25mm (0.207")
Bias weld.					

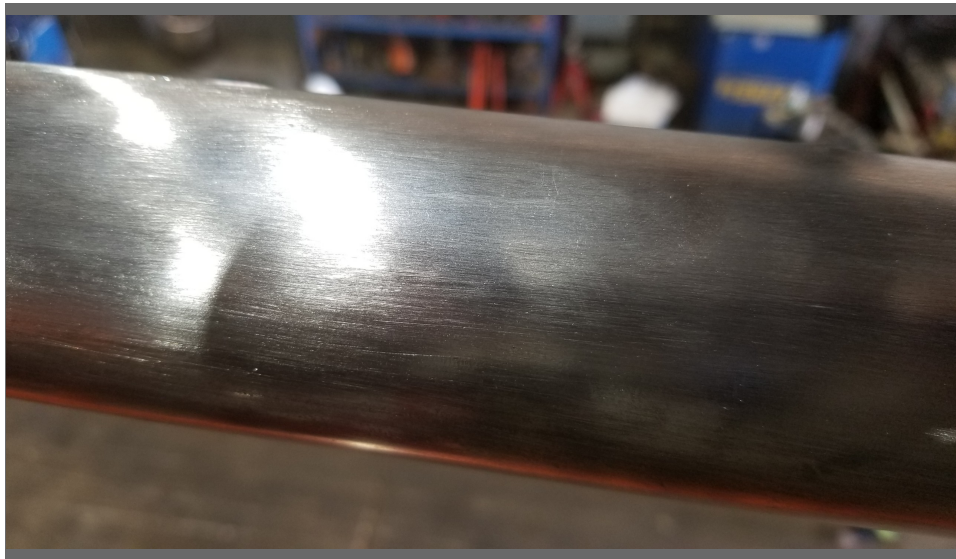
566m - 567m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.25mm (2.372")	60.04mm (2.364")	0.348%	0.012" or 0.305mm	5.32mm (0.209")	5.14mm (0.202")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.



572m - 573m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.77mm (2.393")	60.09mm (2.366")	1.128%	0.019" or 0.483mm	5.32mm (0.209")	4.79mm (0.189")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.





584m - 585m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.04mm (2.364")	59.51mm (2.343")	0.879%	0.018" or 0.457mm	5.29mm (0.208")	4.98mm (0.196")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.



1,007m - 1,008m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.32mm (2.375")	59.88mm (2.357")	0.730%	5.24mm (0.206")	5.16mm (0.203")
	Bias weld.				

1,319m - 1,320m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	59.96mm (2.361")	59.76mm (2.353")	0.332%	0.010" or 0.254mm	5.30mm (0.209")	4.95mm (0.195")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI. Low UT reading on manufacturer repair of 4.95mm.







1,468m - 1,471m	OD (Max)	OD (Min)	Ovality	Pit gauge depth	UT (Max)	UT (Min)
Repaired	59.92mm (2.359")	59.67mm (2.349")	0.415%	.012" or .305mm	5.29mm (0.208")	5.14mm (0.202")

3m section of external anomalies on the left side of the CT. This area was repaired by Tenaris and measured before and after by CTI.









1,477m - 1,478m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.24mm (2.372")	60.00mm (2.362")	0.398%	5.27mm (0.207")	5.16mm (0.203")
	Bias weld.				

1,718m - 1,719m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.05mm (2.364")	59.51mm (2.343")	0.896%	0.021" or 0.533mm	5.50mm (0.217")	5.03mm (0.198")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.



1,954m - 1,955m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.34mm (2.376")	60.01mm (2.363")	0.547%	5.33mm (0.210")	5.10mm (0.201")

Bias weld. External anomalies continue intermittently on the side of the tubing.



2,431m - 2,432m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.39mm (2.378")	60.09mm (2.366")	0.498%	5.31mm (0.209")	5.19mm (0.204")

Bias weld. Anomalies continue toward tail.



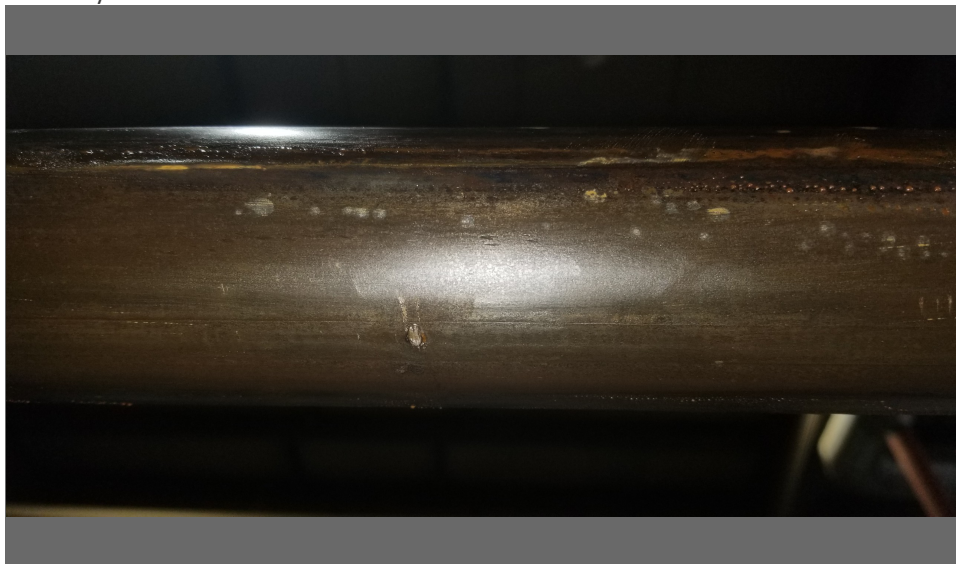


2,473m - 2,474m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
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Repaired

60.40mm (2.378")	60.05mm (2.364")	0.580%	5.27mm (0.207")	5.18mm (0.204")
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Raised metal external anomaly. Raised metal was repaired by CTI exposing a 0.006" anomaly.



2,906m - 2,907m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
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Comment

60.35mm (2.376")	60.06mm (2.365")	0.481%	5.25mm (0.207")	5.05mm (0.199")
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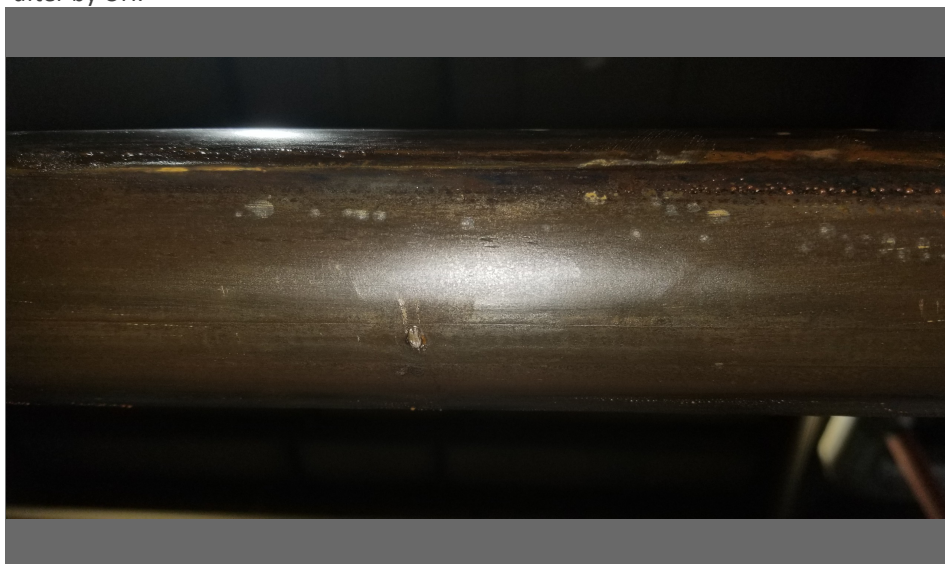
Bias weld.





3,331m - 3,332m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.26mm (2.372")	59.97mm (2.361")	0.481%	0.015" or	5.22mm (0.206")	4.90mm (0.193")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.



3,347m - 3,348m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.47mm (2.381")	59.96mm (2.361")	0.846%	5.22mm (0.206")	5.07mm (0.200")

Bias weld. Start of wall transition from 5.18mm to 4.45mm.

3,674m - 3,675m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.66mm (2.388")	60.00mm (2.362")	1.095%	4.58mm (0.180")	4.35mm (0.171")

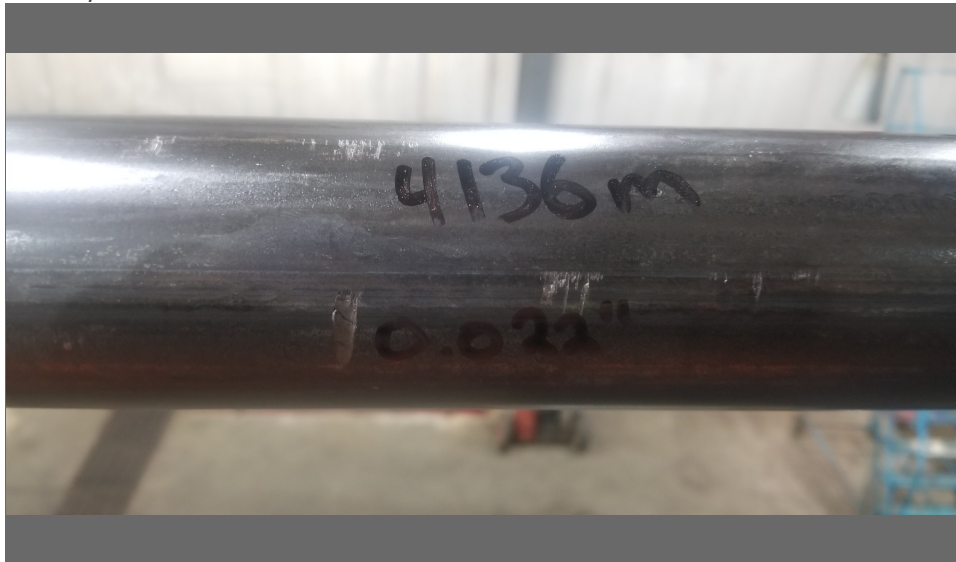
Bias weld. End of wall transition to 4.45mm.

4,053m - 4,054m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.47mm (2.381")	60.00mm (2.362")	0.779%	4.50mm (0.177")	4.39mm (0.173")

Bias weld.

4,136m - 4,137m	OD (Max)	OD (Min)	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.57mm (2.385")	60.09mm (2.366")	0.022" or 0.559mm	4.54mm (0.179")	4.03mm (0.159")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.



4,213m - 4,214m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.34mm (2.376")	59.99mm (2.362")	0.580%	0.020" or 0.508mm	4.60mm (0.181")	4.16mm (0.164")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.



4,255m - 4,256m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.65mm (2.388")	60.29mm (2.374")	0.597%	0.018" or 0.457mm	4.56mm (0.180")	4.13mm (0.163")

Two external anomalies in the area. These anomalies were repaired by Tenaris and measured before and after by CTI.





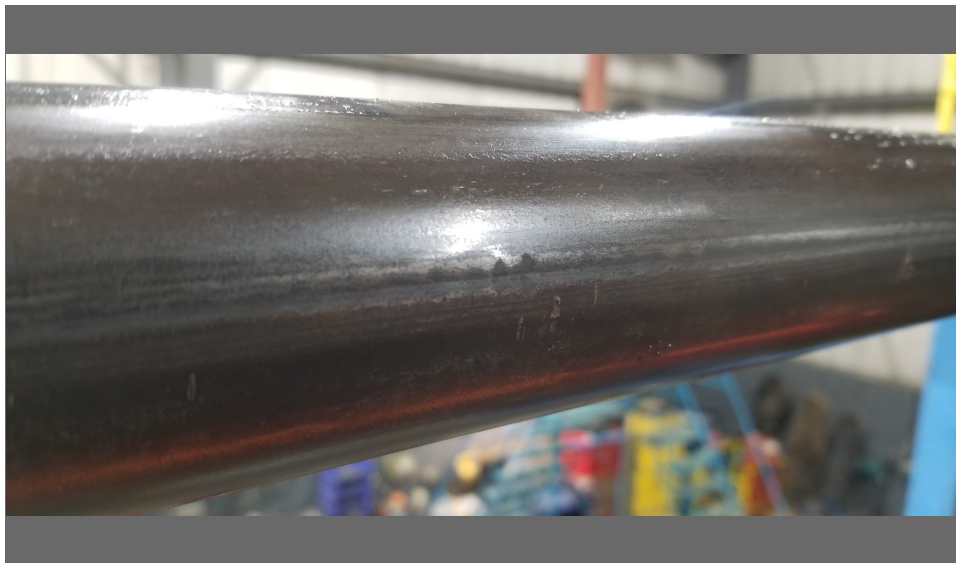
4,261m - 4,262m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.70mm (2.390")	60.04mm (2.364")	1.095%	0.020" or 0.508mm	4.58mm (0.180")	4.22mm (0.166")
Four external anomalies in the area. These anomalies were repaired by Tenaris and measured before and after by CTI.						





4,483m - 4,484m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.37mm (2.377")	59.98mm (2.361")	0.647%	4.48mm (0.176")	4.31mm (0.170")
	Bias weld.				

4,583m - 4,584m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Caution	60.87mm (2.396")	59.86mm (2.357")	1.675%	4.57mm (0.180")	4.48mm (0.176")
External anomaly. Indentations along seam of tubing.					



4,676m - 4,677m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Caution	60.63mm (2.387")	60.33mm (2.375")	0.498%	0.011" or 0.279mm	4.62mm (0.182")	4.34mm (0.171")
External anomaly.						





4,875m - 4,876m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.42mm (2.379")	59.88mm (2.357")	0.896%	0.018" or 0.457mm	4.50mm (0.177")	4.05mm (0.159")

External anomaly. Previous repair in area from manufacturer. This anomaly was repaired by Tenaris and measured before and after by CTI.





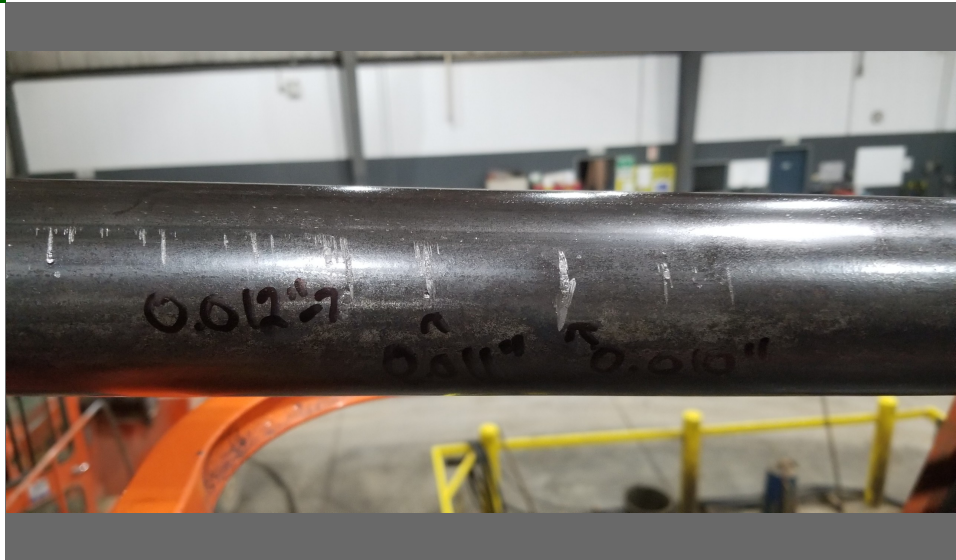
4,928m - 4,929m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.51mm (2.382")	60.18mm (2.369")	0.547%	4.76mm (0.187")	4.52mm (0.178")
	Bias weld				

5,124m - 5,125m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.66mm (2.388")	60.33mm (2.375")	0.547%	0.012" or 0.305mm	4.52mm (0.178")	4.29mm (0.169")

Three external anomalies in area. These anomalies were repaired by Tenaris and measured before and after by CTI.



5,147m - 5,148m	OD (Max)	OD (Min)	Ovality	Pit gauge depth.	UT (Max)	UT (Min)
Repaired	60.51mm (2.382")	60.29mm (2.374")	0.365%	.012" or .305mm	4.59mm (0.181")	4.39mm (0.173")
External anomalies.						



5,345m - 5,346m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.48mm (2.381")	60.17mm (2.369")	0.514%	4.58mm (0.180")	4.40mm (0.173")
Bias weld.					

5,751m - 5,752m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
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Caution

60.06mm (2.365")	59.42mm (2.339")	1.061%	4.46mm (0.176")	3.90mm (0.154")
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Previous repair from manufacturer indicated on CTI's tool. Low UT measurement of 12.4% metal loss from nominal.



5,792m - 5,793m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
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Caution

60.46mm (2.380")	60.04mm (2.364")	0.697%	4.47mm (0.176")	4.04mm (0.159")
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Previous repair by manufacturer indicated on CTI's tool. Low UT of 9.2% metal loss from nominal wall. Similar external repair from manufacturer at 5874m.

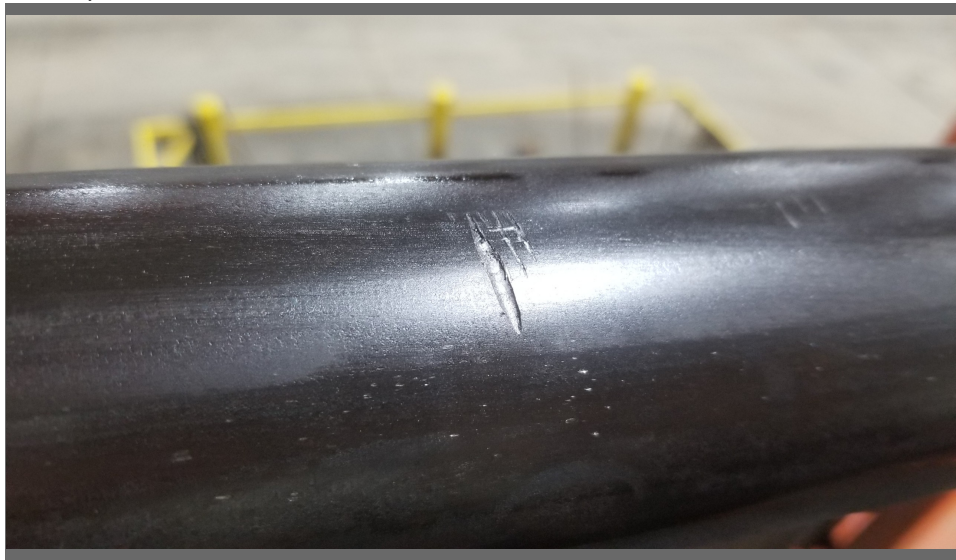


5,850m - 5,851m	OD (Max)	OD (Min)	Ovality	UT (Max)	UT (Min)
Comment	60.48mm (2.381")	60.08mm (2.365")	0.663%	4.20mm (0.165")	4.47mm (0.176")

Bias weld.

6,094m - 6,095m	OD (Max)	OD (Min)	Ovality	Pit Depth Gauge	UT (Max)	UT (Min)
Repaired	60.21mm (2.370")	59.93mm (2.359")	0.464%	0.014" or 0.356mm	4.57mm (0.180")	4.22mm (0.166")

External anomaly. This anomaly was repaired by Tenaris and measured before and after by CTI.





INSPECTION SERVICES

THIS INSPECTION WAS PERFORMED BY

Garrett Sears

AJ Sagan

Disclaimer: This inspection observes the coil tubing at the time our equipment is actively scanning. Our equipment is meant to scan for corrosion, mechanical and manufacturing types of failures and cannot identify or dismiss non-tradition material failures. Damages can occur after our inspection is complete during additional material handling and transportation.

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