GE ENERGY
Industrial Solutions

INSPECTION SERVICES
Pipeline Integrity Team
CWA # 2500461774
GEIS Job # LAPI0015

IN-FIELD SERVICES

GEIS Pipeline Integrity Team NDE

Pacific Gas & Electric Company

Hydrostatic Test Dig from October 7, 2011 to November 5, 2011

T43A/B_L147_B _Redacted

Documents Contained Within:

H-Form Report T43A/B_L147_B Redacted
NDE Reports of T43A/B_L147_B Redacted
Photo Report of T43A/B_L147_B Redacted

Authors Redacted

Date: December 2, 2011

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation:	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:				Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:		Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

Excavation Priority:

☐ Immediate ☐ Scheduled (For ILI - ☐ 1 Year ☐ Other)
☐ Monitor ☐ Effectiveness ☒ Hydro Test

Excavation Reason

☐ ECDA ☐ ILI ☐ Recoat
☐ ICDA ☐ Other NA

If practical, take P/S or CIS reads before excavation: NA

Excavation Details:

U/S Ditch Stad GPS Coordinates (Uncorrected Field Measurement)
Northing: Redacted PDOP: NA
Easting: Acc~: NA

Planned Excavation Length (Ft.): NA
Actual Excavation Length (Ft.): 21.0ft

Centerline GPS Coordinates (Uncorrected Field Measurement)
Northing: NA PDOP: NA
Easting: NA Acc~: NA

GPS File Name: Redacted

D/S Ditch End GPS Coordinates (Uncorrected Field Measurement)
Northing: Redacted PDOP: NA
Easting: Acc~: NA

1.0 Data Before Coating Removal

1.1 Native Soil Type: ☒ Clay ☒ Rock ☒ Sand ☐ Loam ☐ Wet ☐ Other NA

1.1A Backfill Material Found: ☐ Silt ☐ Slurry ☐ Native

Depth of Cover (Ft.): 6.00ft

Comments: NA

1.2 Coating Type: ☐ HAA ☐ Somastic ☐ Plastic Tape ☐ Wax Tape ☐ FBE ☐ Powercrete
☐ Bare/None ☒ Coal Tar ☐ Other: NA Comments: NA

Coating Thickness (Inches): 0.250in Number of Layers: 2

1.3 Holiday Testing Performed?: ☐ Yes ☒ No Voltage Used: NA Map Location of Holidays Below.

Device Used: ☐ Coil ☐ Wet Sponge Comments: NA

1.4 Pipe-to-Soil Potentials in Ditch (-mV):

	12:00	3:00	6:00	9:00
US:	-526	-530	-535	-526
DS:	-661	-658	-640	-663

Comments: CP system may be turned off.

1.5 Soil Resistivity in Ditch (Ω-cm):

Method: ☒ 4-Pin 24469.5 ohm/cm ☐ Soil Box NA

Comments: NA SRM-100 US: 131.5KΩ/cm DS: 6.1 KΩ/cm

1.6 Soil Sample Location Comments Ditch end (DS) 6:00 position under pipe.

1.7 Ground Water Present?: ☐ Yes ☒ No Sample(s) Collected?: ☐ Yes ☒ No Sample pH: NA

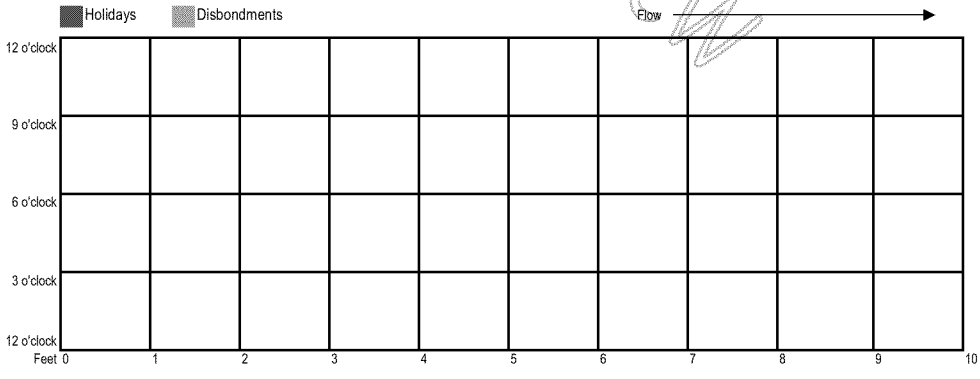
Comments: NA

1.8 Coating Condition: ☒ Good - Adhered to Pipe ☐ Fair - Coating Partially Disbonded or Degraded
☐ Poor - Coating Significantly Disbonded or Missing

Comments: Coating removed & tie in weld areas blasted. Pipe section removed and test pipes installed. Removed pipe section was also assesed and was in good conition except for coating damage from removal and transportation. See comments page 10.

1.9 Map of Coating Degradation*: **Zero Reference Point:**

*Note any calcareous deposit locations



CaCO3	- Calcareous deposits containing calcium
FeO	- General iron oxide with scale
FeCO3	- Calcareous deposits containing iron

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

1.10 Photos Taken?*: [X] Yes [ ] No
*See Photo Log for additional information.

1.11 Coating Sample Taken?: [ ] Yes [X] No Location of Sample: NA

1.12 Liquid Underneath Coating?: [ ] Yes [X] No If Yes, pH of Liquid: NA

1.13 Corrosion Product Present?: [ ] Yes [X] No If Yes, Was Sample Taken?: [ ] Yes [X] No
Comments: NA

1.14 Soil pH (Sb Electrode): Upstream: 6.0 Downstream: 7.5 Pipe pH: 6.0

2.0 Data After Coating Removal

2.1 Pipe Temperature (°F): 60.0° F **Measured Pipe Diameter (In.):** 63" = 20.05"

2.2 Weld Seam Type: [X] DSAW [ ] SSAW [ ] ERW [ ] SMLS
[ ] Spiral [ ] Lap [ ] Flash [ ] AO Smith [ ] IF CAN'T DETERMINE, VISUALLY PERFORM MACROETCH & LOCATE

2.3 Girth Weld Coordinates & Identify Type (See Table 5.7.3):
Northing: NA PDOP: NA
Easting: NA Acc~: NA LS Weld Clock Position(s): 8:55
Elevation: NA

2.4 Damage Found:
Corrosion Damage [ ] Yes [X] No Mechanical Damage [ ] Yes [X] No
Other Damage: Non relevant tool marks, no corrosion found greater than 20%

2.5 UT Wall Thickness Measurements:

	US / DS		US / DS		US / DS		US / DS
TDC:	0.270"/0.275"	1 O'clock	0.267"/0.272"	2 O'clock	0.267"/0.271"	3 O'clock	0.265"/0.271"
4 O'clock	0.268"/0.270"	5 O'clock	0.266"/0.271"	6 O'clock	0.268"/0.273"	7 O'clock	0.266"/0.272
8 O'clock	0.269"/0.269"	9 O'clock	0.261"/0.263"	10 O'clock	0.266"/0.264"	11 O'clock	0.269"/0.270"

UT Wall Thickness Grid @ 6:00 is required. Be sure to attach grid to H-Form electronically. See page 6 of 10.

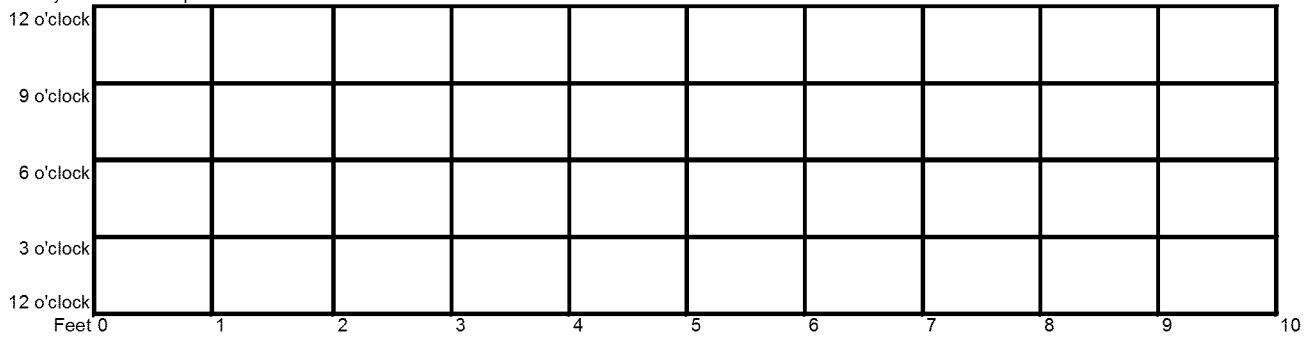
2.6 Wet Fluorescent Mag. Part. Is Required. Comments: 2 linear indications on the removed pipe section. See MT & Photo report.
Were there any linear indications? [X] Yes [ ] No If Yes, attach NDE report electronically as part of the H-Form.
Report to include black light and white light photos of indications.

2.7 Take Photos to Document Corrosion and Other Anomalies*
*See Photo Log for additional information.

2.8 Overview Map of Corroded Area*:
*See Pit Depth Measurement Grid for additional Information **Zero Reference Point:** NA

Flow →

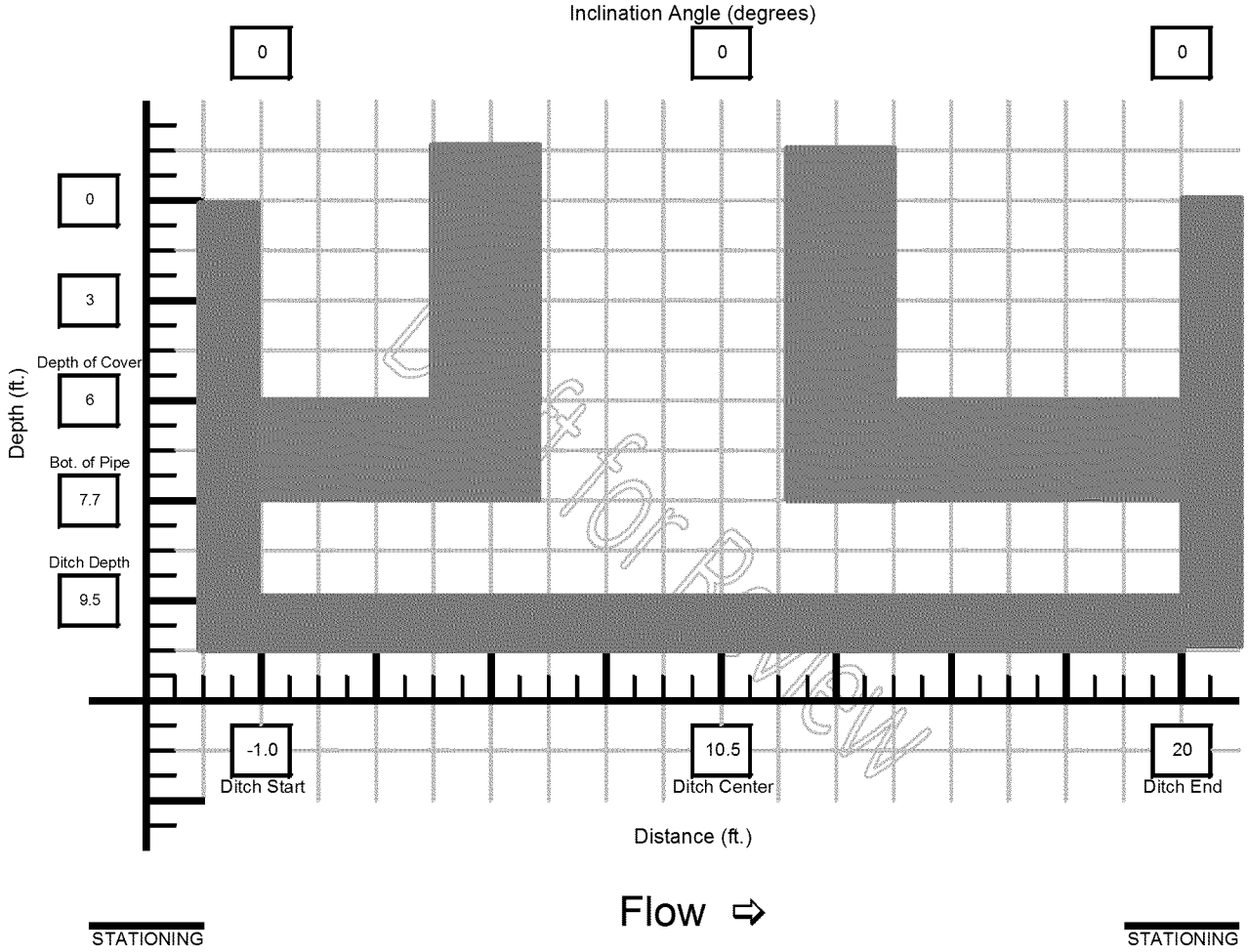
*Note any calcareous deposits.



DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

Excavation Drawing:

At minimum draw pipe elevation profile and indicate stationing of 1) low point and 2) critical inclination angle.
Place an arrow on the drawing indicating direction of gas flow in the region(s). Other labels may also be added (e.g. "to Station").



NOTES: (Record stationing and names of nearby landmarks such as creeks and roads. Provide any additional information that may help in spatially positioning pipe):

**See attached Delorme screen shot on page 11.

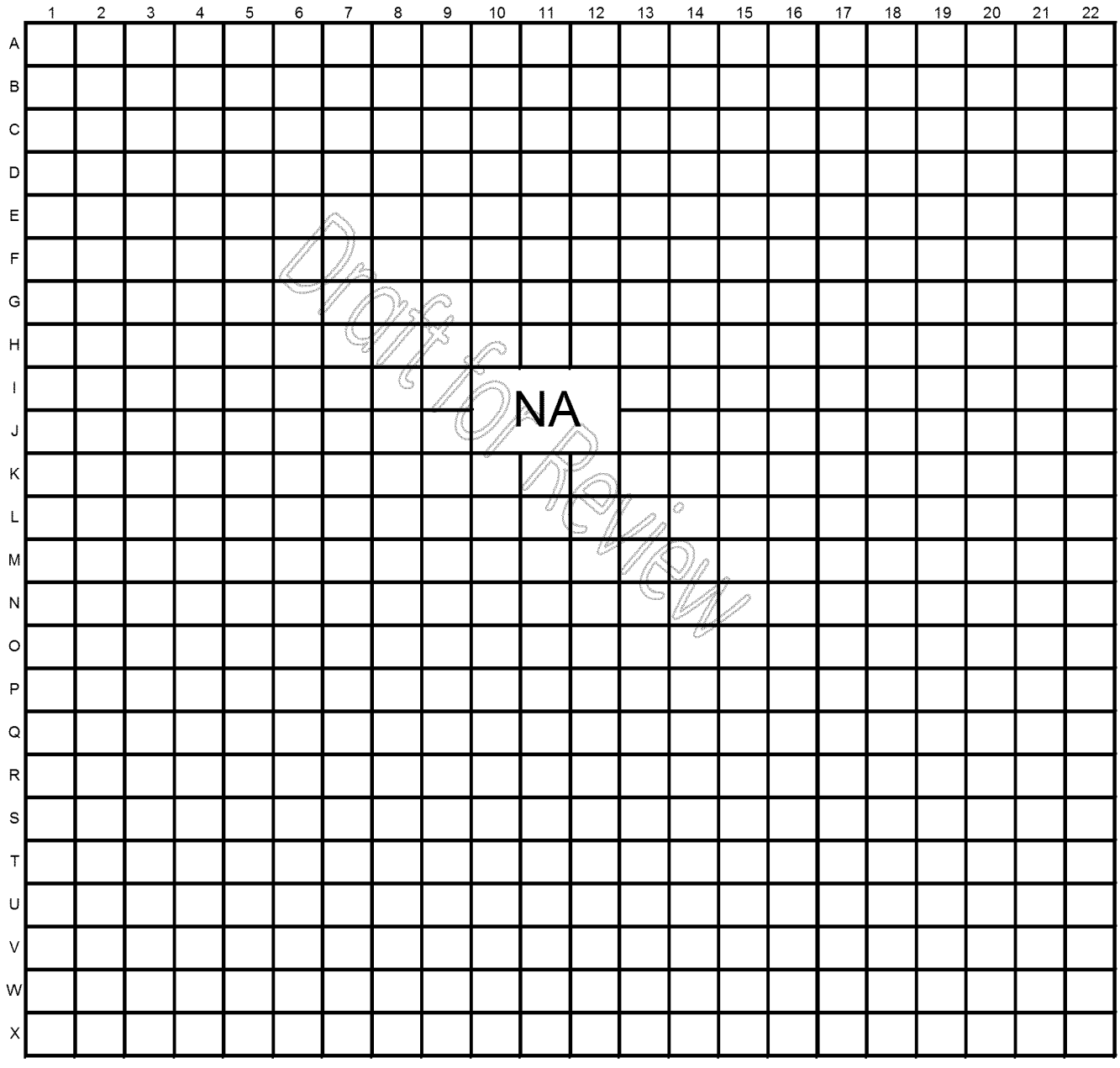
EXTERNAL PIT DEPTH MEASUREMENT GRID SHEETS

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

Grid Size = _____ Inch x _____ Inch (specify grid size)
Clock Position (specify below)

.001 - .009
.010 - .099
.100 - .199
.200 - .299
Highest pit reading

Anomaly # NA Grid # NA



PIT DEPTH GRID 1 OF 2

EXTERNAL PIT DEPTH MEASUREMENT GRID SHEETS

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

Grid Size = _____ Inch x _____ Inch (specify grid size)
Clock Position (specify below)

	.001 - .009
	.010 - .099
	.100 - .199
	.200 - .299
	Highest pit reading

Anomaly # NA Grid # NA

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
A																						
B																						
C																						
D																						
E																						
F																						
G																						
H																						
I											NA											
J																						
K																						
L																						
M																						
N																						
O																						
P																						
Q																						
R																						
S																						
T																						
U																						
V																						
W																						
X																						

PIT DEPTH GRID 2 OF 2

INTERNAL CORROSION WALL LOSS GRID

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

Grid Size = 1 Inch x 1 Inch
Clock Position (specify below)
All measurements are in inches.

UT Grid is centered @ 6:00 position on pipe.

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.251"	0.251"	0.249"	0.249"	0.249"	0.249"	0.249"	0.248"	0.248"	0.248"	0.248"	0.248"
B	0.251"	0.254"	0.251"	0.251"	0.249"	0.249"	0.249"	0.249"	0.248"	0.248"	0.248"	0.249"
C	0.253"	0.251"	0.251"	0.251"	0.251"	0.251"	0.251"	0.249"	0.249"	0.258"	0.249"	0.249"
D	0.251"	0.251"	0.251"	0.251"	0.251"	0.249"	0.250"	0.249"	0.249"	0.248"	0.247"	0.249"
E	0.251"	0.251"	0.251"	0.251"	0.251"	0.251"	0.251"	0.251"	0.247"	0.248"	0.247"	0.248"
F	0.251"	0.251"	0.251"	0.251"	0.249"	0.249"	0.251"	0.249"	0.249"	0.247"	0.248"	0.249"
G	0.251"	0.251"	0.247"	0.246"	0.249"	0.248"	0.247"	0.247"	0.246"	0.247"	0.248"	0.247"
H	0.248"	0.249"	0.249"	0.249"	0.248"	0.247"	0.247"	0.247"	0.246"	0.246"	0.246"	0.246"
I	0.249"	0.249"	0.249"	0.249"	0.247"	0.246"	0.244"	0.247"	0.244"	0.244"	0.247"	0.246"
J	0.247"	0.247"	0.247"	0.246"	0.246"	0.246"	0.242"	0.244"	0.244"	0.243"	0.244"	0.246"
K	0.247"	0.247"	0.247"	0.246"	0.246"	0.246"	0.244"	0.244"	0.244"	0.244"	0.244"	0.246"
L	0.249"	0.247"	0.247"	0.247"	0.248"	0.248"	0.248"	0.242"	0.244"	0.244"	0.246"	0.244"

INTERNAL CORROSION GRID
1 of 1

COATING DAMAGE

DA/ILI

Route Number: L-147
Date of Excavation: 10/7/2011
Mile Point: Redacted
Examination Performed By:
PG&E Project Manager:
Approved By: NA
Order Number: NA

DA

Site Designation T43A/B_B
N-Segment: NA
IMA Number: NA
NA
Region Number: NA
Subregion # (ICDA): NA
Stationing: NA

ILI

ILI Log Distance: NA
RMP-11 Ref. Section: Table 5.6.2
Reference Girth Weld: NA
Distance From Girth Weld: NA

NO.	FEET FROM REFERENCE	O'CLOCK	MAX LENGTH (IN.)	MAX CIRC EXTENT (IN.)
NA	NA	NA	NA	NA

CORROSION LOG

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

IC or EC	FEET FROM REFERENCE	O'CLOCK	MAX PIT DEPTH (MILS)	MAX LENGTH (IN.)	MAX CIRC EXTENT (IN.)
NA	NA	NA	NA	NA	NA

PHOTO LOG

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

PHOTO NO.	LOCATION	DESCRIPTION	COMMENTS
****See attached photo report.			

DA/ILI		DA		ILI	
Route Number:	L-147	Site Designation	T43A/B_B	ILI Log Distance:	NA
Date of Excavation:	10/7/2011	N-Segment:	NA	RMP-11 Ref. Section:	Table 5.6.2
Mile Point:	Redacted	IMA Number:	NA	Reference Girth Weld:	NA
Examination Performed By:			NA	Distance From Girth Weld:	NA
PG&E Project Manager:		Region Number:	NA		
Approved By:	NA	Subregion # (ICDA):	NA		
Order Number:	NA	Stationing:	NA		

3.0 RECOAT DATA

3.1 Sandblast Media: Sharp Shot 30/60 **Anchor Profile Measurement:** Average: 3.2 mils

3.2 Pipe Recoated With:

☐ Powercrete J ☒ Poly Tape ☐ Bar-Rust 235 ☐ Dev Grip 238 ☐ Dev Tar 247 ☒ Protal 7200 ☐ PE Tape

3.3 For Epoxy Coating Systems, Record Environmental Condition:

Air Temperature: 62.4°F Dew Point: 45.1°F

Pipe Temperature: 67.0°F Relative Humidity: 51.4%

Time of Day: 12:30 pm

3.4 Repair Coating Hardness (If ARC Coating:)

US	3:00 -	82	6:00 -	79	9:00 -	79	12:00 -	79
DS	3:00 -	79	6:00 -	75	9:00 -	79	12:00 -	81

3.5 Measured Coating Thickness:

US	3:00 -	33.7	6:00 -	38.7	9:00 -	57.5	12:00 -	27.4
DS	3:00 -	37.3	6:00 -	28.6	9:00 -	39.0	12:00 -	29.3

Holiday Tested?: ☒ Yes ☐ No

Device Used: ☐ Coil ☐ Wet Sponge Voltage Used: UNK Repair All Holidays. YES

3.6 Coupon Test Station Installed?: ☐ Yes ☒ No **ETS Installed?:** ☐ Yes ☒ No

If Yes, Date Installed: NA

Surface Configuration:: ☐ Fink ☐ G-5 Box ☐ Carsonite ☐ Other: NA

3.7 Backfill Material: ☐ Native ☐ Imported Sand ☐ Other: NA

Coating Protections?: ☐ Yes ☐ No

If Yes, Check One: ☐ Rockguard ☐ Tuf-E-Nuf ☐ Conwed ☐ Other: NA

3.8 Pipe-to-Soil Readings Over Bell Hole After Backfill: NA

*If specified, a CIS should be done for approximately 100' on either side of the bell hole. Attach data.

Comments: NA

3.9 Attach site sketch of excavation site.

4.0 REPAIR DATA

4.1 Repair Made: ☐ Yes ☒ No **4.2 Number of Repair Made:** NA

4.3 Repair Type ☐ Metallic Sleeve ☐ Non Metallic Sleeve ☐ Replace ☐ Can ☐ Filler Metal ☐ Other

4.4 Damage Repaired: ☐ Corrosion ☐ Mechanical ☐ Other

Misc. Comments/Information: T43A had coating removed, area for inspection was blasted from coating up to test pipe tie in weld. About 1 ft of coating was inspected. T43B had coating removed, area for inspection was blasted from coating up to test pipe tie in weld. About 1.5 ft of coating was inspected. Removed pipe section was inspected at the PG&E yard.

Redacted

GE Energy

INSPECTION & LIFE EXTENSION SERVICES

MAGNETIC PARTICLE EXAMINATION REPORT

☐ Nuclear ☑ Non-Nuclear

To: Pacific Gas & Electric Company	From: Redacted	Date: 10/7/2011
Project: T43A/B_L147_B _Redacted		
Purchase Order No:	GEIS Job No: LAPI0015	

Item	Weld ☑	Structural ☐	Casting ☐	Machinery ☐	Mach. Parts ☐	Pipe ☑	N/A ☐	Other: N/A
	Non-Weld ☑	Plate ☐	Pipe ☑	Bar ☐	Casting ☐	Mach. Parts ☐	N/A ☐	Other: N/A

Material	Size	Material Thickness	Type of Base Material	Type of Filler Material	Weld
	20"	0.250"	Carbon Steel	C/S Smooth ☐	☑ N/A ☐ As Welded ☐ As Welded

Location	Redacted	System: L-147
Acceptance Standards	Customer Specifications	Procedure: GEIS QCP # 500 Rev 15

Type of Check	Initial ☑	Plate Edge ☐	In Process ☐	Back Gouge ☐	Root Pass ☐	Repair ☐	12 Hour ☐	24 Hour ☐	Final ☑

Type of Inspection					Other:
	☐ Longitudinal	☐ Coil	☐ DC Probe	☑ Continuous	
	☑ Wet	☐ Dry	☐ Direct Contact	☑ Residual	
	☐ Circular	☐ AC Prod	☑ Yoke	☐ Other	

MT Yoke & Model - Serial No. / Blacklight Model - Serial No.: Parker DA-400 - S# 18830 / Spectroline BIP - S# 1597251	Surface Preparation Method: Abrasive Blasting (Kleen Blast) - NACE 2 Finish
Inspection Medium / Color / Batch No.: Magnaglo 14A / Flourescent Green / 09M12K	Demagnetization Method / Equipment: N/A

Reference: Summary ☑ See Attachment

The following areas were requested to be inspected:

	Results of Inspection
Bare pipe: -0.40' to 1.35' from original U/S ditch start.	- No relevant indications found @ time of insp.
Bare pipe : 17.4' to 18.45' from original U/S ditch start.	- No relevant indications found @ time of insp.
Removed pipe section.	2 Linear indications were found.

Summary:

Lin-01: Axial Start=1.60' (From U/S end of pipe), AL=1.58" , CW=0.020" , CLK Position= 4:00
Lin-02: Axial Start=2.33' (From U/S end of pipe), AL=1.20", CW=0.020", CLK Position= 4:06
These are on the removed pipe section.

Indications were on the removed pipe section. Please see attached photo report for additional information.

Copy To:
Pacific Gas & Electric Company
GE Inspection Services (Los Angeles)

Requested By: Redacted

Reported By (Technician): Redacted

☑ Customer Specifications
☑ Accept ☐ Reject

NDT supervisor: Redacted

NOTICE: THIS EXAMINATION REPORT IS A REPORT OF THE RESULTS OF THE NDT PROCEDURE ACTUALLY PERFORMED BY THIS COMPANY IT IS SUBJECT TO THE LIMITATIONS OF THE TESTING SPECIFICATIONS AND PROCEDURES WHICH WERE UTILIZED. BY FURNISHING THIS REPORT, ***GE INSPECTION & LIFE EXTENSION SERVICES*** DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.

GE Energy

Inspection & Life Extension Services

ULTRASONIC EXAMINATION REPORT

☐ Nuclear ☑ Non-Nuclear

To:	From:	Date:
Pacific Gas & Electric Company	Redacted	10/7/2011

Project: T43A/B_L147_B Redacted

Purchase Order No:

GEIS Job No: LAPI0015

Item	Weld ☑	Structural ☐	Casting ☐	Machinery ☐	Mach. Parts ☐	Pipe ☑	N/A ☐	Other:
	Non-Weld ☑	Plate ☐	Pipe ☐	Bar ☐	Casting ☐	Mach. Parts ☐	N/A ☐	Other

Material	Size:	No. of Pieces	Type of Base Metal	Type of Filler Material	Weld
	20"	1	Carbon Steel	C/S	☐ Smooth ☑ N/A ☐ As Welded

Location: Redacted

System: L-147

Acceptance Standards: Customer Specifications

Procedure: QCP-601

Type of Inspection

Soundness ☑ Thickness ☑ Bond ☐

Pulse Echo ☑ Angle-Beam ☐ Other ☐

UT Equipment/Model: USN-60, Serial # 01NLKN, Calibration Date: 10/5/2011, *Calibration Due: 1/5/2012*

Transducer			Transducer Serial No.:
☑ Single Crystal ☐ Dual Crystal			020HFC
Frequency	**Size**	**Angle**	**Couplant / Batch #**
5 MHz	0.375"	0°	Sonatest Ultragel II / 25-901 07225 AF
Flat ☑	**Concave** ☐	**Convex** ☐	
Standard	**Material**	**Notch Depth**	**Serial No.:**
Step Wedge ☑ / Tube Wedge ☐	**Material**	**Thickness Range**	**Serial No.:**
	C/S	0.200" - 0.500"	V34693

Reference: Summary ☑ See Attachment

The following areas were requested to be inspected:

12" x 12" (1"x1" grid) at a random 6:00 position on the pipe.

12" lamination scans at cut-line locations.

Thickness readings US & DS inspection areas at the clock positions.

*** Please see attached reports for additional information.*

Results of Inspection:

- No relevant indications @ time of inspection.
- No relevant indications @ time of inspection.
- No relevant indications @ time of inspection.

Copy To:

Pacific Gas & Electric Company

GE Inspection Services (Los Angeles)

Requested By: Redacted

Reported By (Technician): Redacted

☑ Customer Specifications

☑ Accept ☐ Reject

NDT Supervisor: Redacted

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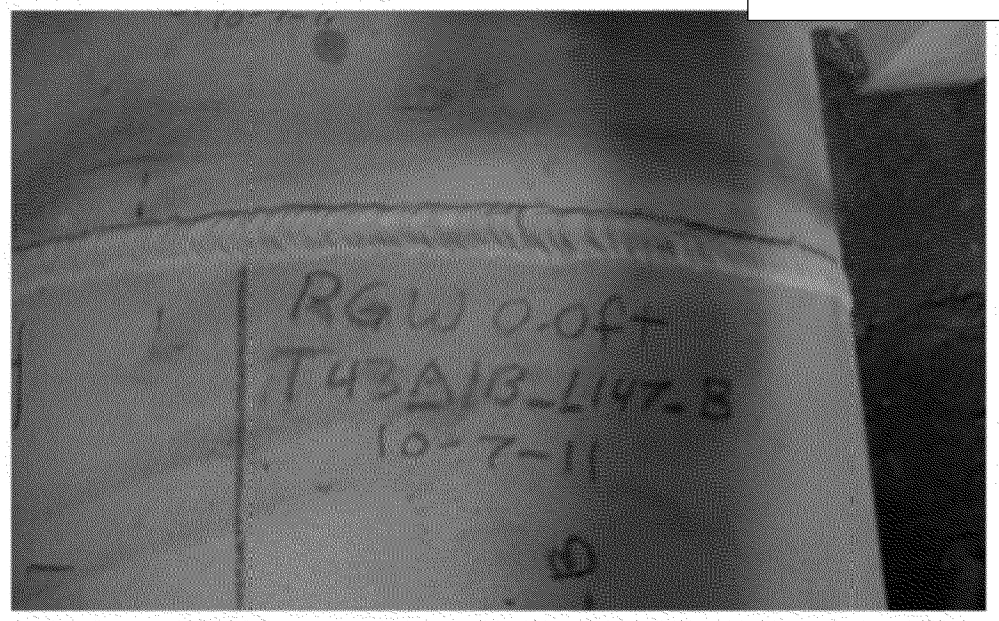
Redacted

Redacted

Redacted



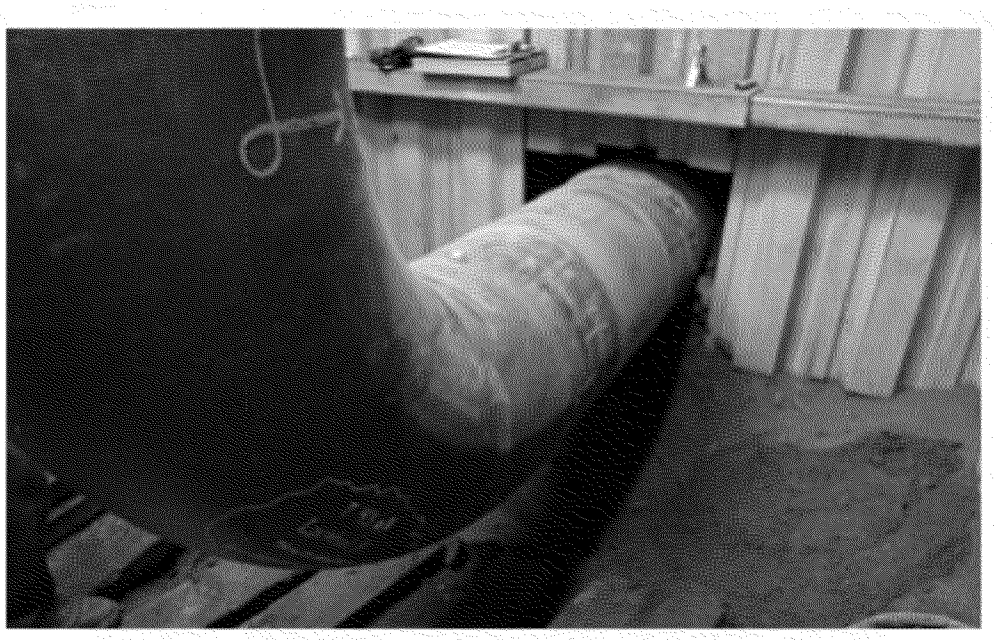
Overview of Reference Girth Weld measurments were taken from.

Overview of coating condition -1ft to 2ft, 3:00 position

Overview of coating condition -1ft to 2ft, 3:00 position

Overview of coating condition -1ft to 2ft, 9:00 position

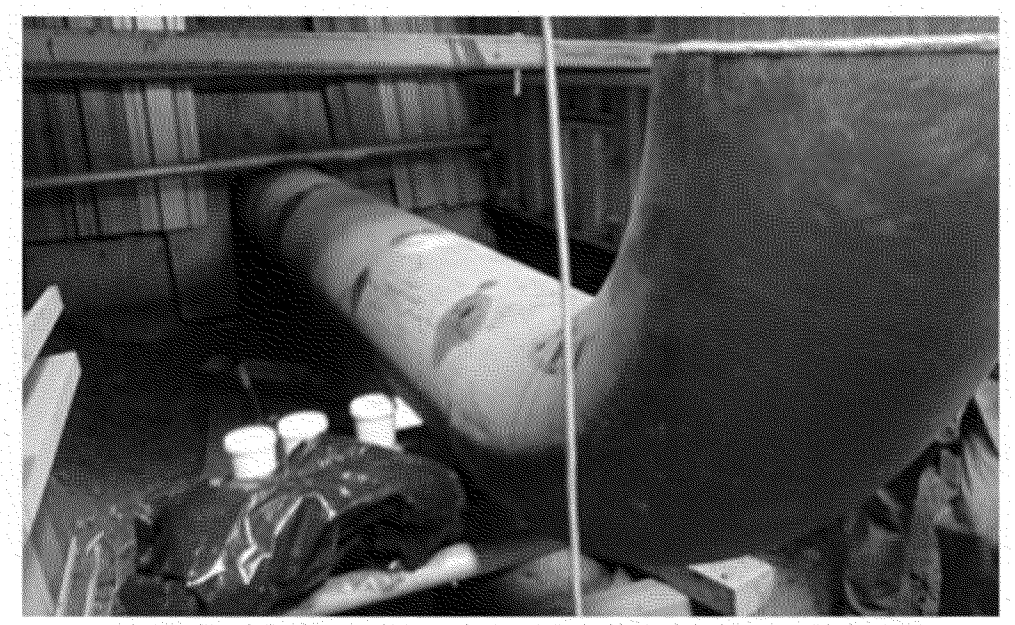
Redacted



Overview of coating condition -1ft to 2ft, 9:00 position

Overview of coating condition 17ft to 20ft, 3:00 position

Overview of coating condition 17ft to 20ft, 3:00 position



Overview of coating condition 17ft to 20ft, 9:00 position

Redacted

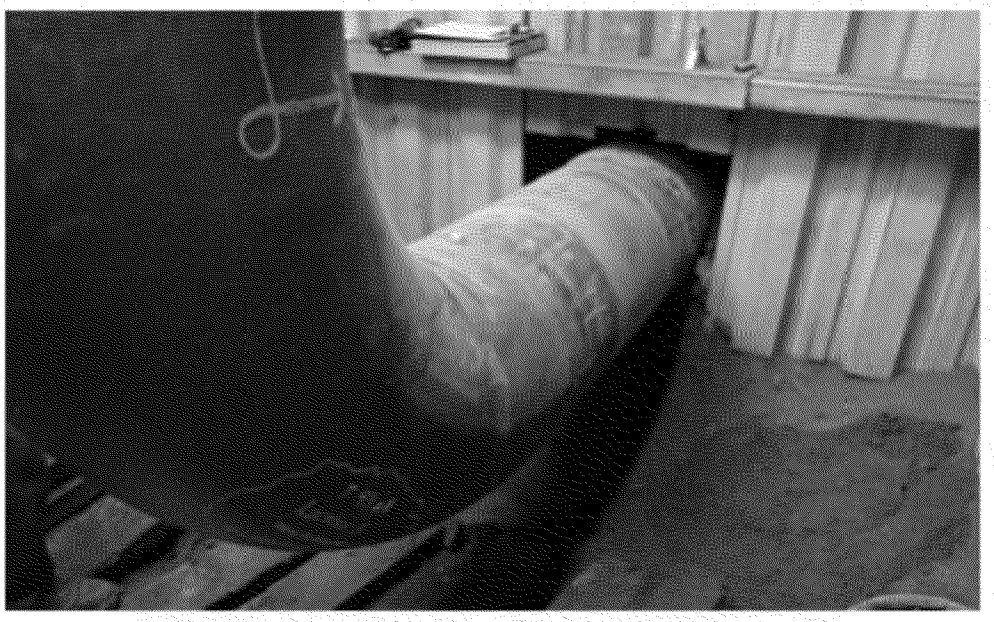
Overview of coating condition 17ft to 20ft, 9:00 position

Overview of MPI layout -1ft to 2ft, 3:00 position

Overview of MPI layout -1ft to 2ft, 3:00 position

Overview of MPI layout -1ft to 2ft, 9:00 position

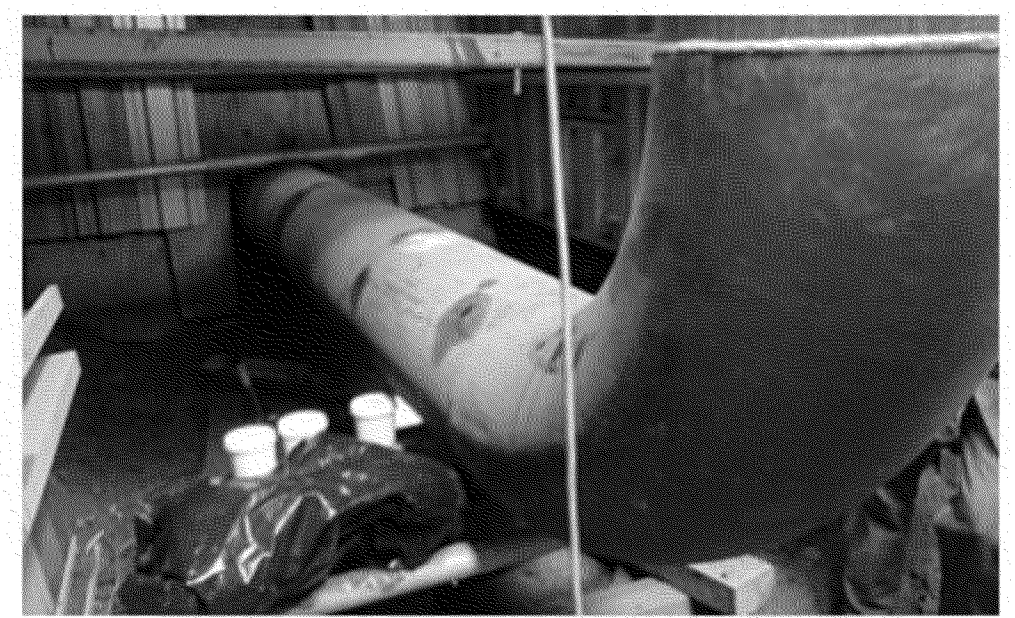
Redacted



Overview of MPI layout -1ft to 2ft, 9:00 position

Overview of MPI layout 17ft to 20ft, 3:00 position

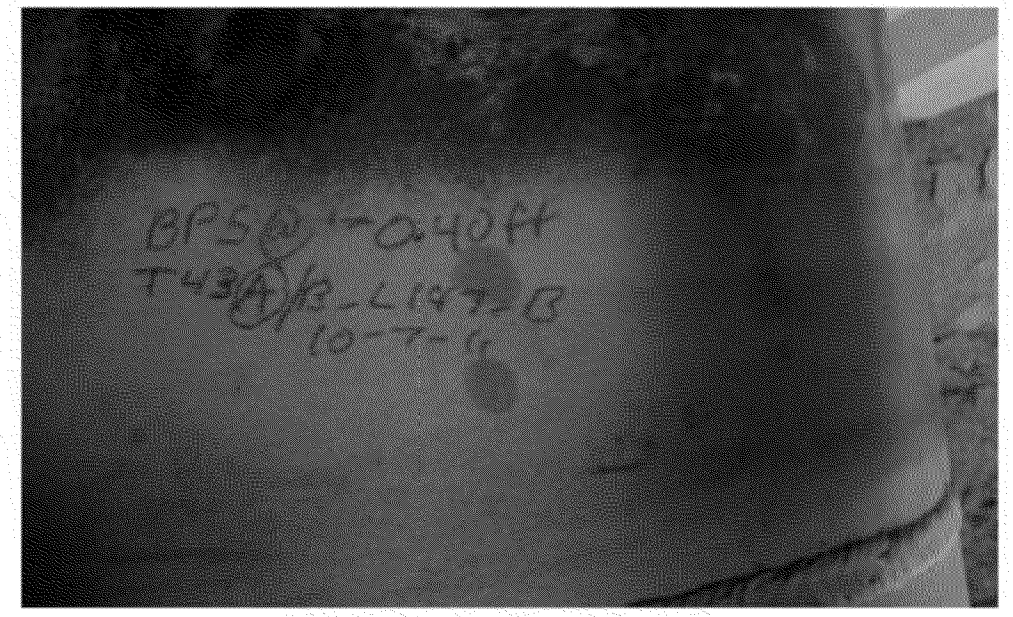
Overview of MPI layout 17ft to 20ft, 300 position



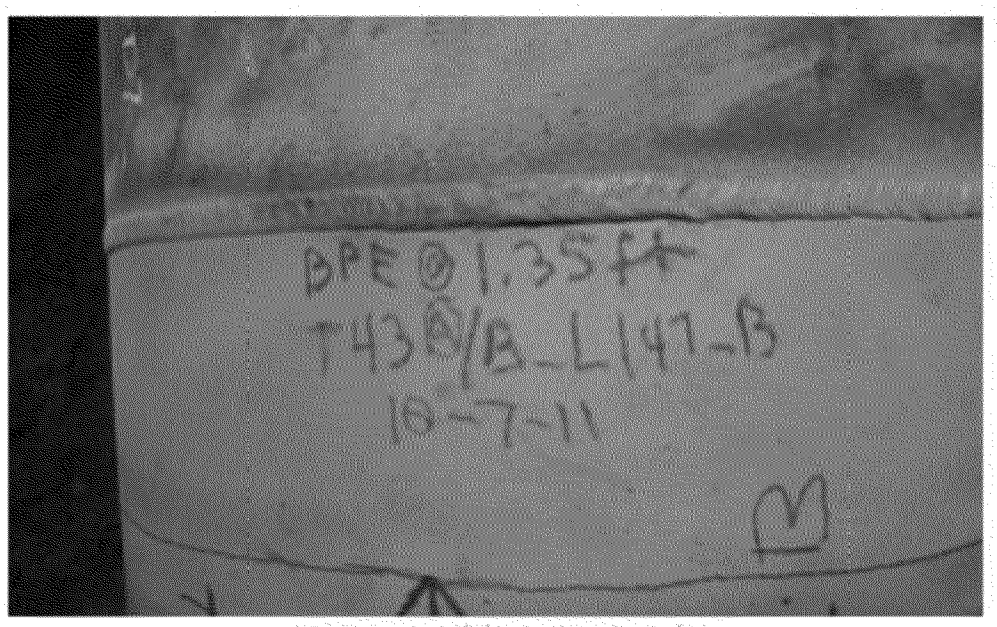
Overview of MPI layout 17ft to 20ft, 9:00 position

Redacted

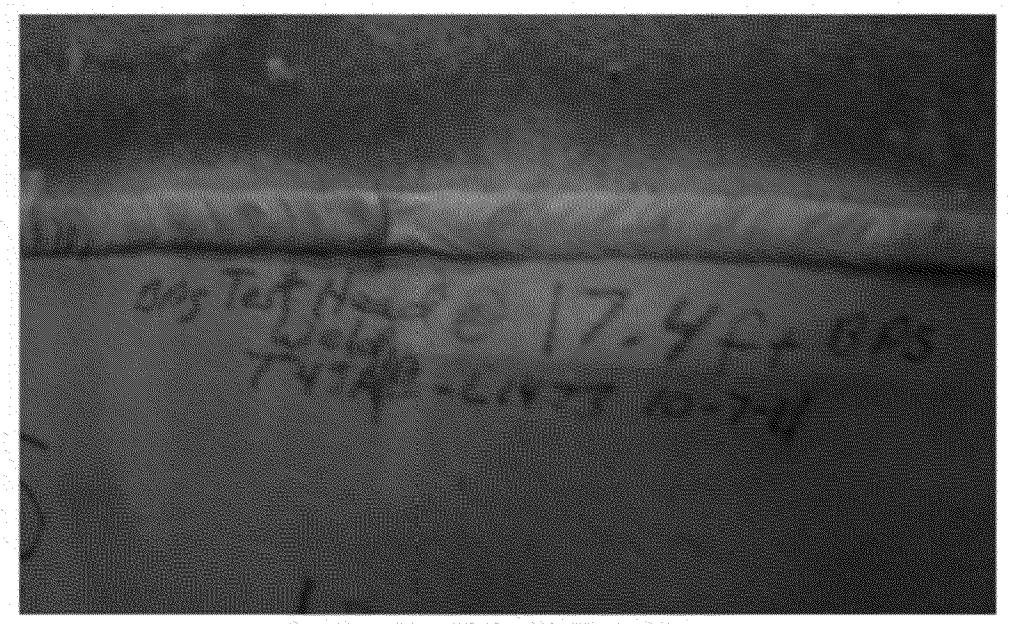
Overview of MPI layout 17ft to 20ft, 900 position



Overview of bare pipe start



Overview of bare pipe end



Overview of bare pipe start

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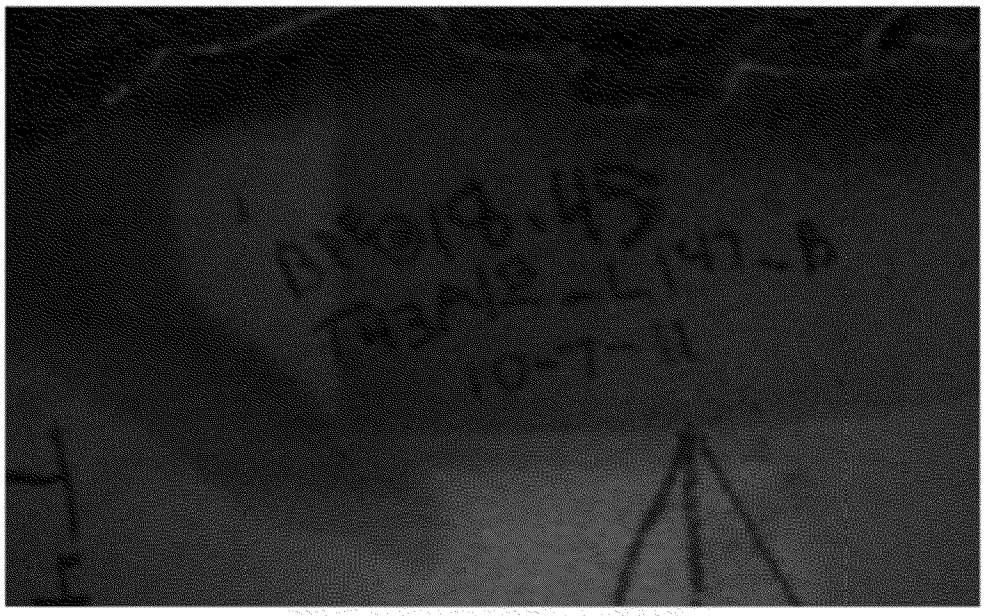


Overview of bare pipe end

Overview of feature joint long seam @ 3:55

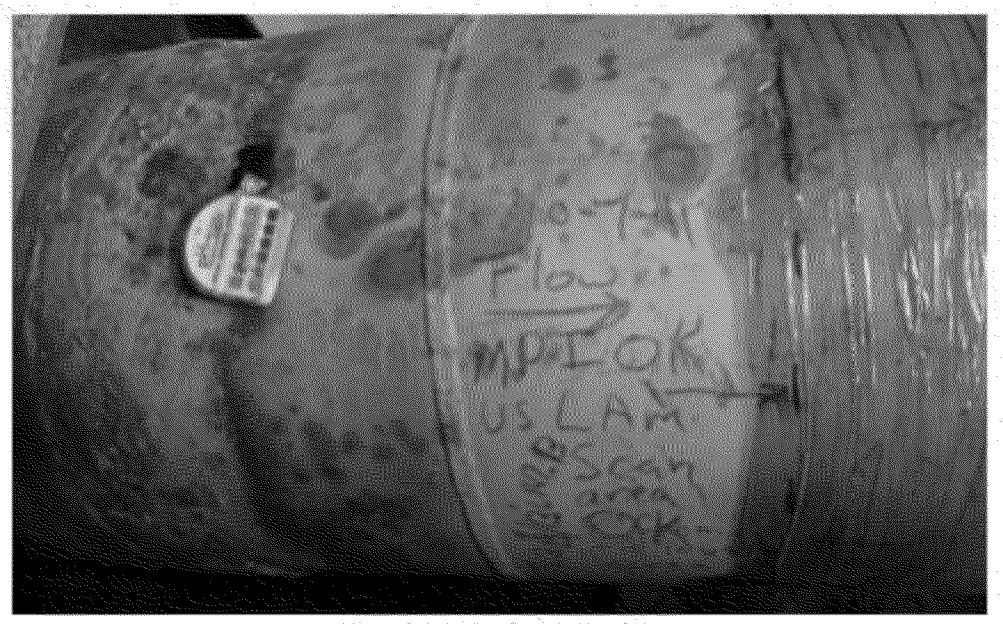
Overview of US lamination scan area.

Overview of DS lamination scan area.

Redacted

Overview of US MPIOK and Lamination scan OK.

Overview DS of MPIOK and Lamination scan OK.



Overview of pipe Ph.

Closeup of pipe Ph.

Redacted

Removed pipe section coating assesment 3:00

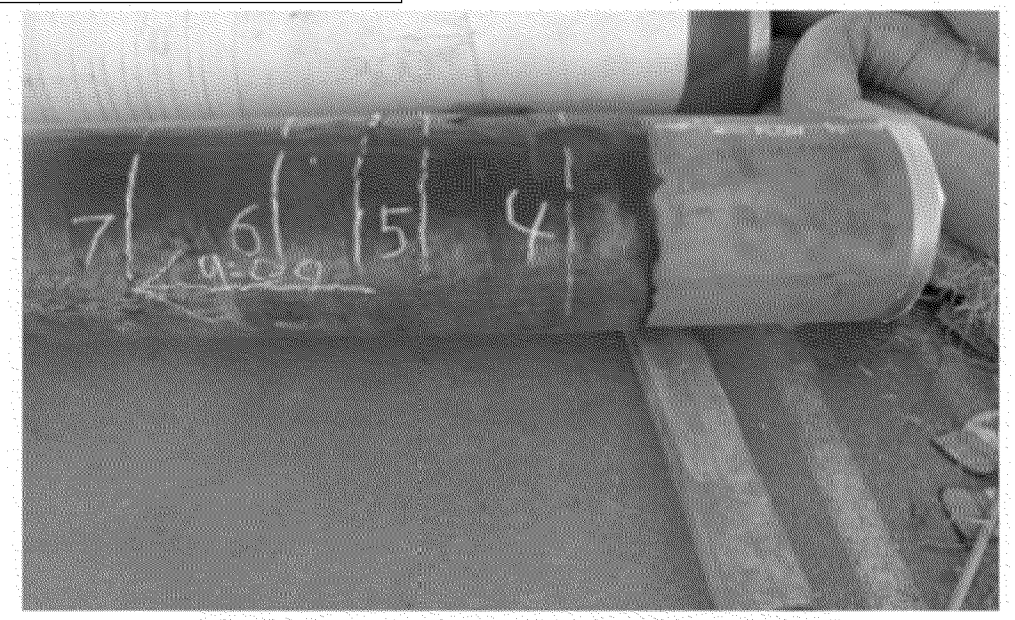
Overview of coating condition 3:00 position

Overview of coating condition 3:00 position

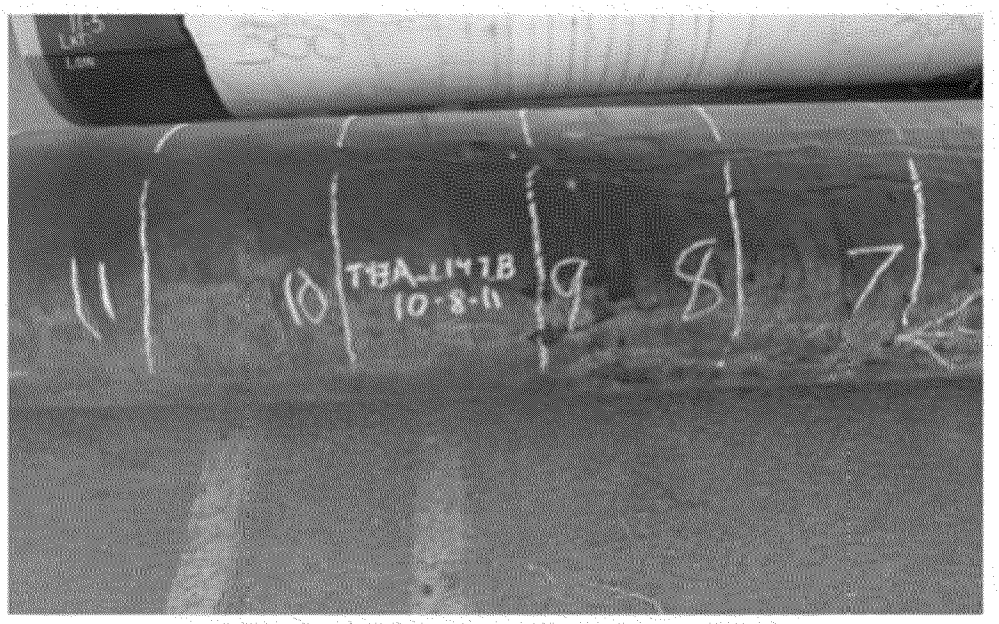
Overview of coating condition 3:00 position

Redacted

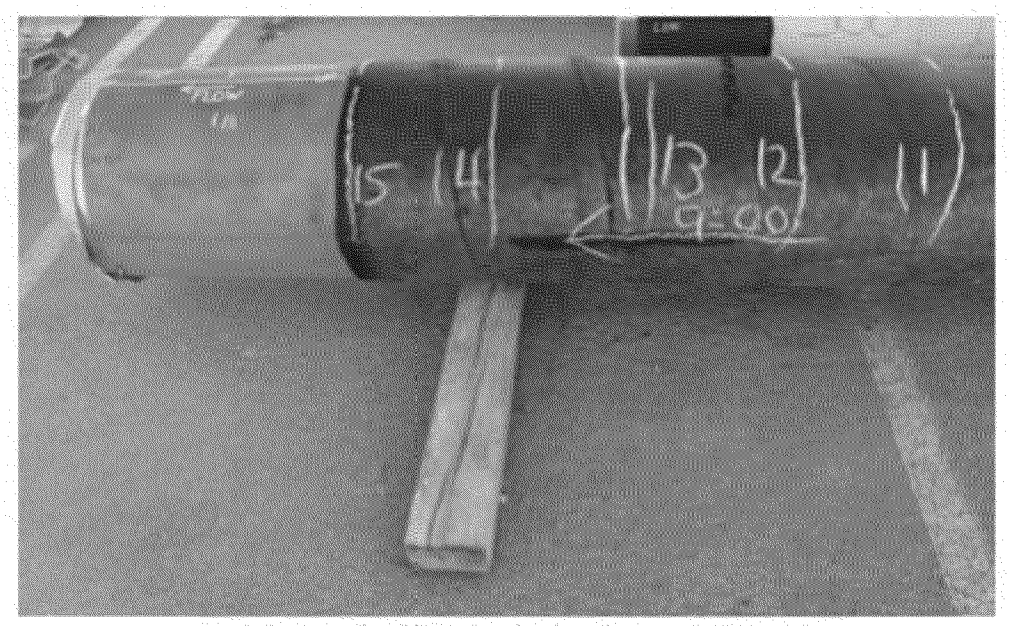
Removed pipe section coating assesment 9:00



Overview of coating condition 9:00 position

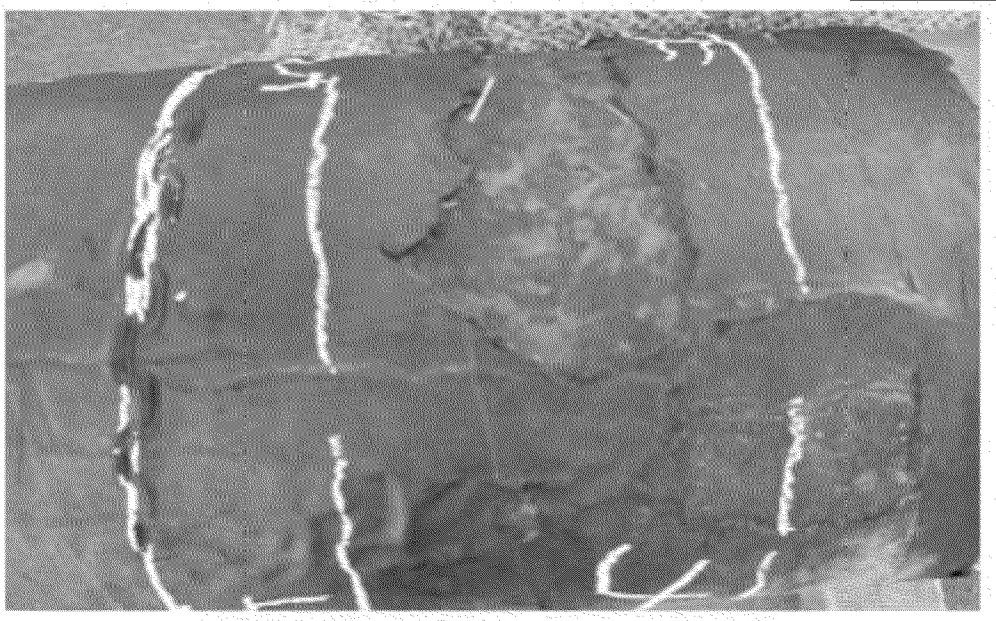


Overview of coating condition 9:00 position

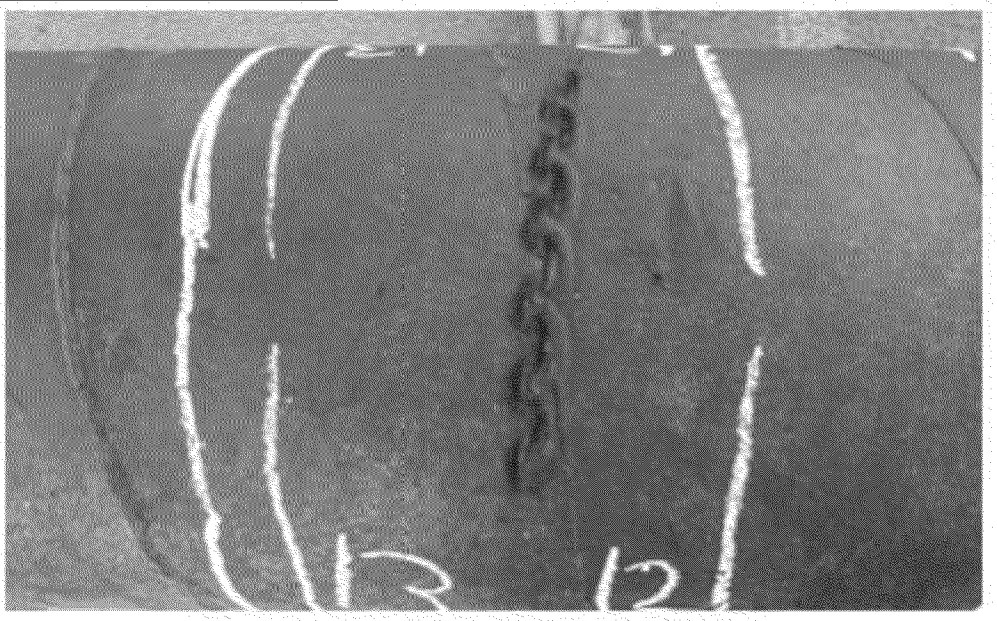


Overview of coating condition 9:00 position

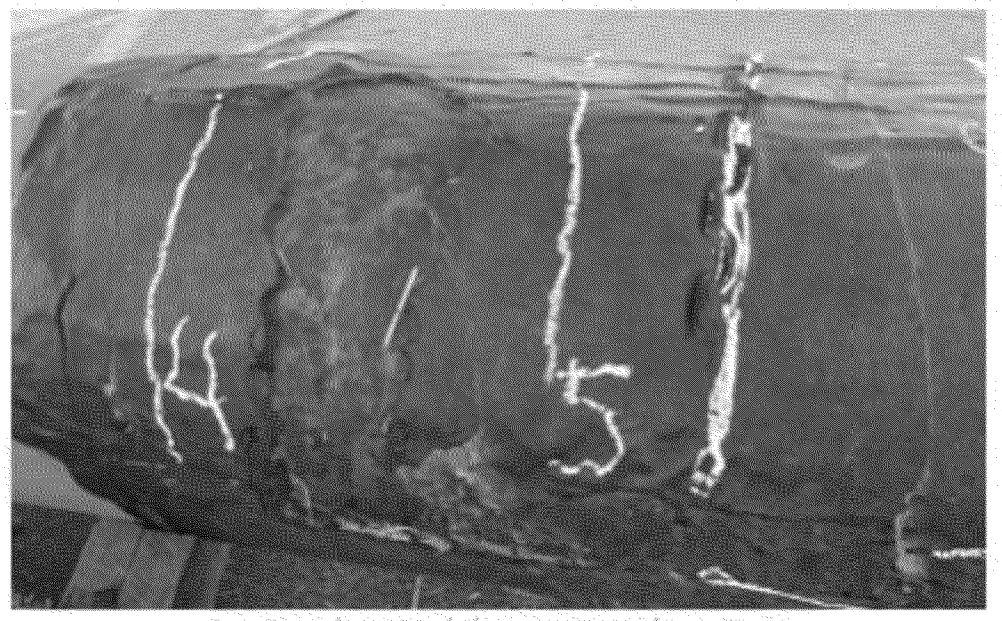
Redacted



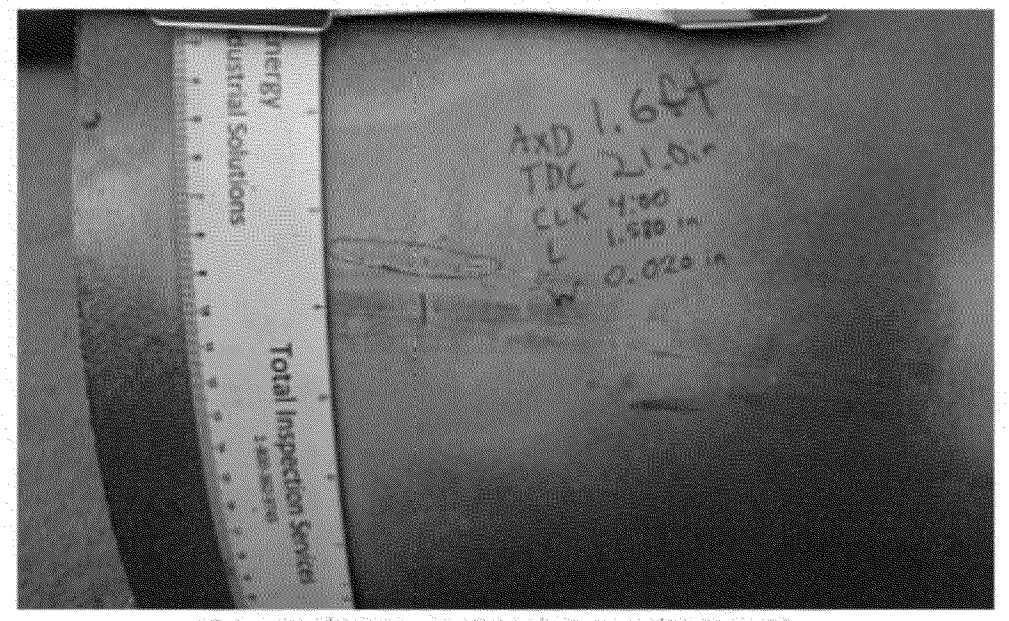
Coating damaged from removal process.



Coating damaged from removal process.



Coating damaged from removal process.



Removed pipe section linear indication-01

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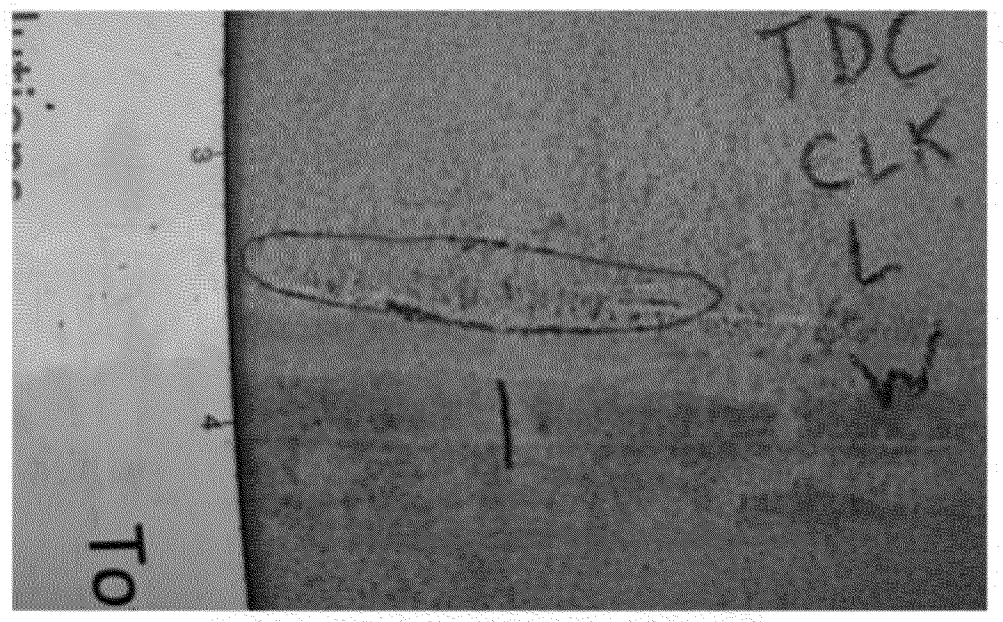
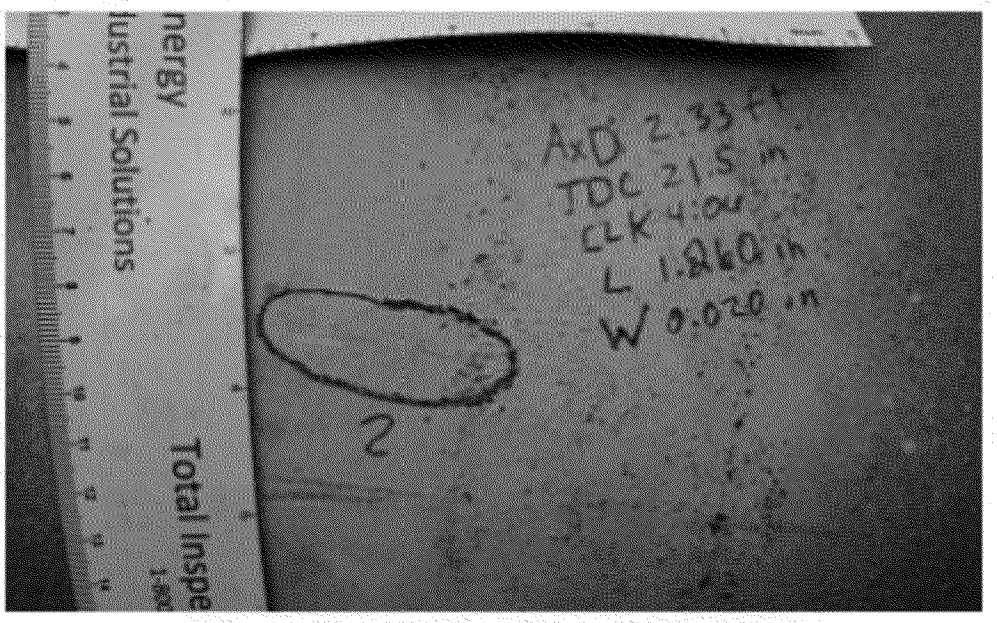
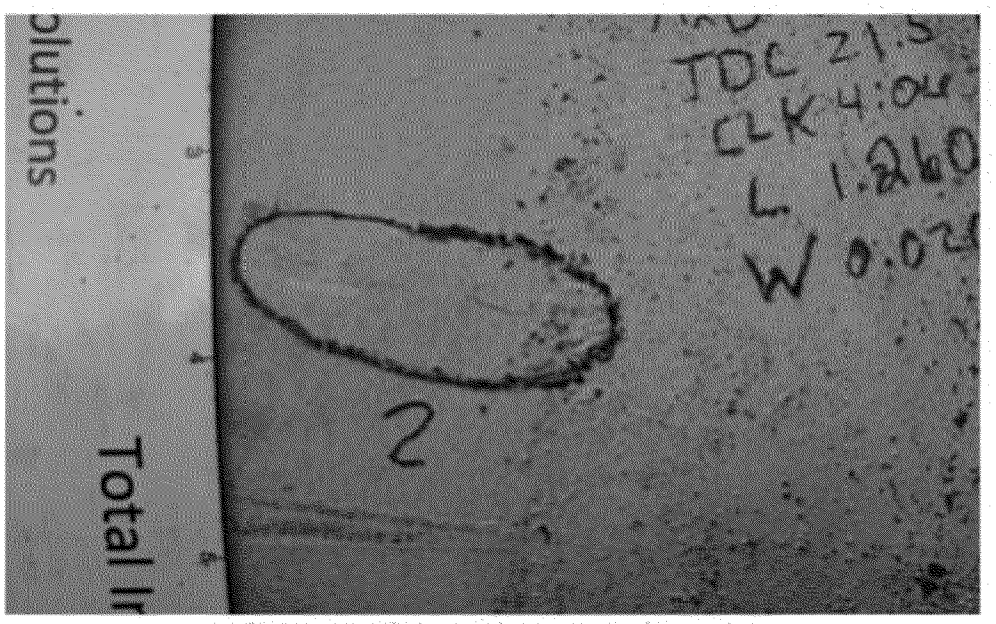


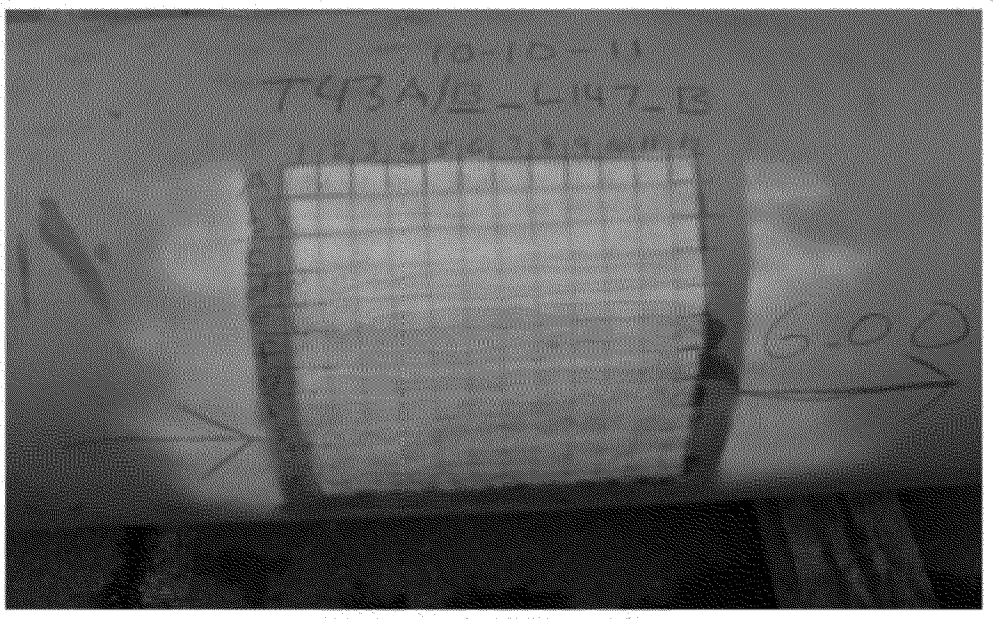
Close up of MT Indications of LIN-01



Removed pipe section linear indication-02



Close up of MT Indications of LIN-02



Overview of UT Grid.

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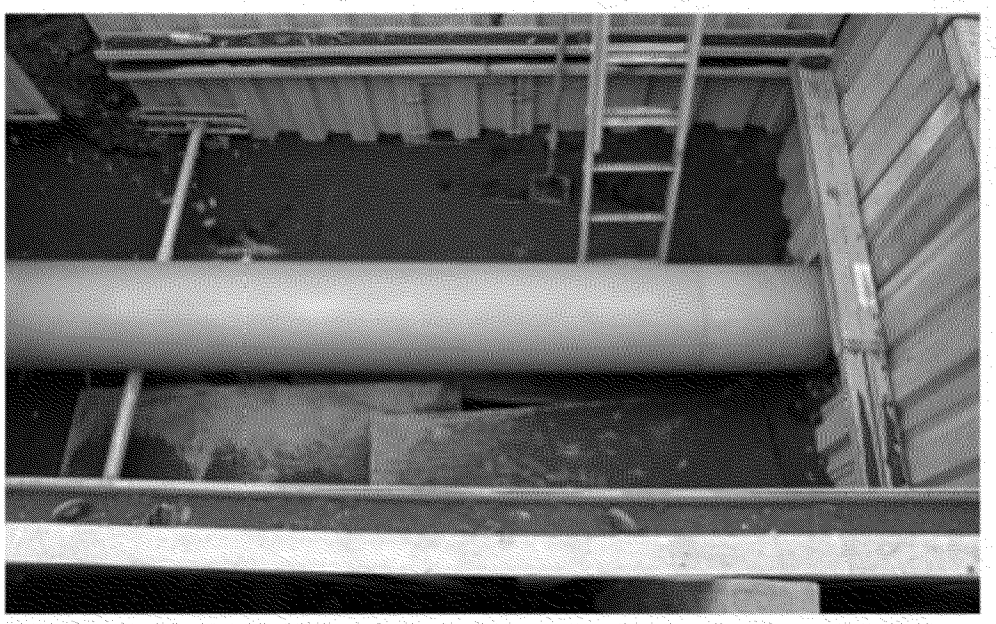
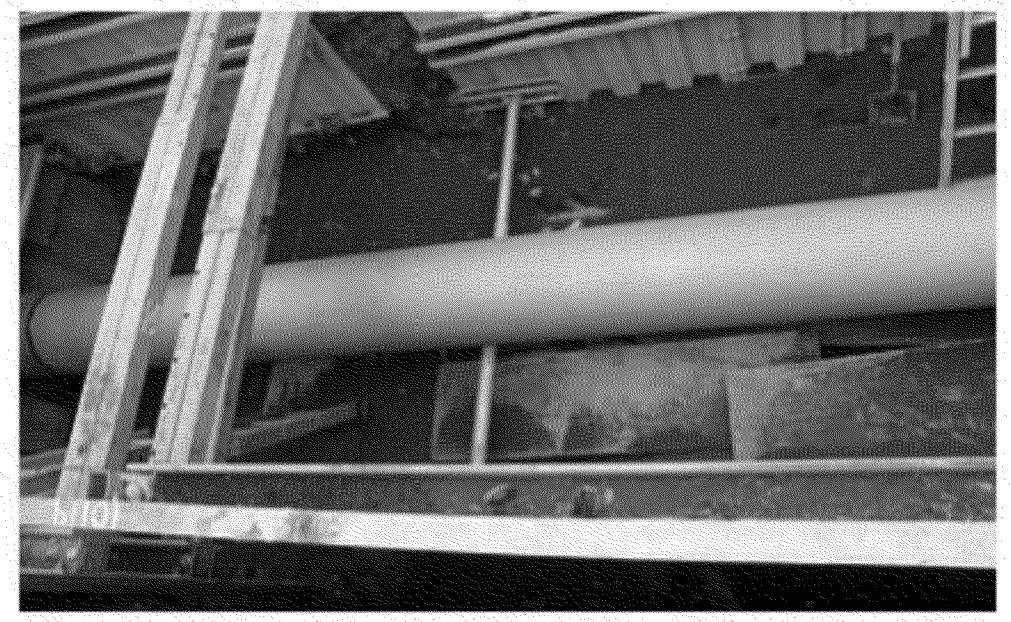
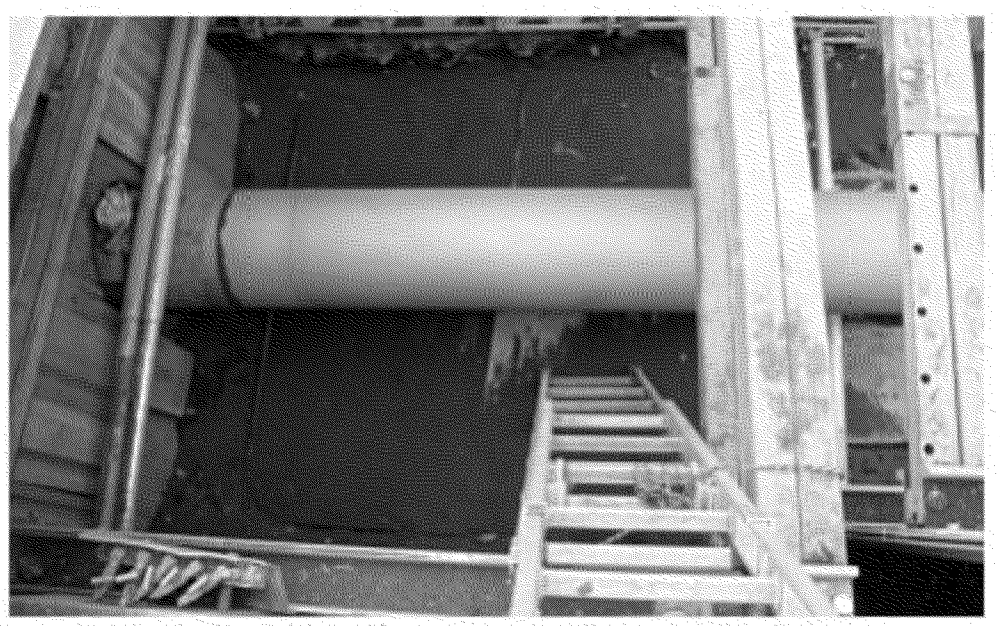


Overview of clean blasted inspection area prior to recoat activities



Overview of clean blasted inspection area prior to recoat activities

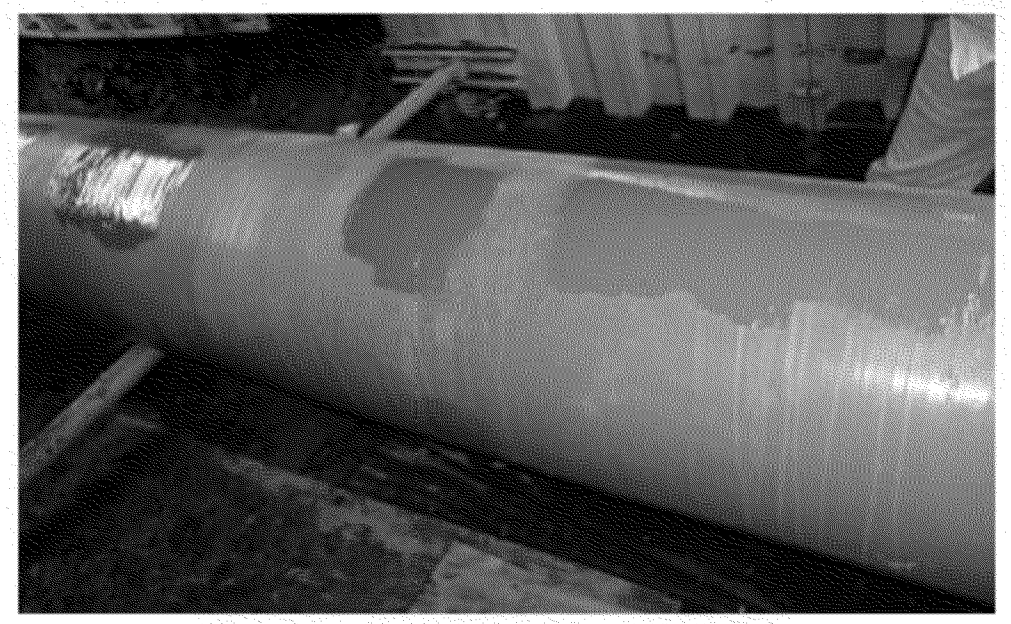


Overview of clean blasted inspection area prior to recoat activities

Overview of final coating condition US 300

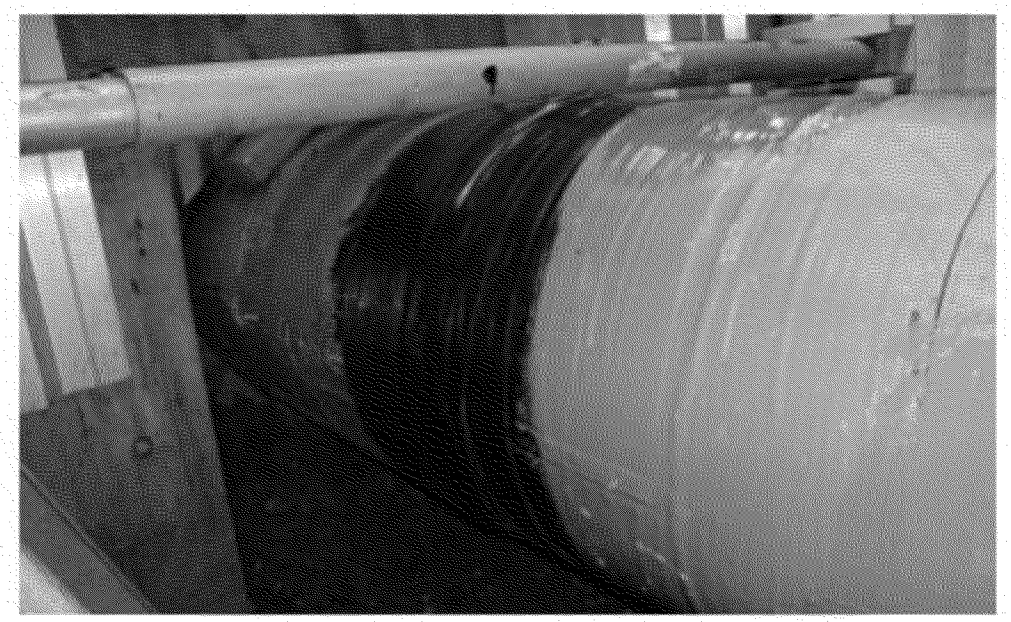
Redacted

Overview of final coating condition 3:00



Overview of final coating condition 3:00

Overview of final coating condition 3:00



Overview of final coating condition US 3:00