

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 November 8, 2011 to January 0, 1900
T30_L132_Leak _MP-15.0029
Documents Contained Within:

H-Form Report T30_L132_Leak MP-15.0029 NDE Reports of T30_L132_Leak MP-15.0029 Photo Report of T30_L132_Leak MP-15.0029

Authors: Redacted Date:



| Form H: Direct Exam | | _ | | | | | | | | | | | | |
|---------------------|-------------------------------|------------------------|-----------------------------|------------------|---------------------------------|------------------|----------------|-------------------|-------------|--------------|---------------------------|------------------|-------------------|----------|
| | DA Route Number: | <u>VILI</u> L-1 | 122 | _ | <u>D</u> Sita Danianatian | | 20 1!: | | | | | <u>ILI</u> | | |
| Da | te of Excavation: | | /2011 | - | Site Designation: N-Segment: | - 1 | 30_Leak | | | | g Distance ef. Section | | Table 5.6.2 |) |
| 24 | Mile Point: | | 0029 | - | IMA Number: | | | | 1 | Reference | | | 14510 0.0.2 | <u> </u> |
| | on Performed By: | | | - | · | | | | Dista | ance From | Girth Weld | : | | |
| PG&E | Project Manager: | | Redacted | _ | Region Number: | | | | | | | | | |
| | Approved By: Order Number: | | 7351 | - Sub | region # (ICDA): Stationing: | | | | | | | | | |
| Excava | ntion Priority: | | | - | | | Excavation | Reason: | | | | | | |
| Imme | | Scheduled (For | III- | ¶ 1 Year ■ | Other) | | ECDA | | ILI | ☐ Re | coat | | | |
| Monito | _ | T Effectiveness | | . | — | | ICDA | | Other | Leak | oout | | | |
| <u> </u> | _ | 4 | | ICDA | | ш | ICDA | | | | | | | |
| | • | P/S or CIS reads b | | | | | | | N/ | A | | | | |
| Excavation Details: | | tart GPS Coordina | | • | Field Measureme | nt) OP: | | Planner | l Excavatio | on Length (f | =t)· | | | |
| | Easting: | | | | Acc | | | | | on Length (| | | 13.2 | |
| | Centerli | ne GPS Coordinat | es | (Uncorrected | Field Measureme | nt) | | | | SPS File Na | | | N/A | |
| | Northing: | | | | | OP: | | | | | | | | |
| | Easting: | | | | Acc | ~: | | | | | | | | |
| | | tch End GPS Coor | | , | Field Measureme PD0 | | | | | | | | | |
| | Easting: | | | | Acc | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 1.0 Data Befo | re Coating Remo | <u>val</u> | | | | | | | | | | | | |
| 1.1 Na | tive Soil Type: | | X Clay | Rock | X Sand | X Loa | am 🗀 | Wet | | Other | | | | |
| | 1.1A Backfill Mat | | _ ′ | Sand | Slurry | Nativ | | • | th of Cover | _ | | 2.5 | | |
| | mments: N/A | | | Gana | Glarry | | | Борі | 01 00001 | (1 1.) | | 2.0 | | |
| | | | <u> </u> | Compostio | DI- | otio Tono | | May Tana | | - | | 7 Dawara | | |
| 1.2 | Coating Type: | HA | | Somastic | — | istic Tape | Ш | Wax Tape | L | T FBE | L | Powerc | rete | |
| | Bare/ | None | Paint X | Other: | Coal tar | | Co | omments: | | | | N/A | | |
| Coa | ating Thickness (Ir | nches): | 0.32 | 2 | | Number of | Layers: | 2 | _ | | | | | |
| 1.3 | Holiday Testir | ng Performed?: | ☐ Y | es X | No | Voltage Us | sed: | | _ | Map Loca | ation of Holi | days Below. | | |
| | | Device U | sed: C | oil 🔲 | Wet Sponge | | | Commen | ts: | | | | | |
| 1.4 | Pipe-to-Soil | Potentials in Dito | | | | .000 3:00 | D -566 | 3.000 | 6:00 | 0 -562. | 000 9:0 | 00 -49 | 9.000 | |
| | · | | , , | | | .000 3:00 | | 0.000 | 6:00 | | | | 2.000 | |
| | Comments: Sor | ne of the upstream | soil was disturbe | | 12.00 | .000 0.00 | | <u> </u> | 0.00 | <u>-570.</u> | 000_0. | <u>-57</u> | 2.000 | |
| 1.5 S oi | — il Resistivity in Di | | | | | | | | | | | | | |
| 1.0 | - | X 4-Pin | | 1,84 | 3.00 | | X | Soil Box | | | | 2,345 | | |
| | Comments: The | lawn spinklers we | nt off before takir | ng 4-pin reading | g. | | | | SRM- | -100 US | S:1 | N/A | DS: | N/A |
| 1.6 Soi | il Sample Locatio | n | Comments | Downstre | eam cross-section | at depth of 5. | 8ft. | | | | | | | |
| | ound Water Prese | | Yes | | | ple(s) Collecte | | Yes | | No | Sampl | e pH: N/A | | |
| | | | 165 | X No | Saiii | pie(s) Collecte | ur | 1 168 | Ш, | NO | Sampi | е рп. <u>м/А</u> | | |
| | mments: N/A | \ | | | | | | | | | | | | |
| 1.8 Co | ating Condition: | | Good - Ad | hered to Pipe | | X Fa | ir - Coating F | Partially Dis | bonded or | Degraded | | | | |
| | | | Poor - Coa | ating Significan | itly Disbonded or N | Missing | | | | | | | | |
| Cor | mments: Exp | oosed pipe from - 0 | .00' to 13.00'. Ti | ne dig crew rer | moved coating fror | n 4ft to 9ft cer | ntered around | d the 9:00 l | ooking for | the leak an | d | | | |
| | | mpletely removed t | | | | | | | | | | | | |
| 1.9 | | g Degradation*: | <u> </u> | | <u> </u> | | erence Point | | JS Ditch St | tart | | | | |
| | ote any calcareous | deposit locations | | | | Zero Reie | rence i onic | . <u>-</u> | O DILOT O | tart | | | | |
| | Holidays | Disbond | ments | | | | | Flow - | | | | | → | |
| 12 o'clock | | 1 | <u> </u> | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| A | | | | | | l | | | | | | | | |
| 9 o'clock | | | | | | | | | | | | | | |
| | | | | | | | | Coatin | g | | | | | |
| 6 o'clock | | | - | | | | | remov | ed by | | | | $\overline{}$ | |
| | | | | | | | | dig cre before | | | | | | |
| 3 o'clock | | - | | | | | | inspec | | | | | \longrightarrow | |
| 2 0 0 0 0 | | | Num-22/10/22/2017/2017/2017 | | | | | | | | | | | |
| 12 o'clock | (| | | <u> </u> | | | | | | | | | | |
| Feet | 0 | 1.5 | 3 | 4.5 | 6 | 7.5 | 9 | | 10.5 | | 12 | 13 | | |
| | | | 9 | | | Í | | | | | | | | |
| | 1 CaCO3 | | its containing calciu | m | | | | | | | | | | |
| | 2 FeO | - General iron oxide | with scale | | | | | | | | | | | |
| | 3 FeCO3 | - Calcareous depos | its containing iron | | | | | | | | | | | |

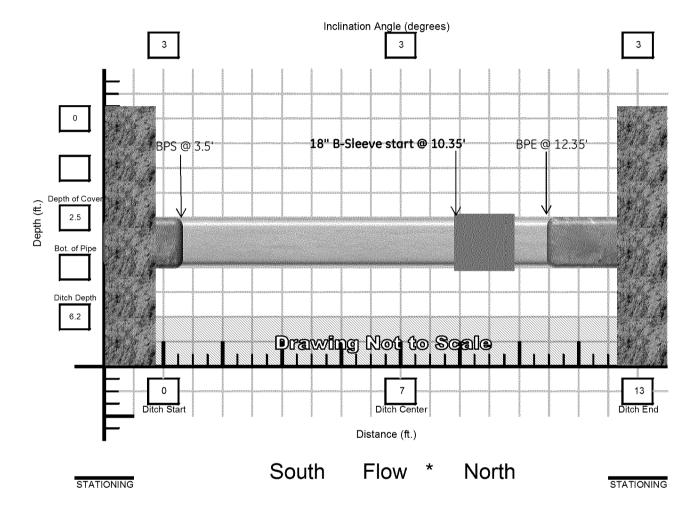
| orm H: Di | | Data Sheet - Page 2 | of 10 | | | | |
|----------------------|--|--|--|---|--------------------------------------|----------------------------|----------------|
| | DA/IL Route Number: | <u>.I</u> L-132 | <u>□</u> Site Designation | DA T30_Leak | 811 | <u>ILI</u> og Distance: | |
| | Date of Excavation: | 11/8/2011 | N-Segment: | | | Ref. Section: | Table 5.6.2 |
| | Mile Point: | 15.0029 | IMA Number: | | | Girth Weld: | |
| Examin | nation Performed By: | Redacted | _ | | Distance Fro | m Girth Weld: | |
| PG | &E Project Manager: | Mark Cabral Dedacte | Region Number: | | | | |
| | Approved By: Order Number: | 41497351 | Subregion # (ICDA): Stationing: | | | | |
| | Order Namber. | 41497331 | | | | | |
| 1.10 | Photos Taken?*: *See Photo Log for a | X Yes No additional information. |) | | | | |
| 1.11 | Coating Sample Ta | ken?: Te | es 🛛 No Lo | cation of Sample: | | N/A | |
| 1.12 | Liquid Undernea | th Coating?: T | es X No If` | Yes, pH of Liquid: _ | | | |
| 1.13 | Corrosion Product Comments: A dep | | No If | Yes, Was Sample T 6:22 with a width of | | X No | |
| 1.14 | Soil pH (Sb Electro | | | wnstream: | | pe pH: | 6.0 |
| .0 Data Af | ter Coating Remo | - oval | | | | | |
| 2.1 | Pipe Temperature (| | | Measured Pipe Di | ameter (In.): 24 | | |
| | | | | ` | | | |
| 2.2 | Weld Seam Type: | DSAW Spiral | SSAW ERW | = | nith IF CAN'T DET | ERMINE, VISUALLY | PERFORM |
| 2.3 | Girth Weld Coordin | nates & Identify Type (S | See Table 5.7.3): | - | MACROETCH | & LOCATE | |
| | Northing: N/A Easting: N/A Elevation: N/A | | PD0 | | LS Weld Clock Position | | S / DS SMLS |
| 0.4 | | | | | | | |
| 2.4 | Damage Found: Corrosion Dama Other Damage: | * - | No Through-wall | Mechanical Dam hole, see attached | age Yes pages for additional details | X No | |
| 2.5 | UT Wall Thickness | Measurements: U | S / DS | US / DS | US / DS | | US / DS |
| | | | 0.265 1 O'clock | | 2 O'clock 0.266 | 3 O'clock | 0.276 |
| | | | 0.283 5 O'clock 0.283 9 O'clock | | 6 O'clock 0.285 0 O'clock 0.275 | 7 O'clock 11 O'clock | 0.283 0.276 |
| | UT Wall Thickness | | d. Be sure to attach grid t | | | 11 0 0100K | 0.270 |
| 2.6 | | ag. Part. Is Required. | Comments: | | ar indications were found or | the evansed nine | |
| 2.0 | Were there any lines | · _ | X Yes No | | report electronically as par | , , , , | • |
| | Trois alors any lines | L maiodaono. | <u> Д</u> 199 Д 110 | | plack light and white light pl | | s . |
| 2.7 | | cument Corrosion and additional information. | Other Anomalies* | | | | |
| 2.8 | Overview Map of C | orroded Area*: | | | | | |
| | *See Pit Depth Meas | surement Grid for addition | onal Information | Zero Reference | Point: Ditch start | | |
| | | | | | Flow — | | |
| *Note any 12 o'cl | calcareous deposits. | | <u> </u> | - 1 | <u> </u> | г г | |
| 12001 | OCK | | | | | | |
| | | | | | | | |
| 9 o'cl | lock | | | | | | 1002 |
| | | | | | | | |
| 6 o'cl | lock | | | 1 | | | |
| | | [| | | | | |
| 3 o'cl | lock | \longrightarrow | + + - | | | | |
| 3 0 01 | look | 1 | | | | | |
| 12 o'cl | | | | | | | |
| | eet 0 | | - | 7 | • | | 13 |

Form H: Direct Examination Data Sheet - Page 3 of 10

| 3 | | | | |
|-----------------------|--|---|--|---|
| <u>'ILI</u> | <u>DA</u> | | <u>ILI</u> | |
| L-132 | Site Designation | T30_Leak | ILI Log Distance: | |
| 11/8/2011 | N-Segment: | | RMP-11 Ref. Section: | Table 5.6.2 |
| 15.0029 | IMA Number: | | Reference Girth Weld: | |
| Redacted | | | Distance From Girth Weld: | |
| Mark Cabral/ Redacted | Region Number: | | _ | |
| | Subregion # (ICDA): | | _ | |
| 41497351 | Stationing: | | _ | |
| | L-132 11/8/2011 15.0029 Redacted Mark Cabral/ Redacted | L-132 Site Designation 11/8/2011 N-Segment: 15.0029 IMA Number: Pedacted Mark Cabral/ Redacted Region Number: Subregion # (ICDA): | L-132 Site Designation T30_Leak 11/8/2011 N-Segment: 15.0029 IMA Number: Redacted Region Number: Subregion # (ICDA): Subregion # (ICDA): | L-132 Site Designation T30_Leak ILI Log Distance: 11/8/2011 N-Segment: RMP-11 Ref. Section: 15.0029 IMA Number: Reference Girth Weld: Dedacted Distance From Girth Weld: Mark Cabral/ Redacted Region Number: Subregion # (ICDA): Subregion # (ICDA): |

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):

| Redacted | |
|--|--|
| **See attached Redac screen shot on page 11. | |
| T G | |

Form H: Direct Examination Data Sheet - Page 4 of 10 EXTERNAL PIT DEPTH MEASUREMENT GRID SHEETS

| | Route | e Numb | DA/ILI | | L-132 | | | Site | Desig | <u>D</u> nation | <u>A</u> | T30 | Leak | | | 1111 | .og Dis | | <u>-1</u> | | | |
|-------------------------------|----------|----------------------|------------|------------|------------|------------|------------|------------|--------|--------------------|-------------|--------|------|----|---------|----------------------|----------|----------|-----------|-------|-------|----|
| Da | te of Ex | xcavati | on: | | 1/8/201 | 11 | _ | | N-Seg | ment: | | 700_ | Loak | | | MP-11 | Ref. Se | ection: | | Table | 5.6.2 | |
| Examination | | /lile Poi ormed l | Bv:□[| Dedac | 15.0029 | | 工 | | IMA Nu | ımber: | | | | | , | eference ance Fro | | | | | | |
| PG&E I | Project | Manag | jer: M | ark Cal | bral Re | :dacte | | | | ımber: | | | | | , | | | | | | | |
| | | roved l r Numb | | 4 | 149735 | 51 | <u> </u> | Subreg | | oning: | | | | | • | | | | | | | |
| | | | | | | | _ | | | | | | | | | | | | | | | |
| Grid Size = Clock Position | | | | Inch (s | specify (| grid size | э) | | | | | | | | | | | | | | | |
| | Anoma | | VOL-0 | | | | | | | | | Grid # | _ | | | | | | | | | |
| А | 0.000 | 2 0.002 | 3 0.023 | 4 0.007 | 5 0.000 | 6 0.019 | 7 0.014 | 8 0.000 | 9 | 10 0.000 | 11 0.000 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| В | 0.000 | 0.000 | 0.016 | 0.053 | 0.006 | 0.000 | 0.021 | 0.019 | 0.000 | 0.000 | 0.000 | | | A) | XD: 10. | 96' (fro | | itch sta | rt) | | | |
| С | 0.005 | 0.014 | 0.026 | 0.077 | 0.163 | 0.016 | 0.020 | 0.014 | 0.005 | 0.000 | 0,000 | | | | | Clock xial Ler | ngth: 3. | | | | | |
| D | 0.012 | 0.026 | 0.021 | 0.124 | 0.045 | 0.043 | 0.070 | 0.060 | 0.004 | 0.000 | 0.000 | | | M | | nferenti oth: Thi | | | 7) | | | |
| Е | 0.044 | 0.166 | 0.083 | 0.020 | 0.039 | 0.280 | HOLE | 0.132 | 0.099 | 0.010 | 0.000 | | | | | | | | | | | |
| F | 0.000 | 0.124 | 0.058 | 0.010 | 0.000 | 0.111 | 0.195 | 0.199 | 0.078 | 0.000 | 0.000 | | | | | | | | | | | |
| G | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.008 | 0.024 | 0.023 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | |
| Н | 0.000 | 0.000 | 0.022 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.032 | 0.027 | | | | | | | | | | | |
| 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.022 | 0.024 | | | | | | | | | | | |
| J | | | | | | | | | | | | | | | | | | | | | | |
| К | | | | | | | | | | | | | | | | | | | | | | |
| L | | | | | | | | | | | | | | | | | | | | | | |
| M | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | |
| Р | | | | | | | | | | | | | | | | | | | | | | |
| Q | | | | | | | | | | | | | | | | | | | | | | |
| R | | | | | | | | | | | | | | | | | | | | | | |
| S | | | | | | | | | | | | | | | | | | | | | | |
| Т | | | | | | | | | | | | | | | | | | | | | | |
| U | | | | | | | | | | | | | | | | | | | | | | |
| V | | | | | | | | | | | | | | | | | | | | | | |
| W | | | | | | | | | | | | | | | | | | | | | | |
| V | | | 1 ! | | . ' | | 1 ! | | | | | | | | | i 1 | 1 | | | | | |

PIT DEPTH GRID 1 OF 2

Form H: Direct Examination Data Sheet - Page 5 of 10 EXTERNAL PIT DEPTH MEASUREMENT GRID SHEETS

| | | e Numl | | | L-132 | | | Site | | nation | | T30_ | Leak | | | | .og Dis | tance: | | | | |
|-------------------------------|----------|--|----------|---------|--|----------|----|--------|----------|----------------------|----------|-------|------|----|----|----|--------------------|--------|----|-------|-------|----|
| Da | te of E | xcavat Vile Po | | | 1/8/201 15.002 | | _ | | | gment: umber: | | | | | | | Ref. Se e Girth | | | Table | 5.6.2 | |
| Examinatio | n Perf | ormed | ву: 🗔 | Doda | cted | | | | IIVIA IV | iiiibei. | | | | | | | om Girtl | | | | | |
| PG&E | roject | Manag | ger: M | ark Cal | bral 🖸 🙃 | dacto | | | | ımber: | | | | | | | | | | | | |
| | | roved r Numl | | 4 | 14973 | 51 | _ | Subreg | | ICDA): oning: | | | | | | | | | | | | |
| | | | | | | | | | | ······g. | | | | | • | | | | | | | |
| Grid Size = Clock Position | | | .5 w) | Inch (s | specify | grid siz | e) | | | | | | | | | | | | | | | |
| | Anoma | aly# | VOL-0 | 2 | | | | | | | • | Grid# | _ | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| A | 0.000 | | 0.000 | | | | | . A. | | 8 (Fron Clock | : 6:15 | | π) | | | | | | | | | |
| В | 0.000 | 0.041 | 0.000 | | | | | . , | | ial Lenç ferentia | | | | | | | | | | | | |
| С | 0.000 | 0.000 | 0.000 | | | | | | Ma | ax Depi | th: 0.04 | 11" | | | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | |
| E | | | | | | | | | | | | | | | | | | | | | | |
| F | | | | | | | | | | | | | | | | | | | | | | |
| G | | | | | | | | | | | | | | | | | | | | | | |
| Н | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | |
| J | | | | | | | | | | | | | | | | | | | | | | |
| К | | | | | | | | | | | | | | | | | | | | | | |
| L | | | | | | | | | | | | | | | | | | | | | | |
| М | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | |
| Р | | | | | | | | | | | | | | | | | | | | | | |
| Q | | | | | | | | | | | | | | | | | | | | | | |
| R | | | | | | | | | | | | | | | | | | | | | | |
| s | | | | | | | | | | | | | | | | | | | | | | |
| Т | | | | | | | | | | | | | | | | | | | | | | |
| U | | | | | | | | | | | | | | | | | | | | | | |
| V | | | | | | | | | | | | | | | | | | | | | | |
| W | | | | | | | | | | | | | | | | | | | | | | |
| V | \vdash | | \vdash | | | | | | | | | | | | | | | | | | | |

PIT DEPTH GRID 2 OF 2

Form H: Direct Examination Data Sheet - Page 6 of 10

INTERNAL CORROSION WALL LOSS GRID

| DA | <u>/ILI</u> | <u>DA</u> | | <u>ILI</u> | |
|---------------------------|-------------|---------------------|----------|---------------------------|-------------|
| Route Number: | L-132 | Site Designation | T30_Leak | ILI Log Distance: | NA |
| Date of Excavation: | 10/9/2011 | N-Segment: | NA | RMP-11 Ref. Section: | Table 5.6.2 |
| Mile Point: | 14.995 | IMA Number: | NA | Reference Girth Weld: | NA |
| Examination Performed By: | Redacted | <u> </u> | NA | Distance From Girth Weld: | NA |
| PG&E Project Manager: | Redacted | Region Number: | NA | _ | |
| Approved By: | NA | Subregion # (ICDA): | NA | | |
| Order Number: | 0 | 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.

| | or drie is certained & 5.00 position on pipe. | | | | | | | | | | | |
|---|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 \ | / 7 | 8 | 9 | 10 | 11 | 12 |
| Α | 0.298" | 0.294" | 0.293" | 0.291" | 0.288" | 0.285" | 0.287" | 0.285" | 0.284" | 0.284" | 0.287" | 0.282" |
| В | 0.299" | 0.299" | 0.292" | 0.296" | 0.290" | 0.286" | 0.284" | 0.287" | 0.289" | 0.287" | 0.286" | 0.285" |
| С | 0.296" | 0.294" | 0.290" | 0.294" | 0.294" | 0.298" | 0.286" | 0.287" | 0.286" | 0.288" | 0.292" | 0.292" |
| D | 0.299" | 0.294" | 0.299" | 0.290" | 0.295" | 0.294" | 0.287" | 0.284" | 0.292" | 0.292" | 0.289" | 0.281" |
| Ε | 0.294" | 0.296" | 0.289" | 0.285" | 0.288" | 0.287" | 0.295" | 0.291" | 0.294" | 0.282" | 0.295" | 0.284" |
| F | 0.297" | 0.292" | 0.290" | 0.294" | 0.297" | 0.285" | 0.286" | 0.287" | 0.284" | 0.291" | 0.285" | 0.292" |
| G | 0.289" | 0.292" | 0.287" | 0.285" | 0.288" | 0.285" | 0.292" | 0.287" | 0.288" | 0.286" | 0.281" | 0.284" |
| Н | 0.294" | 0.291" | 0.299" | 0.286" | 0.283" | 0.287" | 0.285" | 0.292" | 0.287" | 0.288" | 0.285" | 0.291" |
| I | 0.292" | 0.289" | 0.297" | 0.285" | 0.282" | 0.284" | 0.287" | 0.288" | 0.284" | 0.289" | 0.292" | 0.282" |
| J | 0.291" | 0.284" | 0.285" | 0.296" | 0.282" | 0.285" | 0.296" | 0.294" | 0.287" | 0.294" | 0.291" | 0.282" |
| K | 0.290" | 0.283" | 0.285" | 0.284" | 0.281" | 0.290" | 0.290" | 0.282" | 0.284" | 0.284" | 0.291" | 0.277" |
| L | 0.299" | 0.286" | 0.287" | 0.284" | 0.291" | 0.285" | 0.282" | 0.280" | 0.281" | 0.284" | 0.280" | 0.279" |

INTERNAL CORROSION GRID

1 of 1

COATING DAMAGE

| DA | <u>/ILI</u> | DA | | <u>ILI</u> | |
|---------------------------|-----------------------|---------------------|----------|---------------------------|-------------|
| Route Number: | L-132 | Site Designation | T30_Leak | ILI Log Distance: | |
| Date of Excavation: | 11/8/2011 | N-Segment: | | RMP-11 Ref. Section: | Table 5.6.2 |
| Mile Point: | 15.0029 | IMA Number: | | Reference Girth Weld: | |
| Examination Performed By: | | | | Distance From Girth Weld: | |
| PG&E Project Manager: | Mark Cabral/ Redacted | Region Number: | | _ | |
| Approved By: | | Subregion # (ICDA): | | - | |
| Order Number: | 41497351 | Stationing: | | _ | |

| NO. | FEET FROM REFERENCE | O'CLOCK | MAX LENGTH (IN.) | MAX CIRC EXTENT (IN.) |
|--------|------------------------|---------|------------------|-----------------------|
| DEP-01 | 10.6 | 6:22 | 22 | 28.5 |
| | | | | |
| | | | | |
| | 1 | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | ļļ | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | I | | | I |

CORROSION LOG

| DA/ | <u>'ILI</u> | DA | | <u>ILI</u> | |
|---------------------------|----------------------|---------------------|----------|---------------------------|-------------|
| Route Number: | L-132 | Site Designation | T30_Leak | ILI Log Distance: | NA |
| Date of Excavation: | 11/8/2011 | N-Segment: | | RMP-11 Ref. Section: | Table 5.6.2 |
| Mile Point: | 15.0029 | IMA Number: | | Reference Girth Weld: | NA |
| Examination Performed By: | Dedacted | | | Distance From Girth Weld: | NA |
| PG&E Project Manager: | Mark Cabral Dedacted | Region Number: | | _ | |
| Approved By: | | Subregion # (ICDA): | | - | |
| Order Number: | 41497351 | Stationing: | | - | |

| IC or EC | FEET FROM REFERENCE | O'CLOCK | MAX PIT DEPTH (MILS) | MAX LENGTH (IN.) | MAX CIRC EXTENT (IN.) |
|----------|------------------------|---------|----------------------|------------------|-----------------------|
| EC | 10.96 | 6:02 | Through-wall | 3.5 | 5.8 |
| EC | 9.58 | 6:15 | 0.041 | 0.4 | 0.3 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | - | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | <u> </u> | |
| | | | | | |
| \vdash | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

PHOTO LOG

| <u>DA/ILI</u> | | DA | | <u>ILI</u> | | |
|---------------------------|-----------------------|---------------------|----------|---------------------------|-------------|--|
| Route Number: | L-132 | Site Designation | T30_Leak | ILI Log Distance: | | |
| Date of Excavation: | 11/8/2011 | N-Segment: | | RMP-11 Ref. Section: | Table 5.6.2 | |
| Mile Point: ` | 15.0029 | IMA Number: | | Reference Girth Weld: | | |
| Examination Performed By: | Redacted | | | Distance From Girth Weld: | | |
| PG&E Project Manager: | Mark Cabral/ Redacted | Region Number: | | | | |
| Approved By: | | Subregion # (ICDA): | | _ | | |
| Order Number: | 41497351 | Stationing: | | - | | |

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

| Form H: Di | rect Examination Data Sheet - Page 10 of | | | | |
|------------|---|-------------------------------|---------------------------|--|-----------------------|
| | DA/ILI Route Number: L-132 | <u>DA</u> Site Designation | T30_Leak | <u>ILI</u> ILI Log Distance: | |
| | Date of Recoat | N-Segment: | | RMP-11 Ref. Section: | Table 5.6.2 |
| Exami | Mile Point: 15.0029 nation Performed By: Redacted | IMA Number: | | Reference Girth Weld: Distance From Girth Weld: | |
| | &E Project Manager: Mark Cabral Redacte | Region Number: | | _ | |
| | Approved By: 41497351 | Subregion # (ICDA): | | | |
| | Order Number: 41497351 | Stationing: | | | |
| 3.0 REC | OAT DATA | | | | |
| 3.1 | Sandblast Media: | | Anchor Profile I | Measurement: | |
| 3.2 | Pipe Recoated With: | | | | |
| | Powercrete J Wax Tape | Bar-Rust 235 | Dev Grip 238 | Dev Tar 247 Protal 72 | 200 |
| 3.3 | For Epoxy Coating Systems, Record E | Invironmental Conditio | n: | - | |
| | Air Temperature: | _ | Dew Point: | | |
| | Pipe Temperature: Time of Day: | - | Relative Humidity: | | |
| | • | _ | 2.22 | 0.00 | |
| 3.4 | Repair Coating Hardness (If ARC Coating:) | US 3:00 - DS 3:00 - | 6:00 - 6:00 - | 9:00 - 12:00 - 9:00 - 12:00 - | |
| 3.5 | Measured Coating Thickness: US | 3:00 - | 6:00 - | | 2:00 - |
| 3.5 | DS | 3:00 - | 6:00 - | | 2:00 - |
| | Holiday Tested?: Yes No | | | | • |
| | Device Used: Coil Wet Sp | onge Voltage t | Ised: | Repair All Holidays. | |
| 3.6 | | | TS Installed?: | Yes No | |
| | If Yes, Date Installed: | <u></u> | _ | • • • • | |
| | | | | | |
| | • — — | G-5 Box Carson | <u>=</u> | | |
| 3.7 | Backfill Material: Native | Imported Sand | Other: | | |
| | Coating Protections?: Yes | No | | | |
| | If Yes, Check One: Rockguard | Tuf-E-Nuf | Conwed Othe | er: | |
| 3.8 | Pipe-to-Soil Readings Over Bell Hole After Ba | | | _ | |
| | *If specified, a CIS should be done for approxima | tely 100' on either side o | f the bell hole. Attach o | data. | |
| | Comments: | | | | |
| | | | | | |
| | | | | | |
| 3.9 | Attach site sketch of excavation site. | | | | |
| 4.0 REP | PAIR DATA | | | | |
| 4.1 | Repair Made: X Yes No | 4.2 Numb | er of Repair(s) Made: | | |
| 4.3 | Repair Type X Metallic Sleeve | Non Metallic | Sleeve Rep | lace Can Filler Me | etal Other |
| 4.4 | Damage Repaired: X Corros | sion \square N | Mechanical (| Other | — |
| | | <u></u> | <u></u> | | |
| Misc. Co | mments/Information: An 18in B-sleeve wa | as installed over VOL-01 | with a start of 10.35ft. | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| acted | |
|-------|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

INSPECTION & LIFE EXTENSION SERVICES

| | | MAGNE | TIC PAR | RTICLE EX | ΔΜΙΝΑΤΙ | ON REPO |)RT | | | | | | | |
|--|--|----------------|----------------|--------------------|-----------------|-------------|--------------|----------------------|----------------|-----------------|------------|--------------|---|----------|
| | | 1 1/10/11 | | 1110666 | | OIV IVE! C | | | | | N | ıclear | ✓ Non | -Nuclear |
| To: | | | | | | | From | | • | | Date: | | • | |
| | | Pacific Gas | & Electri | c Company | | | Re | dacte | a | | | 11 | /9/2011 | L |
| Project: | | | | | | | | | | | | | | |
| | | | | T3 | 30_L132_L | eak _MP-1 | 5.00 |)29 | | | | | | |
| PG&E Purchase Ord | ler No | : | | | | GEIS Job No | | | | | | | | |
| | | 4149 | 7351 | | | | | | - | API00 | 15 | | | |
| | | Weld | Structural | Casting | Machir | nery Mad | ch. Pa | rts | Pipe | N/A | Other: | | | |
| 14 | | ✓ | | | | | \checkmark | | | | | | N/A | |
| Item | No | n-Weld | Plate | Pipe | Bai | - С | asting |) | Mach. Parts | N/A | Other: | | | |
| | | 7 | | V | | | | | | | | | N/A | |
| | | Size | Material 1 | hickness | Type of Bo | se Material | | Type | e of Filler Ma | terial | Weld | | N/ | ′A |
| Material | | 24" | 0.28 | 31" | Carbo | n Steel | | | C/S | Smooth | | SmAnsoloWeld | dedV As | Welded |
| | Red | dacted | | | | | Syste | em | • | | | | *************************************** | |
| Location | | | | | | | | | | | L-132 | | | |
| Acceptance | | | | | | | Proc | edure | | | | | | |
| Standards | Customer Specifications GEIS Qu | | | | | | | | EIS QCI | CP # 500 Rev 15 | | | | |
| | | Initial | Plate Edge | In Process | Back G | ouge Ro | ot Pas | SS | Repair | 12 | ? Hour | 24 | 4 Hour | Final |
| Type of Check | | √ | | | | | | | | | | | | |
| | | | | - " | | | | | | | Other: | | | |
| | | Longitudinal | | Coil | | DC Probe | | \checkmark | Continuous | 5 | | | | |
| | | | | | | | | D : L L | | | | | | |
| | V | ✓ Wet ☐ Dry | | | Direct Conto | ct | ✓ Residual | | | | | | | |
| Type of | | | | | | | | | | | | | | |
| Inspection | | Circular | | AC Prod | V | Yoke | | | Other | | | | | |
| 111050001011 | | MT Yoke & | Model - Seri | al No./Blacklig | rht Model - S | erial No | т | | | Cuntaga | ``` | tion Mot | - a d | |
| | | | | .01 / Spectro | | | | ۸ ام ۱۰ | | Surface I | | | | 2 Finish |
| | | | | edium / Color | | 1004030 | + | ADIO | asive Blas | | | | uipment | Z FINISH |
| | | | • | lourescent | | EZOK | | | Demo | agnetizai | | | uipment | |
| Reference: Summa | | Mugnug | 10 14A / F | Tourescent | Green / 1. | See Attac | hmor | at | <u> </u> | | N/A | | | |
| The following are | | iere renijesti | ed to be in | snected: | | See Allul | .iiiiei | IL. | | | Resu | ılts of I | nspectic | n |
| Bare pipe: 9.00" to | | | | | | | | | - | 11 linear ir | ndications | found. | | |
| , , | | J | | | | | | | | | | | | |
| | | | | | | | | | - | | | | | |
| | | | | | | | | | | | | | | |
| S | | | | | | | | | | | | | | |
| Summary: Indications LIN-4 T | Summary: Indications LIN-4 Thru 11 were remediated by buffing. | | | | | | | | | | | | | |
| Indications LIN-01 to LIN-03 were covered by the B-Sleeve. | | | | | | | | | | | | | | |
| Please see additional | MT, UI | and photo repo | rt for additio | nal details on inc | dications (UT = | | | ions and | length) | | | | | |
| Copy To: Requested By: | | | | | | | Report | ed Bu (Te edacted | chnician): | | | | | |
| Pacific Gas & Electri | c Com | npany | | | | Redac | .ea | 1\ | Mark Cabr | al | LK. | cualle(| , <u> </u> | |
| GE Inspection Service | ces (Lc | s Angeles) | | | | ✓ Custo | mer S | pecific | ations | | NDT sµ | pervisor | | |
| ☐ Accept ☐ Reject | | | | | | 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.



INSPECTION SERVICES

| | MT Results (Measureme | | □Nuclear | ✓ Non-Nuclear | | |
|------------------------|--|--------------------|-----------------|-----------------------|-----------------|-------------------|
| То: | Pacific Gas & Electric Company | | From: Reda | cted | Date: 11 | /9/2011 |
| Project: | T30_L132_L | .eak _MP-: | 15.0029 |) | | |
| PG&E Purchase Ord | | GEIS Job No | | | | |
| | 41497351 | | • | LAPI00 | 15 | |
| Location | Redacted | | System | | | |
| Location | | | | | L-132 | |
| Acceptance | Customer Specifications | | Procedu | | | |
| Standards | · | | | | P # 500 Rev 1 | 5 |
| | LIN-01 AXD: 10.75 ft, Clock 8:55 | <u>, Axial Ler</u> | <u>igth: 2.</u> | 0 in, Circ. W: 0.30 i | in | |
| | LIN-02 AXD: 10.92 ft, Clock 9:19 | | | | | |
| | LIN-03 AXD: 10.95 ft, Clock 8:30 | Axial Len | gth: 1.3 | 30 in, Circ. W: 0.03 | <u>in</u> | |
| | LIN-04 AXD: 11.40 ft, Clock 8:33 LIN-05 AXD: 11.64 ft, Clock 8:14 | Axiai Len | gtn: 4. | 00 in, Circ. W: 0.04 | in . | |
| | | | | | | |
| | LIN-06 AXD: 11.85 ft, Clock 9:00, LIN-07 AXD: 9.6 ft, Clock 2:01, | Avial Lend | th: 0.60 | 111, Circ. W. 0.010 | 2 111 | |
| | LIN-08 AXD: 9.8 ft, Clock 2:44, / | Axial Lena | th: 1.00 |) in Circ W: 0.0311 | n . | |
| | LIN-09 AXD: 10.10 ft, Clock 2:55 | | | | | |
| | LIN-10 AXD: 10:10 ft, clock 2:35 | | | | | |
| | | | | | | |
| | LIN-11 AXD: 12.3 ft, Clock 1:51, | Axiai Lenç | jtn: 0.6 | 0 in, Circ. W: 0.20 | ın | |
| | | NOTE: | | | | |
| Lin -01, 02, and | 17, 08, 09, 10 and 11 were remediated with bu 03 were left on the pipe and were covered by tached UT and photo report for additional inf | y the B-Sle | eve. | | was vermea | WICH FITE |
| Сору То: | | Requested E | Rein | | Reported By (Te | chnician): |
| Pacific Gas & Electric | Company | Reda | | Mark Cabasi | Redacte | |
| | | | | _/Mark Cabral | | |
| GE Inspection Servic | es (Los Angeles) | ✓ Custo Accer | | cifications Reject | NDT : | supervisor: ed |

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 SERVICES** DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.



INSPECTION & LIFE EXTENSION SERVICES

| | MAGNI | ETIC PAR | TICLE EXAN | OITANIN | REPOR | | | | Nuclear | ✓ Non-1 | Nuclear |
|------------------------------------|-----------------------|---------------|---------------------|-----------------|---------------|---------------|----------------|---------------|--------------------|--------------|------------|
| То: | Pacific Gas | s & Electric | : Company | | | m: edacted | d | | Date: | 1/9/2011 | |
| Project: | | | | | | | | | | | |
| | | | T30 | _L132_Leal | <_MP-15.0 | 029 | | | | | |
| PG&E Purchase Orc | | | | GEI | S Job No: | | | | | | |
| | | 07351 | Cti | NA la iva | N4 |) b | D: | LAPI00 | | | |
| | Weld | Structural | Casting | Machinery | Mach. (| arts | Pipe | N/A | Other: | N/A | |
| Item | Non-Weld | Plate | Pipe | Bar | Casti | ng | Mach. Part | s N/A | Other: | 14/73 | |
| | V | | V | | | | | | | N/A | |
| Material | Size | Material TI | | Type of Base N | | Type | e of Filler Mo | aterial | Weld | □ N/A | |
| , 1000, 101 | 24" | 0.28 | 1" | Carbon S | | | C/S | Smooth | □ SmAncoloN/bel | ded☑ As V | Velded |
| Location | Redacted | | | | Sy | stem | | | 1 172 | | |
| Acceptance | | | | | Dro | cedure | | | L-132 | | |
| Standards | | Custome | r Specificatio | ns | Fic | cedare | G | EIS OCI | P # 500 Rev : | 15 | |
| Turn of Charle | Initial | Plate Edge | In Process | Back Goug | e Root P | ass | Repair | | | 4 Hour | Final |
| Type of Check | 7 | | | | | | | | | | |
| | ☐ Longitudinal | П | Coil | ☐ DC | Probe | 7 | Continuo | ıs | Other: | | |
| | | | | | | | | | | | |
| | ✓ Wet | | Dry | Dire | ect Contact | V | Residual | | | | |
| Type of | | | | | | _ | - · · | | | | |
| Inspection | Circular | | AC Prod | ☑ Yok | e | | Other | | | | |
| | MT Yoke & | Model - Seric | ıl No. / Blacklight | Model - Seria | No. | | | Surface I | Preparation Met | hod | |
| | Magnaflux Y-6 | | • | | 1597251 | Abro | asive Bla | sting (W | alnut Shells |) - NACE 2 | 2 Finish |
| | | • | edium / Color / B | | | | Den | nagnetizat | tion Method / Ed | quipment | |
| | | lo 14A / F | ourescent G | | | | | | N/A | | |
| Reference: Summa The following are | | | | | See Attachm | ent | | | Results of I | Inspection | 1 |
| Bare pipe: 3.50" to | | | | | | | | 19 linear ind | lications found. | | |
| Indications LIN-1 Th | | | | | | | | No relevant | indications@time o | f inspection | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Summary: | | | | | | | | | | | |
| Please see MT, UT | and photo report fo | or additional | details on indica | itions (UT = de | epths, MT for | location | ns and | | | | |
| length) | | | | | | | | | | | |
| Сору То: | | | | Red | uested Bu: | | | | Reported By (To | | |
| Pacific Gas & Electri | c Company | | | | Redacted | <u> </u> | Mark Cab | ral | Redacted | 1 | |
| GE Inspection Servi | ces (Los Angeles) | | | | Z Custome | Specific | ations | | NDT supervisor | | |
| NOTICE, THE EVALA | INIATIONI DEDOUT IC A | י מרמטטז טר ז | וור מרכווידי מייד | | Accept | | Reject | | Redact | | MITATIONIC |
| NOTICE: THIS EXAM | INATION REPORT IS A | KEPOKI OF I | HE KESULIS OF I | HE NOT PROCE | DUKE ACIUA | LLY PEKF | OKMED RA | HIS COMP | MINA 11 12 20R7F | CLIOTHELI | MITATIONS |

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.



INSPECTION SERVICES

| | MT Results (Measureme | □Nuclear | ✓ Non-Nuclear | | | | | | | |
|--|--|-------------|--------------------------|------------------|-----------------|--|--|--|--|--|
| То: | Pacific Gas & Electric Company | | From: Redacted | Date: | 1/9/2011 | | | | | |
| Project: | T30_L132_L | eak MP-1 | 15.0029 | | | | | | | |
| PG&E Purchase Ord | | GEIS Job No | | | | | | | | |
| | 41497351 | <u> </u> | LAI | PI0015 | | | | | | |
| Location | Redacted | | System | L-132 | | | | | | |
| Acceptance Standards | Customer Specifications | | Procedure GEIS | QCP # 500 Rev | 15 | | | | | |
| | LIN-01 AXD: 4.23 ft, Clock 12:35, | Axial Leng | th: 2.500 in, Circ. W: (| 0.800 in | | | | | | |
| | LIN-02 AXD: 4.78 ft, Clock 3:34, A | Axial Lengt | :h: 0.050 in, Circ. W: 0 | .700 in | | | | | | |
| | LIN-03 AXD: 5.20 ft, Clock 3:03, Axial Length: 2.000 in, Circ. W: 0.500 in LIN-04 AXD: 5.52 ft, Clock 3:14, Axial Length: 1.000 in, Circ. W: 0.400 in | | | | | | | | | |
| | LIN-05 AXD: 6.03 ft, Clock 4:10, Axial Length: 1.200 in, Circ. W: 0.100 in | | | | | | | | | |
| LIN-06 AXD: 6.87 ft, Clock 3:08, Axial Length: 1.300 in, Circ. W: 0.020 in | | | | | | | | | | |
| | LIN-07 AXD: 7.95 ft, Clock 1:13, A | Axial Lengt | :h: 1.300 in, Circ. W: 0 | .500 in | | | | | | |
| | LIN-08 AXD: 3.15 ft, Clock 1:59, A LIN-09 AXD: 4.45 ft, Clock 11:52, | | | | | | | | | |
| | LIN-10 AXD: 4.43 ft, Clock 11:02, | | | | | | | | | |
| | LIN-11 AXD: 4.49 ft, Clock 11:02, | | | | | | | | | |
| | LIN-12 AXD: 6.54 ft, Clock 10:38, | | | | | | | | | |
| | LIN-13 AXD: 7.17 ft, Clock 10:48, | Axial Leng | th: 0.800 in, Circ. W: 0 | 0.100 in | | | | | | |
| | LIN-14 AXD: 7.38 ft, Clock 9:25, A | | | | | | | | | |
| | LIN-15 AXD: 7.50 ft, Clock 10:43, LIN-16 AXD: 8.03 ft, Clock 10:38, | | | | | | | | | |
| | LIN-17 AXD: 8.38 ft, Clock 10:57, | | | | | | | | | |
| | LIN-18 AXD: 7.38 ft, Clock 7:56, A | Axial Lengt | :h: 0.200 in, Circ. W: 0 | .050 in | | | | | | |
| | LIN-19 AXD: 8.15 ft, Clock 7:51, A | Axial Lengt | :h: 1.400 in, Circ. W: 1 | .000 in | | | | | | |
| | | NOTE: | | | | | | | | |
| wall-thickness |) were remediated by ARB by buffing. Remov | al was ver | | report for infor | mation on final | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CT | | <u> </u> | | 1 | | | | | | |
| Copy To: | | Requested B | | Reported By (1 | | | | | | |
| Pacific Gas & Electr | | Redac | | Redacted | | | | | | |
| GE Inspection Servi | ces (Los Angeles) | ✓ Custo | mer Specifications | | supervisor: | | | | | |
| | | ☐ Accep | ot 🗌 Reject | Redact | ed | | | | | |

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 SERVICES** DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.



Inspection & Life Extension Services

| | ULTRASOI | VIC EXAM | INATION | REPORT | г 🗆 | 7 | Nuclear | Non-Nuclear |
|-------------------------|---|---------------------------|--------------|-----------------------|-----------------------|---------------------------|----------------------|---|
| То: | Pacific Gas & Ele | ectric Compa | ny | | From: Redacted | | Date: | 11/9/2011 |
| Project: | | | T30_L132_I | Leak _MP-15 | 5.0029 | | • | |
| PG&E Purchase (| Order No: 41497351 | | | GEIS Job No: | | LAPIO | 0015 | |
| ltem | Weld Structural ☑ □ | Casting | Machinery | Mach. Parts | Pipe | N/A | Other: | |
| | Non-Weld Plate | Pipe | Bar | Casting | Mach. Parts | N/A | Other | |
| Material | Size: 30" | No. of Pieces 1 | ٥, | Base Metal n Steel | ٠. | ler Material /S | Weld ☑ Smooth | ☑ N/A ☑ As Welded |
| Location | Redacted | acted | | | | | L-132 | |
| Acceptance Standards | Custo | mer Specific | ations | | Procedure | | QCP-601 | |
| | Soundness Thickness | Bond | | Single Crystal | Transducer | Dual Crystal | | Transducer Serial No.: 561320 |
| | Pulse Echo Angle-Beam | Other | | uency 1Hz | Size 0.312" | Angle 0° | | Couplant / Batch # Sonatest Ultragel II |
| Type of Inspection | UT Equipment/Model Panametrics 36E |)L plus | Flat | | Concave | Convex | | / 25-901 07225 AF |
| | Serial # 982000 Calibration Do |)403 | Standard | | Material | Notch Depth | | Serial No.: |
| | 10/10/2013 Calibration Due: 1/0 | l | Step Wedge | _ | Material C/S | | ss Range | Serial No.: A-111 |
| Reference: Sur | nmary | | Tube Wedge | | Attachment | | nspection: | |
| Baseline read | ng areas were request lings & final grinding pas | s readings fo | | | | | | time of inspection. |
| 12" laminatio | n scans at cut-line locati | ons. | | | | - No relevant | indications at | time of inspection. |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| ** Please se | e attached reports for a | dditional info | ormation | | | | | |
| Сору То: | lectric Company | adiaona nii | ,,,,,,duott. | Requested By Redacted | | k Cabral | Reported By Redac | (Technician): |
| | Services (Los Angeles) | | | | er Specification | | NDT Supervis | |
| | Accept Reject Redacted | | | leu | | | | |

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 SERVICES DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.



This report is strictly confidential, legally privileged, containing GE Intellectual Property, & is intended for Pacific Gas & Electric representatives only. Distribution to GE competitors is strictly forbidden.

INSPECTION SERVICES

| | MT Results (Measureme | | □Nuclear | ✓ Non-Nuclear | | |
|------------------------|--|--------------|---------------|---------------------------------------|------------------|-------------|
| То: | Pacific Gas & Electric Company | | Redacted | | Date: 10 |)/9/2011 |
| Project: | T30_L132_L | _eak _MP-1 | 15.0029 | | | |
| PG&E Purchase Orde | er No: | GEIS Job No: | | | | |
| | 41497351 | | | LAPI00 | 15 | |
| Location | Redacted | | System | | | |
| | | | | | L-132 | |
| Acceptance | Customer Specifications | | Procedure | _ | CD CO1 | |
| Standards | adings for baseline & final grinding pass on LIN-04 | . May mota | Hoss was 0 | • | CP-601 | -0.264") |
| UT red | adings for baseline & final grinding pass on LIN-04 adings for baseline & final grinding pass on LIN-05 | :: Max meta | Hoss was 0 | .011 (Baseline = .017" (Baseline = | 0.275 - Final | =0.268") |
| UT red | adings for baseline & final grinding pass on LIN-06 | : Max meta | l loss was 0 | .006" (Baseline = | 0.285" - Final | =0.279") |
| UT red | adings for baseline & final grinding pass on LIN-07 | 7: Max meta | l loss was 0 | .023" (Baseline = | : 0.274" - Final | =0.251") |
| | adings for baseline & final grinding pass on LIN-08 | | | | | |
| UT rec | adings for baseline & final grinding pass on LIN-09 |): Max meta | l loss was 0 | .014" (Baseline = | 0.277" - Final | =0.263") |
| Ul red | adings for baseline & final grinding pass on LIN-10 adings for baseline & final grinding pass on LIN-1: |): Max meta | l loss was 0 | .020" (Baseline = | 0.284" - Final | =0.264") |
| 01160 | | NOTE: | i ioss wus o | .020 (Buselille = | 0.204 - Fillul | =0.204) |
| LIN 04 to 11 wa | re remediated by buffing and removal was v | | h MT | | | |
| **Please see at | tached MT and photo report for additional in | formation. | | | | |
| Сору То: | | D 1 15 | | | D | -11-11 |
| | | Requested B | | | Reported By (Te | |
| Pacific Gas & Electric | Company | Redact | ted/ M | 1ark Cabral | Redacted | 1 |
| GE Inspection Service | es (Los Angeles) | ✓ Custo | mer Specifica | tions | | supervisor: |
| | | ☐ Accep | t 🗆 | Reject | Redacte | :d |

NOTICE: THIS EXAMINATION REPORT IS A REPORT OF THE RESULTS OF THE NDT PRÔCEDURE 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 SERVICES** DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.



Inspection & Life Extension Services

| · | ULTRASO | NIC EXAM | INATION | REPORT | Γ 🗆 | ~ | Nuclear | Non-Nuclear |
|-------------------|-----------------------------|-----------------|------------|----------------|-------------------|---------------|------------------|------------------------|
| То: | Pacific Gas & E | ectric Compa | iny | | From: Redacted | | Date: | 11/9/2011 |
| Project: | | | T70 172 | oak MD 1 | 5 0020 | | | |
| PG&E Purchase O | Irder No: | | T30_L132_I | GEIS Job No: | 5.0029 | | | |
| TOXET dichase O | 41497351 | | | GEIS 300 NO. | | LAPI0 | 015 | |
| | Weld Structural | Casting | Machinery | Mach. Parts | Pipe | N/A | Other: | |
| Item | 7 | | | | Ż | | | |
| | Non-Weld Plate | Pipe | Bar | Casting | Mach. Parts | N/A | Other | |
| Material | Size: | No. of Pieces | | lase Metal | ٥, | er Material | Weld | ☑ N/A |
| | 30" Redacted | 1 | Carbo | n Steel | | /S | ☑ Smooth | ☑ As Welded |
| Location | System | | | | | | L-132 | |
| Acceptance | | | | | Procedure | | | |
| Standards | Cust | omer Specific | | QCP-601 | | | | |
| | Soundness Thickness | Bond | l _ | | Transducer | | | Transducer Serial No.: |
| | V V | | | Single Crystal | ✓ Size | Dual Crysta | | 561320 |
| | Pulse Echo Angle-Beam | | · · | Frequency | | Angle | | Couplant / Batch # |
| | | | • | 1Hz | 0.375" | O° Convex | | Sonatest Ultragel II |
| Type of | UT Equipment/Model | . | | at I | Concave | | ivex | / 25-901 07225 AF |
| Inspection | Panametrics 36 | • | Standard L | <u> </u> | Material | - | Depth | Serial No.: |
| | Serial # 98200 | | Standard | | Material | NOECH | рерии | Serial No.: |
| | Calibration D | | | | Material | Thickney | ss Range | Serial No.: |
| | 10/10/201 | | Step Wedge | _ | | | _ | |
| | Calibration Due: 1/0 | 19/2012 | Tube Wedge | | C/S | 0.100" t | 0 0.500 | V34693 |
| Reference: Sum | mary g areas were reques | ted to be ins | spected: | See | Attachment | , | Results of I | nspection: |
| | ings & final grinding pa | | | | | - No relevant | indications at t | time of inspection. |
| | n scans at cut-line loca | • | | | | - No relevant | indications at t | time of inspection. |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| ** Please see | e attached reports for | additional info | ormation. | T | | | • | |
| Сору То: | | | | Requested By | | | Reported By | (Technician): |
| Pacific Gas & Ele | | | | Redacted | | k Cabral | Redac | |
| GE Inspection Se | ervices (Los Angeles) | | | | er Specification | ıs | NDT Supervis | sor: |
| | | | | ✓ Accept | Reject | | Redac | ted |

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 SERVICES DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.



This report is strictly confidential, legally privileged, containing GE Intellectual Property, & is intended for Pacific Gas & Electric representatives only. Distribution to GE competitors is strictly forbidden.

INSPECTION SERVICES

| | MT Results (Measureme | | □Nuclear | ☑ Non-Nuclear | | | | | | | |
|---|---|----------------------------|---------------------------|------------------------------------|-----------------|-------------|--|--|--|--|--|
| То: | Pacific Gas & Electric Company | | From: Redacted | | Date: 11 | /9/2011 | | | | | |
| Project: | T30_L132_L | .eak _MP-1 | 5.0029 | | | | | | | | |
| PG&E Purchase Ord | er No: 41497351 | GEIS Job No: | | LAPI00 | 15 | | | | | | |
| Location | Redacted | • | System | | | | | | | | |
| Acceptance | | | Procedure | | L-132 | | | | | | |
| Standards | Customer Specifications | | | - | CP-601 | | | | | | |
| UT re | adings for baseline & final grinding pass on LIN-01 | L: Max meta | loss was 0.0 | 14" (Baseline = | 0.294" - Final | =0.282") | | | | | |
| UT re | adings for baseline & final grinding pass on LIN-02 adings for baseline & final grinding pass on LIN-03 | :: Max meta :: Max meta | loss was 0.0 | 20" (Baseline = 19" (Baseline = | 0.287 - Final | =0.268") | | | | | |
| UT re | UT readings for baseline & final grinding pass on LIN-04: Max metal loss was 0.024" (Baseline = 0.296" - Final =0.274") | | | | | | | | | | |
| UT readings for baseline & final grinding pass on LIN-05: Max metal loss was 0.016" (Baseline = 0.285" - Final =0.268") | | | | | | | | | | | |
| UT re | adings for baseline & final grinding pass on LIN-06 adings for baseline & final grinding pass on LIN-07 | : Max meta | loss was 0.0 | 15" (Baseline = | 0.283" - Final | =0.268") | | | | | |
| | adings for baseline & final grinding pass on LIN-08 adings for baseline & final grinding pass on LIN-08 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-09 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-10 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-11 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-12 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-13 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-14 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-15 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-16 adings for baseline & final grinding pass on LIN-17 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-18 | | | | | | | | | | |
| | adings for baseline & final grinding pass on LIN-19 | | | | | | | | | | |
| | | | | | | | | | | | |
| LIN O1 thru 10 | | NOTE: | | | | | | | | | |
| LIM-OT thru 19 | were remediated by ARB by buffing. | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| **Please see at | tached MT and photo report for additional in | formation. | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Сору То: | | | Reported By (Technician): | | | | | | | | |
| Pacific Gas & Electri | c Company | Redacte | ed / Ma | rk Cabral | Redacted | | | | | | |
| GE Inspection Servic | | ☐ Custo | mer Specificatio | | NDT | supervisor: | | | | | |
| | · · · · · · · · · · · · · · · · · · · | | | | Redacte | | | | | | |
| | | ☐ Accep | t □ R∈ | ject | | | | | | | |

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 SERVICES** DOES NOT GUARANTEE ANY CONDITION OF THE TESTED SPECIMEN.



This report is strictly confidential, legally privileged, containing GE Intellectual Property, & is intended for Pacific Gas & Electric representatives only. Distribution to GE competitors is strictly forbidden.

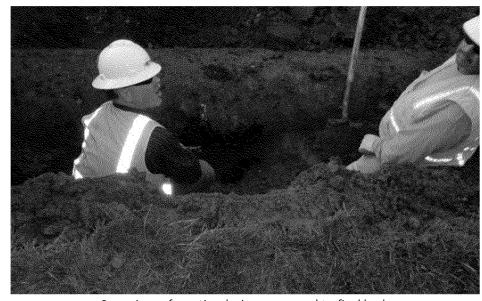
INSPECTION & LIFE EXTENSION SERVICES

| MICROBIOLOGICAL INFLUENCED CORROSION EXAMINATION REPORT | | | | | | | | Nuclear | ✓ Non-Nuclear | |
|---|-----------------------------|-----|---|---|---------------------------------|---|-------------------------------------|---|--|--|
| To: Pacific Gas & Electric Company | | | | | From: Redacted | | | Date: 11/8/2011 | | |
| Project: T30_L132_Leak_MP-15.0029 | | | | | | | | | | |
| PG&E Purchase Order No: 41497351 | | | | | GEIS Job No: LAPI0015 | | | | | |
| Location | | | | System L-132 | | | | | | |
| Acceptance Standards | Customer Specifications | | | | Procedure GEIS QCP # 1908 Rev 1 | | | | | |
| Sample # | Sample Description | рН | Carbonate (CO ₃ ⁻) Bubbles = (+) for CO ₃ ⁻ No Bubbles = (-) for CO ₃ ⁻ | Sulfide (S ⁻ Black/ Brov color = (+) f S ⁻ | ٧n | Ferrous Iron (Fe ⁺²) Ferrozine Reaction: Purple color = (+) for Fe ⁺² | Redu | ric Iron (Fe ⁺³) Icing Solution: ole Color = (+) for Fe ⁺³ | Calcium (Ca) Red color = (+) for Ca Blue color = (-) for Ca | |
| 1 | Downstream Cross section | 6.5 | Positive | Negative | ė | Negative Po | | Positive | Positive | |
| 2 | DEP-01_AXD= 10.60' | 6.0 | Positive | Negative | e, | Positive | | Positive | Positive | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| Copy To: Pacific Gas & Electric Company | | | | Requested By: Redacted / Mark Cabral | | | Reported By (Technician): Redacted | | | |
| GE Inspection Services (Los Angeles) | | | | Redacted | | | l i | 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 Services



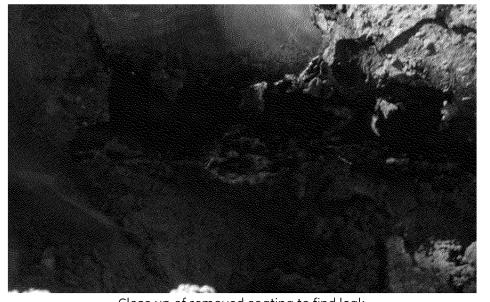
Overview of coating being removed to find leak



Close up of removed coating to find leak



Overview of coating being removed to find leak



Close up of removed coating to find leak



Pacific Gas & Electric Company 24" Route L-132 (MP-15.0029)

GE Energy
Inspection Services



Close up of leak



Close up of leak



Close up of leak



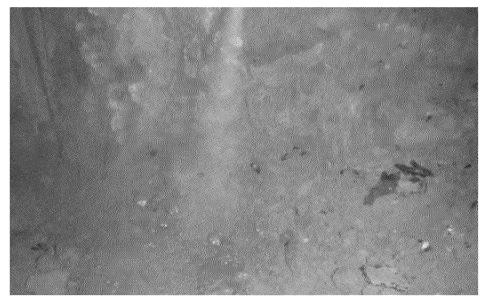
Close up of pipe stenciling



Pacific Gas & Electric Company 24" Route L-132 (MP-15.0029)

GE Energy **Inspection Services**

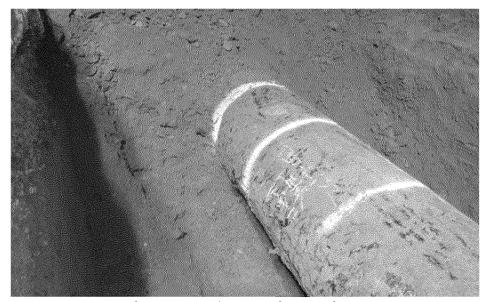
T30_L132_LEAK



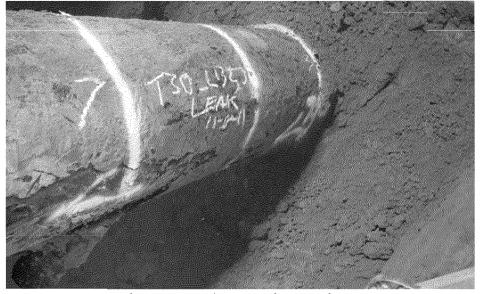
Overview of soil stratification



Overview of soil stratification



Overview of coating condition 3.00ft to 8.00ft, 3:00 position



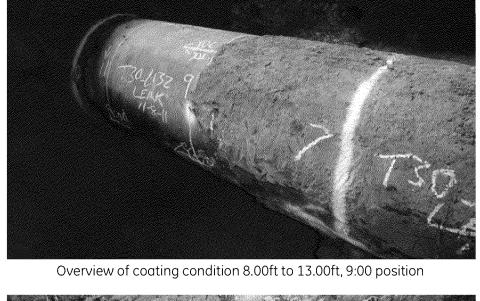
Overview of coating condition 3.00ft to 8.00ft, 9:00 position

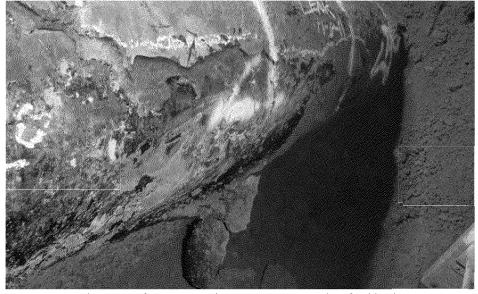


T30_L132_LEAK



Overview of coating condition 8.00ft to 13.00ft, 3:00 position





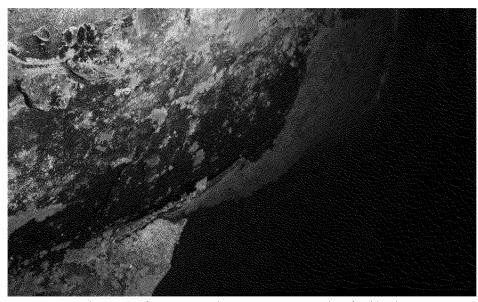
Close up of DIS-01 and coating removeal to find leak



Close up of DIS-01 and coating removeal to find leak



GE Energy Inspection Services



Close up of DIS-01 and coating removeal to find leak



Close up of DIS-01 and coating removeal to find leak



Overview of deposits layout 3.50ft to 12.35ft, 3:00 position

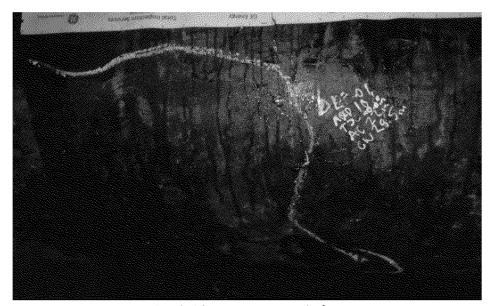


Overview of deposits layout 3.50ft to 12.35ft, 9:00 position



GE Energy **Inspection Services**

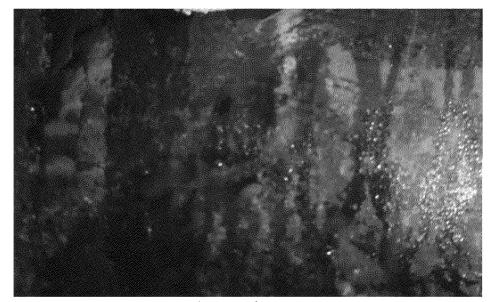
Pacific Gas & Electric Company 24" Route L-132 (MP-15.0029) T30_L132_LEAK



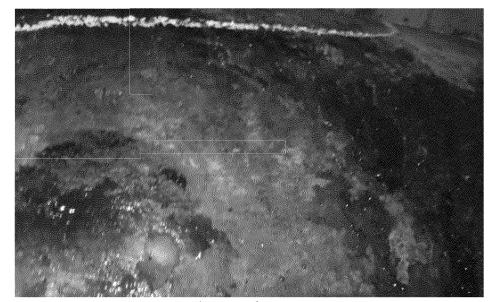
Overview (with measurements) of DEP-01



Close up of DEP-01



Close up of DEP-01



Close up of DEP-01



GE Energy Inspection Services



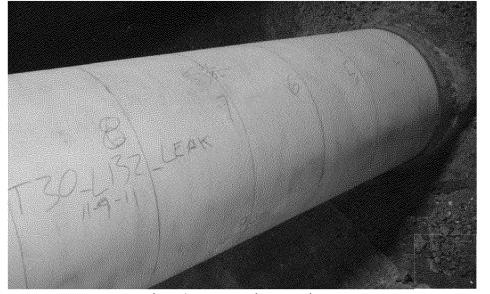
Close up of DEP-01



Pipe pH



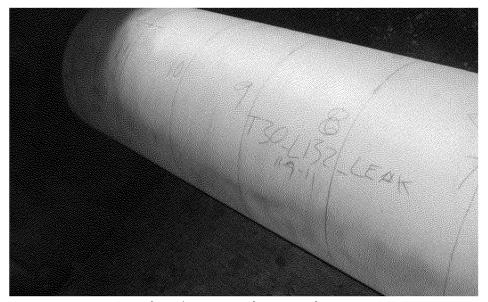
Overview of MPI layout 3.50ft to 8.00ft, 3:00 position



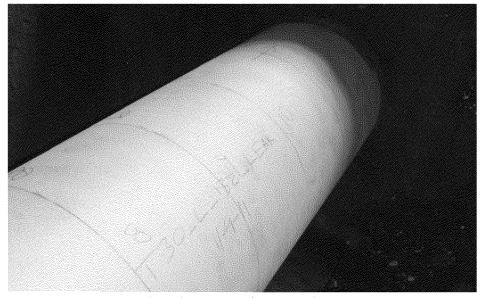
Overview of MPI layout 3.50ft to 8.00ft, 9:00 position



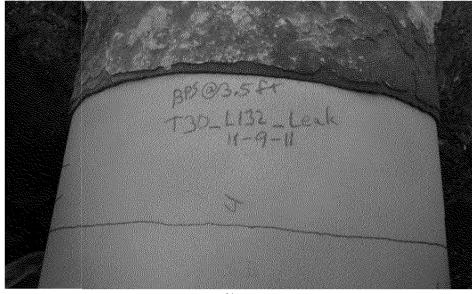
GE Energy **Inspection Services**



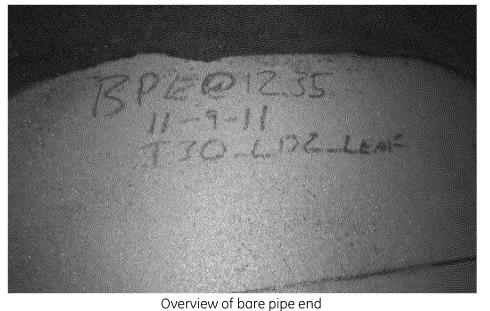
Overview of MPI layout 8.00ft to 12.35ft, 3:00 position



Overview of MPI layout 8.00ft to 12.35ft, 9:00 position



Overview of bare pipe start

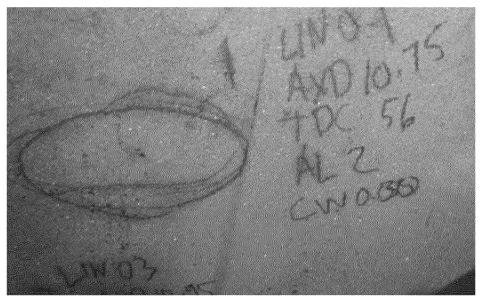




Pacific Gas & Electric Company 24" Route L-132 (MP-15.0029)

GE Energy **Inspection Services**

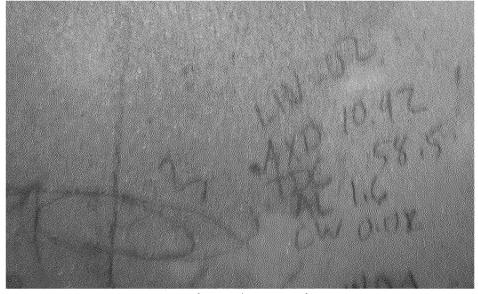
T30_L132_LEAK



Overview of MT Indications of LIN-01



Close up of MT Indications of LIN-01



Overview of MT Indications of LIN-02



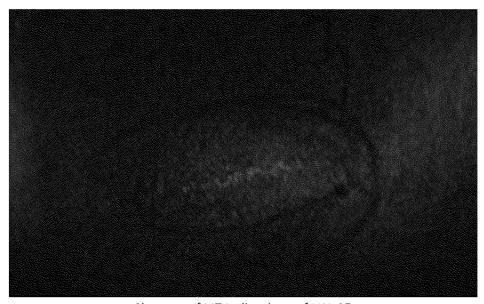
Close up of MT Indications of LIN-02



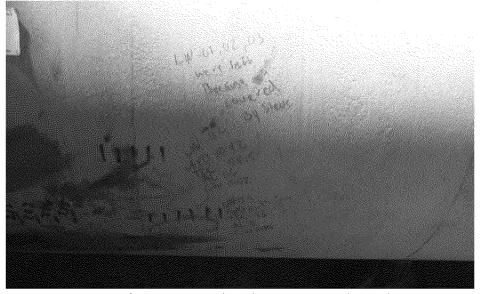
GE Energy Inspection Services



Overview of MT Indications of LIN-03



Close up of MT Indications of LIN-03



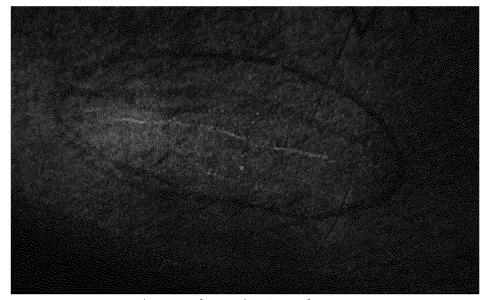
Overview of LIN-01, 02 and 03 that were cover by B-Sleeve



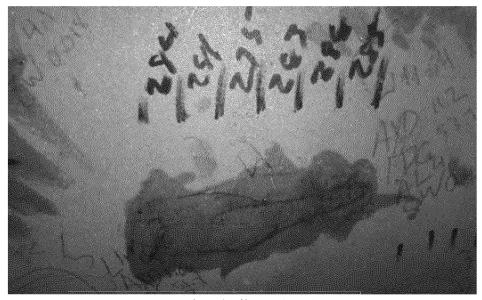
Overview of MT Indications of LIN-04



GE Energy Inspection Services



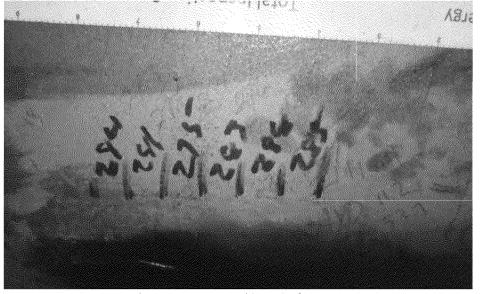
Close up of MT Indications of LIN-04



Overview of pre buff area (RWT) LIN-04



Overview post grind (MPIOK) of LIN-04



Close up post grind (RWT) of LIN-04



Pacific Gas & Electric Company 24" Route L-132 (MP-15.0029)

GE Energy **Inspection Services**

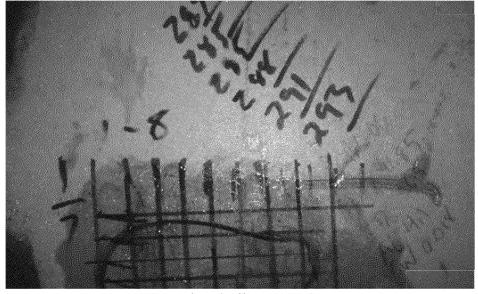
T30_L132_LEAK



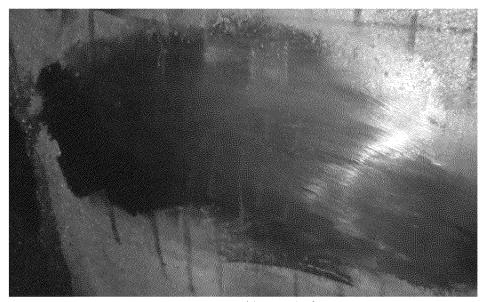
Overview of MT Indications of LIN-05



Close up of MT Indications of LIN-05



Overview of pre buff area (RWT) LIN-05



Overview post grind (MPIOK) of LIN-05



Pacific Gas & Electric Company 24" Route L-132 (MP-15.0029)

GE Energy **Inspection Services**

T30_L132_LEAK



Close up post grind (RWT) of LIN-05



Overview of MT Indications of LIN-06



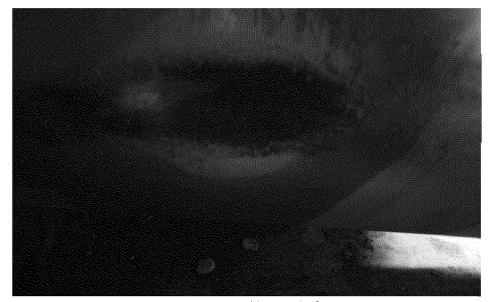
Close up of MT Indications of LIN-06



Close up post grind (RWT) of LIN-06



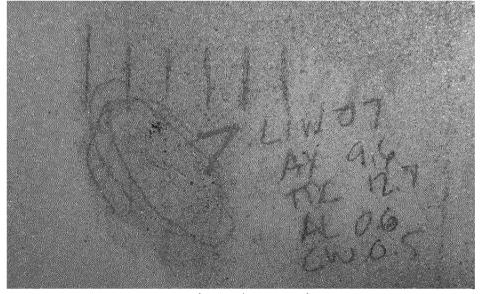
GE Energy Inspection Services



Overview post grind (MPIOK) of LIN-06



Overview of pre buff area (RWT) LIN-06



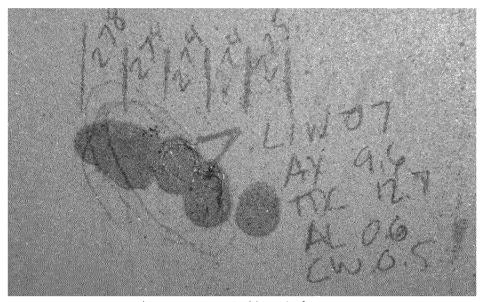
Overview of MT Indications of LIN-07



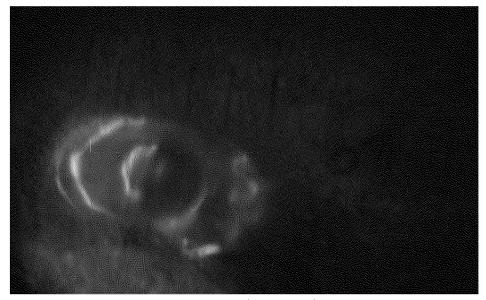
Close up of MT Indications of LIN-07



GE Energy Inspection Services



Close up post grind (RWT) of LIN-07



Overview post grind (MPIOK) of LIN-07



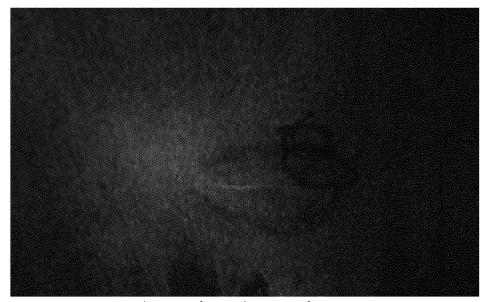
Overview of pre buff area (RWT) LIN-07



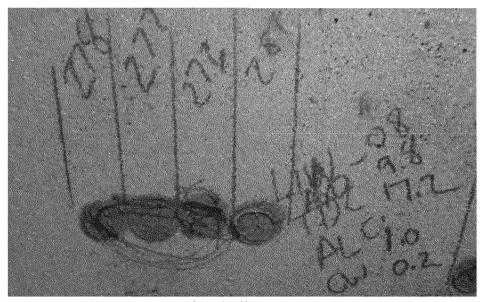
Overview of MT Indications of LIN-08



GE Energy
Inspection Services



Close up of MT Indications of LIN-08



Overview of pre buff area (RWT) LIN-08



Overview post grind (MPIOK) of LIN-08

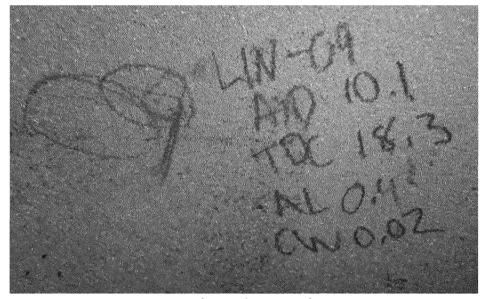


Close up post grind (RWT) of LIN-08



Pacific Gas & Electric Company
24" Route L-132 Redacted
T30_L132_LEAK

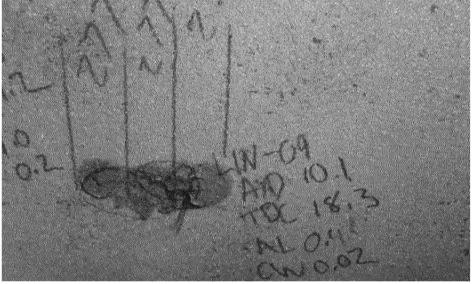
GE Energy Inspection Services



Overview of MT Indications of LIN-09



Close up of MT Indications of LIN-09



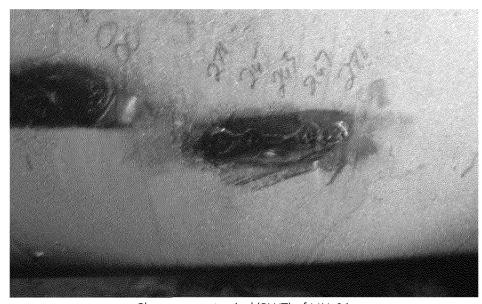
Overview of pre buff area (RWT) LIN-09



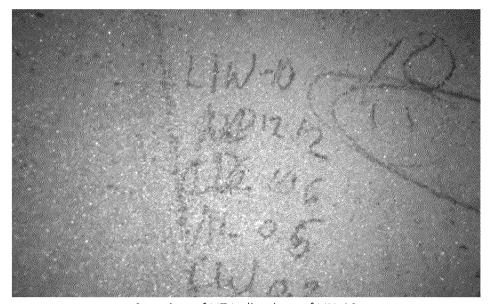
Overview post grind (MPIOK) of LIN-09



GE Energy Inspection Services



Close up post grind (RWT) of LIN-01



Overview of MT Indications of LIN-10



Close up of MT Indications of LIN-10



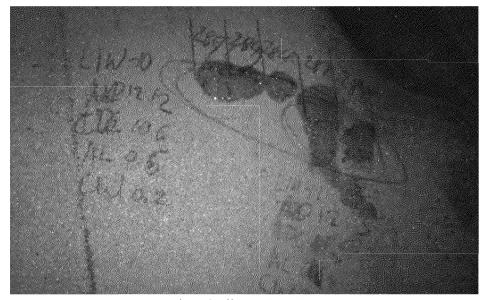
Overview of MT Indications of LIN-11



GE Energy Inspection Services



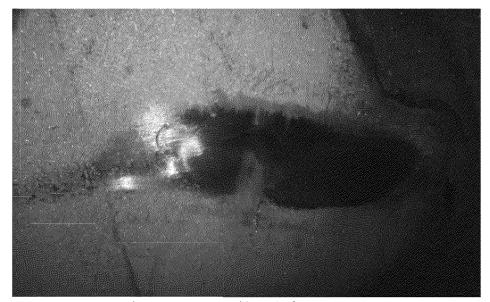
Close up of MT Indications of LIN-11



Overview of pre buff area (RWT) LIN-10 & 11

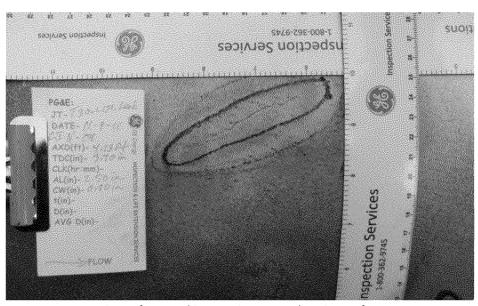


Overview post grind (MPIOK) of LIN-10 & 11

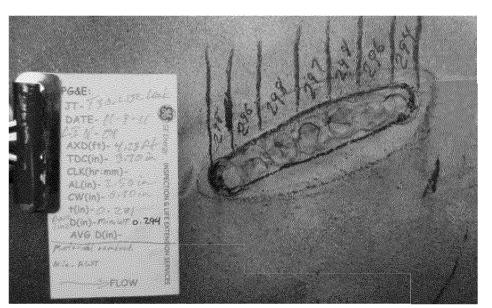


Close up post grind (RWT) of LIN-10 &11

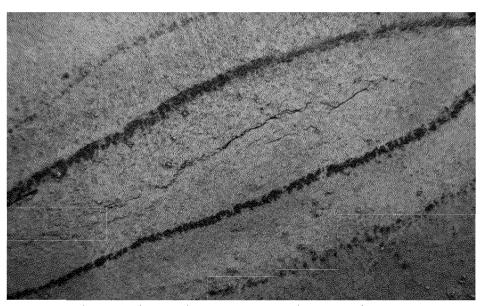




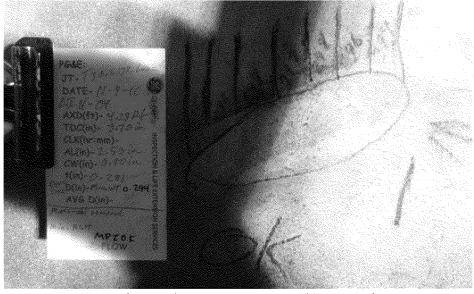
Overview of second inspection MT Indications of LIN-01



Overview of second inspection pre buff area (RWT) LIN-01



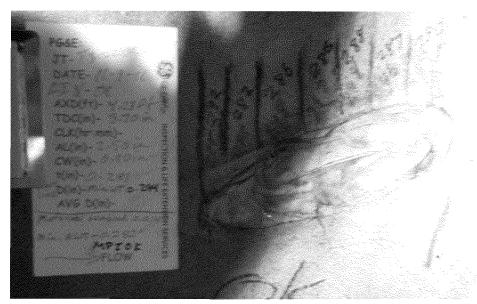
Close up of second inspection MT Indications of LIN-01



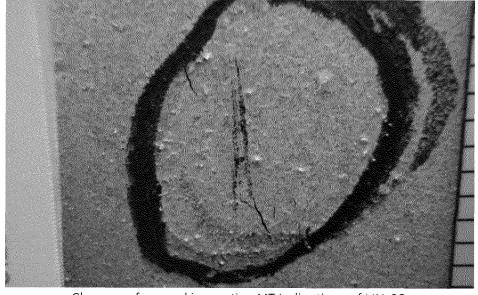
Overview of second inspection post grind (MPIOK) of LIN-01



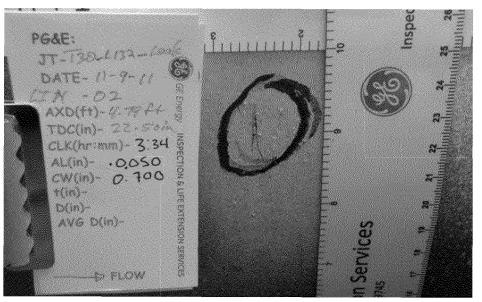
GE Energy Inspection Services



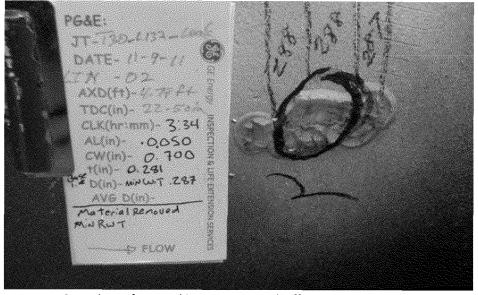
Overview of second inspection post grind (RWT) of LIN-01



Close up of second inspection MT Indications of LIN-02

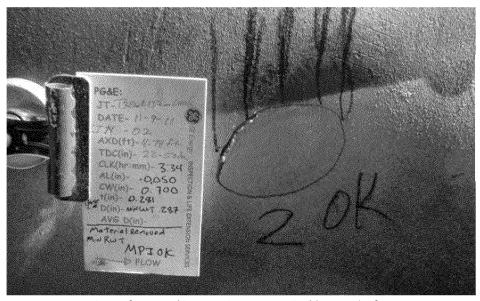


Overview of second inspection MT Indications of LIN-02

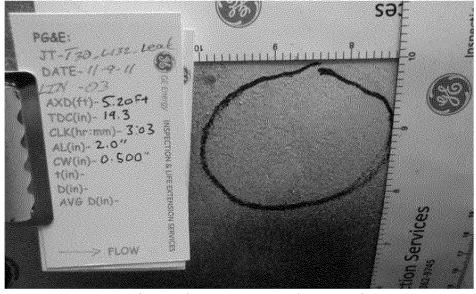


Overview of second inspection pre buff area (RWT) LIN-02

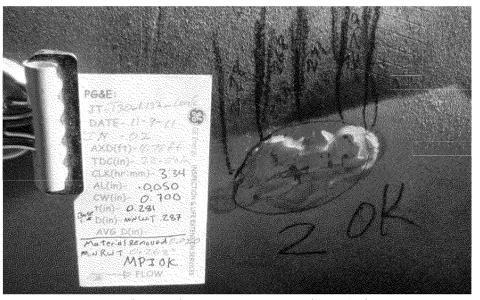




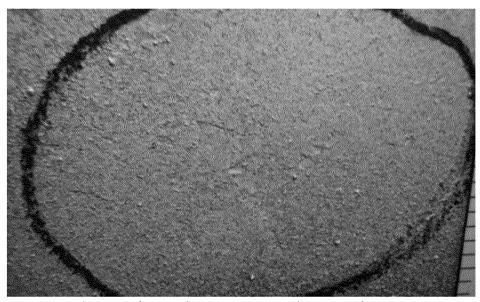
Overview of second inspection post grind (MPIOK) of LIN-02



Overview of second inspection MT Indications of LIN-03

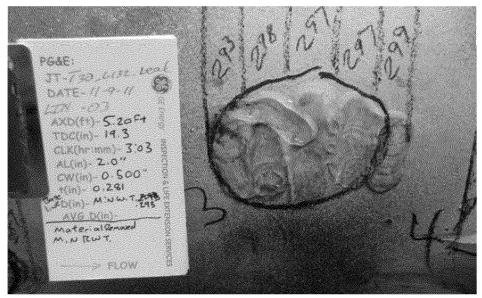


Overview of second inspection post grind (RWT) of LIN-02

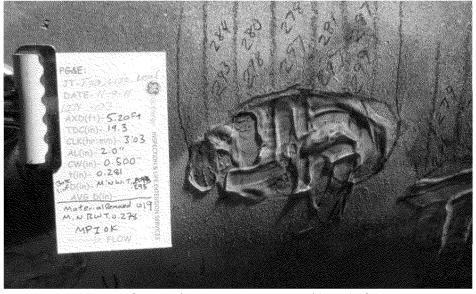


Close up of second inspection MT Indications of LIN-03

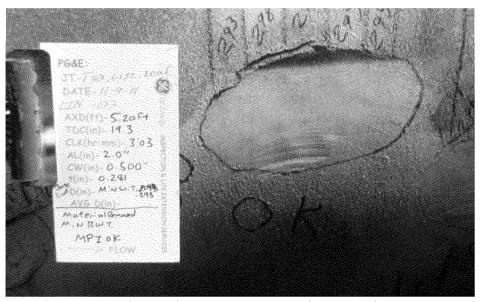




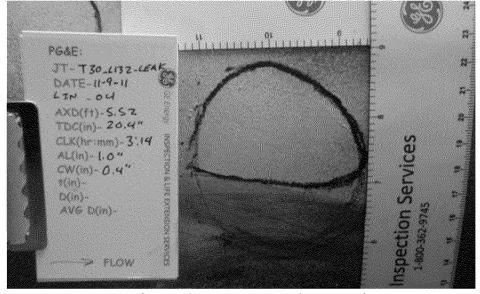
Overview of second inspection pre buff area (RWT) LIN-03



Overview of second inspection post grind (RWT) of LIN-03



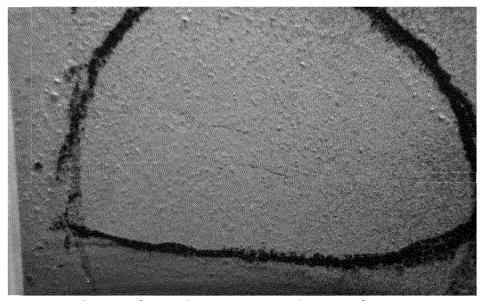
Overview of second inspection post grind (MPIOK) of LIN-03



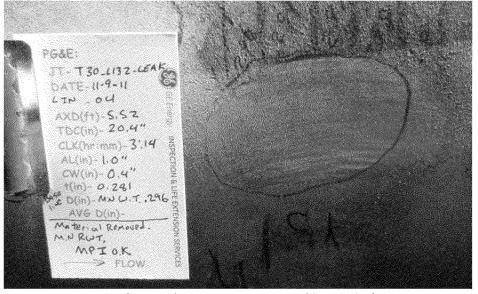
Overview of second inspection MT Indications of LIN-04



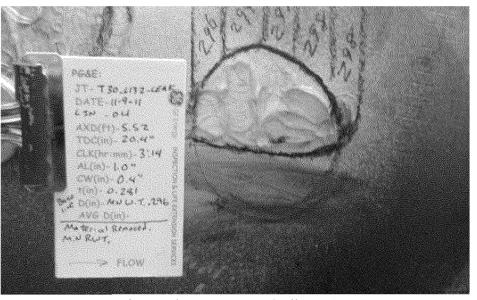
GE Energy Inspection Services



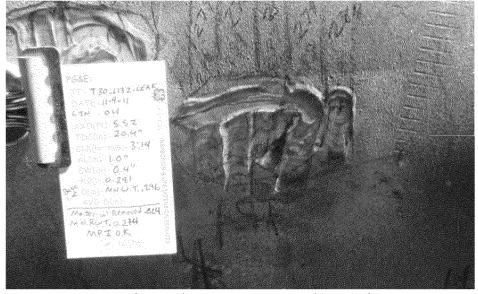
Close up of second inspection MT Indications of LIN-04



Overview of second inspection post grind (MPIOK) of LIN-04

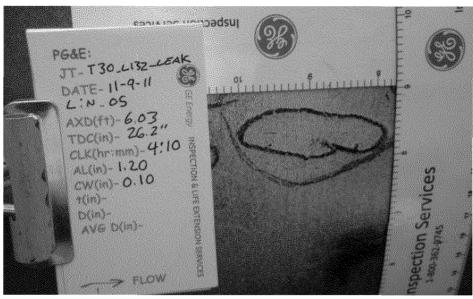


Overview of second inspection pre buff area (RWT) LIN-04

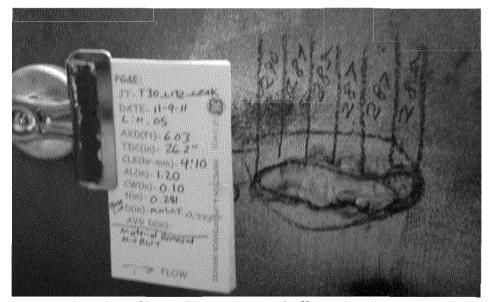


Overview of second inspection post grind (RWT) of LIN-04

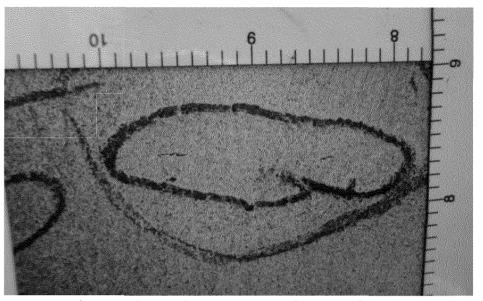




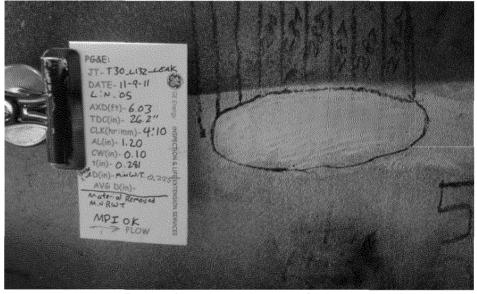
Overview of second inspection MT Indications of LIN-05



Overview of second inspection pre buff area (RWT) LIN-05



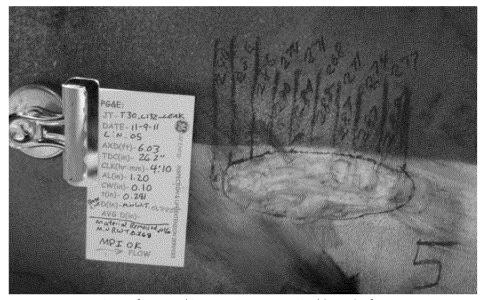
Close up of second inspection MT Indications of LIN-05



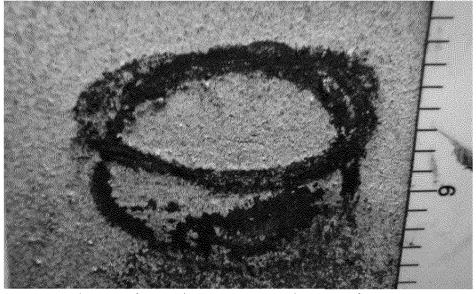
Overview of second inspection post grind (MPIOK) of LIN-05



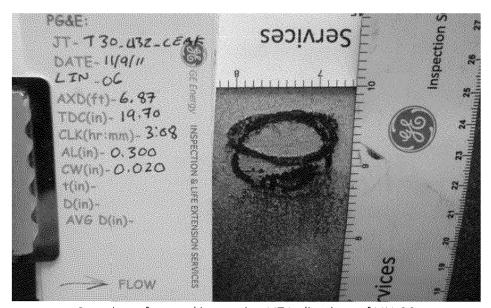
GE Energy Inspection Services



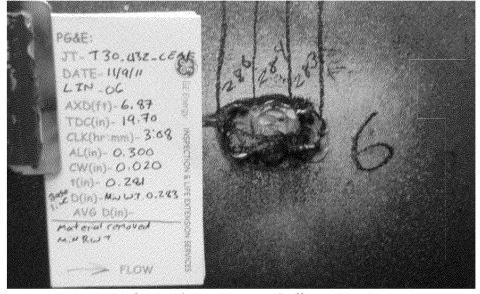
Overview of second inspection post grind (RWT) of LIN-05



Close up of second inspection MT Indications of LIN-06

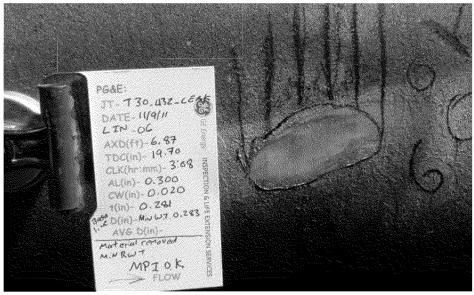


Overview of second inspection MT Indications of LIN-06

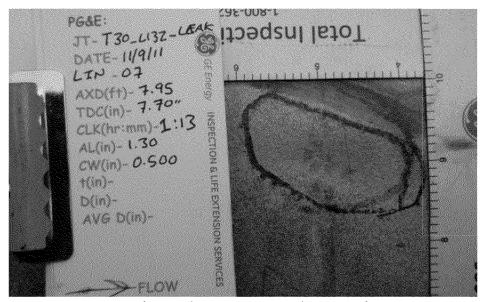


Overview of second inspection pre buff area (RWT) LIN-06

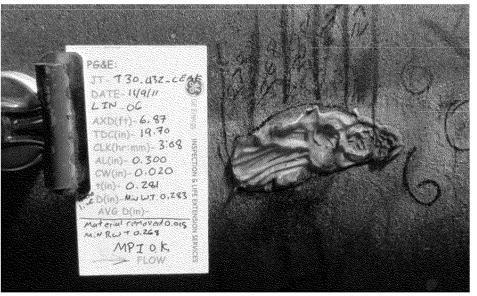




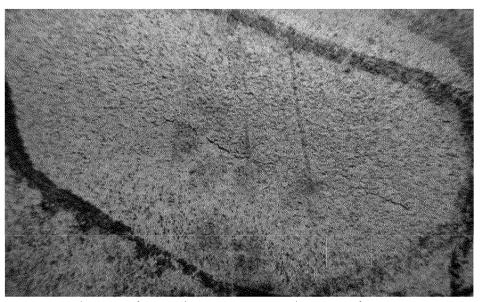
Overview of second inspection post grind (MPIOK) of LIN-06



Overview of second inspection MT Indications of LIN-07

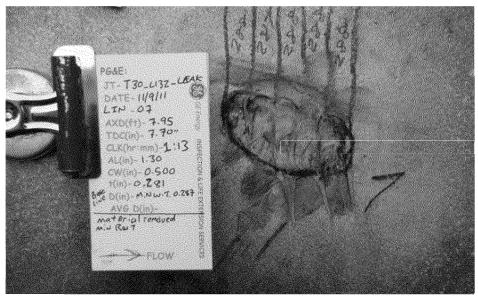


Overview of second inspection post grind (RWT) of LIN-06

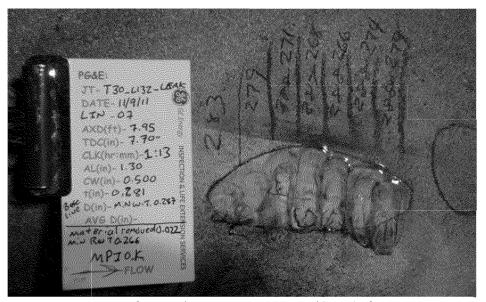


Close up of second inspection MT Indications of LIN-07

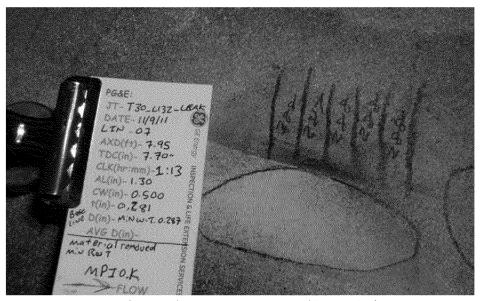




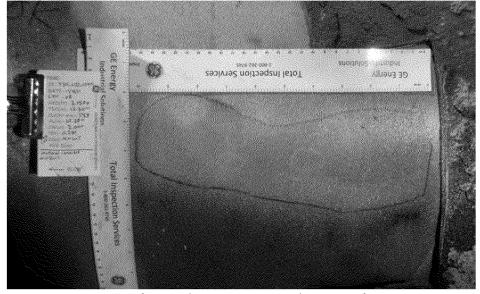
Overview of second inspection pre buff area (RWT) LIN-07



Overview of second inspection post grind (RWT) of LIN-08



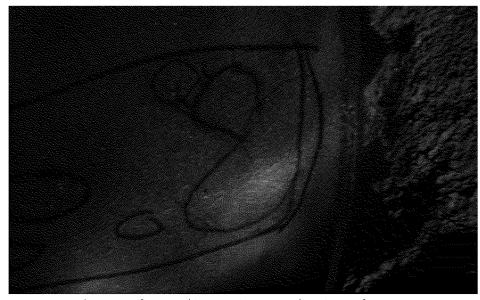
Overview of second inspection post grind (MPIOK) of LIN-07



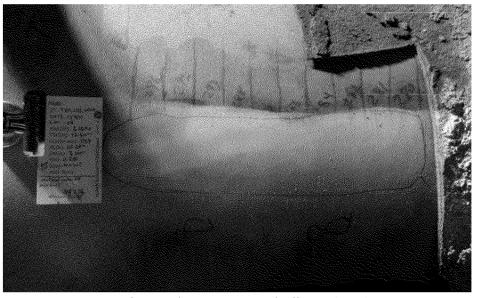
Overview of second inspection MT Indications of LIN-08



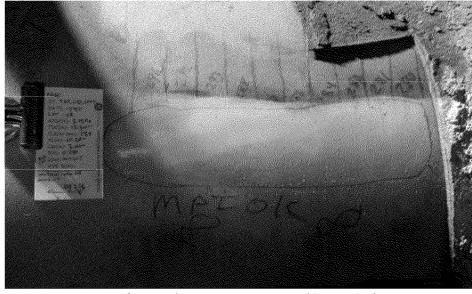
GE Energy Inspection Services



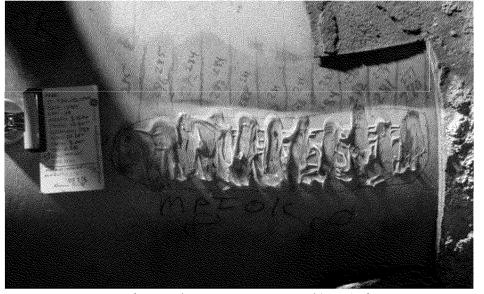
Close up of second inspection MT Indications of LIN-08



Overview of second inspection pre buff area (RWT) LIN-08

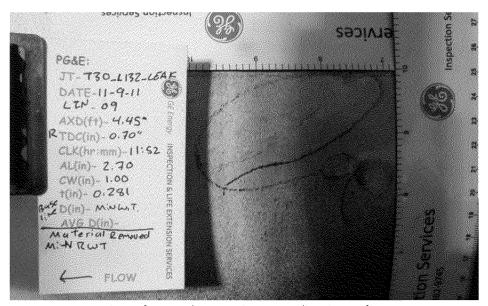


Overview of second inspection post grind (MPIOK) of LIN-08

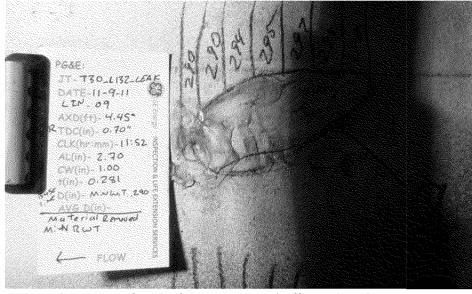


Overview of second inspection post grind (RWT) of LIN-09

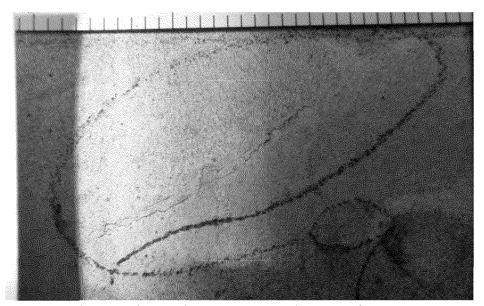




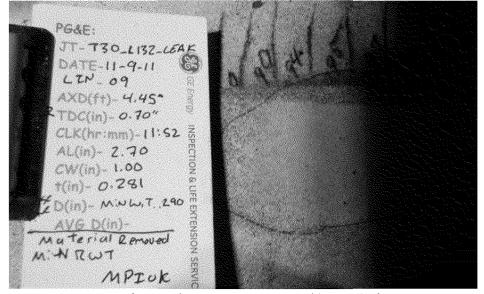
Overview of second inspection MT Indications of LIN-09



Overview of second inspection pre buff area (RWT) LIN-09

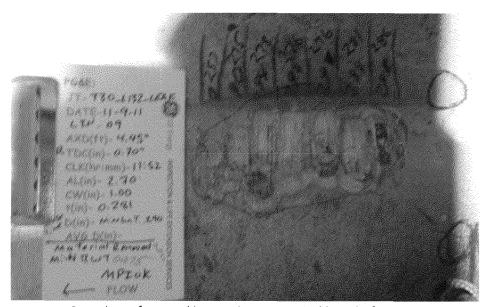


Close up of second inspection MT Indications of LIN-09

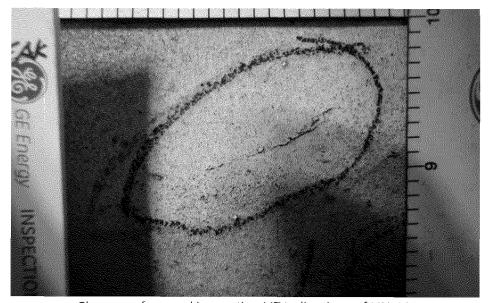


Overview of second inspection post grind (MPIOK) of LIN-09

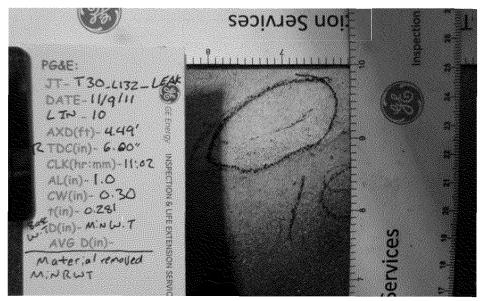




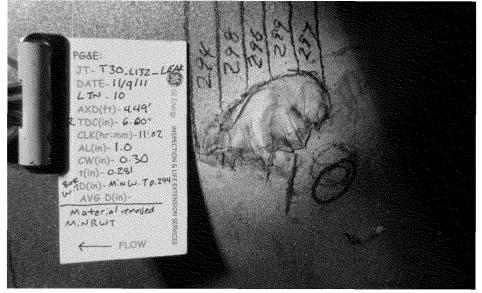
Overview of second inspection post grind (RWT) of LIN-10



Close up of second inspection MT Indications of LIN-10

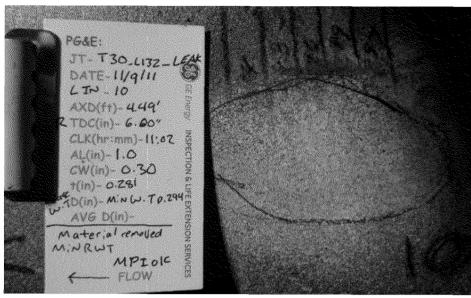


Overview of second inspection MT Indications of LIN-10

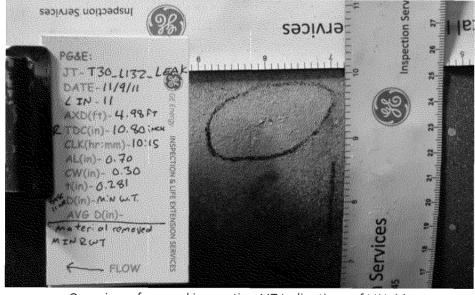


Overview of second inspection pre buff area (RWT) LIN-10

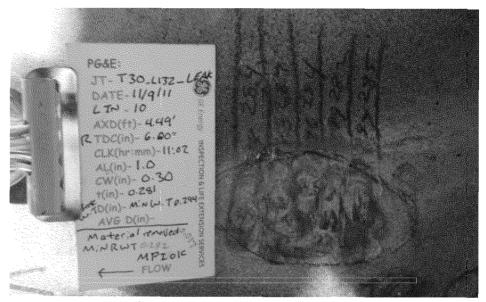




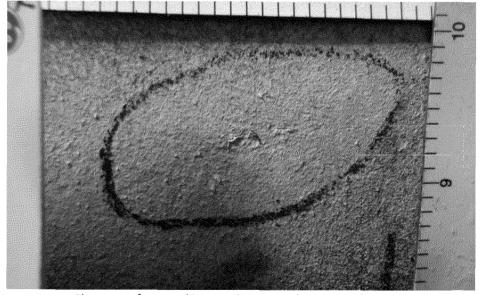
Overview of second inspection post grind (MPIOK) of LIN-10



Overview of second inspection MT Indications of LIN-11

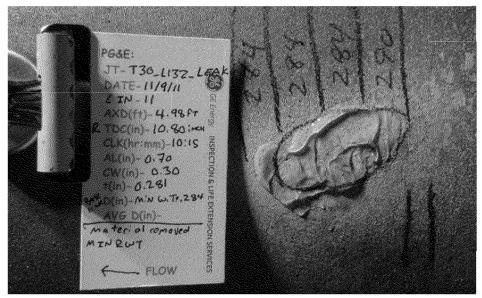


Overview of second inspection post grind (RWT) of LIN-11

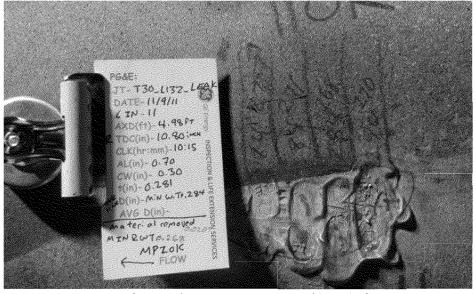


Close up of second inspection MT Indications of LIN-11

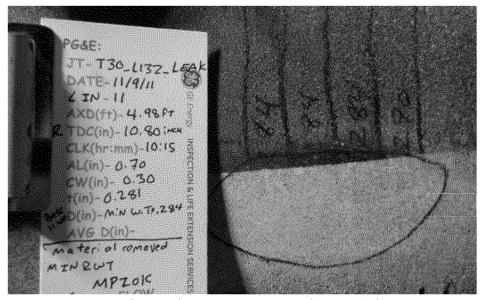




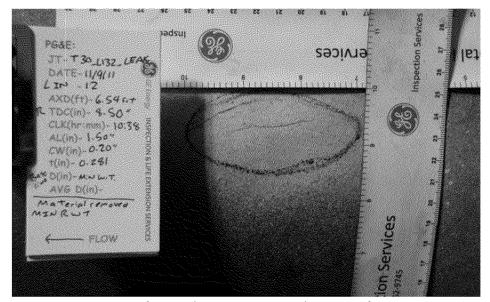
Overview of second inspection pre buff area (RWT) LIN-11



Overview of second inspection post grind (RWT) of LIN-12

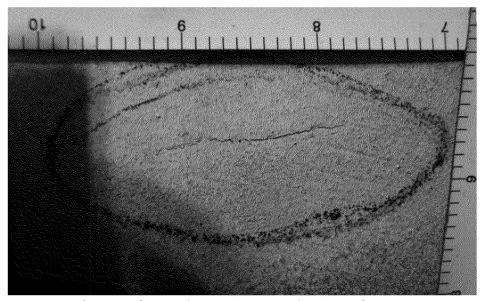


Overview of second inspection post grind (MPIOK) of LIN-11

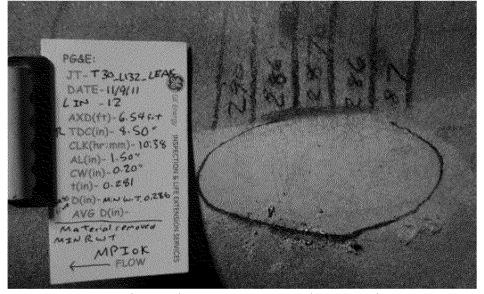


Overview of second inspection MT Indications of LIN-12

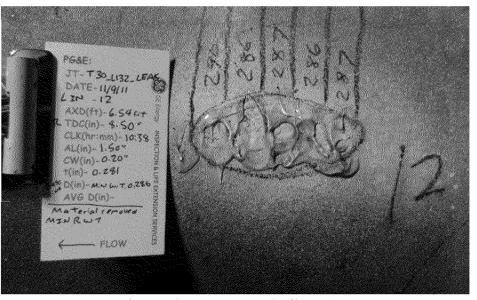




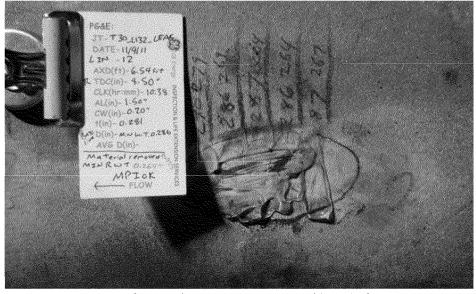
Close up of second inspection MT Indications of LIN-12



Overview of second inspection post grind (MPIOK) of LIN-12

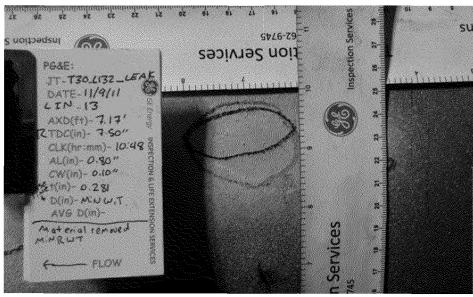


Overview of second inspection pre buff area (RWT) LIN-12

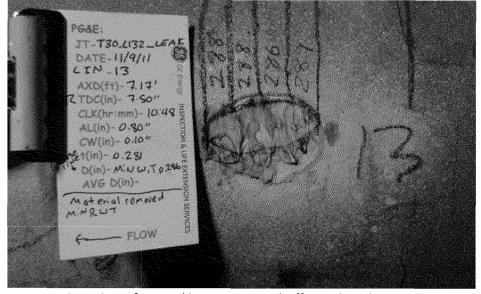


Overview of second inspection post grind (RWT) of LIN-12

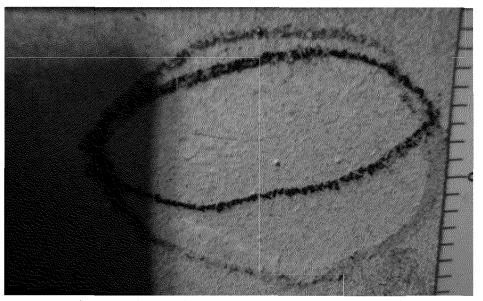




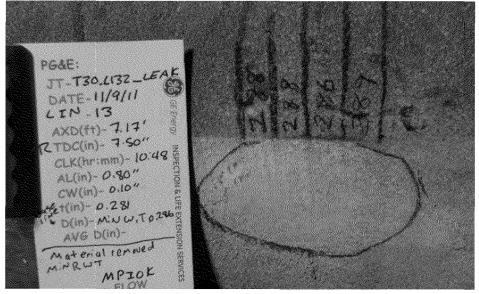
Overview of second inspection MT Indications of LIN-13



Overview of second inspection pre buff area (RWT) LIN-13



Close up of second inspection MT Indications of LIN-13



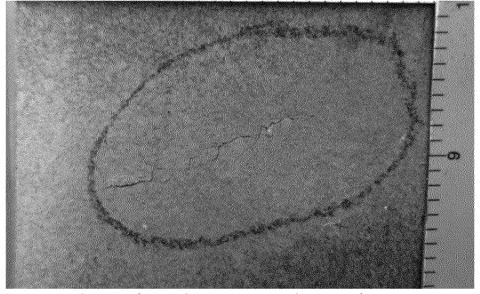
Overview of second inspection post grind (MPIOK) of LIN-13



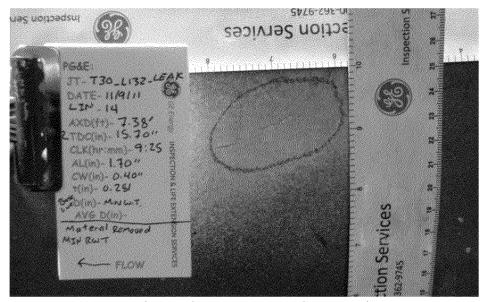
GE Energy
Inspection Services



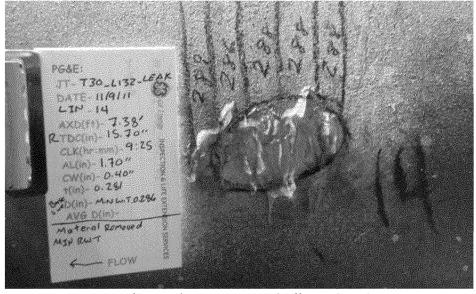
Overview of second inspection post grind (RWT) of LIN-13



Close up of second inspection MT Indications of LIN-14

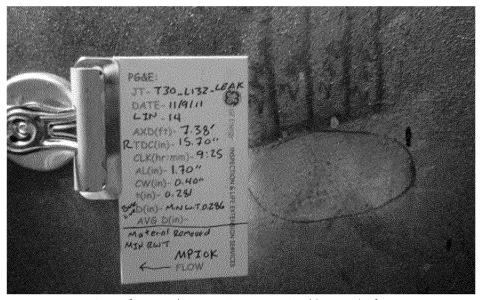


Overview of second inspection MT Indications of LIN-14

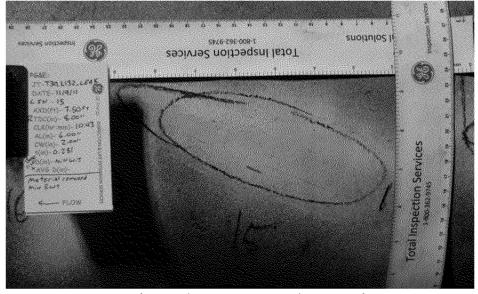


Overview of second inspection pre buff area (RWT) LIN-14

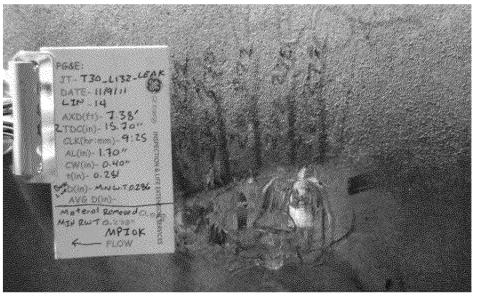




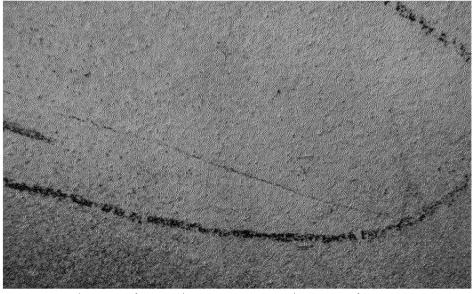
Overview of second inspection post grind (MPIOK) of LIN-14



Overview of second inspection MT Indications of LIN-15



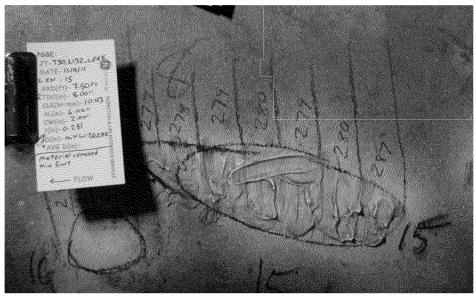
Overview of second inspection post grind (RWT) of LIN-14



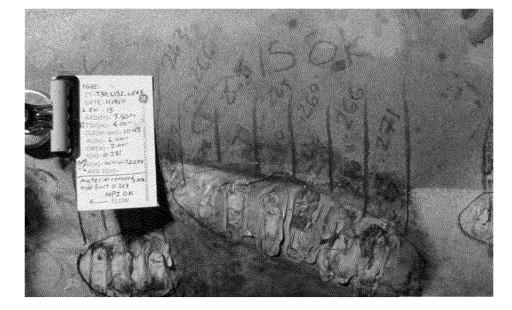
Close up of second inspection MT Indications of LIN-15

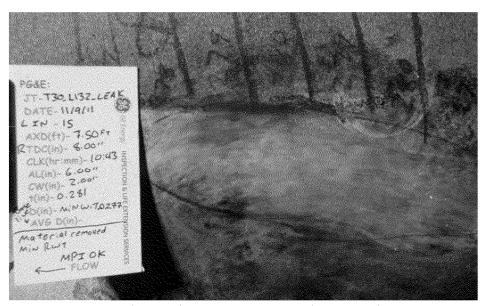


GE Energy Inspection Services

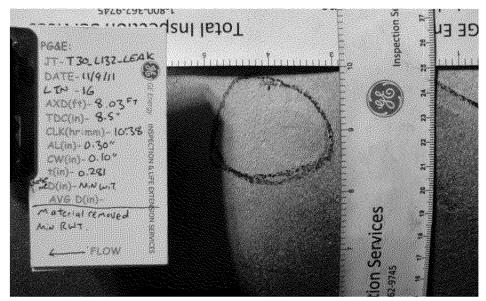


Overview of second inspection pre buff area (RWT) LIN-15



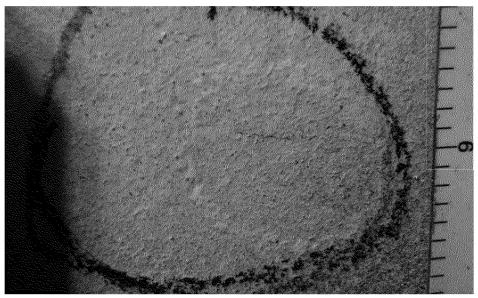


Overview of second inspection post grind (MPIOK) of LIN-15

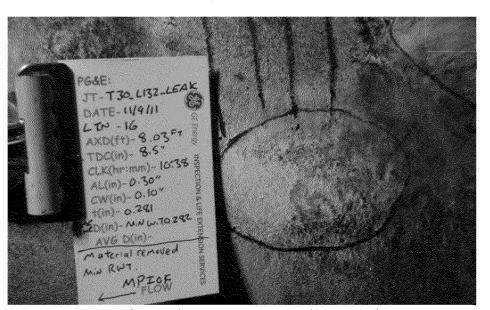


Overview of second inspection MT Indications of LIN-16





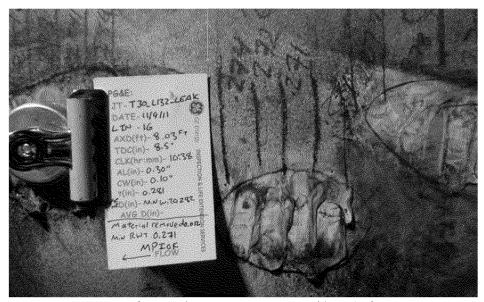
Close up of second inspection MT Indications of LIN-16



Overview of second inspection post grind (MPIOK) of LIN-16

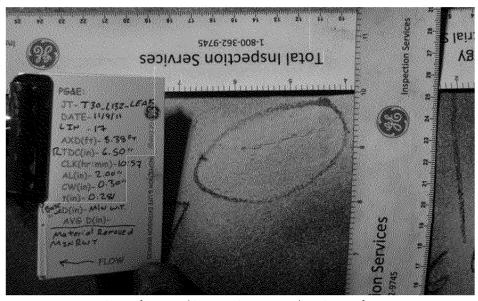


Overview of second inspection pre buff area (RWT) LIN-16

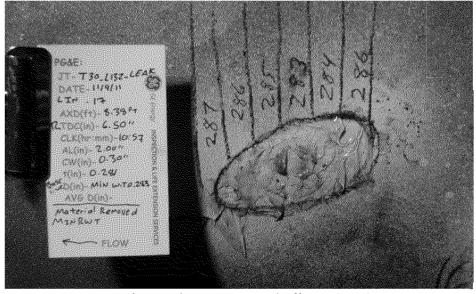


Overview of second inspection post grind (RWT) of LIN-16

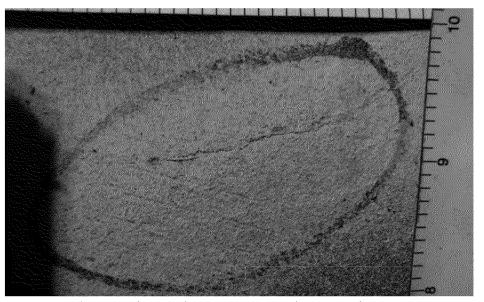




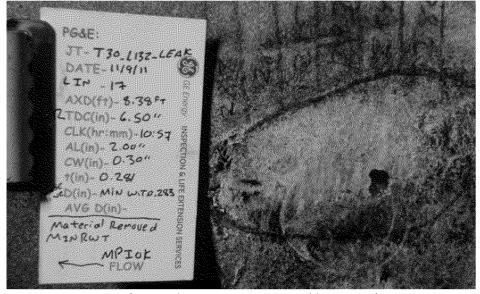
Overview of second inspection MT Indications of LIN-17



Overview of second inspection pre buff area (RWT) LIN-17

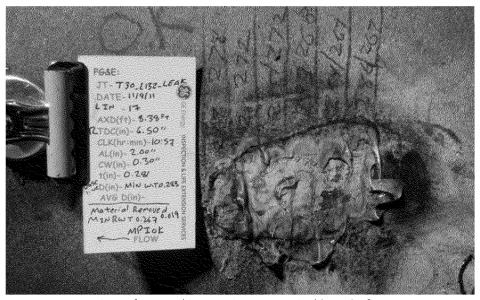


Close up of second inspection MT Indications of LIN-17

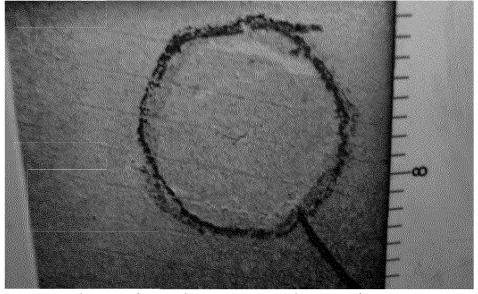


Overview of second inspection post grind (MPIOK) of LIN-17

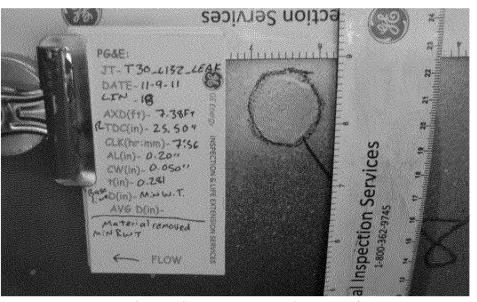




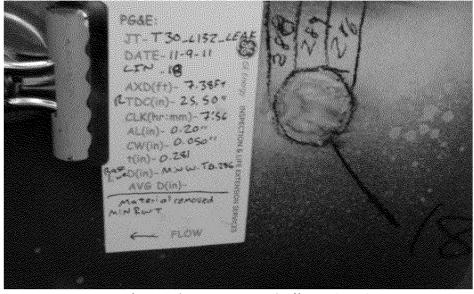
Overview of second inspection post grind (RWT) of LIN-17



Close up of second inspection MT Indications of LIN-18

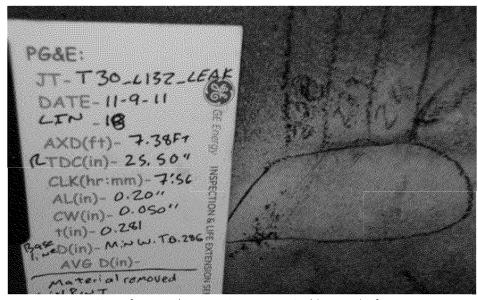


Overview of second inspection MT Indications of LIN-18

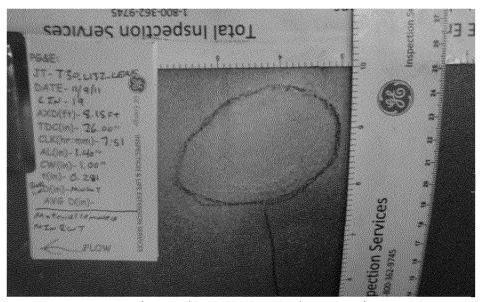


Overview of second inspection pre buff area (RWT) LIN-18

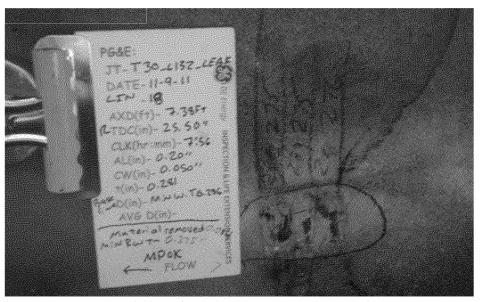




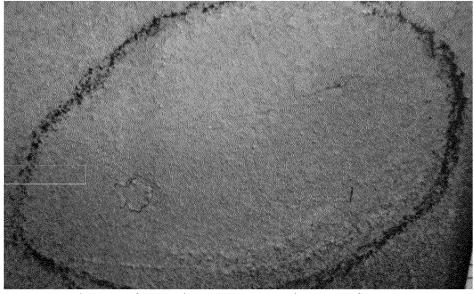
Overview of second inspection post grind (MPIOK) of LIN-18



Overview of second inspection MT Indications of LIN-19

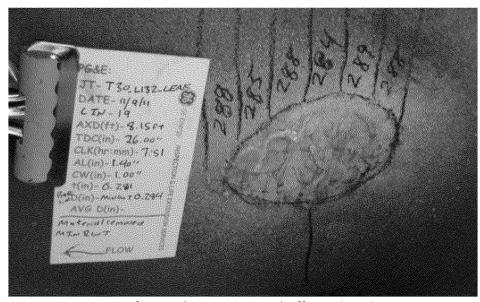


Overview of second inspection post grind (RWT) of LIN-18

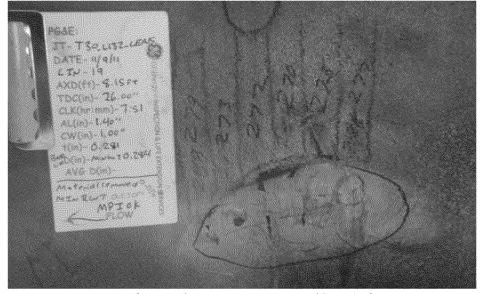


Close up of second inspection MT Indications of LIN-19

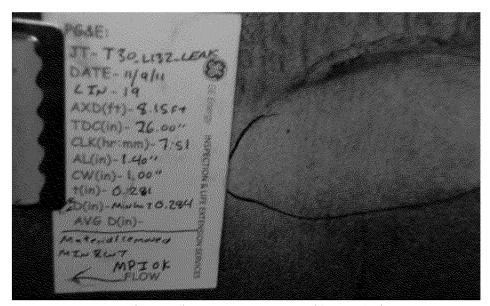




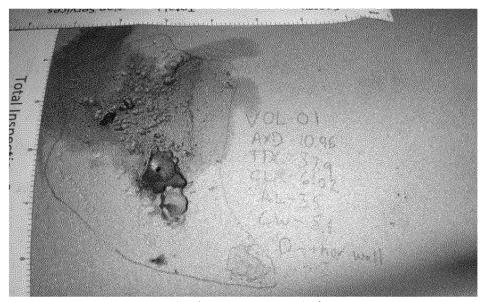
Overview of second inspection pre buff area (RWT) LIN-19



Overview of second inspection post grind (RWT) of LIN-19



Overview of second inspection post grind (MPIOK) of LIN-19



Overview (with measurements) of VOL-01



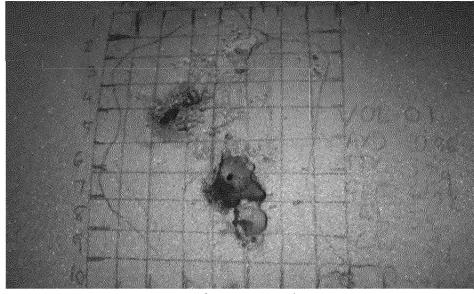
GE Energy Inspection Services



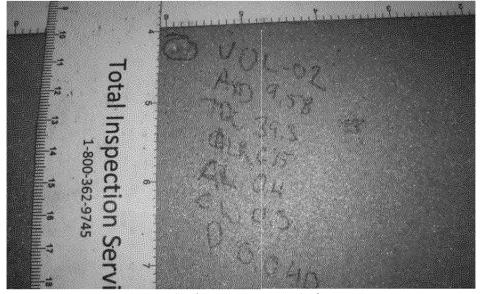
Close up (deepest area) of VOL-01



Pit gauge measurement VOL-01

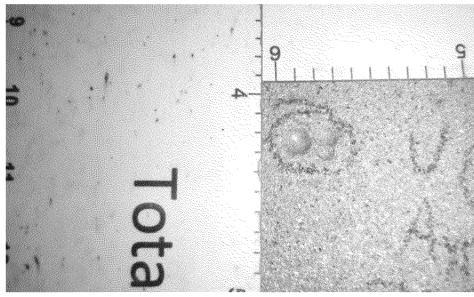


Overview of corrosion grid VOL-01



Overview (with measurements) of VOL-02





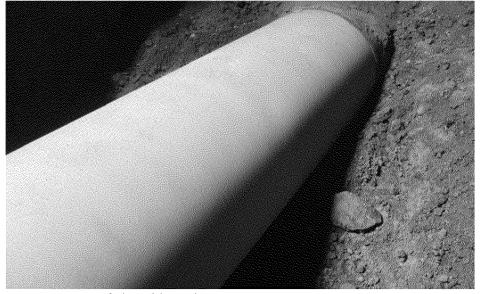
Close up (deepest area) of VOL-02



Pit gauge measurement VOL-02

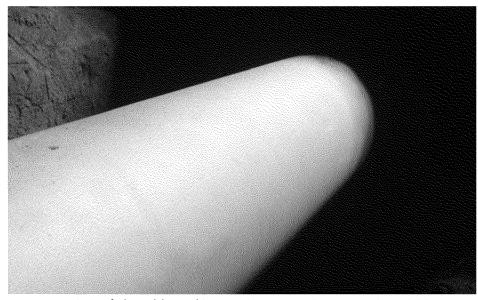


Overview of corrosion grid VOL-02

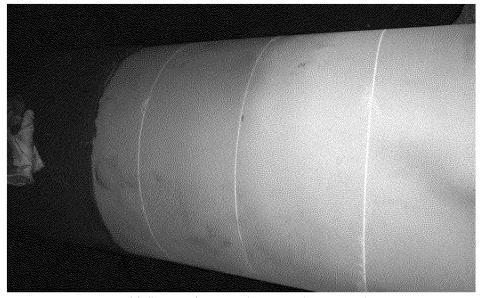


Overview of clean blasted inspection area prior to repair activities





Overview of clean blasted inspection area prior to repair activities



Overview of full encirclement sleeve "B" location placement



Overview of full encirclement sleeve "B" placement



Overview of full encirclement sleeve "B" welded in to place

