Docket #0108 Date Filed: 2/3/2020

THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF DELAWARE

Case No. 18-12378 (KG)

WELDED CONSTRUCTION, L.P., PLAINTIFF,

v.

PRIME NDT SERVICES, INC., DEFENDANT.

EXPERT REPORT

16 December 2019

Aurora Inspection and Consulting
Joshua Bell
PO Box 72491
Fairbanks, Alaska 99707

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I. Scope of Work

1. Aurora Inspection and Consulting ("AIC") was retained by Young Conaway Stargatt & Taylor, LLP to provide an expert analysis and opinion for Case No. 18-12378 (CSS) between Plaintiffs, Welded Construction L.P. and Welded Construction Michigan, LLC (together, "Welded Construction") and Defendant, Prime NDT Services Inc., ("Prime NDT"). AIC's scope of work pertained directly to the allegations that Prime NDT, who was sub-contracted by Welded Construction, did not follow the contractual or code requirements set forth by Subcontract No. 2016-SL_ME2-02 (the "Subcontract"), specifically pertaining to the radiography of welds on the Mariner East 2 Pipeline project. This analysis and opinion is not to determine the acceptability of the welds or the quality of the radiographs submitted and is only specific to Prime NDT's adherence to the Subcontract and the required nondestructive testing ("NDT") codes and specifications.
2. In 2015, Welded Construction contracted with Sunoco Partners Marketing & Terminals L.P. and Sunoco Pipeline L.P., affiliates of Energy Transfer Partners, L.P (collectively, "Sunoco") to construct a pipeline, spanning 152.6 miles, that will transport natural gas liquids ("NGL") across the states of Pennsylvania, Ohio, and West Virginia. In 2016, Welded Construction subcontracted with Prime NDT to perform the NDT required, specifically the radiographic testing, on the welds made by Welded Construction on the pipeline, including producing and analyzing x-ray films of welds made by Welded Construction. In late June of 2018, Sunoco's notified Welded Construction that a number of the x-ray films and analyses submitted by Prime NDT were defective, specifically that there were irregularities in the Prime NDT's radiographic film. As a result, Welded Construction was forced to "dig up", re-examine, re-bury, and backfill completed sections of the pipeline at seventy-three (73) weld that were in question. AIC was retained and asked to evaluate the following:

- The Subcontract for a clear understanding of the NDT requirements and QC of deliverables; and
- Nationally required construction codes and recognized specification pertaining to the construction of NGL pipelines and their requirements for the NDT of welds.

II. Expert

3. AIC is an inspection company, founded in Alaska, whose primary work involves the inspection of and consultation on industrial construction projects as it relates to buildings, piping, pressure vessels, tanks, bridges, etc. AIC's analysis on this matter was led by Joshua Bell. Mr. Bell is the Operations Manager for AIC and has worked in the inspection industry for over fifteen (15) years. He has held management positions with some of the largest inspection companies in the world, managing some of the largest industrial construction projects in the United States. His specialty is in the Oil & Gas field, where he has worked on oil & gas pipelines and facilities, refineries, and marine loading terminals, etc. He currently holds certifications through AWS (American Welding Society), NACE (National Association of Corrosion Engineers), and ASNT (American Society for Nondestructive Testing). As a NDT Level III, in addition to MT (Magnetic Particle testing), PT (Penetrant Testing), UT (Ultrasonic Testing), and RT (Radiographic Testing), Mr. Bell has the allowable qualifications required to certify technicians to current codes and practices, audit NDT results and documentation, write and review procedures and qualifications, and provide QA/QC on all NDT related work.

III. Materials

4. AIC used the following materials to evaluate and form its independent opinion:
   - The Subcontract agreement between Welded Construction and Prime NDT;
   - The Sunoco-Welded Construction contract and amendments;
   - Claims submitted by Welded Construction to Prime NDT;
   - Welded Construction's Corrective Action Report;

- Prime NDT's SP-RT-2 "Procedure Identification" Radiographic Requirements – API-1104 (21st Edition) ("SP-RT-2 Procedure");
- Prime NDT's PQ-2 "Procedure Identification" Qualification / Certification of NDE Personnel;
- Transcript for the deposition of Don Shumway (formerly of Welded Construction);
- 49 CFR Part 195 – Transportation of Hazardous Liquids by Pipeline;
- API Standard 1104 (20th edition) – Welding of Pipelines and Related Facilities;
- ASNT SNT-TC-1A – Personnel Qualification and Certification in NDT; and
- ASME B31.4 – Pipeline Transportation Systems for Liquids and Slurries.

IV. Reporting

5. This report's objective was to utilize the materials listed in Section 3 and form an expert opinion on whether Prime NDT followed its procedures and the required codes/specifications when reporting on the results of its NDT to Welded Construction. That being stated, the cause of deficiency communicated by Prime NDT's employee Scott Elliot in Welded Construction's Corrective Action Report indicated that "when the reviewing and compiling the shots, if the x ray tech believed the film quality was insufficient to pass 3rd party auditor inspection – rather than going back to the weld to take the additional shot, he [the x-ray technician] randomly shot a weld nearby." If the foregoing or something along the same lines is indeed what transpired, then Prime NDT's employee fraudulently reported the weld results.
6. Upon completion of radiography on a weld, Prime NDT was obligated to complete an inspection report stating the results of the weld in accordance with API Standard 1104's acceptance criteria. As referenced in section 5.1 of Prime NDT's SP-RT-2 Procedure, each "radiographic identification number shall include the . . . weld or part number" and "[t]his information shall appear on every radiograph [image.]" Per section 13.1 of Prime NDT's SP-RT-2 Procedure, "[a] copy of all test results shall be submitted to the customer . . . ." If the welds in

question knowingly were identified as the wrong weld by a Prime NDT certified technician, then Prime NDT is out of compliance within its own procedures, as it did not follow the above-referenced sections.

V. Radiographic Film Interpretation

7. As established in paragraph 1, this report is not designed to judge the quality of the welds per the radiographic film nor the quality of the workmanship. Pursuant to section A of the Subcontract, "the subcontractor is required to provide labor, equipment and materials for 100% NDE inspection of the welds in accordance with API Standard 1104 . . . ." Only a Level II or Level III technician can interpret film per API Standard 1104, section 8.4.1. To certify an employee, Prime NDT's SP-RT-2 Procedure, section 2.0, requires "Personnel performing radiographic examinations in accordance with this procedure shall meet qualification requirements as defined in Prime NDT Services, Inc.'s General Procedure PQ-2 which meets the minimum requirements of ASNT Recommended Practice SNT-TC-1A for certification of NDE Personnel." Based upon the foregoing, Prime NDT is required to certify employees per SNT-TC-1A practices, and those employees are required to interpret the film of the welds as set forth in the Subcontract.
8. Both API Standard 1104 and the Subcontract provide Welded Construction the ability for to perform audits on any of Prime NDT's services, in this case the radiographic film. While it may be allowed, the audit provisions are not required by any code, standard, or contract listed in Section 3 of this report. What is required, however, as described in paragraph 7 above, is that Prime NDT must interpret the results of the acceptability of the weld.

VI. Discrepancy with the Code of Federal Regulations 195

9. Welded Construction and Prime NDT executed the Subcontract on January 6, 2016. Section A of the Subcontract states the "Subcontractor will provide all labor, equipment and material for 100% NDE inspection of welds in accordance with API Standard 1104, latest addition and approved by DOT Part 195." Prime

NDT's SP-RT-2 Procedure was last revised on August 28, 2015 and purports to be the "Radiographic Requirements – API-1104 (21st Edition)"; however, in section 1.0 titled "Purpose" the procedure states "for radiographic examination of welds in accordance with API-1104, 20th Edition code requirements." If this procedure has indeed been revised to the 21st addition of API Standard 1104 then it does not follow the Code of Federal Regulations ("CFR") 195.3 which has not yet adopted API Standard 1104 21st edition and still requires technicians to follow the 20th edition. If this is the case, then the procedure Prime NDT was utilizing for this work is non-compliant.

VII. Supervision

10. As an employer, Prime NDT has an obligation to supervise its employees. Without some form of supervision, it goes without saying, the employees of a company are not held to the standard that employers are guaranteeing their clients. This was the case for Prime NDT and its radiographic crew on the Mariner East 2 Pipeline. As stated multiple times in the deposition of Don Byron Shumway, Jr., Prime NDT did not supervise the work being performed by its radiographic crew. Section A of the Subcontract states the "Subcontractor shall furnish all project . . . supervision; technical, professional and other services . . . ." By not supplying adequate supervision, Prime NDT choose to trust its employees to follow company procedure without any company oversight. Trust that most companies often place in veteran technicians but not in newly "non-field tested" technicians. Prime NDT made the mistake of not following common industry practices by not performing any Quality Assurance over its product. On a project of this magnitude some form of Quality Assurance should have taken place on the part of Prime NDT. Random sampling of the radiographic film and Proficiency reviews on the technicians are simple ways the employers can help assure quality deliverables, especially with newer technicians.
11. The Prime NDT technician that knowingly submitted fraudulent documentation and radiographic film, per the deposition of Don Byron Shumway, Jr., was

certified as a Level II in radiography only two (2) days prior to starting work on the Mariner East 2 Pipeline project. Based on Mr. Shumway's deposition, Prime NDT did not place quality assurance over the brand new technician. This, in any industry, is complete negligence of a company to oversee new employees and in my opinion is gross negligence and willful misconduct on the part of Prime NDT.

VIII. Integrity

12. It is said throughout the inspection industry that the most important attribute an inspector/technician is integrity. Often newer employees learn this trait through the standards of which their company holds them. If a company allows corner-cutting behavior in any aspect, then how can anyone expect not to see the same representation of that company's employees? With this said, it is Prime NDT's opinion that its technician is at fault, per the deposition of Mr. Shumway. The technician did not show integrity in the work that he was performing, and at the time, he was representing Prime NDT.

IX. Conclusion

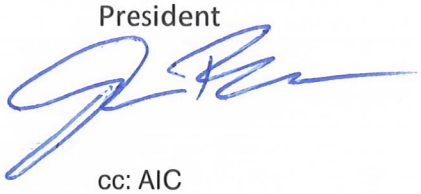
13. Based on the documentation provided to me by Young Conaway Stargatt & Taylor, LLP, along with the codes and standards referenced in Section 3 of this report, I can state that my expert opinion for Case No. 18-12378 (CSS) is that Prime NDT did not satisfactorily meet the requirements set forth in the Subcontract. It did not provide Welded Construction with 100% of NDT inspection for the subject welds. It did not perform quality control over its own technician and relied on Sunoco to identify the problem. Standard practices require services provided by an NDT company to meet code compliance without requiring 3rd party auditing. Prime NDT did not provide any type of supervision over its newly certified technician, and Prime NDT admits that its technician is at fault. As stated earlier, although Welded Construction had the right to review the documentation and film it was not required per any provision of the Subcontract or code referenced in this report. The clear and simple fact is that

Prime NDT, as an inspection company, did not show the integrity expected or required, and as such, flagrantly violated the Subcontract.

14. This author confirms that the statements included in this report are accurate to the best of his knowledge and expertise; that he has evaluated this case in a complete and detailed manner; and his opinions expressed herein are based upon a reasonable degree of professional certainty in the field Inspection, NDT, Quality Control and Quality Assurance. If additional documents or information become available that might affect this author's evaluation or opinions, he reserves the right to amend this opinion as necessary.

Joshua D. Bell

President



cc: AIC

12/16/2019

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EDUCATION

2000 – 2004 High School Diploma, Monroe Catholic High School
2005 – 2006 University of Alaska Fairbanks (UAF) – Business Management
2006 40 Hour Radiation Safety Course
2007 Radiography Examination Level I (40-hour course)
2009 Radiography Examination Level II (40-hour course)
2005 Ultrasonic Examination Level I (40-hour course)
2006 Ultrasonic Examination Level II (40-hour course)
2010 Phased Array Examination Level II (80-hour course)
2010 Time of Flight Diffraction (TOFD) Level II (80-hour course)
2011 Magnetic Particle Examination Level I (8-hour course)
2012 Magnetic Particle Examination Level II (12-hour course)
2011 Liquid Dye Penetrant Examination Level I (4-hour course)
2012 Liquid Dye Penetrant Examination Level II (8-hour course)
2012 AWS Certified Welding Inspector
2014 NACE CIP Level I
2015 NACE CIP Level II

PROFESSIONAL CERTIFICATIONS

Certified CIP Level II
Certified Welding Inspector
Mechanical Inspection
Radiography Level III
Computer Radiography, VMI system
Manual Ultrasonic Testing Level III
Ultrasonic Testing Angle Beam Level III
Automated Ultrasonic Testing III
Phased Array Level II
Time of Flight Diffraction (TOFD) Level II
Magnetic Particle Testing Level III
Liquid Dye Penetrant Level III

INSPECTION EXPERIENCE

Pipelines (Oil and Natural Gas)
Oil Refineries
Power Generation (Nuclear, Wind, Hydro, Fossil Fuel)
Buildings
Paper Mills
Aerospace
Shipyard
Oil Platforms
Process Piping
Bridges
Precision Machining

DETAILED EMPLOYMENT HISTORY

Employer	Aurora Inspection and Consulting
Job Title	President / Aurora Level III
Dates of Employment	October 2019 - current
Job Duties	Managing operations and resources for all Inspection work. Responsible for making all corporate decisions, including but not limited to contracts, financial, procedures, and programs. Develop written practices and procedures for Inspection related work. Perform analysis of construction projects to help identify required Inspection hold points and advise on best operating practices.
Employer	Team Industrial Services Inc.,
Job Title	Operations Manager / Team Ind. Level III
Dates of Employment	March 2014 – current
Job Duties	Responsible for oversight, implementation, planning, reviewing, monitoring, and reporting for Anchorage, Valdez, Fairbanks and Kenai business units on inspection-related activities for regulatory compliance, compliance with multiple contracts (Alyeska Pipeline, British Petroleum, Hilcorp, Marathon, Chevron) processes, procedures, specifications, inspection plans, and work orders. Write and maintain quality programs for all existing contracts as well as certify Team employees under ASNT requirements.
Employer	Team Peak Alaska (Team Inc.), contracted by Alyeska Pipeline Service Company
Job Title	NDE / Mechanical / Welding Coordinator
Dates of Employment	July 2012 – March 2014
Job Duties	NDE / Mechanical / Welding Coordinator and Quality Assurance for the Trans-Alaska Pipeline System (TAPS). Coordinating multiple teams and inspectors line wide to insure the contract is efficiently administered. QA duties include audits on all inspection employees, documentation and film reviews while maintaining the highest level of inspection quality and professionalism.
Employer	Team Peak Alaska (Team Inc.), contracted by Alyeska Pipeline Service Company
Job Title	Facility Radiation Safety Officer
Dates of Employment	March 2008 – June 2013
Job Duties	Perform Audits on all radiation personnel; keep personnel files organized and up to date. Maintain inventory of all radiation equipment including exposure devices. Ship, receive and track exposure devices for reloading and maintenance. Perform radiation training of personnel as required.

Additional job experience will be provided upon request

TESTIMONY EXPERIENCE

Joshua Bell has provided expert reports (written form) on numerous occasions (over 10), that have been used for United States Federal Claims in the Oil and Gas Industry. These reports consist of Project Auditing, Work Scope changes, Defective Inspection work and Defective Construction work. These reports were generated for generated by companies that include British Petroleum, Conoco Philips, Exxon Mobile, Hilcorp Energy, Chevron, Alyeska Pipeline Service Company, etc.

COMPENSATION

Joshua Bell or Aurora Inspection and Consulting have any financial interest related to the outcome of Case # 18-12378 "Welded Construction vs Prime NDT". Aurora Inspection and Consulting compensation is limited to the payment based on agreed hourly rates. The agreed upon hourly rates are as followed -

Review and Reporting fee -	$250 per hour
Deposition fee-	$300 per hour
Trial Testimony fee-	$350 per hour