



TechCorr



TechCorr

Statement of Qualifications

January 29, 2011

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Vision, Mission and Values

Vision, Mission and Values

Our Vision is to be recognized throughout the industry as the premier inspection, nondestructive testing, corrosion engineering and industrial solutions provider offering a wide range of services to meet our client's needs.

Our Mission is to provide safe, high quality, efficient and effective solutions to assist in the preservation of critical company assets to reduce liability and to ensure continued operations that comply with industry regulations in a cost effective manner.

Our Values encourage our employees to continuously "Manage the Customers Expectations" by providing solutions to problems versus becoming the clients problem. We value our ability and those employees whom go the extra mile to meet and manage our client's expectations.

To Our Employees we provide safe work environment with an aggressive pay and benefits structured to obtain and retain the best in the industry. We have created an environment and culture that promotes both personal and professional growth encouraging creativity, innovation and excellence.

To Our Shareholders we are a high growth company focused on continued growth and continued diversification assuring positive cash-flow, profitability and superior return on investment.

Introduction

Introduction

TechCorr is a leading materials-corrosion engineering, inspection-nondestructive testing and industrial cleaning solutions company with over three-hundred (300) highly skilled employees dispatched from more than sixteen (16) locations across the world. For more than twelve (12) years engineering, inspection, nondestructive testing, advanced nondestructive testing and industrial cleaning has been provided to the pipeline, oil & gas, electric power generation, petrochemical, pulp & paper and structural fabrication industries.

TechCorr engineers, inspectors and technicians provide expert advice in areas such as failure analysis, root cause analysis, material selection, remaining service life assessments, welding procedures, corrosion evaluations, inspection programs, testing programs and much more. These professionals have proven experience in almost every industrial sector and are backed by state of the art analytical equipment. This expertise, experience and technical support combine to provide practical solutions to challenging problems.

TechCorr is highly experienced in providing conventional nondestructive testing services, advanced nondestructive testing services and specialty inspection services. Our advanced non-destructive testing departments include far and above some of the most talented individuals in the world. We pride ourselves on continuously improving advanced inspection techniques and technologies. We pride ourselves on obtaining and promoting new technology to solve common industry problems.

Finally our industrial cleaning division includes some of the most talented individuals known to the industry. With a primary focus on non-manned entry tank and vessel cleaning services we promote both in-house robotic solutions that reduce the man-entry time nearly ninety (90) percent. As a result we don't just have the most talented individuals with the most effective solutions we also are the safest industrial cleaning company throughout the industry as a result of non-manned entry robotic cleaning systems.

Our clients benefit from the complimentary services and technical experiences to improve productivity and maximize the effectiveness of their inspection, maintenance and capital budgets.

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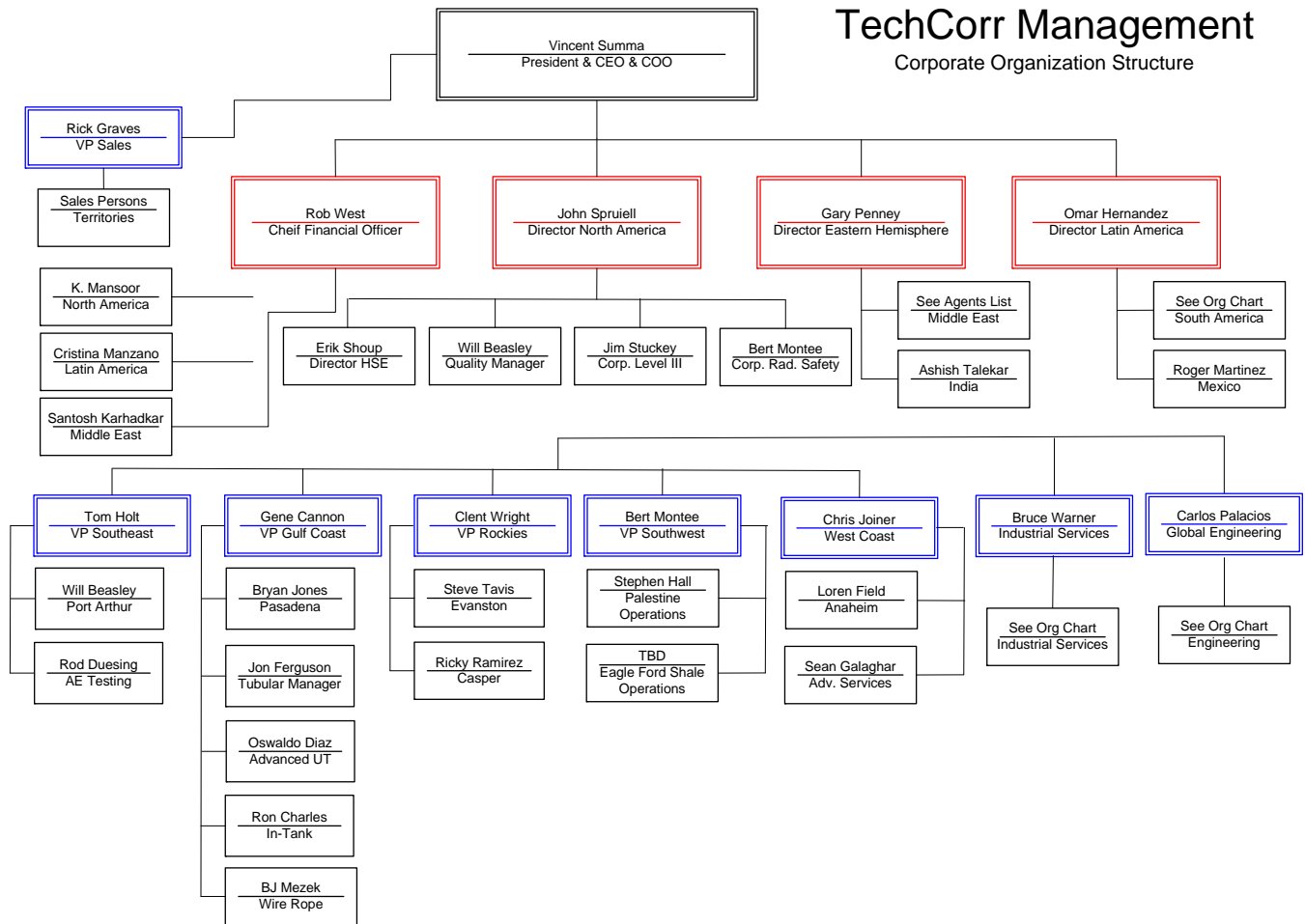
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Overall Management Organizational Structure

Overall Management Organizational Structure



Overall Professional Services

Overall Professional Services

Inspection & Non-destructive Testing:

API 510 Pressure Vessel Inspectors
API 570 Piping Inspectors
API 653 Tank Inspectors
NACE Coating Inspectors
NACE CP Specialists
Automated Corrosion Mapping
Automated Time of Flight Diffraction
Ultrasonic Phased Array Examination
Guided Wave Ultrasonic Testing
External Laser Scanning & Imaging
Alternating Current Field Measurement
Tank Floor MFE Inspection
Eddy Current Tube Inspection
Remote Field Tube Inspection
Internal Rotary Tube Inspection
B-SCAN Ultrasonic Inspection
Infrared Component Inspection
Ultrasonic Testing
Liquid Dye Penetrant Testing
Magnetic Particle Testing
Magnetic Lift-off Testing
Acoustic Emission Testing
Wire Rope Testing
Valve Leak Detection & Measurement

In-Service Tank Inspection Services:

In-Service Robotic Tank Floor Inspection
In-Service Tank Floor Probe Inspection
In-Service Tank Visual Inspections
3-D Sludge Profiling & Measurement

Industrial Cleaning Services:

Non-Man Entry Robotic Systems
Non-Man Entry Man-Way Cannons
Sludge Processing & Disposal
Hydro-blasting & Pressure Washing

Engineering:

Process Flow Modeling
Risk Based Analysis
Internal Corrosion Studies
External Corrosion Studies
Material Testing & Root Cause
Corrosion Inhibitor Optimization
CP Design, Construction
Pipeline GIS Surveys
Project Management

Partial List of Customers

Partial List of Customers

Anadarko Petroleum	Exxon Chemical	Onondaga
AES Corporation	Exxon Mobil Lubricant	Otter Tail
Aera Energy	Exxon Plastics	Oxy Chemicals
AGRA Environmental	Falcon Gas Pipeline	Pasadena Refining
Alabama Power Co.	Ferro Corporation	PCS Nitrogen
Alyeska Pipeline Services	Firestone Tire Company	PEMEX Madero Refinery
American Electric Power	First Energy Generating	Penobscot Energy
Atlantic Electric	Florida Eastcoast Railway	Petroleos de Venezuela
Bayer Corporation	Flint Hills Refining	Pfizer – SAIC
Bayern Oil	Georgia Pacific Corp.	PG&E
Bechtel (Sabine Pass)	Giant Industries	Platte River Power
British Petroleum	Global Petroleum	Portland Pipeline Co.
Boccard	Goodyear Tire Co.	PPG Industries
Camden Co-Gen	Gordonsville Energy	Publ. Service Elec. & Gas
Cardinal Operating	Halliburton Energy	Public Service Enterprise
Carolina Power & Light	Hanover Compressors	Resolute Natural Gas
Carpenter Environmental	Hoosier Energy	Reliant Energy
Celanese Acetate	International Paper	Rochester Public Utilities
Celanese Chemicals	Invista Chemicals	Rohm and Haas
Channel Master	Johnson & Johnson	Salt River Project
ChevronTexaco	Kansas City Power Keyspan	Savannah Electric
Cinergy	Energy	Schlumberger
CITGO	Koch Industries	Shell Oil Co.
City of Lakeland	KM Liquid Terminals	Sinclair Oil Co.
City Public Service	KM CO2	S. Carolina Electric Gas
Colonial Pipeline	Linde Gas	Sprague Energy Corp.
Compliance Technology	Los Alamos Nat. Labs	Stolthaven Perth Amboy
Conectiv	Lyondell Citgo Refining	Stone Industrial
ConocoPhillips	Lyondell Equistar	Sun Company, Inc.
Constellation Energy	Marathon Ashland Petr.	Suncor Energy USA, Inc.
Continental Cooperative	Meade Westvaco	Sunoco Logistics
Covanta Huntsville	Methanex Corporation	Tanknology
Degussa Corporation	Mich S. Central Power	Taylor Oil
Delmarva	Midwest Generation	Teco Power Services
MacDill Airforce Base	Mirant Kendall LLC	Tenaska
Dunn Heat Exchanger	Mirant Mid-Atlantic	Texmark Chemicals
Dominion Resources	Morton International	Tetra Tech Inc.
Dominion VA Power	Motiva Enterprises, LLC	Texas Petrochemical
Dow Chemicals	NJ American Water Co.,	Tractebel Poer
Duke Energy	Newark Bay Partnership	TransMontaigne
Eastman Chemical Co.	Novick Chemical	US Air Force
El Paso Electric Co.	Northeast Generation	US Navy
Enterprise Products	Nustar Energy	WE Energy Corporation
Enbridge Products	NRG Llion Energy	Westway Terminal
Esso Petroleum	Ocean State Power	Williams Companies
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Project References

Project References

The following are just a brief list of projects which the company has performed. There are hundreds if not thousands of similar project experiences.

On-Stream Inspection & Testing

TechCorr offers full-time on-site personnel to support on-stream run and maintain activities for pipeline companies, production fields, offshore platforms, petrochemical plants, refineries, storage facilities and power plants. Additional personnel are supplied on an as-need-basis during turnarounds, capital projects, specialty projects, and engineering studies. Our full time personnel report to each client's facility a minimum of forty (40) hours per week (2080 hours per year). These experienced inspectors, technicians and engineers are responsible for the day to day activities. We currently have full time resident inspectors at:

Exxon Refinery (Beaumont) – Eight (8) full time inspectors and technicians working at the Beaumont refinery complex.

- Texas Petrochemical (Houston) – eleven (11) full time data entry, inspectors and technicians responsible for overseeing run and maintain program along with shut-downs and expansions at the Houston, Baytown and Port Arthur facilities.
- Pasadena Refining Systems – Three (3) full time inspectors and technicians involved in the run and maintain program acting as complex inspectors, tank farm inspectors, pipeline inspectors.
- Rhodia (Houston & Baytown) – Six (6) full time inspectors and technicians responsible for overseeing run and maintain program, new tank construction, piping inspections and involved in planned and unplanned maintenance outages.
- Marathon Refinery (Texas City) – Two (2) full time inspectors and technicians responsible for run and maintain program along with planned and unplanned outages.
- Goodyear Tire Company – Five (5) full time inspectors and technicians responsible for run and maintain program, database management, planned and unplanned outages.
- Gulf Coast Fabricators – Six (6) full time radiography personnel responsible for weld quality inspection at pipe spool and vessel shop.
- Exterran (Houston) – Three (3) full time radiography personnel responsible for weld quality testing on piping spools and related vessels associated with compressor skids.
- Sinclair Refinery – Eight (8) full time inspectors and technicians working at the Casper and Sinclair refineries performing on-stream mechanical integrity inspection.

Example Projects

Example Projects



Project Reference: Aboveground Indirect Assessment and Direct Examinations of Buried Pipeline

Aboveground Indirect Assessment and Direct Examinations of buried oil and gas piping systems including Global Positioning System (GPS), Close Interval Potential Surveys (CIPS), Direct Current Voltage Gradient (DCVG), Soil Resistivity (SR), Alternating Current Voltage Gradient (ACVG) for several customers: Boardwalk Pipeline Company, Texas Gas, Praxair Pipeline, Conoco Phillips, Petroleos de Venezuela (PDVSA), Chevron Pipeline Company, Petrobras Ecuador-Bolivia-Argentina, Encana Oil & Gas, Pacific Natural Gas, Northern Natural Gas, Kinder Morgan Gas, Plains All American, The Gas Company.



Project Reference: External Corrosion Direct Assessment Studies

External Corrosion Direct Assessment Studies for companies including but not limited to Praxair Pipeline, Boardwalk Pipeline, Wexpro Oil & Gas, Encana Oil & Gas.

Example Projects



Project Reference: Guided Wave Ultrasonic Inspection Technique

TechCorr performs +/-150 kilometers per year of above ground and partially buried gas transmission piping inspection using the Guided Wave Ultrasonic Inspection Technique. The above project references piping located in the Anaco district in Venezuela. Similar projects also completed for Qatar Petroleum, Abu Dhabi Gas Company, Oil & Natural Gas Company.



Project Reference: Guided Wave Ultrasonic Testing (Offshore Production)

TechCorr performs regular Guided Wave Ultrasonic testing on offshore production risers and compressor station piping. The above project references an offshore compressor station on Lake Maracaibo in Venezuela. Both insulated and overhead piping were inspected using the Guided Wave Ultrasonic Inspection Technique.

Example Projects



Project Reference: Guided Wave Ultrasonic Testing (buried pipeline)

Centragas Colombia uses the Guided Wave Ultrasonic Inspection Technique to test their buried piping at compressor stations throughout their network. The Guided Wave Technique identified a single area of corrosion which was repaired and recoated.



Project Reference: Guided Wave Ultrasonic Testing (high temperature API 8 crude buried pipeline)

Chevron Texaco in Venezuela transports API 8 degree crude oil through the above pipeline. The pipeline is nearly impossible to inspect using in-line inspection devices as the temperatures are too high. At the same time the bitumen type petroleum build up making cleaning the line a difficult process. TechCorr was contracted to perform above ground close interval, direct current voltage gradient and pipeline profiling surveys. Guided Wave Ultrasonic was utilized to inspect the low points where liquid hold up (H₂O) would occur but also at the launchers and receivers. Several large defects were located and repaired. The above picture shows the area excavated after locating the severe corrosion defects caused by thermal elongation which destroyed the wrap coating causing CP shielding issues.

Example Projects



Project Reference: Guided Wave Ultrasonic Testing (above ground pipeline)

The ISLAS Refinery in Curacao Dutch Antilles contracted TechCorr to perform Guided Wave Ultrasonic testing on eight (8) kilometers of above ground and buried transmission piping from the refinery to the tank farm.



Project Reference: Guided Wave Ultrasonic Testing (above ground production piping)

Encana Ecuador required a full field inspection on all buried and above ground piping located at their Vintage field in the Amazon Jungle. TechCorr using API 570 standards along with the Guided Wave Ultrasonic Inspection Technique evaluated 200 kilometers of production piping. A detailed risk assessment was performed while our engineering staff also developed a repair and replacement schedule. The above dent was caused by falling trees in the jungle.

Example Projects



Project Reference: Guided Wave Ultrasonic Testing (200 km buried pipeline)

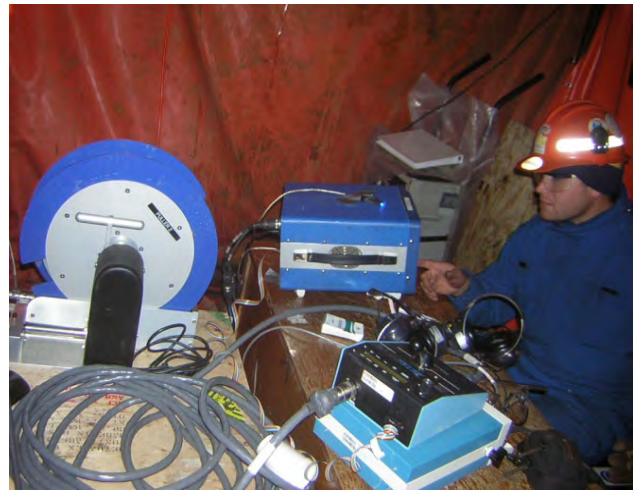
TechCorr has performed Guided Wave Ultrasonic testing on more than two hundred kilometers of buried piping. The above pictures shows buried six and eight inch diameter piping running parallel to each other underground for thirty-six (36) kilometers each. 100% of these two lines were tested using the Guided Wave Ultrasonic Inspection Technique. The above project was performed at OXY's production field in Ecuador's Amazon Rainforest.



Project Reference: Guided Wave Ultrasonic Testing (road crossings)

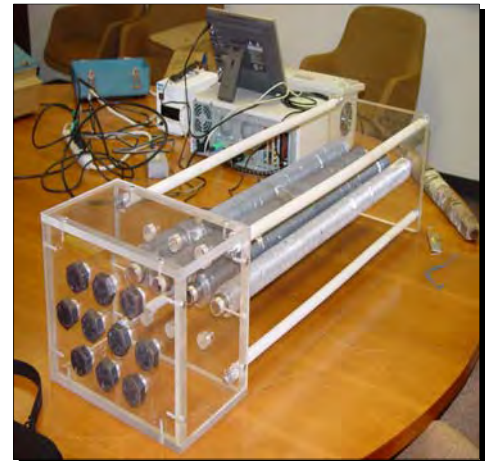
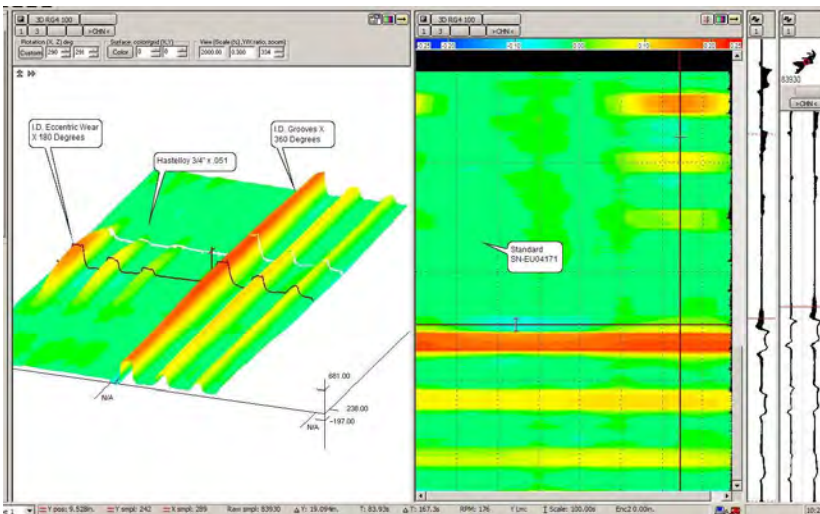
Gulf South Pipeline requires Guided Wave Ultrasonic testing on their road crossings (left) and also their overhead river crossings. The above picture on the right references a 36" diameter piping crossing the Colorado River south of Houston.

Example Projects



Project Reference: Tubular Inspection on Exchangers, Condensers and Boilers

TechCorr performs tubular inspection on exchangers, condensers and boilers for Methanex Chile and Methanex Trinidad during plant outages or emergency shut-downs. The above condenser contained roughly 8,500 tubes 60 foot in length. TechCorr utilized our high speed probe pushers to perform 100% testing on all tubes during a period of one week working 24 hours per day. Several tubes were identified with nearly through wall holes which we recommend be plugged saving the plant from experiencing an “un-planned” outage.



Project Reference: Tubular Inspection on Specialized Fin Fan Exchanger Tubes

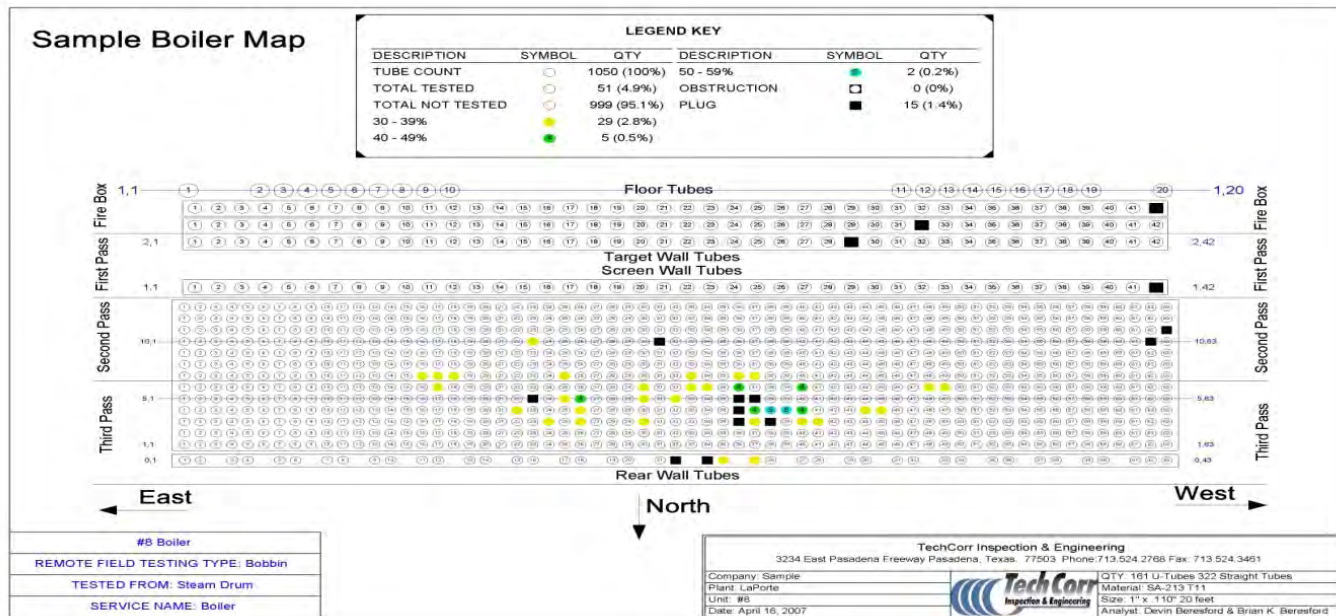
TechCorr developed and performed tubular inspection technique on specialized fin fan exchanger tubes for British Petroleum. The above C-scan plot shows the defect orientation and removes the traditional x and y plots. Utilizing this technique we were able to see all defects even small outside diameter EDM cracks located in finned tubing where conventional eddy current was unable.

Example Projects



Project Reference: Tubular Inspection on over 250 exchangers

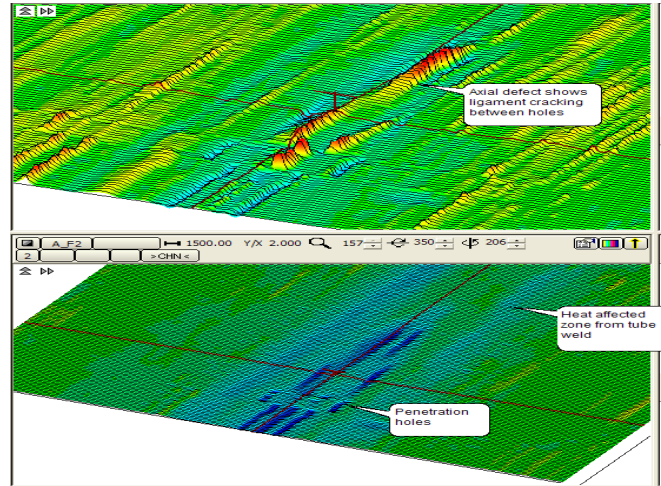
TechCorr examined over 250 exchangers for Valero (Houston) over a 6 week period, working 7 days a week until the project was complete. TechCorr provided 4 crews at Dunn Heat Exchanger facility and 2 crews at the Valero plant for exchangers that could not be removed from the shells. Multiple tubes were pulled by Valero reliability group for defect verification. All tubes pulled matched the result from the TechCorr analyst.



Project Reference: Remote Field Testing (RFT)

Invista was experiencing tube leaks in their boiler that was bringing the boiler off line for repairs. This method chosen for examination was Remote Field Testing (RFT). With remote field we were able test from the steam drum and push the probe around the bends to the mud drum. With RFT we are able to find tube thinning, pitting and compare the bend signatures looking for defects in the bends.

Example Projects



Project Reference: Tubular Inspection on Reformer Tube Headers

TechCorr develops and performs tubular inspection on reformer tube headers for Methanex Chile during plant outages or emergency shut-downs. The above reformer headers were inspected with the spinner technology looking for ligament cracks between the vent holes and cracks in the free span area. TechCorr is the only company developing this technique to inspect reformer tube headers. Cracking in reformer tube headers leads to leaks and fires within the plant. Several cracks were found as a result of this testing likely saving an emergency “un-planned” outage.



Project Reference: In-Service Tank Cleaning and Inspection

TechCorr through its InTank Acquisition performed an in-service cleaning and inspection project on a 160' diameter, internal floating roof tank at CPL in South Carolina. Over 200,000 individual floor samples were collected during the cleaning process. The sludge was removed from the tank while the OTIS floor inspection was in progress. The material was inventoried in the two frac tanks seen in the photo on the left. They were allowed to decant and the usable product was then pumped back into the tank. The residuals left in the two frac tanks were vacuum trucked off site after our departure.

Example Projects



Project Reference: In-Service Floor Plate Inspection

The TechCorr InTank Inspection group performed an in-service floor plate inspection at a Lyondell-Citgo refinery in Texas. Over 200,000 individual UT samples were gathered during the three day inspection period. The 90' tank was used to store light cycle oil. The photo on the right shows the OTIS vehicle on a wheeled dolly and the aluminum tripod used to deploy the vehicle.



Project Reference: In-Service Demineralized Water Tank Inspection

InTank performed an in-service inspection on a 60' demineralized water tank at International Paper in Texas. The tank was completed in a five day period which includes the rig up and rig down phase. More than 150,000 individual UT samples were collected and analyzed. The photo on the right shows one of the six magnetically attached transducers used in determining the vehicle location.

Example Projects



Project Reference: In-Service Crude Oil Tank Inspection

TechCorr through its InTank division performed an in-service inspection on a 275' diameter crude oil tank in Virginia. A special heavy duty vehicle was used in order to move through the thicker product. The project lasted a full month and over 2,000,000 UT data points were collected. The equipment and tank was under a nitrogen purge while in use to minimize the danger of working in sour crude. The job was completed in a safe manner, on time and under budget. The photo on the right shows the umbilical carts and deployment gantry located on top of the floating roof.



Project Reference: Automated Ultrasonic Testing (AUT)

Kinder Morgan CO2 contracted TechCorr Inspection to perform an Automated Ultrasonic (AUT) examination on several dig sites on the 8" pipeline from McKinney Gas Storage Facility to Wink Station, utilizing Corrosion Mapping Techniques to locate and size internal corrosion anomalies. The purpose of this examination was to monitor areas of internal corrosion detected by a previous AUT examination and provide an integrity assessment of the pipeline using the RSTRENG calculation.

Example Projects



Project Reference: Inline Inspection Tool Performing Automated Corrosion Mapping (18" Pipe)

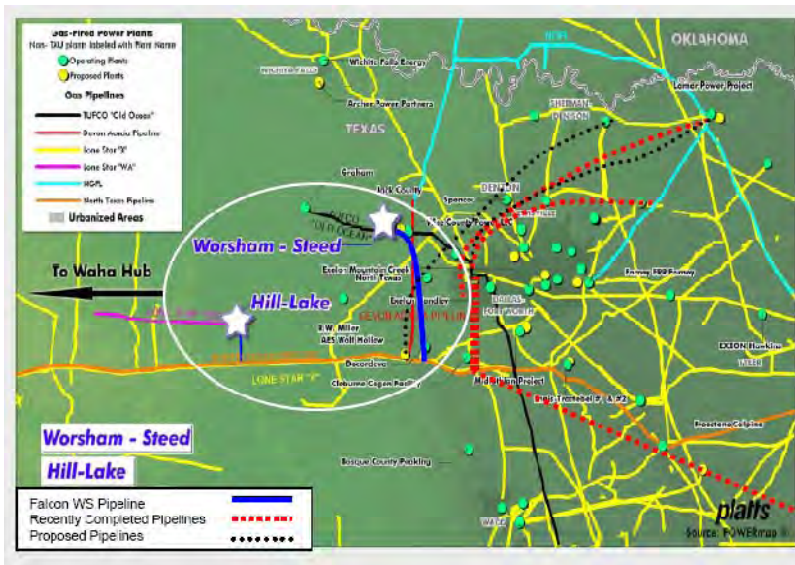
Longhorn Pipeline Company contracted TechCorr to perform Automated Corrosion Mapping at dig sites on the 18" diameter pipeline between Llanos and Gillespie Texas. These locations were identified using an in-line inspection tool. The purpose of using AUT was to validate the morphology of the defects to compare with the ILI results to determine detection accuracy and refine the number of digs and repairs required along the entire pipeline.



Project Reference: Inline Inspection Tool Performing Automated Corrosion Mapping (20" Pipe)

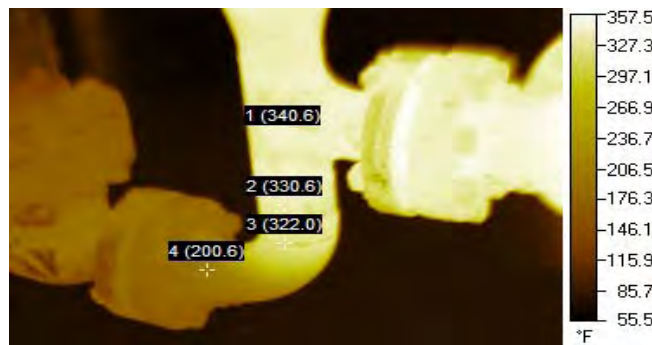
Kinder Morgan contracted TechCorr to perform Automated Corrosion Mapping on a 20" diameter buried pipeline inside the Mason Station located near Pecos, Texas. These locations were selected as low points where corrosion would likely occur. The purpose was to determine if corrosion existed and size anomalies for mechanical integrity calculations.

Example Projects



Project Reference: Radiography and Conventional NDT

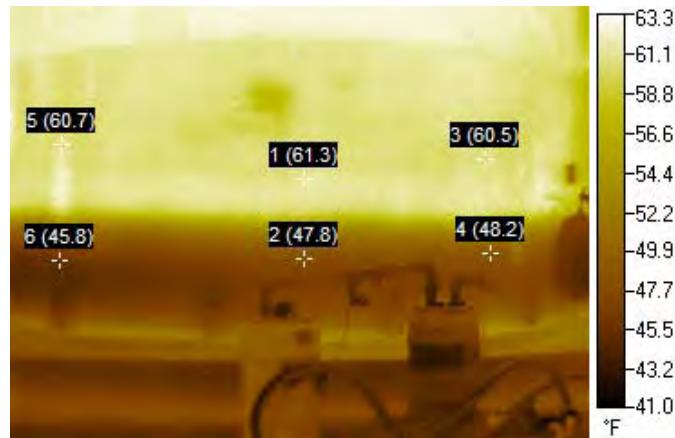
Falcon Gas contracted TechCorr to provide radiography and conventional nondestructive testing support services on a new 60 mile, 450,000 Mcfd, 24" diameter pipeline from the Worsham-Steed Gas Storage Facility south to dual interconnections with the North Texas 36" diameter pipeline and the Atmos network. The scope of work included radiography on all welded right wells including those associated with road crossings, creek crossings and pipeline crossings interpreted to API 1104 standards. Three pipeline radiography crews were utilized six days per week for roughly three months.



Project Reference: Thermography Inspection Services (Infrastructure Integrity)

Invista S.A.R.L. has been using our thermography department to help them maintain operational readiness at its highest level, by monitoring equipment online to better predict a failure before it happens. The above thermography image shows loss of pressure within a piping circuit caused by calcium deposits at various areas throughout the piping circuit. Upon finding these areas, contractors cleaned and removed the calcium deposits. Another IR inspection was performed to verify cleaning and a monthly inspection is done to ensure that ID restriction on such a vital line doesn't happen again.

Example Projects



Project Reference: Thermography Inspection Services (verification of storage tank levels)

Verification of storage tank levels. Invista contracted TechCorr to evaluate the storage tank levels. A faulty level indicator showed the tank at 90% full. The IR shows this is not the case. While IR can't give a volume metric measurement it has many uses to assess tanks and storage containers. IR can also be used to find sludge levels within a tank that is out of service to help with contracting companies who are removing the sludge.



Project Reference: Online Permanent Pipe Repair System

The 8" diameter pipe carrying heated hydrocarbons was internally pitted and at some points the wall thickness shrunk to only 2 mm. The total length of the above ground pipe was 8 ft and the pressure was 14 bars. Replacing the pipe would have meant shutting down the refinery. Fortunately the Maintenance Team opted for an online permanent pipe repair system.

The installation team led by Shahid Raza Imam, who is a pioneer in Pakistan of Cold Online Pipe Repair, repaired the pipe by following the steps of surface preparation, wrapping of Spider Wrap and putting final top coat of primer. With 6 wraps of the repair system installed the pipe reinforced online without shutting down and the surface became hard after 40 minutes. Everybody including Engr. Khalid, Engr. Alamgir, Engr. Nadeem Akhter, numerous other maintenance, operations and inspection personnel lauded the efforts and appreciated the Pipe Repair System which saved the refinery from shut down and thus dollars.

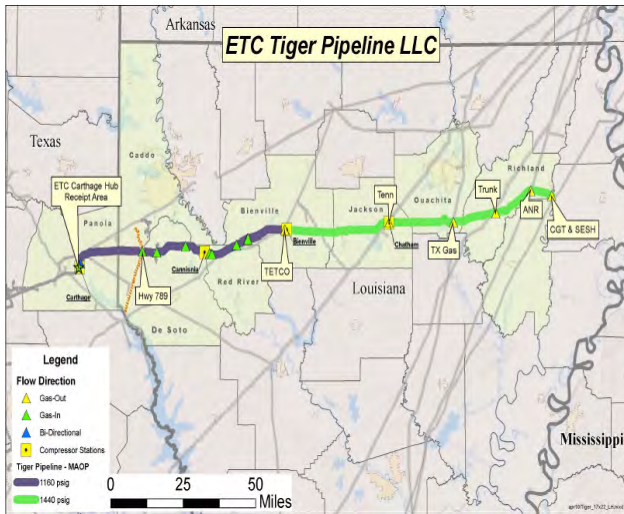
Example Projects



Project Reference: Automated Girth Weld Inspection and Radiography Services (185 miles)

The Fayetteville Express Pipeline was constructed between April and September 2010. The pipeline is approximately 185 miles long, forty-two (42) inches in diameter, originating in Conway County Arkansas continuing eastward terminating at an interconnect with Trunkline Gas Company in Panola County Mississippi. The pipeline has an initial capacity of 2.0 billion cubic feet per day costing nearly 1.01 billion dollars. AUT Specialists, LLC was subcontracted through Willbros Construction to provide automated girth weld inspection and radiography services during the pipeline construction phase. Nearly sixty (60) individual technicians were supplied to the project along with twelve (12) radiography trucks and eight (8) automated girth weld inspection systems.

Example Projects



Project Reference: Automated Girth Weld Inspection and Radiography Services (42 inches)

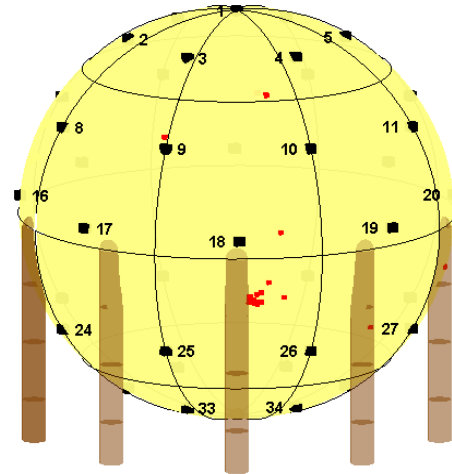
The Tiger Pipeline Project was constructed between July and October 2010. The pipeline is approximately 175 miles long, forty-two (42) inches in diameter, originating in Panola County, TX and terminating at the Perryville Hub in Richland Parish, LA. AUT Specialists, LLC was subcontracted through Henkels & McCoy to provide automated girth weld inspection and radiography services during the pipeline construction phase. Nearly fifty (50) individual technicians were supplied to the project along with ten (10) radiography trucks and six (6) automated girth weld inspection systems.



Project Reference: Non-Manned Entry Tank Cleaning

Our industrial services (Tank Cleaning) group is a leader in non-manned entry tank cleaning. The above project performed for BP Canada consisted of a 150' diameter tank with nearly solid bitumen residue. The above robotic system was driven into the tank and using heated diesel diluents the tank was desludged using no-man entry. The project took two (2) weeks versus six weeks should it have been performed conventionally with man-entry.

Example Projects



Project Reference: Acoustic Emission Testing on Sphere Tanks

TechCorr performs acoustic emission testing on sphere tanks, horizontal vessels, towers and similar pressurized equipment to identify hot spots for follow up nondestructive testing. The above project involved the testing of eighteen (18) spheres including the legs. The above document shows one particular vessel with indications near the for north leg. After following up with nondestructive testing a crack was found using phased array ultrasonic testing between the leg and shell weld. TechCorr has performed AE testing for Pasadena Refining Systems Incorporated (PRSI), Dakota Gas, MEMC Pasadena, Texas Petrochemicals, ExxonMobil Beaumont, Citgo Sour Lake, Recope Costa Rica, Abu Dhabi National Oil Company, Bharat Petroleum, Hindustan Petroleum.



Project Reference: Long Range Guided Wave Ultrasonic Testing (LRUT)

TechCorr worked Qatar Petroleum performing long range guided wave ultrasonic testing on four-hundred (400) kilometers of above ground and buried pipeline gathering, trunk and transmission pipelines. Three (3) crews have worked on rotation since January 2009.

Example Projects



Project Reference: In-Service Advanced Inspection and Non-Destructive Testing (Mumbai, India)

TechCorr was awarded a United States Trade Development Agency to demonstrate advanced inspection and nondestructive testing technology to Bharat Petroleum Company Limited and separately Hindustan Petroleum Corporation Limited. These projects involved risk based analysis, visual inspection, mechanical integrity database reviews, a deficiency analysis along with demonstration of in-service robotic tank inspection, on-line corrosion mapping, and long range guided wave ultrasonic testing along with several other techniques. The above pictures show the in-service robotics system on-site at the BPCL refinery in Mumbai India. Separately a picture of the robot entering the roof man-way is showing on the right.