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Govan Engineering was founded in 2013 and is currently a small-responsive A&E firm based in Akron, OH centrally located in the Utica and Marcellus shale region. Specializing in natural gas projects, our engineers and project managers are experienced in all phases of midstream facility development, compression, process, gathering and DOT regulated natural gas pipelines and NGL piping.

MECHANICAL ENGINEERING & SOLID MODELING DESIGN SERVICES

PIPELINE DESIGN

WELD PROCEDURE SPECIFICATION DEVELOPMENT AND QUALIFICATION WELDER TESTING AND INSPECTION ASME PRESSURE VESSEL DESIGN AND PIPELINE COMPONENT FABRICATION PROCUREMENT MANAGEMENT

START UP AND COMMISSIONING SERVICES

PROJECT PLANNING AND START TO FINISH CONSTRUCTION PROJECT MANAGEMENT

PROCESS MODELING & DESIGN

COMPLETE INSPECTION SERVICES

DRONE SERVICES

HOT TAP DESIGN & CONSTRUCTION

PIPELINE CONSTRUCTION AUDITING AND TROUBLESHOOTING PLANT SYSTEM DESIGN AND HYDRAULIC MODELING

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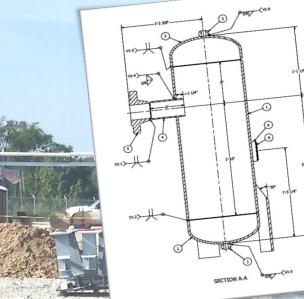
LEAK SURVEY STUDIES

GOVAN ENGINEERING, LLC Office: (234) 334-4138 Fax: (234) 334-4142 Member of South Summit Chamber of Commerce Member of American Welding Society

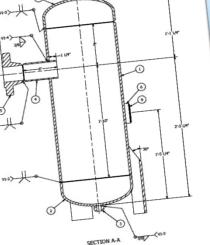
> Ohio Certificate of Authorization No. 04319 West Virginia Certificate of Authorization No. C05216



WELDING PROCEDURE SPECIFICATION AND QUALIFICATION: Engineering review and/or development of API-1104 and ASME Section IX welding procedures and qualification records. We can partner with your lab or our state-of-the-art lab partners and provide complete in-house weld ready specifications with PQRs. We can also provide weld failure forensic analysis via our metallurgical lab partners. Experienced on staff CWIs are here to provide welder testing and certification and/or the ability to audit contractor records. (We employ senior welding inspectors with 20+ years experience.)



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PRESSURE VESSEL AND PIPELINE COMPONENT FABRICATION: GOVAN ENGINEERING can design, specify fabrication, and manage construction of ASME Section VIII Division I and Division II pressure vessels (PED & CRN also available for offshore applications), and related components per your process needs. Includes slug catchers, condensate vessels, custom pig launchers/receivers, holding and separation tanks. We can also facilitate review and inspection of existing vessels per ASME NBIC.

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Ohio Certificate of Authorization No. 04319 West Virginia Certificate of Authorization No. C05216 HOT TAPPING: GOVAN ENGINEERING is experienced in the design, planning, and coordination of in-service (hot tap) construction. Per API 1104 Appendix B we can also develop welding procedures and weld tests for in-service welding on existing pipelines for branch connections. Our hot tap experience includes 42" DOT pipelines operating at MAOPs in excess of 1400 psig.





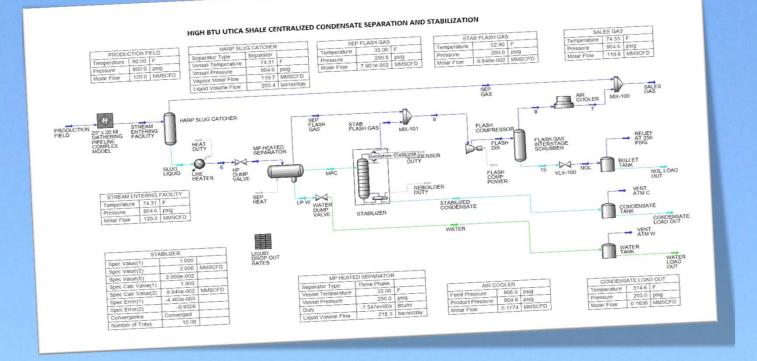
CONSTRUCTION MANAGEMENT: Let GOVAN ENGINEERING be your on site construction management, we're well seasoned in natural gas construction projects, safety protocol, writing specifications, operator qualifications, construction and fabrication acceptance criteria for numerous trades and processes. This experience provides our clients valuable QA/QC oversite. Our drone pilots can then help you see exactly what's happing on the job site, we found drones to be excellent tools for documenting construction; routing, surveying, inspection, project records, time lapse reports, and advertisement.

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PROCESS DESIGN, HYDRAULIC & MULTIPHASE FRACTIONATION MODELING: GOVAN ENGINEERING can provide gathering, distribution, and transmission piping system design, line sizing, and troubleshooting with SynerGEE (Stoner) hydraulic modeling software. Lastly we are capable process modelers with state-of-the-art HYSYS software: our models accurately predict pipeline liquids dropout, capturing, and are our primary tools for process system analysis.

