

SOUTH TEXAS

REGIONAL OVERVIEW



AES DRILLING FLUIDS

SOUTH TEXAS REGION

OPERATIONS



From efficiency-driven monobore wells in the Eagle Ford to the deep, high-pressure, high-temperature wells in South Texas, AES Drilling Fluids optimizes drilling performance through our service, technical and operational support, and product solutions.

The drilling environment across South Texas presents different sets of challenges. In the Eagle Ford, rapid well delivery requires flawless execution. When a matter of hours can separate benchmark wells from poor performers, there is no room for error.

Deeper, hotter wells require technical prowess, products that perform under extreme conditions, and the experience to apply both to minimize overall well cost.

Since 2015, AES Drilling Fluids has delivered more than 3,200 wells in the region - with hundreds more in the years prior. Our facilities are positioned to meet the demands of thousands more.



Our facility in Pleasanton provides warehousing and mixing with capacity to service up to 50 rigs.



With our experience in the region comes our development of products and systems designed with local drilling challenges in mind. In some cases, we have worked with a customer to develop a product tailored to their unique challenges.

Our MICRO STRENGTH[†] wellbore strengthening additive extends formation fracture gradients to avoid losses of whole mud or additional casing in the Eagle Ford. Further south, high temperature additives like ABS MUL HT extend our diesel-based AES VERT[†] system to perform at bottomhole temperatures up to 450°F. In all regions, ECM 1[†], ECM 2[†], and ENERLOC[†] combine to address numerous loss scenarios while minimizing products on location.

Technical support for the region is provided by our Houston Support Services Center, which features standard mud testing and advanced analytical equipment to address any challenge. Our high pressure, high temperature viscometer measures fluid properties under extreme conditions for reliable hydraulic modeling. Tools to characterize formations, such as x-ray diffraction are performed in-house with dedicated experts to prepare and analyze samples.

Our RIG FILE system tracks drilling fluid properties, volumes, product usage, and drilling activity for daily reporting and overall well performance data. This system integrates with our dedicated sales portal to minimize paperwork without compromising accuracy of critical records.

Our experience goes beyond our proven personnel to our ability to utilize offset data for the best possible outcome of a given well. Our data analytics platform, AES ANALYTICS[†], tracks key benchmarks and success factors to plan, execute, and review drilling fluid practices. Rapid access to data allows for informed decisions at critical moments to save time and money.

3200+

WELLS SERVICED SINCE 2015

More than 3200 wells in the Eagle Ford and South Texas since 2015



FULL-SERVICE FACILITIES

Pleasanton and Falfurrias Facilities operate on 24-hour regional dispatch with a mud engineer on duty at all times to perform required mud checks in the on-site mud testing lab.



AMPLE CAPACITY

Falfurrias Warehouse and Mud Plant can service 15 Rigs, while Pleasanton Warehouse and Mud Plant can service up to 50 rigs at a time.



FACILITIES

PLEASANTON, TEXAS

The Pleasanton facility in Atascosa County sits on 20 acres featuring a 8,000 square foot warehouse, mixing facility and bulk storage. Pleasanton operates on 24-hour regional dispatch with a mud engineer on duty at all times to perform required mud checks in the on-site mud testing lab.



The Pleasanton facility services the Gulf Coast with a full mixing facility and chemical warehouse. The liquid mud plant supports oil-base drilling fluids.

Chemical inventory includes key drilling fluid additives including bulk barite and lost circulation material. Chemical storage is available in the 8,000 square foot warehouse or outdoors in dedicated areas on the 20 acre site.

AES Drilling Fluids is constantly upgrading facilities to meet the needs of its customers. Confirm the latest capabilities and locations with an AES account manager.

STORAGE

8,000 square foot warehouse

16,316 bbl bulk liquid mud

23,000 sacks bulk barite

1,300 bbl base oil

50' x 100' pole barn

MIXING

3 x 500 bbl and 1 x 250 bbl mixing tanks

EQUIPMENT

Mud lab (quality control)

FACILITIES

EL CAMPO, TEXAS

The El Campo facility in Wharton County features a 15,000 square foot canopy chemical storage, 14,000 square feet of warehouse space in two buildings and operates as a proprietary Blending Facility. The El Campo facility services the Gulf Coast with a full blending facility and chemical warehouse.



Chemical inventory includes key drilling fluid additives including bulk barite and lost circulation material. Chemical storage is available in a 15,000 square foot canopy chemical storage, 14,000 square feet of warehouse space in two buildings.

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STORAGE

OBM Plant:

3 x 260 bbl blenders

1 x 130 bbl blender

20 x 500 bbl Raw Material Storage Tanks

Blending Barn:

2 x 200 bbl blenders

1 x 300 bbl blender

1 x 130 bbl blender

2 x 300 bbl Raw Material Storage Tanks

400 bbl- WBM Blending

500 bbl- WBM Storage

EQUIPMENT

Mud lab (quality control)

Tractors (2)

Flat bed truck (2)

Utility van trailers (2)

Pneumatic tanker (1)

Extended boom forklift (1)

Warehouse forklifts (5)

FACILITIES

TENAHA, TEXAS

The Tenaha Facility in Shelby County, Texas, strategically enhances AES Drilling Fluids' operational capabilities and efficiency in the Haynesville. The facility features five 250-ton bulk storage tanks and a new 1,100-foot AES-dedicated rail spur with the capacity to accommodate 18 railcars. With a total mud storage capacity of 7,250 barrels, this location positions AES Drilling Fluids for continued growth, ensuring reliable service delivery and operational excellence.



STORAGE

5 x 250-ton bulk storage tanks on a 108' x 18' concrete pad
16' x 16' concrete overhead loading area
Pad positioned along rail spur for maximum loading

50' x 100' pole barn
2-acre stabilized pad

1 x 500 bbl diesel tank
1 x 750 bbl diesel tank
1 x 500 bbl calcium chloride water tank
4 x 500 bbl Frac Tanks (2000 bbl)
1 x 750 bbl upright storage tanks

Total Mud Storage: 1,250 bbls

MIXING

1 x 400 bbl mixing pit
1 x 500 bbl mixing pit

EQUIPMENT

Mud lab (quality control)
Rail with capacity for 18 cars

HOUSTON

SUPPORT SERVICE CENTER

The Houston Support Service Center provides comprehensive services for customer projects, operations support, and new product development. It features a broad range of testing equipment, including sophisticated analytical tools to quickly respond to time-sensitive challenges.

This full-service laboratory is operated by specialists with a diverse background in drilling fluids and related chemistry functions. The Houston Support Service Center performs a wide range of activities from basic drilling fluid tests and product quality control to research and new product development.

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SELECT EQUIPMENT

Full suite of equipment for API water-, oil-, and synthetic-based drilling fluid checks

Chandler 7500 HPHT viscometer (30,000 psi / 600°F)

Shimadzu QP-2010s gas chromatography-mass spectrometry + flame ionization detection + electron capture detection (GC-MS + FID + ECD)

Bruker Invenio Fourier transform infrared spectrophotometer (FT-IR)

Netzsch TG 209 F1 Libra thermobalance (TGA) with coupling to FT-IR for evolved gas analysis

Rigaku MiniFlex 600 x-ray diffractometer (XRD)

Rigaku ZSX Primus x-ray fluorescence analyzer (XRF)

Malvern Mastersizer 3000 laser particle analyzer

Thermo Scientific Phenom XL scanning electron microscope (SEM)

Keyence VHX 1100 visible light microscope (50x, 200x, 1000x)



Thermobalance



HPHT Viscometer

AES Drilling Fluids has multiple labs with equipment to address basic questions and solve complex challenges.



SYSTEMS & PRODUCTS

By working with our customers to address specific needs, our products and systems perfectly complement our incomparable support and services.

AES Drilling Fluids manufactures many of its own products to insure they perform to the highest standards for the operations we serve. Our drilling fluid systems offer the flexibility to perform across a range of environments. From the conventional water-based systems to HTHP and synthetic invert emulsions, we continue to deliver application-based solutions.

The AES VERT[†] diesel invert emulsion system provides a low-cost solution across a broad range of mud weights and temperature requirements. Even with superior solutions, we continue to advance our portfolio with new and improved offerings to meet the needs of evolving drilling technology.



AES Drilling Fluids utilizes both unique and patented technologies and specialized personnel to help our customers to lower their overall drilling costs and enhance efficiency of the wells they drill.

As drilling has become more complex, the applied down-hole technologies are becoming increasingly important in driving success for operators. AES drilling fluids continues to invest in research and development to lead the drilling fluids market in technology.



AES VERT[†]

Invert Emulsion System

AES VERT is a robust, flexible invert emulsion drilling fluid system that provides all of the benefits of an invert emulsion drilling fluid with maximum operational efficiency. AES VERT performs across a wide range of densities and temperatures, including long horizontal wells approaching 30,000' measured depth.

**MAXIMIZE RATE OF
PENETRATION**

**HIGHLY
INHIBITIVE**

**MINIMIZES
TORQUE**

**FLEXIBLE SYSTEM
DESIGN**

AES VERT is ideal for a variety of wells where an invert emulsion system is desired. Compared to water-based systems, AES VERT offers superior inhibition and lubricity to simplify challenging extended reach wells. AES VERT is available at densities ranging from below 7.8 lbm/gal to over 20 lbm/gal.



MICRO STRENGTH[†]

Wellbore Strengthening Material

MICRO STRENGTH is designed to enhance drilling performance by sealing losses and strengthening the wellbore. MICRO STRENGTH includes a special, sub-micron material to improve sealing and packing in microfractures, reducing fluid loss.

- Seals and strengthens the wellbore covering fractures up to ~250 microns
- Superior compressive strength allows material to seal and support openings
- Sub-micron material improves sealing and packing in microfractures



GLYDEX[†]

Invert Emulsion Lubricant

GLYDEX is a lubricant formulated to reduce the coefficient of friction in invert emulsion drilling fluids. GLYDEX is engineered for invert emulsion systems to perform at low concentrations with no adverse impact to rheology.

Unlike other invert-emulsion lubricants that often provide a temporary reduction in torque, GLYDEX offers a completely different chemistry - ensuring sustained torque reduction throughout drilling & casing running operations.



CEASE & DESIST[†]

Lost Circulation Material

CEASE & DESIST is an optimized blend of granular and fibrous lost circulation materials designed to rapidly seal a wide range of pore and fracture widths.

CEASE & DESIST is a composite blend of materials added to the drilling fluid system to prevent or remediate lost circulation by quickly sealing a wide range of fractures. This engineered, proprietary blend of components includes a resilient graphitic carbon material, among other high-compressive strength additives.



AES ANALYTICS

AES ANALYTICS allows operators to compare wells and identify outlying cost and performance data quickly and easily. Points of interest can be investigated in more detail by clicking on a data set of interest for a well, pad, rig, or region for quick comparison. This helps to determine the best options for mud weight selection, drilling fluid properties, treatment solutions, and much more.

DESCRIPTION

A data analytics platform to optimize drilling fluid performance and minimize cost
Easily observable data sets are presented on dashboards customized to customer needs

BENEFITS

Rapid access to large data sets minimize time to make informed decisions
Visualizations allow for quick trend analysis
Customization and continuous improvement regularly enhance available insight

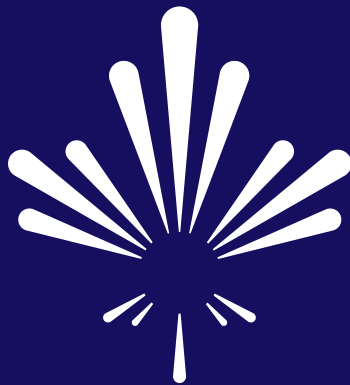
APPLICATIONS

Well planning to identify risks and maximize insight from offset wells
Tracking activity to key performance indicators
Evaluating cost, product consumption, and overall performance by area, pad, rig, or other criteria



QUESTIONS?

Reach out to your AES Account Manager or visit www.aesfluids.com for more information



AES DRILLING FLUIDS

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