Comprehensive Service & Record-Breaking Performance

CONTRACOR

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At Aim Directional Services, we constantly strive for and achieve, performance excellence on your behalf because we have a unique way of doing things – an internal process called Aim Operational Excellence[™] – that guides all phases of our operations.

Whether we're recruiting and training personnel, doing data analytics to gain insights that inform operational decision-making, applying quality control to our failure incident modes or developing new tools that challenge and improve upon old drilling techniques, we have a proven process that blends our unique experience over time, the collective expertise of our people, and the integration of our tools and technologies to deliver the results and record achievements that meet, and exceed, our clients' expectations.

PEOPLE

Vision & Mission Organizational Structure Role & Responsibility

> Customer Driven Reliability

> > Teamwork

Performance Management

In-House Training & Continuing Education



PROCESS

Maintenance Management

Standardization Incident Investigation

Materials & Parts Management

Vendor Management

Design for Reliability

Management of Change



Aim Operational Excellence™

TOOLS/METHODS

Performance Motors Advanced MWD Systems

> Formation Evaluation Tools

Real-Time Operations Center Survey Management Drilling Optimization Real-Time Dashboard

MEASUREMENTS

KPI Scorecard Planned vs. Actual

Comparison

Area Learning & Growth

Customer Feedback

Customer Financial Savings

Internal Business Processes

Data Analytics



Optimal Use of the Latest & Best Information

It starts with our people. Hiring and training them is just the beginning. They go through an ongoing learning process that keeps them updated about the newest drilling technologies and processes and how to apply them to individual client site projects. In fact, our field personnel complete more than 100 in-person and computer-based training modules each year. But we do more than teach and prepare our staff to handle their responsibilities. We tap into their best thinking and ideas because we know their opinions count and make a difference to the success of a project.

It continues with our constant attention to quality, where we monitor the condition and performance of our parts and equipment and do preventative maintenance that identifies any potential red flags and diffuses them before they become full-blown problems. The corollary to this is our technical alert system, where in the event of an incident or human error, we send out a company-wide notification of how the incident occurred and what can be done to keep history from repeating itself.

It extends to the data we capture and analyze in real-time, with the smartest possible software, that yields insights into across-the-board performance – of our employees, parts, operational processes, vendors and client wells – so that we can make timely, effective decisions that save money, cut down on failures and non-productive time, increase efficiency and successfully address the challenges posed by your particular drilling project and the drilling environment.

This covers such critical functions as motor and hand performance, and areas of difficulty such as build rate issues and low rates of penetration (ROP). Our real-time operations center is on the job 24/7 with up-to-the-moment digital data feeds that furnish the well correlations and corrections and other responses to ensure the safe and precise drilling of your well.

Proactive & Innovative

The process also is about anticipating the future before it happens with a strategic, proactive approach that sees how the industry is evolving and meets a trend as it arrives instead of reacting to it after the fact. We do this, in part, by interacting with industry players and observers at seminars and conferences. By learning what our peers and associates are seeing and doing to overcome obstacles, we can discover the directions in which we need to go.

We have created a culture of performance that disdains doing something simply because it's always been done that way. That's how we came to patent a lower-end for our mud pulse MWD system that filters out debris in the mud that sometimes blocks the lower-end. It's also how we came to create a proprietary design for a UBHO sub that avoids two kinds of set screw malfunctions.

Comprehensive Service Coverage

Because we know this industry inside and out, we offer the complete palette of drilling services to meet every need you may have and solve every problem you may encounter.

- Our unparalleled downhole mud motor designs feature proven technologies in mud lube bearing sections, as well as carbide coated rotors to withstand the harshest drilling environments.
- Guided by robust, precise, proven sensors, our mud pulse MWD technology helps keep operators reliably on target and in zone. We have designed three different

MWD systems which allows our customer to choose which system best suites their needs. The directional & gamma ray logging that's available in real-time uses dependable mud pulse and electromagnetic telemetry options that suit any drilling requirement.

• By applying leading-edge software to your well planning needs, we create customized well plans with exports that uniquely fit your requirements. Moreover, we can prepare anti-collision, ellipse of uncertainty, and torque & drag analysis reports if necessary.

Customer-Centric Focus

First and foremost, the process is about you and the other clients we serve. It's collaborative and consultative, so that we're planning with you, not for you, and are keenly aware of your objectives and concerns (a philosophy we call "Teaming Up With Our Customers"). We're always asking what goals our customers want to achieve on their wells, and on each different section of those wells. Do you want to increase the overall ROP in order to reduce total drilling days? Or limit the number of hours to drill the curve or the number of days to drill the intermediate or lateral section? Or something else? Whatever your goals are, we want to know so we can help devise a plan in partnership with you to address them. That plan will be custom-tailored and accompanied by daily support updates to view progress and real-time monitoring to identify performance gaps. Working together in this way means cost benefits for the customer – such as better production that happens when we help you improve wellbore placement, and cost reduction that happens with this increased performance.

Measurable, Record-Breaking Results

The proof is in the unmatched measurable results we deliver for you. Like in **Webb County, Texas**, when we drilled Spud to total depth in less than 14 days; exceeded ROP for three of the four well sections; and set a record for most footage drilled with a single BHA – more than 11,000 feet.

Or in **Glasscock County, Texas**, when we drilled a lateral from landing point to total depth in just one run of 10,367 feet, at an average ROP of 125.53 feet/hr.



It's not like this distinguishing process is something new for us. We've been living it for decades. We're making the exceptional drilling feat "business as usual" at AIM, and the beneficiaries of this kind of performance are our customers. Talk with us to see what's possible for you.

Performance While Driving Safety

Performance. Technology. Service. We're best-in-class and industry-leading in all these areas. But the excellence extends to one more thing that's no less important than the others: Safety. Every one of our processes and procedures meets or exceeds the most rigorous industry safety standards, including ISO 9001, ISO 4001, and OHSAS 18001. To maintain that level of safety, we conduct fully accredited, in-house training programs and, in fact, our field personnel complete more than 100 in-person and computer-based training courses every year.

We immediately report and fully investigate any incident that happens so that we can learn what caused it and how to prevent it from happening again. But we haven't had to do much of this lately, because we posted a **0.0 Total Recordable Incident Rate** from 2014-2020.

We're not just sticklers for our own safety, but also the safety of the vendors with whom we do business. That's why we audit them to make sure their Quality, Health, Safety and Environment processes conform to industry standards and rules.

ZERO Recordable Incidents FOR PAST 9 YEARS!



Management Leadership & Accountability

Documentation

Training & Competence

Risk Management

Emergency Management

Safe Work Practices

Operational Control

Continual Improvement

Our Safety Profile

Committed to Safety in Everything We Do

At Aim Directional Services we pride ourselves in maintaining a safety first attitude. This starts by ensuring all our processes and procedures meet or exceed industry standards including ISO 9001, ISO 14001 and OHSAS 18001.

SafeLandUSA

computer based training courses each year

- Industry leading Journey Management program utilized for all field trips
- Proactively audit vendors to ensure their QHSE processes align with Industry Standards and Regulations

Notable Safety Achievements

- Fully accredited, in-house training programs
- IADC RigPass, SafeLand, SafeGulf and H2S
- 0.0 Total Recordable Incident Rate from 2014-2020
- ISNetworld / PEC Grade Green Status

Safety Highlights

C SafeGulf

- All incidents are reported immediately and fully investigated to compile lessons learned and prevent recurrence
- Constantly looking to identify improvements and maintain consistent processes by utilizing enhanced operational performance measurements
- Field personnel complete over 100 in-person and

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Directional Services









Aim Contender Drilling Motors

Defining Features

- Proven performance from the Dyna-Drill HR, Abaco HR, and PV HS-88" Stator Rubber
- Carbide coated rotors for harsh drilling environments
- Mud lube and sealed bearing lower ends
- Short bit to bend lower ends
- Various sizes



Maximize Performance with Aim Contender Drilling Motors

Aim Directional Services uses only the best in downhole mud motor designs. With the proven technologies in both mud lube and oil sealed bearing sections, Aim has made necessary modifications to increase performance for the growing needs of this market. All 4 3/4" OD motors and greater use the latest hard rubber stators. Rotors are available in both chrome and carbide as needed for the environment it is to be run in.

Aim's extensive and versatile selection of downhole drilling motors has been chosen and tested to ensure that they can withstand rigorous operation in even the harshest conditions. Our expert team can identify and make the needed configurations to any of our motors to meet your unique application requirements.

Extreme Performance (EP) Series



DESTROYER

6/7 10.9 | 400 GPM 5.50" Motor | .75 rev/gal Stall Torque 13,200 ft/lbs Stall Diff 4,040 psi



DEMON

6/7 12.1 | 750 GPM 7" Motor | .40 rev/gal Stall Torque 23,300 ft/lbs Stall Diff 4,080 psi

Motor Options



HELLION

6/7 6.6 | 1,300 GPM 8.75" Motor | .13 rev/gal Stall Torque 47,230 ft/lbs Stall Diff 2,480 psi

3.125 - 5" Motors							
MOTOR SIZE/TYPE		RPG	TORQUE HR	FLOW RATE (GPM)	DIFFERENTIAL HR		
3.125	7/8 3.0	1.69	980	8-140	680		
3.5	5/6 3.0	2.38	760	50-130	710		
3.5	7/8 4.3	1.85	1,380	30-110	970		
4.75	4/5 6.0	1.02	3,690	100-250	1,350		
4.75	7/8 3.8	0.52	4,450	150-250	860		
4.75	7/8 5.0	0.64	4,460	100-275	1,130		
5	4/5 6.0	1.02	3,690	100-250	1,350		
5	7/8 3.8	0.52	4,450	150-250	860		
5	7/8 5.0	0.64	4,460	100-275	1,130		
6.50 - 7" Motors							
7	4/5 7.0	0.49	9,090	300-600	1,580		
7	6/7 8.4	0.30	16,550	350-750	1,980		
7	7/8 3.5	0.15	13,500	300-600	790		
7	7/8 5.0	0.29	10,460	300-600	1,130		
7	7/8 5.7	0.24	13,720	300-600	1,280		
7	7/8 8.5	0.26	18,710	500-750	1,910		
7.75 - 8" Motors							
7.75	7/8 4.0	0.17	14,930	400-900	900		
8	7/8 5.9	0.16	22,022	400-900	1,330		
8.25	7/8 7.0	0.16	24,130	400-1000	1,580		
					SULL PATASTRE		





Services Included in Full Directional Packages

- ADOC personnel remotely monitor jobs 24/7 and escalate any concerns in real-time to directional staff and clients
- Real-Time 24/7 Curve Monitoring: build rates and projection confirmations
- Operational dashboard updates that include 24-hour activity and cost breakdowns
- Target and window monitoring
- Drilling log review & parameter optimization
 - 34.90 100

Services Offered

- Torque & Drag Analysis: Pre- and Post-Run – allows faster and easier drilling, which increases BHA and bit life
- Hydraulics Analysis





Advanced Drilling Optimization Center

Remote Directional Monitoring

Aim Directional is dedicated to providing our clients with the best possible service on each and every job. To honor this dedication, we created our Advanced Drilling Optimization Center (ADOC) in Houston, TX. ADOC personnel remotely monitor directional performance across all active jobs. Our knowledgeable personnel provide real-time expertise and analyze all available drilling data to maximize drilling efficiency and wellbore accuracy. A collaborative effort between Aim Directional's ADOC and RTOC ensures valuable oversight across multiple wells simultaneously.



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Defining Features

- Ability to use a downhole motor for motor assist in order to increase hp and torque at the bit
- Expanded revolution rate limits, supporting up to 350 rev/ min for higher ROP and stick and slip control
- Six-axis continuous inclination and azimuth measurements for better true-vertical-depth (TVD) definition and accurate well positioning
- A downlink is used to change steering commands, and an uplink is sent for confirmation of the command change

Real Benefits

 Rotary Steerable Technology has enhanced durability for severe downhole conditions. It can drill from shoe to TD in a single run, reducing operating days. It provides extra



Pictured above: PowerDrive Orbit tool.

reliability in complex operations where stick/slip, severe shock and torque, and complex hydraulic systems are significant risks.

Aim Advantages

There are many advantages to using this technology for both main groups of users: geologists and drillers. Continuous rotation of the drill string allows for improved transportation of drilled cuttings to the surface resulting in better hydraulic performance, better weight transfer for the same reason allows a more complex bore to be drilled, and reduced well bore tortuosity due to utilizing a more steady steering model. The well geometry therefore is less aggressive and the wellbore (wall of the well) is smoother than those drilled with a motor. This last benefit concerns geoscientists, because better measurements of the properties of the formation can be obtained, and the drillers, because the well casing or production string can be more easily run to the bottom of the hole.

Rotary Steerable Systems

Reach Further Depths with Rotary Steerable Systems





The methods used to direct the well path fall into two broad categories, these being "push-the-bit" or "point-the-bit". Push-the-bit tools use pads on the outside of the tool which press against the well bore thereby causing the bit to press on the opposite side causing a direction change. Point-the-bit technologies cause the direction of the bit to change relative to the rest of the tool by bending the main shaft running through it. They both require some kind of non-rotating housing or reference housing in order to create this deflection within the shaft.

Mud Pulse System Advantages

- Proven technology with tensor based design
- Fully retrievable via wireline
- Patented lower poppet housing provides reliable performance, even in formations where high LCM is required

EM System Advantages

- Ability to operate in any drilling fluid (mud, oil, air, foam, etc.)
- Low or no survey wait time
- Extreme reliability even in high LCM situations
- Ultra-low noise receiver allows for deeper drilling
- Increased speed of data transmission

Aim Directional Benefits

- Highly reliable and proven technology reduces nonproductive time (NPT)
- Avoid costly mistakes of well path deviation and missed targets
- Tool strings are centralized and integrated with rugged components, which are



designed to greatly reduce negative effects of high shock and vibration

 Accurate gamma logging, including azimuthal gamma combined with real-time operation center (RTOC) services ensures realtime quality control and on-thefly well path changes





NorthStar MWD System

Stay On Target and In Zone with Aim NorthStar MWD

Aim Directional Services uses industry proven technology to provide precise directional and gamma ray data for any Measurement While Drilling (MWD) application. With Aim's robust equipment, operators can rely on our accurate sensors to land in zone, stay on target, and eliminate unnecessary costly trips out of the hole. Aim Directional Services offers both mud pulse and electromagnetic (EM) technology to meet our client's various drilling needs.

Aim Directional has invested in ruggedized tool components to provide multiple reliable performance MWD systems. All of the available systems below can be equipped with EM to create our parallel telemetry systems.

Classic NorthStar MWD System | Essential NorthStar MWD System | Elite NorthStar MWD System

Available MWD Services

- Mud pulse, EM, and dual telemetry
- Gamma, azimuthal gamma, and resistivity
- Continuous inclination and azimuth
- Top mount and rotary pulsers, Aim patented lower ends
- Near-bit inclination/gamma
 - Pressure While Drilling (PWD)

NorthStar MWD System

Mechanical Specifications

Directional / Gamma				
Operating Temp	0-350° F 32-175° C			
Survival Temp	-40-365° F -40-185° C			
Max Operating Pressure	20,000 psi 137.9 Mpa			
Random Vibration	20 g (RMS 30-500 Hz)			
Shock	1,000 g (0.5 msec half-sine)			

Sensor Accuracy

Directional					
Inclination		± 0.1°			
	5° inc	± 1.2°			
Azm	10° inc	± 1.0°			
	90° inc	± 0.5°			
Toolface	169	± 1.0°			
Dip	2011	± 0.3°			
Gravity		± 2.0 mG			
Magnetic	BANK!	± 1.5 mgauss			
RPM		± 0.5% of value			
Gamma					
Sensitivity		1.4 CPS per API			
Accuracy		± 2% to 300° F ± 5% to 350° F			
Max AP Rang 5% PPU Erroi		8,000 API			
Thin-bed Res (8" hole at 50° points)		6/8" / 0.173m			

Aim NorthStar MWD Systems	Classic	Essential	Elite
High LCM Compatible	1	1	1
RTOC Monitoring (24hr)	1		1
Wireline Retrievable	1	1	
Parallel Telemetry (EM) Compatible	1		1
Rotational Sequence	1	1	1
Real-Time Raw Survey Data	1	1	1
Real-Time Shock & Vibe	1	1	1
Real-Time Stick-Slip Detection	1	1	1
Long Surveys (6 Decimals)	/	1	1
Generic Variables		1	
High Speed MP Decoding		1	1
Continuous Inclination (Onboard)		Optional	1
Continuous Azimuth (Onboard)	19	Optional	1
Continuous Inclination (Additional Sensor)		Optional	Optional
Azimuthal Gamma		Optional	Optional
Nearbit Inclination/Gamma		Optional	Optional
Pressure While Drilling (PWD)		Optional	Optional
Resistivity		Optional	Optional
Collar Mounted System	Optional	Optional	Optional





Azimuthal Gamma

Azimuthal Gamma with Aim MWD Services

Aim Directional Services now offers Rotational Gamma, also known as "Azimuthal Gamma." This gamma module can detect and transmit four real-time gamma readings (high-side, low-side, left, and right), along with Total Gamma ray. With these separate readings, Aim MWD can distribute a log with the individual curves and a borehole image. Capturing this valuable data in real-time allows the geologist, geophysicist, and geosteering team to make the correct target change to stay in zone.



Defining Features

- Proven technology with Tensor based design
- Real-time Downhole RPM
- Reliable gamma correlation of Total Gamma
- Four gamma curves (high-side, low-side, left, right) plus Total Gamma
- Gamma sensor which can be placed anywhere in the MWD string

Aim Advantages

- An additional inclination sensor is also offered (using generic variables to capture the information in a customizable format)
- Aim MWD department coordinates with the client's geology and geosteering teams to customize logs to help in their decision-making
- Aim provides information between surveys to make crucial corrections

Real Benefits

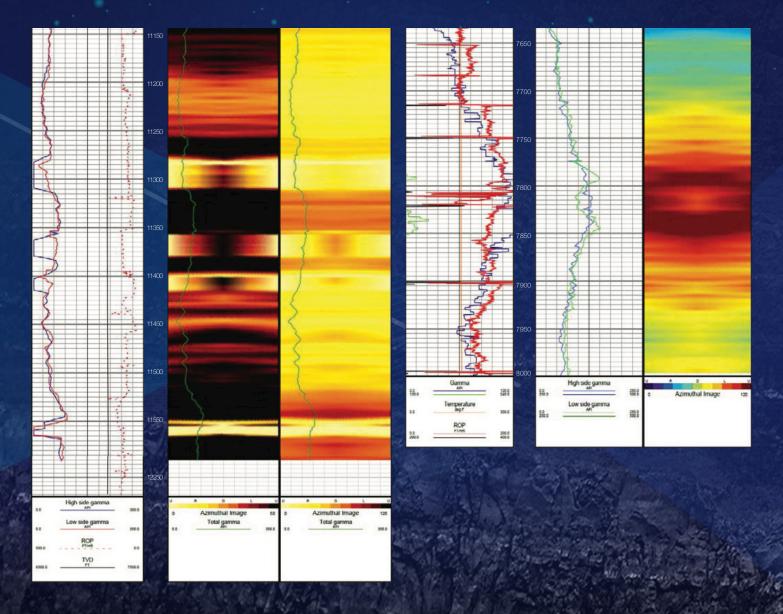
- All four curves and total gamma can be pulsed up in real-time and plotted on a log graph
- A color image log allows for a better visualization of the wellbore
- Continuous inclination gives the user the ability to calculate build rates in real-time





Azimuthal Gamma

Example Logs

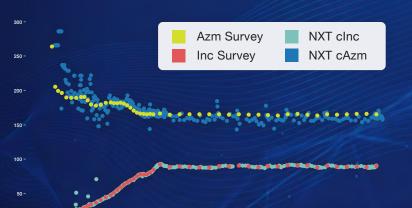


Proven Results

- Customer feedback has revealed azimuthal gamma to be a helpful tool for their Geo team to stay in zone.
- Having the image log available in real-time increases the communication between the geology department, drilling engineer and directional driller while steering the lateral.
- It has shown an increase in well production rates by having the ability to stay in a tight pay zone throughout the lateral.







Depth (Ft.)





Continuous Inclination & Azimuth

Inclination & Azimuth While Drilling with Aim MWD Services

Aim Directional Services gives you the information you need, when you need it. We offer azimuth while drilling as well as two options for inclination while drilling. Continuous inclination and azimuth give the directional driller the needed information to calculate the build rate between surveys. This information is very useful in drilling the curve, but also useful while drilling vertical or in the lateral. Knowing that a correction needs to be made sooner can help you stay on target or in zone.

Continuous inclination and continuous azimuth give you the knowledge needed to stay in zone. They both give you the information needed to make decisions sooner for increased performance.

Real Benefits

- Continuous inclination surveys can be plotted along the well path to improve well-bore placement
- Gives geology and geosteering the ability to stay in zone with additional inclination data
- Post-well TVD shifts can be made internally for enhanced field drainage planning

Aim Advantages

- The ability to use one or both of the continuous inclination options
- The additional inclination sensor data is offered by the use of generic variables
- Continuous inclination gives the user the ability to calculate build rates real-time
- Information between surveys to make crucial corrections to stay on target.

Defining Features

- Proven technology with Tensor based design
- Reliable inclination/azimuth-whiledrilling from the directional sensor
- An additional inclination sensor can be placed anywhere within the MWD string
- Additional inclination sensor can be up to 15' closer to the bit than the directional sensor

Anarchy Friction Reduction Tool

The ANARCHY friction reduction tool is focused on reducing the overall friction encountered when drilling highly deviated or horizontal wellbores.

The ANARCHY FRT has demonstrated clear improvements in drilling performance by reducing stick slip and torque within the drill string. This has enabled reduction in drag and thus improved weight transfer to the bit when drilling through highly interbedded formations, directional applications, or long horizontal sections. The ANARCHY FRT has also shown to improve tool face control by minimizing static friction in the drill string and bottom hole assembly.

When the ANARCHY FRT is strategically placed it will improve ROP and weight transfer through complex directional wellbore profiles.







Defining Features

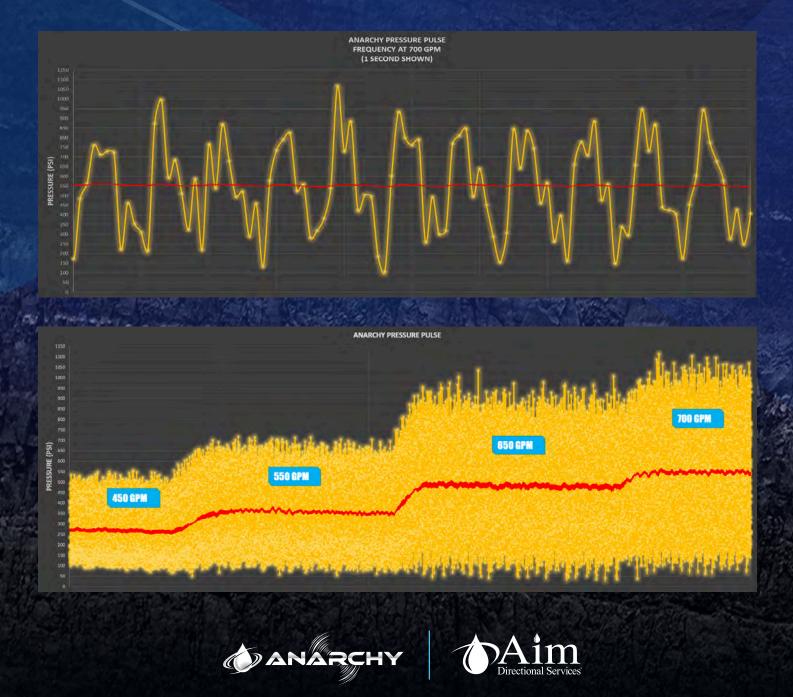
- Up to a 50% increase in sliding ROP
- Reduction in drilling time
- Decreased lateral and torsional vibration
- Saves time and drilling cost

Real Benefits

- Increase in rotating ROP
- Improved tool face control
- Increased sliding ROP
- Compatible with all MWD/LWD
- Less WOB requirements result in longer bit life
- Prevents weight stacking

Anarchy Friction Reduction Tool

Anarchy FRT	Shock Tool
OD: 6-3/4	OD: 6-3/4
Length: 17.25 ft	ID: 2.25"
Weight: 556 lbs	Length: 13 ft
Frequency: 7-13 hz (.0165*Flow rate) hz	Weight: 1,300 lbs
Flow Range: 450-750 GPM	Pump Open Area: 22.1 sq in
Pressure Drop: 450 PSI Nominal, 350-550 PSI Range	Stroke: 3 in



Defining Features

- 24-hour troubleshooting & quality control
- Real-time & memory gamma correlation
- Survey corrections using superior QC
- Azimuth uncertainty decrease
- Survey ellipse reduction
- Real-time drilling optimization

Aim Advantages

- Pre-job analysis with engineers, well planners, and management
- Quality control checks on every survey
- Real-Time downhole MWD performance and quality rating
- Personalized real-time data views online & mobile
- Fully encrypted data backup
- Customizable services from troubleshooting to full 24-hour watch
- Available WITSML data transfer

Real Benefits

- Reduce uncertainty and costly potential collisions
- Fully customizable online displays for position and target monitoring 24-7
- Survey corrections allow for closer well placement and higher production rates
- Quality control and immediate troubleshooting catches and fixes issues to reduce non-productive time (NPT)
- Torque and drag analysis allows faster, easier drilling to increase BHA and bit life



Real-Time Operations Center

Stay Informed and Reduce Risk with Aim's Real-Time Operations Center

There are many uncertainties during the drilling process. From quality control and troubleshooting to anti-collision and well correlations, it is nearly impossible to have too much data. However, combing through all the available data to determine which corrections are needed or why gamma counts don't match can be a tedious and time-consuming process.





This is where Aim Directional Services' Real-Time Operations Center (RTOC) can help. It is specially designed to monitor drilling activity 24 hours a day. Offering services like real-time digital data feeds and immediate troubleshooting, the RTOC reduces risk while keeping the operator informed. When combined with Survey Management, the RTOC can perform collision monitoring, survey corrections, and more to ensure the well is drilled as safe and precise as possible.

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Real-Time Operations Center

Available Services

RTOC

Remote Operations from Houston, Texas

- Day / Night Shifts
- 24 Hour
- Troubleshooting Services

Real-Time Log Visualization

- Standalone WITSML services
- All inclusive EDR and MWD visualization

Drilling Optimization

- Torque & Drag Reports
- Hydraulics Reports
- Real-Time optimization:
 - ROP, WOB, RPM, and MSE
 - PDM Output and Performance

Magnetic Calculations

- MVHD (latest model)
- GARM (latest model)

Survey Management

Survey Management Using Superior QC (Real-Time & Post Run Services)

- Multi-Station Analysis / FDIR
- SAG Corrections
- Stretch Corrections
- Stockhausen Effect
- Ability to correct with pseudo six axis

Anti-Collision Monitoring

- Updated projections at every survey
- Notifications sent at client's request
 - Available twice daily or every survey/ connection

Hard Line/Lease Monitoring

- At every survey within 100'
- Notification sent out once within 50'
- Verifying distances at BHL





Aim Performance Solutions

Introducing Aim Directional Services' New Performance Initiative That Focuses on Analytics Catered to the Customer

We have found that establishing client-specific goals prior to drilling each well is a key driver for success. With clear client expectations, our entire operations team works in unison to achieve desired performance goals. Self-evaluation is crucial for the continued growth and success of both parties.

Aim Performance Solutions was established based on our company's core values and strong belief in being transparent in both failure and success. Outlined below is the fundamental infrastructure for our new data-driven program:







Open Dialogue with Customer

Communicate to establish measurable benchmarks prior to each job



Well Performance Metrics

- Evaluate and grade our performance on drilling accuracy, operating efficiency and BHA success rate
- Identify highlights and lowlights



Continued Growth and Success

- Present report in person
 Welcome customer feedback to customize report
- Discuss future goals



Operational Team Focus

- Assess all client goals as a team prior to start of job
- Escalate issues in real-time; RTOC, ADOC and Operations Management work together to identify and resolve

Directional Guidance

Utilize personnel experience in all departments to provide lessons learned and suggestions for future wells