

EDR Trace Descriptions

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Technology

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1 EDR Trace Descriptions

1.1 Overview

This document lists and describes the traces used in the Pason Electronic Drilling Recorder (EDR) interface. Some traces may be specific to country (Canada or US) and, consequently, may not display in the EDR version that you are using.

This list is intended for any EDR user, but it is especially useful when configuring the WITSML Direct from Rig Third-Party option, which is purchased by customers from the Pason Store. Also, WITSML Direct from Rig customers should be familiar with full trace names when setting up WITSML with a Pason Sales Representative.

1.2 Descriptions

The following table provides a list of the latest EDR trace names, including the EDR interface trace name, the full trace name, and a description.

EDR Interface Trace Name	Full Trace Name	Description
10 Min. Gel Str.	10 Min Gel Strength	Ten-minute gel strength on a mud sample. Provides an indication of how well it gels in order to suspend cuttings.
10 Sec. Gel. Str.	10 Sec Gel Strength	Ten-second gel strength on a mud sample. Provides an indication of how well it gels in order to suspend cuttings.
300 RPM Def.	300 RPM Deflection	Viscosity measurement on a mud sample.
3rd Party Gas	3rd Party Gas	Total combustible gas content in sample. Third-party chromatograph trace.
3rd Party LagD	3rd Party Lag Depth	Depth at which the gas sample was detected based on lag calculation.
600 RPM Def.	600 RPM Deflection	Viscosity measurement on a mud sample.
Acetylene	CHR Acetylene	Acetylene content of the sample. Third-party chromatograph trace.

EDR Interface Trace Name	Full Trace Name	Description
Ann. Pres.	Annulus Pressure	Air pressure at the annulus.
App. Visc.	Apparent Viscosity	A standard viscosity measurement on a mud sample.
Azimuth	Azimuth	Direction of inclination measured by the directional sensor relative to true north. This is a compass reading. N = 0, E = 90, S = 180, W = 270. Value is in degrees.
Balance Ratio	Balance Ratio	Calculated trace based on Pason Gas Analyzer readings of C1, C2, C3, C4, and C5. For more information, see the Pason Gas Analyzer Product Application Note .
Battery 1 Charge Used	MWD Bat 1 Charge Used	The charge used for the primary battery in the MWD tool.
Battery 2 Charge Used	MWD Bat 2 Charge Used	The charge used for the secondary battery in the MWD tool.
Bit Depth	Bit Depth	Depth of the drill bit in reference to the bottom of the hole.
Bit Hours	On Bottom Hours	Total number of hours the bit is on bottom.
Bit RPM	Bit RPM	Rotary RPM plus motor RPM. For this trace to be accurate, you must set up the mud motor speed to flow rate ratio for MSE. To learn how, see Setting Up Mechanical Specific Energy (MSE) .
Bit Torque	Bit Torque	A trace calculated using this formula: bit torque = diff pressure x (motor max torque / motor max diff pressure)
Block Ht.	Block Height	Distance from the traveling blocks to the rotary table.
Block Temp.	TGS Block Temperature	Temperature of the sample block inside the Gas Analyzer.
C1	CHR C1 Methane	Methane content of the sample. Third-party chromatograph trace.
C2	CHR C2 Ethane	Ethane content of the sample. Third-party chromatograph trace.
C3	CHR C3 Propane	Propane content of the sample. Third-party chromatograph trace.
Calcium	Calcium	Calcium ion content in filtrate collected from a mud sample.
Casing	Casing Pressure	Pressure in the annulus outside of the drill pipe or tubing.
Cement Date	Cement Date	Date of the cement job.

EDR Interface Trace Name	Full Trace Name	Description
Cement Fl. Tmp.	Cement Fluid Temp	Temperature of the cement fluid.
Cement Time	Cement Time	Time of the cement job.
Character Ratio	Character Ratio	Calculated trace based on Pason Gas Analyzer readings of C3, C4, and C5.
Chloride	Chloride	Chloride ion content in filtrate collected from a mud sample.
Choke Pos.	Choke Position	Monitors the position of the choke in the well flow line.
chr Heavy Ends C6	CHR Heavy Ends C6	Hexane content of a sample. Third-party chromatograph trace.
CHR TTL Gas	CHR Total Gas	Gas value sent to the EDR from the chromatograph. Third-party chromatograph trace. Also used to display the Pason Gas value from the second Pason Gas Analyzer when two analyzers are connected to the system.
Circ. Hours	Circulating Hours	Number of hours the mud is circulated in the hole.
CO2	CHR CO2 Carbon Dioxide	Carbon dioxide content of the sample. Third-party chromatograph trace.
Condensate	Condensate Out	Measured amount of liquid hydrocarbons coming out of the well.
Conv. Torque	Convertible Torque	When you select Nm, kN-M, FT-LBS, kFT-LBS for the torque units, the EDR sends a trace called convertible torque (CTOR) to the Pason DataHub. The convertible torque trace enables the DataHub to convert trace values to units selected by DataHub users. The convertible torque trace is not available if you calibrate torque in AMPS or PSI. The Convertible Torque trace is only available on the DataHub—you can't display it on the EDR at the rig.

EDR Interface Trace Name	Full Trace Name	Description
Cumulative Fill Strokes	PVT Accum. Fill Strokes	An ePVT trip sheets data value. This is the cumulative number of fill strokes measured for the current trip. It's updated each time a fill is completed i.e., when a user presses Zero in the ePVT trip section.
Custom #1 to #100	Custom Param #1 to #100	User-defined traces.
DAS BHA Stick Slip	DAS BHA Stick Slip	Stick slip at the BHA. A value of 1 indicates full stick slip. A smaller number is better.
DAS bRPM Max	DAS Bit RPM Max	For Pason technical use.
DAS bRPM Min	DAS Bit RPM Min	For Pason technical use.
DAS Depth of Cut	DAS Depth of Cut	The distance drilled by one revolution of the drill bit.
DAS Downhole MSE	DAS Downhole MSE	Downhole mechanical specific energy calculated at the bit when a mud motor is configured. If no motor is configured, DAS Downhole MSE = DAS MSE.
DAS Lrn Scr	DAS Learning Score	Displays the calibration, or learning mode, percentage complete.
DAS MSE	DAS MSE	DAS-calculated mechanical specific energy.
DAS mu	DAS mu	Bit friction coefficient. The value increases as bit friction increases.
DAS Obj	DAS Objective Function	For Pason technical use.
DAS Rec DiffP	DAS Recommended Differential Pressure	DAS recommendation.
DAS Rec Flow	DAS Recommended Flow	DAS recommendation.
DAS Rec ROP	DAS Recommended ROP	DAS recommendation.
DAS Rec RPM	DAS Recommended RPM	DAS recommendation.
DAS Rec WOB	DAS Recommended WOB	DAS recommendation.
DAS ROP	DAS ROP	DAS-calculated ROP.
DAS Score	DAS Score	For Pason technical use.
DAS Stick Slip	DAS Stick Slip	Stick slip at the bit. A value of 1 indicates full stick slip. A smaller number is better.
DAS Time	DAS Time	How long the DAS service has been running.
DAS TSE Alert	DAS TSE Alert	A high stick slip alert that displays a value of 1 after 10 minutes of high stick slip drilling.

EDR Interface Trace Name	Full Trace Name	Description
D-Exponent	D-Exponent	The drilling exponent used in calculations to detect under-compacted shale formations and associated high-pressure zones.
Depth of Cut	Depth of Cut	This is the distance drilled, in cm (inch), by one revolution of the drill bit. When the bit is on bottom, the system calculates Depth of Cut once per second. When off bottom, Depth of Cut always equals zero.
DH Press 1	Downhole Pressure 1	Pressure reading taken from the bottom of the hole.
DH Press 2	Downhole Pressure 2	Pressure reading taken from the bottom of the hole.
DH Temp	Downhole Temperature	Temperature of the mud at the bottom of the hole.
Diff Press	Differential Pressure	The relative increase in standpipe pressure, typically caused by a mud motor. Differential pressure = (current SPP value) – (the SPP value when differential pressure was last zeroed).
Drum Velocity	Drawworks Drum Velocity	The speed at which the drum rotates in RPM.
EDR Instantaneous ROP	EDR Instantaneous ROP	Calculates rate of penetration using a fixed, 30 second averaging interval. For use in post-well analysis and troubleshooting.
Elevator Pos.	Elevator Position	The height of the elevator from the rig floor.
EST BiCarb IC	Est. Bicarbonate Ion Concentration	Estimated from MF (methyl orange alkalinity end point of mud filtrate) and PF (phenolphthalein mud filtrate) alkalinity test.
EST Carb IC	Est. Carbonate Ion Concentrate	Estimated from MF (methyl orange alkalinity end point of mud filtrate) and PF (phenolphthalein mud filtrate) alkalinity test.
EST Hydrox IC	Est. Hydroxyl Ion Concentrate	Estimated from MF (methyl orange alkalinity end point of mud filtrate) and PF (phenolphthalein mud filtrate) alkalinity test.
Event Num.	Event Number	Sequential number of an event (e.g., cement job number).
FDens. At Bit	Fdens. At Bit	The measured formation density at the drilling depth.
FDens. Depth	Formation Density Depth	Rock strength sent by third-party instruments.

EDR Interface Trace Name	Full Trace Name	Description
Fill Strokes	Fill Strokes	Number of pump strokes to fill the hole once while tripping. Used when the rig has no trip tank. Resets each time the pumps start.
Flow	Flow	Percentage of flow in the flow line.
Flow 1 G/L	Flow 1 Gain Loss	Corresponds to the gain (or loss) in flow with respect to a preset (via zero operation) benchmark. This value is a percentage.
Flow 1 Gain Loss Threshold	Flow 1 Gain Loss Threshold	Corresponds to the alarm threshold for the flow gain (or loss). This value is a percentage. If the flow gain/loss exceeds this value, an alarm is triggered (assuming that the alarm is enabled).
Flow 1 Gain Loss Alarm	Flow 1 Gain Loss Alarm	This is an internal trace that provides an encoding (a bit mask) of the alarm status for the Flow 1 gain loss trace. The trace encodes the following attributes: <ul style="list-style-type: none"> - Whether the alarm is enabled (true/false) - The state of the alarm (off, high, low, or test) - Whether an alarm has been acknowledged
Flow Pres.	UBD Flow Pressure	Pressure registered at the wellhead of a flowing well.
Flow Temp	UBD Flow Temperature	Temperature registered at the wellhead of a flowing well.
Fluid Loss	Fluid Loss	Volume of filtrate collected from a standard fluid loss test.
Form. Dens.	Formation Density	Density of external environment (rock) of wellbore.
GA-Conn Temp	GA Box Connector Temp	The temperature of the gas analyzer box connector. Pason Gas Analyzer trace.
GA-Tubing Temp	GA Heat Trace Temp	The temperature of the gas analyzer heat trace. Pason Gas Analyzer trace.
Gain Loss	ePVT Gain/Loss	The change in mud tank volume.
Gamma	Gamma	Value of gamma sensor at sensor depth (not bit depth).
Gamma At Bit	Gamma At Bit	Measured gamma value at drilling depth. It has to be back-populated when the gamma sensor has crossed the given bit depth.

EDR Interface Trace Name	Full Trace Name	Description
Gamma Depth	Gamma Depth	Measured gamma value at third-party calculated depth.
Gamma Fresh	Gamma Fresh	Provides the most recent Gamma value without any persistence (i.e., the most recent “raw” value only). For example, the Gamma trace listed above currently has a shelf life of 1000 seconds (which means that the Gamma trace will display the last received value for 1000 seconds in the event that no new value is received). Gamma Fresh displays no reading (“- -”) during that time period.
Gas Return	Total Gas Return	Total gas (N2 and hydrocarbons) in the returns from an underbalanced well.
Gas Spec G	CHR Gas Specific Gravity	Hydrocarbon gas density. Third-party chromatograph trace.
Grv. ToolFace	Gravity Toolface	The direction the downhole tool is pointing in relation to the high side of the hole.
Grav TF Fresh	Gravity Toolface Fresh	Provides the most recent Gravity Toolface value without any persistence (i.e., the most recent “raw” value only). For example, the Gravity Toolface trace listed above currently has a shelf life of 1000 seconds (which means that the Gravity Toolface trace will display the last received value for 1000 seconds in the event that no new value is received). Gravity Toolface Fresh displays no reading (“- -”) during that time period.
H2O Nozzle	Water Nozzle	Used in underbalanced drilling; sent via the WITS protocol.
H2S	H2s	Measured value of H2S in the flow.
H2S Sensor 1	H2S Sensor 1	H2S sensor reading at location 1 – HGAS.
H2S Sensor 2	H2S Sensor 2	H2S sensor reading at location 2 – HGAS.
H2S Sensor 3	H2S Sensor 3	H2S sensor reading at location 3 – HGAS.
H2S Sensor 4	H2S Sensor 4	H2S sensor reading at location 4 – HGAS.
HC Flow	Hydrocarbon Flow	Measured flow rate of hydrocarbon gas.

EDR Interface Trace Name	Full Trace Name	Description
Hole Depth	Hole Depth	Measured depth of the hole.
Hook Load	Hook Load	Weight of the traveling block.
Hookload Threshold	Hook Load Threshold	Displays the current calibrated hook load threshold value.
Inclination	Inclination	Measurement of degrees the hole is off vertical.
In Slips	In Slips	1 = the drill string is in slips. 2 = the drill string is out of slips.
iso-C4	CHR ic4 Isobutane	Isobutane present in a sample. Third-party chromatograph trace.
iso-C5	CHR ic5 Isopentane	Isopentane present in a sample. Third-party chromatograph trace.
iso-C6	CHR ic6 Isohexane	Isohexane present in a sample. Third-party chromatograph trace.
LEL Sensor 1	LEL Sensor 1	LEL sensor reading at location 1 – HGAS.
LEL Sensor 2	LEL Sensor 2	LEL sensor reading at location 2 – HGAS.
LEL Sensor 3	LEL Sensor 3	LEL sensor reading at location 3 – HGAS.
LEL Sensor 4	LEL Sensor 4	LEL sensor reading at Location 4 – HGAS.
Line Wear	Line Wear	Measures the amount of wear on the drilling line. The units used are Megajoules (metric) and Ton-Miles (imperial).
Mag. ToolFace	Magnetic Toolface	The direction the downhole tool is pointing in relation to true north in degrees.
Mag TF Fresh	Magnetic Toolface Fresh	Provides the most recent Magnetic Toolface value without any persistence (i.e., the most recent “raw” value only). For example, the Magnetic Toolface trace listed above currently has a shelf life of 1000 seconds (which means that the Magnetic Toolface trace will display the last received value for 1000 seconds in the event that no new value is received). Magnetic Toolface Fresh displays no reading (“—”) during that time period.

EDR Interface Trace Name	Full Trace Name	Description
Measured Fill Strokes	PVT Fill Strokes	An ePVT trip sheets data value. This is the number of strokes measured for the current fill. It's reset to 0 when the current fill is completed i.e., when a user presses Zero in the ePVT trip section.
MegaJoules	Megajoules	Measures the amount of wear on the drilling line. Used to decide when to slip and cut. Viewable on the Canadian EDR only.
MF	MF	A standard alkalinity titration. It is the ratio of acid to filtrate.
MSE	Mechanical Specific Energy	Amount of physical energy delivered to the bit. Acts as an indicator of rock strength, and thus as an indicator of formation.
Mud Dens.	Mud Density	The density of the mud being pumped. This is not a measured or calculated value—EDR users manually enter a value for this trace.
Mud pH	Mud pH	The measurement of the acidity or alkalinity in the mud.
Mud Temp	Mud Temperature	Mud temperature at the Mud Analyzer.
Mud Visc.	Mud Viscosity	The viscosity of the mud being pumped. This is not a measured or calculated value—EDR users manually enter a value for this trace.
MWD Check Word	MWD Check Word	An MWD word that is decoded by the Pathfinder decoder. It gives an indication of whether the decoder is in sync with the downhole tool or not, thereby indicating the decoding quality.
MWD Chrg Rem.	MWD Charge Remaining	Battery charge remaining in the MWD downhole tool.
MWD DH RPM	MWD Downhole RPM	The amount of RPM measured by the MWD tool downhole. Typically, this is a positive value and is used in conjunction with "reverse rotation" to indicate RPM in the opposite direction.
MWD Dyn Azimuth	MWD Dynamic Azimuth	The azimuth values measured during the dynamic (toolface) sequence, while the drill is on bottom and drilling ahead.

EDR Interface Trace Name	Full Trace Name	Description
MWD Dyn Inclin	MWD Dynamic Inclination	The inclination values measured during the dynamic (toolface) sequence, while the drill is on bottom and drilling ahead.
MWD Gen Var 0 - 10	MWD General Variables	Separate traces from 0 – 10 decoded by the directional tools. These have no specific units or scaling, and can be customized by the user.
MWD Lat Shk Lvl	MWD Lateral Shock Level	A nominal measure of the lateral movement of the MWD tool downhole. Typically zero means no lateral shock and five means high lateral shock.
MWD Lat Shk Pct	MWD Lateral Shock Percentage	A percentage-based measure of the lateral movement of the MWD tool downhole. Zero percent means no lateral shock and 100% means high lateral shock.
MWD Pump State	MWD Pump State	Indicates whether the pumps are turned on or off.
MWD Quality	MWD Decode Quality Percentage	Quality of packets received by the Pason Directional System from the downhole tool.
MWD Rev. Rotate	MWD Reverse Rotation	Indicates the MWD downhole tool is rotating in reverse direction. High stick slip may cause the tool to rotate in reverse direction due to sticking and torsion.
MWD Stk Slip Lvl	MWD Stick Slip Level	Measures the irregular movement of the logging tool to ensure it doesn't get stuck due to differential pressure.
MWD Success	MWD Decode Success Percentage	Success of packets decoded from the MWD downhole tool by the Pason Directional System.
MWD Temp	MWD Temperature	Temperature recorded by the directional tool.
MWD Vib Count	MWD Vibration Count	Vibration count recorded by the directional tool.
MWD Vib XY Gamma	MWD Vibration XY Gamma	Vibration count recorded by the gamma module of the directional tool in the XY direction.
MWD Vib XYZ	MWD Vibration XYZ	Vibration count recorded by the directional tool in the XYZ direction.
MWD Vib XYZ Gamma	MWD Vibration XYZ Gamma	Vibration count recorded by the gamma module of directional tool in the XYZ direction.

EDR Interface Trace Name	Full Trace Name	Description
MWD Vib Z Gamma	MWD Vibration Z Gamma	Vibration count recorded by the gamma module of directional tool in Z direction.
N2 Press.	Nitrogen Pressure In	Pressure of the nitrogen being injected into the well.
N2 Rate	N2 Rate	Volume of nitrogen injected over time (usually measured in m3/min or bbls/min).
N2 Vol. In	Nitrogen Volume In	Volume of nitrogen being injected into the well.
N2 Vol. Out	Nitrogen Volume Out	Volume of nitrogen coming out of the well.
neo-C5	Chr neo-C5 Neopentane	Neopentane present in a sample. Third-party chromatograph trace.
None	None	Indicates that no trace is selected.
nrm-C4	CHR nc4 Normal Butane	Normal butane present in a sample. Third-party chromatograph trace.
nrm-C5	CHR nc5 Normal Pentane	Normal pentane present in a sample. Third-party chromatograph trace.
nrm-C6	CHR nc6 Normal Hexane	Normal hexane present in a sample. Third-party chromatograph trace.
On Bottom	On Bottom	1 = the drill bit is on bottom. 2 = the drill bit is off bottom.
OROP	Overall ROP	Calculates an average rate of penetration over a customizable time period. Unlike the ROP trace, OROP includes time spent on and off bottom, so it's useful when you want to measure overall rig performance.
Over Pull	Over Pull	Hookload minus the weight of the drill string. This value is used to monitor the drill string while coming out of the hole. If the pull coming out of the hole is too great, it may indicate the possibility of the drill string getting stuck in the hole.
Oxygen	CHR Oxygen O2	Oxygen content of the sample. Third-party chromatograph trace.
P1 Total	Pump 1 Total Strokes	Total number of strokes on pump 1.
P2 Total	Pump 2 Total Strokes	Total number of strokes on pump 2.
P3 Total	Pump 3 Total Strokes	Total number of strokes on pump #3.

EDR Interface Trace Name	Full Trace Name	Description
P4 Total	Pump 4 Total Strokes	Total number of strokes on pump # 4.
Pason Gas	Pason Gas	Relative gas in units or percent, and is the value of gas (hydrocarbons) present in the sample of drilling fluid being processed by the trap. Used to measure the value of all hydrocarbons in the drilling fluid. Pason Gas Analyzer trace. When two Gas Analyzers are connected to the system, the CHR TTL Gas trace displays the Pason Gas value from the second analyzer.
Pason LagD	Pason Lag Depth	Depth at which the gas sample was detected based on lag calculation.
PF	PF	A standard alkalinity titration. Ratio of acid to filtrate.
PGas C1	C1 Methane Gas	Percentage of methane gas in well fluid. Pason Gas Analyzer trace.
PGas C2	C2 Ethane Gas	Percentage of ethane gas in well fluid. Pason Gas Analyzer trace.
PGas C3	C3 Propane Gas	Percentage of propane gas in well fluid. Pason Gas Analyzer trace.
PGas C4	C4 Butane Gas	Percentage of butane gas in well fluid. Pason Gas Analyzer trace.
PGas C5	C5 Pentane Gas	Percentage of pentane gas in well fluid. Pason Gas Analyzer trace. Note: The Pason Gas Analyzer does not currently detect pentane. The C5 trace value is only a placeholder for when this capability may become available. If you export this trace, the value will be zero.
PGas CO2	CO2 Carbon Dioxide Gas	Percentage of carbon dioxide gas in well fluid. Pason Gas Analyzer trace.
PGas Heavy Gas	Heavy Gas	Percentage of heavy gas in well fluid. Pason Gas Analyzer trace.
PGas No Lag	Pason Gas Unlagged	Percentage of gas in well fluid (not lagged). Pason Gas Analyzer trace.
Plastic Visc.	Plastic Viscosity	A standard viscosity measurement performed on a mud sample.
Por1 At Bit	Por1 At Bit	Porosity values at drilling depth.
Por1 Depth	Porosity 1 Depth	Depth at which porosity 1 reading occurred.
Por2 At Bit	Por2 At Bit	Porosity values at drilling depth.

EDR Interface Trace Name	Full Trace Name	Description
Por2 Depth	Porosity 2 Depth	Depth at which porosity 2 reading occurred.
Porosity 1	Porosity 1	The pore volume within rock that can contain fluids or gas.
Porosity 2	Porosity 2	The pore volume within rock that can contain fluids or gas.
Pump 1 Rate	Pump Rate	The volume rate that the pump 1 is pumping in cubic meters/minute.
Pump 1234	P1234_Rate	The combined stroke rate for all 4 pumps. This is measured in strokes per minute.
Pump 2 Rate	Pump Rate	The volume rate that the pump 2 is pumping in cubic meters/minute.
Pump 3 Rate	Pump Rate	The volume rate that the pump 3 is pumping in cubic meters/minute.
Pump 4 Rate	Pump Rate	The volume rate that the pump 4 is pumping in cubic meters/minute.
Pump Disp.	Total Pump Displacement	Cumulative volume of mud pumped by all pumps. Can be zeroed on the DHC.
Pump Press	Cement Pump Pressure	Pressure of cement as it is pumped downhole.
Pump Rate	Total Pump Output	Rate at which mud is pumped down the drill string.
Relative MSE	Mechanical Specific Energy (relative)	Amount of physical energy delivered to the bit. Acts as an indicator of rock strength, and thus as an indicator of formation. Less accurate than MSE, but requires less user input.
Res1 At Bit	Res1 At Bit	Resistivity values at drilling depth.
Res1 Depth	Resistivity 1 Depth	Depth at which resistivity1 reading occurred.
Res2 At Bit	Res2 At Bit	Resistivity values at drilling depth.
Res2 Depth	Resistivity 2 Depth	Depth at which resistivity2 reading occurred.
Resistivity 1	Resistivity 1	Measures the electrical characteristics of rock, used to detect different formations. A third-party company sends this value via the WITS protocol.
Resistivity 2	Resistivity 2	Measures the electrical characteristics of rock, used to detect different formations. A third-party company sends this value via the WITS protocol.

EDR Interface Trace Name	Full Trace Name	Description
Rig Super State	Rig Super State	Displays numbers 0 - 6, which correlate to a high-level description of rig activity determined by Pason algorithms. To learn how to interpret the displayed numbers, see <i>Using Rig State Traces</i> on EDR Help .
Rig Sub State	Rig Sub State	Displays numbers 0 - 9, which correlate to a specific description of rig activity within a rig super state determined by Pason algorithms. To learn how to interpret the displayed numbers, see <i>Using Rig State Traces</i> on EDR Help .
ROP	On Bottom ROP	Speed at which the drill bit is drilling.
Rotary	Rotary RPM	Measured surface RPM of the rotary table or top drive.
Sensor Depth	Sensor Depth	The depth of the sensor of the downhole tool.
Single Fill	Single Fill	Refers to the change in trip tank volume during a single fill operation during tripping activities. As pipe is removed from the well (during tripping), fluid is pumped in to replace the volume removed during the operation.
Slurry Dens.	Slurry Density	Density of wet cement as it is pumped downhole.
Slurry Rate	Slurry Rate	Volume of cement over time (usually measured in m3/min or bbls/min).
SPP	Standpipe Pressure	Pressure of the mud in the standpipe.
SSSI*	Surface Stick Slip Index	A calculated metric (using hydraulic or current-based torque) based on the surface-torque signal, which indicates the level of torsional vibration (i.e., stick-slip) that is occurring downhole. (*This trace is a prototype. Do not use without Pason guidance.)
Stage Vol	Cement Stage Volume	Volume between events or stages during a cementing job. Volume is based on the number of pump revolutions.
Strokes #1	Pump 1 Strokes/Min	Stroke rate for pump # 1.
Strokes #2	Pump 2 Strokes/Min	Stroke rate for pump # 2.

EDR Interface Trace Name	Full Trace Name	Description
Strokes #3	Pump 3 Strokes/Min	Stroke rate for pump # 3.
STROKES #4	Pump 4 Strokes/Min	Stroke rate for pump # 4.
T.V. Depth	True Vertical Depth	Vertical distance from total depth to kelly bushing.
Tank 1 - 32	Mud Tank 1 - 32 Volume	Volume of mud in tanks # 1 - 32.
ToolFace(G)	Toolface	Direction in which the bent sub is pointing (up/down/left/right).
Torque	Rotary Torque	Measures the force used to rotate the drill string.
Total Fill	Total Fill Strokes	Sum of all "strokes to fill." During a trip, the hole may be filled 10 times. This is the sum of the "fill strokes" from each filling operation.
Total Mud	Total Mud Volume	Total mud volume for all tanks (does not include trip and custom tanks).
Total P1234	Total Strokes P1+P2+P3+P4	Total strokes for all pumps.
Trap RPM	TGS RPM	Speed of the motor inside the gas trap.
Trip 1	Trip Tank 1	The current volume of the trip tank assigned as Trip Tank 1.
Trip 2	Trip Tank 2	The current volume of the trip tank assigned as Trip Tank 2.
Trip Mud	Trip Tank Mud Volume	Volume of mud used when tripping.
Trip Speed	Trip Speed	Estimated average rate of tripping pipe. The rig cannot be in slips, and the calculation takes the average of the last 10 packets sent, which is approximately two seconds.
Ttl. Stage Vol.	Cement Total Stage Volume	Total volume of events or stages during a cementing job.
Water Out	Water Out	Rate at which water is pumped out of the well.
Water Rate	Cement Water Rate	Rate at which water is brought on the truck from the rig tanks or water truck. This indicates if the cement is being mixed properly.
Weight On Bit	Weight On Bit	Calculated value based on string weight. When drilling, weight on bit is the weight of the drill string on the bit.

EDR Interface Trace Name	Full Trace Name	Description
Wetness Ratio	Wetness Ratio	Calculated trace based on Pason Gas Analyzer readings of C1, C2, C3, C4, and C5. For more information, see the Pason Gas Analyzer Product Application Note .
Wind Direction	Wind Direction	Measures wind direction on the rig.
Wind Speed	Wind Speed	Measures wind speed on the rig.
WITS Custom #1- 30	WITS Custom #1 - 30	Custom WITS parameters
XY Accel Sev Lev	XY Acceleration Severity Level	Used to monitor downhole vibration. Represents lateral downhole vibration.
Yield Pt.	Yield Point	A standard viscosity measurement performed on a mud sample. Related to the force required to restart circulation.
Z Accel Sev Lev	Z Acceleration Severity Level	Used to monitor downhole vibration. Represents axial downhole vibration.