ROUNDS LOGGING

Rounds Logging

A COMPONENT OF: **TANGO**

PLANT DATA COLLECTION WITH SMART DEVICES DOES MORE, COST LESS

- BASIC OPERATOR CARE
- LUBRICATION
- MECHANICAL
- ELECTRICAL
- ULTRASONICS
- THERMOGRAPHY

24/7 SYSTEMS

Simplifies collection and operator rounds, lubrication routes, and visual inspections. Inspection data is collected using commercially available smart devices.* Once collected, results are displayed in a summary report, alarm findings can be escalated to condition entry status, and history and trends are maintained for accountability.

*Android, iOS, and Windows Compatible

DATA COLLECTION EFFICIENCY

Once a route has been started, the at-point collection screen provides technician with all the information they need to accurately take measurements.

ROUTE NAME

LOCATION INFORMATION

POINT ORDER LOCATION

CURRENT STATUS

POINT INSTRUCTIONS

MEASUREMENT VALUE

MEASUREMENT COMMENT

PREVIOUS VALUES

ALIAS INFORMATION

LINKED DOCUMENTS

OPTIONS & SEARCH

CONNECTION STATUS

Tango Rounds Logger

Route Name: Lube - Route 2 - Daily

Location
   65 Fresh Water Station
   > 652 - Mill Fresh Water
   >> 652003 - #2 Water Pump
   >>> Motor
   >>>> **Check Oil Condition**

   Point: 1 of 40
   Status: Not Measured
   Value: Not Measured

Instructions
MOTOR BEARINGS, Number of Points = 2, NUTOH68

Milky (Water Present) ▼ ❌
Data Value Label
Water found in sample, needs to be inspected for leaks

[Save]

Past Trend Data | Save Using Previous Value

Timestamp	Value	Label
May 23, 2014 *04:08:46*	Good	From Previous Value
May 22, 2014 *07:44:25*	Good	From Previous Value
May 20, 2014 *18:03:05*	Good	From Previous Value
May 15, 2014 *03:53:54*	Good	From Previous Value
May 12, 2014 *17:25:48*	Good	From Previous Value

Location Alias Values
• *JDE Unit Number*: 65200301

Linked Documents
Sample Brady Lockout Tagout Procedure *at the Asset*
2Centac.jpg *at the Asset*

| << | < | Options | > | >> | | 🔍 |

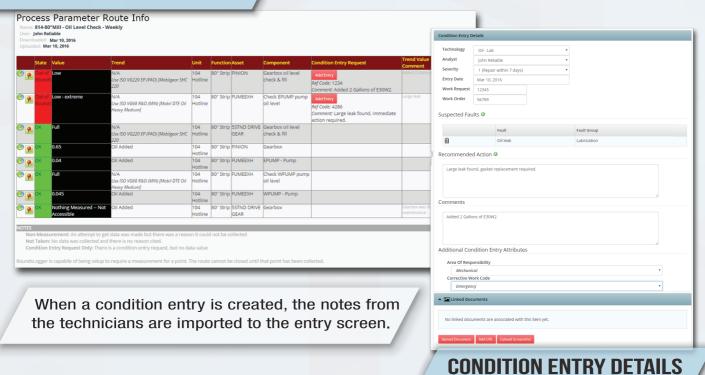🟢 Online

AT-POINT COLLECTION SCREEN

During collections, if a measurement is out of range, the technicians are prompted to comment on the problem. The technician's comments and measurements play a key factor into eliminating failures-in-service.

INTEGRATING COLLECTED DATA

Upon completion of the route, managers can review the values and states, including missed locations, via the Route Summary Report in Tango™. If a measurement is "Out of Bounds," they can escalate the status to a condition entry directly from the report.

ROUTE SUMMARY REPORT

Process Parameter Route Info

Name: **814-80"Mill - Oil Level Check - Weekly**
User: **John Reliable**
Downloaded: **Mar 10, 2016**
Uploaded: **Mar 10, 2016**

State	Value	Trend	Unit	Function	Asset	Component	Condition Entry Request	Trend Value Comment
Out of Bounds	Low	N/A Use ISO VG220 EP (PAO) [Mobilgear SHC 220	104 Hotline	80" Strip	PINION	Gearbox oil level check & fill	Add Entry Ref Code: 1234 Comment: Added 2 Gallons of E30W2.	Added 2 Gallons
Out of Bounds	Low - extreme	N/A Use ISO VG68 R&O (MIN) [Mobil DTE Oil Heavy Medium]	104 Hotline	80" Strip	FUMEEXH	Check EPUMP pump oil level	Add Entry Ref Code: 4286 Comment: Large leak found, immediate action required.	Large leak
OK	Full	N/A Use ISO VG220 EP (PAO) [Mobilgear SHC 220	104 Hotline	80" Strip	5STND DRIVE GEAR	Gearbox oil level check & fill		
OK	0.65	Oil Added	104 Hotline	80" Strip	PINION	Gearbox		
OK	0.04	Oil Added	104 Hotline	80" Strip	FUMEEXH	EPUMP - Pump		
OK	Full	N/A Use ISO VG68 R&O (MIN) [Mobil DTE Oil Heavy Medium]	104 Hotline	80" Strip	FUMEEXH	Check WPUMP pump oil level		
OK	0.045	Oil Added	104 Hotline	80" Strip	FUMEEXH	WPUMP - Pump		
OK	Nothing Measured – Not Accessible	Oil Added	104 Hotline	80" Strip	5STND DRIVE GEAR	Gearbox		Gearbox was d... maintenance.

NOTES
Non-Measurement: An attempt to get data was made but there was a reason it could not be collected.
Not Taken: No data was collected and there is no reason cited.
Condition Entry Request Only: There is a condition entry request, but no data value

RoundsLogger is capable of being setup to require a measurement for a point. The route cannot be closed until that point has been collected.

When a condition entry is created, the notes from the technicians are imported to the entry screen.

CONDITION ENTRY DETAILS

Condition Entry Details

Technology	Oil - Lab
Analyst	John Reliable
Severity	1 (Repair within 7 days)
Entry Date	Mar 10, 2016
Work Request	12345
Work Order	56789

Suspected Faults

	Fault	Fault Group
🗑	Oil leak	Lubrication

Recommended Action

Large leak found, gasket replacement required.

Comments

Added 2 Gallons of E30W2.

Additional Condition Entry Attributes

Area Of Responsibility
Mechanical
Corrective Work Code
Emergency

Linked Documents

No linked documents are associated with this item yet.

[Upload Document] [Add URL] [Upload Screenshot]

INTEGRATED CONDITION STATUS REPORT

Filter:

			Severity	Criticality	Unit	Function	Asset	Component	Technology	Most Recent Severity	Days Awaiting Checkoff	Work Order Status	Work Order Numbers	Corrective Work Code	Area of Responsibility	Asset Diagram	Created By	Latest Status Comments	Case Closure
1			1	0	170 Compressor Room	AIR	2CENTAC	Air leaks	• Visual Inspection	1	18	0 of 1		• Outage	• Mechanical	• 2Centac.jpg	• Mike Manager	• 3/14/07: Will check seals at month end outage	
2			1	0	101 Cooling Tower	Tower	CLDWELL	MOTOR1	• Infrared • Vibration - Route	1	1	1 of 2	• 02-14056	• Emergency • Next Opportunity	• Enviromental • Mechanical	Coldwell_Motors.jpg	• James Tech • Mike Manager	• Still waiting on special sheilded bearings - expected in by early June	
3			2	0	162 Carbon Plant	BAKE	WASTE	FANS2	• Electrical - Online	2	19	0 of 1					• Mike Manager		
4			2	0	170 Compressor Room	AIR	2CENTAC	Compressor	• Oil Analysis - Screening	2	18	0 of 1				• 2Centac.jpg	• John Reliable		
5			2	0	170 Compressor Room	AIR	1CENTAC	Motor	• Electrical - Online	2	115	0 of 2					• James Tech		
6			2	0	170 Compressor Room	AIR	3CENTAC	Motor	• Oil - Lab	2	2	0 of 1					• John Reliable		
7			2	0	161 EPA Cranes	Unit 1	Primary Transport Crane	Gearbox	• Oil Analysis - Lab • Vibration - Special Test	4	23	0 of 5	• Awaiting: 08-030221A				• James Tech • John Tech		
8			3	0	170 Compressor Room	AIR	1CENTAC	Air leaks	• Visual Inspection	3	29	0 of 1	• Awaiting: 08-0630028				• John Reliable		

The Integrated Condition Status Report (ICSR) display the condition entries, enabling Managers and Maintenance to track the progress of repairs. From the ICSR, users can add comments, linked documents, checkoff and close entries.

ACCOUNTABILITY

Roundlogging, paired with Tango™, establishes accountability for the data collection process. The Route Adherence Report provides critical data for monitoring completion of inspection rounds. By filtering date ranges and breaking down the routes by locations, this report provides a comprehensive overview of route completion percentages, condition statuses, and not measured locations.

	Route Completion Adherence				Route Point Adherence			
	63.93%				62.38%			
230 Compressor Room	80.00%				75.15%			
230 Compressor Day Shift	80.00%				75.15%			
	Scheduled Start Date	Scheduled End Date	# of Route Completions	# of Points On Route	# Points Measured OK	# Points Measured Not OK	# of Points marked as Not Measured	# of Points with No Data Entered
Totals			4	165	105	19	0	41
	Mar 01, 2016	Mar 02, 2016	1	33	26	5	0	2
	Mar 03, 2016	Mar 04, 2016	0	33	0	0	0	33
	Mar 05, 2016	Mar 06, 2016	1	33	27	4	0	2
	Mar 07, 2016	Mar 08, 2016	1	33	26	5	0	2
	Mar 09, 2016	Mar 10, 2016	1	33	26	5	0	2
250 Compressor Room	60.71%				48.18%			
250 Compressor Room Day Shift	100.00%				33.33%			
250 Compressor Room Night Shift	100.00%				100.00%			
250 Compressor Room Monday & Thursday Shifts	50.00%				50.00%			
250 Compressor Room Monday &	50.00%				50.00%			
250 Compressor Room Tuesday & Friday Shifts	50.00%				50.00%			
250 Compressor Room Wednesday	50.00%				48.33%			
250 Compressor Room Friday Lube	0.00%				0.00%			
260 Compressor Room	79.31%				75.50%			
270 Compressor Room	61.54%				62.25%			
290 Compressor Room	66.67%				67.69%			
Field Maintenance	0.00%				0.00%			

ROUTE ADHERENCE REPORT

EMAIL NOTIFICATIONS

Email notifications also provide a level of accountability to the technicians. Emails are sent to the responsible person or group when the designated lead time for a route has arrived, giving the technicians adequate time to prepare and complete the route. Emails are also sent to personnel when a condition entry has been made from the summary report.

QR CODES

QR codes can be assigned to a route or route points to aid in the inspection process. By assigning a QR code to the route, technicians scan the QR code and are directed to the route after login is successful.