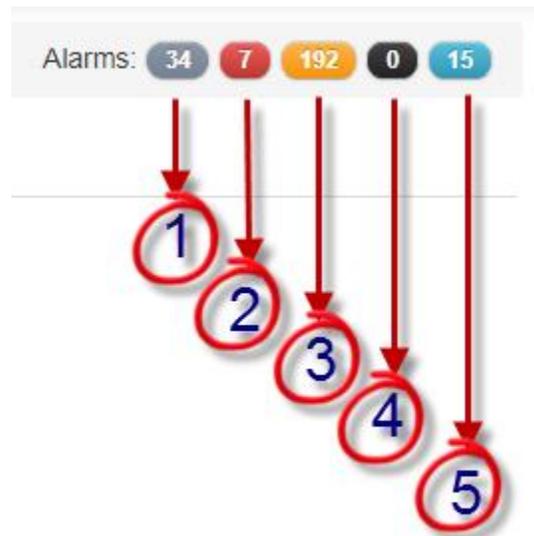


ALARMS

In Zedi Access you will have the ability to set server-based alarms for any sensor on any EFM device. Server based alarms are triggered by Zedi Access and are based off the last reading taken by the device in the field. The alarms may automatically be cleared when the sensor transmits within the normal operating range. Once alarming, Zedi Access can send either a text message, email or both to the end user to notify them.

ALARM TYPES

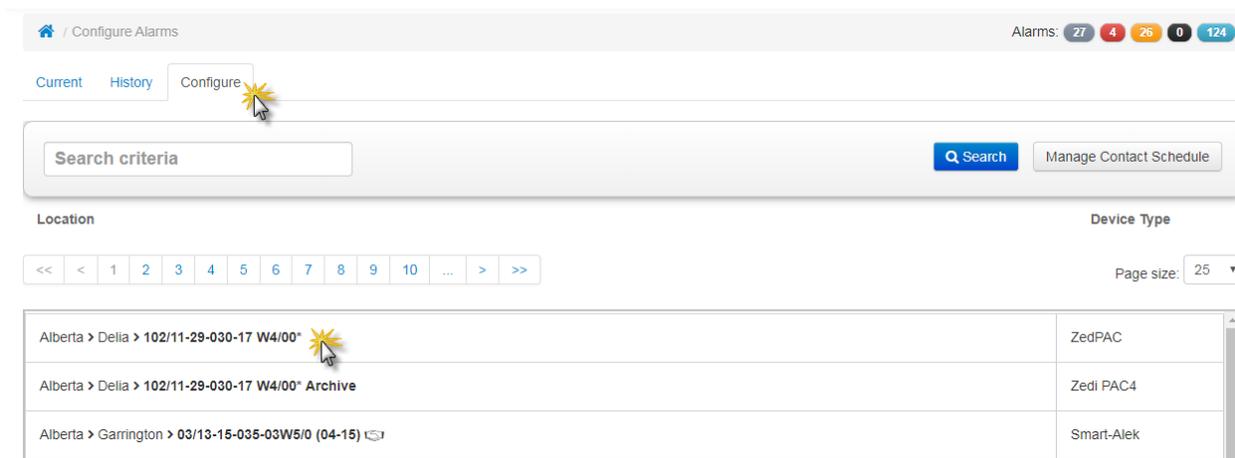


1. Grey – **No Communication Alarms**, this site does not have any communication.
2. Red – **High High / Low Low or Smart-Alek Cryout Alarms**, this site is very outside of the parameters put in place.
3. Orange/Yellow – **High / Low Alarms**, this site is slightly out of the parameters put in place.
4. Black – **RTU Alarms**, not in use.
5. Blue – **Location Missing Flow Parameters Configurations**, indicates which sites flow parameters need to be updated. Most not in use.

1. There are a few ways in which you can access the configure alarm screen to begin configuring them:



- a. The first option is to click the Options dropdown menu and select **Configure Alarm**. This will take you directly to the configure alarm screen for the site selected.



- b. The second option is to select from the colored **Alarm** icons on the top right of the screen. This will take you to the configure alarms screen where you will select **Configure** and select the **Location**.

The screenshot shows the Zedi Cloud SCADA Solutions interface. At the top left, the 'zedi' logo is followed by navigation menus: 'Admin', 'Data', and 'Reports'. A dropdown menu is open under 'Admin', listing 'Alarms', 'Company', 'Hierarchy', 'Property Types', 'Units of Measure', and 'Users'. A red circle highlights the 'Alarms' option. In the top right, there is a 'Help' link and a user profile 'zedi Admin'. Below the navigation, there are tabs for 'Current Alarms' and 'History'. A search bar is present with a dropdown for 'All Alarm Type' and a text input for 'Sensor name contains...'. A table of alarms is displayed with columns: 'Date', 'Sensor', 'Alarm', 'Value', and 'Set Point'. The first row shows an alarm for '07-23 Flow Alarm Status' with a 'High' alarm level. A second screenshot below shows a similar interface but with a dropdown menu open for the 'Alarms' row, showing 'Alarm History' and 'Configure' options.

- c. Finally, you can select **Alarms** in the Admin pull down menu in the top left of the home page. This will take you to the configure alarms screen where you will select **Configure** and select the **Location**.

Home > SCADA > Zedi Cloud SCADA Solutions > Sunchild > 00/16-15-044-10 W5M/00 (16-16 Surf) Zedi SCADA

Sensor name contains... All measurement types Find

No Communication After 24 Hour(s)	Gas Flow Rate Set (E3M3/Day)	Line Heater Status	Casing Pressure	Condensate K-Factor
	HH 0	H 99999		
	H 99999	L 0		
	L 0.11			
	LL 0			
Condensate Volume	Differential Pressure	Flowing Temperature	Hours On Flow	Pipeline Pressure
Static Pressure	Tubing Pressure	Volume		

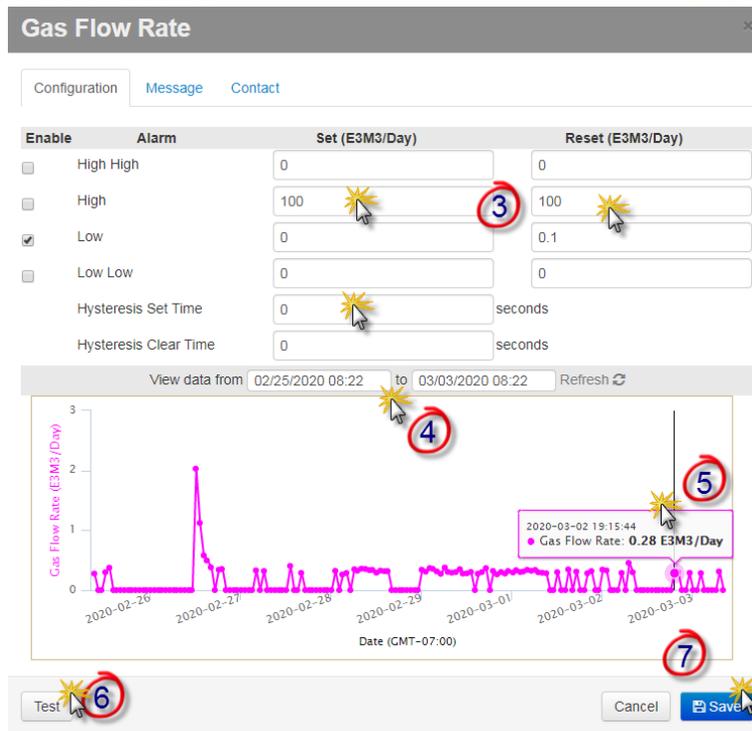
- Once you are in the configure screen, choose the sensor you would like to set the alarm for by selecting the name in blue. (ie. Gas Flow Rate)

Gas Flow Rate

Set (E3M3/Day)	
HH	0
H	99999
L	0.11
LL	0
	

At a quick glance you are able to see what the, UOM is, and what the High High and Low Low is set at.

The person icon indicates if there is a contact should the alarm be triggered. (Red indicates no contact has been set up)



3. Enter the value you would like the alarm to be tripped or set at for High High/Low Low and High/Low under the Set Level field. Enter your normal or reset value for each trip point.

Alarm Configuration settings available for a server alarm are:

- a. **High High Set Level** the level at which the high high alarm event triggers.
 - b. **High High Reset Level** the level at which the high high alarm event is cleared. High High Reset Level Value = Set Level Value – **Hysteresis**
 - c. **High Set Level** the level at which the high alarm event triggers.
 - d. **High Level Reset** the level at which the high alarm event clears. High Reset Level Value = Set Level Value – Hysteresis
 - e. **Low Set Level** the level at which the low alarm event triggers.
 - f. **Low Reset Level** the level at which the low alarm event clears. Low Reset Level Value = Set Level Value + Hysteresis
 - g. **Low Low Set Level** the level at which the low low alarm event triggers.
 - h. **Low Low Reset Level** the level at which the low low alarm event is cleared. Low Low Reset Level Value = Set Level Value + Hysteresis
 - i. **Hysteresis Set Time**- After the 'x' seconds, the RTU will demand poll and confirm whether that sensor is still in alarm state or if the alarm can be cleared. It will ultimately check the alarm status twice to confirm whether an alarm should be initiated or cleared
4. You can change the dates to **View Data** from a specific range.
 5. You can hover over the graph to see the exact time, date and gas flow rate.
 6. Select **Test** to ensure the parameters are enabled.
 7. Click **Save**.

View data graphs the dates selected for a quick view of alarms on this site.

MESSAGE

Messages can be customized to suit the device, person, or message center receiving the email or text message. The well site location, the device Instrument ID, sensor type, alarm value, and the date and time of the alarm event as registered by the server can be sent in a text message. A very simple message can be used to convey only the relevant data. A short message like the example below may be used when the device has limited message length capability, or when the recipient is familiar with the alarms that have been set up.

Example:

An alarm event occurred at #TIM on the PAC, PAC2, or PAC4 #SDS, located at Battery #LOC in Field #FLD for XYZ Exploration Ltd. The sensor measuring #SEN with a value of #AMT is outside the range set at #MIN - #MAX. Please call John Smith at 780-555-5555.

Message formats are:

#FLD-Field Name
 #MAX-Alarm Maximum
 #AMT-Reading Amount
 #VALUE [equivalent to #AMT]
 #SEN-Sensor Name
 #TIM-Time and Date
 #MIN-Alarm Minimum
 #ERR-High or Low
 #LOC-Well Location
 #WELL-equivalent to #LOC
 #HIERARCHY



Differential Pressure

Configuration Message Contact

Message for this sensor only 1

Message for entire location

Message Template

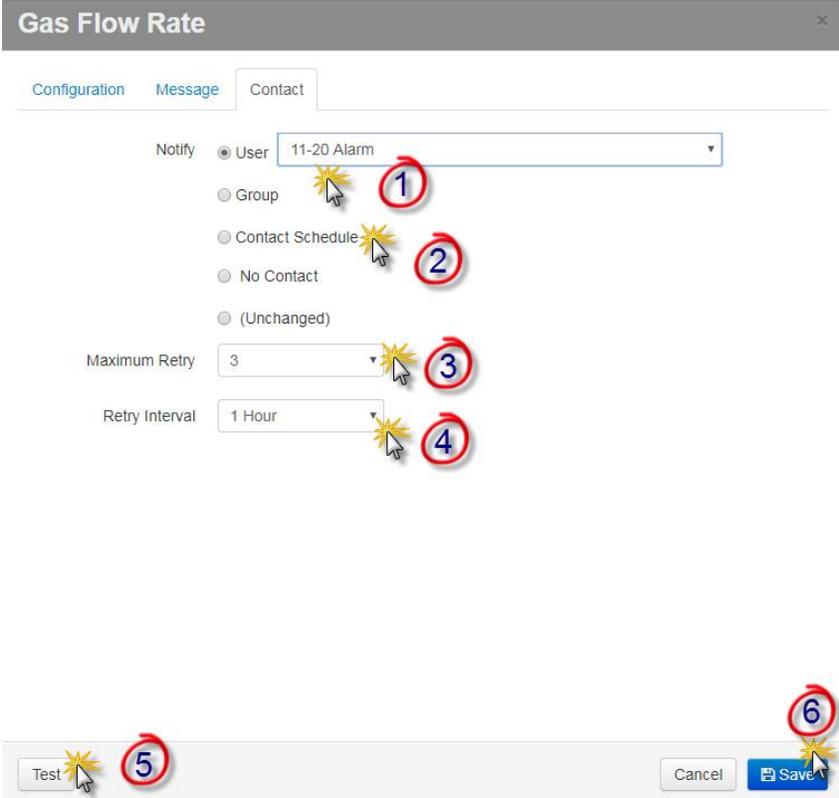
#ERR #HIERARCHY
 #HIGH #LOW #SN
 #SEN #TIM #VALUE
 #WELL #HIGHHIGH
 #LOWLOW

#FLD, #LOC
 THE #SEN SENSOR ON DEVICE #SDS RECORDED AN ALARM OF #AMT AT
 #TIM

Test 2 Cancel Save 3

1. Select **Message for this sensor only** or **Message for entire location**.
2. Select **Test** to see if the message is sent out to the user and in the format that is required by the end user.
3. Select **Save**.

If an alarm is triggered, the contacts that are set up will receive the message. The User/Group must have email/text set up in the user setting of Zedi Admin. **Follow procedures in Creating a New User.**

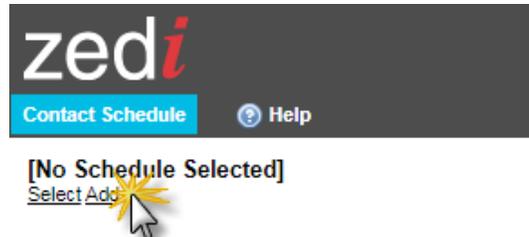


1. Choose if you would like the alarm contact to be an individual **User**, **Group**, or **No Contact**. Once clicked, select the user or group from the pull-down menu.
2. The **Contact Schedule** will allow a group or individuals in a group to receive alarms on certain days based on scheduling preferences. ***See next page for creating schedule. ***
3. Select the **Maximum Retry** times, up to 5 retries.
4. Select the **Retry Interval**, varies from 60 seconds to 1 day (24 hours)
5. Select **Test** to ensure that this has been set up correctly.
6. Select **Save**.

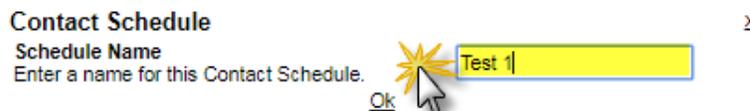
Zedi Cloud SCADA Solutions
TO CREATE A CONTACT SCHEDULE



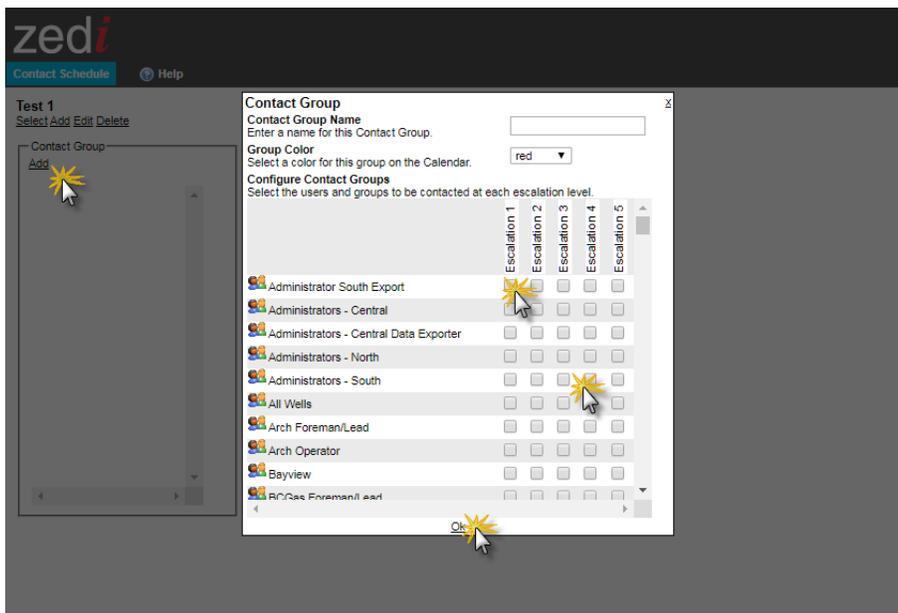
1. Within the Contact Screen (See above) select Contact schedule.



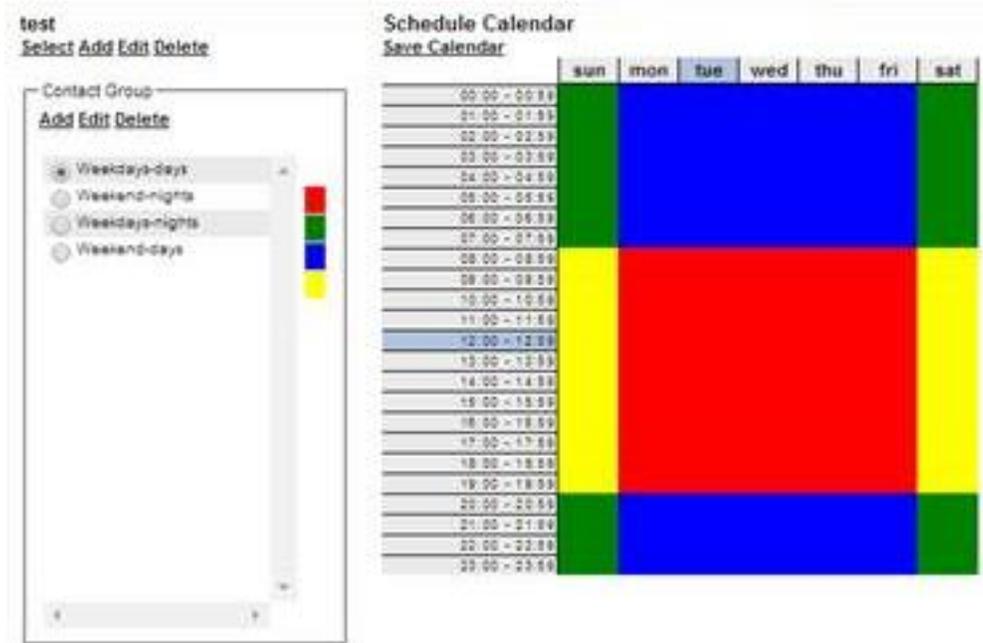
2. Select **Add** to create a new schedule or Select to open an existing schedule.



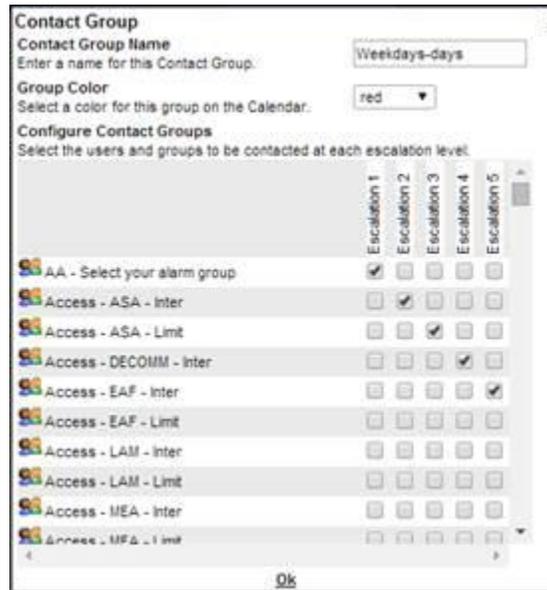
3. Create a name for the Contact Schedule and click **Ok**. The Contact Schedule will not move to the next step if the name has already been created.



4. The screen shows a list of contacts you can **Add** in the Contact Group box. You can select Weekdays. Enable the boxes of the users you would like to be in the Contact Group.



5. The window will redraw to display the calendar that is attached to the schedule. If Weekdays-days are selected, the cursor will be red, and you can click on any 1-hr period in the calendar to change it to red. The color bar next to the groups indicates which color is associated with which group. If you choose Weekend-nights, the cursor will be green. Double-check the calendar by cycling through each group to see if the colored boxes are correct.
(Note: Don't forget to save the calendar between color changes or the changes won't be saved as intended and this may be a source of error for the routed alarm notifications).



6. If you choose to select or edit groups that will be assigned to the scheduling group, you must choose a group like Wednesdays-days and select the Edit function inside the Contact Group box. The popup window will display a list of users and groups in the company.
7. You can enter/edit the name of the Contact Group, and you can select the calendar display color for the Contact Group. Next to the list of users and groups, you can select which user and group will be associated with the Escalation level. To make it easier you can simplify this by choosing only one level to use (Level 1). Try with Level 1 for now to ensure the feature is working properly.
8. Click **OK** at the bottom of the window to save the changes.
9. Continue with the rest of the groups that will take part in the schedule. **Recommended Setup of User Groups for Contact Schedules** Since the contact schedules allow for contact groups to be assigned, the groups used in the schedule should follow the shift schedules. So, as demonstrated above, the groups can be identified by the shift days and shift hours.

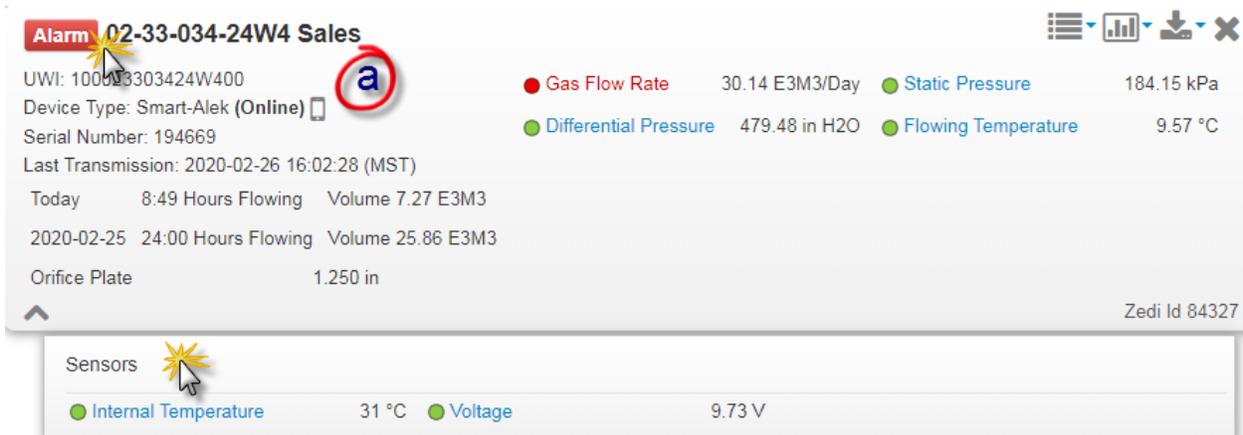
Note: *The schedule calendar repeats every week, so if you have a two-week rotation of personnel covering each shift, this won't work without making changes on a regular basis.*

You will want to avoid changing the Contact Group in the calendar or for each alarm sensor. This defines a role-based system. It is recommended keeping the alarm contact schedule and calendar fixed and change the users in the groups according to their work rotation.

ACKNOWLEDGING ALARMS

There are 2 ways to acknowledge alarms, in the Well Site Display and in the Alarms Dashboard. The Well Site Display will show one location at a time, while the Alarms Dashboard will show all the alarms that have been triggered in that category.

1. To Acknowledge:



Alarm 02-33-034-24W4 Sales

UWI: 100003303424W400
 Device Type: Smart-Alek (Online)
 Serial Number: 194669
 Last Transmission: 2020-02-26 16:02:28 (MST)

Today 8:49 Hours Flowing Volume 7.27 E3M3
 2020-02-25 24:00 Hours Flowing Volume 25.86 E3M3

Orifice Plate 1.250 in

Zedi Id 84327

Sensors

- Internal Temperature 31 °C
- Voltage 9.73 V

a. Well Site Display:

- Click on the **Alarm** indicator. The Sensor panel will automatically expand when an alarm is activated. The alarm color will indicate the type of alarm that has been triggered. This will only show the location selected.



b. Alarm Dashboard:

- Select the type of alarm that you would like to see. All the of the locations with alarms that have been triggered will show.

Home / Current Alarms / 00/06-20-046-15 W5M/00 Alarms: 37 4 156 0 14

Current | History | Configure

All Alarm Type | Sensor name contains... Search

Date	Sensor	Alarm	Value	Set Point	
North Business Unit > COLUMBIA > Columbia > 00/06-20-046-15 W5M/00					
2020-02-27 11:29:59 (MST)	Differential Pressure	Low	-5.18 in H2O	0 in H2O	2 Acknowledge

2. Select **Acknowledge**.

Acknowledge Alarm ×

North Business Unit > North Business Unit > COLUMBIA > Columbia > 00/06-20-046-15 W5M/00
2020-02-27 11:29:59 (MST)

Sensor	Alarm	Value	Set Point
Differential Pressure	Low	-5.18 in H2O	0 in H2O

Notes

Called out dispatch

3

Cancel Acknowledge

3. Fill in notes in Acknowledge Alarm and select **Acknowledge** again.

Clear Alarm ×

> North Business Unit > COLUMBIA > Columbia >
00/16-33-046-16 W5M/00 Dehy (Sales Meter)
 2020-02-18 13:04:07 (MST)

Sensor	Alarm	Value	Set Point
Gas Flow Rate	Low Low	189.18 E3M3/Day	E3M3/Day

Notes

Issue has been resolved  4

Cancel

 ✓ Clear 

4. Once issue has been resolved, select clear and fill in notes in Clear Alarm. Select **Clear** to remove alarm.
 Note: You will be able to review the history of acknowledged alarms through Alarm History in Alarm Manager, as well as the dropdown menu.



5. Once the alarm has been acknowledged it will remove itself from the alarm dashboard list.