

# Upstream Professionals, Inc.

“Optimizing Operations Efficiencies”

## UP SCADA Alert System

Web-based monitoring of near real-time SCADA data

### What is the UP SCADA Alert System?

The Upstream Professionals SCADA Alert System (UP-SAS) is a Service Oriented Application Software Application that allows oil and gas producers to view immediate field data from any well, or group of wells on the website. UP-SAS consolidates SCADA Data from multiple SCADA vendors systems into one source, providing a consistent, easy-to-use interface for monitoring your SCADA data.

UP-SAS is designed to allow users to set thresholds for key performance data such as; flow, temperature and pressure such that if the threshold has been met or exceeded, an immediate alert is sent via email or cell phone notifying the user the threshold is over limit and needs attention.

Employees & groups given access to the system, can view any well, or group of wells, and set alerts according to desired time frames. Variance analysis can be performed to compare current instantaneous flow rate vs the 30 day average, and yesterday's total flow vs the 30 day average. When a variance is noted, the user can run hourly/daily production reports for additional details about that well.

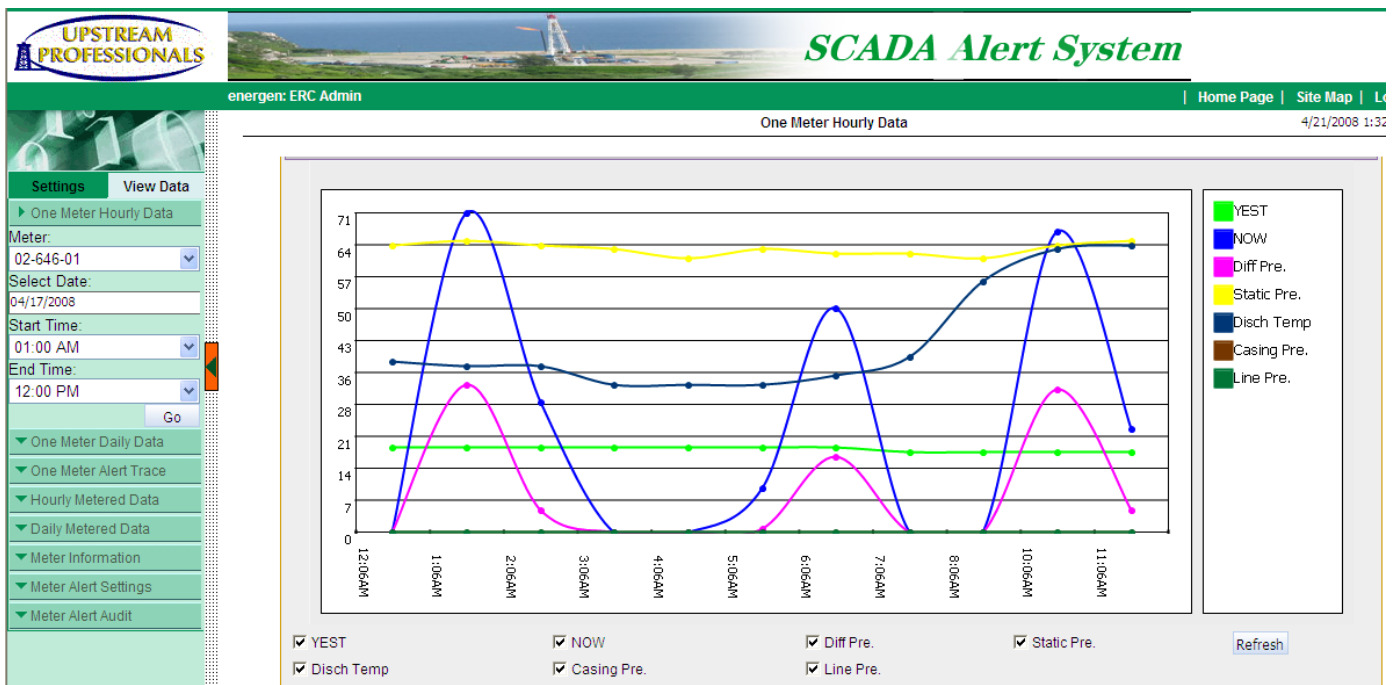
### Key Benefits

The UP-SAS system software works with multiple, different SCADA systems. Hourly data files are transferred to the UP-SAS website where data is immediately available for viewing/charting and alerts are sent out that violate threshold limits. You can add new wells (meters) to monitor and set Alert thresholds to meet your policies and procedures.

The goal of the System is to provide immediate production information that is easy for users to setup and change alert settings, monitor variances & potential failures, & enables Alerts to be sent via email or cell phone as soon as they occur.

*You will realize immediate impact in the following areas:*

- Monitor, predict & quickly respond to wells that are failing
- Daily Activities can be quickly prioritized by reviewing Alert results for faulty wells
- Significantly reduces downtime in the field
- Increases well production efficiencies
- Delivers immediate, accurate field production data for predictive analysis
- Reduces field service costs & improves resource productivity



# UP SCADA Alert System (UP-SAS)

## Fact Sheet & Business Impact

### Functionality Specifications

**Data Views** - there are several options

- View volumes from the perspective of a pumper's route. A user may want to see all the volumes for an hour/day/month, variance reports & how the well is performing versus a month ago.
- Users will be able to view daily data by the hour (hourly data), a month (daily data)

**Monitors various data types**

Volumes                      Tubing pressure  
 Differential pressure      Static pressure  
 Line pressure                Temperatures

**Meter Monitoring**

- Individual meter - hourly data view
- Individual meter - daily data view, can drill into hourly data view by click on one date.
- Group meter - one hour data view
- Group meters - one day data view, can drill into one hour data view by clicking one date
- Group meters - hourly summary data view
- Group meters - daily summary data view

**Charts**

- Hourly/daily data by group meters/individual meter to graph and chart production data in different views
- Summary data view of meters hourly/daily
- Chart the alert when it took place
- Variance reports for trend analysis

**UP-SAS Alert Settings**

- Each user can set up as many alerts as they like
- Meters are assigned to a group
- Set alert time range and specified tolerances
- Set alert method, email and/or cell phone
- The alert will only go out if the alert criteria is met

**UP-SAS consists of five major services for the user:**

- Automatically searches SCADA data file in a specified FTP site or folder and integrates the SCADA hourly data
- Automatically checks the hourly data for each meter. If the hourly data is beyond the alert value pre-set by user then it will automatically send an alert
- The user sets alert thresholds and the method of notification.
- The system includes the function for user management and security access
- Multiple views of data as graphs and charts

### Business Impact

- Increased production without any drilling
- Operating more wells with fewer people
- Reduced production downtime
- Reduced time spent troubleshooting
- Issues are identified almost immediately
- Increased engineering efficiency
- Identification of system losses and inefficiencies
- Less time spent finding and organizing data
- Immediate, accurate production data for predicting well failure trends and prioritizing which wells need attention
- Analyze & understand Well Lifecycle production performance
- Integration with Repositories for further predictive analysis
- Pumper can easily prioritize his time based on the numbers

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The screenshot displays the SCADA Alert System web interface. At the top, there is a header with the logo for 'UPSTREAM PROFESSIONALS' and the text 'SCADA Alert System'. Below the header, a navigation bar shows 'energizer: ERC Admin' and 'Daily Metered Data'. The main content area is titled 'Daily Data for Meters at 04/18/2008 by Group SJ, 12'. On the left side, there is a sidebar with navigation options like 'Settings', 'View Data', and 'One Meter Hourly Data'. The main table lists various meters with columns for Meter No, WellName, Prod Date, Avg Flow Rate, Avg Differential, Avg Static, and Avg Temperature. The table contains 30 rows of data. At the bottom of the page, there is a footer with 'page 1 of 2' and navigation links.

Meter No	WellName	Prod Date	Avg Flow Rate	Avg Differential	Avg Static	Avg Temperature
7038401	SAN JUAN 30-4 UNIT 1 PC	04/18/2008	93	15	177	52
7098401	SAN JUAN 30-4 UNIT 3 PC	04/18/2008	3	0	199	51
7114501	SAN JUAN 30-4 UNIT 8 PC	04/18/2008	143	7	232	53
7215101	SAN JUAN 30-4 UNIT 17 PC	04/18/2008	65	6	238	57
7233801	SAN JUAN 30-4 UNIT 21 PC	04/18/2008	38	5	229	49
7235101	SAN JUAN 30-4 UNIT 27 PC	04/18/2008	16	1	183	51
7249401	SAN JUAN 30-4 UNIT 30 PC	04/18/2008	54	2	181	50
8187001	SIMMS COM 1	04/18/2008	0	0	191	63
8198901	SAN JUAN 30-4 UNIT 48 PC	04/18/2008	798	15	198	51
8253701	SAN JUAN 30-4 UNIT 41 MV	04/18/2008	6	-0	178	58
8253801	SAN JUAN 30-4 UNIT 41M	04/18/2008	75	3	177	55
8253901	SAN JUAN 30-4 UNIT 42 MV	04/18/2008	0	0	175	54
8254401	CARSON 4	04/18/2008	52	1	182	59
8256201	SAN JUAN 30-4 UNIT 42A	04/18/2008	0	-0	175	60
8256401	CARSON 4M	04/18/2008	71	4	177	55
8266801	CARSON 5	04/18/2008	58	1	181	60
8267301	CARSON 6A PC	04/18/2008	99	9	197	57
8283001	SAN JUAN 30-4 UNIT 44 (MV/PC)	04/18/2008	91	1	175	60
8283301	SAN JUAN 30-4 UNIT 44A	04/18/2008	54	1	181	58
8283401	SAN JUAN 30-4 UNIT 45 PC	04/18/2008	34	2	184	57
8283501	SAN JUAN 30-4 UNIT 43	04/18/2008	252	5	175	57
8315901	SAN JUAN 30-4 UNIT 40 FRT	04/18/2008	28	1	187	57
8336501	SAN JUAN 30-4 UNIT 42B	04/18/2008	123	5	174	61
8344401	SAN JUAN 30-4 UNIT 50	04/18/2008	7	0	206	58
8346101	SAN JUAN 30-4 UNIT 34R PC	04/18/2008	13	0	232	57
8346201	SAN JUAN 30-4 UNIT 103 FRT	04/18/2008	244	9	179	64
8346301	CARSON 208 FRT	04/18/2008	456	31	183	91
8346401	CARSON 10 PC	04/18/2008	13	1	191	57
8346501	CARSON 11 PC	04/18/2008	0	-0	188	55
8357101	SAN JUAN 30-4 UNIT 103S	04/18/2008	265	11	182	61