

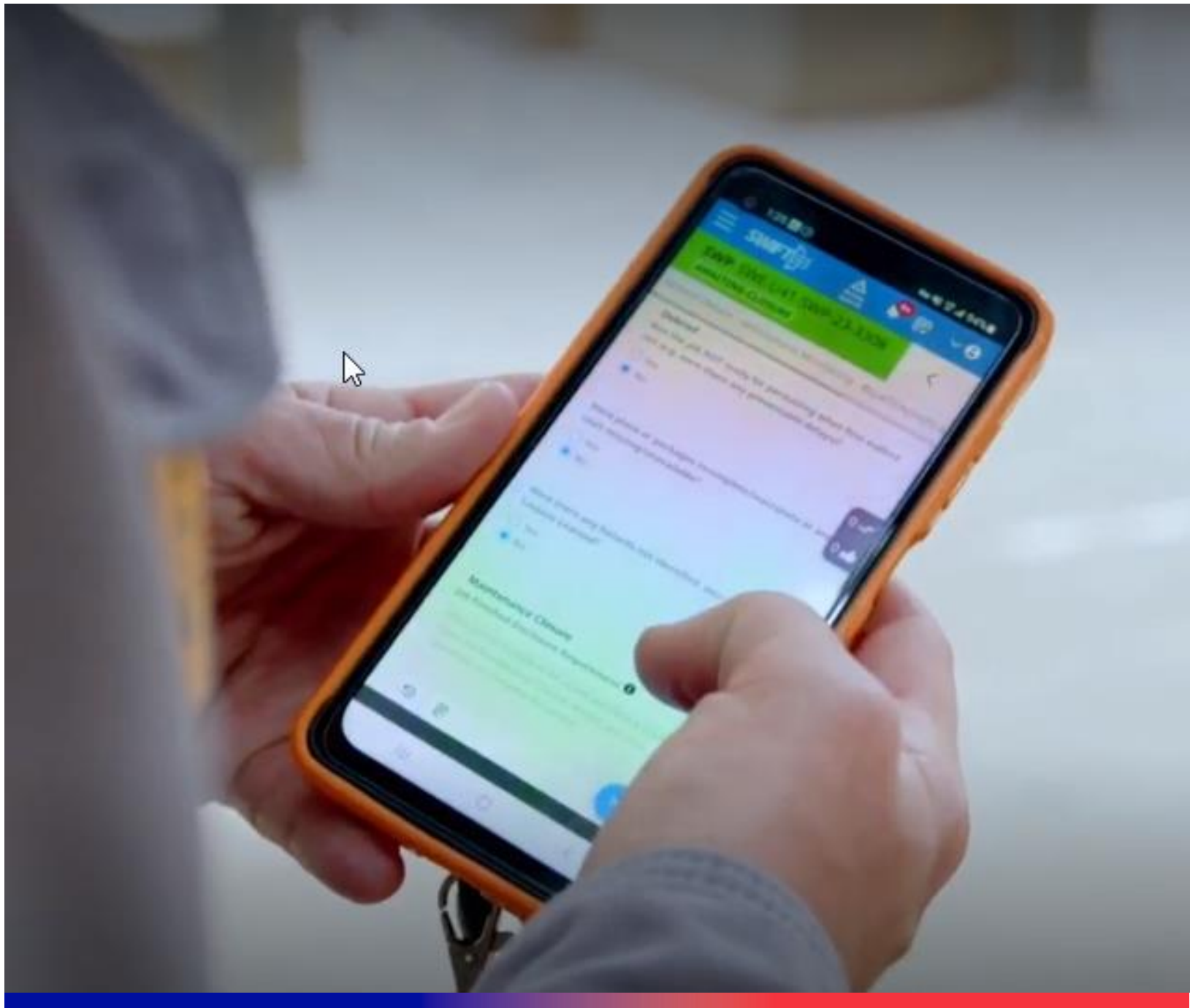
ePAS

Mobile Field Presence with ePAS

- **David Bailey**
- March 5th, 2024



Performance by design.
Caring by choice.™



Our History of Our Growth



CHEMICAL BUSINESS (Chevron) + **CHEMICAL BUSINESS** (Phillips 66) = **CHEMICAL BUSINESS** (Chevron Phillips Chemical)

2000: Chevron Phillips Chemical logo

2001: QChem logo

2003: Industrial facility

2007: Saudi Polymers LLC logo

2010: Industrial facility

2011: Industrial facility

2012: Industrial facility

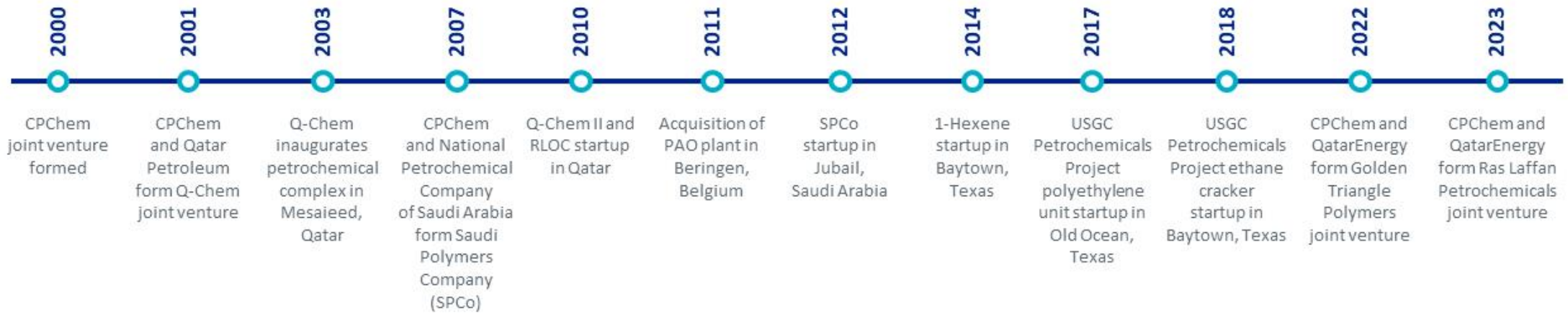
2014: Industrial facility

2017: Industrial facility

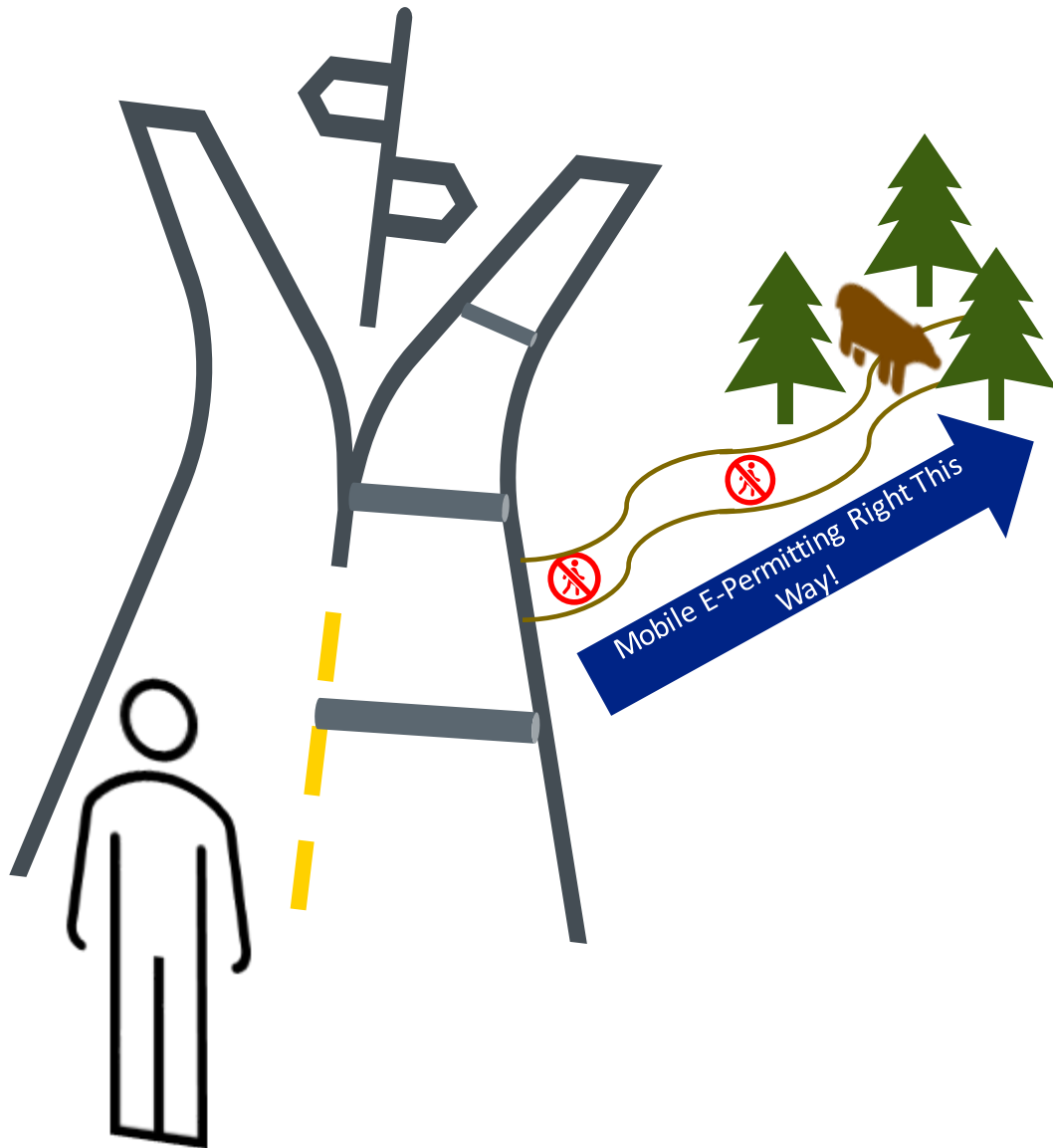
2018: Industrial facility

2022: Two workers in safety gear

2023: Ras Laffan Petrochemicals Complex Agreements Signing Ceremony



The Journey to Get To a Fully Mobile Field Presence



- > 2015 – pilot attempt with an e-permitting solution never took off.
- > 2019 – committee assembled where discovery and vendor interviews, but nothing materialized
- > 2020 – committee reassembled; vendor selected, and requirements gathered
- > Launch ePAS at first site in December 2020

Let the fun begin!

What Does Mobile e-Permitting Look Like?



- ● ● Search for a Permit
- ● ● Request a Permit (Create Permit Request)
- ● Create a Permit
- ● Issue/Approve a Permit
- ● ● Sign on/off a Permit (Work Party Sign On)
- ● ● Debrief a Permit
- ● Close a Permit
- ● ● Print a Permit Package
- ● ● Attach Documents
- Take Photo in the Field



Tablets / Mobile



Kiosks



Desktop

Hardware and Infrastructure



What Were the Challenges?



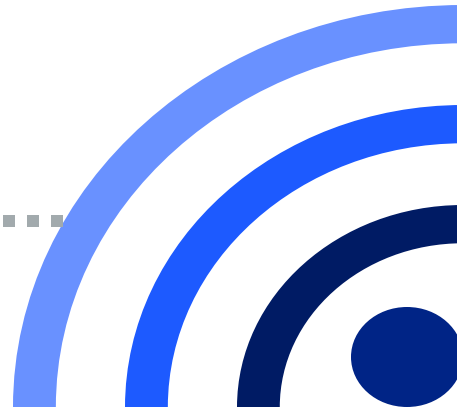
- Mobile Native Application Performance and Reliability
- Legacy Devices Were Old and Slow
- Wireless Network Was Not Working as Intended
- Kiosks Issues

What Were the Answers

We needed a
working
application



We needed a
reliable
network



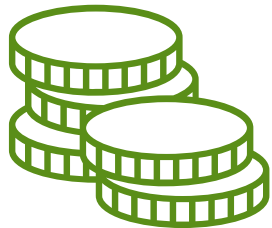
We needed
fast, reliable
devices



How Did We Get Out of Woods?



- Partnered with PG to find the right fit with ePAS
 - Transitioned from mobile native app to form factored web app



- All in on 100% connectivity all the time.
 - Conducted surveys and optimized existing wireless network
 - Invested in Advanced Wireless Network (Private LTE)



- **DEVICES! DEVICES! DEVICES!**
 - Assigned devices for operations personnel
 - Shared devices for CPC Crafts and some non-nested crafts

Be Bold, Go Paperless

- Focus on Conduct of Operations and Operational Discipline
- Trusting the process on letting go of paper allowed us to focus more on the job site conditions. Crafts and operations engaged in better connection while performing jobsite visits
- Expected versus Realized value gaps closed
- User adoption steadily increased
- Pull outweighing the push for more solutions
 - Email
 - TEAMS
 - Work Notifications
 - Energy Isolation
 - Shift Handover





9 manufacturing and research facilities using ePAS

private LTE and Wi-Fi in field



2500+



mobile devices

Safe Work Permits issued in 2023



50k

WHATS IS NEXT?

Badge Integration & Certificate Verification for Critical Work Activities

SWIFT CP Chem | Development Active Search 91 David Bailey

Create Permit Create With Badge

Site
Cedar Bayou x | v

Area
CED - 1792 x | v

Workflow*
Safe Work Permit x | v

Please Scan Badge Reader



How can we verify contractor credentials for critical work activities?

Integrate Contractor Onboarding Management System and our badge system with ePAS



Badge integration tool for ePAS



Maintain Integration User Badges

Global

Location	Badge Number	Employee Number	First Name	Last Name	Personnel Type	Company	Badge Status	Created On
Cedar Bayou	0123456	9876543	Joe	Smith	Scaffold Builder	Brock	Active	9/15/2023
Pasadena	1234567	8765432	Tracy	Jones	Insulator	Brand	Active	8/12/2023
Borger	2345678	7654321	Alex	Taylor	Boilermaker	Zachry	Active	07/15/2023
Sweeny	3456789	6543210	Daniel	Anderson	Electrician	Contech	Active	06/22/2023
Conroe	4567890	5432109	Gloria	Powell	Painter	Apache	Active	02/01/2023

Feedback From Pause & Listen Tour



9+

David Bailey

SWP BRTC-78-G-SWP-23-29

- PLANNING
- FIELD WALK DOWN
- AWAITING APPROVAL
- ACTIVE**
- AWAITING CLOSURE
- COMPLETE

SWP Copy Notify

Deepthi Pandiri (pandid@cpchem.com)

BRTC - 78-G

General Details 1

Atmospheric Monitoring

RELATIONSHIPS & DOCUMENTS

Closeout 3

If you are assuming the responsibility as a Hole Watch or Fire Watch, please also review the duties below.

Work Party Sign On/Off*

Name
Daniel Wilson

Hole Watch Fire Watch

User Signs in With Badge

Name	Signed On	Signed Off	CSEC Sign In	CSEC Sign Out	Hole Watch	Fire Watch
John Smith	September 15, 2023 3:48 PM				No	No
Alex Jones	September 15, 2023 3:48 PM				No	No

Plant Item & Location

Add Plant Item If Needed & Click Marker/Pin and Click Location of Work on Map

Plant Item

PPI	Exclusive	Name	Description	Location/Area	Building	Floor	Room
No Rows To Show							

4

0

Feedback From Pause & Listen Tour

SWP BRTC-78-G-SWP-23-29

PLANNING FIELD WALK DOWN AWAITING APPROVAL **ACTIVE** AWAITING CLOSURE COMPLETE

SWP Copy Notify Awaiting Closure

- Deepthi Pandiri (pandid@cpchem.com)
- BRTC - 78-G
- General Details 1
- Atmospheric Monitoring
- RELATIONSHIPS & DOCUMENTS
- Closeout 3

If you are assuming the responsibility as a hole watch or fire watch, please also review the duties below:

Work Party Sign On/Off+

Name
Daniel Wilson

Hole Watch Fire Watch

Sign On Group Sign On Sign On With Badge

Craft Signs in As a Hole Watch/Fire Watch

Name	Signed On	Signed Off	CSEC Sign In	Fire Watch
John Smith	September 15, 2023 3:48 PM	Sign Off	No	No
			CSEC Sign In	
Alex Jones	September 15, 2023 3:48 PM	Sign Off	No	No
			CSEC Sign In	

Craft Signs in As a Confined Space Entrant

Plant Item & Location

Add Plant Item If Needed & Click Marker/Pin and Click Location of Work on Map

Plant Item

Add Plant Item

PPI	Exclusive	Name	Description	Location/Area	Building	Floor	Room
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No Rows To Show

Stored badge data checks worker's certifications



Scanner Gate 1

PASS

Employee Info Reset

HASC



Current Exp: 01/31/2022

- BICYCLE SAFETY
- FIRE WATCH
- NEW CHEMICAL SITE ORIENTATION
- SAFETY AWARENESS 5

GateCheck

Scanner Configuration + Create Configuration Gate 1

STOP

This employee does not meet all the requirements.

Missing requirements


- SSV
- On Suspension List

Current Exp: 08/31/2021

Basic Orientation

Employee Info Reset

HASC



Council ID: 1985776589
SSN ID: 6784
First Name: LAURA
Last Name: BORN
Middle Name: [View Link Badge](#)

QUESTIONS?