



EXPRO

Premier Oil's well integrity journey

Leveraging software to manage well integrity

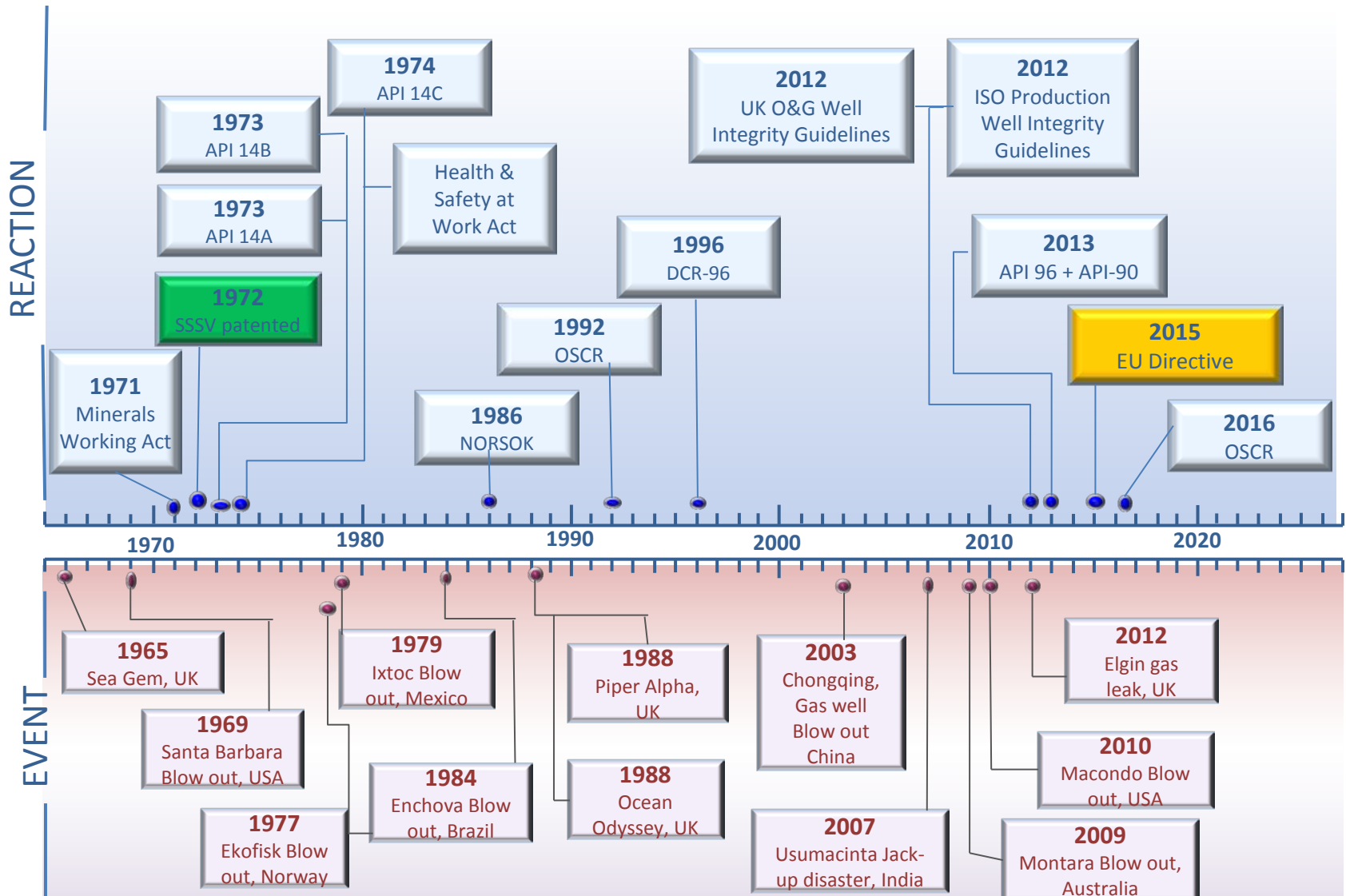
Agenda



- Why is well integrity important?
- Managing well integrity, what is SafeWells?
- Premier Oil's Journey...
- ...plus information about SafeWells, how the system works
- Where are we today?
- What next?
- Discussion



Significant Industry Events



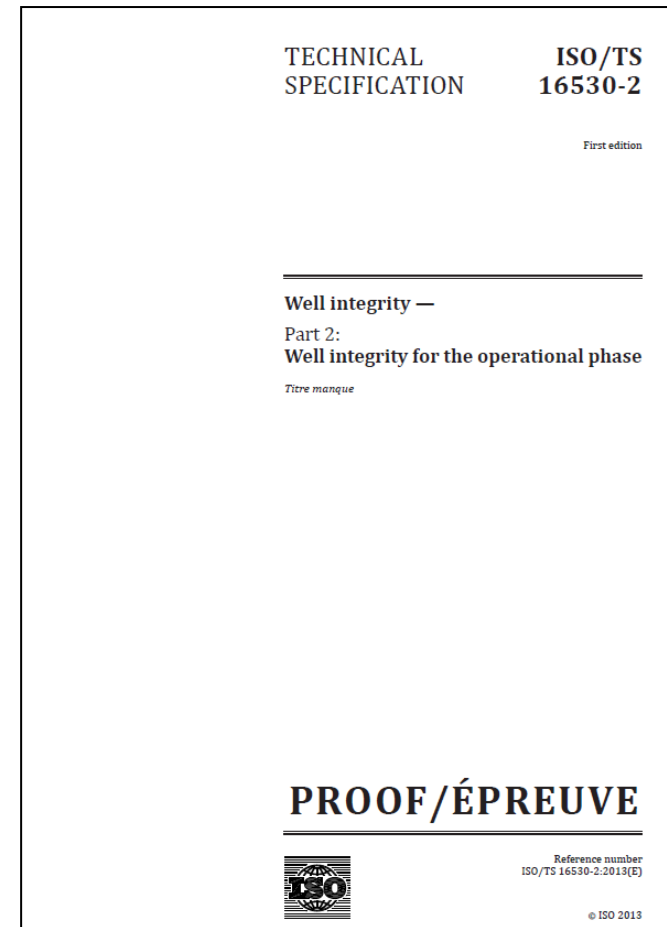
Incidents will happen – Incidents change regulation – Regulation requirements will change



Aligning with standards

*“The management of well integrity is a combination of **technical, operational and organizational processes** to ensure a well’s integrity during the operating life cycle...”*

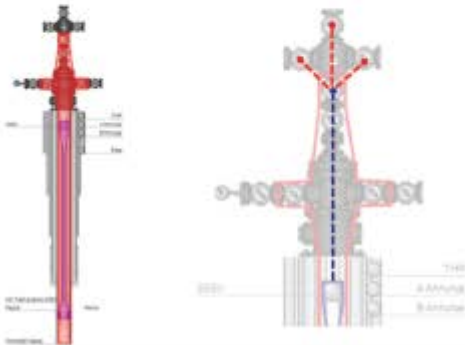
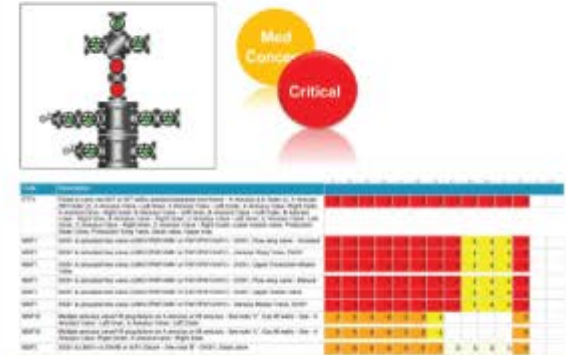
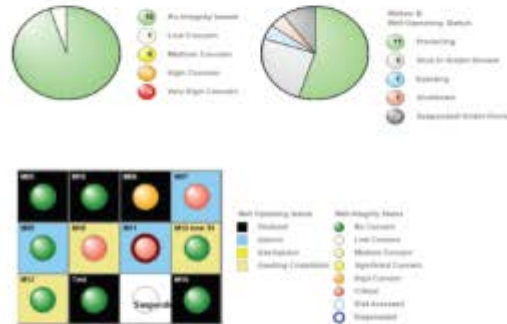
- Well operating limits
- Well component performance standards
- Well barriers
- Well monitoring and surveillance
- Annular pressure management
- Well maintenance
- Well integrity failure management
- Risk assessment process
- Management of change
- Well handover
- Well records and well integrity reporting
- Performance monitoring of WIMS system / Compliance



SafeWells™ – Expro's well integrity data management software

Realising ISO/TS 16530-2 (Part 2: Well integrity for the operational phase) compliance

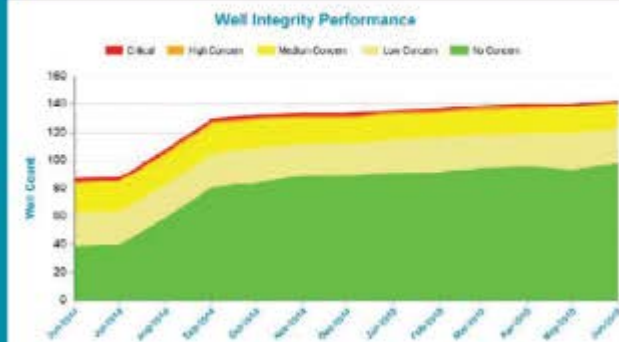
- Well barriers
- Well integrity reporting
- Compliance audit
- Well maintenance



- Risk management
- Failure management
- Management of change
- Well handover



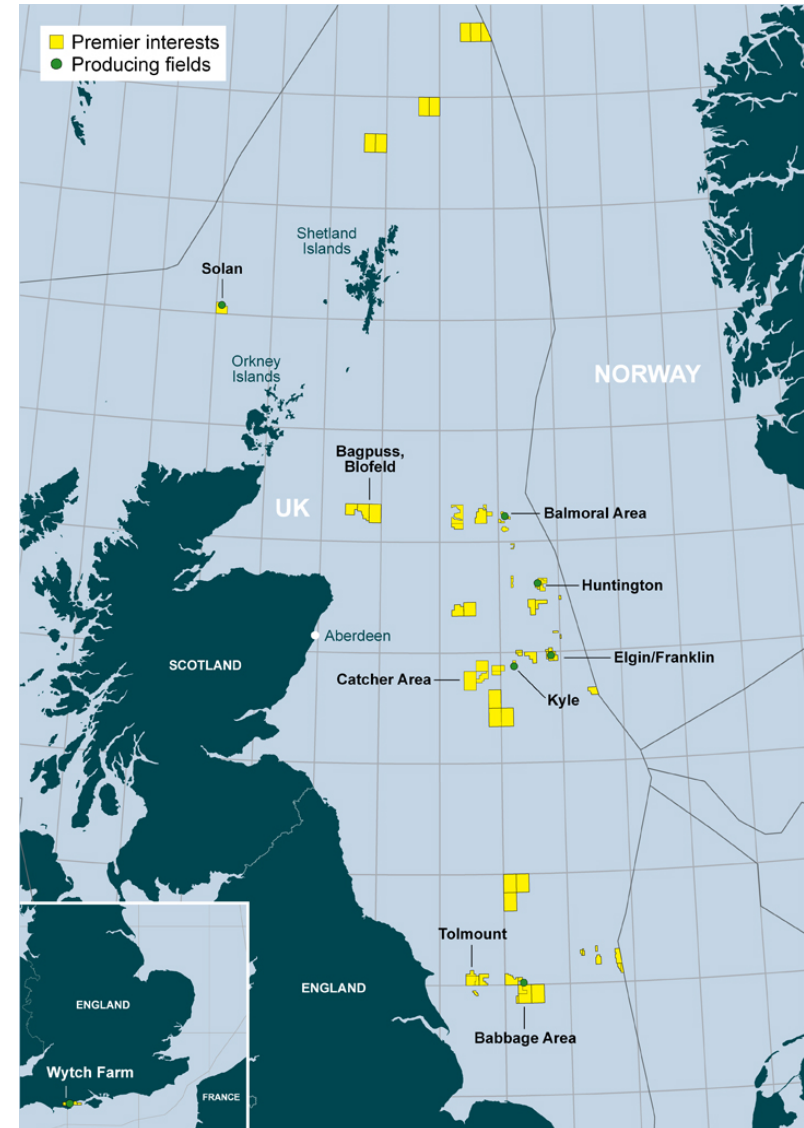
- Well component performance standards
- Operating limits
- Annular pressure management
- Monitoring and surveillance



Premier Oil - UKBU Wells



- 83 wells
- Oil and Gas
- SNS, CNS, WoS
- Subsea to FPSO, Subsea platform tieback, dry tree platform
- Multiple Duty Holders
- 1970s to 2017
- 27 wells added in 2016 with E.ON acquisition
- Catcher Field development ongoing – 22 wells





Challenges

Prior to implementation of the SafeWells system, well integrity data was stored in various spreadsheets. This posed various challenges:

- **Difficult to analyse** data
- Varied approach across **multiple assets**
- **Version control**
- **Consistency, errors** in formulas
- Difficult to see a **well overview**
- Increasingly stringent **regulatory environment**
- **Limited personnel** involved
- How to you ensure **compliance** with a new standard?



Premier Oil's Objectives



Within the first year, the goal was to:

- Create a **baseline** of well integrity statuses
- Establish **workflows** to manage the well integrity issues more effectively
- Adopt a **proactive** approach to well integrity for growing well stock

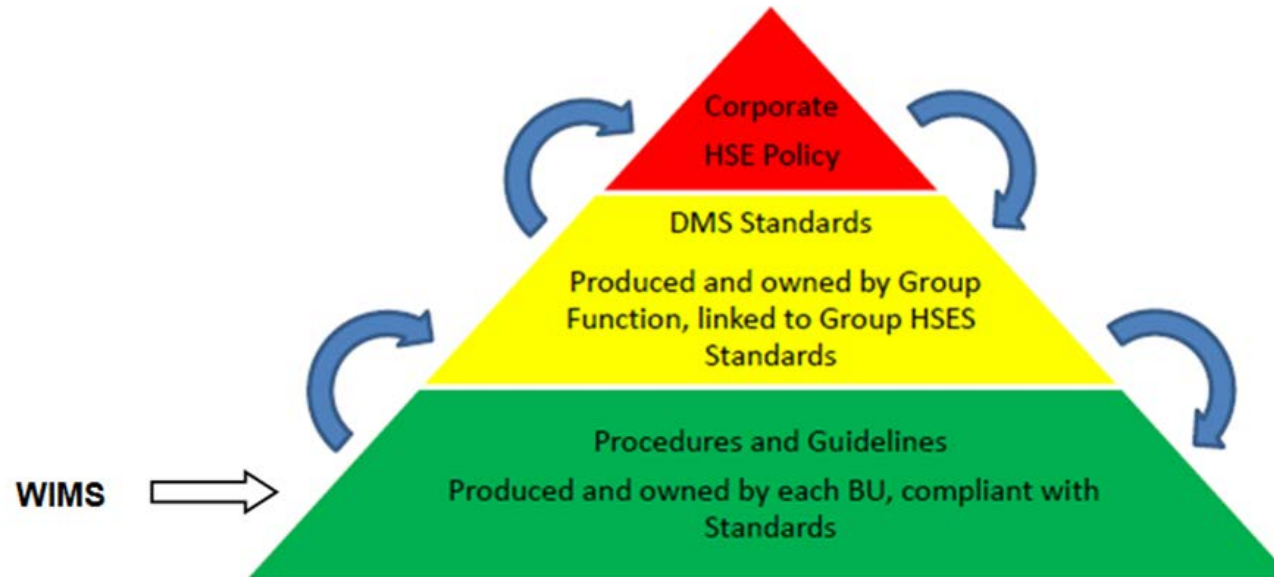
Additionally, there were qualitative objectives:

- Increased **visibility of well integrity management** within and outside the company
- Ease of accessing all of the well integrity information and analysing that data **to find and fix problems**
- Improvement to **data accuracy** and availability to increase productivity by having up-to-date knowledge of well integrity issues
- Quicker and more **informed decision making process**

Implementing the SafeWells system



Well integrity management in Premier Oil



Key documents:

- Well Integrity Management Scheme (**WIMS**)
- Well Examination Scheme
- Premier Oil's **Well Failure Model**

Implementing the SafeWells system



Premier Oil Well Failure Model

- Consistent response to failures
- Rule-driven system – can be applied in **SafeWells**

PremierOil WELL FAILURE MODE MODEL Rev.1		Well Type				
Failure Mode No.	Failure to Complete Integrity Test / Inspections as per Schedule	Manned Installation			Subsea Well	Normally Unmanned Installation
		Natural Flow	Water Injector	Gas or Artificial Lift		
FTT 1	Failure to complete Well Integrity test (WIT) or Annulus Integrity test (AIT) within the allocated time frame - See Notes 'H'	3	3	3	3	3
FTT 2	Failure to complete Wellhead / Xmas Tree general visual inspection (GVI) within the allocated time frame.	1	1	1	1	1
MFTT 1	Failure to complete both WIT / AIT & Wellhead / Xmas Tree GVI within the allocated time frame - See Note 'H'	4	4	4	4	4
Failure Mode No.	Single Surface Failure - (Above Wellhead)	NF	WI	GL	SS	NUI
SSF 1	Single manual annulus valve failure.	2	2	3		2
SSF 2	Wellhead VR plug or Annulus check valve failure. See Note 'D'.	4	4	4		4
SSF 3	Swab, KVV failure (Gas or Oil side) - See Note 'B'.	2	2	2	1	2
SSF 4	Loss of Annulus or Tubing Head Pressure monitoring capability.	3	3	3	3	3
SSF 5	LMV failure - See Note 'B'.	2	2	2	1	2
SSF 6	UMV / PWV / AMV failure (Gas or Oil side) - See Notes 'A' and 'B'.	3	3	3	2	3
SSF 7	AXOV / XOV				1	
SSF 8	External leak from tree / wellhead. - See Note 'K'.	5	5	5	5	5
Failure Mode No.	Multiple Surface Failures - (Above Wellhead)	NF	WI	GL	SS	NUI
MSF 1	LMV & (SWAB or KVV failure) - See Note 'B'.	2	2	2	1	2
MSF 2	Multiple manual Annulus valve / VR plug / Annulus check valve failure on a 'A' Annulus or lift Annulus - See Note 'D'.	4	4	4		4

Implementing the SafeWells system



Premier Oil Well Failure Model

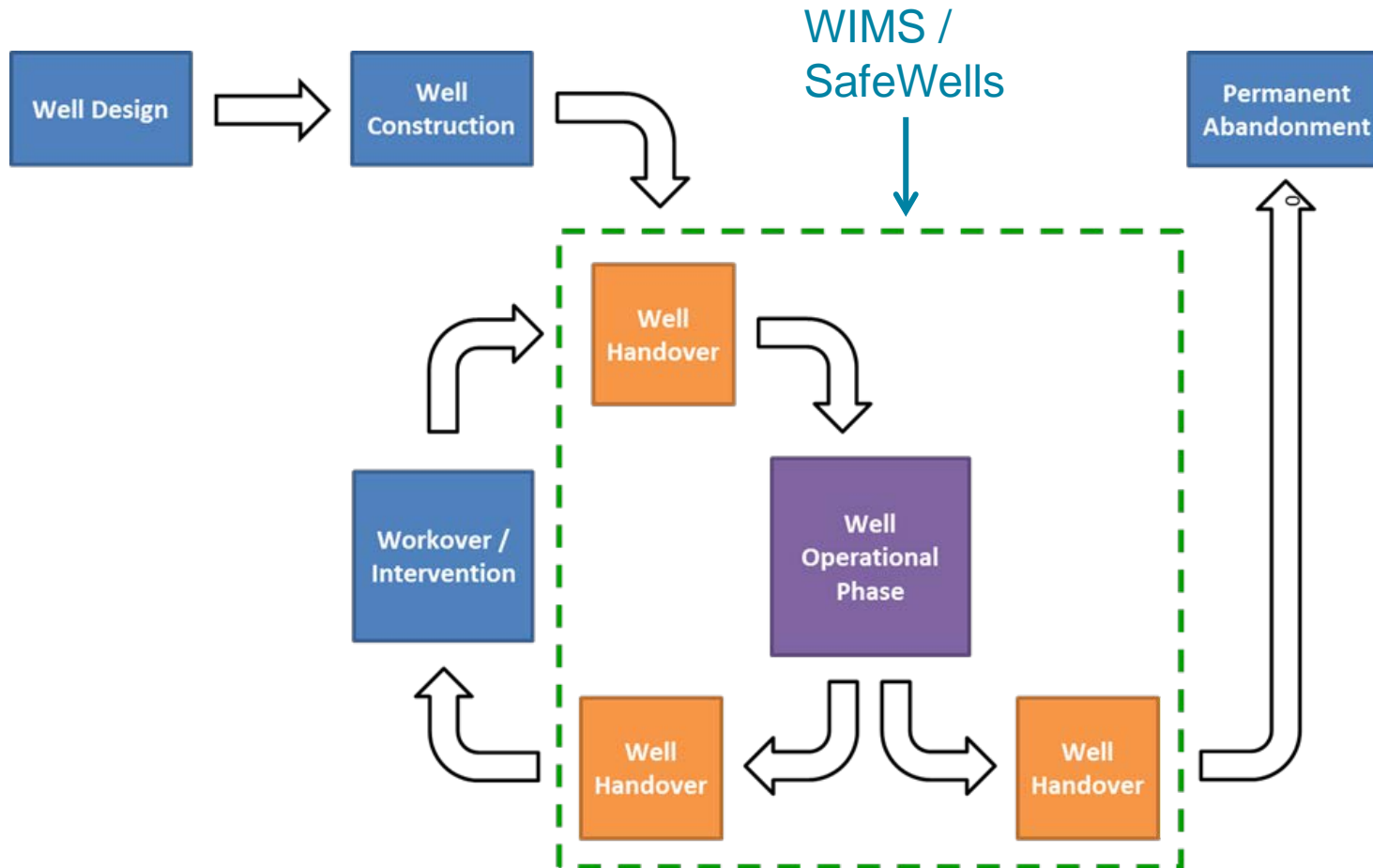
- Consistent response to failures
- Rule-driven system – can be applied in **SafeWells**

Mitigating Action matrix - To be used as a guide in the Risk Assessment process		
Well Status	Action Code AC #	RECOMMENDED ACTION
No Concern	0	Normal well operating status. No faults Found, well tested within operating parameters.
Low Concern	1	Risk Assess issue(s) within 7 days, dispensation required for well to be Flowed/Injected with issue, repair at the earliest opportunity (preferably within 12 Months grace period)
Med Concern	2	Risk Assess issue(s) within 7 days, dispensation required for well to be Flowed/Injected with issue and repair at the earliest opportunity (preferably within 6 Months grace period)
Significant Concern	3	Risk Assess issue(s) within 7 days, dispensation required for well to be Flowed / Injected with issue and repair at the earliest opportunity (preferably within 3 Months grace period)
High Concern	4	Risk Assess issue(s) within 5 days to determine actions if to either continue operating the well, if safe to do so or to make the Well safe and make action plan within 7 days
Critical	5	Shut in well immediately, if safe to do so. Risk Assess to determine mitigating actions to either repair / test / suspend or abandon
Note		The action code # can changed after a formal risk assessment has been conducted and new coding agreed.

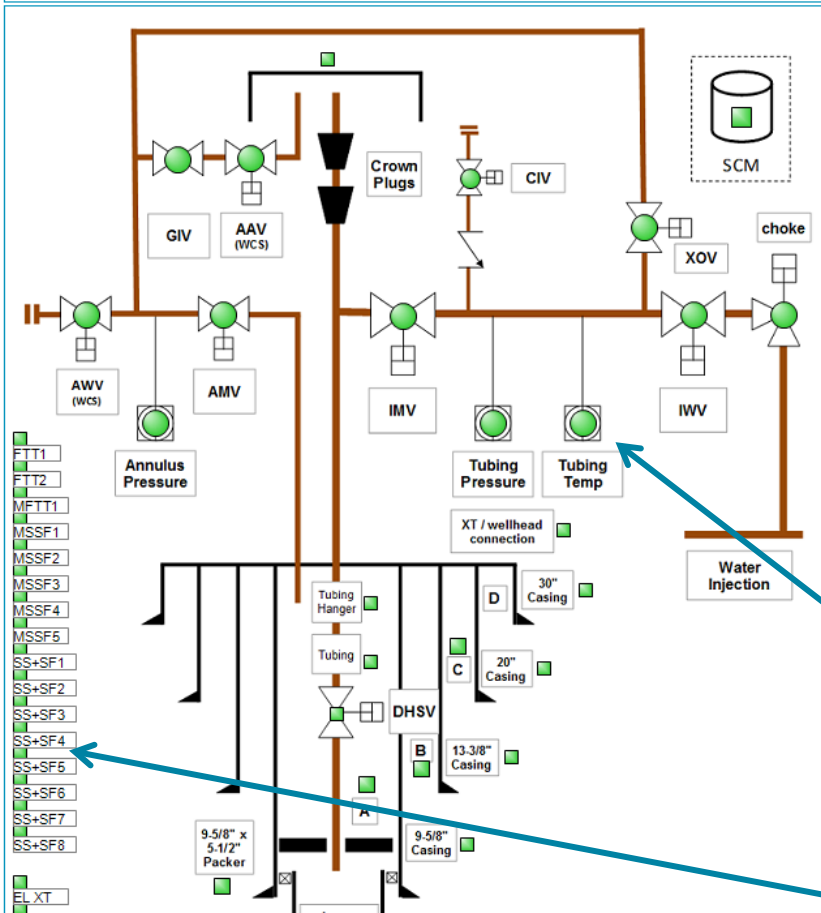
Implementing the SafeWells system



Applicability of Well Integrity Management Scheme



SafeWells - Overview



22/14b-H1 Integrity Issues

Create New... Show Closed Actions

Activity Summary Activity History

Filter : Show : Show All (visible) Activities...

●	03-Nov-16 Subsea Well Integrity Test Legacy WIT			2
●	17-Oct-16 Dispensation (Expires: 17-Oct-17) Huntington H1, H6 - DHSV testing not possible			2
●	11-Jul-15 Subsea Well Integrity Test Legacy WIT			1
●	31-Dec-14 GVI Report Legacy GVI			0
●	10-Jul-14 Subsea Well Integrity Test Legacy WIT			1
●	14-Feb-12 Intervention CT Intervention for Thermal Frac.			0

'Traffic light' component status indicators

Activity summary

'Pseudo components' indicate non-physical failure codes, e.g. failure to test

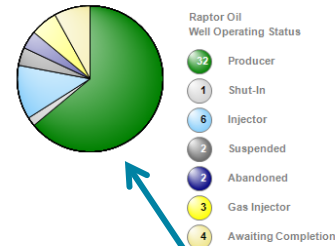
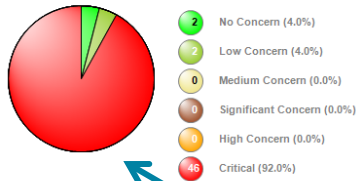
SafeWells - Communicating Risk



System Admin Raptor Oil All Permissible Locations All Wells Go SafeWells

- SafeWells
- Home Screen
- Well Search
- Well Test Frequency
- Bulk Activity Management
- Documentation
- Reports
- Help
- SafeWells Admin

Overview Area Summary Area Integrity Issues



No Concern	Normal operating status.	Continue production while adhering to WIMS operating guidelines for maintenance and testing
Low Concern	Risk is acceptable.	Continue to check, test and maintain. Repair within two years. Well can be operated during this period.
Medium Concern	Risk is acceptable if ALARP.	Perform a formal and documented risk assessment within 1 month to ensure it is safe to continue operating. Test and maintain as policy dictates. Repair within 6 months.
Significant Concern	Perform a formal and documented risk assessment	Risk Assessment to be carried out within 1 month
High Concern	Perform a formal and documented risk assessment	Perform a formal and documented risk assessment within 2 weeks
Critical	Risk is unacceptable.	Shut In Well. Carry out Formal Technical Review within 7 days to determine mitigating actions. Exec to be advised of well status.

Well types

Integrity statuses



Well Operating Status

- Undefined
- Producer
- Observer

Well Integrity Status

- No Concern
- Low Concern
- Medium Concern
- Significant Concern
- High Concern
- Critical
- Expired

Slot view

SafeWells - Communicating Risk



Simon Copping (Expro) Raptor Oil All Permissible Locations All Wells Go

- SafeWells
 - Home Screen
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Well Register

Text search:

Concern Levels	Well Groups	Operating Status	Well template
<input checked="" type="checkbox"/> No Concern	<input checked="" type="checkbox"/> Producer	<input checked="" type="checkbox"/> Undefined	<input checked="" type="checkbox"/> Spool Tree
<input checked="" type="checkbox"/> Low Concern	<input checked="" type="checkbox"/> Injector	<input checked="" type="checkbox"/> Producer	<input checked="" type="checkbox"/> Subsea Horizontal Tree
<input checked="" type="checkbox"/> Medium Concern	<input checked="" type="checkbox"/> Abandoned	<input checked="" type="checkbox"/> Gas Storage	
<input checked="" type="checkbox"/> Significant Concern	<input checked="" type="checkbox"/> Gas Storage	<input checked="" type="checkbox"/> Shut-In	
<input checked="" type="checkbox"/> High Concern		<input checked="" type="checkbox"/> GOLDEN	
<input checked="" type="checkbox"/> Critical		<input checked="" type="checkbox"/> Injector	
		<input checked="" type="checkbox"/> Suspended	
		<input checked="" type="checkbox"/> Abandoned	
		<input checked="" type="checkbox"/> Gas Injector	
		<input checked="" type="checkbox"/> Awaiting Completion	

RA / Disp

Risk Assessed
 Dispensated

Location	Well	Well Group	Operating Status	Risk Level	Integrity Status	History	Well Template	View
Eagle	AB01	Abandoned	Producer	No Concern	None	Surface Well spudded 16th May 2012 at TD of 2282mMDBRT . It is a gas producer without AL.	Spool Tree	
Kestrel	Britta1	Producer	Producer	No Concern			Spool Tree	
Condor	C01	Injector	GOLDEN	High Concern	After several years of leaking at above the acceptable rate, in June 2011 the SSSV finally failed and could not be opened. It is suspected that the actuation cylinder failed and the control lines is suspected to be in direct communication with the tubing production stream.	Last well drilled on the Condor Field. Conventional design with 4-1/2" carbon steel completion producing from Upper, Mid & Lower D sand. Highest rate well in the field and most crestally located in the field.	Spool Tree	
Condor	C02	Injector	Producer	No Concern	Since this well does not contain a SSSV it will always have at least a failure score of 2 which is Low Risk. Any other problems will probably result in a higher score and a medium or high risk rating.	C02 was the Field discovery well and is a cemented monobore construction with no SSSV incorporated.*** Well definition changed on 20/09/2012 16:05:34***	Spool Tree	
Condor	C3	Abandoned	Producer	No Concern	The carbon steel completion is experiencing corrosion due to CO2. The corrosion level was	Conventional completion with 4-1/2" carbon steel. Initially produced from E sand until	Spool Tree	

SafeWells – Data Entry



Subsea Flow Check Test

Well Name	Production Type	Well Type	Asset Type	Tree Type
<input type="text"/>	Gas Lift	Oil	Template	Conventional
SIT#P	Ann Press	Flowline Press	Well Operating Status	Production Rate
<input type="text"/> psi	<input type="text"/> psi	<input type="text"/> psi	Active	BPD
Test Freq	Completed By	Production Sup	OM	
Annual	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Comments				
Production Kill line blanked and valve not tested. Agreed with Onshore that All valve not tested.				

CATEGORY A	CATEGORY B	CATEGORY C
clear reduction in oil, water and gas flowrates that are trending towards zero	reduction in oil, water and gas flowrates but flow continues (Perform technical review and operational assessment)	little or no reduction in oil, water and gas flowrates (Perform technical review and operational assessment)

Production Bore

	Test Mode	Valve Tag	Valve Size	Pre-Test Flowing Parameters (Liquid) (m3/day)	Pre-Test Flowing Parameters (Gas) (scf/day)	Separator Temp (Deg C/F)	Separator Pressure	Test Duration	Result	Valve as Left	Comments
Prod Test	Annual	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	30 Mins	A	<input type="text"/>	<input type="text"/>
Production Master Valve	Annual	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	30 Mins	A	<input type="text"/>	<input type="text"/>
Production Wing Valve	Annual	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	30 Mins	A	<input type="text"/>	<input type="text"/>

Annulus Bore

	Test Mode	Valve Tag	Valve Size	Pre-Test Flowing Parameters (Liquid) (m3/day)	Pre-Test Flowing Parameters (Gas) (scf/day)	Separator Temp (Deg C/F)	Separator Pressure	Test Duration	Result	Valve as Left	Comments
Annulus Wing Valve	Annual	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	30 Mins	A	<input type="text"/>	<input type="text"/>
Annulus Master Valve	Annual	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	30 Mins	A	<input type="text"/>	<input type="text"/>

Form Designer

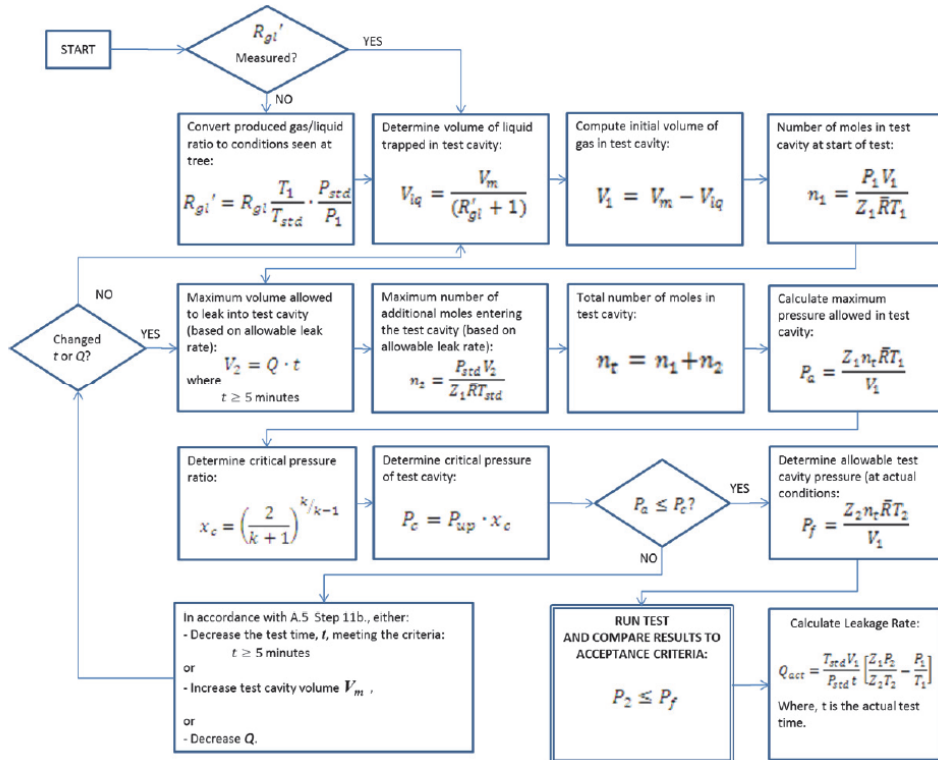


Figure A.1—Calculation Flow Diagram

Prod Temp F	204	Annulus Master Valve			
Water Temp at Depth F	40				
Water Pressure At Depth	259200				
Shut In Pressure	722177			Valve bore size	5.125
Gas Liquid Ratio	1283			Gas Properties (k)	1.293
Z1	0.8474				
Z2	0.8474			P1	218116.800
				Volume	21.250
				Initial Pressure	1500
				Allowable Leak Rate	0.383
Production Temperature R	664	Final Pressure	2200		
Standard Temperature R	500	Final Temperature	204		
		Test Duration	15		
GLR scf/ft	228.495				
		Q	0.725		
Rgl	180547.71	Vol2	10.875		
Vlq	0.000	nrev2	4.306		
V1	21.250	nrevt	9.638		
n1	5.332	Pa2canremove	394287.501		
V2	5.745	Pf	311199.940		
n2	2.275				
nt	7.607	Ppsif	2146.411		
Pa	311199.940				
Xc	0.547				
Pc	395030.819				

Generic Reports



Required Testing Schedule - 30 day lookahead

Contact : Ian Fraser

Condor

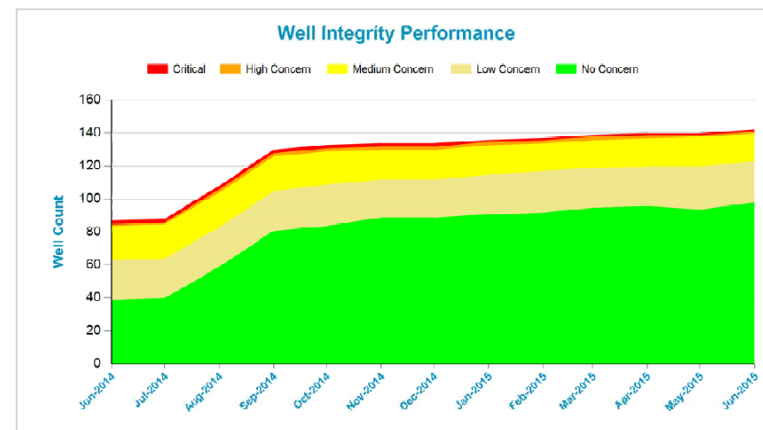
C1A

C1A : Required Activities

Well	Test Type	Frequency (months)	Last Tested	Next Due	Scheduled	Overdue Days
C1A 1-2	Annulus Top Up	12	no data	now	22-Jul-2015	
C1A 1-2	Condor DHSV Operations Report	6	no data	now	23-Jul-2015	
C1A 1-2	Condor Wellhead Service Report	12	no data	now	17-Apr-2015	
C1A 1-2	Condor XMAS Tree Service Report	12	no data	now	23-Jul-2015	
C1A 1-1	Annulus Top Up	12	07-Apr-2013	07-Apr-2014		385
C1A 4.2	Annulus Top Up	3	18-Jul-2014	18-Oct-2014		191
C1A 3-5	Condor XMAS Tree Service Report	6	10-Jun-2014	10-Dec-2014	04-Jun-2015	138
C1A 5-2	Annulus Top Up	12	13-Feb-2014	13-Feb-2015		73
C1A 5-6	Annulus Top Up	12	14-Feb-2014	14-Feb-2015	14-Feb-2015	72
C1A 1-3	Annulus Top Up	12	15-Feb-2014	15-Feb-2015		71
C1A 4.4	Annulus Top Up	12	16-Feb-2014	16-Feb-2015		70
C1A 2-1	Annulus Top Up	3	28-Nov-2014	28-Feb-2015		58
C1A 5.4	Condor DHSV Operations Report	6	15-Sep-2014	15-Mar-2015	15-Mar-2015	43
C1A 5.4	Condor XMAS Tree Service Report	6	15-Sep-2014	15-Mar-2015	15-Mar-2015	43
C1A 1-1	Condor DHSV Operations Report	6	11-Oct-2014	11-Apr-2015		16
C1A 4.5	Condor Wellhead Service Report	12	14-Nov-2014	18-Apr-2015		9
C1A 3.3	Condor Wellhead Service Report	6	19-Oct-2014	19-Apr-2015		8
C1A 4.6	Condor Wellhead Service Report	6	23-Oct-2014	23-Apr-2015		4
C1A 4.4	Condor DHSV Operations Report	6	03-Mar-2015	30-Apr-2015		
C1A 5.6	Condor XMAS Tree Service Report	6	31-Oct-2014	30-Apr-2015	30-Apr-2015	
C1A 4.4	Condor XMAS Tree Service Report	6	01-Nov-2014	01-May-2015		
C1A 6.2	Condor DHSV Operations Report	6	02-Nov-2014	02-May-2015		
C1A 6.3	Condor XMAS Tree Service Report	6	02-Nov-2014	02-May-2015	02-May-2015	
C1A 6.1	Annulus Top Up	12	03-May-2014	03-May-2015		
C1A 6.2	Condor XMAS Tree Service Report	6	03-Nov-2014	03-May-2015	03-May-2015	
C1A 1-1	Condor XMAS Tree Service Report	6	04-Nov-2014	04-May-2015		
C1A 2.4	Annulus Top Up	12	05-May-2014	05-May-2015		
C1A 2.6	Annulus Top Up	12	22-Nov-2014	05-May-2015		
C1A 2-1	Condor DHSV Operations Report	6	06-Nov-2014	06-May-2015		
C1A 2-1	Condor XMAS Tree Service Report	6	06-Nov-2014	06-May-2015		
C1A 4.5	Condor XMAS Tree Service Report	6	06-Nov-2014	06-May-2015		
C1A 5.3	Annulus Top Up	12	07-May-2014	07-May-2015		
C1A 2.4	Condor DHSV Operations Report	6	08-Nov-2014	08-May-2015		
C1A 2.6	Condor DHSV Operations Report	6	09-Nov-2014	09-May-2015		
C1A 2.4	Condor XMAS Tree Service Report	6	09-Nov-2014	09-May-2015		
C1A 4.6	Condor DHSV Operations Report	6	09-Nov-2014	09-May-2015		
C1A 4.6	Condor XMAS Tree Service Report	6	09-Nov-2014	09-May-2015		
C1A 4.1	Condor Wellhead Service Report	12	10-May-2014	10-May-2015		



Well Integrity Performance



	Wellcount	No Concern	Low Concern	Medium Concern	High Concern	Critical
Jun-2014	87	39	24	21	1	2
Jul-2014	88	40	24	21	1	2
Aug-2014	108	59	24	21	2	2
Sep-2014	130	81	24	21	2	2
Oct-2014	133	84	25	20	2	2
Nov-2014	134	89	23	18	2	2
Dec-2014	134	89	23	18	2	2
Jan-2015	136	91	24	18	2	1
Feb-2015	137	92	25	17	2	1
Mar-2015	139	95	24	17	2	1
Apr-2015	140	96	24	17	2	1
May-2015	140	94	26	18	1	1
Jun-2015	142	98	25	17	1	1

Bespoke Reports



Well CTP1 Well Summary Sheet

Well Property	Value
Alternative Well Name	CTP1
Field	Catcher
Well Type:	Oil
Risks	H2S
Flow Potential	100
Licence No	12345
Licence Operator	Premier Oil
Duty Holder	Aker
Well Operator	Wood Group
Original Rig Name / Rig Contractor	Ensco 100
Depth Measurements Unit	ft
Rotary Table Elevation MSL	158
Water Depth MSL	304ft
Datum	Rotary Table
Installation Type	Platform
Drilling System	Drillquip
Well Surface Datum (Lat):	56° 46' 19.0297' North
Well Surface Datum (Long):	0° 46' 23.8218' East
Well Profile	Horizontal
Well Location (TD) Lat	45 46' 56.232 N
Well Location (TD) Long	0 46' 4.886 E
Total Depth	(8,800 ft MD BRT, 4,555ft TVD SS)
Maximum Inclination / DLS (depth)	75
Current Well Status	Completed Producer
Last Completion Date:	
MAASP (psi)	
Wellhead Protection Structure	Fish Safe
Wellhead Details	Vetco
Tree Details	Drill Quip 5kpsi - 5" x 2" VXT
DHSV Details	Halliburton SSSV
Spud Date:	10-Jul-15
Date Reached TD	17-Mar-16
Completed	13-Apr-16
End of Operations	05-Dec-16



WIST Premier Oil

	Well			Spud Date	Last Completion Date	MAASP	GVI			Well Integrity Test		Risk Assessment		Dispensation		Integrity Status	Comment
	Name	Type	Status				Date Last	Freq	Date Next	Date Last	Freq	Date Next	Date	Ref.	Ref.		
Testcase of CTP1	Chim	Natural Flow	Producer				2 Year			0 Year						No Concern	
	CS-16	Natural Flow	Producer				2 Year		20/07/2015	1 Year	20/07/2016					No Concern	
	CS-17	Gas Lift	Producer				2 Year		20/07/2015	1 Year	20/07/2016					No Concern	
	Dua 5XRE	Water Injector	Abandoned				2 Year			1 Year						No Concern	
	Gajah Baru	Gas Lift	Abandoned				2 Year		20/07/2015	1 Year	20/07/2016					No Concern	
	Genm Bal	Natural Flow	Producer				2 Year		22/07/2015	0 Year	22/07/2015					No Concern	
	Glam Gas	Gas Lift	Producer				2 Year		22/07/2015	0 Year	22/07/2015					No Concern	
	Glam Pro	Subsea	Producer				2 Year		22/07/2015	1 Year	22/07/2016					No Concern	
	Glamis Inj	Water Injector	Injector				2 Year		22/07/2015	0 Year	22/07/2015					No Concern	
	h1	Subsea	Producer				2 Year			1 Year						No Concern	
	H2	Subsea	Producer				2 Year			1 Year						No Concern	
	H6	Subsea	Producer				2 Year			1 Year						No Concern	
	Hunter	Subsea	Producer				2 Year			1 Year						No Concern	
	J321	Subsea	Producer				2 Year			1 Year						No Concern	
	J42	Subsea	Producer				2 Year			1 Year						No Concern	
	My Well	Natural Flow	Abandoned				2 Year			0 Year						No Concern	
	Rita	Subsea	Producer				2 Year		02/12/2016	1 Year	02/12/2017					No Concern	
	Solan	Natural Flow	Producer				2 Year		22/07/2015	0 Year	22/07/2015					No Concern	
	Solan inj	Water Injector	Injector				2 Year		22/07/2015	0 Year	22/07/2015					No Concern	
	Training	Water Injector	Injector				2 Year			0 Year						No Concern	
Vietnam	Natural Flow	Producer				2 Year		20/07/2015	1 Year	20/07/2016					No Concern		

SWRR	Suspended Well Risk Review.
Red Text	Indicates the DHSV being locked open. (Sleeved).
Red Text	Highlights a non-compliance with WIMS criteria.

WFM Action Code	No Concern AC #0	Low Concern AC #1	Medium Concern AC #2	Significant Concern AC #3	High Concern AC #4	Critical AC #5
Well Count	141	15	0	4	6	10
%	80.1	8.5	0	2.3	3.4	5.7



Where are we now?

- Create a **baseline** of well integrity statuses
- Establish **workflows** to manage the well integrity issues more effectively
- Adopt a **proactive** approach to well integrity for growing well stock

- All 82 wells on the system
- All wells have a risk score, well histories and key data uploaded
- Integrity tests can be entered direct by CROs
- Automatic notifications and reports generated by the system
- Interventions carried out on 6 wells so far in 2017 to improve integrity status
- Rolling-out to legacy E.ON assets in Q2

- Immediate benefit is **awareness** of historic well stock



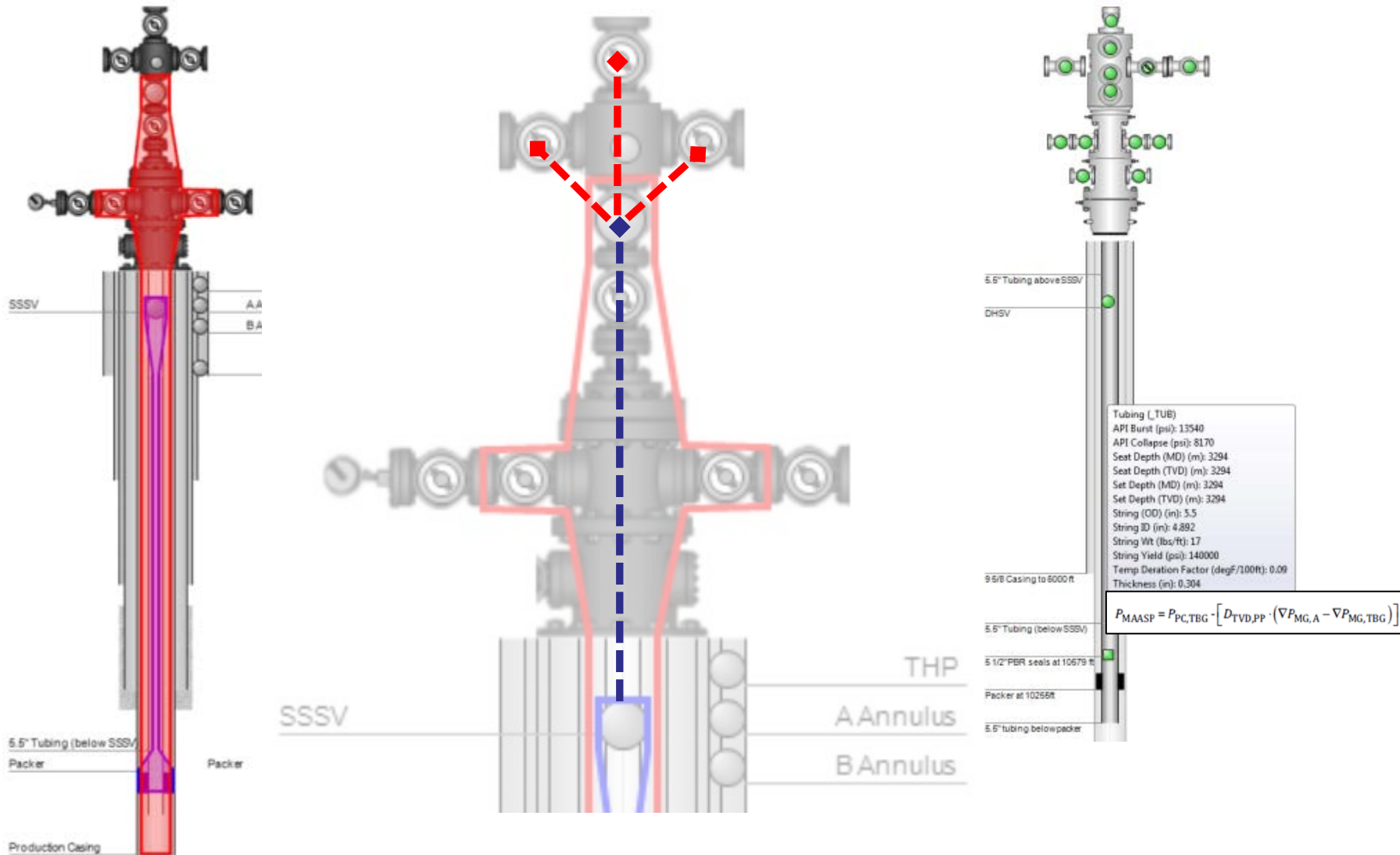


Where next?

- **API 6AV2** – full integration of leak rate formulas
- All assets self-entering test data, ensuring a **smooth workflow**
- **One click** sign-on, build well integrity awareness
- **Dashboard** style output?
- Various other features available...!



Next Steps: Barrier Schematics, MAASP



Conclusions



Multiple benefits observed:

- Improved well integrity **awareness** allowing proactive issue management
- **Alerts** and **notifications** aid communication and swift issue resolution
- More informed, consistent **decision making**
- **Immediate test results**, reduced administration and potential reduction in production downtime
- **Well integrity culture** growing within the organisation



Some more work still to do!



Questions?



PETROM

Member of OMV Group