

# Break-out Job Presentation

**Name** : Ammirol Bin Ahmad Mahmud

**Client** : ROC OIL

**Location** : J4DP-A

**Well** : A03L

**Team Member** : Arvince T, Bennylove B

**Topic** : Retrieve XX Plug



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# Surface Preparation



# **PTW ( Permit to work )**

## Require Cold and Hot Work Permit

- **Cold Permit** is for RIH (Rig Up/Down Lubricator Using Gantry Crane. To Performed Wireline Activity )
- **Hot Permit** is for Start and Run Power Pack Diesel Engine
- Here is the sample of Hot & Cold Work Permit for this operation.

# JHA ( JOB HAZARD ANALYSIS )

**A job hazard analysis is a technique that focuses on job task as a way to verify hazard before they occur**

- Before getting approval and submit our PTW, JHA must being attached to our permit for SSE to verified.
- All relevant hazard for our task must being captured and put inside the JHA before submitting.
- Here is the sample of JHA Precautionary Control barrier (JPBC) check for this job before start operation that we need to verified every 2 hours .

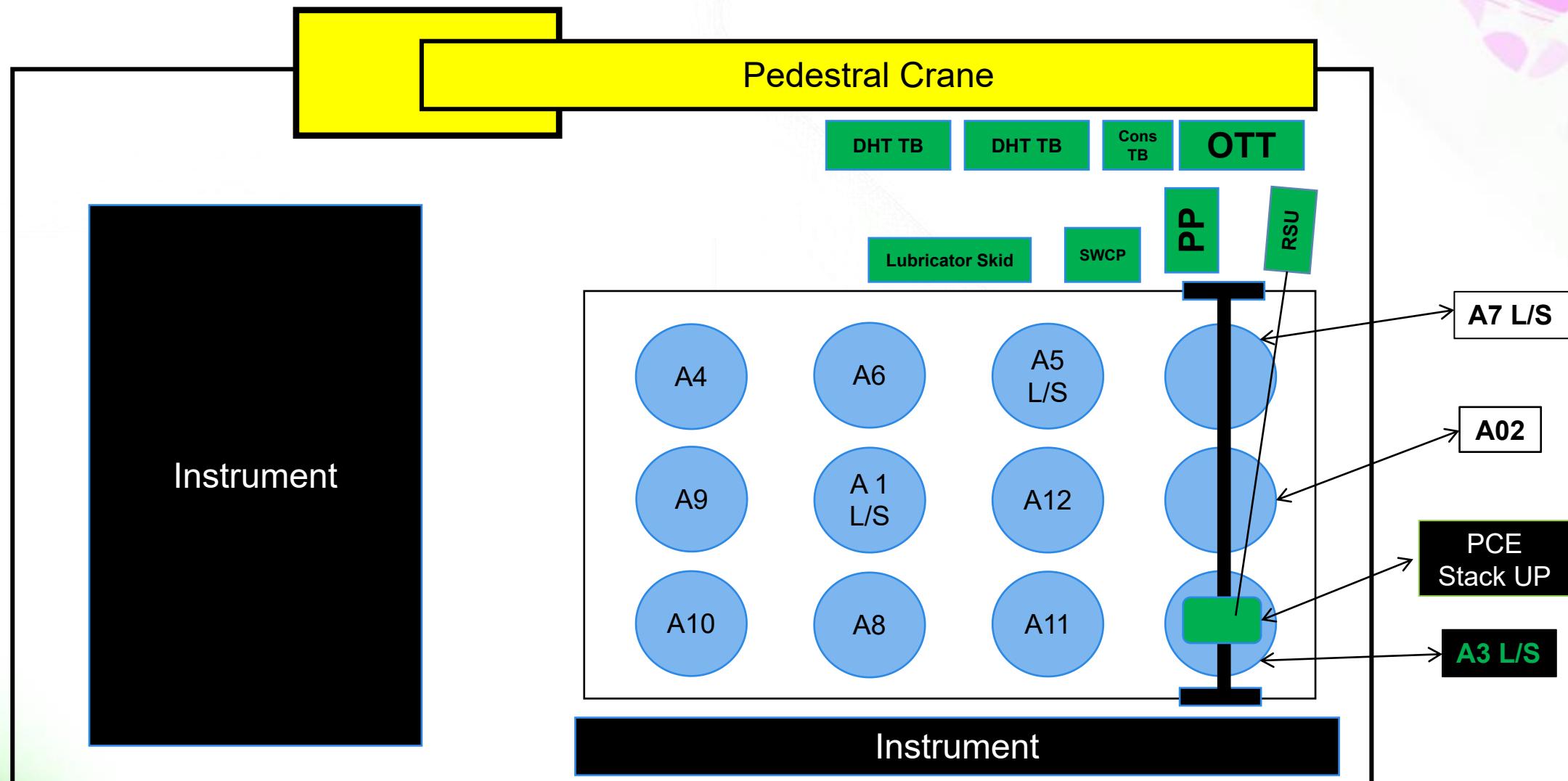
## Hot Work

## COLD WORK

No.	JHA Barriers (Date: _____)	Barrier Verification Frequency (Tick ✓ and timestamp where applicable)					
1	Barricade area of hazard						
2	Keep worksite clear from slippery/tripping hazards/obstructions of escape route						
3	Maintain housekeeping during the working period						
4	Ensure equipment is inspected and in good condition						
5	Ensure guard is provided						
6	Bleed off any trapped pressure						
7	Verify to ensure zero pressure inside						
8	Ensure guard is provided						
9	Keep worksite clear of pinch point/sharp object hazards						
10	To ensure housekeeping performed at the end of the day						

No.	JHA Barriers (Date: _____)	Barrier Verification Frequency (Tick ✓ and timestamp where applicable)					
1	Barricade area of hazard						
2	Be vigilant on footing/watch the footsteps.						
3	Keep worksite clear from slippery/tripping hazards/obstructions of escape route						
4	Maintain housekeeping during the working period						
5	Correct hand placement/ positioning						
6	Usage of tag line to control the load from safe distance						
7	Correct hand placement/ positioning						
8	Local weather forecast report from onshore						
9	Cover any potential sharp edges with cotton rag						
10	Correct hand placement/ positioning						
11	At least 2 tag line to be attached to the opposite end of the load to assist the control of lifting lowering/ positioning for long or bulky loads						
12	Barricade working area						
13	Others						
14	Barricade working area						
15	Correct hand placement/ positioning						
16	Monitor and analyses LEL and PEL						

# Spot Equipment



# PCE Stack Up

## Stuffing Box

Stuffing Box 16", 5.00"- "O" Pin & Collar, 5K, H2S  
4 ACME (4.0" Seal) Type

## Lubricator 3ea 8FT

Lubricator, 3.00" ID X 8 ft. Long, 5.00"-4 ACME Type "O" Box X Pin & Collar, 5K H2S.

## QTS ( Quick Test Sub )

QuickTest Sub with 1/2" NPT 5K Test Port, 3.0" ID -4" OD  
ACME Type "O" Box X Pin & Collar, **5K H2S**.

## Dual Hydraulic BOP

Dual Hyd BOP, 3.0" ID, 5.00"-4 ACME Type "O" Box X Pin & Collar, 5K H2S.

## **Pup Joint 6FT**

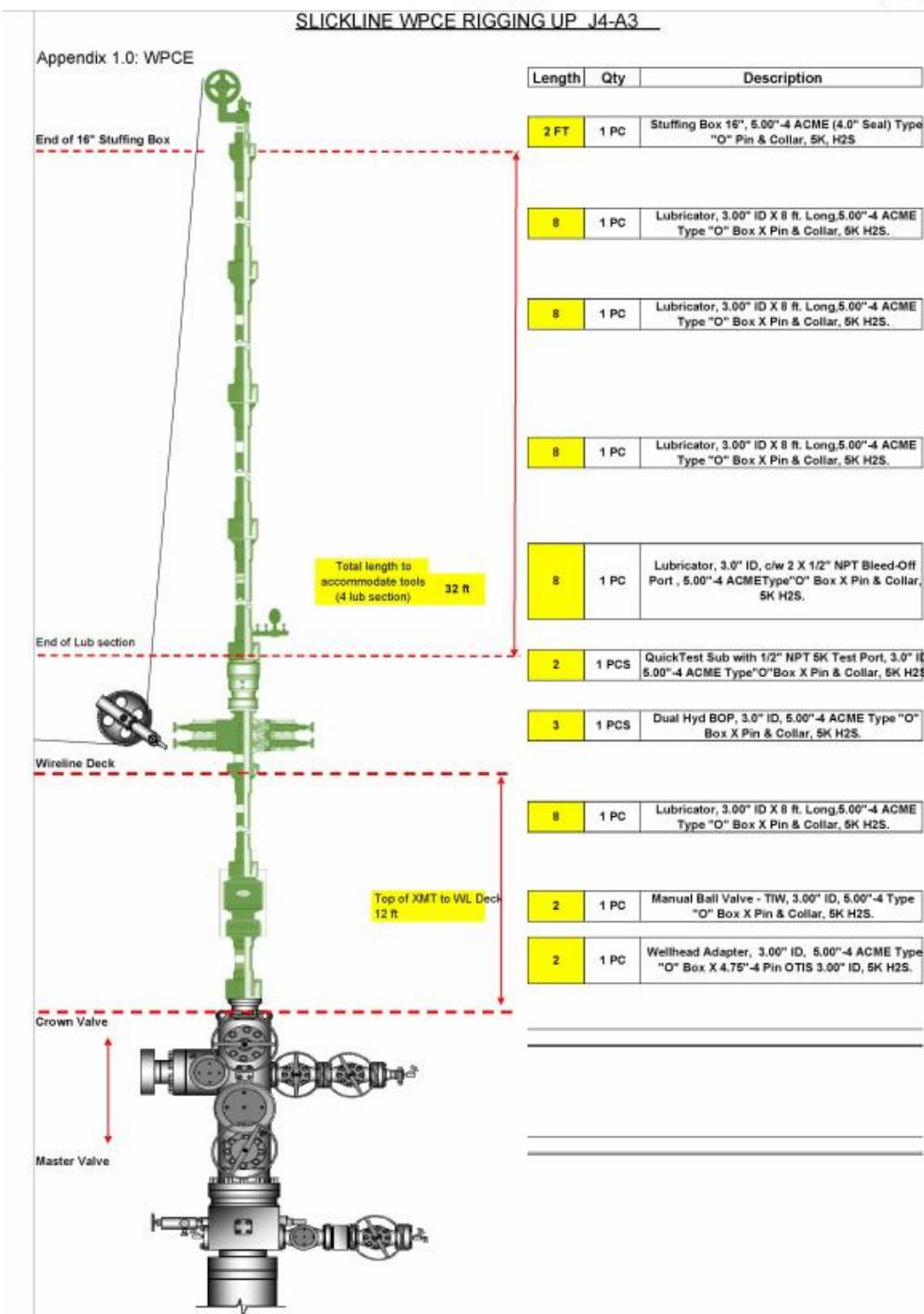
Lubricator, 3.00" ID X 4 ft. Long, 5.00"-4 ACME Type "O" Box X Pin & Collar, 5K H2S.

## Manual Ball Valve

Manual Ball Valve - TIW, 3.00" ID, 5.00"- "O" Box X Pin & Collar, 5K H2S.

## **Wellhead Adapter .**

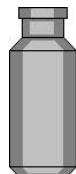
Wellhead Adapter, 3.00" ID, 5.00"-4 ACME Type "O" Box  
X 4.75"-4 Pin OTIS 3.00" ID, 5K H2S.



# Detail BHA ( Bottom Hole Assembly )

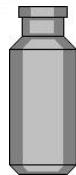


# Toolstring Configuration



## Drift 2.735" For 3.1/2" Tubing

1-7/8" Rope Socket + Swivel Joint + 5 ft Roller Stem + 3 ft Roller Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + 2.735" Drift



## Drift 1.80" \* For 2.3/8" Tubing

1-1/2" R/Socket + 1.1/2" Swivel joint +1.1/2"x 5ft tungsten stem + 1.1/2" 5FT tungsten stem + 1.1/2" K/Joint + 1.1/2" Hyd Jar + 1.1/2 x 20 Stroke Link jar + 1.80" Drift



## 2" GS Grounded Dog with equalizing prong

1-1/2" R/Socket + 1.1/2" Swivel joint +1.1/2"x 5ft tungsten stem + 1.1/2" 5FT tungsten stem + 1.1/2" K/Joint + 1.1/2" Hyd Jar + 1.1/2 x 20 Stroke Link jar + 2" GS Grounded dog with equalizing prong



## 2" GS

1-1/2" R/Socket + 1.1/2" Swivel joint +1.1/2"x 5ft tungsten stem + 1.1/2" 5FT tungsten stem + 1.1/2" K/Joint + 1.1/2" Hyd Jar + 1.1/2 x 20 Stroke Link jar + 2" GS

# Toolstring Details

## TCC BHA For 3-1/2 " Tubing

No	Description	Length (ft )	Weight (lbs)
1	1-7/8" Rope Socket	0.5	5.0
2	1-7/8" Swivel Joint	0.5	5.0
3	1-7/8" x 5ft Roller Stem	5	40.0
4	1-7/8" x 3 ft Roller Stem	3	18.0
5	1-7/8" Knuckle Joint	1	5.5
6	1-7/8" Hydraulic Jar	4.4	13.5
7	1-7/8" 20" Mechanical Jar	5	15.5
8	2.735" Drift	1	15

## TCC BHA For 2.3/8 " Tubing

No	Description	Length (ft )	Weight (lbs)
1	1-1/2" Rope Socket	0.5	4.0
2	1-1/2" Swivel Joint	0.5	3.0
3	1-1/2" x 5ft Tungsten Stem	5	30.0
4	1-1/2"x 5 ft Tungsten Stem	3	30.0
5	1-1/2" Knuckle Joint	1	4.5
6	1-1/2" Hydraulic Jar	4.4	11.5
7	1-1/2" 20" Mechanical Jar	5	12.5
8	1.80" Drift	1	12

## Equalizing Plug BHA

No	Description	Length (ft )	Weight (lbs)
1	1-1/2" Rope Socket	0.5	4.0
2	1-1/2" Swivel Joint	0.5	3.0
3	1-1/2" x 5ft Tungsten Stem	5	30.0
4	1-1/2"x 5 ft Tungsten Stem	3	30.0
5	1-1/2" Knuckle Joint	1	4.5
6	1-1/2" Hydraulic Jar	4.4	11.5
7	1-1/2" 20" Mechanical Jar	5	12.5
8	2" GS Grounded Dog + Equalizing Prong	1	15

## Retrieve Plug BHA

No	Description	Length (ft )	Weight (lbs)
1	1-1/2" Rope Socket	0.5	4.0
2	1-1/2" Swivel Joint	0.5	3.0
3	1-1/2" x 5ft Tungsten Stem	5	30.0
4	1-1/2"x 5 ft Tungsten Stem	5	30.0
5	1-1/2" Knuckle Joint	1	4.5
6	1-1/2" Hydraulic Jar	4.4	11.5
7	1-1/2" 20" Mechanical Jar	5	12.5
8	2" GS	1	15

# Precaution During Operation



# **Precaution During RIH & POOH**

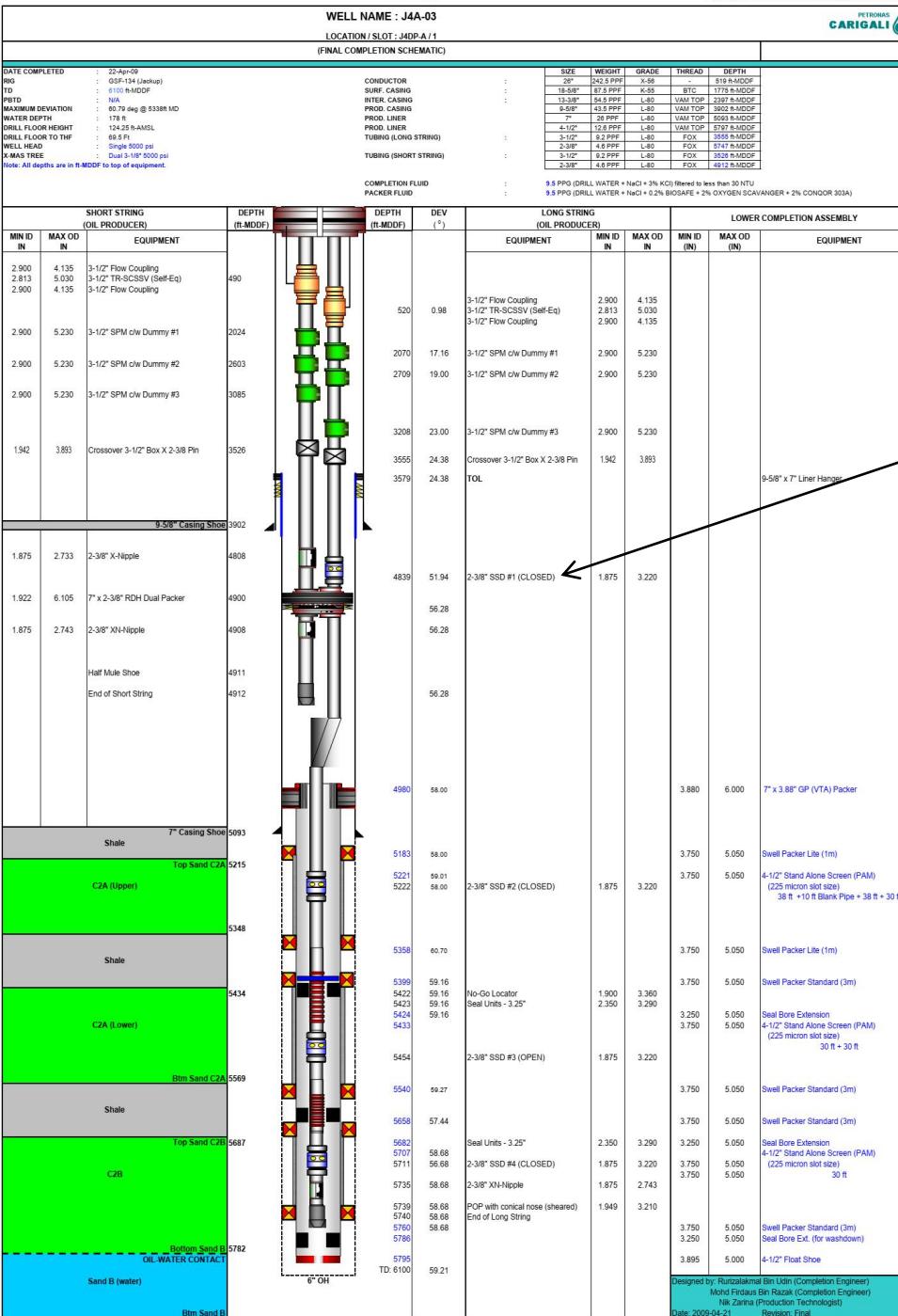
- Make sure using the right size of toolstring configuration corresponding to the tubing size.
- set the toolstring “zero” reference depth on the odometer.
- Pressurize the lubricator slowly to well “CITHP” then open x-mas tree
- RIH in moderate speed. Slow down when passing thru tubing accessories. Noted the F/L.
- If any resistance is encountered on the way down, DO NOT attempt to jar through. Make a few attempts by tapping down only.
- If toolstring is held up and unable to be tapped through, pull out of hole.
- While POOH, take noted of the PW of the toolstring until surface.
- When toolstring at surface, closed the swab valve and depressurize pressure inside lubricator
- Capture or Inform if any abnormality found on running/pulling tools inside DOR.

# Parameter On Well A03L



# Well Schematic For A03L

No	Accessories	THF-Depth (ft)	Status
1	TRSCSSV	450	
2	SPM #1	2000	
3	SPM #2	2639	
4	SPM #3	3138	
5	3-1/2" to 2-3/8" XO	3485	
6	SSD #1	4769	2"XX Plug
7	SSD #2	5152	Closed
8	SSD #3	5384	Open
9	SSD #4	5641	Closed
10	XN Nipple	5665	XN Plug



Plug need  
to be  
retrieved @  
depth  
4769ft-THF

# Toolstring Parameter

2.735" Drift on 3-1/2" Tubing			
THF-Depth (ft)	R/W (lbs)	P/W (lbs)	H/W (lbs)
450	120	125	120
1000	130	140	135
1500	100	155	150
2000	100	170	165
2500	100	175	165
3000	90	185	180
3400	90	220	210

1.80" Drift on 2-3/8" Tubing			
THF-Depth (ft)	R/W (lbs)	P/W (lbs)	H/W (lbs)
450	105	110	105
1000	110	120	105
1500	90	140	130
2000	90	160	140
2500	85	170	140
3000	85	175	150
3500	80	200	170
4000	80	210	180
4500	85	250	180
4700	85	250	180

# Toolstring Parameter

2" GS Grounded Dog With Equalizing Prong				2" GS			
THF-Depth (ft)	R/W (lbs)	P/W (lbs)	H/W (lbs)	THF-Depth (ft)	R/W (lbs)	P/W (lbs)	H/W (lbs)
450	110	135	130	450	110	135	130
1000	140	145	140	1000	140	145	140
1500	110	160	155	1500	110	160	155
2000	110	175	170	2000	110	175	170
2500	110	180	175	2500	110	180	175
3000	100	190	185	3000	100	190	185
3500	100	225	220	3500	100	225	220
4000	90	240	230	4000	90	240	230
4500	85	280	245	4500	85	280	245
4700	85	280	250	4700	85	280	250

## **Pressure on THP & CHP**

- CITHP : 20 psi
- CHP : 20 psi

\*Last report on DOR, Before inflow test plug, the CITHP pressure is 560 psi.

## **During RIH**

- During POOH drift 2.735", encountered restriction from 2624ft-THF to 2620ft-THF. WOL. Managed to free tool. On surface found no abnormality on drift.
- No Fluid Level detected during RIH & POOH

# Type of Plug & Mandrel



# Plug Profile

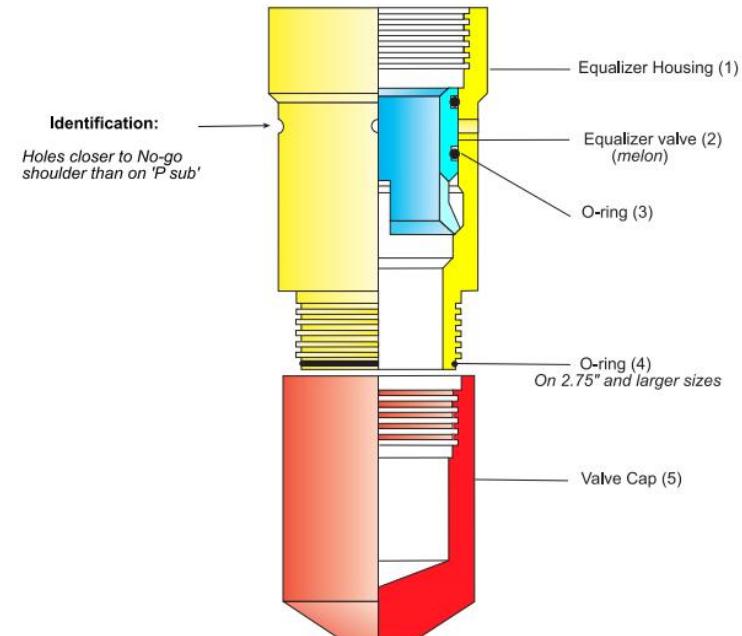
Nipple Bore Reference	'X' Equalising Sub	Valve Cap	Running Prong	Pulling Prong
1.875"	20XO18701	20R208	49Q496	49QO35
2.313"	20XO23100	20R7	49Q1056	49QO44
2.750"	20XO27504	20R181	49Q599	49QO43
3.813"	20XO38104	20R59	49P640	49P641

Running	Reference	2 (1.87)	2 1/2 (2.313)	3 (2.750)
	A	4 15/32	5 1/8	5 1/2
	B	0.750	1.095	1.500
	C	0.875	1.220	1.625
	D	0.965	1.340	1.710
	Thread	1/2 - 13 UNC 2A	5/8 - 11 UNC 2A	3/4 - 10 UNC 2A

Pulling	Reference	E	F	G
	E	12 1/4	13 7/8	13.000
	F	0.970	1.300	1.713
	G	0.500	0.750	0.750
	Thread	1/2 - 13 UNC 2A	5/8 - 11 UNC 2A	3/4 - 10 UNC 2A

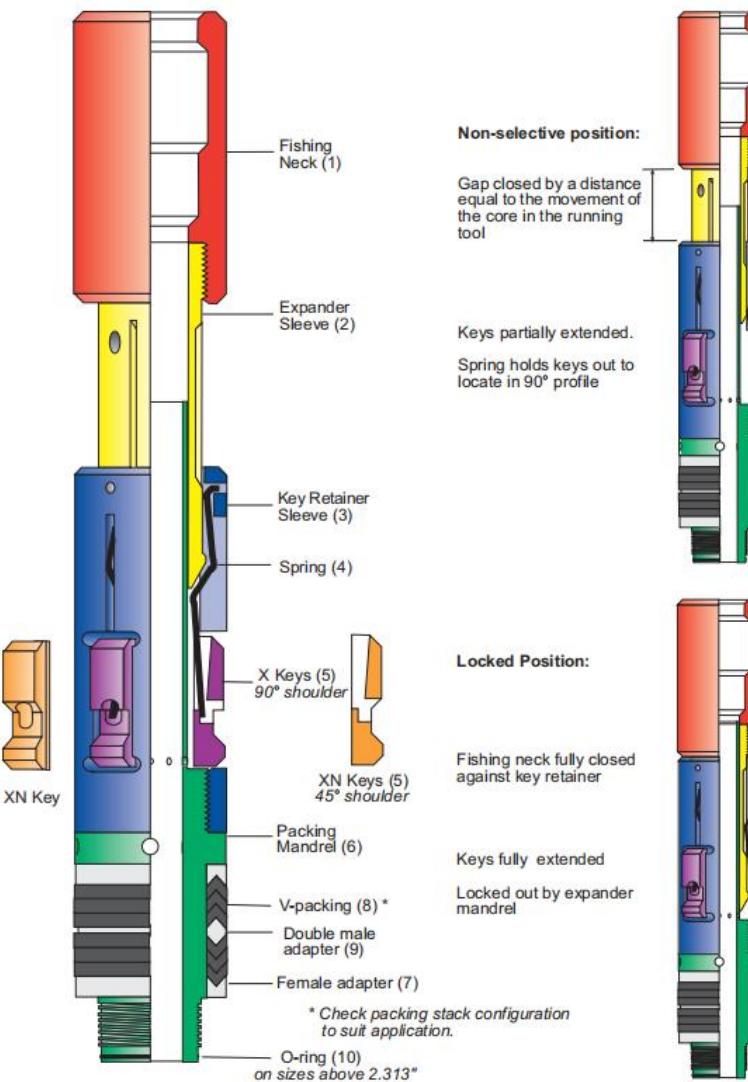
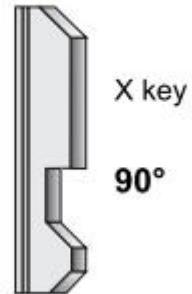
- For Well A03L, The plug being used is XX Plug
- 2" GS Grounded dog need to attach with Equalizing Prong to equalise plug before retrieving it



# Lock Mandrel

- The lock Mandrel attach with XX Plug is located at 4769FT-THF
- The Mandrel is seated at 1.875" Nipple Profile

'X' keys have a 90° shoulder.

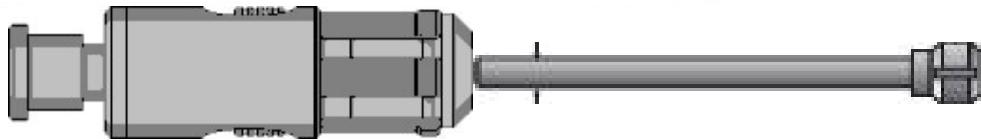


# Type of Running tools & Pulling Tools



# **Equalizing & Retrieve Plug Tools**

## **GS Grounded dog attached with Equalizing Prong**



- 2" GS Grounded dog attached with equalizing prong to equalise pressure below plug.
- Brass pin is being used
- Tap down lightly on the equalizing prong tool to shift the equalizing sleeve in the plug to open position
- Jar Down to Shear GS Pin to ensure the equalizing sleeve on plug is fully open.

## **GS Pulling Tools**



- 2" GS to retrieve plug after pressure equalize
- Brass pin is being used

# Running Sequence



# **Equalizing and Retrieve Plug**

## ***Equalizing Plug***

- Run in the equalizing tool assembly at moderate speed.
- Check pulling weight before reach on top of plug.
- Lower down the toolstring until hold-up at the depth of the plug.
- Jar down lightly on the equalizing prong tool to shift the equalizing sleeve in the plug to the open position while observing closely for any sign of drop in weight indication during the jarring down process. Observed for any pressure change in the CITHP.
- The pressure gauge used shall be of appropriate range to ensure that pressure changes could be easily observed.
- As soon as a pressure change is observed in the CITHP, continue to jar down to shear the pin in the GS pulling tool. Jar down at least 20 times to be sure prior to pulling out of hole.
- Check on the GS pin is shear to ensure the equalizing sleeve in the plug is fully open.

## ***Retrieve Plug***

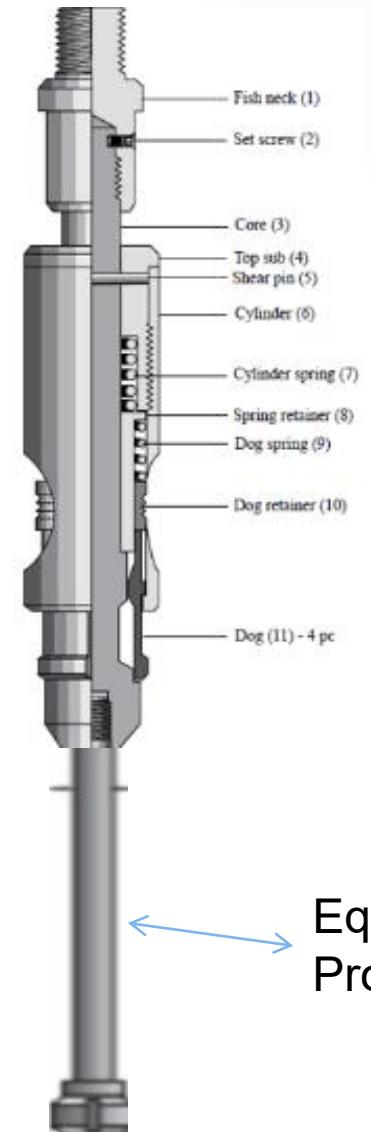
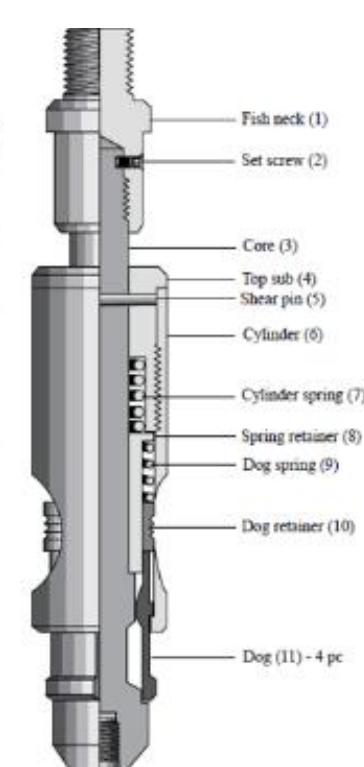
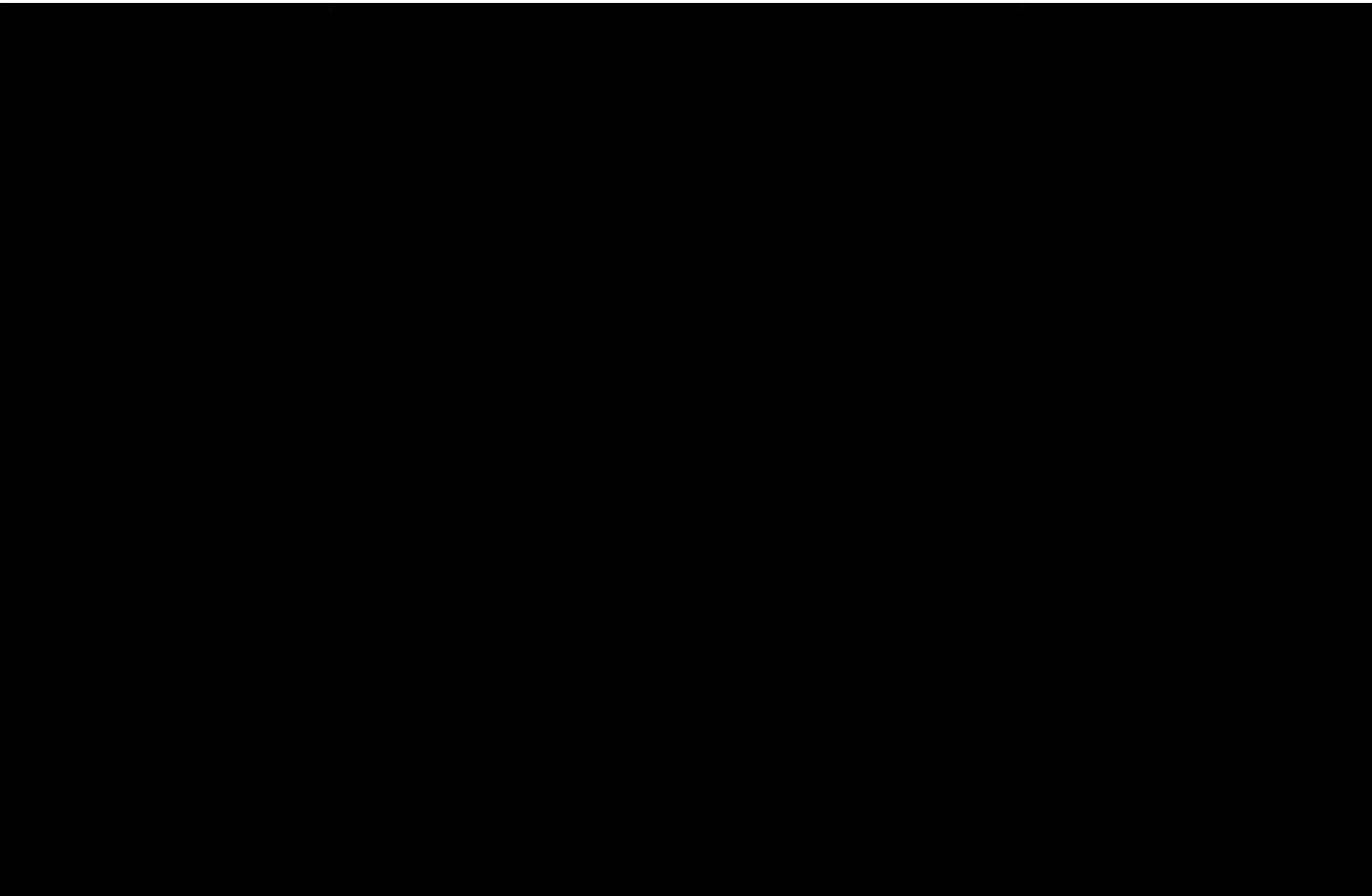
- Run in the 2" GS Pulling tools at moderate speed.
- Check pulling weight before reach on top of plug.
- Lower down the toolstring until hold-up at the depth of the plug.
- Pick up the toolstring to open the link jar fully. If overpull is observed following this, then the pulling tool has latched into the plug.
- Confirmed the plug has been latched on, proceed to jar free the plug from the nipple where it was installed.
- When plug is free from the nipple, check for increase in pulling weight of the toolstring to confirm the plug has been successfully retrieved.
- Inspect the plug and report all visual findings

# Redress Pulling/Equalizing Tools, Lock Mandrel



# Pulling/Equalizing Tools

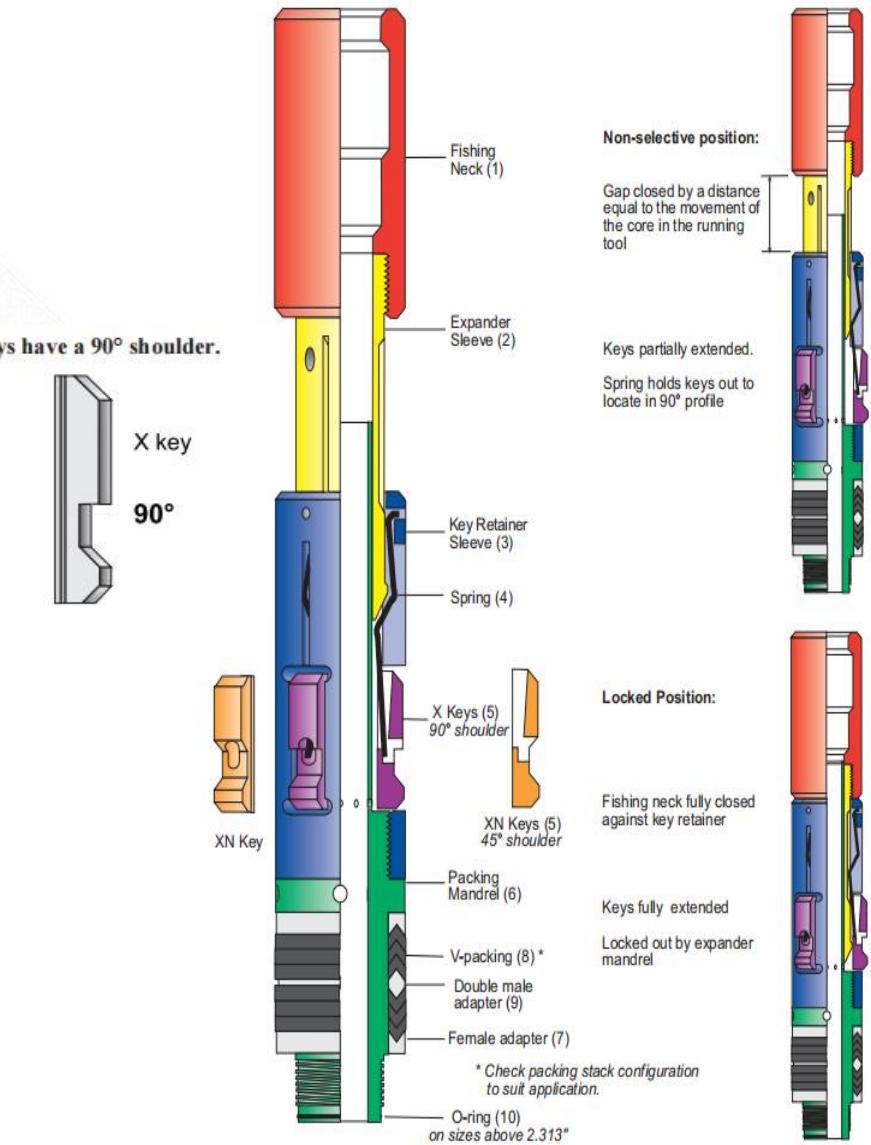
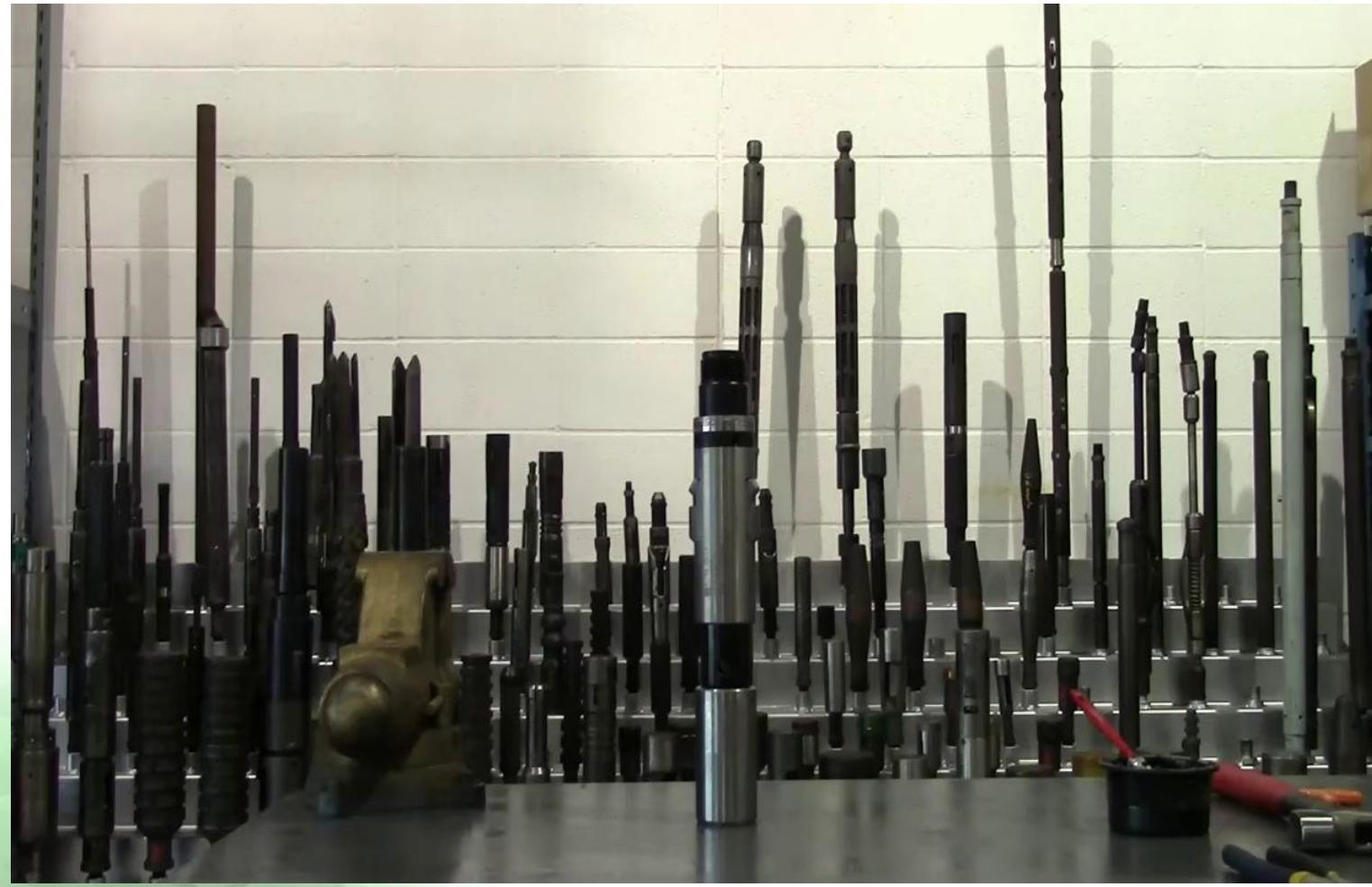
## Assembly and Disassembly Video



Equalizing  
Prong

# Lock Mandrel

## Assembly and Disassembly Video



# Contingency Plan



# Operation Contingency

Event	Contingency Plan
During RIH Drift, Held-up before reaching top of Plug	<ul style="list-style-type: none"> <li>- RIH wire scratcher or gauge ring</li> <li>- RIH LIB to tag held-up depth</li> </ul>
Unable to Equalize Equalizing Sleeve @ Melon	<ul style="list-style-type: none"> <li>- RIH LIB to tag top of XX Plug</li> <li>- Add more weight on toolstring</li> <li>- RIH sand pump bailer If required</li> </ul>
GS unable to latch on Plug	<ul style="list-style-type: none"> <li>- RIH LIB to get impression of XX Plug</li> <li>- RIH wire scratcher &amp; sand bailer</li> <li>- Discuss with CSR to use Releasable Bulldog Spear if acceptable.</li> </ul>
Toolstring stuck during POOH after retrieving Plug	<ul style="list-style-type: none"> <li>- Informed CSR on depth of toolstring stuck</li> <li>- Increase Tension to 60% safety margin wire breaking point after last test wire recorded.</li> <li>- Closed upper/lower BOP.</li> <li>- Drop Cutter after getting informed by CSR &amp; Town</li> </ul>

# Pre and Post Operation



# Pre & Post Operational

## Pre-job Operation Before Equalizing & Retrieve plug

- Equalizing pressure across the plug. Inject pressure if THP lower than pressure below plug.  
**Note : Get reservoir pressure from CSR or DB EIC**
- Liase with SOR on board on injecting pressure from other well to inject well to well pressure.
- Check for all connection on toolstring and pulling tools before RIH
- Check condition of GS being used is in good condition
- Record CITHP and compare with previous CITHP prior to installation of the plug

## Post Operation After Equalizing & Retrieve Plug

- Check for any changes in CITHP during tapping down GS Grounded dog for any changes in CITHP.
- Record CITHP and informed CSR for any changes in pressure after confirm pressure has equalizing
- Monitor P/W during POOH incase pressure not yet equalize with pressure below plug. It can indicate the tool is being vaccum by the pressure if not yet equalize.
- Check GS Grounded dog condition once at surface to ensure the brass pin is shear to confirm XX Plug Equalizing Sleeve @ Melon is fully open.
- Check P/W 20ft above plug before retrieving plug
- Monitor CITHP closely after successfully retrieve plug for any changes.
- Check condition of Plug once at surface and report the condition of the plug inside DOR.

Timestamp	Your Full Name	Position	Name of Trainer/Presenter	Training Topics
7/24/2024 11:57:37	Ammirol A	SLS Trainee Operator	Ammirol	Retrieve XX Plug & Zone Change
7/24/2024 11:58:03	supardi bin japar	SLS Operator	Ammirol	pxx and SSD
7/24/2024 12:00:42	Iman Asshafi	SLS Trainee Assistant	Ammirol	Break Out Job
7/24/2024 12:01:07	Seamus Saging	SLS Trainee Operator	Ammirol	Retrieve xx plug
7/24/2024 12:34:20	malkyzidek yehu Jerry	SLS Assistant	Ammirol	Retrieve plug
7/24/2024 15:17:04	FADZLIN MOHAMAD IBRAHIM	Operation Support	Ammirol	Retrieve XX Plug & Zone Change
7/25/2024 10:59:13	Wilson Eddy	SLS Assistant	Ammirol	Retrieve XX Plug & Zone Change
7/25/2024 11:00:37	Amir Firdaus	Operation Support	Ammirol	Retrieve XX Plug & Zone Change
7/25/2024 11:03:18	Rozaiman Osman	Operation Support	Ammirol	Retrieve XX Plug & Zone Change
7/25/2024 11:05:25	Ryan Gia Smith	SLS Trainee Assistant	Ammirol	Retrieve XX Plug & Zone Change