

# Break-out Job Presentation

**Name** : Eldrian Bin Juil

**Client** : Seah Hibicus (North Sabah)

**Location** : SJJT-G

**Well** : SJ 704S

**Team Member** : Edrieon Edmund & Muhd. Hasnawi

**Topic** : Set PXX-Plug



# *Table of Contents*

- Pre-job preparation
- Surface Preparation
- Rig up procedure
- Detail BHA
- Job objective
- Well diagram & well history
- Plug introduction
- Precaution during operation
- Operation running sequence
- Pre and post operational

# Pre job preparation

- Pre job preparation is the most important task to be carried out prior to perform wireline jobs and the objectives are to ensure all the information pertaining to work program, well candidate(s) are available and updated.
- To check and ensure tools and equipment's are in good and in safe working condition and to ensure safety of personnel and workplace.
- Pre-job checklist is one of the tasks that is necessary to be carried out before beginning any work, personnel must ensure that:
  1. Crew must have approved work program from client.
  2. Gathered and collected information i.e well schematic and Slickline report history to check any difficulties encountered from the previous Slickline entry jobs that had been carried out and latest status of well condition.
  3. Prepared Job Safety Analysis/Job Hazard Analysis to identify hazard and risk assessment of work that to be carried out and implemented controls measure.
  4. Ensure that all necessary work permits (i.e hot, cold & lifting) have been prepared and approved.
  5. Conduct pre-job safety meeting with all personnel involve on location detailing program, pressure limitation, safety procedures and personnel responsibilities.

# 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.

**PERMIT-TO-WORK (PTW) FORM**  
BORANG PERMITSIHAN PERMIT Bekerja  
COLD (HOT) WELL ENTRY

NO. NS 009301

1. PERMIT TO WORK APPLICATION  
FACILITY / UNIT: **PTT-G**  
JOB NO: **147043**  
JOB DESCRIPTION: **Rig up/down for using manual chain block attached to gantry crane**

2. INSPECTION OF PLANT FOR WORK  
CHECKED BY: **[Signature]**  
DATE: **[Date]**

3. WORKER PERMIT SPECIAL REQUIREMENTS  
CHECKED BY: **[Signature]**  
DATE: **[Date]**

4. PERMIT REQUEST/ENDORSEMENT  
CHECKED BY: **[Signature]**  
DATE: **[Date]**

5. PERMIT COORDINATOR/ENDORSEMENT  
CHECKED BY: **[Signature]**  
DATE: **[Date]**

6. PERMIT CLOSURE BY WORKER APPROVED  
CHECKED BY: **[Signature]**  
DATE: **[Date]**

# **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 permit coordinator to verify.
- All relevant hazards for our task must being captured and put inside the JHA before submitting.
- Here is the sample of JHA to check hazards for this job before start operation.

JHA No: No JHA: NS 009301	Revision Date: Tarikh dikemaskini:	Facility: St. JOSEPH Fasiliti:	Location: SJJT-G Lokasi:	Date: Tarikh:
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<b>Section A: Task Information</b> <b>Seksyen A: Maklumat Tugasan</b> TUGASAN: RIG UP/DOWN PCE using manual chain block attached to gantry crane. Start Hyd PIPack, Bleed Off Pressure From CHP/Lubricator, To perform set PXX-Plug and GLVC on well SF-704s NO: NS 009301	Team Composition: Komposisi Kumpulan: _____
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Deviation associated with above task: Yes/No <small>*Delete whichever not required</small> Deviasi berkaitan tugasan di atas: Ya/Tidak <small>*Potong mana-mana yang tidak dikehendaki</small>	If Yes, Deviation No: Jika Ya, Nombor Deviasi:	Additional Deviation/Precautions attached: Yes/No Deviasi/Langkah Berjaga-jaga Tambahan telah Ditampirkan: Ya/Tidak
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**Section B: JHA Detail Description**  
**Seksyen B: Penerangan Terperinci JHA**

Step No. (No. Langkah)	Descriptions of Task Step (Penerangan Langkah-langkah Tugasan)	Hazard Prompt 10 +1	Task Hazards/ Sub Hazard (Bahaya Tugasan)	Threats (Ancaman)	Top Event (Kejadian 'Top Event')	RISK (RISIKO):				Overall risk rating	Control Measures (Langkah Kawalan)
						P	A	E	R		
1	Connect/disconnect Sw/CP line to SSV/SCSSV	PRESSURE	HC under pressure	Defective Hoses	People / LOC	2C	1B	1B	1C	P2C	Ensure no leak on hoses and fitting. Lock Out Tag Out properly installed/display at the connection and production line already
2	Open/Close Swab Valve and SSV	PRESSURE	HC gas/liquid under pressure during bleed off pressure from tree cap	Incompetent staff/Leak/Uncontrol pressure release	LOC	2C	1C	2C	2D	R2D	Apply stop work policy if found unsafe to work or valve passing. Bleed downwind direction.
3	Well Isolation	PRESSURE	Pressurized line	Accidentally open up well	Create fish	2B	2C	2B	2D	R2D	Lock Out Tag Out / Safety Warning Signage at wellhead / Barriers in place. Ensure Isolation Certificate valid.
4	Removal of hatch cover	BODY MECHANICS	Lifting/Pulling	Incorrect body posture	Backache	1D	1A	1A	1A	P1D	Correct lifting/pulling technique and body posture.
		GRAVITY	Hand tools near open hatches	Poor housekeeping	Dropped Object	3B	2C	1A	1A	P3B	Keep hand tools/object clear from open hatches. To carry out Drop checklist prior commencing work. ( Drop lead)
5	Open X-Mas tree cap	BODY MECHANICS	Lifting/Pushing/Pulling /Climbing/Positioning	Stiff X-mas tree cap/wrong body position	Pinch Fingers/ Hand Injuries/Trip and fall	2C	1B	1B	1A	P2C	Correct tools/techniques and body position/Use high impact hand glove.
		PRESSURE	HC gas/liquid under pressure during bleed off pressure from tree cap	Incompetent staff/inproper equipment/ Leak/uncontrol bleed down	Injury	2C	2A	2C	2A	P2C	Apply stop work policy if found unsafe to work. Double barrier must be applied. Ensure no leak on Swab Valve. Allowable leak rate for UMW is 0.300 psi/10 mins as per procedures.
		CHEMICAL	Fumes from HC	Uncontrolled released of HC / Inhalation of toxic vapour/gasses / ignition	Fire / Heart failure	3B	1A	3A	1A	P3B	Bleed downwind direction. Personnel to stay up wind.

**Section C: Signatories / Seksyen C:**

**Penandatanganan  
Reviewed & Discussed  
by**

**Assessed & Agreed by  
Ditaksir & Dipersetujui oleh**

**Discussed & Agreed by  
Dibincang & Dipersetujui**

**Reviewed and Verified by  
Disemak & Disahkan oleh**

PTW Endorser (1)/Pengesah: \_\_\_\_\_  
 Sign 1 (Tandatangan): \_\_\_\_\_  
 Date/Time (Tarikh/Masa): \_\_\_\_\_  
 PTW Coordinator(2)/Kordinator: \_\_\_\_\_  
 Sign 2 (Tandatangan): \_\_\_\_\_  
 Date/Time (Tarikh/Masa): \_\_\_\_\_

PTW Authoriser  
Pemberkuasa: \_\_\_\_\_  
 Sign (Tandatangan): \_\_\_\_\_  
 Date/Time (Tarikh/Masa): \_\_\_\_\_










PTW Applicant  
Pemohon: \_\_\_\_\_  
 Sign (Tandatangan): \_\_\_\_\_  
 Date/Time (Tarikh/Masa): \_\_\_\_\_

PTW Approver  
Pelulus: \_\_\_\_\_  
 Sign (Tandatangan): \_\_\_\_\_  
 Date/Time (Tarikh/Masa): \_\_\_\_\_

**Section D:**

**Identify and discuss Life Saving Rule**

(1) Tick the Life Saving Rule(s) relevant to the task  
 (2) Discuss the rules?  
 HPB-HSEQ-GEN-PCD12-FRM01 Rev 0

<p>1. <b>Bypassing Safety Controls:</b> Obtain authorisation before overriding or disabling safety-controls</p> <input checked="" type="checkbox"/> 	<p>4. <b>Energy Isolation:</b> Verify isolation and zero energy before work begins</p> <input checked="" type="checkbox"/> 	<p>7. <b>Safe Mechanical Lifting:</b> Plan lifting operations and control the area</p> <input checked="" type="checkbox"/> 
<p>2. <b>Confined Space:</b> Obtain authorisation before entering a confined space</p> <input type="checkbox"/> 	<p>5. <b>Hot Work:</b> Control flammables and ignition sources</p> <input checked="" type="checkbox"/> 	<p>8. <b>Work Authorisation:</b> Work with a valid permit when required</p> <input checked="" type="checkbox"/> 
<p>3. <b>Driving:</b> Follow safe driving rules</p> <input type="checkbox"/> 	<p>6. <b>Line of Fire:</b> Keep yourself and others out of the line of fire</p> <input checked="" type="checkbox"/> 	<p>9. <b>Working at Height:</b> Protect yourself against a fall when working at height</p> <input checked="" type="checkbox"/> 

**10+1 HAZARD PROMPT**

The 10+1 Hazard Prompt are the possible among the common hazards in the workplace. Use it in the risk assessment activity.

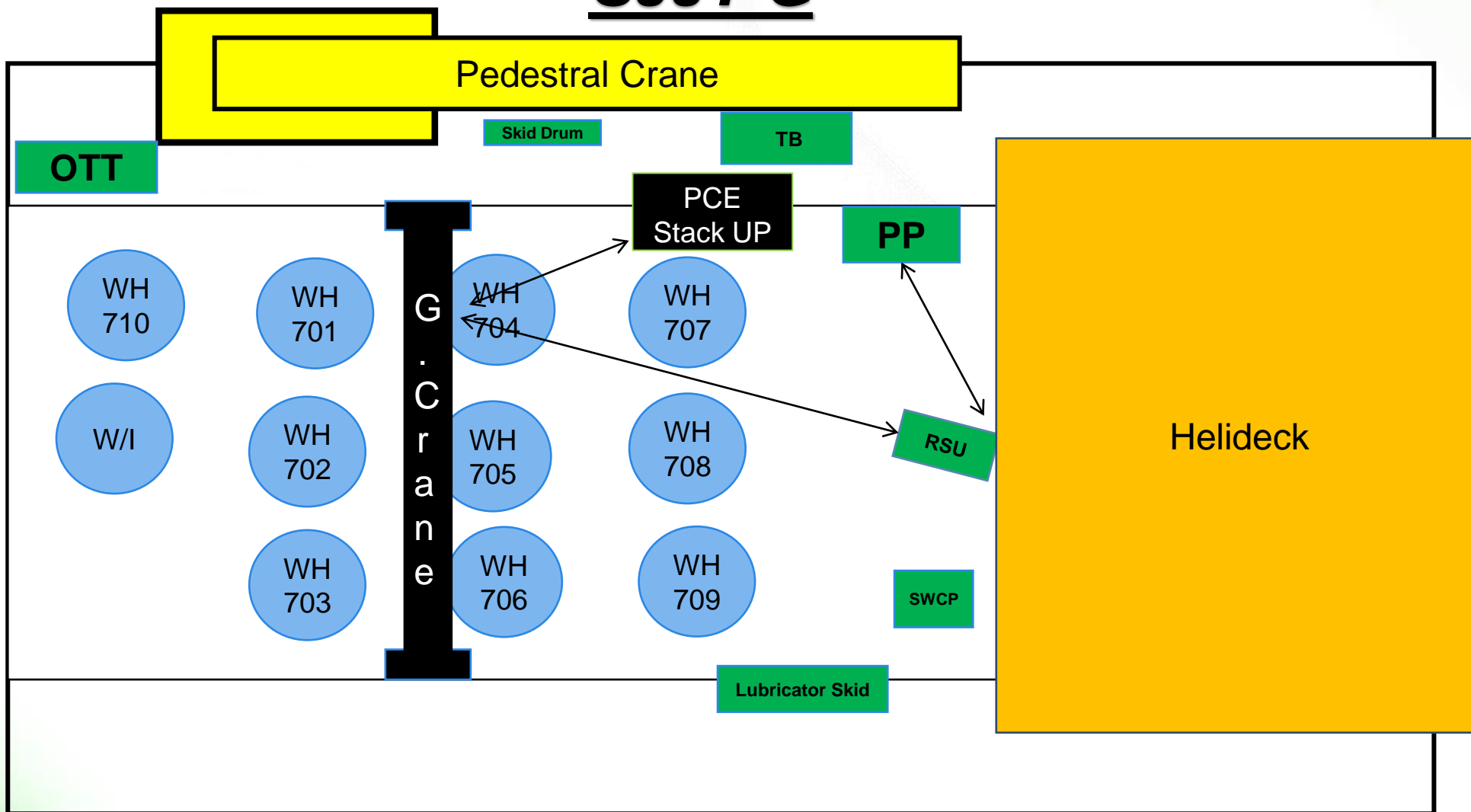
<p><b>Biological</b></p> <p>Covers the many sources of energy in life forms for wildlife to small viruses or bacteria.</p> <ul style="list-style-type: none"> <li>• Legionella Bacteria</li> <li>• Rabies</li> <li>• Blood borne pathogens</li> <li>• Food poisoning</li> <li>• Snakes, insects bites</li> </ul>	<p><b>Weather</b></p> <p>Energy sources from weather that could impact the work environment.</p> <ul style="list-style-type: none"> <li>• Wind</li> <li>• Ice</li> <li>• Fog</li> <li>• Ambient temp</li> </ul>	<p><b>Chemical</b></p> <p>Chemical energy contained in gases, liquids, solids.</p> <ul style="list-style-type: none"> <li>• Methane, H<sub>2</sub>S</li> <li>• Solvents</li> <li>• Explosives</li> <li>• Asbestos</li> <li>• Fire smoke &amp; fumes</li> </ul>
<p><b>Radiation</b></p> <p>Energy release from radioactive and electro-magnetic sources.</p> <ul style="list-style-type: none"> <li>• Ionizing radiation</li> <li>• Light</li> <li>• Radio waves</li> </ul>	<p><b>Gravity</b></p> <p>Naturally occurring energy that causes things or people to fall or move downhill.</p> <ul style="list-style-type: none"> <li>• Working at height</li> <li>• Dropped objects</li> </ul>	<p><b>Body Mechanics</b></p> <p>Covers the human bodies own energy to move.</p> <ul style="list-style-type: none"> <li>• Lifting</li> <li>• Pushing</li> <li>• Climbing</li> </ul>
<p><b>Pressure</b></p> <p>Pressure is a force exerted in pneumatic or hydraulic system.</p> <ul style="list-style-type: none"> <li>• Gas/Liquid under pressure</li> <li>• Hydrocarbon from motion</li> </ul>	<p><b>Electricity</b></p> <p>Electrical energy from flow of electric current.</p> <ul style="list-style-type: none"> <li>• Junction boxes</li> <li>• HV cables</li> <li>• Electrical power equipment</li> </ul>	<p><b>Motion</b></p> <p>Energy due to motion.</p> <ul style="list-style-type: none"> <li>• Turning fan</li> <li>• Hanging load</li> <li>• Moving vehicle</li> <li>• Person running</li> </ul>
<p><b>Thermal</b></p> <p>Energy that comes from hot or cold surfaces.</p> <ul style="list-style-type: none"> <li>• Unlagged surface of pipe</li> </ul>	<p><b>Invisible</b></p> <p>Hazard that cannot be seen or smelled.</p> <ul style="list-style-type: none"> <li>• High pressure</li> <li>• Free pressure</li> </ul>	

Severity	People	Consequences				Probability				
		Asset	Environment	Reputation	A (1) Very unlikely	B (2) Unlikely	C (3) Possible	D (4) Likely	E (5) Almost certain	
5 Catastrophic	Single fatality	<b>Massive Damage</b> CAPEX USD 25mil OPEX USD 2.5mil Production loss >20% annual target	<b>Massive Effect</b> Persistent severe environmental damage Tier 3 Oil Spill Response LOPC: Major release equal to or above 100 times Tier 1 Threshold	<b>Massive international consequence</b> International public attention. Extensive adverse attention in international media.	5	10	15	20	25	
4 Major	PTD, PFD	<b>Major Damage</b> CAPEX USD 15-25mil OPEX USD 2.5mil Production loss 10-20% annual target	<b>Major Effect</b> Severe environmental damage Tier 2 Oil Spill Response LOPC: Major release equal to or above 10 times Tier 1 Threshold and below 100 times the limit	<b>Major national consequence</b> National public concern. Extensive adverse attention in the national media.	4	8	12	16	20	
3 Moderate	Major injury or health effect LWC or RWC, > 4 calendar days	<b>Moderate Damage</b> CAPEX USD 5-15mil OPEX USD 1-2mil Production loss 5-10% annual target	<b>Moderate Effect</b> Local environmental damage LOPC: Major release equal to or above Tier 1 Threshold and below 10 times the limit	<b>Moderate localized consequence</b> National media and/or regional political attention resulting in negative consequence on company operations.	3	6	9	12	15	
2 Minor	Minor injury or health effect LWC or RWC, <= 4 calendar days	<b>Minor Damage</b> CAPEX/OPEx USD 50K-500K Production loss <= 5% annual target	<b>Minor Effect</b> Minor environmental damage, but no lasting effect. LOPC: Minor release equal to or above Tier 2 and below Tier 1 Threshold	<b>Limited consequence</b> Local media and/or local political attention with potentially negative consequence for company operations.	2	4	6	8	10	
1 Slight	Slight injury or health effect No Treatment Case or FAC	<b>Slight Damage</b> CAPEX/OPEx USD 50K-500K Production loss <2% annual target	<b>Slight Effect</b> Slight environmental damage contained within the premises. LOPC: Slight release below Tier 2 Threshold	<b>Slight effect</b> Local public awareness but no discernible concern.	1	2	3	4	5	
Notes:	PTD: Permanent Total Disability PFD: Partial Permanent Disability LWC: Lost Working Capacity RWC: Restricted Work Capacity FAC: First Aid Case See explanation table	Direct Cost: Cost directly attributed to the incident, includes indirect costs. See explanation table	LOPC: Material Release Threshold Quantities per API Recommended Practice 754 See explanation table	See explanation table	Never heard of in the last 100 years in O&G O&G = Oil & Gas Industry	Heard of within the last 10 years in O&G	Has happened within the last 5 years in the O&G or Group of Companies Group = HPB including all Op Co	Has happened at the Op Co once per year	Has happened more than once per year at the Op Co	

Risk Assessment Matrix is a tool that standardize qualitative risk assessment and facilitates the categorization of risk from the threats to people, assets, environment and company reputation. For guidance in

# Spot Equipment

## SJJT-G



# Rig up procedure.

- Obtain Permit to Work and conduct Toolbox Meeting between Hibiscus Wells CSR and DB slickline crews onsite.
- Record the FTHP, SITHP and CHP prior to commence with the operations.
- Ensure the well is shut in and prepare for rig up activity.
- Signage “wireline in progress” must be displayed.
- Transfer control of the SSV and SCSSV from the COM / Wellhead Control Panel to the Slickline’s Single Well Control Panel (SWCP).
- Close Crown Valve. Bleed off pressure above the Crown Valve through the tree cap needle valve and perform inflow test for 15 minutes.
- Close Upper Master Valve. Bleed off flowline and perform inflow test on Upper Master Valve for 15 minutes.

# Rig up procedure.

- Bleed off flowline and close the Flow Wing Valve (FWV) and Flow Line Valve (FLV).
- Function test TRSCSSV. Record pressure and hydraulic volume being pumped when pressure up. Isolate the control line pressure from wellhead panel and disconnect the tubing. Hook-up the hydraulic pressure supply line from DB SWCP.
- Rig up slickline lower PCE stack on the wellhead + dual BOP.
- Attach Chain block onto the gantry crane pad eyes.
- Lay down and make up Upper PCE section on main deck as per PCE Stack Up. Attach lubricator clamp's sling onto the chain block. Manually hoist the chain block until the lubricator sections is fully upward.
- Pressure test slickline PCE stack up to wellhead at low pressure test of 500 psi for 5 minutes and high pressure test of 1,000 psi for 15 minutes.
- Once satisfactory pressure test achieved, bleed off the pressure and prepare to proceed as per the procedures.
- Function test BOP open/close both rams.

# PCE Stack Up

Description	Top Connection (Pin)	Bottom Connection (Box)	Length (ft)	I.D. (inches)	Seal Bore Size
STUFFING BOX	N/A	5"-4 ACME OTIS	STD	3.00	N/A
LURICATOR c/w clamp	5"-4 ACME OTIS	5"-4 ACME OTIS	8.0	3.00	3.50
LURICATOR	5"-4 ACME OTIS	5"-4 ACME OTIS	8.0	3.00	3.50
LUBRICATOR c/w 1.5" NPT Port	5"-4 ACME OTIS	5"-4 ACME OTIS	8.0	3.00	3.50
QUICK TEST SUB	5"-4 ACME OTIS	5"-4 ACME OTIS	2.9	2.90	3.50
DUAL RAM HYDRAULIC BOP	5"-4 ACME OTIS	5"-4 ACME OTIS	3.1	3.00	3.50
4FT PUP	5"-4 ACME OTIS	5"-4 ACME OTIS	4.0	3.00	3.75
Riser	5"-4 ACME OTIS	5"-4 ACME OTIS	8.0	3.00	3.50
BALL VALVE	5"-4 ACME OTIS	5"-4 ACME OTIS	2.8	3.00	3.50
2FT PUP	5"-4 ACME OTIS	5"-4 ACME OTIS	2.0	3.00	3.75

**Total length**

**46.8**

# Detail BHA ( Bottom Hole Assembly )



# **Toolstring Configuration**

## **Drift 2.867" For 3.1/2" Tubing (Top of B7 safety valve)**

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + 20" Mechanical Jar + 2.867" Drift

## **Retrieved and set B7 safety valve**

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + 20" Mechanical Jar + QXD pulling / running tool.

## **Drift 2.735" \* For 3.1/2" Tubing / below safety valve**

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

## **Wire scratcher 2.5" / 3.0"**

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + 2.5" wire scratcher / 3.0" wire scratcher

# Toolstring Configuration

## X-Line 2.750" c/w Pxx-Plug

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + X-Line 2.750" c/w Pxx-Plug

## 3'0 X-Check set tool

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + 3.0" x-check set tool

## Set / Retrieved 1.50" P Equalizing Prong

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + 2.00" SB pulling tool c/w 1.50" X 4ft P Equalizing Prong

## Retrieved Pxx-Plug

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + 3.0" GS

# **Toolstring Configuration**

## **Set gas Lift catcher**

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + X-Line  
2.750" c/w 2.750" gas lift catcher.

## **GLVC**

1-7/8" Rope Socket + Swivel Joint + 5 ft Normal Stem + Knuckle Joint + Hydraulic Jar + 20" Mechanical Jar + 3.0" KOT  
c/w 1.25" PCE to retrieve / JK-1 to set.

# Toolstring Details

No	Description	Length (ft )	Estimate Weight (lbs)
1	1-7/8" Rope Socket	0.5	7.0
2	1-7/8" Swivel Joint	0.5	8.0
3	1-7/8" x 5ft Normal Stem	5	46.0
4	1-7/8" Knuckle Joint	1	8.0
5	1-7/8" Hydraulic Jar	4.4	14.0
6	1-7/8" 20" Mechanical Jar	5	22.0
7	2.867" Drift	1.2	18
8	2.735" Drift	1	15
9	2.750" X-Line	2.5	24.00
10	3.0" x-check set tool	0.7	8.0
11	2.0" SB Pulling tool	1.10	10.0
12	3.0" KOT	4.5	28.00

# Job objective

- To investigate any possible tubing casing communication issue & GLVC.(note: CHP observed build up exceeding limit)

- **Instruction**

## **SJ-704L**

1. Perform SJ-704L HUD check. Retrieve B7 at 415ft.thf.
2. Install plug at 2019ft.thf (circulation SSD).
3. Rig down from LS.

## **SJ-704S**

1. Perform SJ-704S HUD check. Retrieve B7 at 382ft.thf.
2. Install plug at 2020ft.thf (X-nipple).

## Diagnostic step:

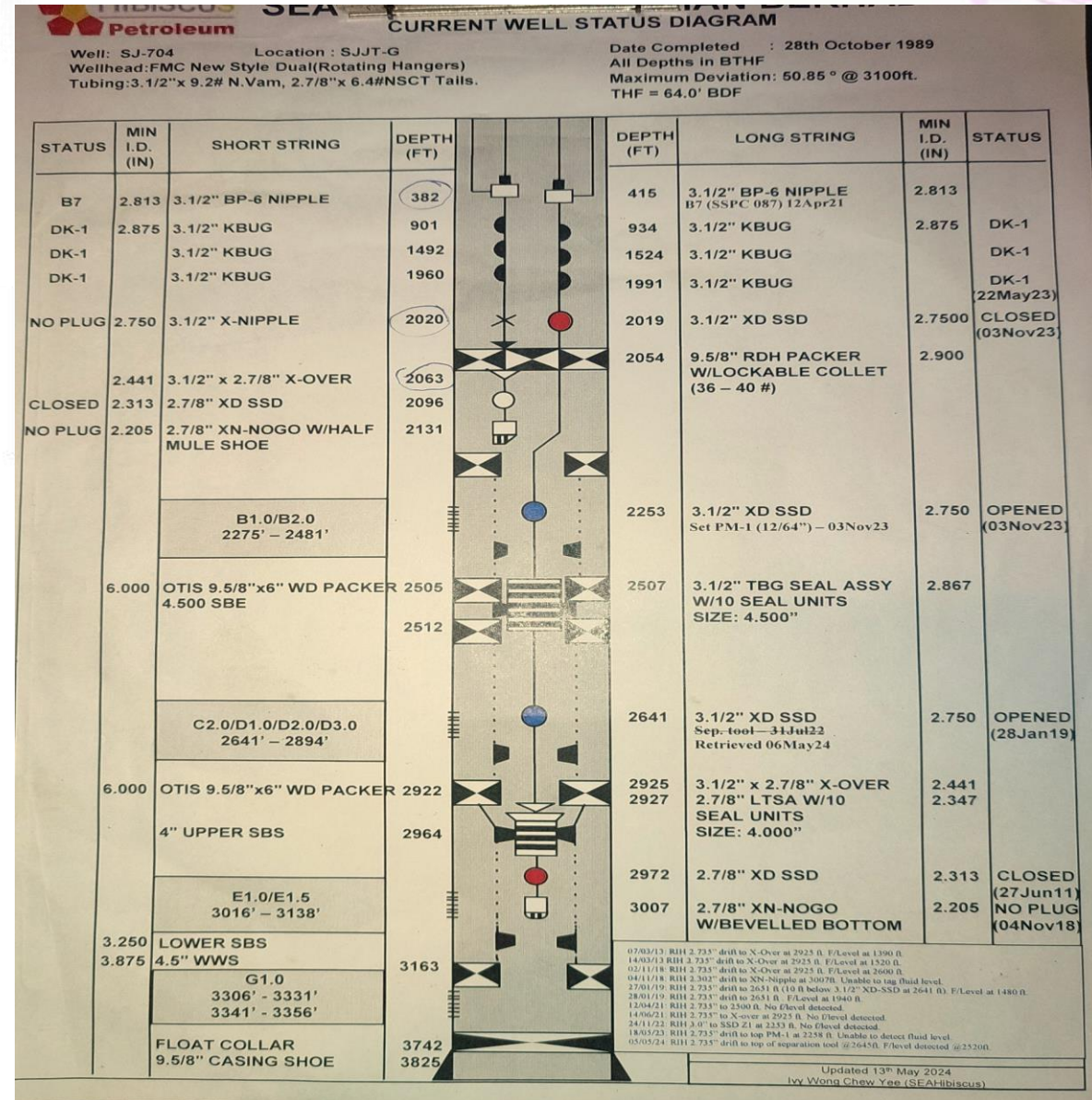
1. Bleed off LS & SS THP to 0psi.
2. Bleed off CHP to 0psi. Monitor for pressure build up in LS, SS & CHP for 1 hour and record in a table.
3. If CHP & SS have pressure builds up, bleed off the CHP & SS back to 0psi & proceed next step
4. Inject LS to 500psi and monitor for any CHP pressure changes for 1 hour. Record results in a table (ensure SS CITHP is 0psi during monitoring period).
5. Bleed off LS & CHP to 0psi. Inject SS THP to 500psi and monitor for any CHP pressure changes for 1 hour. Record results in a table (ensure LS CITHP is 0psi during monitoring period).
6. If observed LS communicate with CHP in step (4), proceed to perform GLVC (SPM 1 & 2 only) follows by TIC after each GLV change out (ensure plug retrieved & set GLV catcher prior GLVC).
7. If observed SS communicate with CHP in step (5), proceed to perform GLVC (all 3 SPMs) follows by TIC after each GLV change out (ensure plug retrieved & set GLV catcher prior GLVC).
8. Inform town the results and end investigation.
9. Normalize the well (retrieve GLV catcher, set back B7 on both LS & SS).

# Well diagram & history On Well SJ 704S



# Well diagram SJ 704S

No	Accessories	THF-Depth (ft)	Status	Remark
1	WRSCSSV	382		B7
2	SPM #1	901		DK-1
3	SPM #2	1492		DK-1
4	SPM #3	1960		DK-1
5	3.1/2" X-Nipple	2020		No Plug
6	3.1/2" x 2.7/8" x-over	2063		
7	2.7/8" SSD	2096	Closed	
8	2.7/8" XN-NOGO w/half Mule shoe	2131	No Plug	



# Well history

Last entry was 2006 (SS-Active gas injector)

*For well file*

**EPA-T-WSV OPERATION REPORT**

FROM	SSPC EPA-T-WSV, Kota Belud	Date	22/08/06
TO	EPA-PM-PSPP2, Lutong		
COPY	EPA-T-WSV, KKOB & Lutong		
COPY	EPA-PM-SBOS		

**HSE SUMMARY**

1. No. of ACTS/STOP Cards	Nil
2. Near Miss	Nil
3. Incident	Nil

**CREW**

EPA-T-WSV	John Wong
Amsito	Michael Sim, Dexter Lamat, Willy Ajan

**WELL SERVICES SURFACE EQUIPMENT INVENTORY**

Description	Type/size	Number	Due Date	Descriptions	Remarks
Power pack	Camco	503	05/07	Engine Running hrs	0 hrs
Reel skid	Camco	702	08/06	Wire: Type & Size	Bridon 0.092"
Stuffing box	3"	SSPC 610	05/07	Date sample taken & Turns	19/08/06 & 24 turns
Bag		SSPC 415	05/07	Length of Wire discarded	0 ft
Lubricator	3"x 8 ft	SSPC 904, No. XX 2 & XX1	05/07	Wire left in spool	21,510 ft
Chaser				Xmasct tree top / flow-line valve	Good
Lub. extension	3" x 4 ft	SSPC 101 & 026, 011	05/07	Chain Block	
Weight indicator		001		Long Toolbox No	
S.W.C.P		1575			

**WELL SERVICES DAILY REPORT FROM 0600 HRS 22/08/06 TO 0600 HRS 23/08/06**

LOCATION	SJTT-G
WELL No.	SJ-7045
OPERATION TYPE	SCSSV leak investigation

Well status before operation	C/in		
Close in well at Date			
CITHP	460 Psig	Time	530 Hrs
		CHP	Psig

**PROGRAMME**

TIME	PROGRAMME		
0600	Departed from KBH.		
0930	Arrived at SJTT-G via SF route crew boat. Pre-job briefing.		
1120	Wait for O.T from SJK-A to approve PTW. Carried out leak test on the surface control line manifold to the Auto-con pump. Found Auto-con pump continuous pumping. Flushed the control with hyd. oil and repeated test and still found the Auto-pump continuous pumping. Reported to the frontline.		
1200	Connected SWCP to SCSSV and tested good. Pressure up control line to 3800 psi with the SWCP. Observed for 15 mins. Found pressure holding at 3800 psi and no stroking. Bled-off control line pressure to zero psi. Good. Carried out DP test by bleeding down CITHP to minimum from 460 psi to 100 psi and observed for 15 mins. Pressure maintaining. Pressured up c/line to 3800 psi and confirmed SCSSV function normally. Repeated test and similar result. Good. Disconnected SWCP from SCSSV/SSV and House kept at worksite. Well remain c/in as per instruction.		
1715	Departed SJTT/G.		
1915	Arrived at KBH.		
Planned No. of wireline runs	0	Wireline misrun(s)	Nil
Max. CITHP during ops.	460 Psig	Max. wire pull during ops	Lbs
Well status after operation	C/in	OU time	Hrs
CITHP	460 Psig	CHP	530 Psig

**PLANNED ACTIVITY ON: SJTT-G**

Well No.	Programme
SJ-701L	To rectify SCSSV passing

- Note: SJ 704L  
2.750" PXX plug c/w 1.50" PX equalising prong installed at 3.1/2" XD SSD 2019ft (Circulating SSD).

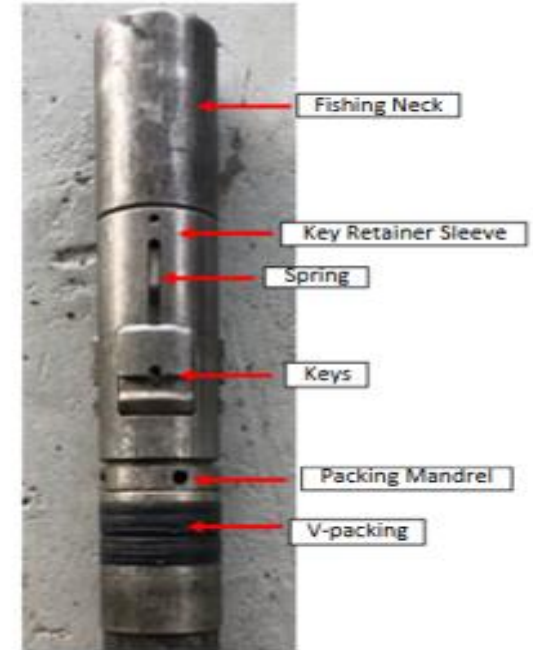
# Plug introduction LOCK MANDREL – Nipple lock



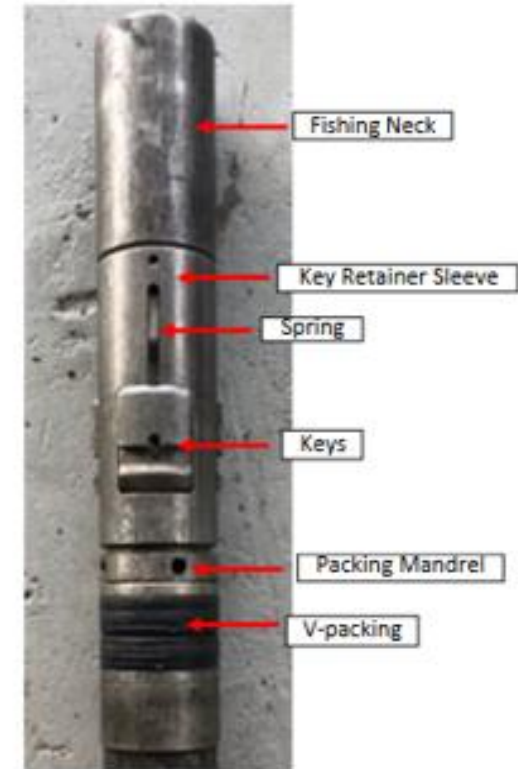
# Lock Mandrel – Nipple Lock

## X / XN Lock

- The X / XN lock mandrels designed by Otis set the standard for selective locks and are in common use worldwide.
- X lock mandrel designed to locate and lock in a compatible “X” nipple.
- There are two types of nipple locks:
  - “X” Locks – Selective
  - XN Locks – No-Go



- The 'X' Lock system uses identical nipples in each respective tubing size. The operator can select which nipple the lock is to be set in, by the use of a selective running tool
- The XN Lock is an 'X' lock with the keys changed to XN. All other components are identical, including the running and pulling tools
- This lock mandrel can be run in the selective or non-selective mode, determined prior to running by the position of running tool.



# X / XN Lock Advantages

1. V-Packing is seal at polished bore of the nipple.
2. Hold pressure from both direction.
3. Can be set in the 'X' profile of SSD.
4. Identical nipples simplify installation and ordering.

# X / XN- Operation

- Before running the 'X' or XN Locks, you should check the following:
  - i. All threads are tight - Note the hole in the expander mandrel for a bar (DO NOT PLACE A WRENCH ON THIS SURFACE) Correct profile keys - 'X' or 'XN'
  - ii. Check serrations on the expander mandrel and keys. Replace if worn
  - iii. Check the internal fishing neck for wear / damage
  - iv. Key spring tension. Keys should be :  
Fully retracted and firm in SELECTIVE.  
Sprung forward evenly in NON-SELECTIVE
- **Running Tool: X-line**
- **Pulling Tool: GR/GS**



# X / XN- Operation

'X' keys have a 90° shoulder.



X key

90°

XN have 45° shoulder.



XN key

45°



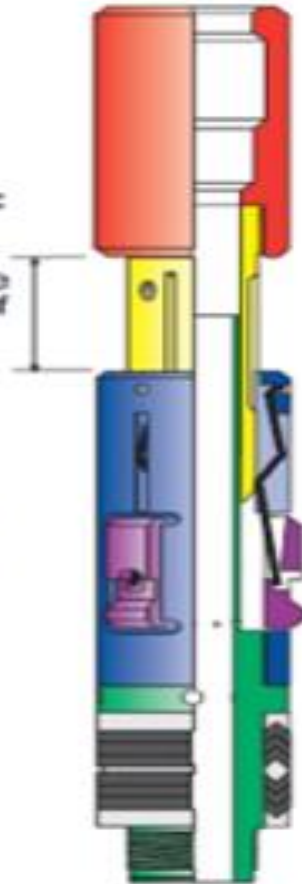
# X / XN- Operation

## Non-selective position:

Gap closed by a distance equal to the movement of the core in the running tool

Keys partially extended.

Spring holds keys out to locate in 90° profile

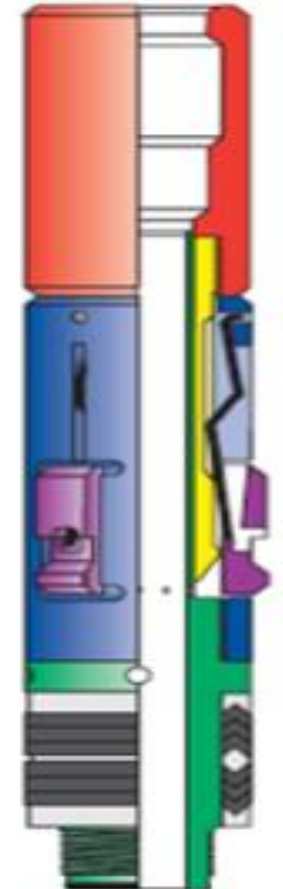


## Locked Position:

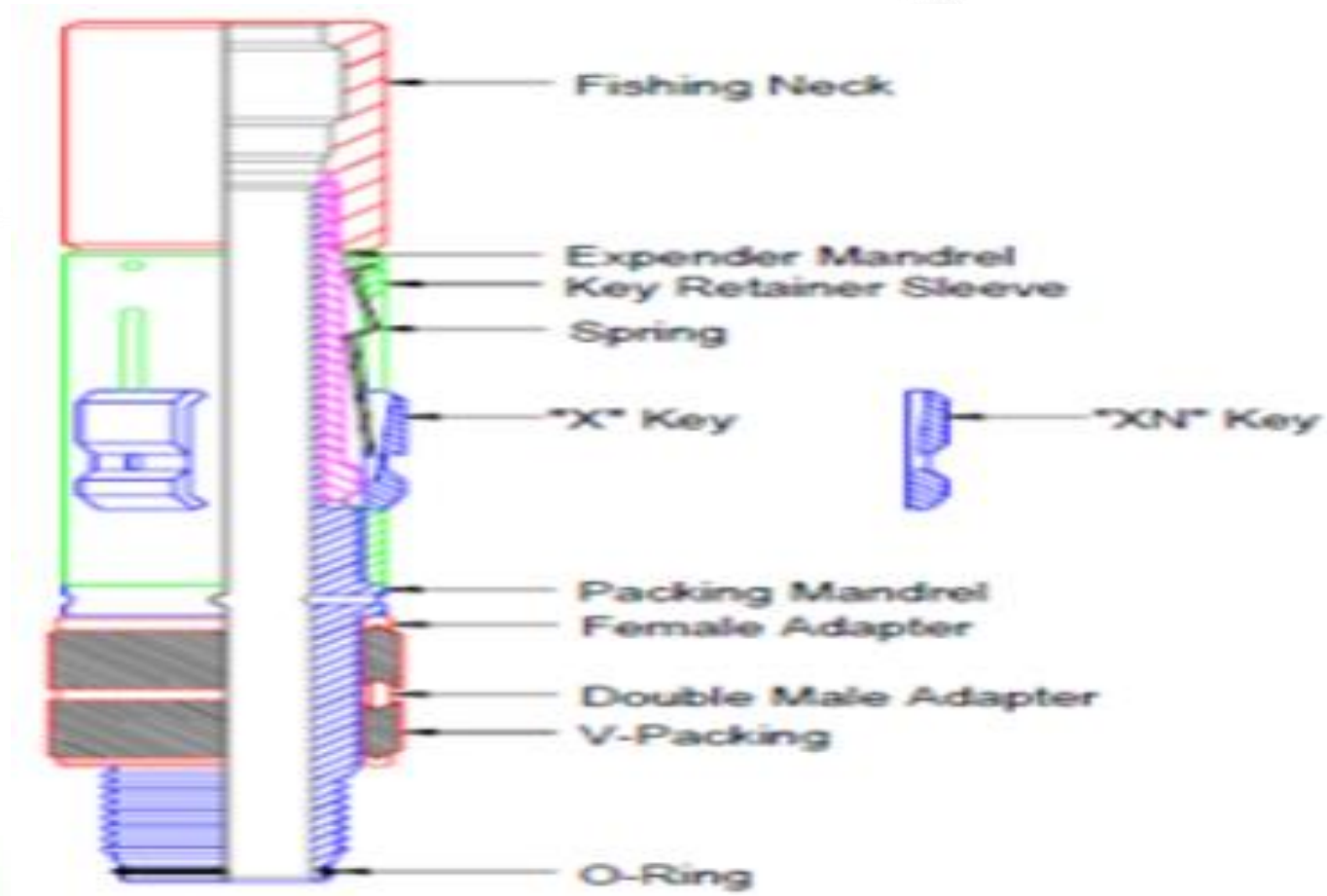
Fishing neck fully closed against key retainer

Keys fully extended

Locked out by expander mandrel



# X / XN Lock - Parts



# PX equalising prong



# 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.
- RIH the correct size of wire scratcher.
- If toolstring is held up and unable to be tapped through, pull out of hole.
- While POOH, take noted of the pulling weight 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.

# Operation running sequence

## Pressure on THP & CHP

- CITHP : 400 psi
- CHP : 395 psi

\*Last report on DOR was 23/08/2006 (CITHP 460 psi / CHP 530 psi)

## Before start any operation, daily check is needed for:

1. Power pack
2. Reel skid unit
3. SWCP
4. Well status ( Flowing/Close in)

## RIH Sequence

- Performed DP test
- RIH 2.867” drift to make sure top of B7 safety valve is clear before retrieve it. ( contingency wire scratcher)

# Operation running sequence

- **RIH Sequence**
  - RIH QXD pulling tool to retrieve B7 safety valve. (check v-packing condition, redress if damage)
  - Changed toolstring configuration. RIH 2.735" drift in tandem RS 2.5" to 3.1/2" X-Over 2.7/8" tubing at 2063ft. (Contingency RIH wire scratcher)
  - RIH 2.750" X-line c/w 2.750" PXX plug in selective mode. Control and located X-nipple profile 3.1/2" at 2020ft.

# Setting plug at nipple

1. RIH Plug in selective/control mode subjective to well schematic and perform pick up weight before setting nipple.
2. Run down and pass through setting nipple 10ft below.
3. Pick up and pass thru setting nipple to control the running tool.
4. Run down and sit on setting nipple.
5. Jar down until top pin running tool shear
6. Perform pull test to twice pick up weight 2 times.
7. Jar up to shear off bottom running tool pin
8. POOH.

# Operation running sequence

- **RIH Sequence**
  - RIH 3.0" X-check set tool to confirm 2.750" X-lock mandrel fully set at depth 2020ft.
  - RIH 2.00" SB pulling tool c/w 1.50" X 4ft P Equalizing Prong on top of plug at 2020ft. (jarring down 4 times to shear the SB pulling tool).
  - Performed DP test on SS/LS to make sure the safety valve flapper is open.
  - Bleed SS,LS THP and CHP to minimum / Zero psi.

# Operation running sequence

- Performed inflow test.

Well no	TIC	Initial pressure before bleed down (psig) & time.	Initial pressure after bleed down (psig) & time.	Monitoring pressure reading after (psig)						
				5 mins	10 mins	20 mins	30 mins	40 mins	50 mins	60 mins
SJ 704	CHP (bleed down)	12:30 540 psi	16:00 40 psi	40 psi	50 psi	50 psi	60 psi	60 psi	60 psi	60 psi
	LS CITHP	510 psi	10 psi	10 psi	10 psi	10 psi	15 psi	15 psi	20 psi	20 psi
	SS CITHP	400 psi	0 psi	0 psi	0 psi	0 psi	0 psi	0 psi	0 psi	0 psi

- **RIH Sequence**

- RIH 2.0" SB pulling tool to retrieve prong at 2020ft. Observed THP increased slowly from 380 psi to 400 psi and maintain.
- RIH 3.0" GS pulling tool to retrieve PXX-Plug body at 2020ft.
- RIH 2.750" X-line c/w 2.750" GL catcher in selective mode. Control and located X-nipple profile 3.1/2" at 2020ft.
- RIH 3.0" KOT c/w 1.25" HDPT PCE (long core, short reach) to retrieve (DK-1 Bottom Latch) from SPM 1,2 & 3.
- RIH 3.0" KOT and installed JRD top latch at SPM 1,2 & 3.

Well no	TIC	Before bleed	After bleed	Monitoring pressure reading after (psig)						
				5 mins	10 mins	20 mins	30 mins	40 mins	50 mins	60 mins
SJ 704	CHP	09:00 395 psi	14:10 50 psi	50 psi	50 psi	70 psi	70 psi	80 psi	90 psi	90 psi
	LS CITHP	340 psi	10 psi	10 psi	10 psi	15 psi	20 psi	25 psi	30 psi	35 psi
	SS CITHP	400 psi	400 psi	400 psi	400 psi	400 psi	400 psi	400 psi	400 psi	400 psi

# Pre and Post Operational



# Pre & Post Operational

- **Toolstring / tools.**

- Condition / connection
- Any damage / file any sharp edges
- Correct size
- Service and function test on surface.

- **Retrieve B7 safety valve**

- Well shut in condition
- Pulling / Running tool condition and connection
- Service and function test
- Make sure SWCP functioning well
- DP test

# Pre & Post Operational

- **Install PXX-Plug / Prong**

- Running tool size (X-Line, X-Lock mandrel & SB), Condition, service tool, function test, plug/prong packing.
- Condition of the well. Tubing size
- Record pressure. (CITHP,CHP)
- Record tool weight (R/W, H/W, P/W)

- **Retrieve PXX-Plug / Prong**

- Pulling tool size (GS & SB), Condition, service tool, function test.
- Condition of the well. Tubing size
- Record pressure. (CITHP,CHP)
- Record tool weight (R/W, H/W, P/W)
- Inject pressure if THP lower than pressure below plug.
- Make sure pressure is equalized after retrieved P equalizing prong prior to retrieve PXX-Plug.

# Pre & Post Operational

- **Install Gas Lift catcher.**

- Running tool size (X-Line / X-Lock mandrel), Condition, service tool, function test.
- Condition of the well. Tubing size
- Record tool weight (R/W, H/W, P/W)

- **Retrieve / install gas lift**

- **Check the condition of the running tool and pulling tool.(JK-1,GA2 / JDC,HDPT)**
- **Service and function test.**
- **Close in gas lift supply**
- **Bleed down CHP. (make sure tubing pressure is greater than CHP pressure prior to retrieve)**
- **Record CITHP and CHP before / after perform GLVC.**



**THANK YOU**