

<b>Hub</b>	<b>Central East Hub</b>	<b>Field</b>	<b>Nun River</b>
<b>Meeting</b>	Risk Assessment for NUNR004 & NUNR011		
<b>Date</b>	19/11/2021		
	<b>Attendees</b>		
	Benjamin Ajaraogu (Well Integrity TA2), Diepere Taiger (Well Integrity Adviser); Ikechukwu Onyegahialam (CWI); Eelah Muzan (WIFP); Uchenna Udobata (WIFP); Victor Uzozie (Asset Operations); Caleb Yanet (Mtce Tech)		
<b>Objectives</b>	The objective of the risk assessment meeting was to: <ul style="list-style-type: none"> <li>Review the SCE failures on NUNR004 &amp; NUNR011</li> <li>Conduct risk assessment for the wells</li> <li>Confirm mitigations to prevent the risk of a top event</li> </ul>		

### Description of Well Integrity Issues

Well	Action Code	Red Group	Reason being Red	Background/Discussions	Secured?	Risk Assessment Outcome/ Mitigation Action
NUNR004	9	SCE	LMV2, SSSV2, UMV2	<ul style="list-style-type: none"> <li>NUNR004 has been closed in since 1978</li> <li>Well was closed-in due to reservoir pressure decline and HGOR</li> <li>There is no wellhead cage installed for the well.</li> <li>There is NRV in the LS but not in the SS</li> <li>Measured CHP A/B: 0psi</li> <li>The well is on a land location about 50m from built up area and not fenced</li> <li>Well has been earmarked for securing.</li> <li>Future opportunity is a workover planned for 2031.</li> </ul>	No	<ul style="list-style-type: none"> <li><b>Mitigations:</b> <ul style="list-style-type: none"> <li>Swab valve, wing valve and kerotex valve on the well are tested and integral</li> <li>There is a 3-monthly visiting frequency to the well location which is to be increased to monthly.</li> </ul> </li> <li><b>Risk Assessment: <u>MEDIUM RISK</u></b> <ul style="list-style-type: none"> <li><b>People: 4C</b></li> <li><b>Asset: 2C</b></li> <li><b>Community: 3C</b></li> <li><b>Environment: 3C</b></li> </ul> </li> </ul>
NUNR011	6	SCE	SSSV, SSSV2	<ul style="list-style-type: none"> <li>NUNR011L/S are producing</li> <li>Well head and Christmas tree valves were tested and confirmed integral</li> <li>There is a cage covering control panel, bean box but not the Christmas tree valves</li> <li>There are some inconsistencies observed in the CITHP trend measured over the past years and require validation before Risk Assessment to be done.</li> </ul>	No	<ul style="list-style-type: none"> <li><b>N/A</b></li> </ul>

**Risk Assessment Matrix**

Severity	Consequences				Increasing likelihood				
	People	Assets	Environment	Reputation	A	B	C	D	E
					Never heard of in the Industry	Heard of in the Industry	Has happened in the Organisation or more than once per year in the Industry	Has happened at the Location or more than once per year in the Organisation	Has happened more than once per year at the Location
<b>0</b>	No injury or health effect	No damage	No effect	No impact					
<b>1</b>	Slight injury or health effect	Slight damage	Slight effect	Slight impact					
<b>2</b>	Minor injury or health effect	Minor damage	Minor effect	Minor impact			NUNR004 Assets: 2C		
<b>3</b>	Major injury or health effect	Moderate damage	Moderate effect	Moderate impact			NUNR004 Community:3C Environment: 3C		
<b>4</b>	PTD or up to 3 fatalities	Major damage	Major effect	Major impact			NUNR004 People: 4C		
<b>5</b>	More than 3 fatalities	Massive damage	Massive effect	Massive impact					

**Actions:**

S/N	Action	Action Party	Close-Out Date
1	Carry out <b>monthly</b> surveillance to NUNR004 well location	Victor	30/11/2021
2	Measure CITHP on NUNR004S using advised steps from WIFP	Victor	26/11/2021
3	Prioritize well securing for NUNR004 and secure well at earliest opportunity	lyke	Q1 2022
4	Measure CITHP on NUNR011S & NUNR011L to enable review of observed inconsistencies in data input	Victor	26/11/2021
5	Clearly label the L & S arms on NUNR011 to forestall any future errors in measurements	Victor	26/11/2021

