

Morning Report PNR1z				
Management System:		HSE	File Name:	022_PNR1z_29.10.2018_RMR
Approver:		Senior Geoscientist	Version No:	1
Reviewer:		Frac Manager	Date of Issue:	30 th October 2018
Author:		Senior Geoscientist	Proposed date of Review:	n/a
Version	Section	Revision Information	Date	Reviser
0.1	All	Draft Publication	30/10/2018	Senior Geoscientist
<i>Documents are reviewed as per proposed review date, or sooner if a significant change to the operation has taken place, to ensure relevance to the systems and process that they define.</i>				

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Summary

Overview of day's operations:

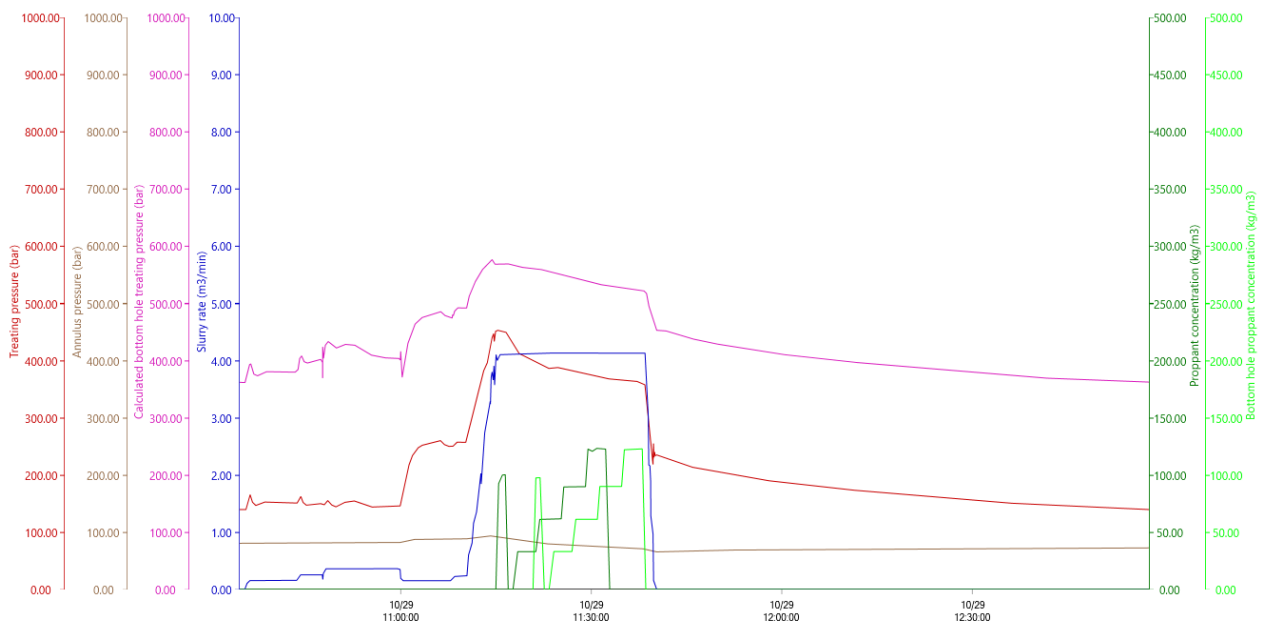
- Fracture operations performed on sleeve 32
- Flowback performed – 8.45 m³
- Induced seismicity 29/10/2018 11:30:39 – 1.0 M_L
- No red line boundary breached

Injection Summary

Stage 32

Injection Depth m (RT)	Volume (fluid m3, proppant tonne)	Fluid System	Additives (type, mass kg, %)
-2823.09 M MDRT	Slickwater Frac (119.1 m3 & 4.8 T)	Slickwater	B528 Friction Reducer, Slickwater Frac – 28 kg – 0.02 %
-2337.56 M TVDRT			

Injection Chart

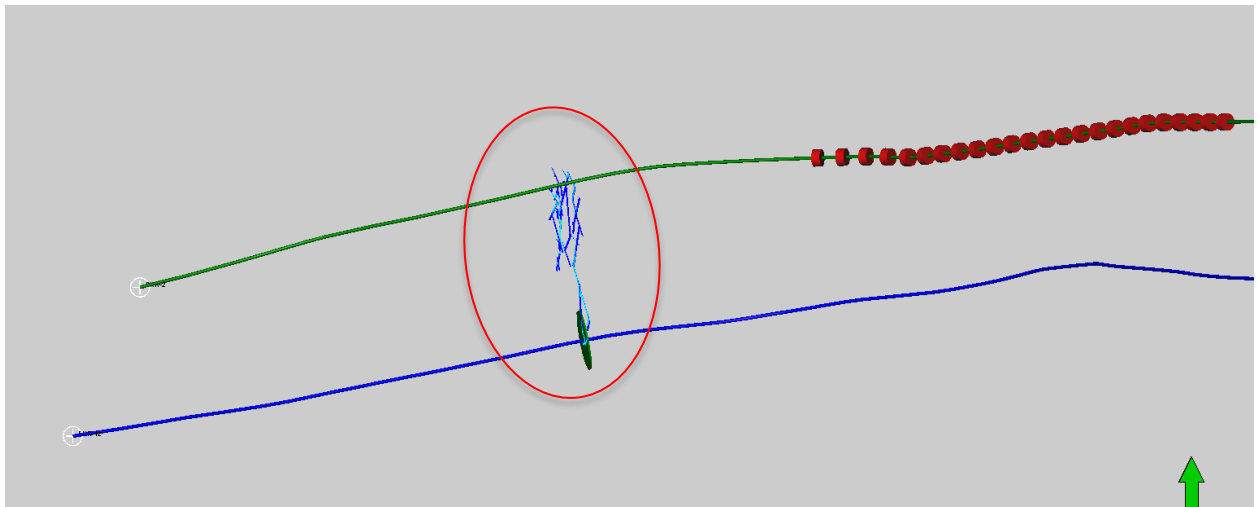


Pumping Time:

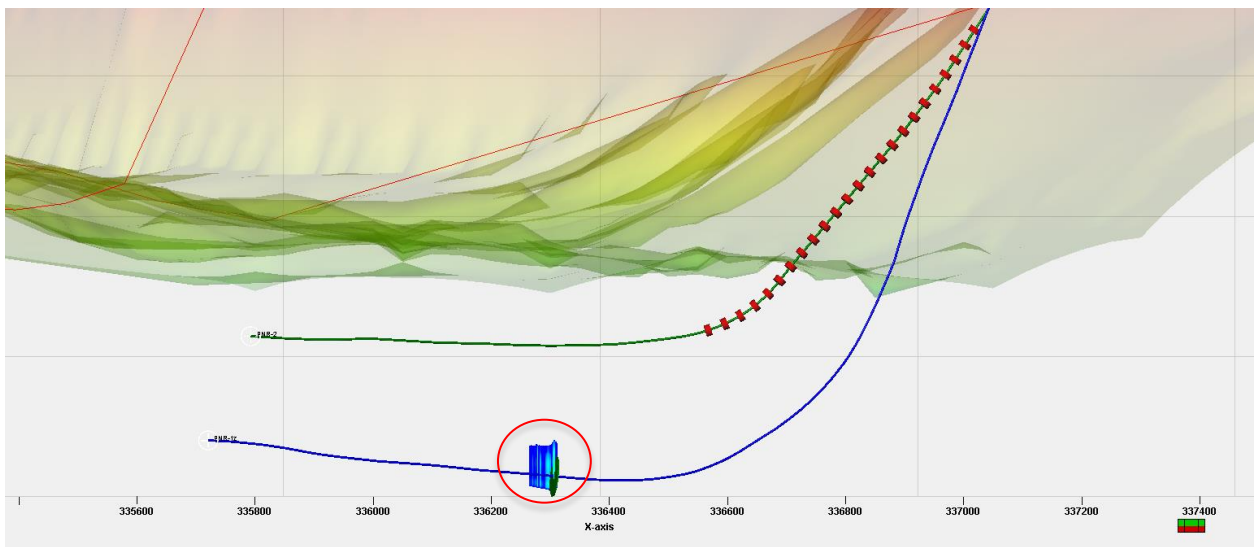
1) 29/10/2018 10:59:58 – 29/10/2018 11:39:57

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Fracture Growth

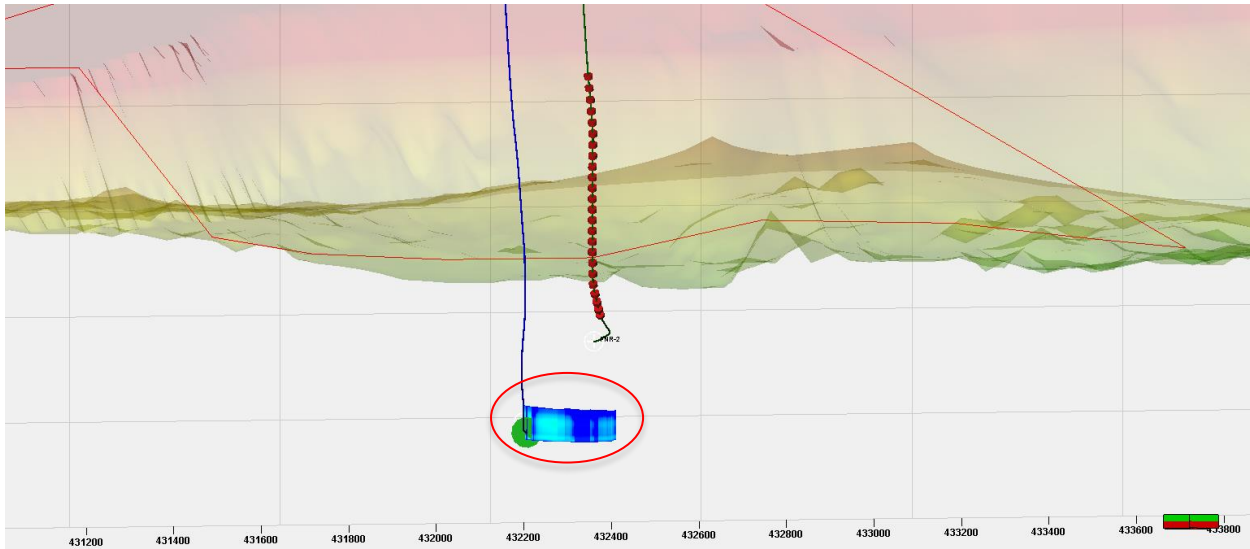


- Map View, scale north bar



- X-section due north

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- X-section due east

- Max hydraulic frac half length: 203.73 m
- Hydraulic frac height at well: 76.53 m

Well Integrity Status

- No change

Induced Seismicity of Note

- 29/10//2018 11:30:39 = $M_w = 0.93$ & $M_L = 1.00$

Update to Stress Magnitude

No update to stress magnitude as closure was not observed

- $S_{Hmin} = 0.0152 \text{ MPa/m}$

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