

Morning Report PNR1z				
Management System:		HSE	File Name:	009-PNR1z-16.10.18-S01-RMR
Approver:		Senior Geoscientist	Version No:	1
Reviewer:		Fracture Manager	Date of Issue:	17 th October 2018
Author:		Senior Geoscientist	Proposed date of Review:	n/a
Version	Section	Revision Information	Date	Reviser
0.1	All	Draft Publication	17/10/2018	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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1.0 Summary

Overview of day's operations:

- 1x Diagnostic injection test performed
- 1x Hydraulic fracture injection stage performed without proppant
- Flow back performed
- No induced seismicity or any red line boundary breached

2.0 Injection Summary

Stage 01

Injection Depth m (RT)	Volume fluid (m ³)	Proppant (mesh size, tonne)	Fluid System	Additives (type, mass kg)
3374.5 M MDRT	12.8	none	Fresh	None
2279.5 M TVDRT		none		

Stage 01

Injection Depth m (RT)	Volume fluid (m ³)	Proppant (mesh size, tonne)	Fluid System	Additives (type, mass kg)
3374.5 M MDRT	149.9	none	Slickwater	B528, FR. 36 kg
2279.5 M TVDRT		none		

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3.0 Injection Chart (Diagnostic Injection Test)

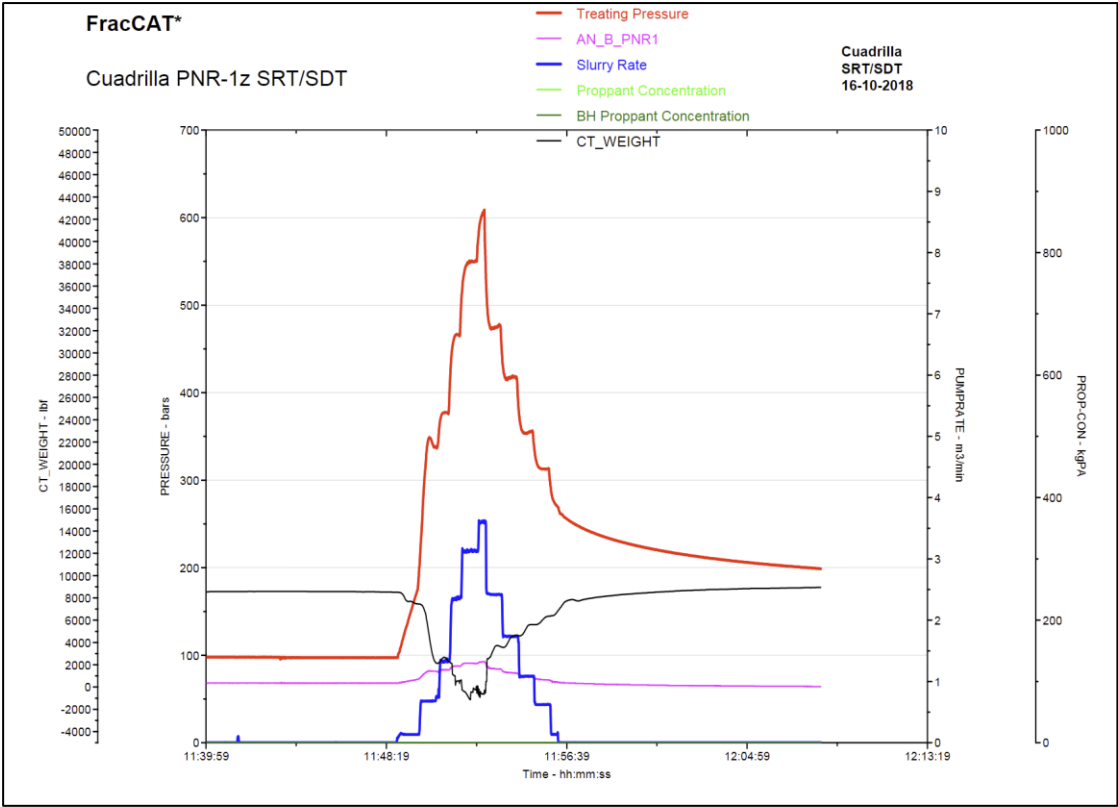


Figure 1. Diagnostic injections test chart

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4.0 Injection Chart (Hydraulic Fracture Stage)

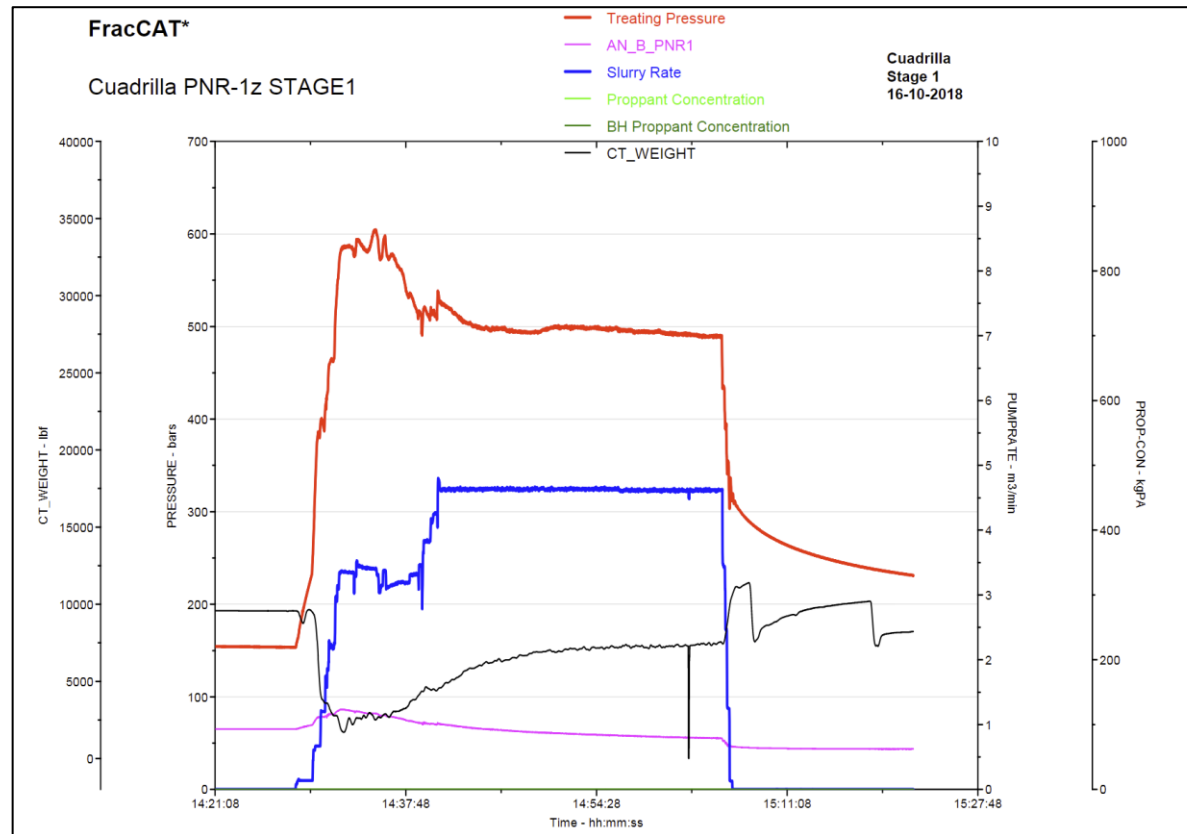


Figure 2. Hydraulic fracture stage 1 injection chart

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5.0 Fracture Growth



Figure 4. Map view (grids provide 500m x 500m scale), red circle to highlight fracture model within.

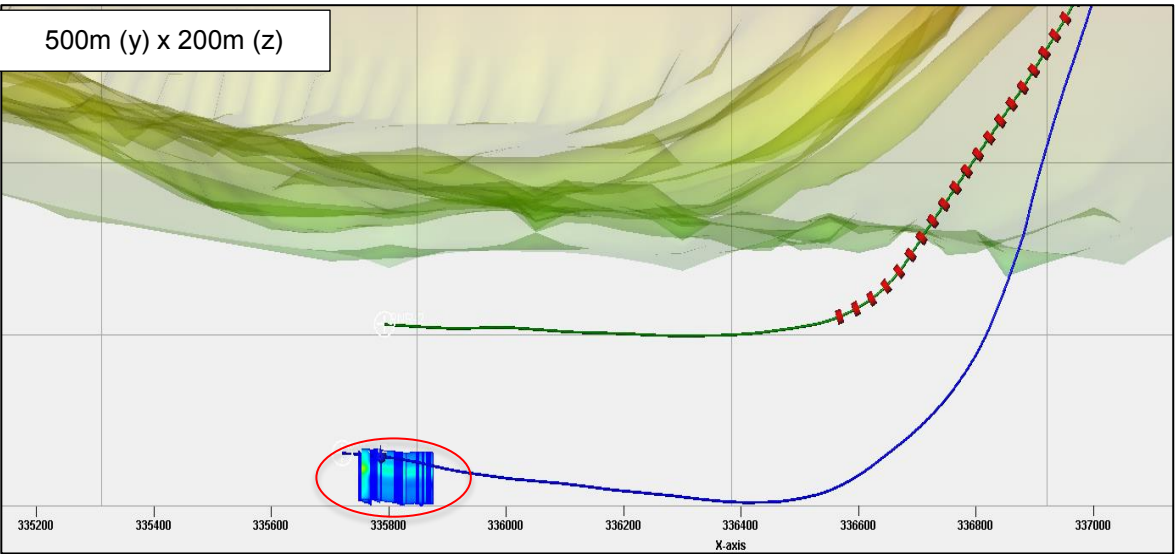


Figure 5. X-section due north (Depth box 500m by 200m), red circle to highlight fracture model within.

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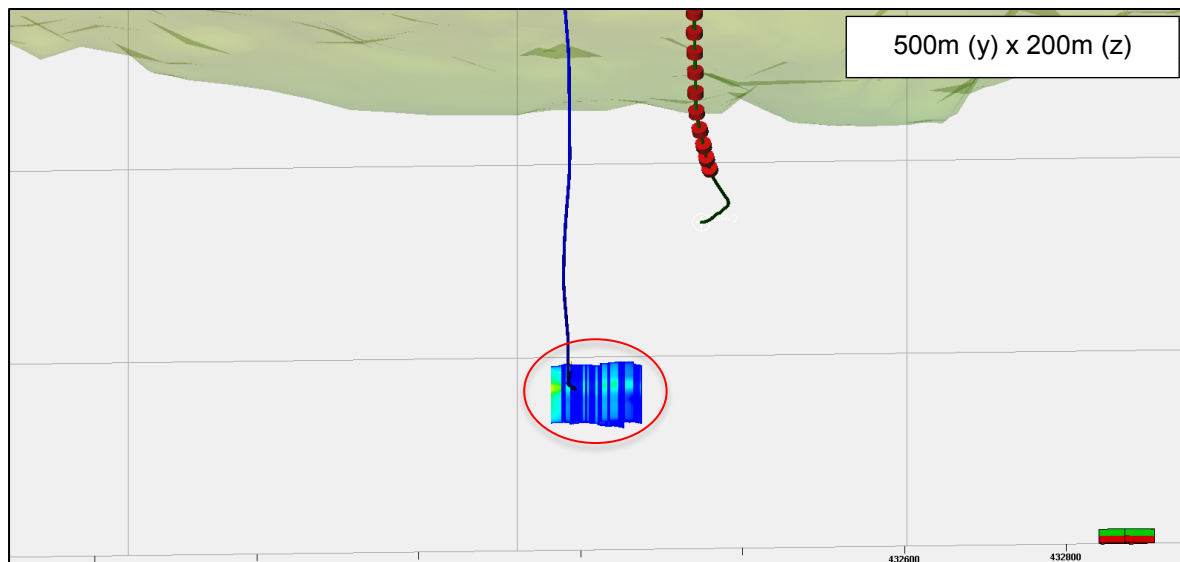


Figure 6. X-section due east (Depth box 500m by 200m), red circle to highlight fracture model within.

- Maximum hydraulic fracture half length: 142.21 m
- Maximum hydraulic fracture height at well: 71.2 m

Well Integrity Status

- No change

Induced Seismicity of Note

- No induced seismicity of note

Update to Stress Magnitude

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

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