Canadian Natural Resources Ltd
Facility Change Record

FCR/Project #: FCR STA 14-084	**Work Requisition:**
Priority/Timeline:	**Initiated Date:** Aug 18/2014
AFE# (if applicable):	**PHA/ FCR Level #(1, 2, or 3)** 2

Summary of Change/Modifications include reason for change:

De-rate separator pressure MAWP from 1000 psi to 500psi at the well site 5-18-30-11W4 to extend the life. A#2705118
Flow rates:
Gas - 0.5 e3m3/day
Liquid - 118 m3/day (98% water)
Liquid level in vessel during normal operations at less than half (~2-2.5 ft up the vessel). Samples available on protrend.

Cost/Time Estimate (Include estimated cost to complete change and estimated down time)
350.00 for the psv

Timing of Change (Include start and end date and if temporary change, date returned to normal)
Start _____ End:
Permanent (Y/): Temporary (Y.N): Return to Normal Operations Date:

Key Areas Affected: (check box if req'd)

Modification/alteration to control logic incl. S/D key		Modification to electrical/control circuits	
Modification to process piping/vessel/ exchanger		Modification to rotating machinery	
Structural change to building or lifting equipment		Change to Operating Philosophy or Procedure	
Modification to Gathering Lines		Spare Parts	
Change to Design Conditions (i.e.: Temp., Press. Etc.)	X	Others:	

Key Drawings or Documentation Affected: (check box if req'd)

P&IDs and PFDs	X	Data Books	
Line Lists		Operating procedures/Manuals	
Plot Plans		Start-up/Shut-down procedures	
U/G. Piping		Isolation Procedures	
S/D Key and Logic Diagrams		Training Manuals or Procedures	
Termination and Loop Diagrams		ERP	
Single Lines		Safety Manual	
QA/QC Program		Environmental or Waste Management Program	
Corrosion Control Program		Others	
Others			

Documentation Required: (check box if req'd)

Updated key documentation as above	X	Piping Drawings incl. Isometrics	
Material or Equipment Specifications	X	Civil/Structural Drawings	
Instrument Specification		Testing Program (hydro, radiographic, etc)	
HAZOP		Welding and PWHT procedures	
Technical Checklist		Precommissioning Inspection Reports	

Change Management Signoff:

Approval to Execute Change		**Follow-up Documentation Complete**	
Initiator:	Bob Rayner	Initiator:	
Operations:		Operations:	
Maintenance:		Maintenance:	
Engineering:	Tyler Olinek 12/15/14	Engineering:	
Integrity:	Kufre Akpan	Integrity:	
Safety:	Rob Black	Safety:	
Environment:		Environment:	
Other:		Other:	
Other:		Other:	

Comments

The PSV is have an API orifice D or greater with a set point of 500 psig. Vessel drawings are to be drawn to capture documentation of original vessel rating and derated vessel rating. Vessel derating calculations done by Streamline Inspection LTD.. New vessel Tmin to be submitted to ABSA, once approved Streamline to issue a new vessel plate. In the interim, place a sticker on the vessel indicating the new pressure rating. New vessel life is estimated to be 12 years from March 7 2013, due to piping corrosion.