

Pirtlaw Partners LTD 24-33
Fracture Treatment Summary
Attachment to Form 5A

11/15/2012

Stage Data			Perforation Summary			Treatment Summary		Proppant Summary		
Completion Stage:	Formation	Bench	Perforated Intervals	Perforation Dia. (in)	Number of Perforations	Maximum Injection Rate (bpm)	Fluid Volume (gal)	40/70 Ottawa (lbs)	20/40 Ottawa (lbs)	20/40 CRC (lbs)
1	Frontier		7,505'-10', 7,548'-53', 7,570'-75', 7,610'-15'	0.42	120	35.8	132,212		132,900	11,000
2	Niobrara	Basal Niobrara	7,005'-10', 7,065'-70', 7,120'-25', 7,155'-60'	0.42	120	80.8	239,104	202,600		38,200
3	Niobrara	Wolf Mountain	6,630'-35', 6,700'-05', 6,755'-60', 6,805'-10'	0.42	120	83.5	451,870	406,300		57,300
4	Niobrara	Toe Creek/Buck Peak	6,000'-05', 6,045'-50', 6,405'-10', 6,455'-60', 6,510'-15'	0.42	150	83.6	456,162	404,200		57,600