## **Appendix E**

**McPhillips Engine Inspection Reports** 

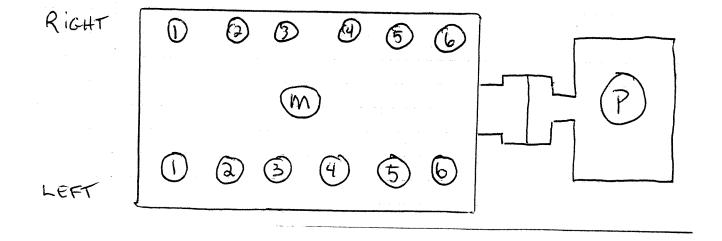
## **Bore Scope Results**

Engine #: 1

Location: McPhillips Pump Station

**Date:** April 7, 2006

	·
#1 Left	#1 Right
Cylinder Liner – light scuffing 5:00-3:00	Cylinder Liner – good
Cylinder Head - good Generalized Exhaust Valve - good scrotches	Cylinder Head - good
Exhaust Valve - good scratches	Exhaust Valve - good
Intake Valve - good	Intake Valve - good
#2 Left	#2 Right
Cylinder Liner – liner is like brand new	Cylinder Liner - good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve - good	Exhaust Valve - good
Intake Valve - good	Intake Valve - good
#3 Left	#3 Right
Cylinder Liner – scratches from 12:00-1:00	Cylinder Liner – scratches & scuffing 12:00-1:00
Cylinder Head - excellent	Cylinder Head - good
Exhaust Valve –good	Exhaust Valve - good
Intake Valve – some carbon B/U not excessive	Intake Valve - good
#4 Left	#4 Right
Cylinder Liner – liner is like brand new	Cylinder Liner - good
Cylinder Head – is perfect	Cylinder Head - good
Exhaust Valve – good	Exhaust Valve – like brand new
Intake Valve - good	Intake Valve – like brand new
#5 Left	#5 Right
Cylinder Liner – good	Cylinder Liner - good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve - right valve a lot of recession	Exhaust Valve - good
Intake Valve - good	Intake Valve - good
#6 Left	#6 Right
Cylinder Liner – good	Cylinder Liner - good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve - good	Exhaust Valve - good
Intake Valve - good	Intake Valve - good



## **Bore Scope Results**

Engine #: 5

Location: McPhillips Pump Station

**Date:** April 7, 2006

#1 Left	#1 Right
Cylinder Liner – light scuffing 9:00-5:00	Cylinder Liner – good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve - good	Exhaust Valve - good
Intake Valve - good	Intake Valve - good
#2 Left	#2 Right
Cylinder Liner – light scuffing, some scratches	Cylinder Liner - good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve - good	Exhaust Valve – high wear on right valve
Intake Valve - good	Intake Valve - good
#3 Left	#3 Right
Cylinder Liner – good	Cylinder Liner – good
Cylinder Head - excellent	Cylinder Head - good
Exhaust Valve –good	Exhaust Valve - good
Intake Valve –good	Intake Valve - good
#4 Left	#4 Right
Cylinder Liner – good	Cylinder Liner - good
Cylinder Head – good	Cylinder Head - good
Exhaust Valve – left valve cracked, some	Exhaust Valve – like brand new
recession	Intake Valve – like brand new
Intake Valve - good	
#5 Left	#5 Right
Cylinder Liner – light scuffing 10:00 – 3:00	Cylinder Liner - good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve – good	Exhaust Valve – leaking valve seal on left valve
Intake Valve - good	Intake Valve - good
#6 Left	#6 Right
Cylinder Liner – light scuffing 12:00-1:00	Cylinder Liner - good
Cylinder Head - good	Cylinder Head - good
Exhaust Valve - good	Exhaust Valve - good
Intake Valve - good	Intake Valve - good

