



Customer: IESS

Engine: QSL-9

Location: Williston, ND

Engine Rating: 180 KW Continue

Date	M	GSP	VAC	MAP	MAT	EGT	VIB	LOAD		FC	EWT		% SUB	PVP	Notes
09/10/2009	O	21	22	23	24	25	26	KW	%	L/H				Turns	
9:25	D	2.2	0.0	3.2	72	392	0.96	0	0	2.20	151				
9:30	D	2.1	-0.1	12.8	81	612	0.72	61	34	5.44	176				
9:40	D	2.1	-0.1	25.1	104	770	0.96	123	68	11.29	181				
9:50	D	2.2	-0.2	26.9	113	930	1.10	173	96	14.22	187				
10:10	D	2.1	-0.1	12.6	90	620	0.75	61	34	5.32	180				
10:56	D	2.3	-0.1	26.1	117	892	1.03	153	85	13.18	190				
10:20	B	2.1	-0.1	12.5	91	618	0.84	61	34	3.09	180		42	1/2	Propane Gas
10:40	B	2.2	-0.1	21.5	106	705	1.05	123	68	6.15	181		46	1/2	
10:58	B	2.2	-0.1	25.7	117	853	1.30	153	85	10.01	190		25	1/16	
3:32	B	-0.3	-0.1	11.9	103	645	0.99	61	34	2.04			63	1/2	City Gas
3:40	B	-0.2	-0.1	20.2	117	736	1.00	123	68	5.21			54	1/2	
3:45	B	-0.2	-0.1	24.7	126	814	1.25	153	85	7.7			42	1/2	

DF = Diesel Fuel
 BF = Bi-Fuel
 MAP = Manifold Air Pressure
 MAT = Manifold Air Temperature
 EGT = Exhaust Gas Temperature
 VAC = Air Filter Vacuum
 VIB = Engine Vibration
 FC = Fuel Consumption
 FP = Fuel Position
 ID = Injector Duration
 TP = Throttle Position
 PVP = Power Valve Position
 GSP = Gas Supply Pressure
 CAT = Reading from CatController
 GPN = Reading from GPN-1000/2000
 SD-SP = Bi-Fuel Shut Off Setpoint
 CT-SP = Bi-Fuel Control Set point

Channel #		SD-SP	CT-SP
21	GSP LO	-12.5	
	HI	3.0	
22	VAC LO	-1.5	
	HI	62.5	
23	MAP LO	-12.5	2.5
	HI	28.0	26.5
24	MAT LO	5	
	HI	150	
25	EGT LO	5	
	HI	950	
26	VIB LO	-0.50	
	HI	1.50	

Project Manager: _____

Commission by: *Chert Nampene* _____

Commissioning Date: 09/10/2009