รายการอ้างอิง

ภาษาไทย

พงศกร แสงผ่องแผ้ว . การวิเคราะห์หาสาเหตุและวิธีการป้องกันการชำรุดของเครื่องจักร ในสายการผลิตโซ้กอัป .วิทยานิพนธ์ปริญญามหาบัณฑิต ภาควิชาวิศวกรรมอุตสาหการ จุฬาลงกรณ์มหาวิทยาลัย , 2539.

พูลพร แสงบางปลา . การเพิ่มประสิทธิภาพการผลิตโดยการบำรุงรักษา(Total Productive Maintenance) . กรุงเทพมหานคร : จุฬาลงกรณ์มหาวิทยาลัย ,2538.

สราวุธ สิทธิพจน์ และ อมรรัตน์ สนธิไทย . คู่มือการบำรุงรักษาทวีผลแบบทุกคนมีส่วนร่วม(Total Productive Maintenance) . กรุงเทพมหานคร : บริษัท อินโนมีเดีย จำกัด , 2541.

อลงกฎ ชุตินันท์ . Production Maintenance System , โครงการพัฒนาความรู้ทางธุรกิจ หลักสูตร "การผลิต" . (ม.ป.ท.,ม.ป.ป.).

ภาษาอังกฤษ

Lawrence Mann,Jr. Maintenance Management . Louisiana State University . Lexington Books D.C. Heath and Company Lexington, Massachusetts Toronto , 1983.

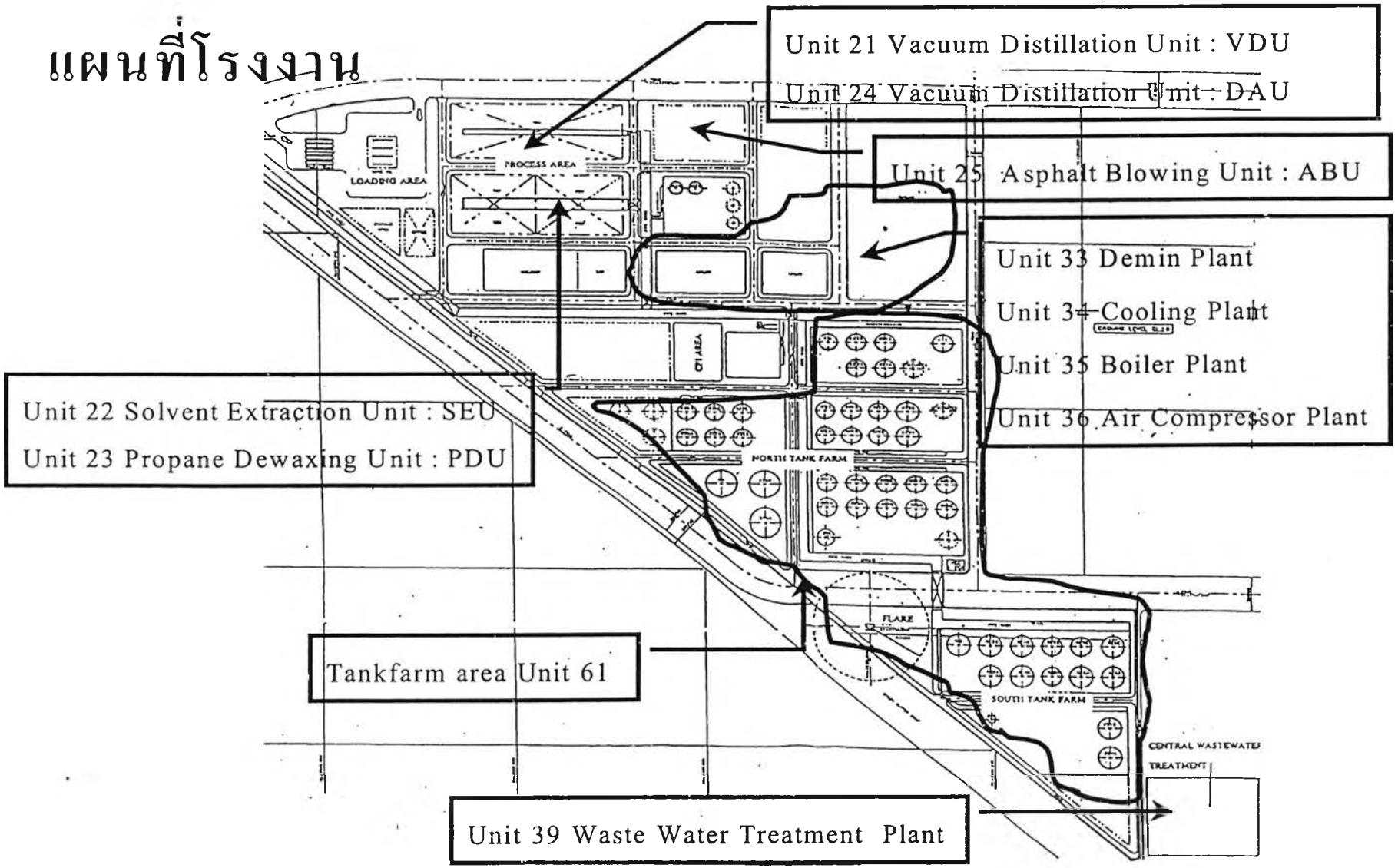
SOHEI HIBI . How To Measure Maintenance Performance : Asian Productivity Organization. (n.p.) : 1980.

ภาคผนวก

ภาคผนวก ก

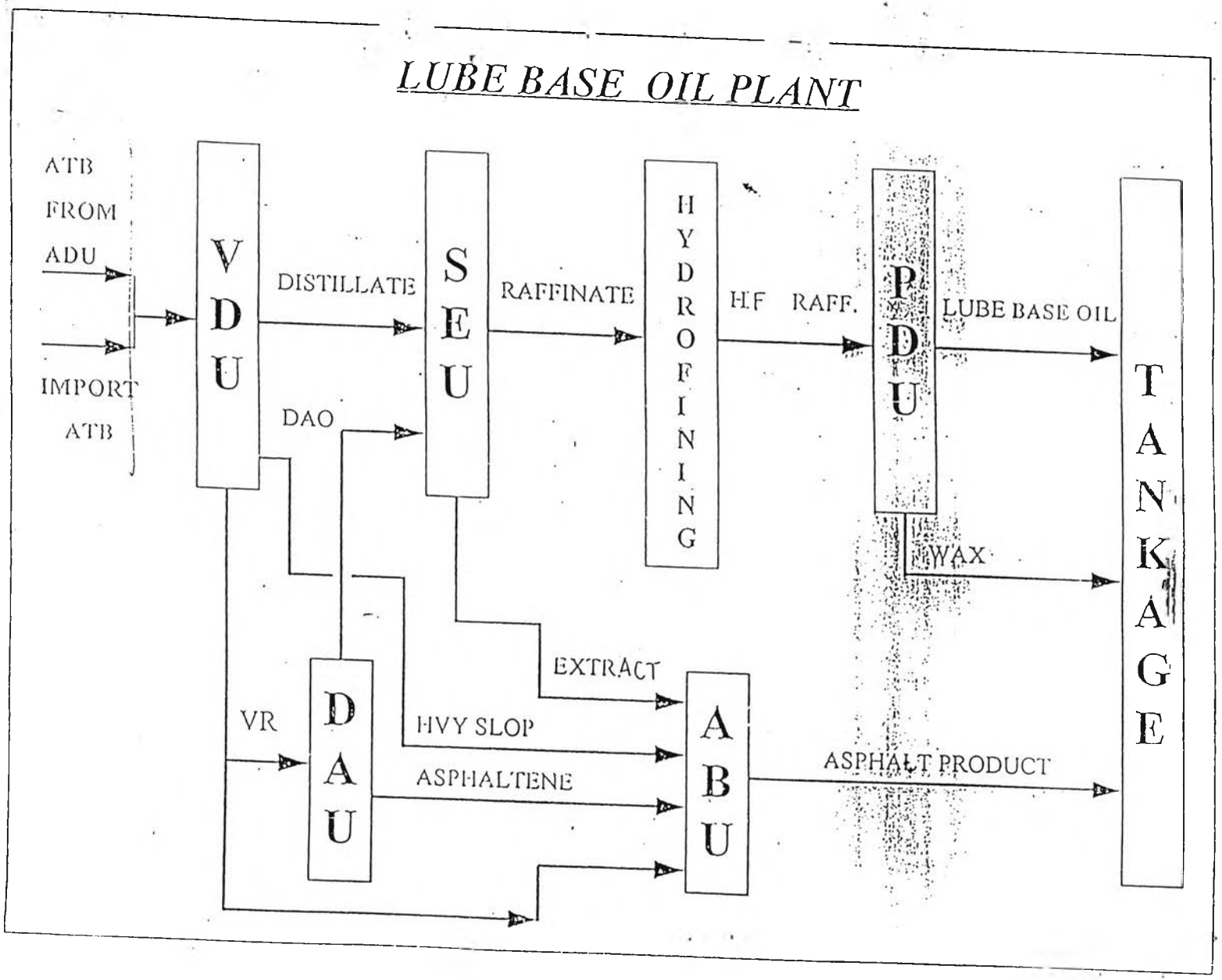
- แผนผัง Layout ของโรงงานกรณีศึกษา และแผนผังแสดงกระบวนการผลิตในขั้นตอนต่างๆ

แผนที่โรงงาน

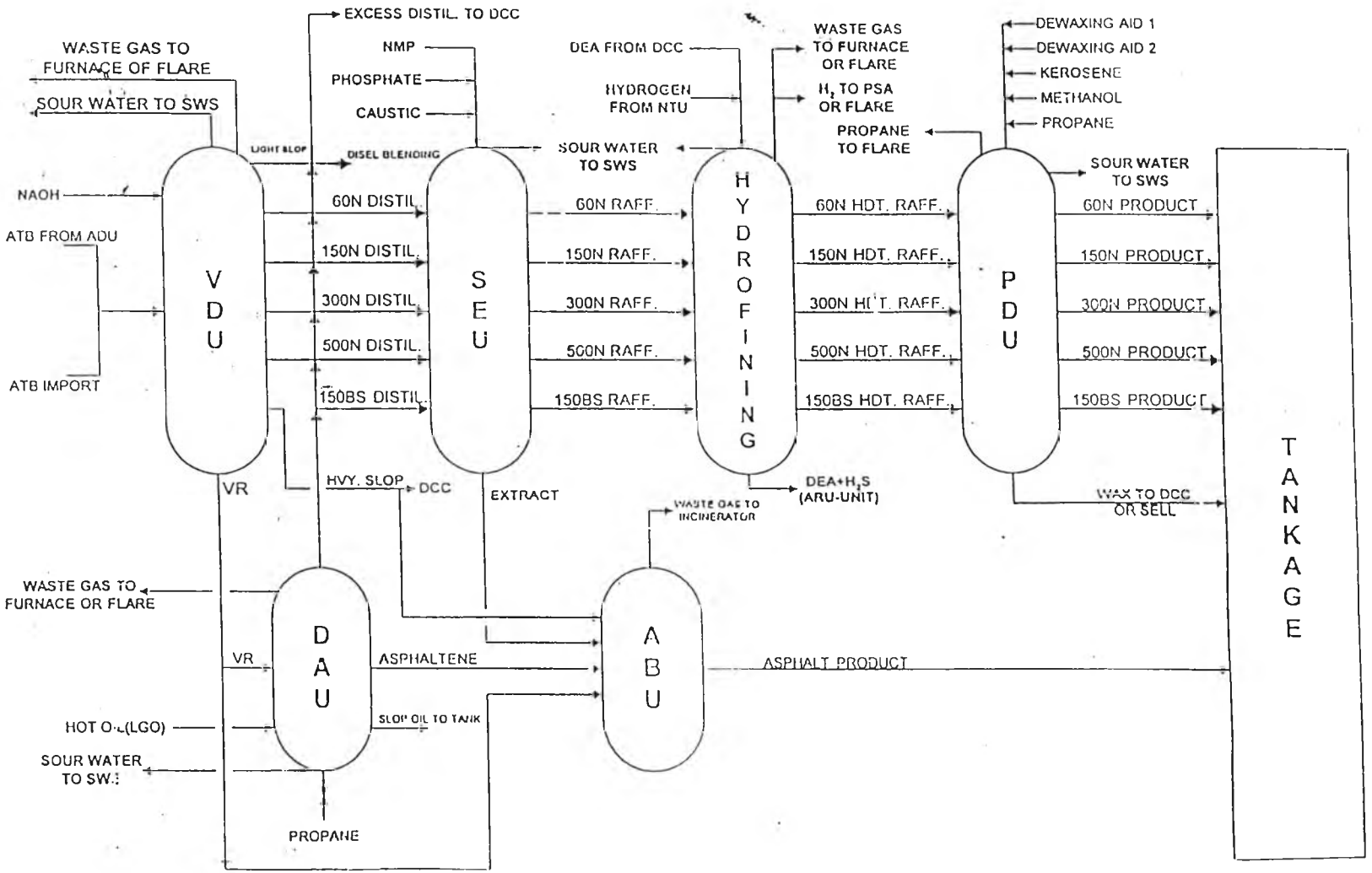


รูป ก.1 แผนผัง Layout ของโรงงาน

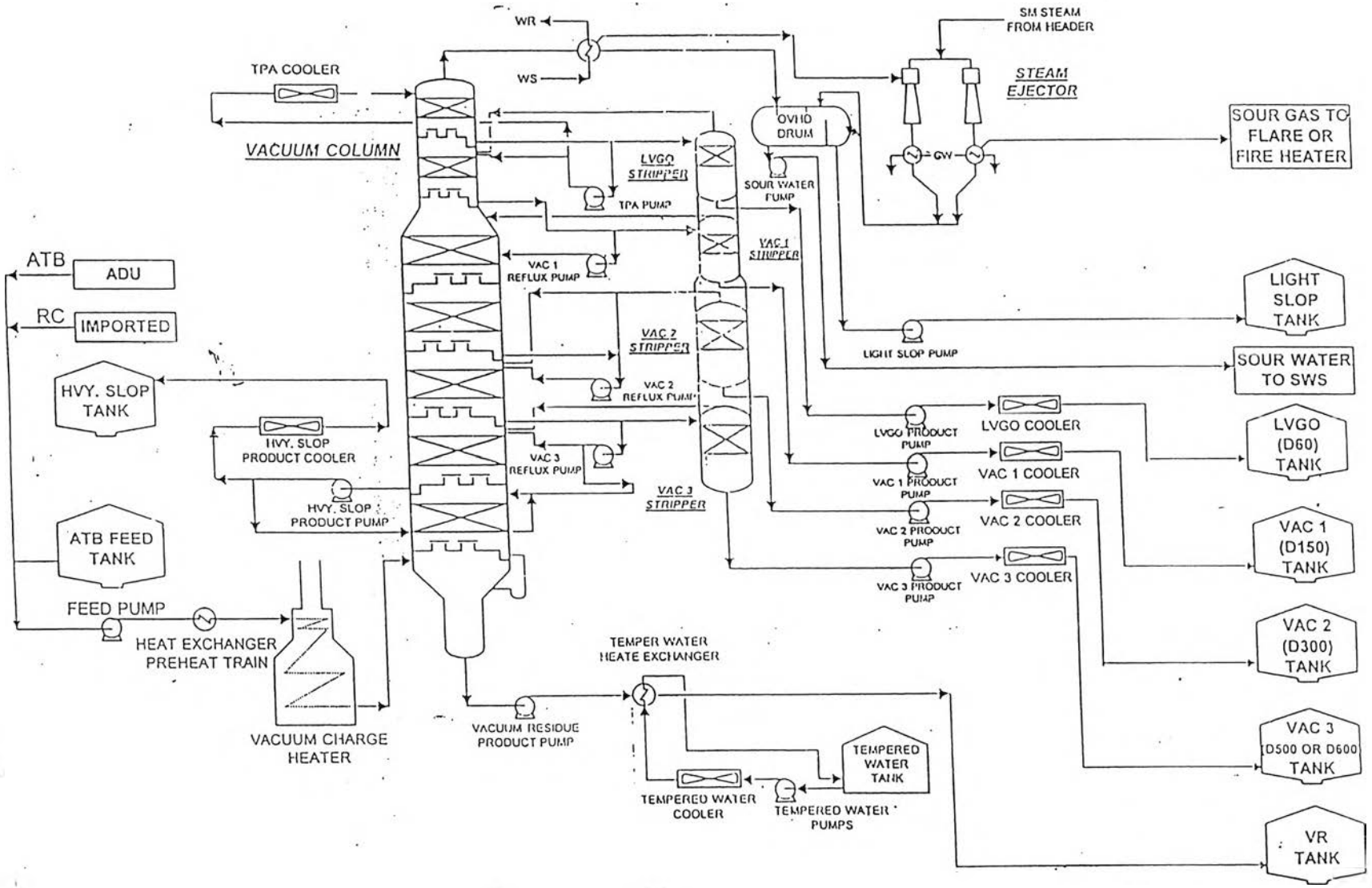
LUBE BASE OIL PLANT



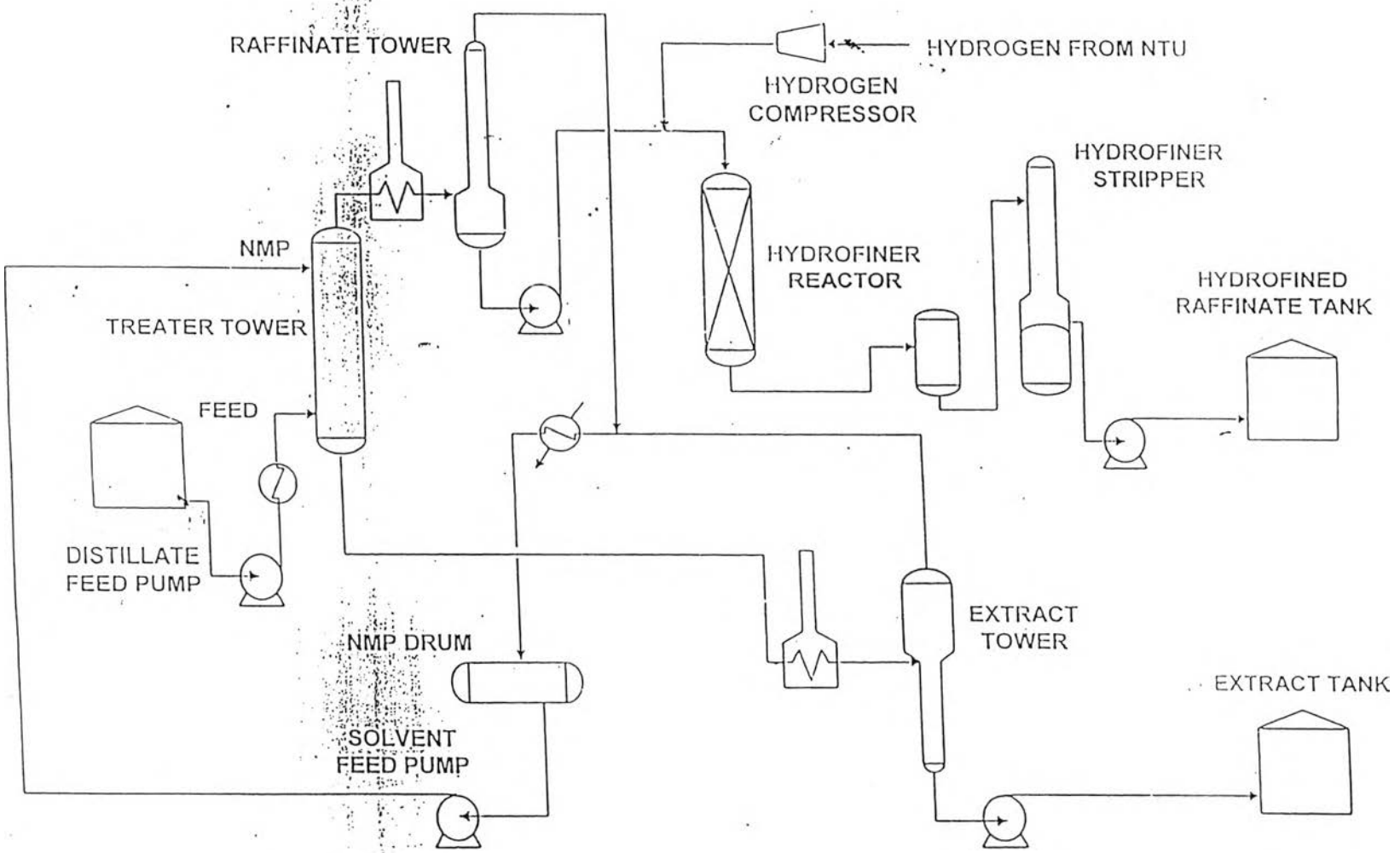
LUBE BASE OIL PLANT BLOCK FLOW DIAGRAM



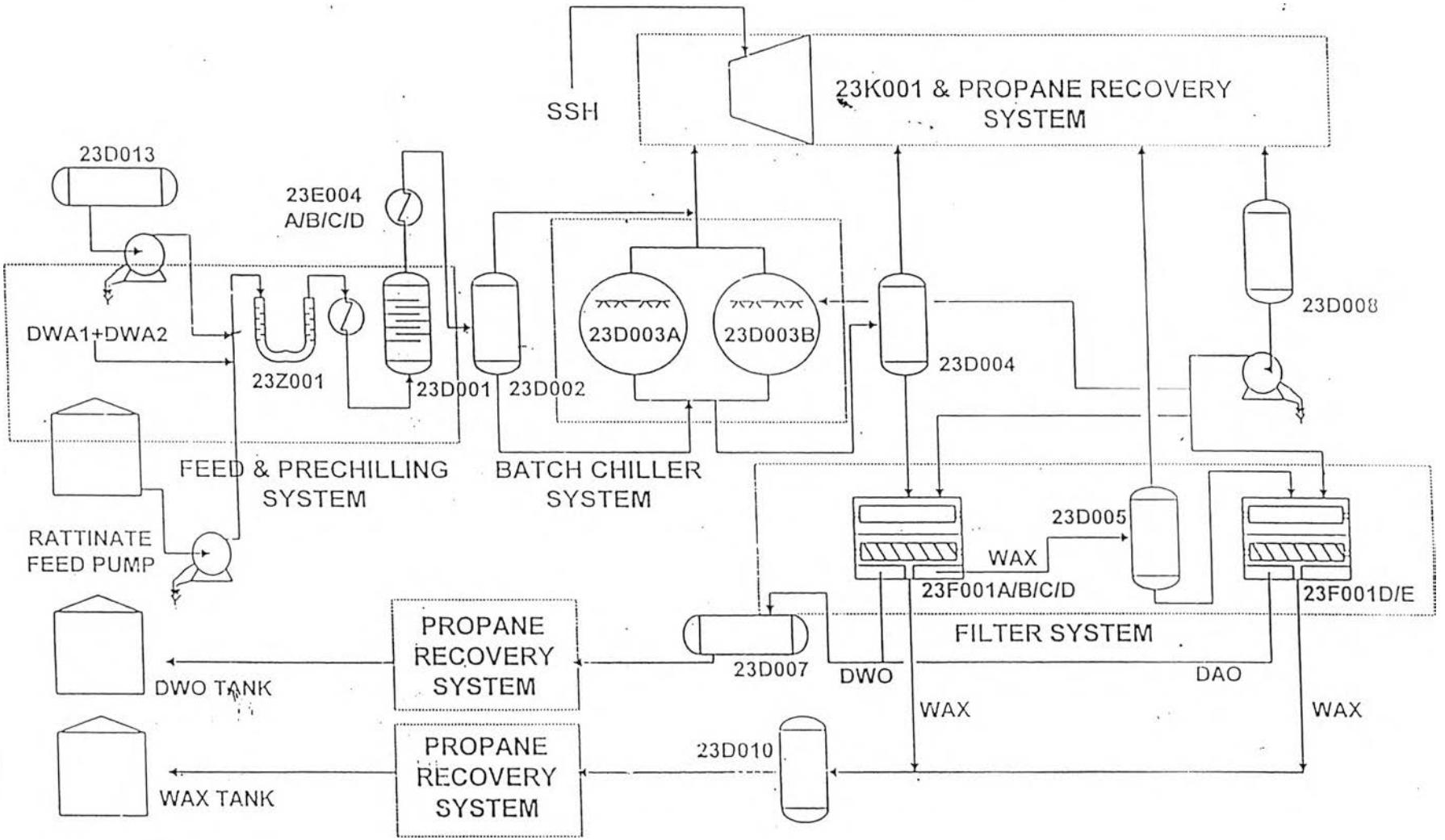
UNIT 21 VACUUM DISTILLATION UNIT(VDU)



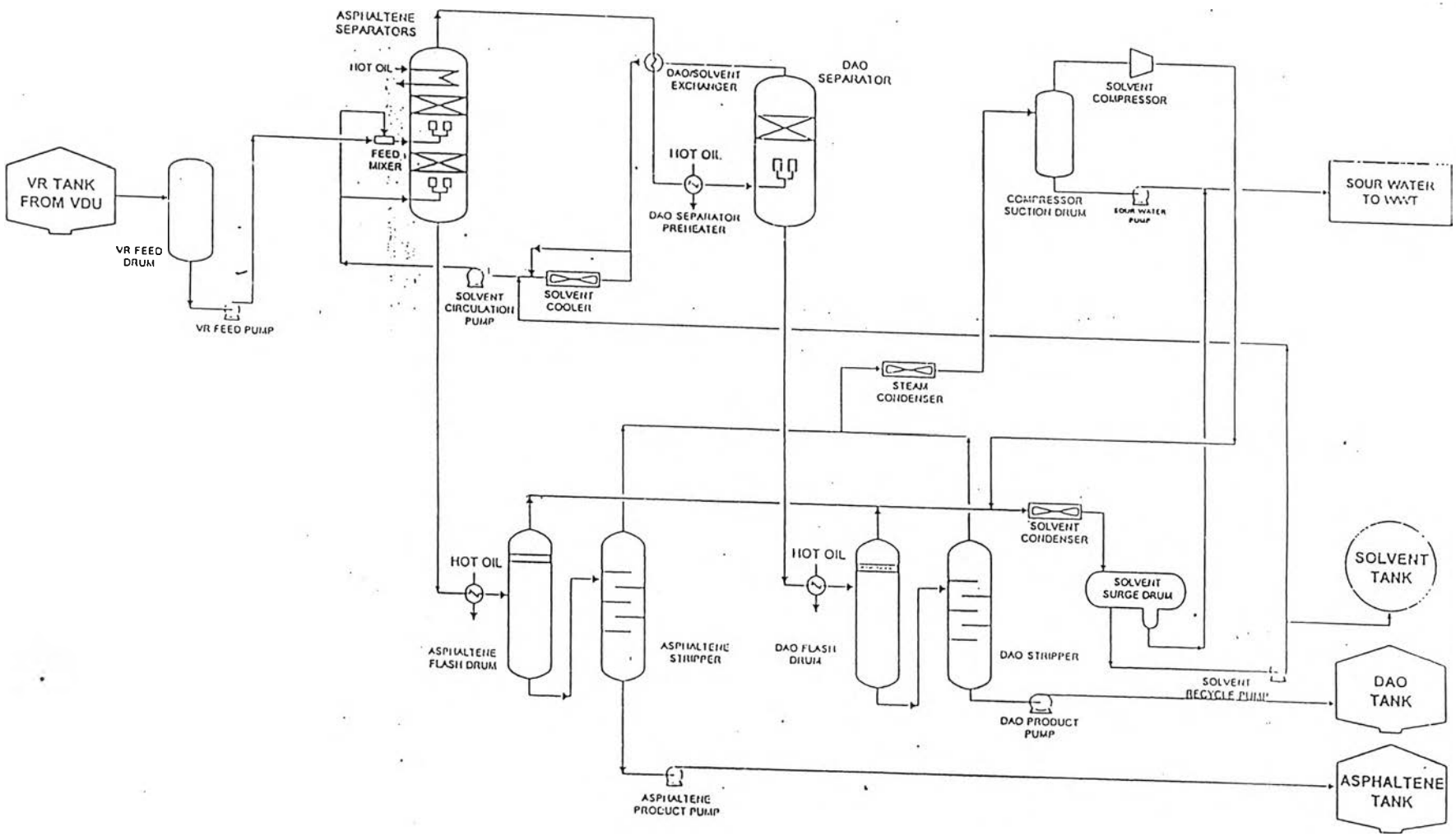
UNIT 22 SOLVENT EXTRACTION UNIT



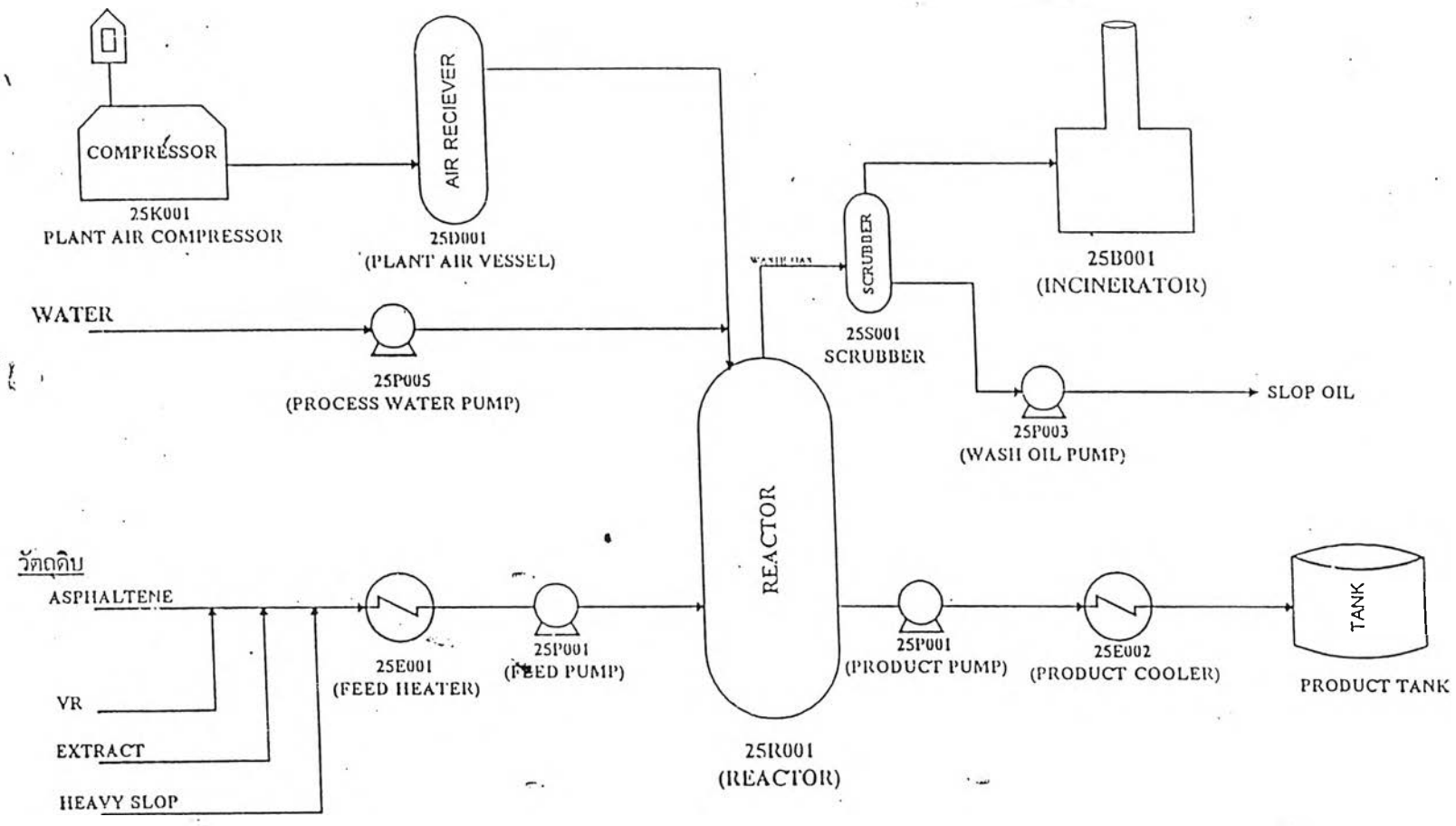
UNIT 23 PROPANE DEWAXING UNIT



UNIT 24PROPANE DEASPHALTING UNIT(DAU)



UNIT 25 ASPHALT BLOWING UNIT



ภาคผนวก ข

- การจัดแบ่งกลุ่มมอเตอร์
- แผนการทำงาน PM ประจำปี
- ตัวอย่างคู่มือการทำ PM มอเตอร์
- ตัวอย่างรูปภาพมอเตอร์และอุปกรณ์ควบคุมมอเตอร์

ตารางการจัดแบ่งกลุ่มมอเตอร์ ออกเป็น 4 ประเภท

UTILITY PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
1	33P001A	DEGASIFIED WATER PUMP	22	NO	PERIOD	B	PMT	MCC	OUT
2	33P001B	DEGASIFIED WATER PUMP	22	NO	PERIOD	B	PMT	MCC	OUT
3	33P002A	CATION REGENERENT RECYCLE PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
4	33P002B	CATION REGENERENT RECYCLE PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
5	33P003A	ANION REGENERENT RECYCLE PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
6	33P003B	ANION REGENERENT RECYCLE PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
7	33P004A	REGEN/BACKWASH PUMP	7.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
8	33P004B	REGEN/BACKWASH PUMP	7.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
9	33P005A	DEMIN WATER FEED PUMP	22	YES	PERIOD	D	BREAK DOWN	MCC	OUT
10	33P005B	DEMIN WATER FEED PUMP	22	YES	PERIOD	D	BREAK DOWN	MCC	OUT
11	33P006A	ACID METERING PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
12	33P006B	ACID METERING PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
13	33P007A	CAUSTIC METERING PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
14	33P007B	CAUSTIC METERING PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
15	33P008A	EFFLUENT DISCHARGE PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC	OUT
16	33P008B	EFFLUENT DISCHARGE PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC	OUT
17	33P009A	DEMIN WATER TRANSFER PUMP	11	YES	CONT	A	PMC	MCC	OUT
18	33P009B	DEMIN WATER TRANSFER PUMP	11	YES	CONT	A	PMC	MCC	OUT
19	33P010A	CONDENSATE FEED PUMP	30	YES	PERIOD	D	BREAK DOWN	MCC	OUT
20	33P010B	CONDENSATE FEED PUMP	30	YES	PERIOD	D	BREAK DOWN	MCC	OUT
21	33P011A	CATION REGENERENT RECYCLE PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
22	33P011B	CATION REGENERENT RECYCLE PUMP	1.5	YES	PERIOD	D	BREAK DOWN	MCC	OUT
23	33P012A	ANION REGENERENT RECYCLE PUMP	2.2	YES	PERIOD	D	BREAK DOWN	MCC	OUT
24	33P012B	ANION REGENERENT RECYCLE PUMP	2.2	YES	PERIOD	D	BREAK DOWN	MCC	OUT
25	33P015	DEGASIFIED WATER PUMP	22	NO	PERIOD	B	PMT	MCC	OUT
26	33K001A	CENTIFUGAL FAN FOR DEGASIFIER	7.5	NO	PERIOD	B	PMT	MCC	OUT
27	33K001B	CENTIFUGAL FAN FOR DEGASIFIER	7.5	NO	PERIOD	B	PMT	MCC	OUT
28	33K002	NUETRALIZATION	7.5	NO	PERIOD	B	PMT	MCC	OUT
29	33K003	DEGASIFIER FAN	7.5	NO	PERIOD	B	PMT	MCC	OUT
30	34P001A	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
31	34P001B	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
32	34P001C	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
33	34P001D	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
34	34P001E	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
35	34P001F	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
36	34P001G	COOLING PUMP	645	YES	CONT	A	PMC	MCC	OUT
37	34K001A	COOLING FAN	160	YES	CONT	A	PMC	MCC	OUT
38	34K001B	COOLING FAN	160	YES	CONT	A	PMC	MCC	OUT
39	34K001C	COOLING FAN	160	YES	CONT	A	PMC	MCC	OUT
40	34K001D	COOLING FAN	160	YES	CONT	A	PMC	MCC	OUT
41	34K001E	COOLING FAN	160	YES	CONT	A	PMC	MCC	OUT
42	34K001F	COOLING FAN	160	YES	CONT	A	PMC	MCC	OUT
43	34K002	CHEMICAL DOSING PUMP FOR COOLING	22	NO	PERIOD	B	PMT	LCP	IN
44	34P002	CHEMICAL DOSING PUMP FOR COOLING	0.37	NO	CONT	C	PMC, PMT	LCP	IN
45	34P003	CHEMICAL DOSING PUMP FOR COOLING	0.37	NO	CONT	C	PMC, PMT	LCP	IN

ตารางการจัดแบ่งกลุ่มมอเตอร์ ออกเป็น 4 ประเภท

UTILITY PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
46	35K001A	FD FAN A BOILER ABB	300	NO	CONT	C	PMC, PMT	MCC	IN
47	35K001B	FD FAN B BOILER ABB	300	NO	CONT	C	PMC, PMT	MCC	IN
48	35K002A	SCANER COOLING AIR FAN B BOILER ABB	2.2	NO	CONT	C	PMC, PMT	MCC	IN
49	35K002B	SCANER COOLING AIR FAN B BOILER ABB	2.2	NO	CONT	C	PMC, PMT	MCC	IN
50	35P001A	DEARATOR LIFT PUMP	75	YES	CONT	A	PMC	MCC	IN
51	35P001B	DEARATOR LIFT PUMP	75	YES	CONT	A	PMC	MCC	IN
52	35P002A	FEED PUMP	280	YES	CONT	A	PMC	MCC	IN
53	35P002B	FEED PUMP	280	YES	CONT	A	PMC	MCC	IN
54	35P002C	FEED PUMP	280	YES	CONT	A	PMC	MCC	IN
55	35P003A	FEEDER FOR FUEL OIL PUMP	22	YES	CONT	A	PMC	MCC	IN
56	35P003B	FEEDER FOR FUEL OIL PUMP	22	YES	CONT	A	PMC	MCC	IN
57	35P005A	CHEMICAL DOSING PUMP FOR BOILER ABB	0.06	YES	CONT	A	PMC	LCP	IN
58	35P005B	CHEMICAL DOSING PUMP FOR BOILER ABB	0.06	YES	CONT	A	PMC	LCP	IN
59	35P006	CHEMICAL DOSING PUMP FOR BOILER ABB	0.06	NO	CONT	C	PMC, PMT	LCP	IN
60	35P007A	CHEMICAL DOSING PUMP FOR BOILER ABB	0.37	YES	CONT	A	PMC	LCP	IN
61	35P007B	CHEMICAL DOSING PUMP FOR BOILER ABB	0.37	YES	CONT	A	PMC	LCP	IN
62	35P007C	CHEMICAL DOSING PUMP FOR BOILER ABB	0.37	YES	CONT	A	PMC	LCP	IN
63	35P008A	#1 D/A SUPPLY PUMP	75	YES	CONT	A	PMC	MCC	IN
64	35P008B	#2 D/A SUPPLY PUMP	75	YES	CONT	A	PMC	MCC	IN
65	35P009A	#1 PUMP	11	YES	CONT	A	PMC	MCC	IN
66	35P009B	#2 PUMP	11	YES	CONT	A	PMC	MCC	IN
67	35P009C	#3 PUMP	11	YES	CONT	A	PMC	MCC	IN
68	35P012A	#1 F/W PUMP	250	YES	CONT	A	PMC	MCC	IN
69	35P012B	#2 F/W PUMP	250	YES	CONT	A	PMC	MCC	IN
70	35P012C	#3 F/W PUMP	250	YES	CONT	A	PMC	MCC	IN
71	35P013A	#1 32 BAR AUX. PUMP	75	YES	CONT	A	PMC	MCC	IN
72	35P013B	#2 32 BAR AUX. PUMP	75	YES	CONT	A	PMC	MCC	IN
73	35K012A	#2 UB F.D. FAN	225	NO	CONT	C	PMC, PMT	MCC	IN
74	35K012B	#2 LB F.D. FAN	225	NO	CONT	C	PMC, PMT	MCC	IN
75	35K012C	#1 UB F.D. FAN	225	NO	CONT	C	PMC, PMT	MCC	IN
76	35K012D	#1 LB F.D. FAN	225	NO	CONT	C	PMC, PMT	MCC	IN
77	35P015A	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.55	YES	CONT	A	PMC	LCP	IN
78	35P015B	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.55	YES	CONT	A	PMC	LCP	IN
79	35P015C	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.56	YES	CONT	A	PMC	LCP	IN
80	35P016A	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.18	YES	CONT	A	PMC	LCP	IN
81	35P016B	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.18	YES	CONT	A	PMC	LCP	IN
82	35P017A	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.18	YES	CONT	A	PMC	LCP	IN
83	35P017B	CHEMICAL DOSING PUMP FOR BOILER GTB I	0.18	YES	CONT	A	PMC	LCP	IN
84	35P051A	CHEMICAL DOSING PUMP FOR BOILER GTB II	0.24	YES	PERIOD	D	BREAK DOWN	LCP	IN
85	35P051B	CHEMICAL DOSING PUMP FOR BOILER GTB II	0.24	YES	PERIOD	D	BREAK DOWN	LCP	IN
86	35P051C	CHEMICAL DOSING PUMP FOR BOILER GTB II	0.24	YES	PERIOD	D	BREAK DOWN	LCP	IN
87	35P052A	CHEMICAL DOSING PUMP FOR BOILER GTB II	0.24	YES	PERIOD	D	BREAK DOWN	LCP	IN
88	35P052B	CHEMICAL DOSING PUMP FOR BOILER GTB II	0.24	YES	PERIOD	D	BREAK DOWN	LCP	IN
89	35P052C	CHEMICAL DOSING PUMP FOR BOILER GTB II	0.24	YES	PERIOD	D	BREAK DOWN	LCP	IN
90	35TN015	MIXER CHEMICAL DOSING FOR GTB	0.25	NO	PERIOD	B	PMT	LCP	IN

ตารางการจัดแบ่งกลุ่มมอเตอร์ ออกเป็น 4 ประเภท

UTILITY PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
91	35TN016	MIXER CHEMICAL DOSING FOR GTB	0.25	NO	PERIOD	B	PMT	LCP	IN
92	35TN017	MIXER CHEMICAL DOSING FOR GTB	0.25	NO	PERIOD	B	PMT	LCP	IN
93	35TN005	MIXER CHEMICAL DOSING FOR ABB	0.25	NO	PERIOD	B	PMT	LCP	IN
94	35TN006	MIXER CHEMICAL DOSING FOR ABB	0.25	NO	PERIOD	B	PMT	LCP	IN
95	35TN007	MIXER CHEMICAL DOSING FOR ABB	0.25	NO	PERIOD	B	PMT	LCP	IN
96	1-XM413	SUPERHEATER SOOT BOILER A ABB	0.75	NO	PERIOD	B	PMT	MCC	IN
97	1-XM414	BOILER SOOT A BOILER A ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
98	1-XM415	BOILER SOOT B BOILER A ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
99	1-XM416	BOILER SOOT C BOILER A ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
100	1-XM417	BOILER SOOT D BOILER A ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
101	1-XM418	ECONOMIZER SOOT A BOILER A ABB	0.37	NO	PERIOD	B	PMT	MCC	IN
102	1-XM419	ECONOMIZER SOOT B BOILER A ABB	0.37	NO	PERIOD	B	PMT	MCC	IN
103	2-XM413	SUPERHEATER SOOT B BOILER ABB	0.75	NO	PERIOD	B	PMT	MCC	IN
104	2-XM414	BOILER SOOT A BOILER B ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
105	2-XM415	BOILER SOOT B BOILER B ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
106	2-XM416	BOILER SOOT C BOILER B ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
107	2-XM417	BOILER SOOT D BOILER B ABB	0.25	NO	PERIOD	B	PMT	MCC	IN
108	2-XM418	ECONOMIZER SOOT A BOILER B ABB	0.37	NO	PERIOD	B	PMT	MCC	IN
109	2-XM419	ECONOMIZER SOOT B BOILER B ABB	0.37	NO	PERIOD	B	PMT	MCC	IN
110	36K001A	AIR COMPRESSOR	895	YES	CONT	A	PMC	MCC	IN
111	36K001B	AIR COMPRESSOR	895	YES	CONT	A	PMC	MCC	IN
112	36P001A	OIL PUMP FOR AIR COMPRESSOR	1.5	NO	PERIOD	B	PMT	LCP	IN
113	36P001B	OIL PUMP FOR AIR COMPRESSOR	1.5	NO	PERIOD	B	PMT	LCP	IN
114	36K002	MOTOR FOR AIR DRYER 36A001	11	NO	CONT	C	PMC, PMT	LCP	IN

-A : INSPECTION EVERY MONTH OF RUNNING

- B : OVERHAUL EVERY 5 YEAR

- C : INSPECTION EVERY 2 MONTH OF RUNNING AND OVERHAUL EVERY 3 YEARS

- D : RUNNING UNTIL BREAK DOWN

- PERIOD : PERIOD RUNNING

- CONT : CONTINUOUS RUNNING

- MCC : MOTOR IS SUPPLIED BY SOURCE FROM MOTOR CONTROL CENTER

- LCP : MOTOR IS SUPPLIED BY SOURCE FROM LOCAL CONTROL PANEL

3 YEARS MOTOR OVERHAUL (GROUP C)

UTILITY PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
1	34P002	CHEMICAL DOSING PUMP FOR COOLING	0.37	NO	CONT	C	3 YEARS OVERHAUL
2	34P003	CHEMICAL DOSING PUMP FOR COOLING	0.37	NO	CONT	C	3 YEARS OVERHAUL
3	35K001A	FD FAN A BOILER ABB	300	NO	CONT	C	3 YEARS OVERHAUL
4	35K001B	FD FAN B BOILER ABB	300	NO	CONT	C	3 YEARS OVERHAUL
5	35K002A	SCANER COOLING AIR FAN B BOILER ABB	2.2	NO	CONT	C	3 YEARS OVERHAUL
6	35K002B	SCANER COOLING AIR FAN B BOILER ABB	2.2	NO	CONT	C	3 YEARS OVERHAUL
7	35P006	CHEMICAL DOSING PUMP FOR BOILER ABB	0.06	NO	CONT	C	3 YEARS OVERHAUL
8	35K012A	#2 UB F.D. FAN	225	NO	CONT	C	3 YEARS OVERHAUL
9	35K012B	#2 LB F.D. FAN	225	NO	CONT	C	3 YEARS OVERHAUL
10	35K012C	#1 UB F.D. FAN	225	NO	CONT	C	3 YEARS OVERHAUL
11	35K012D	#1 LB F.D. FAN	225	NO	CONT	C	3 YEARS OVERHAUL
12	36K002	MOTOR FOR AIR DRYER 36A001	11	NO	CONT	C	3 YEARS OVERHAUL

5 YEARS MOTOR OVERHAUL(GROUP B)

UTILITY PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
1	33P015	DEGASIFIED WATER PUMP	22	NO	PERIOD	B	5 YEARS OVERHAUL
2	33K001A	CENTIFUGAL FAN FOR DEGASIFIER	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
3	33K001B	CENTIFUGAL FAN FOR DEGASIFIER	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
4	33K002	NUETRALIZATION	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
5	33K003	DEGASIFIER FAN	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
6	34K002	CHEMICAL DOSING PUMP FOR COOLING	22	NO	PERIOD	B	5 YEARS OVERHAUL
7	35TN015	MIXER CHEMICAL DOSING FOR GTB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
8	35TN016	MIXER CHEMICAL DOSING FOR GTB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
9	35TN017	MIXER CHEMICAL DOSING FOR GTB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
10	35TN005	MIXER CHEMICAL DOSING FOR ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
11	35TN006	MIXER CHEMICAL DOSING FOR ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
12	35TN007	MIXER CHEMICAL DOSING FOR ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
13	1-XM413	SUPERHEATER SOOT BOILER A ABB	0.75	NO	PERIOD	B	5 YEARS OVERHAUL
14	1-XM414	BOILER SOOT A BOILER A ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
15	1-XM415	BOILER SOOT B BOILER A ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
16	1-XM416	BOILER SOOT C BOILER A ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
17	1-XM417	BOILER SOOT D BOILER A ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
18	1-XM418	ECONOMIZER SOOT A BOILER A ABB	0.37	NO	PERIOD	B	5 YEARS OVERHAUL
19	1-XM419	ECONOMIZER SOOT B BOILER A ABB	0.37	NO	PERIOD	B	5 YEARS OVERHAUL
20	2-XM413	SUPERHEATER SOOT B BOILER ABB	0.75	NO	PERIOD	B	5 YEARS OVERHAUL
21	2-XM414	BOILER SOOT A BOILER B ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
22	2-XM415	BOILER SOOT B BOILER B ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
23	2-XM416	BOILER SOOT C BOILER B ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
24	2-XM417	BOILER SOOT D BOILER B ABB	0.25	NO	PERIOD	B	5 YEARS OVERHAUL
25	2-XM418	ECONOMIZER SOOT A BOILER B ABB	0.37	NO	PERIOD	B	5 YEARS OVERHAUL
26	2-XM419	ECONOMIZER SOOT B BOILER B ABB	0.37	NO	PERIOD	B	5 YEARS OVERHAUL
27	36P001A	OIL PUMP FOR AIR COMPRESSOR	1.5	NO	PERIOD	B	5 YEARS OVERHAUL
28	36P001B	OIL PUMP FOR AIR COMPRESSOR	1.5	NO	PERIOD	B	5 YEARS OVERHAUL

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PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
1	21P001A	TPA PUMP	80	YES	CONT	A	PMC		
2	21P001B	TPA PUMP	80	YES	CONT	A	PMC		
3	21P002A	LVCO PRODUCT PUMP	28	YES	CONT	A	PMC		
4	21P002B	LVCO PRODUCT PUMP	28	YES	CONT	A	PMC		
5	21P003A	VAC-1 INTERNAL REFLUX PUMP	6.8	YES	CONT	A	PMC		
6	21P003B	VAC-1 INTERNAL REFLUX PUMP	6.8	YES	CONT	A	PMC		
7	21P004A	VAC-1 PRODUCT PUMP	80	YES	CONT	A	PMC		
8	21P004B	VAC-1 PRODUCT PUMP	80	YES	CONT	A	PMC		
9	21P005A	MPA PUMP	148	YES	CONT	A	PMC		
10	21P005B	MPA PUMP	148	YES	CONT	A	PMC		
11	21P006A	VAC-2 INTERNAL REFLUX PUMP	36	YES	CONT	A	PMC		
12	21P006B	VAC-2 INTERNAL REFLUX PUMP	36	YES	CONT	A	PMC		
13	21P007A	VAC-2 PRODUCT PUMP	58	YES	CONT	A	PMC		
14	21P007B	VAC-2 PRODUCT PUMP	58	YES	CONT	A	PMC		
15	21P008A	VAC-3 INTERNAL REFLUX PUMP	20	YES	CONT	A	PMC		
16	21P008B	VAC-3 INTERNAL REFLUX PUMP	20	YES	CONT	A	PMC		
17	21P009A	VAC-3 PRODUCT PUMP	80	YES	CONT	A	PMC		
18	21P009B	VAC-3 PRODUCT PUMP	80	YES	CONT	A	PMC		
19	21P010A	HEAVY SLOP PRODUCT PUMP	47	YES	CONT	A	PMC		
20	21P010B	HEAVY SLOP PRODUCT PUMP	47	YES	CONT	A	PMC		
21	21P011	VACUUM RESIDUE PRODUCT PUMP	148	NO	CONT	C	PMC, PMT		
22	21P012A	VACUUM COLUMN OVHD SOUR WATER PUMP	36	YES	CONT	A	PMC		
23	21P012B	VACUUM COLUMN OVHD SOUR WATER PUMP	36	YES	CONT	A	PMC		
24	21P013A	VACUUM COLUMN OVHD DRUM SLOP PUMP	24	YES	CONT	A	PMC		
25	21P013B	VACUUM COLUMN OVHD DRUM SLOP PUMP	24	YES	CONT	A	PMC		
26	21P014A	VACUUM UNIT SLOP OIL PUMP	1.5	YES	PERIOD	D	BREAK DOWN		
27	21P014B	VACUUM UNIT SLOP OIL PUMP	1.5	YES	PERIOD	D	BREAK DOWN		
28	21P015A	MIDDLE SLOP PUMP	3.6	YES	PERIOD	D	BREAK DOWN		
29	21P015B	MIDDLE SLOP PUMP	3.6	YES	PERIOD	D	BREAK DOWN		
30	21P016A	CORROSION INHBITOR INJECTION PUMP	0.18	YES	PERIOD	D	BREAK DOWN		
31	21P016B	CORROSION INHBITOR INJECTION PUMP	0.18	YES	PERIOD	D	BREAK DOWN		
32	21P017A	TEMPERED WATER PUMP	44	YES	CONT	A	PMC		
33	21P017B	TEMPERED WATER PUMP	44	YES	CONT	A	PMC		
34	21X002	CORROSION INHBITOR SYSTEM	0.37	NO	PERIOD	B	PMT		
35	21K001A	21B001 F.D FAN	45	YES	CONT	A	PMC		
36	21K001B	21B001 F.D FAN	45	YES	CONT	A	PMC		
37	21E011-1	TEMPERED WATER COOLER	25	NO	CONT	C	PMC, PMT		
38	21E011-2	VAC. RESID COOLER	25	NO	CONT	C	PMC, PMT		
39	21E013-1	TPA COOLER	15	NO	CONT	C	PMC, PMT		
40	21E013-2	TPA COOLER	15	NO	CONT	C	PMC, PMT		
41	21E014-1	LVCO PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT		
42	21E014-2	LVCO PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT		
43	21E015-1	VAC-1 PRODUCT COOLER	15	NO	CONT	C	PMC, PMT		
44	21E015-2	VAC-1 PRODUCT COOLER	15	NO	CONT	C	PMC, PMT		

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PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
45	21E016-1	VAC-2 PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT		
46	21E016-2	VAC-2 PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT		
47	21E017-1	VAC-3 PRODUCT COOLER	10	NO	CONT	C	PMC, PMT		
48	21E017-2	VAC-3 PRODUCT COOLER	10	NO	CONT	C	PMC, PMT		
49	21E018-1	HEAVY SLOP PRODUCT COOLER	2.5	NO	CONT	C	PMC, PMT		
50	21E018-2	HEAVY SLOP PRODUCT COOLER	2.5	NO	CONT	C	PMC, PMT		
51	22K001A	STRIP GAS COMPRESSOR	260	YES	CONT	A	PMC		
52	22K001B	STRIP GAS COMPRESSOR	260	YES	CONT	A	PMC		
53	22K001A-1	LUBE OIL PUMP FOR 22K001A	11	YES	CONT	A	PMC		
54	22K001A-2	LUBE OIL PUMP FOR 22K001A	11	YES	CONT	A	PMC		
55	22K001A-3	VENT FAN FOR 22K001A	0.1	NO	CONT	C	PMC, PMT		
56	22K001B-1	LUBE OIL PUMP FOR 22K001B	11	YES	CONT	A	PMC		
57	22K001B-2	LUBE OIL PUMP FOR 22K001B	11	YES	CONT	A	PMC		
58	22K001B-3	VENT FAN FOR 22K001A	0.1	NO	CONT	C	PMC, PMT		
59	22K002A	TREAT GAS COMPRESSOR	450	YES	CONT	A	PMC		
60	22K002B	TREAT GAS COMPRESSOR	450	YES	CONT	A	PMC		
61	22K002A-1	LUBE OIL PUMP FOR 22K002A	1.5	NO	CONT	C	PMC, PMT		
62	22K002A-2	LUBE OIL PUMP FOR 22K002A	0.55	NO	CONT	C	PMC, PMT		
63	22K002B-1	LUBE OIL PUMP FOR 22K002B	1.5	NO	CONT	C	PMC, PMT		
64	22K002B-2	LUBE OIL PUMP FOR 22K002B	0.55	NO	CONT	C	PMC, PMT		
65	22K003A	OFF GAS COMPRESSOR	58	YES	CONT	A	PMC	MCC-PC	
66	22K003B	OFF GAS COMPRESSOR	58	YES	CONT	A	PMC	MCC-PC	
67	22K003A-1	LUBE OIL PUMP FOR OFF GAS COMPRESSOR A	0.55	NO	CONT	C	PMC, PMT	LCP	
68	22K003B-1	LUBE OIL PUMP FOR OFF GAS COMPRESSOR B	0.55	NO	CONT	C	PMC, PMT	LCP	
69	22P002A	DRY NMP PUMP	250	NO	CONT	C	PMC, PMT	MCC-PC	
70	22P003A	WET NMP PUMP	30HP	YES	CONT	A	PMC	MCC-PC	
71	22P003B	WET NMP PUMP	30HP	YES	CONT	A	PMC	MCC-PC	
72	22P004A	EXTRACT PRODUCT PUMP	68	YES	CONT	A	PMC	MCC-PC	
73	22P004B	EXTRACT PRODUCT PUMP	68	YES	CONT	A	PMC	MCC-PC	
74	22P005A	DEHYDROFINER FEED PUMP	300	YES	CONT	A	PMC	MCC-PC	
75	22P005B	DEHYDROFINER FEED PUMP	300	YES	CONT	A	PMC	MCC-PC	
76	22P006A	HYDROFINED PRODUCT PUMP	140	YES	CONT	A	PMC	MCC-PC	
77	22P006B	HYDROFINED PRODUCT PUMP	140	YES	CONT	A	PMC	MCC-PC	
78	22P007A	WASH WATER PUMP	3.6	YES	CONT	A	PMC	MCC-PC	
79	22P007B	WASH WATER PUMP	3.6	YES	CONT	A	PMC	MCC-PC	
80	22P008A	LEAN DEA PUMP	50HP	YES	CONT	A	PMC	MCC-PC	
81	22P008B	LEAN DEA PUMP	50HP	YES	CONT	A	PMC	MCC-PC	
82	22P009	DEHYDRATOR REFLUX PUMP	15	NO	CONT	C	PMC, PMT	MCC-PC	
83	22P010A	TEMPERED WATER PUMP	84	YES	CONT	A	PMC	MCC-PC	
84	22P010B	TEMPERED WATER PUMP	84	YES	CONT	A	PMC	MCC-PC	
85	22P011	ION BED FEED PUMP	5.5	NO	CONT	C	PMC, PMT	MCC-PC	
86	22P012	TRANSFER PUMP	24	NO	PERIOD	B	PMT	MCC-PC	
87	22P013	MAKE UP PUMP	15	NO	PERIOD	B	PMT	MCC-PC	
88	22P014	NMP SUMP PUMP	5.5	NO	CONT	C	PMC, PMT	MCC-PC	

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PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
89	22P015	PHOSPHATE INJECTION PUMP	0.25	NO	CONT	C	PMC, PMT	MCC-PC	
90	22P016	CAUSTIC FEED PUMP	2.5	NO	PERIOD	B	PMT	MCC-PC	
91	22P017	DEHYDRATOR BOTTOM PUMP	3.6	NO	CONT	C	PMC, PMT	MCC-PC	
92	22P018A	RICH DEA PUMP	4.6	YES	CONT	A	PMC	MCC-PC	
93	22P018B	RICH DEA PUMP	4.6	YES	CONT	A	PMC	MCC-PC	
94	22P019	SPENT CAUSTIC PUMP	6.8	NO	CONT	C	PMC, PMT	MCC-PC	
95	22E002-1	NMP COOLER	30	YES	CONT	A	PMC	MCC-PC	
96	22E002-2	NMP COOLER	30	YES	CONT	A	PMC	MCC-PC	
97	22E007	NMP CONDENSER	6.8	NO	PERIOD	B	PMT	MCC-PC	
98	22E008-1	WET NMP CONDENSER	15	NO	CONT	C	PMC, PMT	MCC-PC	
99	22E008-2	WET NMP CONDENSER	15	NO	CONT	C	PMC, PMT	MCC-PC	
100	22E016	STRIP GAS COMP. AFTERCOOLER	5	NO	CONT	C	PMC, PMT	MCC-PC	
101	22E019	HOT SEPARATE CONDENSER	10	NO	CONT	C	PMC, PMT	MCC-PC	
102	22E020-1	STRIP OVHD. CONDENSER	10	NO	CONT	C	PMC, PMT	MCC-PC	
103	22E020-2	STRIP OVHD. CONDENSER	10	NO	CONT	C	PMC, PMT	MCC-PC	
104	22E023	DEHYDRATOR OVERHEAD CONDENSER	5	NO	CONT	C	PMC, PMT	MCC-PC	
105	22E025-1	TEMPERED WATER COOLER	30	YES	CONT	A	PMC	MCC-PC	
106	22E025-2	TEMPERED WATER COOLER	30	YES	CONT	A	PMC	MCC-PC	
107	22E025-3	TEMPERED WATER COOLER	30	YES	CONT	A	PMC	MCC-PC	
108	22E025-4	TEMPERED WATER COOLER	30	YES	CONT	A	PMC	MCC-PC	
109	22E025-5	TEMPERED WATER COOLER	30	YES	CONT	A	PMC	MCC-PC	
110	22E025-6	TEMPERED WATER COOLER	30	YES	CONT	A	PMC	MCC-PC	
111	22N001	PHOSPHATE SOLOTION MIXER	3HP	NO	PERIOD	B	PMT	MCC-PC	
112	23P002A	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT	MCC-PC	
113	23P002B	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT	MCC-PC	
114	23P002C	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT	MCC-PC	
115	23P002D	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT	MCC-PC	
116	23P002E	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT	MCC-PC	
117	23P003A	SECOND STAGE FILTRATE PUMP	140	YES	CONT	A	PMC	MCC-PC	
118	23P003B	SECOND STAGE FILTRATE PUMP	140	YES	CONT	A	PMC	MCC-PC	
119	23P004A	DWO SOLUTION PUMP	250	YES	CONT	A	PMC	MCC-PC	
120	23P004B	DWO SOLUTION PUMP	250	YES	CONT	A	PMC	MCC-PC	
121	23P005A	COLD DRY PROPANE PUMP	140	NO	CONT	C	PMC, PMT	MCC-PC	
122	23P005B	COLD DRY PROPANE PUMP	140	NO	CONT	C	PMC, PMT	MCC-PC	
123	23P006A	DWO PRODUCT PUMP	100	YES	CONT	A	PMC	MCC-PC	
124	23P006B	DWO PRODUCT PUMP	100	YES	CONT	A	PMC	MCC-PC	
125	23P007A	PRODUCT WAX SLURRY PUMP	58	YES	CONT	A	PMC	MCC-PC	
126	23P007B	PRODUCT WAX SLURRY PUMP	58	YES	CONT	A	PMC	MCC-PC	
127	23P007A-1	LUBICATION FOR 23P007A	1/4HP	NO	CONT	C	PMC, PMT	MCC-PC	
128	23P007B-1	LUBICATION FOR 23P007B	1/4HP	NO	CONT	C	PMC, PMT	MCC-PC	
129	23P008A	WAX LP FLASH PUMP	7.5	YES	CONT	A	PMC	MCC-PC	
130	23P008B	WAX LP FLASH PUMP	7.5	YES	CONT	A	PMC	MCC-PC	
131	23P009A	WAX/KERO PRODUCT PUMP	20	YES	CONT	A	PMC	MCC-PC	
132	23P009B	WAX/KERO PRODUCT PUMP	20	YES	CONT	A	PMC	MCC-PC	

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PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
133	23P010A	DILUTION PROPANE PUMP	200	YES	CONT	A	PMC	MCC-PC	
134	23P010B	DILUTION PROPANE PUMP	200	YES	CONT	A	PMC	MCC-PC	
135	23P011A	VACUUM CONDENSATE PUMP	15	YES	CONT	A	PMC	MCC-PC	
136	23P011B	VACUUM CONDENSATE PUMP	15	YES	CONT	A	PMC.	MCC-PC	
137	23P012	EJECTOR CONDENSATE PUMP	15	NO	CONT	C	PMC, PMT	MCC-PC	
138	23P013A	SLOP OIL PUMP	10	YES	CONT	A	PMC	MCC-PC	
139	23P013B	SLOP OIL PUMP	10	YES	CONT	A	PMC	MCC-PC	
140	23P014A	KEROSENE CIRCULATION PUMP	10	YES	CONT	A	PMC	MCC-PC	
141	23P014B	KEROSENE CIRCULATION PUMP	10	YES	CONT	A	PMC	MCC-PC	
142	23P015A	DEWAXING AID 1 PUMP	7.5	YES	CONT	A	PMC	MCC-PC	
143	23P015B	DEWAXING AID 1 PUMP	7.5	YES	CONT	A	PMC	MCC-PC	
144	23P016A	DEWAXING AID 2 PUMP	7.5	YES	CONT	A	PMC	MCC-PC	
145	23P016B	DEWAXING AID 2 PUMP	7.5	YES	CONT	A	PMC	MCC-PC	
146	23P017A	METHANOL INJECTION PUMP	0.37	YES	PERIOD	D	BREAK DOWN	MCC-PC	
147	23P017B	METHANOL INJECTION PUMP	0.37	YES	PERIOD	D	BREAK DOWN	MCC-PC	
148	23P018A	DIRTY KERO PUMP	10	YES	CONT	A	PMC	MCC-PC	
149	23P018B	DIRTY KERO PUMP	10	YES	CONT	A	PMC	MCC-PC	
150	23P019A	FLARE KNOCK OUT DRUM LIQUID PUMP	20	YES	PERIOD	D	BREAK DOWN	MCC-PC	
151	23P019B	FLARE KNOCK OUT DRUM LIQUID PUMP	20	YES	PERIOD	D	BREAK DOWN	MCC-PC	
152	23K001-1	LUBE OIL PUMP FOR 23K001	33	NO	CONT	C	PMC, PMT	MCC-PC	
153	23N001	WAX RESLURRY MIXER	4	NO	CONT	C	PMC, PMT	MCC-PC	
154	23N002	WAX PRODUCT SLURRY MIXER	4	NO	CONT	C	PMC, PMT	MCC-PC	
155	23N003	DEWAXING AID 1 MIXER	3	NO	CONT	C	PMC, PMT	MCC-PC	
156	23N004	DEWAXING AID 2 MIXER	3	NO	CONT	C	PMC, PMT	MCC-PC	
157	23F001A-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT	MCC-PC	
158	23F001A-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
159	23F001A-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
160	23F001B-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT	MCC-PC	
161	23F001B-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
162	23F001B-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
163	23F001C-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT	MCC-PC	
164	23F001C-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
165	23F001C-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
166	23F001D-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT	MCC-PC	
167	23F001D-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
168	23F001D-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
169	23F001E-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT	MCC-PC	
170	23F001E-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
171	23F001E-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT	MCC-PC	
172	24P001A	FEED PUMP	322	YES	CONT	A	PMC		
173	24P001B	FEED PUMP	322	YES	CONT	A	PMC		
174	24P001A-1	LUBE OIL PUMP FOR 24P001A	1HP	NO	PEROID	B	PMT		
175	24P001B-1	LUBE OIL PUMP FOR 24P001B	1HP	NO	PEROID	B	PMT		
176	24P001A-2	LUBE OIL PUMP FOR 24P001A	1HP	NO	PEROID	B	PMT		

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PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
177	24P001B-2	LUBE OIL PUMP FOR 24P001B	1HP	NO	PEROID	B	PMT		
178	24P002A	SOLVENT CIRCULATION PUMP	442	YES	CONT	A	PMC		
179	24P002B	SOLVENT CIRCULATION PUMP	442	YES	CONT	A	PMC		
180	24P003A	RECYCLE SOLVENT PUMP	135	YES	CONT	A	PMC		
181	24P003B	RECYCLE SOLVENT PUMP	135	YES	CONT	A	PMC		
182	24P004A	SOUR WATER PUMP	15	YES	PERIOD	D	BREAK DOWN		
183	24P004B	SOUR WATER PUMP	15	YES	PERIOD	D	BREAK DOWN		
184	24P005A	DAO PRODUCT PUMP	28	YES	CONT	A	PMC		
185	24P005B	DAO PRODUCT PUMP	28	YES	CONT	A	PMC		
186	24P006A	ASPHALTENE PRODUCT PUMP	65	YES	CONT	A	PMC		
187	24P006B	ASPHALTENE PRODUCT PUMP	65	YES	CONT	A	PMC		
188	24P007A	HOT OIL PUMP	863	YES	CONT	A	PMC		
189	24P007B	HOT OIL PUMP	863	YES	CONT	A	PMC		
190	24P008	HOT OIL FILLING PUMP	5.5	NO	PEROID	B	PMT		
191	24P009A	FLARE KNOCK OUT DRUM PUMP	5.5	YES	PERIOD	D	BREAK DOWN		
192	24P009B	FLARE KNOCK OUT DRUM PUMP	5.5	YES	PERIOD	D	BREAK DOWN		
193	24K001A	PROPANE COMPRESSOR	130	YES	CONT	A	PMC		
194	24K001B	PROPANE COMPRESSOR	130	YES	CONT	A	PMC		
195	24K001A-A	LUBE OIL PUMP FOR 24K001A	1.5	NO	PEROID	B	PMT		
196	24K001A-B	LUBE OIL PUMP FOR 24K001A		NO	PEROID	B	PMT		
197	24K001B-A	LUBE OIL PUMP FOR 24K001B	1.5	NO	PEROID	B	PMT		
198	24K001B-B	LUBE OIL PUMP FOR 24K001B		NO	PEROID	B	PMT		
199	24B001-1/8	SOOT BLOWER	0.75	NO	PEROID	B	PMT		
200	24E006-1	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
201	24E006-2	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
202	24E006-3	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
203	24E006-4	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
204	24E006-5	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
205	24E006-6	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
206	24E006-7	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
207	24E006-8	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
208	24E006-9	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
209	24E006-10	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
210	24E006-11	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
211	24E006-12	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT		
212	24E007-1	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT		
213	24E007-2	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT		
214	24E007-3	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT		
215	24E007-4	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT		
216	24E00-1	STEAM CONDENSER	25	NO	CONT	C	PMC, PMT		
217	24E008-2	STEAM CONDENSER	25	NO	CONT	C	PMC, PMT		
218	25N001	AGITATOR	145	NO	PEROID	B	PMT		
219	25N001-1			NO	PEROID	B	PMT		
220	25K001A	AIR COMPRESSOR	132	YES	PERIOD	D	BREAK DOWN		

ตารางการจัดแบ่งกลุ่มมอเตอร์ ออกเป็น 4 ประเภท

PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
221	25K001A-1	LUBE OIL FOR AIR COMPRESSOR		YES	PERIOD	D	BREAK DOWN		
222	25K001B	AIR COMPRESSOR	132	YES	PERIOD	D	BREAK DOWN		
223	25K001B-1	LUBE OIL FOR AIR COMPRESSOR		YES	PERIOD	D	BREAK DOWN		
224	25K001C	AIR COMPRESSOR	132	YES	PERIOD	D	BREAK DOWN		
225	25K001C-1	LUBE OIL FOR AIR COMPRESSOR		YES	PERIOD	D	BREAK DOWN		
226	25P001A	FEED PUMP	14.5	NO	CONT	C	PMC, PMT		
227	25P001B	FEED PUMP	14.5	NO	CONT	C	PMC, PMT		
228	25P002A	PRODUCT PUMP	17.5	YES	CONT	A	PMC		
229	25P002B	PRODUCT PUMP	17.5	YES	CONT	A	PMC		
230	25P003A	WASH OIL PUMP	23	YES	CONT	A	PMC		
231	25P003B	WASH OIL PUMP	23	YES	CONT	A	PMC		
232	25P004A	PUMPOUT PUMP	5	NO	PEROID	B	PMT		
233	25P005A	PUMPOUT PUMP	2.5	YES	PERIOD	D	BREAK DOWN		
234	25P005B	PROCESS WATER PUMP	2.5	YES	PERIOD	D	BREAK DOWN		
235	25P006A	PROCESS WATER PUMP	4.6	YES	PERIOD	D	BREAK DOWN		
236	25P006B	BOOTER PUMP	4.6	YES	PERIOD	D	BREAK DOWN		
237	25B001	BOOTER PUMP	7.5	YES	PERIOD	D	BREAK DOWN		

- A : INSPECTION EVERY MONTH OF RUNNING
- B : OVERHAUL EVERY 5 YEAR
- C : INSPECTION EVERY MONTH OF RUNNING AND OVERHAUL EVERY 3 YEARS
- D : RUNNING UNTIL BREAK DOWN
- PERIOD : PERIOD RUNNING
- CONT : CONTINUOUS RUNNING
- MCC : MOTOR IS SUPPLIED BY SOURCE FROM MOTOR CONTROL CENTER
- LCP : MOTOR IS SUPPLIED BY SOURCE FROM LOCAL CONTROL PANEL

3 YEARS MOTOR OVERHAUL (GROUP C)

PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
1	21P011	VACUUM RESIDUE PRODUCT PUMP	148	NO	CONT	C	3 YEARS OVERHAUL
2	21E011-1	TEMPERED WATER COOLER	25	NO	CONT	C	PMC, PMT
3	21E011-2	VAC. RESID COOLER	25	NO	CONT	C	PMC, PMT
4	21E013-1	TPA COOLER	15	NO	CONT	C	PMC, PMT
5	21E013-2	TPA COOLER	15	NO	CONT	C	PMC, PMT
6	21E014-1	LVCO PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT
7	21E014-2	LVCO PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT
8	21E015-1	VAC-1 PRODUCT COOLER	15	NO	CONT	C	PMC, PMT
9	21E015-2	VAC-1 PRODUCT COOLER	15	NO	CONT	C	PMC, PMT
10	21E016-1	VAC-2 PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT
11	21E016-2	VAC-2 PRODUCT COOLER	17.5	NO	CONT	C	PMC, PMT
12	21E017-1	VAC-3 PRODUCT COOLER	10	NO	CONT	C	PMC, PMT
13	21E017-2	VAC-3 PRODUCT COOLER	10	NO	CONT	C	PMC, PMT
14	21E018-1	HEAVY SLOP PRODUCT COOLER	2.5	NO	CONT	C	PMC, PMT
15	21E018-2	HEAVY SLOP PRODUCT COOLER	2.5	NO	CONT	C	PMC, PMT
16	22K001A-3	VENT FAN FOR 22K001A	0.1	NO	CONT	C	PMC, PMT
17	22K001B-3	VENT FAN FOR 22K001A	0.1	NO	CONT	C	PMC, PMT
18	22K002A-1	LUBE OIL PUMP FOR 22K002A	1.5	NO	CONT	C	PMC, PMT
19	22K002A-2	LUBE OIL PUMP FOR 22K002A	0.55	NO	CONT	C	PMC, PMT
20	22K002B-1	LUBE OIL PUMP FOR 22K002B	1.5	NO	CONT	C	PMC, PMT
21	22K002B-2	LUBE OIL PUMP FOR 22K002B	0.55	NO	CONT	C	PMC, PMT
22	22K003A-1	LUBE OIL PUMP FOR OFF GAS COMPRESSOR A	0.55	NO	CONT	C	PMC, PMT
23	22K003B-1	LUBE OIL PUMP FOR OFF GAS COMPRESSOR B	0.55	NO	CONT	C	PMC, PMT
24	22P002A	DRY NMP PUMP	250	NO	CONT	C	PMC, PMT
25	22P009	DEHYDRATOR REFLUX PUMP	15	NO	CONT	C	PMC, PMT
26	22P011	ION BED FEED PUMP	5.5	NO	CONT	C	PMC, PMT
27	22P014	NMP SUMP PUMP	5.5	NO	CONT	C	PMC, PMT
28	22P015	PHOSPHATE INJECTION PUMP	0.25	NO	CONT	C	PMC, PMT
29	22P017	DEHYDRATOR BOTTOM PUMP	3.6	NO	CONT	C	PMC, PMT
30	22P019	SPENT CAUSTIC PUMP	6.8	NO	CONT	C	PMC, PMT
31	22E008-1	WET NMP CONDENSER	15	NO	CONT	C	PMC, PMT
32	22E008-2	WET NMP CONDENSER	15	NO	CONT	C	PMC, PMT
33	22E016	STRIP GAS COMP. AFTERCOOLER	5	NO	CONT	C	PMC, PMT
34	22E019	HOT SEPARATE CONDENSER	10	NO	CONT	C	PMC, PMT
35	22E020-1	STRIP OVHD. CONDENSER	10	NO	CONT	C	PMC, PMT
36	22E020-2	STRIP OVHD. CONDENSER	10	NO	CONT	C	PMC, PMT
37	22E023	DEHYDRATOR OVERHEAD CONDENSER	5	NO	CONT	C	PMC, PMT
38	23P002A	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT
39	23P002B	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT
40	23P002C	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT
41	23P002D	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT
42	23P002E	WAXY SLURRY BOOT PUMP	17.5	NO	CONT	C	PMC, PMT
43	23P005A	COLD DRY PROPANE PUMP	140	NO	CONT	C	PMC, PMT
44	23P005B	COLD DRY PROPANE PUMP	140	NO	CONT	C	PMC, PMT

3 YEARS MOTOR OVERHAUL (GROUP C)

PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
45	23P007A-1	LUBICATION FOR 23P007A	1/4HP	NO	CONT	C	PMC, PMT
46	23P007B-1	LUBICATION FOR 23P007B	1/4HP	NO	CONT	C	PMC, PMT
47	23P012	EJECTOR CONDENSATE PUMP	15	NO	CONT	C	PMC, PMT
48	23K001-1	LUBE OIL PUMP FOR 23K001	33	NO	CONT	C	PMC, PMT
49	23N001	WAX RESLURRY MIXER	4	NO	CONT	C	PMC, PMT
50	23N002	WAX PRODUCT SLURRY MIXER	4	NO	CONT	C	PMC, PMT
51	23N003	DEWAXING AID 1 MIXER	3	NO	CONT	C	PMC, PMT
52	23N004	DEWAXING AID 2 MIXER	3	NO	CONT	C	PMC, PMT
53	23F001A-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT
54	23F001A-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
55	23F001A-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
56	23F001B-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT
57	23F001B-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
58	23F001B-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
59	23F001C-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT
60	23F001C-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
61	23F001C-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
62	23F001D-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT
63	23F001D-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
64	23F001D-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
65	23F001E-1	DEWAXXING FILTER	0.37	NO	CONT	C	PMC, PMT
66	23F001E-2	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
67	23F001E-3	DEWAXXING FILTER		NO	CONT	C	PMC, PMT
68	24E006-1	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
69	24E006-2	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
70	24E006-3	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
71	24E006-4	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
72	24E006-5	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
73	24E006-6	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
74	24E006-7	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
75	24E006-8	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
76	24E006-9	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
77	24E006-10	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
78	24E006-11	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
79	24E006-12	SOLVENT COOLER	25	NO	CONT	C	PMC, PMT
80	24E007-1	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT
81	24E007-2	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT
82	24E007-3	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT
83	24E007-4	SOLVENT CONDENSER	36	NO	CONT	C	PMC, PMT
84	24E00-1	STEAM CONDENSER	25	NO	CONT	C	PMC, PMT
85	24E008-2	STEAM CONDENSER	25	NO	CONT	C	PMC, PMT
86	25P001A	FEED PUMP	14.5	NO	CONT	C	PMC, PMT
87	25P001B	FEED PUMP	14.5	NO	CONT	C	PMC, PMT

5 YEARS MOTOR OVERHAUL (GROUP B)

PROCESS LUBE BASE OIL PLANT

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
1	21X002	CORROSION INHBITOR SYSTEM	0.37	NO	PERIOD	B	PMT
2	22P012	TRANSFER PUMP	24	NO	PERIOD	B	PMT
3	22P013	MAKE UP PUMP	15	NO	PERIOD	B	PMT
4	22P016	CAUSTIC FEED PUMP	2.5	NO	PERIOD	B	PMT
5	22E007	NMP CONDENSER	6.8	NO	PERIOD	B	PMT
6	22N001	PHOSPHATE SOLOTION MIXER	3HP	NO	PERIOD	B	PMT
7	24P001A-1	LUBE OIL PUMP FOR 24P001A	1HP	NO	PEROID	B	PMT
8	24P001B-1	LUBE OIL PUMP FOR 24P001B	1HP	NO	PEROID	B	PMT
9	24P001A-2	LUBE OIL PUMP FOR 24P001A	1HP	NO	PEROID	B	PMT
10	24P001B-2	LUBE OIL PUMP FOR 24P001B	1HP	NO	PEROID	B	PMT
11	24P008	HOT OIL FILLING PUMP	5.5	NO	PEROID	B	PMT
12	24K001A-A	LUBE OIL PUMP FOR 24K001A	1.5	NO	PEROID	B	PMT
13	24K001A-B	LUBE OIL PUMP FOR 24K001A		NO	PEROID	B	PMT
14	24K001B-A	LUBE OIL PUMP FOR 24K001B	1.5	NO	PEROID	B	PMT
15	24K001B-B	LUBE OIL PUMP FOR 24K001B		NO	PEROID	B	PMT
16	24B001-1/8	SOOT BLOWER	0.75	NO	PEROID	B	PMT
17	25N001	AGITATOR	145	NO	PEROID	B	PMT
18	25N001-1			NO	PEROID	B	PMT
19	25P004A	PUMPOUT PUMP	5	NO	PEROID	B	PMT

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TANKFARM AREA

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
1	61P001 A	AR FEED PUMP	355	YES	CONT	A	PMC	MCC-TK	
2	61P001 B	AR FEED PUMP	355	YES	CONT	A	PMC	MCC-TK	
3	61P002 A	DISTILATE PUMP	300	YES	CONT	A	PMC	MCC-TK	
4	61P002 B	DISTILATE PUMP	300	YES	CONT	A	PMC	MCC-TK	
5	61P002 C	DISTILATE PUMP	300	YES	CONT	A	PMC	MCC-TK	
6	61P002 D	DISTILATE PUMP	300	YES	CONT	A	PMC	MCC-TK	
7	61P021 A	RAFINATE PUMP	250	YES	CONT	A	PMC	MCC-TK	
8	61P021 B	RAFINATE PUMP	250	YES	CONT	A	PMC	MCC-TK	
9	61P047 A	150BS MARINE LOADING PUMP	580	YES	PERIOD	D	BREAK DOWN	MCC-TK	
10	61P047 B	61P046/61P047A SPARE LOADING PUMP	580	YES	PERIOD	D	BREAK DOWN	MCC-TK	
11	61P003	150N DIST. FEED PUMP	5.5	NO	PERIOD	B	PMT	MCC-TK	
12	61P004 A	500N DIST. FEED PUMP	7.5	NO	PERIOD	B	PMT	MCC-TK	
13	61P004 B	61P003/61P004A SPARE PUMP	7.5	NO	PERIOD	B	PMT	MCC-TK	
14	61P023	150N RAFF. TRANSFER PUMP	4	NO	PERIOD	B	PMT	MCC-TK	
15	61P031	60N ROAD LOADING PUMP	18.5	NO	PERIOD	B	PMT	MCC-TK	
16	61P032 A	100N ROAD LOADING PUMP	30	YES	PERIOD	D	BREAK DOWN	MCC-TK	
17	61P032 B	100N ROAD LOADING PUMP	30	YES	PERIOD	D	BREAK DOWN	MCC-TK	
18	61P033	150N ROAD LOADIG PUMP	30	NO	PERIOD	B	PMT	MCC-TK	
19	61P034 A	300N ROAD LOADIG PUMP	30	YES	PERIOD	D	BREAK DOWN	MCC-TK	
20	61P034 B	61P031,033,34A SPARE PUMP	22	YES	PERIOD	D	BREAK DOWN	MCC-TK	
21	61P036	500N ROAD LOADING PUMP	30	NO	PERIOD	B	PMT	MCC-TK	
22	61P037 A	150BS ROAD LODING PUMP	75	YES	PERIOD	D	BREAK DOWN	MCC-TK	
23	61P037 B	61P036/61P037A SPARE PUMP	75	YES	PERIOD	D	BREAK DOWN	MCC-TK	
24	61P042	100N MARINE LOADING PUMP	140	NO	PERIOD	B	PMT	MCC-TK	
25	61P043 A	150N MARINE LOADING PUMP	140	YES	PERIOD	D	BREAK DOWN	MCC-TK	
26	61P043 B	61P042/61P043A SPARE PUMP	140	YES	PERIOD	D	BREAK DOWN	MCC-TK	
27	61P044 A	300N MARINE LOADING PUMP	132	YES	PERIOD	D	BREAK DOWN	MCC-TK	
28	61P044 B	300N MARINE LOADING PUMP	132	YES	PERIOD	D	BREAK DOWN	MCC-TK	
29	61P046	500N LOADING PUMP	140	NO	PERIOD	B	PMT	MCC-TK	
30	61P051A	LIGHT EXTRACT PUMP	11	YES	PERIOD	D	BREAK DOWN	MCC-TK	
31	61P051B	LIGHT EXTRACT PUMP	11	YES	PERIOD	D	BREAK DOWN	MCC-TK	
32	61P052	300N EXTRACT PUMP	22	NO	PERIOD	B	PMT	MCC-TK	
33	61P053 A	150BS EXTRACT PUMP	11	YES	PERIOD	D	BREAK DOWN	MCC-TK	
34	61P053 B	61P052/61P053A SPARE PUMP	30	YES	PERIOD	D	BREAK DOWN	MCC-TK	
35	61P054 A	500N EXTRACT LOADING PUMP	75	YES	PERIOD	D	BREAK DOWN	MCC-TK	
36	61P054 B	500N EXTRACT LOADING PUMP	75	YES	PERIOD	D	BREAK DOWN	MCC-TK	
37	61P055 A	EXTRACT FEED PUMP	11	YES	CONT	A	PMC	MCC-TK	
38	61P055 B	EXTRACT FEED PUMP	11	YES	CONT	A	PMC	MCC-TK	
39	61P071 A	LIGHT SLOP OIL PUMP	11	YES	PERIOD	D	BREAK DOWN	MCC-TK	
40	61P071 B	LIGHT SLOP OIL PUMP	11	YES	PERIOD	D	BREAK DOWN	MCC-TK	
41	61P072 A	HEAVY SLOP OIL PUMP	55	YES	PERIOD	D	BREAK DOWN	MCC-TK	
42	61P072 B	HEAVY SLOP OIL PUMP	55	YES	PERIOD	D	BREAK DOWN	MCC-TK	
43	61P073 A	VR PUMP	55	YES	CONT	A	PMC	MCC-TK	

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TANKFARM AREA

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
44	61P073 B	VR PUMP	55	YES	CONT	A	PMC	MCC-TK	
45	61P074 A	SLOP OIL PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC-TK	
46	61P074 B	SLOP OIL PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC-TK	
47	61P075A	DCC FEED PUMP	140	YES	CONT	A	PMC	MCC-TK	
48	61P075B	DCC FEED PUMP	140	YES	CONT	A	PMC	MCC-TK	
49	61P076 A	FUEL OIL LOADING PUMP	65	NO	PERIOD	B	PMT	MCC-TK	
50	61P076 B	FUEL OIL LOADING PUMP	65	NO	PERIOD	B	PMT	MCC-TK	
51	61P078 A	WAX ROAD LOADING PUMP	65	NO	PERIOD	B	PMT	MCC-TK	
52	61P078 B	WAX ROAD LOADING PUMP	65	NO	PERIOD	B	PMT	MCC-TK	
53	61P079 A	SLACK WAX PUMP	15.5	YES	PERIOD	D	BREAK DOWN	MCC-TK	
54	61P079 B	SLACK WAX PUMP	15.5	YES	PERIOD	D	BREAK DOWN	MCC-TK	
55	61P080	FRESH C3 LPG PUMP	10	NO	PERIOD	B	PMT	MCC-TK	
56	61P081	FRESH C3 LPG PUMP	4.6	NO	PERIOD	B	PMT	MCC-TK	
57	61P082 A	RECYCLE C3 LPG PUMP	4.6	NO	PERIOD	B	PMT	MCC-TK	
58	61P082 B	61P081/61P082A SPARE PUMP	5.5	NO	PERIOD	B	PMT	MCC-TK	
59	61P083	FLUSHING OIL PUMP	55	NO	PERIOD	B	PMT	MCC-TK	
60	61P102 A	TANK YARD OILY WATER TRANS. PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC-TK	
61	61P102 B	TANK YARD OILY WATER TRANS. PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC-TK	
62	61TN054B	300N DISTILATE TANK AGITATOR	7.5	NO	PERIOD	B	PMT	MCC-TK	
63	61TN036A	300N DISTILATE TANK AGITATOR	7.5	NO	PERIOD	B	PMT	MCC-TK	
64	61TN036C	300N DISTILATE TANK AGITATOR	7.5	NO	PERIOD	B	PMT	MCC-TK	
65	61TN021	600N/300V ST RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
66	61TN022	100N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
67	61TN023 A	150N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
68	61TN023 B	150N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
69	61TN024 A	300N RAFF TANK AGITATOR	11	NO	PERIOD	B	PMT	MCC-TK	
70	61TN024 B	300N RAFF TANK AGITATOR	11	NO	PERIOD	B	PMT	MCC-TK	
71	61TN025 A	500N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
72	61TN025 B	500N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
73	61TN025 C	500N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	PMT	MCC-TK	
74	61TN026 A	150BS RAFF TANK AGITATOR	11	NO	PERIOD	B	PMT	MCC-TK	
75	61TN026 B	150BS RAFF TANK AGITATOR	11	NO	PERIOD	B	PMT	MCC-TK	
76	61TN026 C	150BS RAFF TANK AGITATOR	11	NO	PERIOD	B	PMT	MCC-TK	
77	61TN075 A	DCC FEED TANK AGITATOR	15	NO	PERIOD	B	PMT	MCC-TK	
78	61TN075 B	DCC FEED TANK AGITATOR	15	NO	PERIOD	B	PMT	MCC-TK	
79	61TN076 A	FUEL OIL TANK AGITATOR	22	NO	PERIOD	B	PMT	MCC-TK	
80	61TN076 B	FUEL OIL TANK AGITATOR	22	NO	PERIOD	B	PMT	MCC-TK	
81	81P055 A		4.5	NO	PERIOD	B	PMT	MCC-TK	
82	61P095A		132	YES	PERIOD	D	BREAK DOWN	MCC-TK	
83	61P095B		132	YES	PERIOD	D	BREAK DOWN	MCC-TK	
84	61P062A	ASPHALTEN PUMP	37	NO	CONT	C	PMC, PMT	MCC-PC	
85	61P062B	ASPHALTEN PUMP	37	NO	CONT	C	PMC, PMT	MCC-PC	
86	61P063A	BLOWN ASPHALTEN DRUM'G PUMP	55	NO	PERIOD	B	PMT	MCC-PC	

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TANKFARM AREA

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE	INSTALLATION	
								FEEDER	LOCATION
87	61P063B	BLOWN ASPHALTEN DRUM'G PUMP	55	NO	PERIOD	B	PMT	MCC-PC	
88	61P064A	BLOWN ASPHALTEN LOADING PUMP	110	NO	PERIOD	B	PMT	MCC-PC	
89	61P064B	BLOWN ASPHALTEN LOADING PUMP	110	NO	PERIOD	B	PMT	MCC-PC	
90	61P065A	ASPHALTEN PUMP	250	YES	PERIOD	D	BREAK DOWN	MCC-PC	
91	61P065B	ASPHALTEN PUMP	250	YES	PERIOD	D	BREAK DOWN	MCC-PC	
92	61P084	TANK LOADING SLOP OIL PUMP	3	NO	PERIOD	B	PMT	MCC-PC	
93	61P085	BITUMEN SLOP OIL PUMP	11	NO	PERIOD	B	PMT	MCC-PC	
94	61P101A	FUEL OIL SUPPLY PUMP	22	YES	CONT	A	PMC	MCC-PC	
95	61P101B	FUEL OIL SUPPLY PUMP	22	YES	CONT	A	PMC	MCC-PC	
96	61P201A	OIL CONTAMINATED FEED PUMP	3	YES	PERIOD	D	BREAK DOWN	MCC-PC	
97	61P201B	OIL CONTAMINATED FEED PUMP	3	YES	PERIOD	D	BREAK DOWN	MCC-PC	
98	61P202A	TREATED WATER T/R PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC-PC	
99	61P202B	TREATED WATER T/R PUMP	15	YES	PERIOD	D	BREAK DOWN	MCC-PC	
100	61P203A	RECOVERED OIL TRANSFER PUMP	45	YES	PERIOD	D	BREAK DOWN	MCC-PC	
101	61P203B	RECOVERED OIL TRANSFER PUMP	45	YES	PERIOD	D	BREAK DOWN	MCC-PC	
102	61P204		3.5	YES	PERIOD	D	BREAK DOWN	LCP	
103	61P205		15	YES	PERIOD	D	BREAK DOWN	LCP	
104	61TN062A	A.C ASPHALT TANK AGITATOR	7.5	NO	PERIOD	B	PMT	MCC-PC	
105	61TN062B	A.C ASPHALT TANK AGITATOR	7.5	NO	PERIOD	B	PMT	MCC-PC	
106	61TN063A	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	PMT	MCC-PC	
107	61TN063B	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	PMT	MCC-PC	
108	61TN064A	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	PMT	MCC-PC	
109	61TN064B	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	PMT	MCC-PC	
110	61TN064C	BLOWN ASPHALT 10/20 TANK AGITATOR	4	NO	PERIOD	B	PMT	MCC-PC	

- A : INSPECTION EVERY MONTH OF RUNNING
- B : OVERHAUL EVERY 5 YEAR
- C : INSPECTION EVERY MONTH OF RUNNING AND OVERHAUL EVERY 3 YEARS
- D : RUNNING UNTIL BREAK DOWN
- PERIOD : PERIOD RUNNING
- CONT : CONTINUOUS RUNNING
- MCC : MOTOR IS SUPPLIED BY SOURCE FROM MOTOR CONTROL CENTER
- LCP : MOTOR IS SUPPLIED BY SOURCE FROM LOCAL CONTROL PANEL

3 YEARS MOTOR OVERHAUL(GROUP C)

TANKFARM AREA

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
1	61P062A	ASPHALTEN PUMP	37	NO	CONT	C	3 YEARS OVERHAUL
2	61P062B	ASPHALTEN PUMP	37	NO	CONT	C	3 YEARS OVERHAUL

5 YEARS MOTOR OVERHAUL(GROUP B)

TANKFARM AREA

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
1	61P003	150N DIST. FEED PUMP	5.5	NO	PERIOD	B	5 YEARS OVERHAUL
2	61P004 A	500N DIST. FEED PUMP	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
3	61P004 B	61P003/61P004A SPARE PUMP	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
4	61P023	150N RAFF. TRANSFER PUMP	4	NO	PERIOD	B	5 YEARS OVERHAUL
5	61P031	60N ROAD LOADING PUMP	18.5	NO	PERIOD	B	5 YEARS OVERHAUL
6	61P033	150N ROAD LOADIG PUMP	30	NO	PERIOD	B	5 YEARS OVERHAUL
7	61P036	500N ROAD LOADING PUMP	30	NO	PERIOD	B	5 YEARS OVERHAUL
8	61P042	100N MARINE LOADING PUMP	140	NO	PERIOD	B	5 YEARS OVERHAUL
9	61P046	500N LOADING PUMP	140	NO	PERIOD	B	5 YEARS OVERHAUL
10	61P052	300N EXTRACT PUMP	22	NO	PERIOD	B	5 YEARS OVERHAUL
11	61P076 A	FUEL OIL LOADING PUMP	65	NO	PERIOD	B	5 YEARS OVERHAUL
12	61P076 B	FUEL OIL LOADING PUMP	65	NO	PERIOD	B	5 YEARS OVERHAUL
13	61P078 A	WAX ROAD LOADING PUMP	65	NO	PERIOD	B	5 YEARS OVERHAUL
14	61P078 B	WAX ROAD LOADING PUMP	65	NO	PERIOD	B	5 YEARS OVERHAUL
15	61P080	FRESH C3 LPG PUMP	10	NO	PERIOD	B	5 YEARS OVERHAUL
16	61P081	FRESH C3 LPG PUMP	4.6	NO	PERIOD	B	5 YEARS OVERHAUL
17	61P082 A	RECYCLE C3 LPG PUMP	4.6	NO	PERIOD	B	5 YEARS OVERHAUL
18	61P082 B	61P081/61P082A SPARE PUMP	5.5	NO	PERIOD	B	5 YEARS OVERHAUL
19	61P083	FLUSHING OIL PUMP	55	NO	PERIOD	B	5 YEARS OVERHAUL
20	61TN054B	300N DISTILATE TANK AGITATOR	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
21	61TN036A	300N DISTILATE TANK AGITATOR	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
22	61TN036C	300N DISTILATE TANK AGITATOR	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
23	61TN021	600N/300V ST RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
24	61TN022	100N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
25	61TN023 A	150N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
26	61TN023 B	150N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
27	61TN024 A	300N RAFF TANK AGITATOR	11	NO	PERIOD	B	5 YEARS OVERHAUL
28	61TN024 B	300N RAFF TANK AGITATOR	11	NO	PERIOD	B	5 YEARS OVERHAUL
29	61TN025 A	500N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
30	61TN025 B	500N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
31	61TN025 C	500N RAFF TANK AGITATOR	7.46	NO	PERIOD	B	5 YEARS OVERHAUL
32	61TN026 A	150BS RAFF TANK AGITATOR	11	NO	PERIOD	B	5 YEARS OVERHAUL

5 YEARS MOTOR OVERHAUL(GROUP B)

TANKFARM AREA

ITEM NO	MOTOR NO	DESCRIPTION	POWER kW	STAND BY	RUNNING	MOTOR GROUP	MAINTENANCE TYPE
33	61TN026 B	150BS RAFF TANK AGITATOR	11	NO	PERIOD	B	5 YEARS OVERHAUL
34	61TN026 C	150BS RAFF TANK AGITATOR	11	NO	PERIOD	B	5 YEARS OVERHAUL
35	61TN075 A	DCC FEED TANK AGITATOR	15	NO	PERIOD	B	5 YEARS OVERHAUL
36	61TN075 B	DCC FEED TANK AGITATOR	15	NO	PERIOD	B	5 YEARS OVERHAUL
37	61TN076 A	FUEL OIL TANK AGITATOR	22	NO	PERIOD	B	5 YEARS OVERHAUL
38	61TN076 B	FUEL OIL TANK AGITATOR	22	NO	PERIOD	B	5 YEARS OVERHAUL
39	81P055 A		4.5	NO	PERIOD	B	5 YEARS OVERHAUL
40	61P063A	BLOWN ASPHALTEN DRUM'G PUMP	55	NO	PERIOD	B	5 YEARS OVERHAUL
41	61P063B	BLOWN ASPHALTEN DRUM'G PUMP	55	NO	PERIOD	B	5 YEARS OVERHAUL
42	61P064A	BLOWN ASPHALTEN LOADING PUMP	110	NO	PERIOD	B	5 YEARS OVERHAUL
43	61P064B	BLOWN ASPHALTEN LOADING PUMP	110	NO	PERIOD	B	5 YEARS OVERHAUL
44	61P084	TANK LOADING SLOP OIL PUMP	3	NO	PERIOD	B	5 YEARS OVERHAUL
45	61P085	BITUMEN SLOP OIL PUMP	11	NO	PERIOD	B	5 YEARS OVERHAUL
46	61TN062A	A.C ASPHALT TANK AGITATOR	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
47	61TN062B	A.C ASPHALT TANK AGITATOR	7.5	NO	PERIOD	B	5 YEARS OVERHAUL
48	61TN063A	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	5 YEARS OVERHAUL
49	61TN063B	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	5 YEARS OVERHAUL
50	61TN064A	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	5 YEARS OVERHAUL
51	61TN064B	BLOWN ASPHALT 10/20 TANK AGITATOR	5.5	NO	PERIOD	B	5 YEARS OVERHAUL
52	61TN064C	BLOWN ASPHALT 10/20 TANK AGITATOR	4	NO	PERIOD	B	5 YEARS OVERHAUL

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
O : Overhaul
L : Lubrication
R : Running condition check
I : Inspection
C : Calibration
Q : Check lube oil quality
S : Stand by condition check
F : Function Test
B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

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PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

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			52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
21E011-1	MOTOR 25 Kw.	C					←		I	→																					←		S	→																						
21E011-2	MOTOR 25 Kw.	C					←		I	→																					←		S	→																						
21E013-1	MOTOR 15 Kw.	C					←		I	→																					←		S	→																						
21E013-2	MOTOR 15 Kw.	C					←		I	→																					←		S	→																						
21E014-1	MOTOR 17.5 Kw.	C					←		I	→																					←		S	→																						
21E014-2	MOTOR 17.5 Kw.	C					←		I	→																					←		S	→																						
21E015-1	MOTOR 15 Kw.	C					←		I	→																					←		S	→																						
21E015-2	MOTOR 15 Kw.	C					←		I	→																					←		S	→																						
21E016-1	MOTOR 17.5 Kw.	C					←		I	→																					←		S	→																						
21E016-2	MOTOR 17.5 Kw.	C					←		I	→																					←		S	→																						
21E017-1	MOTOR 10 Kw.	C					←		I	→																					←		S	→																						
21E017-2	MOTOR 10 Kw.	C					←		I	→																					←		S	→																						
21E018-1	MOTOR 2.5 Kw.	C					←		I	→																					←		S	→																						
21E018-2	MOTOR 2.5 Kw.	C					←		I	→																					←		S	→																						

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

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DATE : OCT. 1 5, 2001

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22E002-1	MOTOR 30 Kw.	A					←	I		E							L						L					←	S		E							L						L												L			L
22E002-2	MOTOR 30 Kw.	A					←	I		E							L						L					←	S		E							L						L												L			L
22E007	MOTOR 6.8 Kw.	C					←	I		→																		←	S		→																											
22E008-1	MOTOR 15 Kw.	C					←	I		→																		←	S		→																											
22E008-2	MOTOR 15 Kw.	C					←	I		→																		←	S		→																											
22E016	MOTOR 5 Kw.	C					←	I		→																		←	S		→																											
22E019	MOTOR 10 Kw.	C					←	I		→																		←	S		→																											
22E020-1	MOTOR 10 Kw.	C					←	I		→																		←	S		→																											
22E020-2	MOTOR 10 Kw.	C					←	I		→																		←	S		→																											
22E023	MOTOR 5 Kw.	C					←	I		→																		←	S		→																											
22E025-1	MOTOR 30 Kw.	A	←	I		→				L							L						L					←	S		→				L						L						L						L			L
22E025-2	MOTOR 30 Kw.	A	←	I		→				L							L						L					←	S		→				L						L						L						L			L
22E025-3	MOTOR 30 Kw.	A	←	I		→				L							L						L					←	S		→				L						L						L						L			L
22E025-4	MOTOR 30 Kw.	A	←	I		→				L							L						L					←	S		→				L						L						L						L			L
22E025-5	MOTOR 30 Kw.	A	←	I		→				L							L						L					←	S		→				L						L						L						L			L
22E025-6	MOTOR 30 Kw.	A	←	I		→				L							L						L					←	S		→				L						L						L						L			L

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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24E006-1	MOTOR 25 Kw.	C						I																						S																											
24E006-2	MOTOR 25 Kw.	C						I																						S																									
24E006-3	MOTOR 25 Kw.	C						I																						S																									
24E006-4	MOTOR 25 Kw.	C						I																						S																									
24E006-5	MOTOR 25 Kw.	C						I																						S																									
24E006-6	MOTOR 25 Kw.	C						I																						S																									
24E006-7	MOTOR 25 Kw.	C						I																						S																									
24E006-8	MOTOR 25 Kw.	C						I								L								L						S										L										L			
24E006-9	MOTOR 25 Kw.	C						I																						S																									
24E006-10	MOTOR 25 Kw.	C						I								L								L						S										L										L			
24E006-11	MOTOR 25 Kw.	C						I																						S																									
24E006-12	MOTOR 25 Kw.	C						I								L								L						S										L										L			
24E007-1	MOTOR 36 Kw.	C						I								L								L						S										L										L			
24E007-2	MOTOR 36 Kw.	C						I								L								L						S										L										L			
24E007-3	MOTOR 36 Kw.	C						I								L								L						S										L										L			
24E007-4	MOTOR 36 Kw.	C						I								L								L						S										L										L			
24E008-1	MOTOR 25 Kw.	C						I																						S																									
24E008-2	MOTOR 25 Kw.	C						I																						S																									

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

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REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

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21K001A	MOTOR 45 Kw.	A													←	I	→																				←	S	→																			
21K001B	MOTOR 45 Kw.	A																	←	I	→																		←	S	→																
21P001A	MOTOR 80 Kw.	A		L											←	I	→		L															L			←	S	→								L								
21P001B	MOTOR 80 Kw.	A														L			←	→											L						←	S	→		L													
21P002A	MOTOR 36 Kw.	A													←	I	→																				←	S	→																
21P002B	MOTOR 36 Kw.	A																	←	I	→																		←	S	→																
21P003A	MOTOR 6.8 Kw.	A																					←	I	→																←	S	→													
21P003B	MOTOR 6.8 Kw.	A	←	I	→																																						←	S	→											
21P004A	MOTOR 80 Kw.	A		L																L			←	I	→									L								←	S	→		L								
21P004B	MOTOR 80 Kw.	A	←	I	→											L																		L									←	S	→										
21P005A	MOTOR 148 Kw.	A		L																L			←	I	→									L								←	S	→		L								
21P005B	MOTOR 148 Kw	A	←	I	→											L																		L									←	S	→										
21P006A	MOTOR 36 Kw.	A																					←	I	→																		←	S	→										
21P006B	MOTOR 36 Kw.	A	←	I	→																																						←	S	→										
21P007A	MOTOR 58 Kw.	A																					←	I	→																		←	S	→										
21P007B	MOTOR 58 Kw.	A	←	I	→																																						←	S	→										
21P008A	MOTOR 20 Kw.	A																					←	I	→																		←	S	→										
21P008B	MOTOR 20 Kw.	A	←	I	→																																						←	S	→										

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

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APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date / GROUP	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
			52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
21P009A	MOTOR 80 Kw.	A		L															L				I												L										S				L							
21P009B	MOTOR 80 Kw.	A		I											L																L												L				S							
21P009C	MOTOR 80 Kw.	A		L															L				I												L										S				L							
21P010A	MOTOR 47 Kw.	A																					I																						S											
21P010B	MOTOR 47 Kw.	A		I																																										S											
21P011A	MOTOR 148 Kw.	C						L							L								L	I							L												L	S					L					
21P012A	MOTOR 36 Kw.	A					I																																							S											
21P012B	MOTOR 36 Kw.	A									I																								S																					
21P013A	MOTOR 24 Kw.	A					I																												S																					
21P013B	MOTOR 24 Kw.	A									I																								S																					
21P014A	MOTOR 1.5 Kw.	D					I																												S																					
21P014B	MOTOR 1.5 Kw.	D									I																								S																					
21P015A	MOTOR 3.6 Kw.	D					I																												S																					
21P015B	MOTOR 3.6 Kw.	D									I																								S																					
21P016A	MOTOR 0.18 Kw.	D					I																												S																					
21P016B	MOTOR 0.18 Kw.	D									I																								S																					
21P017A	MOTOR 58 Kw.	A		L			I												L																L																					
21P017B	MOTOR 58 Kw.	A					I								L																L				S																					
21X002	MOTOR 0.37 Kw.	B					I																																																		

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function Test
R . Running condition check
S : Stand by condition check
B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
		GROUP	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
24K001A	MOTOR 130 Kw.	A		L			←—		I	—→									L												S	→		L																	L							
24K001A-1	MOTOR 1.5 Kw.	B					←—		I	—→																					S	→																									
24K001A-2	MOTOR 1.5 Kw.	B					←—		I	—→																					S	→																									
24K001B	MOTOR 130 Kw.	A									←—		I	—→		L															L			←—		S	—→														L							
24K001B-1	MOTOR 1.5 Kw.	B									←—		I	—→																			←—		S	—→																									
24K001B-2	MOTOR 1.5 Kw.	B									←—		I	—→																			←—		S	—→																									
24P001A	MOTOR 322 Kw.	A		L											←—	I	—→		L														L			←—	S	—→																									
24P001A-1	MOTOR 0.75 Kw.	B													←—	I	—→																			←—	S	—→																									
24P001A-2	MOTOR 0.75 Kw.	B													←—	I	—→																			←—	S	—→																									
24P001B	MOTOR 322 Kw.	A														L			←—	I	—→												L						←—	S	—→																								
24P001B-1	MOTOR 0.75 Kw.	B																	←—	I	—→																		←—	S	—→																								
24P001B-2	MOTOR 0.75 Kw.	B																	←—	I	—→																		←—	S	—→																								
24P002A	MOTOR 442 Kw.	A		L											←—	I	—→		L														L			←—	S	—→																									
24P002B	MOTOR 442 Kw.	A														L			←—	I	—→												L						←—	S	—→																								
24P003A	MOTOR 135 Kw.	A		L											←—	I	—→		L														L			←—	S	—→																									
24P003B	MOTOR 135 Kw.	A														L			←—	I	—→												L						←—	S	—→																								
24P004A	MOTOR 15 Kw.	D		L											←—	I	—→		L														L			←—	S	—→																									
24P004B	MOTOR 15 Kw.	D														L			←—	I	—→												L						←—	S	—→																								
24P005A	MOTOR 28 Kw.	A													←—	I	—→																			←—	S	—→																									
24P005B	MOTOR 28 Kw.	A																	←—	I	—→																		←—	S	—→																								

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
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F : Function Test
R : Running condition check
S : Stand by condition check
B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jar				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jar			
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24P006A	MOTOR 65 Kw.	A		L											←		I	→		L																L				S	→										L							
24P006B	MOTOR 65 Kw.	A														L			←		I	→												L						←		S	→		L												
24P007A	MOTOR 863 Kw.	A		L											←		I	→		L																L				S	→										L							
24P007B	MOTOR 863 Kw.	A														L			←		I	→												L						←		S	→		L												
24P008	MOTOR 5.5 Kw.	B													←		I	→																						S	→																
24P009A	MOTOR 5.5 Kw.	D													←		I	→																						S	→																
24P009B	MOTOR 5.5 Kw.	D																	←		I	→																		←		S	→														

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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MAINTENANCE DEPARTMENT MANAGER

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PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date GROUP	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-23Nov	24Nov-21Dec	22Dec-18Jan
25N001	MOTOR 145 Kw.	B		L		L	←I→	L		L		L	←S→	L		L
25N001-1	MOTOR 0.25 Kw.	B					←I→						←S→			
25P001A	MOTOR 14.5 Kw.	C				←I→						←S→				
25P001B	MOTOR 14.5 Kw.	C					←I→						←S→			
25P002A	MOTOR 17.5 Kw.	A				←I→						←S→				
25P002B	MOTOR 17.5 Kw.	A					←I→						←S→			
25P003A	MOTOR 23 Kw.	A				←I→						←S→				
25P003B	MOTOR 23 Kw.	A					←I→						←S→			
25P004	MOTOR 5 Kw.	B				←I→						←S→				
25P005A	MOTOR 2.5 Kw.	D				←I→						←S→				
25P005B	MOTOR 2.5 Kw.	D					←I→						←S→			
25P006A	MOTOR 4.6 Kw.	D				←I→						←S→				
25P006B	MOTOR 4.6 Kw.	D					←I→						←S→			
25K001A	MOTOR 132 Kw.	D		L	←I→			L			←S→	L				L
25K001B	MOTOR 132 Kw.	D	L			←I→		L			L	←S→			L	
25K001C	MOTOR 132 Kw.	D	L	←I→			L			←S→	L				L	

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function Test
R : Running condition check
S : Stand by condition check
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ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

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MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date / GROUP	23Dec-18Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
			52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
22K001A	MOTOR 260 Kw.	A	←—	—	I	—→										L															L														L			S	—→						
22K001A-1	MOTOR 11 Kw.	A	←—	—	I	—→																																									S	—→						
22K001A-2	MOTOR 11 Kw.	A	←—	—	I	—→																																								S	—→						
22K001A-3	MOTOR 0.1 Kw.	C	←—	—	I	—→																																								S	—→						
22K001B	MOTOR 260 Kw.	A		L			←—	—	I	—→									L												S	—→			L												L						
22K001B-1	MOTOR 11 Kw.	A					←—	—	I	—→																					S	—→																						
22K001B-2	MOTOR 11 Kw.	A					←—	—	I	—→																					S	—→																						
22K001B-3	MOTOR 0.1 Kw.	C					←—	—	I	—→																					S	—→																						
22K002A	MOTOR 450 Kw.	A	←—	—	I	—→										L															L														L			S	—→						
22K002A-1	MOTOR 1.5 Kw.	C	←—	—	I	—→																																								S	—→						
22K002B	MOTOR 450 Kw.	A		L			←—	—	I	—→									L												S	—→			L												L						
22K002B-1	MOTOR 1.5 Kw.	C					←—	—	I	—→																					S	—→																						
22K003A	MOTOR 58 Kw.	A	←—	—	I	—→										L															L														L			S	—→						
22K003A-1	MOTOR 0.55 Kw.	C	←—	—	I	—→																																								S	—→						
22K003B	MOTOR 58 Kw.	A		L			←—	—	I	—→									L												S	—→			L												L						
22K003B-1	MOTOR 0.55 Kw.	C					←—	—	I	—→																					S	—→																						
22P002A	MOTOR 250 Kw.	C		L							←—	I	L	—→					L								L								S	L	—→				L								L						
22P003A	MOTOR 22 Kw.	A									←—	—	I	—→		L															L					S	—→									L								
22P003B	MOTOR 22 Kw.	A		L											←—	—	I	—→	L																	L			←—	S	—→									L						

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
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ISSUED BY : .....DATE: .....
SUPERVISOR

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MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

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PRODUCTION SECTION MANAGER

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PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
		GROUP	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
22P004A	MOTOR 68 Kw.	A									←I→				L																L				S→										L													
22P004B	MOTOR 68 Kw.	A		L								←I→						L																L		S→															L						
22P005A	MOTOR 300 Kw.	A									←I→				L																L				S→										L													
22P005B	MOTOR 300 Kw.	A		L								←I→						L																L		S→															L						
22P006A	MOTOR 140 Kw.	A									←I→				L																L				S→										L													
22P006B	MOTOR 140 Kw.	A		L								←I→						L																L		S→															L						
22P007A	MOTOR 3.6 Kw	A									←I→																								S→																						
22P007B	MOTOR 3.6 Kw.	A										←I→																									S→																						
22P008A	MOTOR 37 Kw.	A									←I→				L																L				S→										L													
22P008B	MOTOR 37 Kw.	A		L								←I→						L																L		S→															L						
22P009	MOTOR 15 Kw.	C		L							←I I→								L						L								S L→						L						L											
22P010A	MOTOR 84 Kw.	A									←I→				L																L		S→												L											
22P010B	MOTOR 84 Kw.	A		L								←I→						L																L		S→															L						
22P011	MOTOR 5.5 Kw.	C										←I→																								S→																						
22P012	MOTOR 24 Kw.	B		L							←I L→								L						L								S L→						L						L											
22P013	MOTOR 15 Kw.	B		L							L				←I→				L						L								L		S→						L						L											
22P014	MOTOR 5.5 Kw.	C									←I→																								S→																						
22P015	MOTOR 0.25 Kw.	C									←I→																								S→																						
22P016	MOTOR 2.5 Kw.	B									←I→																								S→																						
22P017	MOTOR 3.6 Kw.	C									←I→																								S→																						

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

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ISSUED BY : ....DATE: .....
SUPERVISOR

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MAINTENANCE SECTION MANAGER

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MAINTENANCE DEPARTMENT MANAGER

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EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Ma				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jar			
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22P018A	MOTOR 4.6 Kw.	A									←	I		→																					←	S		→																				
22P018B	MOTOR 4.6 Kw.	A													←	I		→																					←	S		→																
22P019	MOTOR 6.8 Kw.	C									←	I		→																					←	S		→																				
22N001	MOTOR 2.2 Kw.	B					←	I		→																			←	S		→																										

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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23K001-1	MOTOR 33 Kw.	C		L								L			←I→				L							L								L				S→				L								L							
23P002A	MOTOR 17.5 Kw.	C	←I→																																																S→							
23P002B	MOTOR 17.5 Kw.	C	←I→																																															S→							
23P002C	MOTOR 17.5 Kw.	C	←I→																																															S→							
23P002D	MOTOR 17.5 Kw.	C					←I→																								←S→																											
23P002E	MOTOR 17.5 Kw.	C					←I→																								←S→																											
23P003A	MOTOR 140 Kw.	A													L		←I→														L										←S→			L													
23P003B	MOTOR 140 Kw.	A		L													L		←I→																L								←S→			L											
23P004A	MOTOR 250 Kw.	A													L		←I→														L										←S→			L											
23P004B	MOTOR 250 Kw.	A		L													L		←I→																L								←S→			L											
23P005A	MOTOR 140 Kw.	C													L		←I→														L										←S→			L											
23P005B	MOTOR 140 Kw.	C		L													L		←I→																L								←S→			L											
23P006A	MOTOR 100 Kw.	A													L		←I→														L										←S→			L											
23P006B	MOTOR 100 Kw.	A		L													L		←I→																L								←S→			L											
23P007A	MOTOR 58 Kw.	A			L		←I→											L												←S→					L																					
23P007A-1	MOTOR 0.25 Kw.	C					←I→																								←S→																											
23P007B	MOTOR 58 Kw.	A					←I→								L																←S,L→																											
23P007B-1	MOTOR 0.25 Kw.	C					←I→																								←S→																											
23P008A	MOTOR 7.5 Kw.	A															←I→																									←S→															
23P008B	MOTOR 7.5 Kw.	A																	←I→																									←S→														

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength | O : Overhaul | L : Lubrication | R : Running condition check

I : Inspection | C : Calibration | Q : Check lube oil quality | S : Stand by condition check

F : Function Test | B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date GROUP	23Dec-18Jan 52 01 02 03	20Jan-16Feb 04 05 06 07	17Feb-16Mar 08 09 10 11	17Mar-13Apr 12 13 14 15	14Apr-11May 16 17 18 19	12May-8Jun 20 21 22 23	9Jun-6Jul 24 25 26 27	7Jul-3Aug 28 29 30 31	4Aug-31Aug 32 33 34 35	1Sep-28Sep 36 37 38 39	29Sep-26Oct 40 41 42 43	27Oct-23Nov 44 45 46 47	24Nov-21Dec 48 49 50 51	22Dec-18Jan 52 01 02 03
23P009A	MOTOR 20 Kw.	A				L	I			L			S	L		
23P009B	MOTOR 20 Kw.	A	L				L	I			L			S	L	
23P010A	MOTOR 200 Kw.	A				L	I			L			S	L		
23P010B	MOTOR 200 Kw.	A	L				L	I			L			S	L	
23P011A	MOTOR 15 Kw.	A				L	I			L			S	L		
23P011B	MOTOR 15 Kw.	A	L				L	I			L			S	L	
23P012	MOTOR 15 Kw.	C	L			L	I		L			L	S		L	
23P013A	MOTOR 10 Kw.	A					I						S			
23P013B	MOTOR 10 Kw.	A						I						S		
23P014A	MOTOR 10 Kw.	A					I						S			
23P014B	MOTOR 10 Kw.	A						I						S		
23P015A	MOTOR 7.5 Kw.	A					I						S			
23P015B	MOTOR 7.5 Kw.	A						I						S		
23P016A	MOTOR 7.5 Kw.	A					I						S			
23P016B	MOTOR 7.5 Kw.	A						I						S		
23P017A	MOTOR 0.37 Kw.	D					I						S			
23P017B	MOTOR 0.37 Kw.	D						I						S		
23P018A	MOTOR 10 Kw.	A					I						S			
23P018B	MOTOR 10 Kw.	A						I						S		

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : PROCESS EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function Test
R : Running condition check
S : Stand by condition check
B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date / GROUP	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-23Nov	24Nov-21Dec	22Dec-18Jan
23P019A	MOTOR 20 Kw.	D	L	I		L	I	I		L			S	L		
23P019B	MOTOR 20 Kw.	D	L				L	I			L			S	L	
23N001	MOTOR 4 Kw.	C		I						S						
23N002	MOTOR 4 Kw.	C		I						S						
23N003	MOTOR 3 Kw.	C		I						S						
23N004	MOTOR 3 Kw.	C		I						S						
CPI UNIT																
61P201A	MOTOR 3 Kw.	D				I						S				
61P201B	MOTOR 3 Kw.	D					I						S			
61P202A	MOTOR 15 Kw.	D				I						S				
61P202B	MOTOR 15 Kw.	D					I						S			
61P203A	MOTOR 45 Kw.	D				I						S				
61P203B	MOTOR 45 Kw.	D					I						S			

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

☐ MECH. ■ ELEC. ☐ INST.

REV 0

SECTION : .... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC

DATE : OCT 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength	O : Overhaul	L : Lubrication	R : Running condition check
I : Inspection	C : Calibration	Q : Check lube oil quality	S : Stand by condition check
		F : Function Test	B : Program Back - up

ISSUED BY : ....DATE: ....
SUPERVISOR

CHECKED BY : ....DATE: ....
MAINTENANCE SECTION MANAGER

APPROVED BY : ....DATE: ....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : ....DATE: ....
PRODUCTION SECTION MANAGER

APPROVED BY : ....DATE: ....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date GROUP	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
			52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
PUMP STATION 1																																																										
61P062A	MOTOR 37 Kw.	C										L			←	I	—	→										L											←	S	—	→		L														
61P062B	MOTOR 37 Kw.	C									←	I	—	→				L																L	←	S	—	→												L								
61P063A	MOTOR 55 Kw.	B													←	I	—	→ L																L					←	S	—	→								L								
61P063B	MOTOR 55 Kw.	B									←	I	—	→				L																L	←	S	—	→												L								
61P064A	MOTOR 110 Kw.	B										L			←	I	—	→										L											←	S	—	→		L														
61P064B	MOTOR 110 Kw.	B																L	←	I	—	→												L									←	S	—	→				L								
61P065A	MOTOR 250 Kw.	D	L																L				←	I	—	→									L												←	S	—	→	L							
61P065B	MOTOR 250 Kw.	D																L	←	I	—	→												L									←	S	—	→				L								
61P101A	MOTOR 22 Kw.	A										L											←	I	—	→		L																L			←	S	—	→								
61P101B	MOTOR 22 Kw.	A																L	←	I	—	→												L									←	S	—	→				L								
61TN062A	MOTOR 7.5 Kw.	B																					←	I	—	→																					←	S	—	→								
61TN062B	MOTOR 7.5 Kw.	B																					←	I	—	→																					←	S	—	→								
61TN063A	MOTOR 3 Kw.	B																					←	I	—	→																					←	S	—	→								
61TN063B	MOTOR 3 Kw.	B																					←	I	—	→																					←	S	—	→								
61TN064A	MOTOR 3 Kw.	B																					←	I	—	→																					←	S	—	→								
61TN064B	MOTOR 3 Kw.	B																					←	I	—	→																					←	S	—	→								
61TN064C	MOTOR 4 Kw.	B																					←	I	—	→																					←	S	—	→								

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function Test
R : Running condition check
S : Stand by condition check
B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jar			
		GROUP	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
PUMP STATION 2																																																									
61P080	MOTOR 10 Kw.	B																					I																						S											
61P081	MOTOR 4.6 Kw.	B		I																																										S									
61P082A	MOTOR 4.6 Kw.	B																					I																						S									
61P082B	MOTOR 5.5 Kw.	B		I																																									S									
PUMP STATION 3																																																							
61P036	MOTOR 30 Kw.	B									L												I,L												L										S,L									
61P037A	MOTOR 37 Kw.	D									L												I				L																		S									
61P037B	MOTOR 37 Kw.	D									L												I				L																		S									
61P046	MOTOR 140 Kw.	B		I				L								L								L								L								L				S,L								L		
61P047A	MOTOR 580 Kw.	D									L												I				L																		S									
61P047B	MOTOR 580 Kw	D									L												I				L																		S									
61TN036A	MOTOR 5.5 Kw	B						I																							S																							
61TN036C	MOTOR 5.5 Kw	B		I																													S																						
PUMP STATION 4																																																							
61P001A	MOTOR 355 Kw.	A									L				I												L										S				L													
61P001B	MOTOR 355 Kw.	A											L				I									L														S													
61P076A	MOTOR 65 Kw.	B											L										I				L																L		S								
61P076B	MOTOR 65 Kw.	B									L						I									L														S,L													
61TN076A	MOTOR 22 Kw.	B		I									L								L						L								L						L				S									

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function Test
R : Running condition check
S : Stand by condition check
B : Program Back - up

ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-16Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				8Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
		GROUP	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
61TN076B	MOTOR 22 Kw.	B	←I→							L								L							L							L								L							L	←S→							L
PUMP STATION 5																																																									
61P031	MOTOR 19 Kw.	B					←I→																								←S→																												
61P032A	MOTOR 30 Kw.	D					←I→				L															L				←S→												L															
61P032B	MOTOR 30 Kw.	D									←I,L→															L						S→											L															
61P033	MOTOR 30 Kw.	B					←I,L→								L								L							←S,L→								L							L								L						
61P034A	MOTOR 30 Kw.	D					←I→				L															L				←S→												L															
61P034B	MOTOR 22 Kw.	D									←I,L→															L						S→											L															
61P042	MOTOR 142 Kw.	B					←I,L→								L								L							←S,L→								L							L								L						
61P043A	MOTOR 142 Kw.	D					←I→				L															L				←S→												L															
61P043B	MOTOR 142 Kw.	D									←I,L→															L						S→											L															
61P044A	MOTOR 132 Kw.	D					←I→				L															L				←S→												L															
61P044B	MOTOR 132 Kw.	D									←I,L→															L						S→											L															
61P078A	MOTOR 65 Kw.	B									L				←I→											L												S→				L															
61P078B	MOTOR 65 Kw.	B									L						←I→									L																S,L→															
61P079A	MOTOR 16 Kw.	D													←I→																						S→																			
61P079B	MOTOR 16 Kw.	D															←I→																								S→															
PUMP STATION 6																																																									
61P002A	MOTOR 300 Kw.	A									L				←I→											L												S→				L															
61P002B	MOTOR 300 Kw.	A									L						←I→									L																S,L→															

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

☐ MECH ■ ELEC. ☐ INST.

REV . 0

SECTION : .... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
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ISSUED BY : ....DATE: ....
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MAINTENANCE SECTION MANAGER

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MAINTENANCE DEPARTMENT MANAGER

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EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
		GROUP	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
61P073A	MOTOR 55 Kw.	A										L			←	I	—	→										L											←	S	—	→		L														
61P073B	MOTOR 55 Kw.	A										L							←	I	—	→						L															←	S,L	—	→												
PUMP STATION 7																																																											
61P002C	MOTOR 300 Kw.	A	L												←	I	—	→	L																L				←	S	—	→									L							
61P002D	MOTOR 300 Kw.	A					L												←	I	—	→	L																L				←	S	—	→												
61P003	MOTOR 5.5 Kw.	B																					←	I	—	→																					←	S	—	→								
61P004A	MOTOR 7.5 Kw.	B					←	I	—	→																					←	S	—	→																								
61P004B	MOTOR 7.5 Kw.	B									←	I	—	→																					←	S	—	→																				
PUMP STATION 8																																																											
61P071A	MOTOR 11 Kw.	D					←	I	—	→																					←	S	—	→																								
61P071B	MOTOR 11 Kw.	D									←	I	—	→																					←	S	—	→																				
61P072A	MOTOR 55 Kw.	D					←	I	—	→																					←	S	—	→																								
61P072B	MOTOR 55 Kw.	D									←	I,L	—	→														L									←	S	—	→						L														
61P083	MOTOR 55 Kw.	B						L								L							←	I,L	—	→						L								L								L								L		
61P301B	MOTOR 0.7 Kw.	B													←	I	—	→																					←	S	—	→																

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemicals & Dielectric Strength
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
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R : Running condition check
S : Stand by condition check
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ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

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PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
		GROUP	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
PUMP STATION 9																																																											
61P021A	MOTOR 250 Kw.	A												L	←	I	→														L								←	S	→				L															
61P021B	MOTOR 250 Kw.	A															L	←	I	→													L								←	S	→						L										
61P023	MOTOR 4 Kw.	B													←	I	→																							←	S	→																
61TN021	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN022	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN023A	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN023B	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN024A	MOTOR 11 Kw.	B					←	I	→																						←	S	→																										
61TN024B	MOTOR 11 Kw.	B					←	I	→																						←	S	→																										
61TN025A	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN025B	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN025C	MOTOR 7.46 Kw.	B					←	I	→																						←	S	→																										
61TN026A	MOTOR 11 Kw.	B					←	I	→																						←	S	→																										
61TN026B	MOTOR 11 Kw.	B					←	I	→																						←	S	→																										
61TN026C	MOTOR 11 Kw.	B					←	I	→																						←	S	→																										
PUMP STATION 10																																																											
61P051A	MOTOR 11 Kw.	D													←	I	→																							←	S	→																
61P051B	MOTOR 11 Kw.	D																	←	I	→																			←	S	→																
61P052	MOTOR 22 Kw.	B						L								L			←	I	→		L								L								←	S	→				L										L			

	PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE **YEAR 2002**	☐ MECH. ■ ELEC. ☐ INST.
		REV. 0
	SECTION : .... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC	DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

- D : Chemicals & Dielectric Strength
- I : Inspection
- O : Overhaul
- C : Calibration
- L : Lubrication
- Q : Check lube oil quality
- F : Function Test
- R : Running condition check
- S : Stand by condition check
- B : Program Back - up

ISSUED BY : ....DATE: ....
SUPERVISOR

CHECKED BY : ....DATE: ....
MAINTENANCE SECTION MANAGER

APPROVED BY : ....DATE: ....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : ....DATE: ....
PRODUCTION SECTION MANAGER

APPROVED BY : ....DATE: ....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date / GROUP	23Dec-19Jan (52 01 02 03)	20Jan-16Feb (04 05 06 07)	17Feb-16Mar (08 09 10 11)	17Mar-13Apr (12 13 14 15)	14Apr-11May (16 17 18 19)	12May-8Jun (20 21 22 23)	9Jun-6Jul (24 25 26 27)	7Jul-3Aug (28 29 30 31)	4Aug-31Aug (32 33 34 35)	1Sep-28Sep (36 37 38 39)	29Sep-26Oct (40 41 42 43)	27Oct-23Nov (44 45 46 47)	24Nov-21Dec (48 49 50 51)	22Dec-18Jan (52 01 02 03)
61P053A	MOTOR 11 Kw.	D				←I→						←S→				
61P053B	MOTOR 30 Kw	D				L	←I→			L			←S→	L		
61P054A	MOTOR 75 Kw.	D			L	←I→			L			←S→	L			
61P054B	MOTOR 75 Kw.	D			L		←I→		L				←S,L→			
61P055A	MOTOR 11 Kw.	A				←I→						←S→				
61P055B	MOTOR 11 Kw.	A					←I→						←S→			
61P074A	MOTOR 15 Kw.	D						←I→						←S→		
61P074B	MOTOR 15 Kw.	D	←I→												←S→	
61P075A	MOTOR 140 Kw.	A			L			←I→	L				L	←S→		
61P075B	MOTOR 140 Kw.	A	←I→			L				L				L	←S→	
61TN075A	MOTOR 15 Kw.	B	←I→												←S→	
61TN075B	MOTOR 15 Kw.	B	←I→												←S→	
61TN054B	MOTOR 5.5 Kw.	B		←I→							←S→					

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PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : TANK FARM AREA EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV . 0

DATE : OCT. 1 5, 2001

REMARK

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ISSUED BY : .....DATE: .....
SUPERVISOR

CHECKED BY : .....DATE: .....
MAINTENANCE SECTION MANAGER

APPROVED BY : .....DATE: .....
MAINTENANCE DEPARTMENT MANAGER

CHECKED BY : .....DATE: .....
PRODUCTION SECTION MANAGER

APPROVED BY : .....DATE: .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT No.	EQUIPMENT NAME	Date / GROUP	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-23Nov				24Nov-21Dec				22Dec-18Jan			
			52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
TANK YARD																																																									
61P102A	MOTOR 15 Kw.	D													←I→																								←S→																			
61P102B	MOTOR 15 Kw.	D																	←I→																						←S→																	
LUBE OIL TRUCK LOADING																																																								
61P084	MOTOR 3 Kw.	B																	←I→																						←S→																	
ASPHALT TRUCK LOADING																																																								
61P085	MOTOR 11 Kw.	B																	←I→																						←S→																	
FLARE																																																								
61P095A	MOTOR 132 Kw.	D													←I→																								←S→																			
61P095B	MOTOR 132 Kw.	D																	←I→																						←S→																	

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
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ISSUED BY : ..... DATE : .....

SUPERVISOR

CHECK BY : ..... DATE : .....

MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....

MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....

PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....

PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-16Nov	17Nov-21Dec	22Dec-19Jan
			Week No	50 01 02 03	04 05 06 07	08 09 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 01 02 03
33P001A	B	MOTOR 22 kW , 2935 RPM	(OVERHAUL)								S,I						
33P001B	B	MOTOR 22 kW , 2935 RPM	(OVERHAUL)									S,I					
33P001C	B	MOTOR 22 kW , 2935 RPM	(OVERHAUL)								S,I						
33P001D	B	MOTOR 22 kW , 2935 RPM	(OVERHAUL)									S,I					
33P002A	D	MOTOR 1.5 kW , 2870 RPM	(BREAK DOWN)								S,I						
33P002B	D	MOTOR 1.5 kW , 2870 RPM	(BREAK DOWN)									S,I					
33P003A	D	MOTOR 1.5 kW , 2870 RPM	(BREAK DOWN)								S,I						
33P003B	D	MOTOR 1.5 kW , 2870 RPM	(BREAK DOWN)									S,I					
33P004A	D	MOTOR 7.5 kW , 2905 RPM	(BREAK DOWN)								S,I						
33P004B	D	MOTOR 7.5 kW , 2905 RPM	(BREAK DOWN)									S,I					
33P005A	D	MOTOR 15 kW , 1455 RPM	(BREAK DOWN)								S,I						
33P005B	D	MOTOR 15 kW , 1455 RPM	(BREAK DOWN)									S,I					
33P006A	D	MOTOR 1.5 kW , 1420 RPM	(BREAK DOWN)								S,I						
33P006B	D	MOTOR 1.5 kW , 1420 RPM	(BREAK DOWN)									S,I					
33P007A	D	MOTOR 1.5 kW , 1420 RPM	(BREAK DOWN)								S,I						
33P007B	D	MOTOR 1.5 kW , 1420 RPM	(BREAK DOWN)									S,I					

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

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ISSUED BY : ..... DATE : .....

SUPERVISOR

CHECK BY : ..... DATE : .....

MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....

MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....

PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....

PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
33P008A	D	MOTOR 15 kW , 1455 RPM (BREAK DOWN)																														S,I																							
33P008B	D	MOTOR 15 kW , 1455 RPM (BREAK DOWN)																																		S,I																	
33P009A	A	MOTOR 11 kW , 2930 RPM										R																R				S,I										R											
33P009B	A	MOTOR 11 kW , 2930 RPM						R																R								S,I				S,I	R														R		
33P010A	D	MOTOR 30 kW , 2955 RPM (BREAK DOWN)																														S,I																							
33P010B	D	MOTOR 30 kW , 2955 RPM (BREAK DOWN)																																		S,I																	
33P011A	D	MOTOR 1.5 kW , 2860 RPM (BREAK DOWN)																														S,I																							
33P011B	D	MOTOR 1.5 kW , 2860 RPM (BREAK DOWN)																																		S,I																	
33P012A	D	MOTOR 2.2 kW , 2870 RPM (BREAK DOWN)																														S,I																							
33P012B	D	MOTOR 2.2 kW , 2870 RPM (BREAK DOWN)																																		S,I																	
33P015A	B	MOTOR 22 kW , 2940 RPM (OVERHAUL)																														O,S,I																							
33P015B	B	MOTOR 22 kW , 2940 RPM (OVERHAUL)																																		O,S,I																	
33K001A	B	MOTOR 7.5 kW , 1450 RPM (OVERHAUL)																														O,S,I																							
33K001B	B	MOTOR 7.5 kW , 1450 RPM (OVERHAUL)																																		O,S,I																	
33K002	B	MOTOR 7.5 kW , 1450 RPM (OVERHAUL)																														O,S,I																							
33K003	B	MOTOR 7.5 kW , 1450 RPM (OVERHAUL)																																		O,S,I																	

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

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CHECK BY : ..... DATE : ..... APPROVED BY: ..... DATE : .....

ISSUED BY : ..... DATE : .....

MAINTENANCE SECTION MANAGER

MAINTENANCE DEPARTMENT MANAGER

SUPERVISOR

CHECK BY : ..... DATE : ..... APPROVED BY: ..... DATE : .....

PRODUCTION SECTION MANAGER

PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jar				20Jan-16Fet				17Feb-16Ma				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oc				27Oct-16Nov				17Nov-21Dec				22Dec-19Jar			
			Week No	52	01	02	03	04	05	06	07	08	09	01	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
34P001A	A	MOTOR 645 kW , 992 RPM			R										O,S,I	RL				R				RL				R								S,			RL				R				RL				R							
34P001B	A	MOTOR 645 kW , 992 RPM			R			RL										O,S,I		R				RL				R				RL							S,I		R				RL				R				RL			
34P001C	A	MOTOR 645 kW , 992 RPM			R			RL				R										O,S,I		RL				R				RL				R						S,I		RL				R				RL			
34P001D	A	MOTOR 645 kW , 992 RPM																																																							
34P001E	A	MOTOR 645 kW , 992 RPM			R			RL				R				RL									O,S,I	R				RL				R								S,I	R				RL							
34P001F	A	MOTOR 645 kW , 992 RPM						RL				R				RL				R							O,S,I	RL				R				RL				R								RL							
34P001G	A	MOTOR 645 kW , 992 RPM										R				RL				R				RL						O,S,I	R				RL				R								RL				S,I			
34K001A	A	MOTOR 160 kW , 1465 RPM			R							R				RL				R				RL				R			S,I	R				RL				R								RL							
34K001B	A	MOTOR 160 kW , 1485 RPM			R			RL								RL				R				RL				R				RL			S,I	RL				R								RL				R			
34K001C	A	MOTOR 160 kW , 1485 RPM			R			RL				R								R				RL				R				RL						S,I	R								RL				R				RL			
34K001D	A	MOTOR 160 kW , 1485 RPM																																																						
34K001E	A	MOTOR 160 kW , 1485 RPM			R			RL				R				RL								RL				R				RL				R				RL			S,I	RL				R				RL			
34K001F	A	MOTOR 160 kW , 1485 RPM						RL				R				RL				R								RL				R				RL				R							S,I	R				RL			
34K002	B	MOTOR 22 KW ,1465 RPM (OVERHAUL)													O,S,I																																										
34P002	C	MOTOR 0.37 KW,1410 RPM (INSPECT & OVERHAUL)								O,S,I		R																R									S,I		R																	
34P003	C	MOTOR 0.37 KW,1410 RPM (INSPECT & OVERHAUL)						R		O,S,I														R														R			S,I												R			

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
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ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....
PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb			17Feb-16Mar			17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
35P001A	A	MOTOR 75 kW , 2950 RPM										R														R											S,I				RL																
35P001B	A	MOTOR 75 kW , 2950 RPM						RL														RL													RL				S,I														RL			
35P002A	A	MOTOR 280 kW , 2965 RPM										R										R				RL									RL				RL	S,I															
35P002B	A	MOTOR 280 kW , 2965 RPM						R																		RL									RL				RL					S,I								R		
35P002C	A	MOTOR 280 kW , 2965 RPM						RL				R										R															S,I														RL		
35P003A	A	MOTOR 22 kW , 1470 RPM										R														R											S,I				R														
35P003B	A	MOTOR 22 kW , 1470 RPM						R														R													R				S,I														R		
35P008A	A	MOTOR 75 kW , 2970 RPM										R														R											S,I				RL															
35P008B	A	MOTOR 75 kW , 2970 RPM						RL														RL													RL				S,I														RL		
35P009A	A	MOTOR 11 kW , 2465 RPM										R										R				R									R				R	S,I															
35P009B	A	MOTOR 11 kW , 2465 RPM						R														R				R									R				R					S,I								R		
35P009C	A	MOTOR 11 kW , 2465 RPM						R				R										R															S,I														R		
35P012A	A	MOTOR 250 kW , 2970 RPM										R										R				RL									RL				RL	S,I															
35P012B	A	MOTOR 250 kW , 2970 RPM						R																		RL									RL				RL					S,I								R		
35P012C	A	MOTOR 250 kW , 2970 RPM						RL				R										R															S,I														RL		
35P013A	A	MOTOR 75 kW , 2970 RPM										R														R											S,I				RL															

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

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MAINTENANCE DEPARTMENT MANAGER

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PRODUCTION SECTION MANAGER

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PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-16Nov	17Nov-21Dec	22Dec-19Jan
			Week No	52 01 02 03	04 05 06 07	08 09 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 01 02 03
35P013B	A	MOTOR 75 kW , 2970 RPM			RL				RL				RL	S,			RL
35K001A	C	MOTOR 300 kW , 1470 RPM (INSPECT & OVERHAUL)			R	RL O,S,I			R	RL			R	RL		S,I	R
35K001B	C	MOTOR 300 kW , 1470 RPM (INSPECT & OVERHAUL)			R	RL		O,S,I	R	RL			R	RL		S,I	R
35K002A	C	MOTOR 2.2 kW , 2870 RPM (INSPECT & OVERHAUL)			R	R O,S,I			R	R			R	R		S,I	R
35K002B	C	MOTOR 2.2 kW , 2870 RPM (INSPECT & OVERHAUL)			R	R		O,S,I	R	R			R	R		S,I	R
35K012A	C	MOTOR 225 kW, 1485 RPM (INSPECT & OVERHAUL)			R	RL			R	RL	O,S,I		R	RL		S,I	R
35K012B	C	MOTOR 225 kW, 1485 RPM (INSPECT & OVERHAUL)			R	RL			R	RL	O,S,I		R	RL		S,I	R
35K012C	C	MOTOR 225 kW, 1485 RPM (INSPECT & OVERHAUL)			R	RL			R O,S,I	RL			R	RL		S,I	R
35K012D	C	MOTOR 225 kW, 1485 RPM (INSPECT & OVERHAUL)			R	RL			R O,S,I	RL			R	RL		S,I	R
36K001A	A	MOTOR 695 KW, 2985 RPM				R				R			O,S,I	R			
36K001B	A	MOTOR 695 KW, 2985 RPM			R				R				R	O,S,I			R
36P001A	B	MOTOR 1.5 kW, 1425 RPM (OVERHAUL)											O,S,I				
36P001B	B	MOTOR 1.5 kW, 1425 RPM (OVERHAUL)												O,S,I			
36K002	C	MOTOR 15 KW, 2900 RPM (INSPECT & OVERHAUL)			O,S,I								S,I				
39K001	B	MOTOR 5.5 kW.,1440 RPM (OVERHAUL)											S,I				
39K002	B	MOTOR 2.2 kW.1420 RPM (OVERHAUL)											S,I				

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

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PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
39K003	B	MOTOR 1.5 kW.1420 RPM (OVERHAUL)																																				S,																			
39P001A	A	MOTOR 4 kW.1453 RPM					R				R				R				R				R				R				R				R				R	S,I			R				R				R				R
39P001B	A	MOTOR 4 kW.,1453 RPM					R				R				R				R				R				R				R				R				R		S,I		R				R				R				R
39P007A	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																					S,I																
39P007B	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																					S,I																
39P007C	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																					S,I																
39P007D	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																						S,I															
39P007E	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																						S,I															
39P007F	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																						S,I															
39P007G	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																						S,I															
39P007H	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																									S,I													
39P007I	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																									S,I													
39P012A	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																									S,I													
39P012B	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																									S,I													
39P012C	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																										S,I												
39P012D	D	MOTOR 5.5 kW.,1450 RPM (BREAK DOWN)																																										S,I												

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function test
R : Running condition check
S : Stand by condition check
B : Program back up

ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....
PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-16Nov	17Nov-21Dec	22Dec-19Jan
			Week No	50 51 52 53 54	00 01 02 03 04	05 06 07 08 09	10 11 12 13 14	15 16 17 18 19	20 21 22 23 24	25 26 27 28 29	30 31 32 33 34	35 36 37 38 39	40 41 42 43 44	45 46 47 48 49	50 51 52 53 54	55 56 57 58 59	60 61 62 63 64	65 66 67 68 69
39P013A	D	MOTOR 1.5 kW.,2850 RPM (BREAK DOWN)												S,I			
39P013B	D	MOTOR 1.5 kW.,2850 RPM (BREAK DOWN)												S,I			
39P013C	D	MOTOR 11 kW.,2905 RPM (BREAK DOWN)												S,I			
39P013D	D	MOTOR 11 kW.,2905 RPM (BREAK DOWN)												S,I			
39P014	C	MOTOR 11 kW.,2925 RPM (INSPECT & OVERHAUL)		R	R	R	R	O,S,I R	R	R	R	R	R	S,I R	R	R	R
39P016A	D	MOTOR 1.5 kW.,1395 RPM (BREAK DOWN)												S,I			
39P016B	D	MOTOR 1.5 kW.,1395 RPM (BREAK DOWN)												S,I			
39P018A	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P018B	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P019A	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P019B	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P020A	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P020B	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P020C	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)												S,I			
39P020D	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)													S,I		
39P021A	D	MOTOR 0.1 kW.,1420 RPM (BREAK DOWN)													S,I		

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
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S : Stand by condition check
B : Program back up

CHECK BY : ..... DATE : ..... APPROVED BY: ..... DATE : .....

MAINTENANCE SECTION MANAGER — MAINTENANCE DEPARTMENT MANAGER

ISSUED BY : ..... DATE : .....

SUPERVISOR

CHECK BY : ..... DATE : ..... APPROVED BY: ..... DATE : .....

PRODUCTION SECTION MANAGER — PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-16Nov	17Nov-21Dec	22Dec-19Jan
			Week No	52 01 02 03	04 05 06 07	08 09 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 01 02 03
39P021B	D	MOTOR 0.1 kW.,1420 RPM	(BREAK DOWN)												S,		
39P022A	D	MOTOR 0.37 kW.,1440 RPM	(BREAK DOWN)												S,I		
39P022B	D	MOTOR 0.37 kW.,1440 RPM	(BREAK DOWN)												S,I		
39P023A	D	MOTOR 0.3 kW.,1425 RPM	(BREAK DOWN)												S,I		
39P023B	D	MOTOR 0.3 kW.,1425 RPM	(BREAK DOWN)												S,I		
39P024A	D	MOTOR 0.37 kW.,1440 RPM	(BREAK DOWN)												S,I		
39P024B	D	MOTOR 0.37 kW.,1440 RPM	(BREAK DOWN)													S,I	
39P025A	D	MOTOR 0.1 kW.,1420 RPM	(BREAK DOWN)													S,I	
39P025B	D	MOTOR 0.1 kW.,1420 RPM	(BREAK DOWN)													S,I	
39TA06	D	MOTOR 0.4 kW.,1410 RPM	(BREAK DOWN)													S,I	
39TA07A	B	MOTOR 30 kW.,1470 RPM	(OVERHAUL)													S,I	
39TA07B	B	MOTOR 30 kW.,1470 RPM	(OVERHAUL)													S,I	
39TA07C	B	MOTOR 30 kW.,1470 RPM	(OVERHAUL)													S,I	
39TA11A	C	MOTOR 45 kW.,1475 RPM	(INSPECT & OVERHAUL)	R	R	R	R	R	R,S,I	R	R	R	R	R,S,I	R	R	R
39TA11B	B	MOTOR 22 kW.,1475 RPM	(OVERHAUL)													S,I	
39TA11C	B	MOTOR 22 kW.,1475 RPM	(OVERHAUL)												S,I		

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : UTILITY (UNIT 33,34,35,36,39) EQUIPMENT TYPE : MOTOR & MCC

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
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O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function test
R : Running condition check
S : Stand by condition check
B : Program back up

ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....
PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jar	20Jan-16Feb	17Feb-16Ma	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oc	27Oct-16Nov	17Nov-21Dec	22Dec-18Jar
			Week	50 00 00 00	00 00 00 00	00 00 01 01	01 01 01 01	01 01 01 01	02 02 02 02	02 02 02 02	02 03 03 03	03 03 03 03	03 03 03 03	04 04 04 04	04 04 04 04	04 04 05 05	05 00 00 00
			No	21 23	45 67	89 01	12 34	56 78	90 12	34 56	78 90	12 34	56 78	90 12	34 56	78 89	01 02	03
39TA11D	C	MOTOR 45 kW.,1475 RPM (INSPECT & OVERHAUL)		R	R	R	R	R	O,S,I	R	R	R	R	R	S,	R	R
39TA11E	B	MOTOR 22 kW.,1475 RPM (OVERHAUL)														S,I	
39TA11F	B	MOTOR 22 kW.,1475 RPM (OVERHAUL)													S,I		
39TA12A	B	MOTOR 0.85 kW.,1440 RPM (OVERHAUL)					S,I										
39TA12B	B	MOTOR 0.85 kW.,1440 RPM (OVERHAUL)					S,I										
39TA15	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN02	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN03	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN04	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN05	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN08	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN09	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN18A	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN18B	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN19A	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)					S,I										
39TN19B	B	MOTOR 1.5 kW.,1410 RPM (OVERHAUL)						S,I									

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function test
R : Running condition check
S : Stand by condition check
B : Program back up

ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....
PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Ma				17Mar-13Apr				14Apr-11May				12May-8Jun				8Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oc				27Oct-16Nov				17Nov-21Dec				22Dec-19Jar			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
21P001A	A	MOTOR, 80 KW, 2975 RPM				R								R						R						R						R						R						R						R					
21P001B	A	MOTOR, 80 KW, 2975 RPM								R						R						R						R						R						R						R						R		
21P002A	A	MOTOR, 28 KW, 2970 RPM				R								R						R						R						R						R						R						R					
21P002B	A	MOTOR, 28 KW, 2970 RPM								R						R						R						R						R						R						R						R		
21P003A	A	MOTOR, 6.8 KW, 1455 RPM				R								R						R						R						R						R						R						R					
21P003B	A	MOTOR, 6.8 KW, 1455 RPM								R						R						R						R						R						R						R						R		
21P004A	A	MOTOR, 80 KW, 2975 RPM				R								R						R						R						R						R						R										
21P004B	A	MOTOR, 80 KW, 2975 RPM								R						R						R						R						R						R						R						R		
21P005A	A	MOTOR, 148 KW, 2986 RPM				R								R						R						R						R						R						R						R					
21P005B	A	MOTOR, 148 KW, 2986 RPM								R						R						R						R						R						R						R						R		
21P006A	A	MOTOR, 36 KW, 2970 RPM				R								R						R						R						R						R						R						R					
21P006B	A	MOTOR, 36 KW, 2970 RPM								R						R						R						R						R						R						R						R		
21P007A	A	MOTOR, 58 KW, 2975 RPM				R								R						R						R						R						R						R										
21P007B	A	MOTOR, 58 KW, 2975 RPM								R						R						R						R						R						R						R						R		
21P008A	A	MOTOR, 20 KW, 2935 RPM				R								R						R						R						R						R						R										
21P008B	A	MOTOR, 20 KW, 2935 RPM								R						R						R						R						R						R						R						R		

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chernical & Dielectric strenght
I : Inspection
O : Overhaul
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Q : Check lube oil quaiity
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ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....
PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
21P009A	A	MOTOR, 80 KW, 2988 RPM				R								R						R						R									R								R								R						
21P009B	A	MOTOR, 80 KW, 2988 RPM								R						R								R						R						R								R								R			
21P010A	A	MOTOR, 47 KW, 2975 RPM				R								R						R						R									R								R								R						
21P010B	A	MOTOR, 47 KW, 2975 RPM								R						R								R						R						R								R								R			
21P011A	C	MOTOR, 148 KW, 2986 RPM (INSPECTION&OVERHAUL)				R				R				R				R						R						R						R								R								R			
21P012A	A	MOTOR, 36 KW, 2970 RPM				R								R						R						R									R								R								R						
21P012B	A	MOTOR, 36 KW, 2970 RPM								R						R								R						R						R								R								R			
21P013A	A	MOTOR, 24 KW, 2950 RPM				R								R						R						R									R								R								R						
21P013B	A	MOTOR, 24 KW, 2950 RPM								R						R								R						R						R								R								R			
21P014A	D	MOTOR, 1.5 KW, 1415 RPM (BREAK DOWN)																																																							
21P014B	D	MOTOR, 1.5 KW, 1415 RPM (BREAK DOWN)																																																						
21P015A	D	MOTOR, 3.6 KW, 1440 RPM (BREAK DOWN)																																																					
21P015B	D	MOTOR, 3.6 KW, 1440 RPM (BREAK DOWN)																																																					
21P016A	D	MOTOR, 0.18 KW, 1375 RPM (BREAK DOWN)																																																					
21P016B	D	MOTOR, 0.18 KW, 1375 RPM (BREAK DOWN)																																																					

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

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D : Chemical & Dielectric strenght
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ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : ..... DATE : .....
PRODUCTION SECTION MANAGER

APPROVED BY: ..... DATE : .....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
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21P017A	A	MOTOR, 44 KW, 1485 RPM				R								R						R						R						R						R						R						R						R		
21P017B	A	MOTOR, 44 KW, 1485 RPM							R							R						R						R						R						R						R						R		
21X002	B	MOTOR, 0.37 KW, 1355 RPM (OVERHAUL)																																																					
21K001A	A	MOTOR, 45 KW, 1475 RPM				R								R						R						R						R						R						R						R		
21K001B	A	MOTOR, 45 KW, 1475 RPM							R							R						R						R						R						R						R						R		
21E011-1	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R	
21E011-2	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E013-1	C	MOTOR, 15 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E013-2	C	MOTOR, 15 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E014-1	C	MOTOR, 17.5 KW,1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E014-2	C	MOTOR, 17.5 KW,1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E015-1	C	MOTOR,15 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E015-2	C	MOTOR,15 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E016-1	C	MOTOR,17.5 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	
21E016-2	C	MOTOR,17.5 KW, 1465 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R	

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
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S : Stand by condition check
B : Program back up

ISSUED BY : .... DATE : ....
SUPERVISOR

CHECK BY : .... DATE : ....
MAINTENANCE SECTION MANAGER

APPROVED BY: .... DATE : ....
MAINTENANCE DEPARTMENT MANAGER

CHECK BY : .... DATE : ....
PRODUCTION SECTION MANAGER

APPROVED BY: .... DATE : ....
PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
21E017-1	C	MOTOR, 10 KW, 1450 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R				R	
21E017-2	C	MOTOR, 10 KW, 1450 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R				R	
21E018-1	C	MOTOR, 2.5 KW, 1420 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R				R	
21E018-2	C	MOTOR, 2.5 KW, 1440 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R				R	
22K001A	A	MOTOR, 260 KW, 1493 RPM				R								R								R								R								R								R								R					
22K001B	A	MOTOR, 260 KW, 1493 RPM								R								R								R								R								R								R								R	
22K001A-1	A	MOTOR, 11 KW, 1460 RPM				R								R								R								R								R								R								R					
22K001A-2	A	MOTOR, 11 KW, 1460 RPM								R								R								R								R								R								R								R	
22K001A-3	C	MOTOR, 0.1 KW, - RPM (INSPECT & OVERHAUL)								R								R								R								R								R								R								R	
22K001B-1	A	MOTOR, 11 KW, 1460 RPM				R								R								R								R								R								R								R					
22K001B-2	A	MOTOR, 11 KW, 1460 RPM								R								R								R								R								R								R								R	
22K001B-3	C	MOTOR, 0.1 KW, - RPM (INSPECT & OVERHAUL)								R								R								R								R								R								R								R	
22K002A	A	MOTOR, 450 KW, 497 RPM				R								R								R								R								R								R								R					
22K002B	A	MOTOR, 450 KW, 497 RPM								R								R								R								R								R								R								R	
22K002A-1	C	MOTOR, 1.5 KW,1420 RPM (INSPECT & OVERHAUL)								R								R								R								R								R								R								R	

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function test
R : Running condition check
S : Stand by condition check
B : Program back up

ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

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PRODUCTION SECTION MANAGER

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PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
22K002A-2	C	MOTOR, 0.55 KW,1400 RPM (INSPECT & OVERHAUL)								R						R								R								R							R							R							R			
22K002B-1	C	MOTOR, 1.5 KW,1420 RPM (INSPECT & OVERHAUL)								R						R								R								R							R							R							R			
22K002B-2	C	MOTOR, 0.55 KW,1400 RPM (INSPECT & OVERHAUL)								R						R								R								R							R							R							R			
22K003A	A	MOTOR, 58 KW, 1490 RPM				R							R						R							R								R							R							R									
22K003B	A	MOTOR, 58 KW, 1490 RPM								R						R								R								R							R							R							R			
22K003A-1	C	MOTOR, 0.55 KW, 920 RPM (INSPECT & OVERHAUL)								R						R								R								R							R							R							R			
22K003B-1	C	MOTOR, 0.55 KW, 920 RPM (INSPECT & OVERHAUL)								R						R								R								R							R							R							R			
22P002A	C	MOTOR, 250 KW, 2985 RPM (INSPECT & OVERHAUL)								R						R								R								R							R							R							R			
22P003A	A	MOTOR, 30 HP , 2935 RPM				R							R						R							R								R							R							R									
22P003B	A	MOTOR, 30 HP, 2935 RPM								R						R								R								R							R							R							R			
22P004A	A	MOTOR, 68 KW, 2985 RPM				R							R						R							R								R							R							R									
22P004B	A	MOTOR, 68 KW, 2985 RPM								R						R								R								R							R							R							R			
22P005A	A	MOTOR, 300 KW, 2988 RPM				R							R						R							R								R							R							R									
22P005B	A	MOTOR, 300 KW, 2988 RPM								R						R								R								R							R							R							R			
22P006A	A	MOTOR, 140 KW, 2985 RPM				R							R						R							R								R							R							R									

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

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EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan	20Jan-16Feb	17Feb-16Mar	17Mar-13Apr	14Apr-11May	12May-8Jun	9Jun-6Jul	7Jul-3Aug	4Aug-31Aug	1Sep-28Sep	29Sep-26Oct	27Oct-16Nov	17Nov-21Dec	22Dec-19Jan
			Week No	52 01 02 03	04 05 06 07	08 09 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 01 02 03
22P006B	A	MOTOR, 140 KW, 2985 RPM			R		R		R		R		R		R		R
22P007A	A	MOTOR, 3.6 KW, 1415 RPM		R		R		R		R		R		R		R	
22P007B	A	MOTOR, 3.6 KW, 1415 RPM			R		R		R		R		R		R		R
22P008A	A	MOTOR, 50HP KW, 2950 RPM		R		R		R		R		R		R		R	
22P008B	A	MOTOR, 50HP KW, 2950 RPM			R		R		R		R		R		R		R
22P009	C	MOTOR, 15 KW, 2955 RPM (INSPECT & OVERHAUL)		R	R	R	R	R	R	R	R	R	R	R	R	R	R
22P010A	A	MOTOR, 84 KW, 1488 RPM		R		R		R		R		R		R		R	
22P010B	A	MOTOR, 84 KW, 1489 RPM			R		R		R		R		R		R		R
22P011	C	MOTOR, 5.5 KW, 2915 RPM (INSPECT & OVERHAUL)		R	R	R	R	R	R	R	R	R	R	R	R	R	R
22P012	B	MOTOR, 24 KW, 2965 RPM (OVERHAUL)															
22P013	B	MOTOR, 15 KW, 2955 RPM (OVERHAUL)															
22P014	C	MOTOR, 5.5 KW, RPM (INSPECT & OVERHAUL)		R	R	R	R	R	R	R	R	R	R	R	R	R	R
22P015	C	MOTOR, 0.25 KW,1420 RPM (INSPECT & OVERHAUL)		R	R	R	R	R	R	R	R	R	R	R	R	R	R
22P016	B	MOTOR, 2.5 KW, 1430 RPM (OVERHAUL)															
22P017	C	MOTOR, 3.6 KW, 1415 RPM (INSPECT & OVERHAUL)		R	R	R	R	R	R	R	R	R	R	R	R	R	R

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

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EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
22P018A	A	MOTOR, 4.6 KW, 2915 RPM				R								R						R								R							R							R							R						
22P018B	A	MOTOR, 4.6 KW, 2915 RPM								R						R						R						R						R						R						R						R	
22P019	C	MOTOR, 6.8 KW, 1455 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E002-1	A	MOTOR, 30 KW, 1465 RPM				R								R						R								R							R							R							R						
22E002-2	A	MOTOR, 30 KW, 1465 RPM								R						R						R						R						R						R						R						R	
22E007	B	MOTOR, 6.8 KW, 1440 RPM (OVERHAUL)																																																					
22E008-1	C	MOTOR, 15 KW, 1460 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E008-2	C	MOTOR, 15 KW, 1460 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E016	C	MOTOR, 5 KW, 1440 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E019	C	MOTOR, 10 KW, 1450 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E020-1	C	MOTOR, 10 KW, 1450 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E020-2	C	MOTOR, 10 KW, 1450 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E023	C	MOTOR, 5 KW, 1440 RPM (INSPECT & OVERHAUL)				R				R				R				R				R						R						R						R						R						R	
22E025-1	A	MOTOR, 30 KW, 1465 RPM				R								R						R								R							R							R							R						
22E025-2	A	MOTOR, 30 KW, 1465 RPM								R						R						R						R						R						R						R						R	

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

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EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jar				20Jan-16Feb				17Feb-16Ma				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oc				27Oct-16Nov				17Nov-21Dec				22Dec-19Jar			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
22E025-3	A	MOTOR, 30 KW, 1465 RPM				R								R								R								R						R								R								R			
22E025-4	A	MOTOR, 30 KW, 1465 RPM								R						R								R								R						R								R								R	
22E025-5	A	MOTOR, 30 KW, 1465 RPM				R								R								R								R						R								R									
22E025-6	A	MOTOR, 30 KW, 1465 RPM								R						R								R								R						R								R								R	
22N001	B	MOTOR, 3HP KW, RPM (OVERHAUL)																																																				
23P002A	C	MOTOR,17.5 KW,1470 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R
23P002B	C	MOTOR,17.5 KW,1470 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R
23P002C	C	MOTOR,17.5 KW,1470 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R
23P002D	C	MOTOR,17.5 KW,1470 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R
23P002E	C	MOTOR,17.5 KW,1470 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R
23P003A	A	MOTOR, 140 KW, 2985 RPM				R								R								R								R						R								R									
23P003B	A	MOTOR, 140 KW, 2985 RPM								R						R								R								R						R								R								R	
23P004A	A	MOTOR, 250 KW, 2985 RPM				R								R								R								R						R								R									
23P004B	A	MOTOR, 250 KW, 2985 RPM								R						R								R								R						R								R								R	
23P005A	C	MOTOR,140 KW, 2985 RPM (INSPECT & OVERHAUL)				R				R				R				R				R				R				R				R				R				R				R				R				R

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

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23P005B	C	MOTOR,140 KW, 2985 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23P006A	A	MOTOR, 100 KW, 2980 RPM					R				R				R				R				R				R				R				R				R				R				R							
23P006B	A	MOTOR, 100 KW, 2980 RPM								R						R								R								R								R								R				R
23P007A	A	MOTOR, 58 KW, 1489 RPM					R				R				R				R				R				R				R				R				R				R				R							
23P007B	A	MOTOR, 58 KW, 1489 RPM								R						R								R								R								R								R				R
23P007A-1	C	MOTOR, 1/4HP , 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R							
23P007B-1	C	MOTOR, 1/4HP , 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R							
23P008A	A	MOTOR, 7.5 KW, 2935 RPM					R				R				R				R				R				R				R				R				R				R				R							
23P008B	A	MOTOR, 7.5 KW 2935 RPM								R						R								R								R								R								R				R
23P009A	A	MOTOR, 20 KW, 2965 RPM					R				R				R				R				R				R				R				R				R				R				R							
23P009B	A	MOTOR, 20 KW, 2965 RPM								R						R								R								R								R								R				R
23P010A	A	MOTOR, 200 KW, 2988 RPM					R				R				R				R				R				R				R				R				R				R				R							
23P010B	A	MOTOR, 200 KW, 2988 RPM								R						R								R								R								R								R				R
23P011A	A	MOTOR, 15 KW, 2955 RPM					R				R				R				R				R				R				R				R				R				R				R							
23P011B	A	MOTOR, 15 KW, 2955 RPM								R						R								R								R								R								R				R

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

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PRODUCTION DEPARTMENT MANAGER

EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Ma				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oc				27Oct-16Nov				17Nov-21Dec				22Dec-19Jar			
			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
23P012	C	MOTOR, 15 KW, 2955 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23P013A	A	MOTOR, 10 KW, 2940 RPM					R								R								R								R				R				R				R				R				
23P013B	A	MOTOR, 10 KW, 2940 RPM									R								R								R								R				R				R				R				R
23P014A	A	MOTOR, 10 KW, 2940 RPM					R								R								R								R				R				R				R				R				
23P014B	A	MOTOR, 10 KW, 2940 RPM									R								R								R								R				R				R				R				R
23P015A	A	MOTOR, 7.5 KW, 1450 RPM					R								R								R								R				R				R				R				R				
23P015B	A	MOTOR, 7.5 KW, 1450 RPM									R								R								R								R				R				R				R				R
23P016A	A	MOTOR, 7.5 KW, 1451 RPM					R								R								R								R				R				R				R				R				
23P016B	A	MOTOR, 7.5 KW, 1452 RPM									R								R								R								R				R				R				R				R
23P017A	D	MOTOR, 0.37 KW, RPM (BREAK DOWN)																																																					
23P017B	D	MOTOR, 0.37 KW, RPM (BREAK DOWN)																																																			
23P018A	A	MOTOR, 10 KW, 2940 RPM					R								R								R								R				R				R				R				R				
23P018B	A	MOTOR, 10 KW, 2940 RPM									R								R								R								R				R				R				R				R
23P019A	D	MOTOR, 20 KW, 2965 RPM (BREAK DOWN)																																																			
23P019B	D	MOTOR, 20 KW, 2965 RPM (BREAK DOWN)																																																			

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
I : Inspection
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C : Calibration
L : Lubrication
Q : Check lube oil quality
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B : Program back up

ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

APPROVED BY: ..... DATE : .....
MAINTENANCE DEPARTMENT MANAGER

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			Week No	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03
23K001-1	C	MOTOR, 33 KW, 2984 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23N001	C	MOTOR, 4 KW, RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23N002	C	MOTOR, 4 KW, 1430 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23N003	C	MOTOR, 3 KW, 1430 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23N004	C	MOTOR, 3 KW, 1430 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001A-1	C	MOTOR,5 KW, 1450 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001A-2	C	MOTOR,4 KW, 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001A-3	C	MOTOR,0.37KW,1380 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001B-1	C	MOTOR,5 KW, 1450 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001B-2	C	MOTOR,4 KW, 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001B-3	C	MOTOR,0.37KW,1380 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001C-1	C	MOTOR,5 KW, 1450 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001C-2	C	MOTOR,4 KW, 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001C-3	C	MOTOR,0.37KW,1380 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001D-1	C	MOTOR,5 KW, 1450 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

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SUPERVISOR

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23F001D-2	C	MOTOR,4 KW, 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
23F001D-3	C	MOTOR,0.37KW,1380 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
23F001E-1	C	MOTOR,5 KW, 1450 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
23F001E-2	C	MOTOR,4 KW, 1425 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
23F001E-3	C	MOTOR,0.37KW,1380 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24P001A	A	MOTOR, 322 KW, 2978 RPM					R				R								R				R				R								R				R				R								
24P001B	A	MOTOR, 322 KW, 2978 RPM									R				R								R								R								R								R				R
24P001A-1	B	MOTOR, 1HP KW, RPM (OVERHAUL)																																																			
24P001B-1	B	MOTOR, 1HP KW, RPM (OVERHAUL)																																																		
24P001A-2	B	MOTOR, 1HP KW, RPM (OVERHAUL)																																																		
24P001B-2	B	MOTOR, 1HP KW, RPM (OVERHAUL)																																																		
24P002A	A	MOTOR, 442 KW, 2974 RPM				R							R						R				R				R								R								R								R
24P002B	A	MOTOR, 442 KW, 2974 RPM					R				R				R								R								R								R								R				
24P003A	A	MOTOR, 135 KW, 2979 RPM				R					R				R								R								R								R								R				
24P003B	A	MOTOR, 135 KW, 2979 RPM					R				R				R								R								R								R								R				

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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			Week No	52 01 02 03	04 05 06 07	08 09 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 01 02 03
24P004A	D	MOTOR, 15 KW, 2925 RPM (OVERHAUL)															
24P004B	D	MOTOR, 15 KW, 2925 RPM (OVERHAUL)															
24P005A	A	MOTOR, 28 KW, 2980 RPM		R		R		R		R		R		R		R	
24P005B	A	MOTOR, 28 KW, 2980 RPM		R		R		R		R		R		R		R	R
24P006A	A	MOTOR, 65 KW, 1484 RPM		R		R		R		R		R		R		R	
24P006B	A	MOTOR, 65 KW, 1484 RPM		R		R		R		R		R		R		R	R
24P007A	A	MOTOR, 863 KW, 1487 RPM		R		R		R		R		R		R		R	
24P007B	A	MOTOR, 863 KW, 1487 RPM		R		R		R		R		R		R		R	R
24P008	B	MOTOR, 5.5 KW, 2925 RPM (OVERHAUL)															
24P009A	D	MOTOR, 5.5 KW, 2925 RPM (OVERHAUL)															
24P009B	D	MOTOR, 5.5 KW, 2925 RPM (OVERHAUL)															
24K001A	A	MOTOR, 130 KW, 1490 RPM		R		R		R		R		R		R		R	
24K001B	A	MOTOR, 130 KW, 1490 RPM		R		R		R		R		R		R		R	R
24K001A-1	B	MOTOR, 1.5 KW, RPM (OVERHAUL)															
24K001A-2	B	MOTOR, KW, RPM (OVERHAUL)															

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

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EQUIPMENT NO.	Gr.	EQUIPMENT NAME	Date	23Dec-19Jan				20Jan-16Feb				17Feb-16Mar				17Mar-13Apr				14Apr-11May				12May-8Jun				9Jun-6Jul				7Jul-3Aug				4Aug-31Aug				1Sep-28Sep				29Sep-26Oct				27Oct-16Nov				17Nov-21Dec				22Dec-19Jan			
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24K001B-1	B	MOTOR, 1.5 KW, RPM (OVERHAUL)																																																							
24K001B-2	B	MOTOR, KW, RPM (OVERHAUL)																																																					
24E006-1	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
24E006-2	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-3	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-4	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-5	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-6	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-7	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-8	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-9	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-10	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-11	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E006-12	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E007-1	C	MOTOR, 36 KW, 1470 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : .... PLANT : LUBE BASE OIL (UNIT 21,22,23,24,25) EQUIPMENT TYPE : MOTOR

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24E007-2	C	MOTOR, 36 KW, 1470 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R				R
24E007-3	C	MOTOR, 36 KW, 1470 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E007-4	C	MOTOR, 36 KW, 1470 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E008-1	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
24E008-2	C	MOTOR, 25 KW, 1465 RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
25N001	B	MOTOR, 145 KW,1488 RPM (OVERHAUL)																																																					
25N001-1	B	MOTOR, KW, 2790 RPM (OVERHAUL)																																																			
25K001A	D	MOTOR, 132 KW. RPM (OVERHAUL)																																																			
25K001A-1	D	MOTOR, KW. RPM (OVERHAUL)																																																			
25K001B	D	MOTOR, 132 KW. RPM (OVERHAUL)																																																			
25K001B-1	D	MOTOR, KW. RPM (OVERHAUL)																																																			
25K001C	D	MOTOR, 132 KW. RPM (OVERHAUL)																																																			
25K001C-1	D	MOTOR, KW. RPM (OVERHAUL)																																																			
25P001A	C	MOTOR,14.5 KW, 2950RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R
25P001B	C	MOTOR,14.5 KW, 2950RPM (INSPECT & OVERHAUL)					R				R				R				R				R				R				R				R				R				R				R				R

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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25P002A	A	MOTOR, 17.5 KW, 1470 RPM					R								R								R							R							R							R							R						
25P002B	A	MOTOR, 17.5 KW, 1470 RPM									R							R							R							R							R							R							R				
25P003A	A	MOTOR, 23 KW, 2950 RPM					R								R								R							R							R							R							R						
25P003B	A	MOTOR, 23 KW, 2950 RPM									R							R							R							R							R							R							R				
25P004A	B	MOTOR, 5 KW, 1450 RPM (OVERHAUL)																																																												
25P005A	D	MOTOR, 2.5 KW, 2870 RPM (OVERHAUL)																																																										
25P005B	D	MOTOR, 2.5 KW, 2870 RPM (OVERHAUL)																																																										
25P006A	D	MOTOR, 4.6 KW, 2900 RPM (OVERHAUL)																																																										
25P006B	D	MOTOR, 4.6 KW, 2900 RPM (OVERHAUL)																																																										
25B001	D	MOTOR, 7.5 KW, 2930 RPM (OVERHAUL)																																																										

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

SECTION : ..... PLANT : TANK FARM AREA UNIT 61 EQUIPMENT TYPE : MOTOR

☐ MECH. ■ ELEC. ☐ INST.

REV. 0

DATE : OCT. 15, 2001

REMARK

DESCRIPTION OF ACTIVITIES & LEGENDS

D : Chemical & Dielectric strenght
I : Inspection
O : Overhaul
C : Calibration
L : Lubrication
Q : Check lube oil quality
F : Function test
R : Running condition check
S : Stand by condition check
B : Program back up

ISSUED BY : ..... DATE : .....
SUPERVISOR

CHECK BY : ..... DATE : .....
MAINTENANCE SECTION MANAGER

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MAINTENANCE DEPARTMENT MANAGER

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			Week No	5021 5022 5023	0024 0025 0026 0027	0028 0029 0030 0031	0032 0033 0034 0035	0036 0037 0038 0039	0040 0041 0042 0043	0044 0045 0046 0047	0048 0049 0050 0051	0052 0053 0054 0055	0056 0057 0058 0059	0060 0061 0062 0063	0064 0065 0066 0067	0068 0069 0070 0071	0072 0073 0074 0075	0076 0077 0078 0079	0080 0081 0082 0083
61P001 A	A	MOTOR, 355KW, 2981 RPM		R		R		R		R		R		R		R	
61P001 B	A	MOTOR, 355KW, 2981 RPM			R		R		R		R		R		R		R	
61P002 A	A	MOTOR, 300KW, 2980 RPM		R		R		R		R		R		R		R	
61P002 B	A	MOTOR, 300KW, 2980 RPM			R		R		R		R		R		R		R	
61P002 C	A	MOTOR, 300KW, 2980 RPM		R		R		R		R		R		R		R	
61P002 D	A	MOTOR, 300KW, 2980 RPM			R		R		R		R		R		R		R	
61P021 A	A	MOTOR, 250KW, 2980 RPM		R		R		R		R		R		R		R	
61P021 B	A	MOTOR, 250KW, 2980 RPM			R		R		R		R		R		R		R	
61P047 A	D	MOTOR, 580KW, 2985 RPM (BREAK DOWN)																
61P047 B	D	MOTOR, 580KW, 2985 RPM (BREAK DOWN)																
61P003	B	MOTOR, 5.5KW, 2920 RPM (OVERHAUL)																
61P004 A	B	MOTOR, 7.5KW, 2920 RPM (OVERHAUL)																
61P004 B	B	MOTOR, 7.5KW, 2920 RPM (OVERHAUL)																
61P023	B	MOTOR, 4KW, 2880 RPM (OVERHAUL)																
61P031	B	MOTOR, 18.5KW, 2910 RPM (OVERHAUL)																
61P032 A	D	MOTOR, 30KW, 2955 RPM (BREAK DOWN)																

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61P032 B	D	MOTOR, 30KW, 2955 RPM	(BREAK DOWN)														
61P033	B	MOTOR, 30KW, 2955 RPM	(OVERHAUL)														
61P034 A	D	MOTOR, 30KW, 2955 RPM	(BREAK DOWN)														
61P034 B	D	MOTOR, 22KW, 2950 RPM	(BREAK DOWN)														
61P036	B	MOTOR, 30KW, 2955 RPM	(OVERHAUL)														
61P037 A	D	MOTOR, 75KW, 2970 RPM	(BREAK DOWN)														
61P037 B	D	MOTOR, 75KW, 2970 RPM	(BREAK DOWN)														
61P042	B	MOTOR, 140KW, 2975 RPM	(OVERHAUL)														
61P043 A	D	MOTOR, 140KW, 2975 RPM	(BREAK DOWN)														
61P043 B	D	MOTOR, 140KW, 2975 RPM	(BREAK DOWN)														
61P044 A	D	MOTOR, 132KW, 2975 RPM	(BREAK DOWN)														
61P044 B	D	MOTOR, 132KW, 2975 RPM	(BREAK DOWN)														
61P046	B	MOTOR, 140KW, 2975 RPM	(OVERHAUL)														
61P051A	D	MOTOR, 11KW, 720 RPM	(BREAK DOWN)														
61P051B	D	MOTOR, 11KW, 720 RPM	(BREAK DOWN)														
61P052	B	MOTOR, 22KW, 750 RPM	(OVERHAUL)														

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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61P053 A	D	MOTOR, 11KW, 720 RPM (BREAK DOWN)																																																				
61P053 B	D	MOTOR, 30KW, 735 RPM (BREAK DOWN)																																																			
61P054 A	D	MOTOR, 75KW, 1481 RPM (BREAK DOWN)																																																		
61P054 B	D	MOTOR, 75KW, 1481 RPM (BREAK DOWN)																																																		
61P055 A	A	MOTOR, 11KW, 720 RPM			R								R								R								R							R							R							R			
61P055 B	A	MOTOR, 11KW, 720 RPM							R								R								R							R							R							R					
61P071 A	D	MOTOR, 11KW, 2916 RPM (BREAK DOWN)																																																		
61P071 B	D	MOTOR, 11KW, 2916 RPM (BREAK DOWN)																																																		
61P072 A	D	MOTOR, 55KW, 2965 RPM (BREAK DOWN)																																																		
61P072 B	D	MOTOR, 55KW, 2965 RPM (BREAK DOWN)																																																		
61P073 A	A	MOTOR, 55KW, 1475 RPM			R								R								R								R							R							R							R			
61P073 B	A	MOTOR, 55KW, 1475 RPM							R								R								R							R							R							R					
61P074 A	D	MOTOR, 15KW, 2915 RPM (BREAK DOWN)																																																		
61P074 B	D	MOTOR, 15KW, 2915 RPM (BREAK DOWN)																																																		
61P075A	A	MOTOR, 140KW, 2975 RPM			R								R								R								R							R							R							R			
61P075B	A	MOTOR, 140KW, 2975 RPM							R								R								R							R							R							R					

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

YEAR 2002

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SUPERVISOR

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61P076 A	B	MOTOR, 65KW, 1484 RPM	(OVERHAUL)														
61P076 B	B	MOTOR, 65KW, 1484 RPM	(OVERHAUL)														
61P078 A	B	MOTOR, 65KW, 1484 RPM	(OVERHAUL)														
61P078 B	B	MOTOR, 65KW, 1484 RPM	(OVERHAUL)														
61P079 A	D	MOTOR, 15.5KW, 735 RPM	(BREAK DOWN)														
61P079 B	D	MOTOR, 15.5KW, 735 RPM	(BREAK DOWN)														
61P080	B	MOTOR, 10KW, 2940 RPM	(OVERHAUL)														
61P081	B	MOTOR, 4.6KW, 2915 RPM	(OVERHAUL)														
61P082 A	B	MOTOR, 4.6KW, 2915 RPM	(OVERHAUL)														
61P082 B	B	MOTOR, 5.5KW, 2915 RPM	(OVERHAUL)														
61P083	B	MOTOR, 55KW, 2965 RPM	(OVERHAUL)														
61P102 A	D	MOTOR, 15KW, 2920 RPM	(BREAK DOWN)														
61P102 B	D	MOTOR, 15KW, 2920 RPM	(BREAK DOWN)														
61TN005A	B	MOTOR, 7.5KW, 1440 RPM	(OVERHAUL)														
61TN005B	B	MOTOR, 7.5KW, 1440 RPM	(OVERHAUL)														
61TN005C	B	MOTOR, 7.5KW, 1440 RPM	(OVERHAUL)														

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

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61TN021	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN022	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN023 A	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN023 B	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN024 A	B	MOTOR, 11KW, 1485 RPM (OVERHAUL)															
61TN024 B	B	MOTOR, 11KW, 1485 RPM (OVERHAUL)															
61TN025 A	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN025 B	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN025 C	B	MOTOR, 7.46KW, 1440 RPM (OVERHAUL)															
61TN026 A	B	MOTOR, 11KW, 1485 RPM (OVERHAUL)															
61TN026 B	B	MOTOR, 11KW, 1485 RPM (OVERHAUL)															
61TN026 C	B	MOTOR, 11KW, 1485 RPM (OVERHAUL)															
61TN075 A	B	MOTOR, 15KW, 1475 RPM (OVERHAUL)															
61TN075 B	B	MOTOR, 15KW, 1475 RPM (OVERHAUL)															
61TN076 A	B	MOTOR, 22KW, 1465 RPM (OVERHAUL)															
61TN076 B	B	MOTOR, 22KW, 1465 RPM (OVERHAUL)															

PREVENTIVE MAINTENANCE YEARLY MASTER SCHEDULE

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81P055 A	B	MOTOR, 4.5KW, 2880 RPM (OVERHAUL)																																																					
61P095A	D	MOTOR, 132KW, 2980 RPM (BREAK DOWN)																																																			
61P095B	D	MOTOR, 132KW, 2980 RPM (BREAK DOWN)																																																		
61P062A	C	MOTOR, 37KW, 1480 RPM (INSPECT & OVERHAUL)		R								R								R							R								R							R							R			
61P062B	C	MOTOR, 37KW, 1480 RPM (INSPECT & OVERHAUL)						R								R								R							R							R							R							R	
61P063A	B	MOTOR, 55KW, 1480 RPM (OVERHAUL)																																																		
61P063B	B	MOTOR, 55KW, 1480 RPM (OVERHAUL)																																																		
61P064A	B	MOTOR, 110KW, 1486 RPM (OVERHAUL)																																																		
61P064B	B	MOTOR, 110KW, 1486 RPM (OVERHAUL)																																																		
61P065A	D	MOTOR, 250KW, 1485 RPM (BREAK DOWN)																																																		
61P065B	D	MOTOR, 250KW, 1485 RPM (BREAK DOWN)																																																		
61P084	B	MOTOR, 3KW, 720 RPM (OVERHAUL)																																																		
61P085	B	MOTOR, 11KW, 715 RPM (OVERHAUL)																																																		
61P101A	A	MOTOR, 22KW, 730 RPM		R								R								R							R								R							R							R			
61P101B	A	MOTOR, 22KW, 730 RPM						R								R								R							R							R							R							R	
61P201A	D	MOTOR, 3KW, 2840 RPM (BREAK DOWN)																																																		

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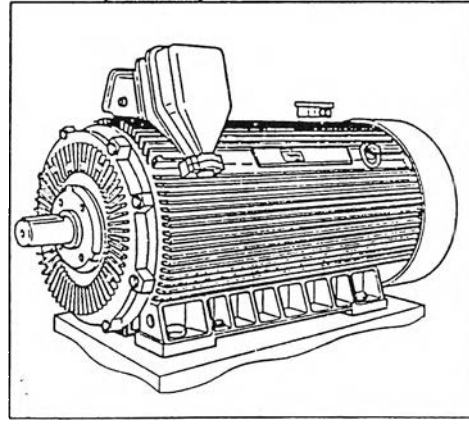
61P201B	D	MOTOR, 3KW, 2840 RPM (BREAK DOWN)																																																						
61P202A	D	MOTOR, 15KW, 2920 RPM (BREAK DOWN)																																																					
61P202B	D	MOTOR, 15KW, 2920 RPM (BREAK DOWN)																																																				
61P203A	D	MOTOR, 45KW, 2940 RPM (BREAK DOWN)																																																				
61P203B	D	MOTOR, 45KW, 2940 RPM (BREAK DOWN)																																																				
61TN062A	B	MOTOR, 7.5KW, 1440 RPM (BREAK DOWN)																																																				
61TN062B	B	MOTOR, 7.5KW, 1440 RPM (BREAK DOWN)																																																				
61TN063A	B	MOTOR, 5.5KW, 1440 RPM (OVERHAUL)																																																				
61TN063B	B	MOTOR, 5.5KW, 1440 RPM (OVERHAUL)																																																				
61TN064A	B	MOTOR, 5.5KW, 1440 RPM (OVERHAUL)																																																				
61TN064B	B	MOTOR, 5.5KW, 1440 RPM (OVERHAUL)																																																				
61TN064C	B	MOTOR, 4KW, 1435 RPM (OVERHAUL)																																																				

AEG

AEG Electrical Machines



Manual

SCH 55 002 00

Table of contents

6. Maintenance

6.1 General Instructions

- Only trained personnel may carry out maintenance and care of the electrical machine, and they must be instructed to do so by the person responsible for the plant.
- Keep to the specified maintenance intervals and use recommended lubricating materials and amounts thereof.
- Collect waste oil and grease and old oily\greasy rags in correspondingly labelled containers and dispose of the waste in the prescribed manner.

Check the locking elements of the bolt connections on machines exposed to vibrations and replace same by new locking elements, if required.

6.2 Safety Instructions

- Only carry out maintenance work when the electrical machine is idle (except regreasing).
- Ensure that the electrical machine cannot be switched back on and that this is indicated by a suitable warning sign.
- Comply with safety instructions and accident prevention regulations of the corresponding manufacturer when using oils and grease, cleaning materials and spare parts!
- Maintenance work on the electrical connections of the electrical machine or on the electrical auxiliary/control connections may only be carried out by qualified electricians in compliance with DIN VDE 0105.

- Ensure that the electrical machine is neutrally switched!
- Make sure that the electrical machine cannot be switched back on and indicate this with a warning sign!
- Ascertain voltage neutrality!
- Short-circuit to earth!
- Cover or cordon off any neighbouring parts which are still live!

6.3 Bearings

6.3.1 Roller Bearings

Roller bearing maintenance:

- Monitoring the bearing temperature during operation,
- Checking the bearings for noise whilst running,
- Roller bearing lubrication,
- Changing the bearings.

△ Should a raising of bearing temperature (→ chap. 9.1) or bearing noise occur during operation, then immediately switch off the electrical machine in order to prevent resultant damage.

Dismantle the bearings and check for damage.
Should the bearing running surfaces be dark, matt or polished in places, then renew the bearing.

☞ Dismantling/installation of bearings by manufacturer customer service.

If the operator dismantles/installs the bearing, then only use bearings recommended or supplied by the manufacturer and comply with the fitting instructions of the bearing manufacturer.

Fit bearings of the same type and tolerance class. For type of bearing see rating plate.

When ordering spare parts give the electrical machine type and number (→ rating plate).

6.3.1.1 Roller Bearing Lubrication

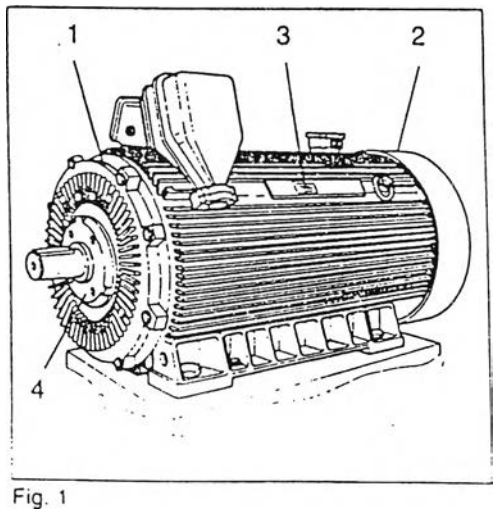


Fig. 1

Lubricate the roller bearing during operation via the greasing nipple

- drive side (1) and
- opposite side (2)

with specified amount of lubricant and using correct grease quality.

☞ Lubrication intervals and amounts, and grease quality are specified on the rating plate (3).

The bearing temperature rises after lubrication, and falls when the operational consistency of the grease has reached its standard value.

Remove old grease from the bearing cover (4) in accordance with the maintenance plan (→ chap. 6.10).

6.3.2 Plain Bearings

6.3.2.1 Checking the Oil Level and Changing the Oil - Plain Bearing

→ omitted !

6.4 Cooling System

6.4.1 Cleaning

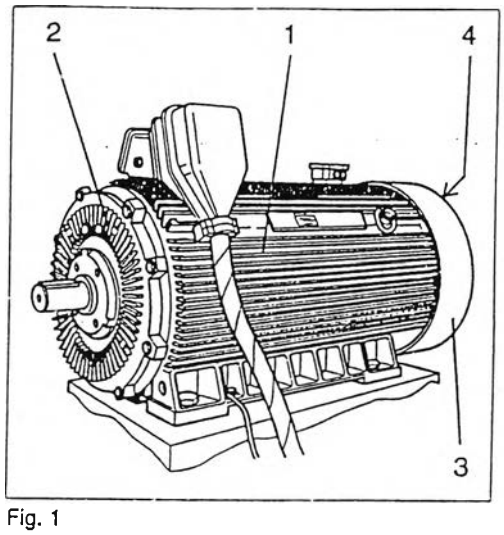


Fig. 1

Regularly check the electrical machine cooling system for dirt and dust deposits.

☞ Dirt and dust deposits prevent heat exchange and the intake and exhaust of the cooling air, and also raise the operational temperature.

⚠ Clean the cooling system when the electrical machine is switched off.

⚠ Ensure that the electrical machine is neutrally switched!

Make sure that the electrical machine cannot be switched back on and indicate this with a warning sign!

Ascertain voltage neutrality!

Short-circuit to earth!

Cover or cordon off any neighbouring parts which are still live!

Using high-pressure airline, rags, brushes and other suitable means, remove dirt and dust deposits from

- cooling passages (1)
- bearing cover (2)
- ventilation hood's protective screen (3)
- cooling fan (4).

☞ Remove the ventilation hood in order to clean the cooling fan.

⚠ Don't damage the electrical machines protective paintwork when cleaning.

6.5 Junction Box/ Terminal Box and Cable Connections

Inspect the junction box (1), terminal box (2) and cable connections annually.

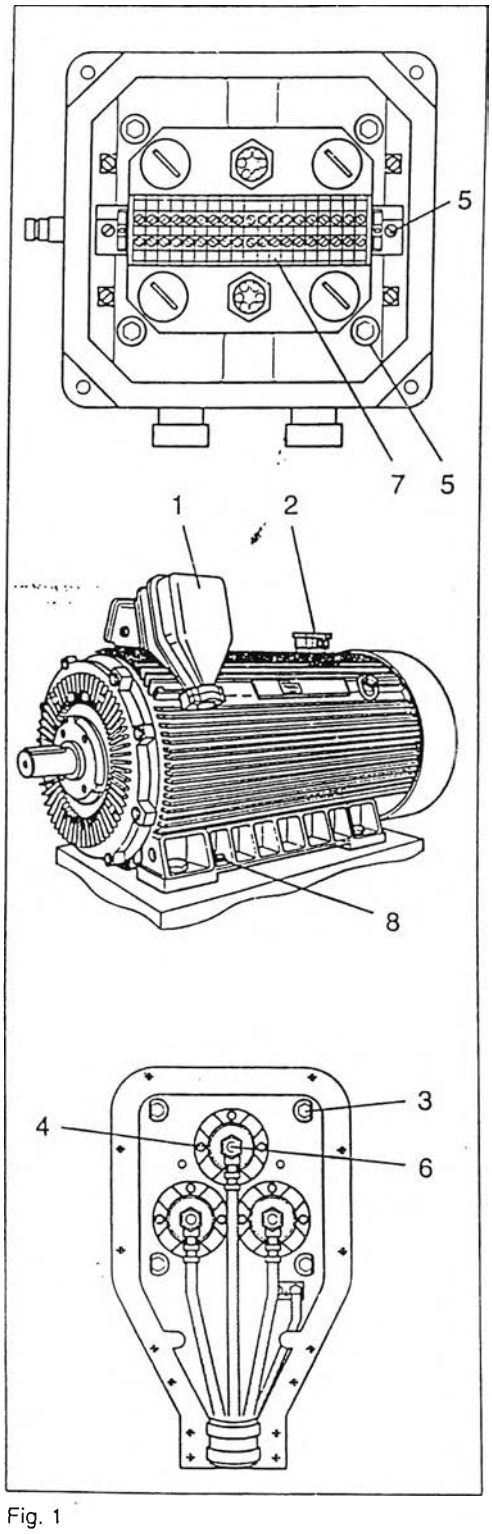


Fig. 1

Ensure that the electrical machine and equipment are neutrally switched!

Make sure the electrical machine cannot be switched back on and indicate this with a warning sign!

Ascertain voltage neutrality!

Short-circuit to earth!

Cover or cordon off any neighbouring parts which are still live!

- Remove the junction box\terminal box cover.
- Check the securing screws of the junction box (3), the insulators (4), the terminal box (5) for tightness.
- Check insulators for damage.
- Check the cover and cable feed seals for correct seating and a good seal.

Renew porous or damaged seals.
Seal cable feeds which are not sealed.

- Clean inside the junction/terminal box.
- Check the cable connections (6), auxiliary/monitoring connections on the terminal strip (7), system earth (8), earthed connections to the junction/terminal box for firm seating of the cable and tightness of the screws!
- Check the insulation of the connection cable and the auxiliary/monitoring leads for damage.

Change damaged cables/leads!

- Place the junction box/terminal box cover in position making sure that the seals are correctly seated and secure the cover with the appropriate screws.

Fig. 1 → Example of the lay-out of a junction box and terminal box.

6.6 Electrical machine Alignment

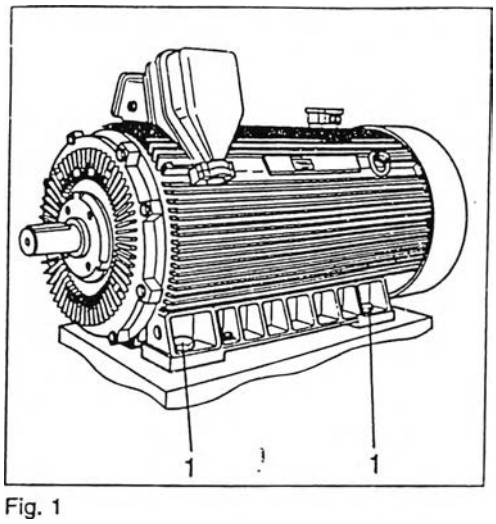


Fig. 1

Check the electrical machine alignment after 2000 operational hours.

Switch off the electrical machine and inspect the alignment while the electrical machine is at operational temperature.

- Ensure that the electrical machine is neutrally switched!
- Make sure the electrical machine cannot be switched back on and indicate this with a warning sign!
- Ascertain voltage neutrality!
- Short-circuit to earth!
- Cover or cordon off any neighbouring parts which are still live!

- Remove the protective cover of the coupling (electrical machine/working machine).
- Check the electrical machine alignment with suitable measuring instruments (→ chap. 2.7.7 Alignment).

Make sure that the distance between the two coupling halves complies with that prescribed by the coupling manufacturer!

- If the determined dimensions lie within the allowed tolerance, then check the electrical machine securing screws (1) for tightness.
- Should the allowed tolerance be exceeded, then realign the electrical machine (→ chap. 2.7.7 Alignment).

6.7 Inscriptions, Information Plates

The inscriptions/information plates should be

- cleaned with rags,
- checked for secure seating and readability.

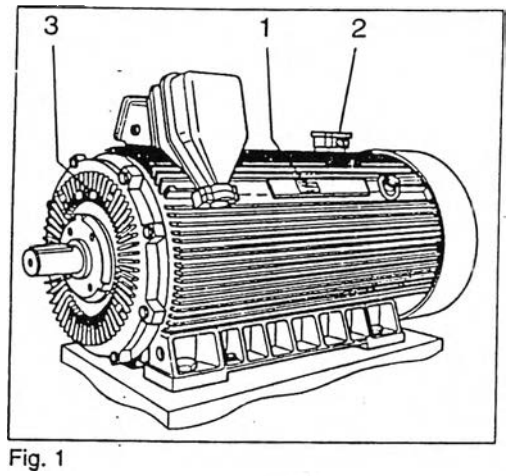


Fig. 1

Legend:

1 Rating Plate
2 Information plate for the measuring circuit
3 Direction of Rotation Arrow

☞ Fig. 1 → examples of inscription location

6.8 Waste Disposal

Collect oils, grease or dirty rags soaked in oil/grease in correspondingly labelled containers and dispose of them in the prescribed manner.

6.9 Revision

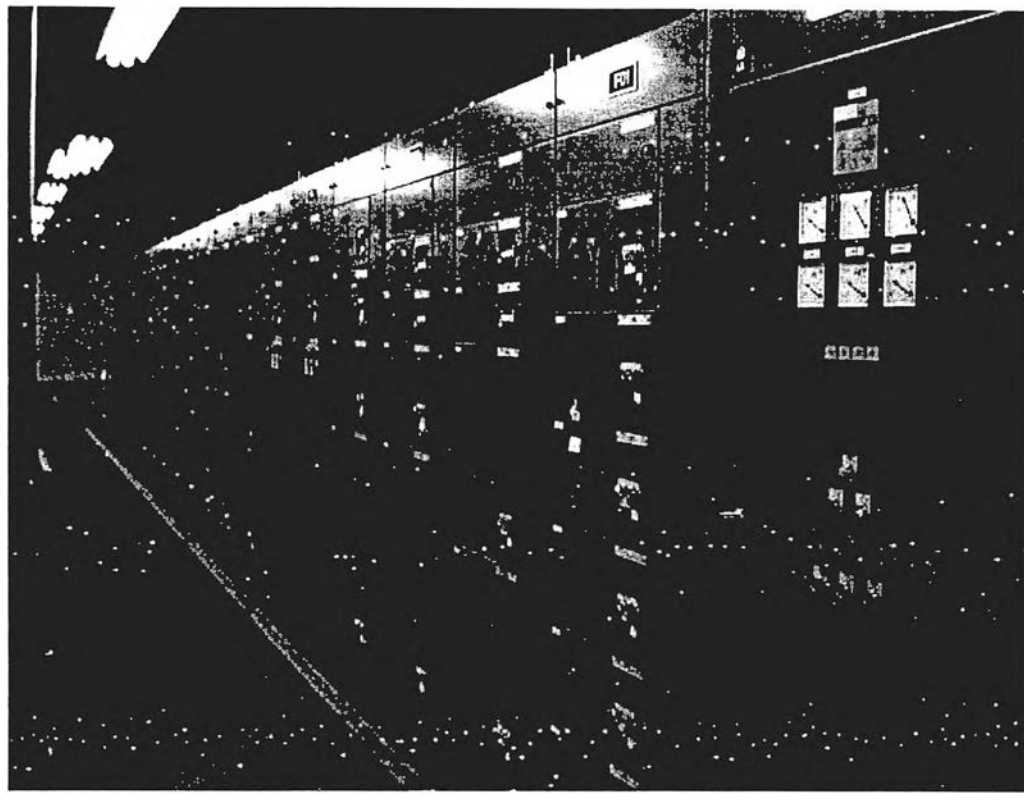
In general, we believe that revision intervals of 4 to 5 years are sufficient.

Prerequisites for these revision intervals are, that

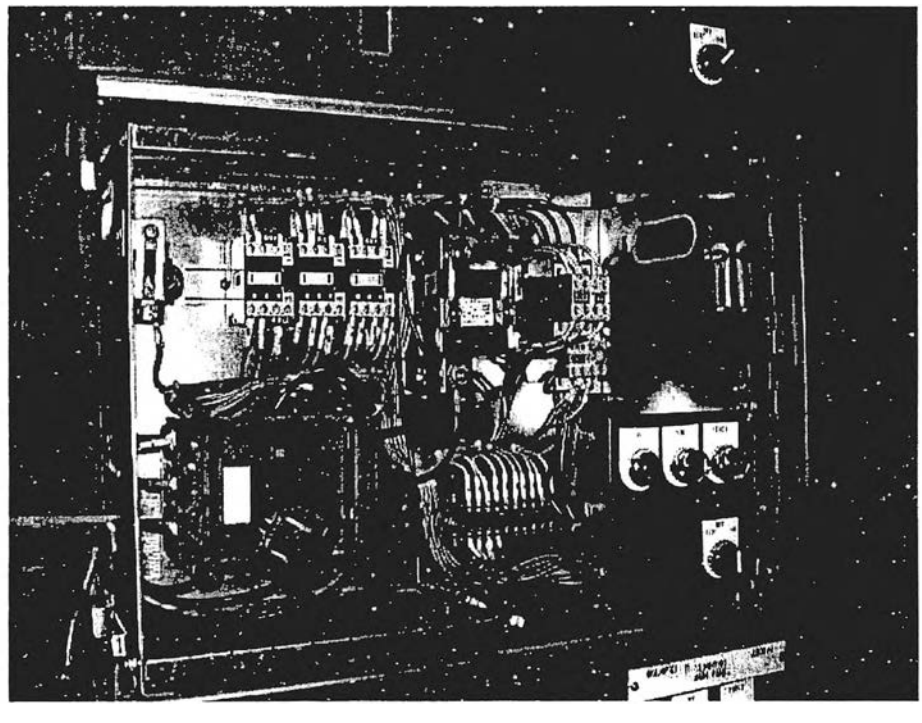
- the checks within the terms of the initial operation and maintenance work were consistently executed.
- all serious changes discerned from the continuous operational monitoring were purposefully followed up and remedied.

6.10 Maintenance Plan for the Roller Bearing Design

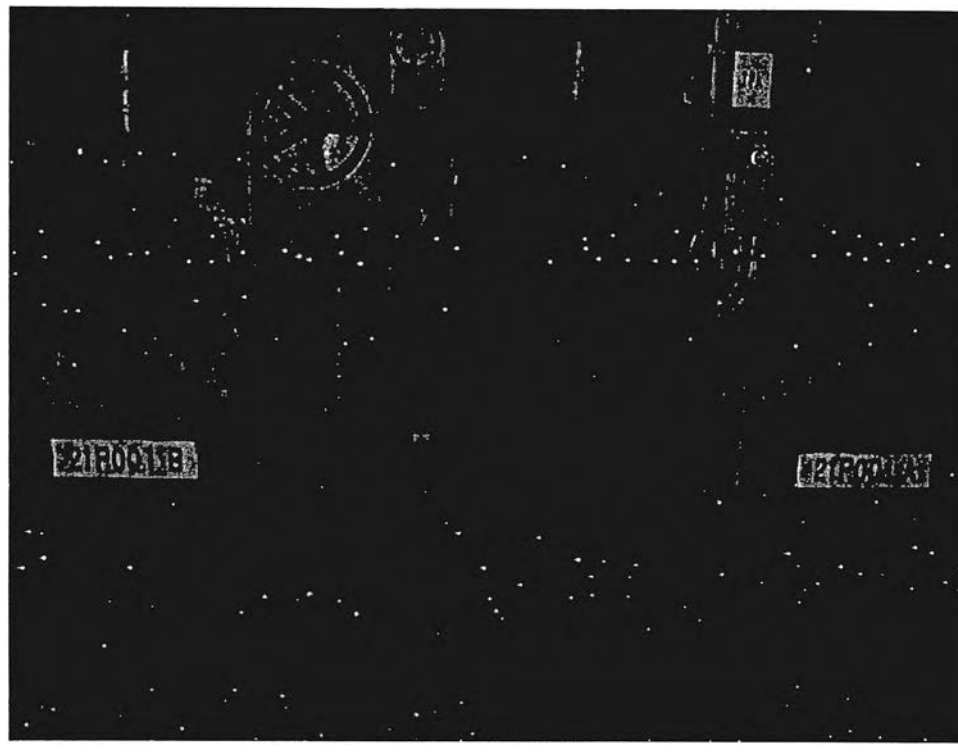
Part	Daily	Weekly	Every 3 months	Annually (minor overhaul)	Every 5 years (mayor overhaul)
Bearing			Greasing intervals see rating plate (see chap. 6.3.1.1 Roller bearing Greasing)		- Change bearings, check shaft seals,if necessary replace; - Remove old grease;
Heat exchanger, airways	Check			Clean	Clean
Coupling (comply with the coupling manufacturer's specifications)			Check alignment and security of fixings	Check alignment and security of fixings	Check alignment and security of fixings; Change grease or oil
Junction box earthing				Clean inside; retighten screws	Clean inside; retighten screws
Stator coils				Measure insulating resistance	Check the output cable for tearing, security of anchoring point and slot wedge; measure insulating resistance
Monitoring/ auxiliary connections	Record measuring data			Check for function	Check for function
The complete motor	Pay attention to operational noise and smooth running			Retighten screws	Dismantle armature; check the laminated core of the armature, the ventilator and laminated core of the windings for secure fixing; check the armature bars for breaks; clean



รูป ข.1 SUBSTATION ไฟฟ้า Process Plant

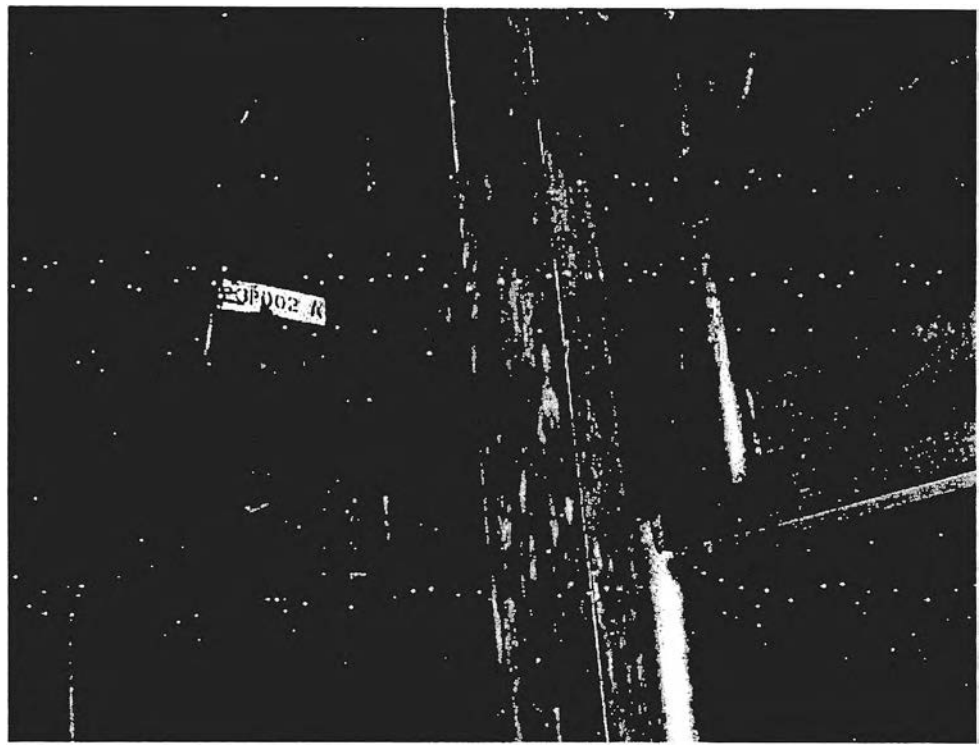


รูป ข.2 MOTOR CONTROL CENTER(MCC) แต่ละตัว

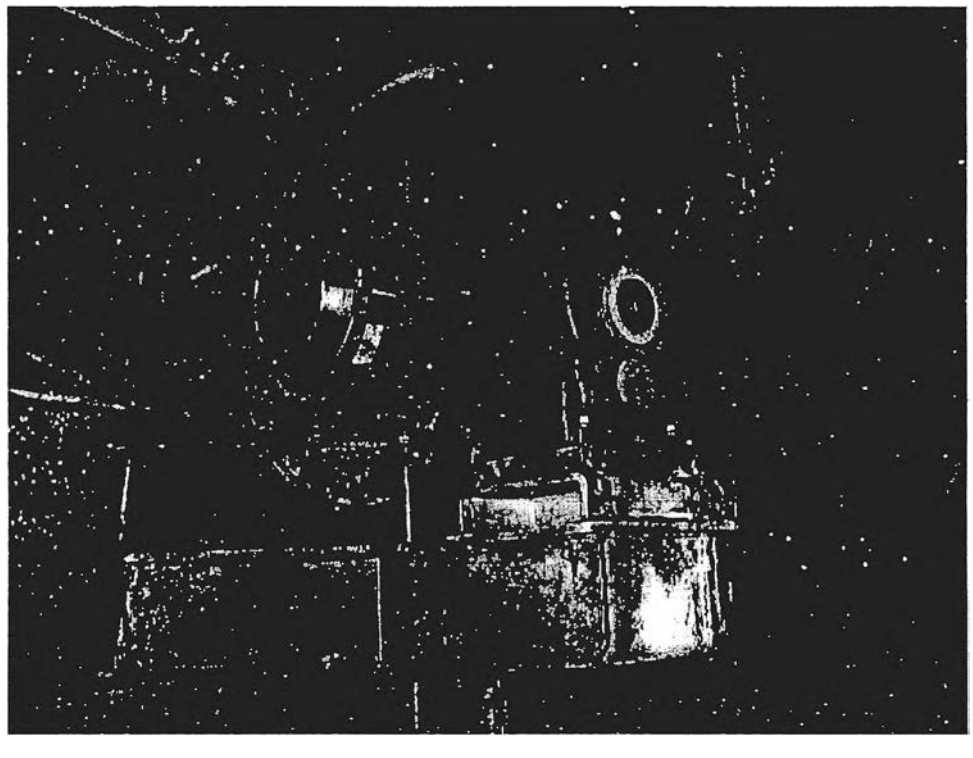


รูป ข.3 ตัวอย่างมอเตอร์กลุ่ม A Unit 21 ที่มี ตัว Stand by ซึ่งกันและกัน

รูป ข.4 ตัวอย่างมอเตอร์กลุ่ม A Unit 22 ที่มี ตัว Stand by ซึ่งกันและกัน



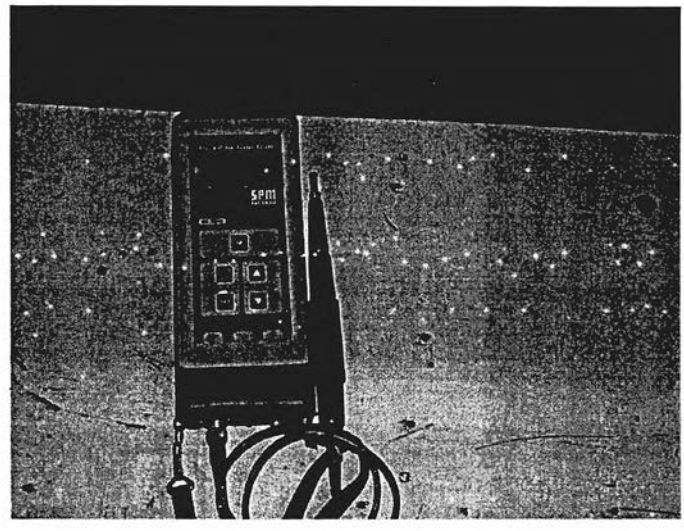
รูป ข.5 ตัวอย่างมอเตอร์กลุ่ม C Unit23 ที่ไม่มีตัว Stand by และเดินใช้งาน 24 ชั่วโมง



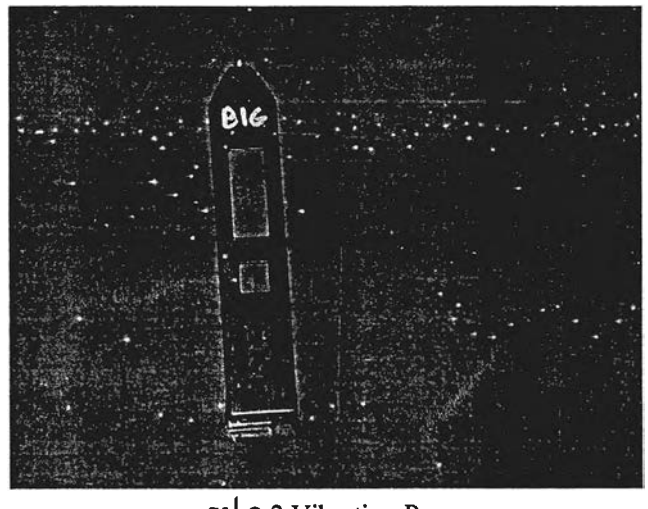
รูป ข.6 ตัวอย่างมอเตอร์กลุ่ม C Unit23 ที่ไม่มีตัว Stand by และเดินใช้งาน 24 ชั่วโมง

ภาคผนวก ค

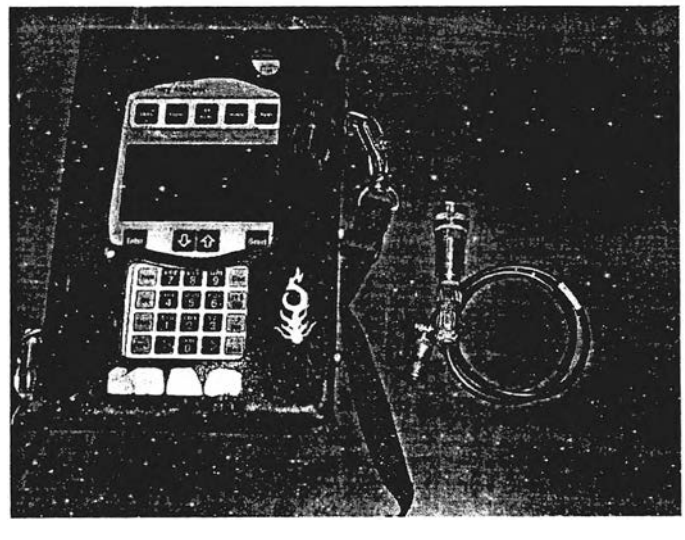
- รูปภาพเครื่องมือต่างๆ ที่ใช้ประกอบการทำงาน



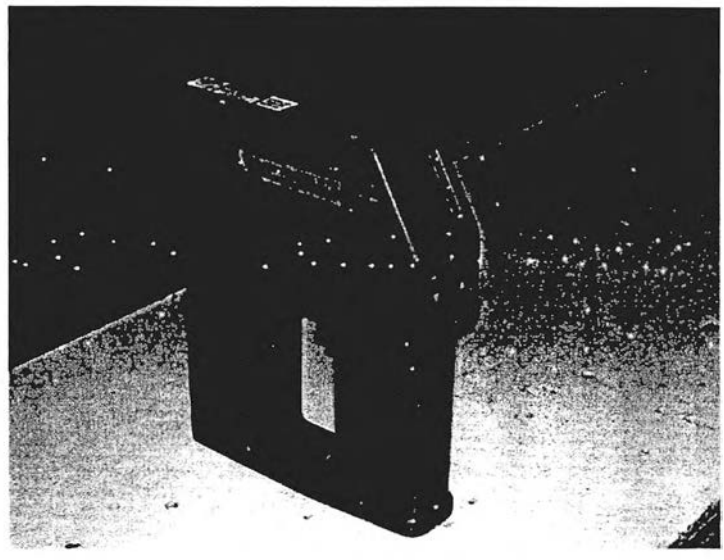
รูป ค.1 Shock Pulse Measuremrnt(SPM) ใช้ตรวจสอบสภาพ Bearing



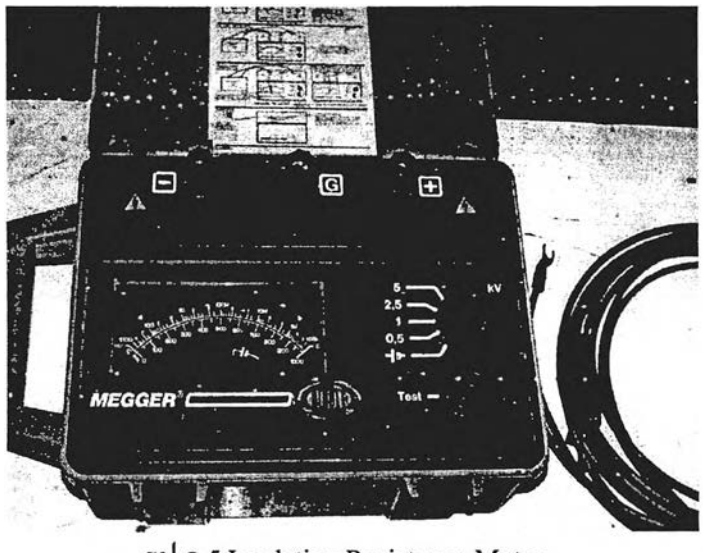
รูป ค.2 Vibration Pen



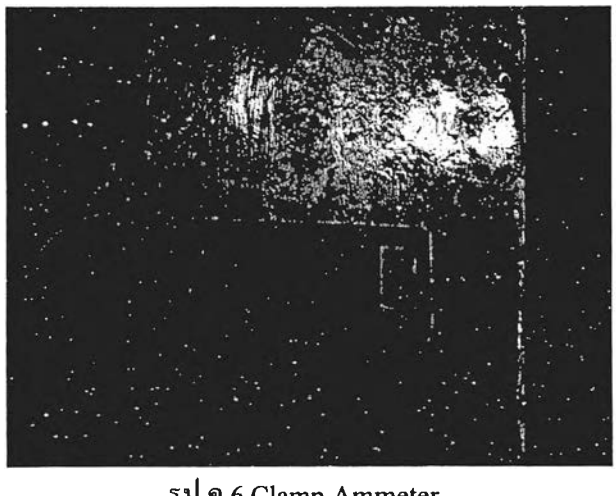
รูป ค.3 Spectrum Analyzer



รูป ค.4 Infrared Temperature Meter



รูป ค.5 Insulation Resistance Meter



รูป ค.6 Clamp Ammeter

ภาคผนวก ง

- แบบฟอร์มต่างๆ ที่ใช้ประกอบการทำงาน

	MOTOR INSPECTION (STAND BY CHECKING)	No. Date. Page

WEEK NO.:............................ W/O NO :..

MOTOR NO.	INSULATION TEST(Mohm)			INSTALLATION		GROUND WIRE		CLEAN		TERMINAL BOX		FAN	
	U - G	V - G	W - G	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

CHECKED BY.. FORE / ENG ....

	FORM FOR MOTOR HISTORY (STAND BY CHECKING)	No.
		Date. / Page

MOTOR NO .... LOCATION ....

KW .... VOLTAGE .... CONNECTION ....

DATE	INSULATION TEST(Molen)			INSTALLATION		GROUND WIRE		CLEAN		SEAL		TERMINAL BOX		FAN		CHECKED	APPROVED BY
	U - G	V - G	W - G	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	BY	FORE./ENG

REMARK ....

....

	MCC INSPECTION RECORED	NO	
		DATE	PAGE

MCC NO. .....LOCATION.....WEEK...NO.....W/O NO.....

ขั้นตอนการตรวจเช็ค	ผลการตรวจ		REMARK
	ปกติ	ควรแก้ไข	
การตรวจเช็คระบบทั่วไป			
1. สภาพทั่วไปของ MCC หรือ ตู้ควบคุม			
1.1. ไม่มีสนิมหรือรอยผุที่เกิดจากความชื้น	☐	☐	
1.2. ไม่มีการหลุดหลวมของของ BOLT หรือ NUT ฝาตู้	☐	☐	
1.3. ความสะอาดภายในตู้	☐	☐	
1.4. สภาพช่องเข้าออกของสายไฟฟ้า	☐	☐	
2. สภาพทั่วไปของอุปกรณ์ต่างๆในตู้			
2.1.ไม่มีรอยแตกร้าวหรือหัก	☐	☐	
2.2. ไม่มีกลิ่นเหม็นไหม้	☐	☐	
2.3. ไม่มีเสียงสั่นของ CONTACTOR หรือ RELAY	☐	☐	
2.4. ไม่รอยอาร์กตาม TERMINAL ต่างๆ	☐	☐	
3. สภาพของฉนวนของสายไฟฟ้า			
3.1. สภาพของฉนวนภายนอกของสายไฟฟ้ากำลัง	☐	☐	
3.2. สภาพของฉนวนภายนอกของสายไฟฟ้าควบคุม	☐	☐	
4. สภาพของ CONTACTOR			
4.1 สภาพของหน้า CONTACT	☐	☐	
4.2 สภาพของ COIL	☐	☐	
4.3การเคลื่อนที่ขึ้นลงของหน้าสัมผัส	☐	☐	
5. สภาพการขัน SCREW ที่ยึดอุปกรณ์ต่างๆ ภายในตู้	☐	☐	
6.การ SET ค่า 1. OVER LOAD.....AMP			
2. BREAKER.....AMP			
3.ELR.....AMP			

หมายเหตุ

RECORDED BY.....FORE / ENG.....

	MOTOR LUBRICATION	No.	
		Date.	Page

Week No. :	W/O No. :	

ลำดับ ที่	Motor No.	วันที่อัดจารบี	Motor Condition	ลักษณะเสียงของ Bearing และสภาพทั่ว ๆ ไปของ Motor	Remark
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	
			☐ RUN ☐ STOP	☐ ปกติ ☐ ผิดปกติ	

หมายเหตุ

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CHECKED BY .... FORE / ENG ....

	FORM FOR MOTOR RUNNING TEST	No.	
		Date.	Page

Motor No. ..... Location ..... Work No. ..... W/O No. .....

FOR ..... KW ..... A ..... RPM .....

☐ NO LOAD TEST START TIME .....

☐ LOAD TEST FINISH TIME .....

Period	Sound	Current (A)	TEMP (C)			VIBRATION												LOW NOISE		Regrease		Quantity (g)	
			atm	DE	NDE	DE						NDE											
						H1	V1	A1	dBm	dBc	dBi	H2	V2	A2	dBm	dBc	dBi	YES	NO	YES	NO	DE	NDE

REMARKS OR MOTOR CONDITION

CHECKED BY ..... FORE/ENG .....

	MOTOR INSPECTION (RUNNING CHECK)	No.	
		Date.	Page

WORK ORDER NO ____________ WEEK NO : ____________

[illegible]	MOTOR NO	TEMP.(C)		DRIVE END (DE)						NON DRIVE END (NDE)						AMP	LOW NOISE		REGREASE		QUANTITY (g)	
				VIB (MM/S)			BEARING			VIB (MM/S)			BEARING									
		DE	NDE	H1	V1	A1	dBM	dBC	dBI	H1	V1	A1	dBM	dBC	dBI	(A)	YES	NO	YES	NO	DE	NDE

CHECKED BY .... FORE / ENG ....

	MOTOR HISTORY (RUNNING CHECK)	No.
		Date. / Page

MOTOR NO...PLANT...................................... UNIT.......................................

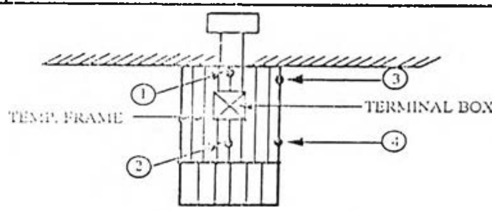
KW......................................RPM..CURRENT (Rated)..............................AMP

VOLT..................................GREASE NO..

DATE	TEMP (C)		DRIVE END						NON DRIVE END							LOW NOISE		RE GREASE		QUANTITY GREASE		RECORD BY
			VIB (mm/s)			BEARING			VIB (mm/s)			BEARING										
	DS	NDS	H1	V1	A1	dBm	dBc	dBi	H2	V2	A2	dBm	dBc	dBi	AMP(A)	YES	NO	YES	NO	DE	NDE	

	HISTORY VIBRATION OF MOTOR AIR FAN..............		Page

MOTOR : BROOK HANSEN
TYPE. WDF 200L , EEx e IIC T3
25 KW , 380 V , STAR , 1455 RPM
RATED CURRENT 49 A



BEARING DE: 6313/C3
BEARING NDE: 6313/C3
OIL SEAL DE: 65x90x10 mm.
OIL SEAL NDE: 65x90x10 mm.

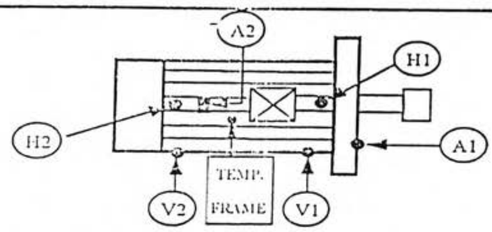
(LIMIT VIBRATION 2.8 mm/s .ISO2372 CLASS 2)

DATE:	TEMP. FRAME MOTOR/ AMBIENT	VIBRATION MOTOR				VIBRATION SWITCH		ลักษณะเสียงของ MOTOR (ดังน้อย ===> ดังมาก)					กระแส (AMP.)	ผู้ตรวจวัด
		1	2	3	4	H	V	1	2	3	4	5		

HISTORY VIBRATION OF MOTOR AIR FAN..............

Page

MOTOR : BROOK HANSEN
TYPE: 7-AD225MD , EEx e IIC T3
36 KW , 380 V , STAR , 1470 RPM
RATED CURRENT 69 A



BEARING DE: N215/C3
BEARING NDE: 6215/C3
OIL SEAL DE: 75x100x10 mm.
OIL SEAL NDE: 75x100x10 mm.

(LIMIT VIBRATION 2.8 mm/s ,ISO2372 CLASS 2)

DATE:	TEMP. FRAME MOTOR/ AMBIENT	VIBRATION MOTOR						VIBRATION SWITCH		ลักษณะเสียงของ MOTOR (ดังน้อย ===> ดังมาก)					กระแส (AMP.)	ผู้ตรวจวัด
		H1	V1	A1	H2	V2	A2	H	V	1	2	3	4	5		

MAINTENANCE REPORT Running No._____ Report date: _____	Equipment No._____	W/O No._____ Start date: _____ Finish date: _____ man-hour: _____

TROUBLE(ปัญหาหรืออาการ):

CONDITION (สภาพ):

CAUSE OF FAILURE (สาเหตุ):

REMEDY AND MATERIAL (การแก้ไข และ วัสดุ):

SPECIAL TOOLS:

PROBLEM DURING REMEDY:

SUGGESTION:

REPORTED BY:	APPROVED BY:

ประวัติผู้เขียนวิทยานิพนธ์

นาย ดนัย พยุงวงษ์ เกิดเมื่อวันที่ 14 เมษายน พ.ศ. 2516 ที่จังหวัด ชลบุรี สำเร็จการศึกษาปริญญาตรีวิศวกรรมศาสตรบัณฑิต สาขาวิศวกรรมไฟฟ้า จากภาควิชาวิศวกรรมไฟฟ้า คณะวิศวกรรมศาสตร์ มหาวิทยาลัยเชียงใหม่ ในปีการศึกษา 2538 และเข้าศึกษาต่อในหลักสูตรวิศวกรรมศาสตรมหาบัณฑิต คณะวิศวกรรมศาสตร์ ภาควิชาวิศวกรรมอุตสาหการ จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2542 ปัจจุบันทำงานที่ แผนกซ่อมบำรุงMA6 สังกัด Complex 6 (Lube Base Oil & Aromatic EB/SM) บริษัท อุตสาหกรรมปิโตรเคมีกัลไทยจำกัด (มหาชน)