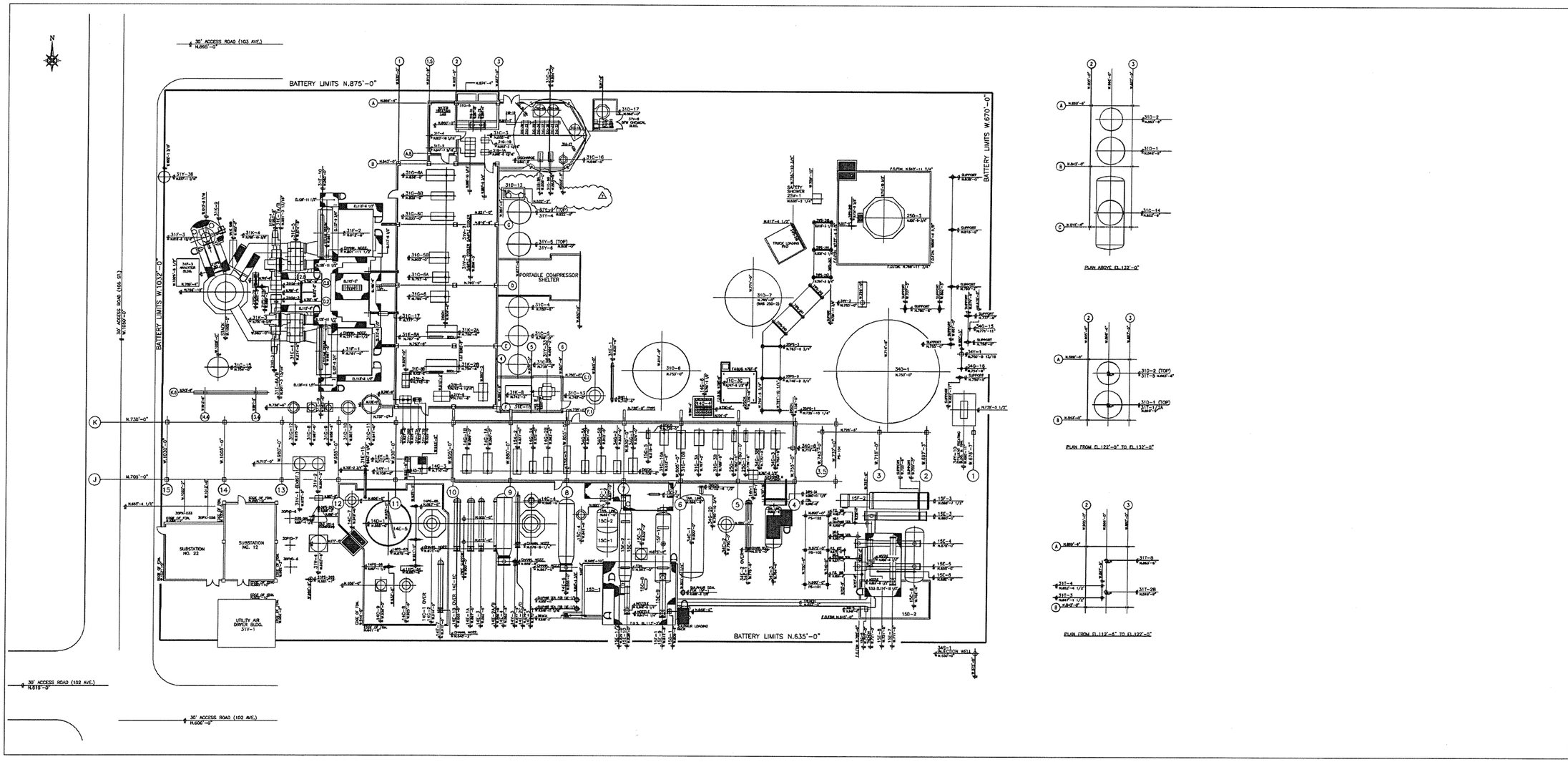

PLANT 31

COLUMNS & VESSELS

31C-3	HOT LIME REACTOR
31C-4	SOLUTE DECARBONIZER
31C-5	SOLUTE DECARBONIZER
31C-6	SOLUTE DECARBONIZER
31C-7	SOLUTE DECARBONIZER
31C-8	H.P. CONTINOUS BLOWDOWN DRUM
31C-9	M.P. CONTINOUS BLOWDOWN DRUM
31C-10	L.P. CONTINOUS BLOWDOWN DRUM
31C-11	AIR INCEDOR
31C-13	175# FLASH DRUM
31C-14	50# FLASH DRUM
31C-15	15# FLASH DRUM
31C-16	FUEL GAS MIX DRUM
31C-18	LIME SLUDGE SURGE TANK
31C-19	HOT WATER TK. FOR SAFETY SHOWER

PUMPS

31C-1A	REACTOR LIME
31C-1B	SPARE FOR 31C-1A
31C-3A	CONDONSER
31C-3B	CONDONSER (SPARE)
31C-3C	CONDONSER (SPARE)
31C-4A	BATCH BOOSTER
31C-4B	BATCH BOOSTER (SPARE)
31C-5	BACPWSH
31C-6	BACPWSH
31C-7A	WRING (SPARE)
31C-8A	H.P. BOILER FEED WATER
31C-8B	H.P. BOILER FEED WATER
31C-8C	H.P. BOILER FEED WATER (SPARE)
31C-9A	SLUDGE
31C-9B	SLUDGE (SPARE)
31C-10A	FCC CONDONSER
31C-10B	FCC CONDONSER (SPARE)
*31C-14A	LUBE OIL FOR 31C-3A
*31C-14B	LUBE OIL FOR 31C-3A (SPARE)
*31C-15A	LUBE OIL FOR 31C-3B
*31C-15B	LUBE OIL FOR 31C-3B (SPARE)
*31C-16A	LUBE OIL FOR 31C-3C COMP.
*31C-16B	ACC. LUBE OIL FOR COMC COMP.
*31C-20	WARM LUBE OIL FOR 31C-6
31C-21	WARM LUBE OIL FOR 31C-6
31C-37	BETZ 1121 SCA
31C-38	BETZ DPS-1903X 8000
31C-39	BETZ DELFIX 30
31C-30	BETZ 5000 HOT #6 SERVICE
31C-31	BETZ 5000 HOT #6 SERVICE
31C-32	BETZ 5000 HOT #6 SERVICE
31C-33	4180 ADDITIVE TO S.F.W.
31C-34	BETZ 5000 HOT #6
31C-35	BFW BETZ AMERICIN
31C-36A	BFW BETZ 5280 ADDITIVE
31C-36B	BFW BETZ 5280 ADDITIVE
31C-37	BFW BETZ 5280 ADDITIVE

EXCHANGERS

31C-1	CONDONSER
31E-1	ELIMINATRON AIR HEATER FOR 31F-1
31E-2	ELIMINATRON AIR HEATER FOR 31F-2
31E-3A	AIR PRECHEAT COILS FOR 31K-3
31E-3B	AIR PRECHEAT COILS FOR 31K-3
31E-4A	AIR PRECHEAT COILS FOR 31K-4
31E-4B	AIR PRECHEAT COILS FOR 31K-4
31E-8A	COMPRESSOR LUBE OIL COOLER FOR 31K-3A
31E-8B	COMPRESSOR LUBE OIL COOLER FOR 31K-3B
31E-9	OVERHEAD CONDENSER SAMPLE COOLER
31E-10	OVERHEAD CONDENSER 31F-2
*31E-11	AIR COOLER FOR 31V-1
*31E-12	AIR COOLER FOR 31V-3
*31E-13	AIR COOLER FOR 31V-4
31E-14	COMPRESSOR INTER COOLER AIR
31E-16	COMPRESSOR LUBE OIL COOLER 31K-6
*31E-17	OVERHEAD CONDENSER SLA AIR
*31E-18	OVERHEAD CONDENSER SLA COOLER
*31E-19	OVERHEAD CONDENSER SAMPLE COOLER

HEATERS

31F-1	H.P. BOILER
31F-2	H.P. BOILER
31F-3	DUAL GAS INCINERATOR

COMPRESSORS

31K-3A	MOTOR DRIVEN AIR
31K-3B	TURBINE DRIVEN AIR
31K-3	FORCED DRAFT FAN 31F-1 & 31F-2
31K-4	FORCED DRAFT FAN 31F-1 & 31F-2
31K-6	COMPRESSOR FOR 31V-6
31K-7	AIR COMPRESSOR 200 SCFM COMPRESSOR
31K-8	AIR COMPRESSOR 2000 SCFM
31K-9	COMBUSTION AIR BLOWER (TAIL GAS)

TANKS

31D-1	LIME SILO
31D-2	MAGNESIUM OXIDE SILO
31D-4	BRINE PREPARATION & STORAGE PIT
31D-5	BRINE PREPARATION & STORAGE
31D-7	ATMOSPHERIC CONDENSATE
31D-13	AMMONIA STORAGE
31D-14	OUTDOOR BOX
31D-15	CHELATE ADDITIVE
31D-16	BOILER FEED WATER CHEMICAL INJECTION
31D-17	BOILER FEED WATER CHEMICAL INJECTION
31D-17	BFW BETZ 5280 ADDITIVE
31D-18	BOILER FEED WATER CHEMICAL INJECTION
31D-19	4180 CHEMICAL INSERVE IN LIME ROOM

MATERIAL HANDLING EQUIPMENT

31F-1	ROTARY LIME FEEDER
31F-2A	LIME ENERGENA GATE
31F-2B	LIME ENERGENA GATE
31F-3	LIME FEEDER
31F-4	LIME FEEDER (SPARE)
31F-5	MAG OXIDE ROTARY FEEDER
31F-6	MAG OXIDE FEEDER
*31F-8A	AIR COMPRESSOR BAYHOUSE SILENCER
*31F-8B	AIR COMPRESSOR BAYHOUSE SILENCER
*31F-9	COMPRESSOR BAYHOUSE SILENCER 31K-6
*31F-10	SILENCER FOR 31F-1

PACKAGE UNITS

31V-1	UTILITY AIR DRYER
31V-2	UTILITY AIR DRYER
31V-3	NITROGEN VAPORIZER
31V-4	NITROGEN VAPORIZER
31V-5	INSTRUMENT AIR DRYER
31V-6	INSTRUMENT AIR DRYER
31V-7	ROOFMOUNT SLA AIR COOLER STATION
31V-8	POWERHOUSE FW SAMPLE COOLING STATION
31V-9	BFW ANIMIN INJECTION

PROCESSING EQUIPMENT

*31Y-14	FILTER
*31Y-15	FILTER
*31Y-20	COMPRESSOR SUCTION AIR FILTER
*31Y-28	COMPRESSOR SUCTION AIR FILTER
31Y-5	FILTER
31Y-6	FILTER
31Y-8	LIME SILO DUST COLLECTOR FAN
31Y-9	BOOSTER & DUST COLLECTOR FAN
*31Y-10	ROOFMOUNT SOOT BLOWER FOR 31F-1
*31Y-11	ROOFMOUNT SOOT BLOWER FOR 31F-1
*31Y-12	ROOFMOUNT SOOT BLOWER FOR 31F-1
*31Y-13	ROOFMOUNT SOOT BLOWER FOR 31F-1
*31Y-13	RETRACTABLE SOOT BLOWER FOR 31F-1
*31Y-14	RETRACTABLE SOOT BLOWER FOR 31F-1
*31Y-15	SOOT BLOWER FOR 31V-4
*31Y-16	ROOFMOUNT SOOT BLOWER FOR 31F-2
*31Y-17	ROOFMOUNT SOOT BLOWER FOR 31F-2
*31Y-18	ROOFMOUNT SOOT BLOWER FOR 31F-2
*31Y-19	ROOFMOUNT SOOT BLOWER FOR 31F-2
*31Y-19	RETRACTABLE SOOT BLOWER FOR 31F-2
*31Y-20	RETRACTABLE SOOT BLOWER FOR 31F-2
*31Y-21	SOOT BLOWER FOR 31C-6
*31Y-22	SOOT BLOWER FOR 31C-6
*31Y-23	MAG OXIDE DUST COLLECTOR
31Y-25	PRODRYATE 3MM MAGOX
31Y-26	AFTER FILTER FOR 31V-1
31Y-27	AFTER FILTER FOR 31V-2
31V-29A	AFTER FILTER FOR 31V-3
31Y-29A	PRE-FILTER FOR 31V-3
31Y-30B	PRE-FILTER FOR 31V-3
31Y-30B	AFTER FILTER FOR 31V-3
*31Y-34	COMPRESSOR SUCTION AIR FILTER 31K-9
*31Y-35	STEAM DESUPERHEATER
*31Y-36	DESUPERHEATER

* DENOTES EQUIPMENT NOT SHOWN

3	97/06	REVISED WARE PLANT JOB 2004587	PAD	Mann		
2	97/06	ADDED 31C-13 DRAWN BOX (W) JOB 2004587	NL	MEC	MS	MS
0	97/04	ADDED PLANT 14 & 15 FOUNR FOR 2003-04-07/03	AR	PH	—	DJ
REV.	DATE	REVISION	BY	CHK	APPR.	APPR.

PETRO-CANADA

TITLE	BLOCK "F" PLOT PLAN
	PLANT 14 - AMINE PLANT 15 - SULPHER
	PLANT 25-CAUSTIC HANDLING PLANT 31-BOILER
	PLANT 24 - EFFLUENT TREATING
EDMONTON	REFINERY
DRAWN BY	T.BORGILI
DESIGNED	J.SANCHEZ
CHECKED	BANCROFT
APPROVED	R.ETTENBERGER
SPONSOR	BETTONG
SCALE	BLOCK "F"
REVISION	MEC
DATE	JULY 4/96
SCALE	1" = 10' - 0"
DWG.	31R-A-1-E SHEET- 1
REV.	7