

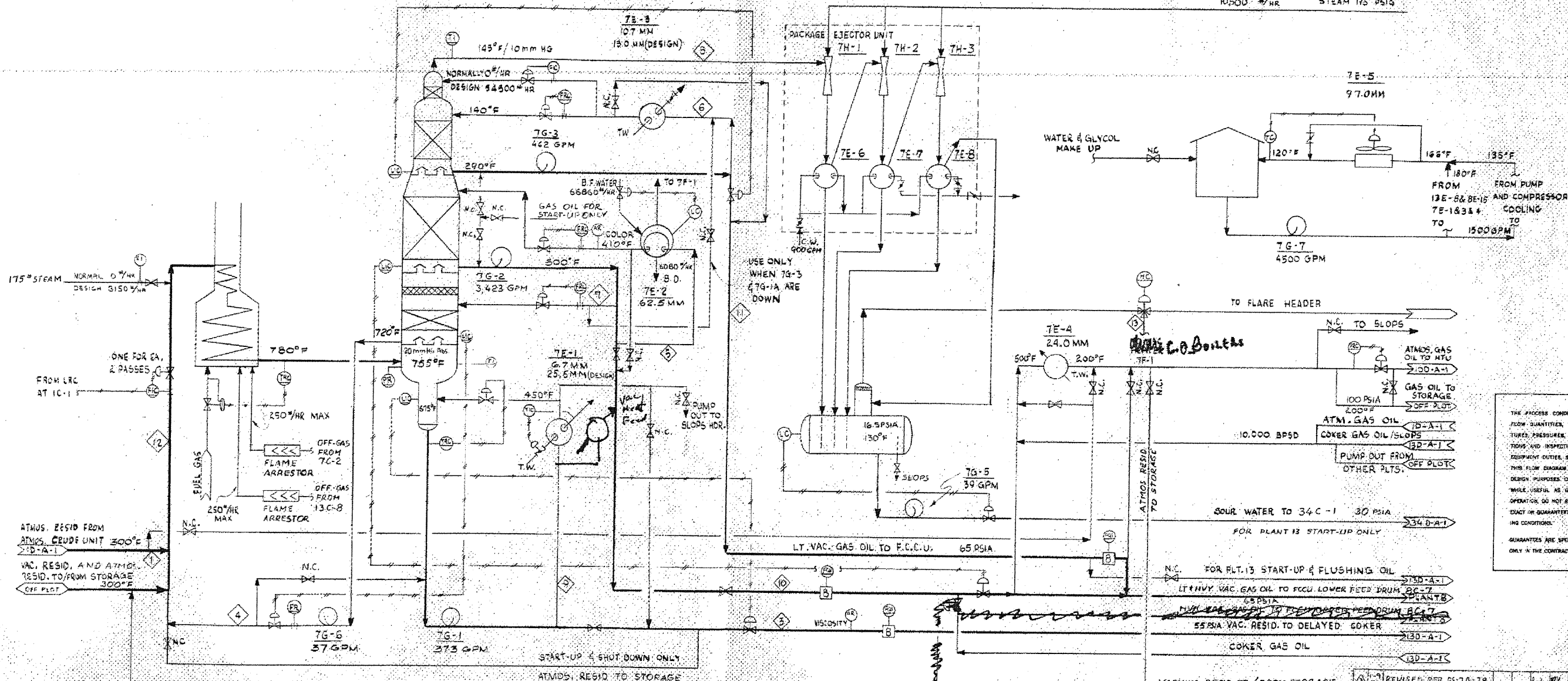
7F-1  
VACUUM  
HEATER  
123.0MM PHOCESS

7C-1  
VACUUM  
TOWER  
4.0' x 3'-2"  
12.0' x 11'-6"  
21.0' x 14'-0"  
8'-0' x 5'-0"

7C-2  
HOT WELL  
4'-6" x 16'-0"

7D-1  
TEMPERED WATER  
API TANK  
20'-0" x 18'-0"  
(EXISTING)

10500 #/HR STEAM 175 PSIG



THE PROCESS CONDITIONS OF FLOW QUANTITIES, TEMPERATURES, PRESSURES, COMPOSITIONS AND INSPECTIONS, AND EQUIPMENT OUTLET, SHOWN ON THIS FLOW DIAGRAM ARE FOR DESIGN PURPOSES ONLY AND WHILE USEFUL AS GUIDES IN OPERATION, DO NOT REPRESENT EXACT OR GUARANTEED OPERATING CONDITIONS. GUARANTEES ARE SPECIFIED ONLY IN THE CONTRACT.

STREAM	ATMOS RESID	SLOPS	VACUUM RESID	OVERFLASH RECYCLE	INTERMEDIATE PUMP AROUND	TOP PUMP AROUND	BOTTOM REFLUX	VAC TOWER OVHD WAP	BOTTOM RECYCLE QUENCH	HVV VAC GAS OIL	LT. VAC GAS OIL	VACUUM TOWER FEED	OFFGAS FROM VAC CONDENSERS
BRITAMOL CRUDE													
BPSD OR MMSCFD	24354	46	7185	274				(48)	3069	13036	4133	25328	(30)
API GR (M.W.)	18.8	31.6	7.3	12.8				(40)	7.3	175	27.2	5.7	(33.5)
LB/HR TOTAL	340320	1650	106719	13910				2150	45400	180502	55698	334850	1120
LIGHT MIX CRUDE													
BPSD OR MMSCFD	22640	46	3840	905	76784	9750	3474	(48)	1417	14681	4119	25545	(30)
API GR (M.W.)	20.3	31.6	8.6	13.9	22.1	28.3	22.1	(40)	8.6	22.1	28.3	20.7	(33.5)
LB/HR TOTAL	307320	1650	56533	12850	1058080	127400	46650	2150	21000	197177	53840	320380	1120

- NOTES:
- MM = 10<sup>6</sup> BTU/HR  
BPSD ARE AT 60°F  
STANDARD GAS CONDITIONS ARE 14.7 PSIA & 60°F  
PUMP GPM ARE AT NORMAL OPERATING CONDITIONS  
NC = NORMALLY CLOSED  
TW = TEMPERED WATER
  - DESIGN BASIS: BRITAMOL CRUDE 60000 BPSD  
TETACO LT. MIX CRUDE 80000 BPSD
  - BRITAMOL CRUDE SIZES: 7E-1, 7G-1, 7G-5, 7F-1  
OTHER EQUIPMENT IS SIZED BY TETACO LT. MIX CRUDE

REVISIONS:

1	REVISED PER DS-70-38	J.P.	1/11
2	REVISED PER DS-70-34	J.P.	1/11
3	GENERAL REVISION LIST	J.P.	1/11
4	ISSUED FOR CONSTRUCTION	J.P.	1/11
5	ISSUED FOR APPROVAL	J.P.	1/11

DESIGNED BY: J.L.

CANADIAN BECHTEL LIMITED  
TORONTO    MONTREAL    EDMONTON    VANCOUVER

GULF OIL CANADA LIMITED  
EDMONTON REFINERY EXPANSION

PROCESS FLOW DIAGRAM  
VACUUM UNIT PLANT #7

ENGINEERING BY:  
BECHTEL CORPORATION  
SAN FRANCISCO

BECHTEL 7422  
C-2 #1895

7D-A-1 3