

WRITTEN BY: RLD
DATE: 4/4/90

5609-006.INF
VC-I VENT STACK HIGH LEVEL ALARM

PROCEDURE FOR PROOF CHECK AT TWO WEEK INTERVAL:

NOTIFY VCM-II VCM LEAD OPERATOR (2771) SO THAT HE CAN NOTIFY VCM-I AND SHIPPING. LEAD OPERATOR OR STORAGE OPERATOR WILL ENSURE THAT TRANSFER/STORAGE SYSTEM OPERATION IS STABLE AND WILL STAND-BY IN STORAGE AREA DURING TEST.

AFTER CLEARANCE IS GIVEN BY OPERATIONS, REMOVE SENSORS FROM STACK AND SUBMERGE THE PROBE IN WATER. CHECK FOR AUDIBLE AND LIGHT IN VC-I SHOP, ALSO IN CONTROL ROOM. ROD OUT NOZZLES TO BE SURE THEY ARE NOT PLUGGED. REMOUNT SENSORS AND NOTIFY VCM-II LEAD OPERATOR WHEN CHECK IS COMPLETE. FILL OUT INSTRUMENT INSPECTION REPORT AND GIVE TO PLANT VC-I NORTH INSTRUMENT FOREMAN.

PROCEDURE FOR PROOF CHECK AT 90 DAY INTERVAL:

NOTIFY VCM-II VCM LEAD OPERATOR (2771) SO THAT HE CAN NOTIFY VCM-I AND SHIPPING. LEAD OPERATOR OR STORAGE OPERATOR WILL ENSURE THAT TRANSFER/STORAGE SYSTEM OPERATION IS STABLE AND WILL STAND-BY IN STORAGE AREA DURING TEST. VCM-II IS TO FURNISH AIR JET FOR REMOVING LIQUID FROM STACKS WHEN CHECK IS COMPLETE.

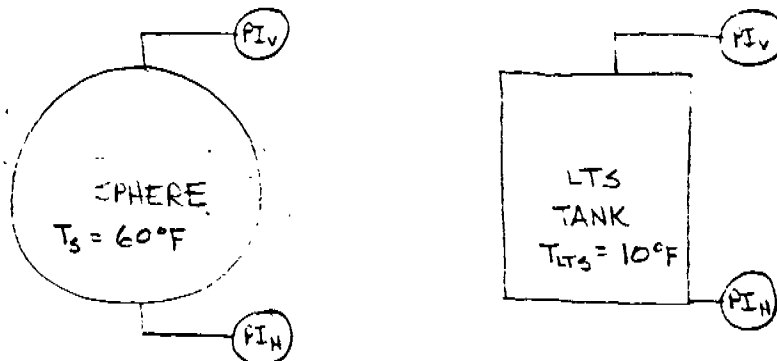
VC-I AREA MAINTENANCE FOREMAN IS TO FURNISH A DRUM OF TRI-CHLOR AND ALSO EQUIPMENT. THE 24" STACK IS TO BE GRAVITY FILLED AT SIGHTGLASS UP TO SENSOR ELEMENT. WHEN LIQUID IS SENSED AN ALARM SHOULD SOUND AND A LIGHT COME ON IN VC-I SHOP AND ALSO VC-I CONTROL ROOM. WHEN CHECK IS COMPLETE, LIQUID IS TO BE REMOVED FROM STACK WITH AIR JET ATTACHED TO DRAIN ON SOUTH SIDE OF STACK AND PUT IN CONTAINER FOR DISPOSAL. THE 3" STACK IS TO BE GRAVITY FILLED FROM THE BOTTOM UP TO SENSOR ELEMENT. WHEN LIQUID IS SENSED THE ABOVE ALARMS SHOULD GO OFF AGAIN. WHEN CHECK IS COMPLETE, LIQUID IS TO BE DRAINED INTO A CONTAINER FOR DISPOSAL.

NOTIFY VCM-II LEAD OPERATOR WHEN CHECK IS COMPLETE.

SL 004535

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STORAGE TANK LEVEL CHECK USING ΔP



57
42
-15
19.23
-4.5
33
135
15
238.45

$$\text{LEVEL} = \Delta P \left(\frac{33.91 \text{ ft H}_2\text{O @ 60°F}}{14.7 \text{ psi}} \right) \left(\frac{\rho_{\text{H}_2\text{O @ 60°F}}}{\rho_{\text{VC @ 60°F}}} \right)$$

$$\rho_{\text{H}_2\text{O @ 60°F}} = 8.338 \frac{\text{lb}}{\text{gal}}$$

$$\rho_{\text{VC @ 60°F}} = 7.672 \frac{\text{lb}}{\text{gal}}$$

$$\rho_{\text{VC @ 10°F}} = 8.117 \frac{\text{lb}}{\text{gal}}$$

$$\Delta P = \text{PI}_H - \text{PI}_V$$

$$\text{LEVEL} = \frac{(\text{PI}_H - \text{PI}_V) 19.23}{\rho_{\text{VC}}}$$

Example:

S-1

$$\text{PI}_V = 42 \text{ psig}$$

$$\text{PI}_H = 57 \text{ psig}$$

SL 004536

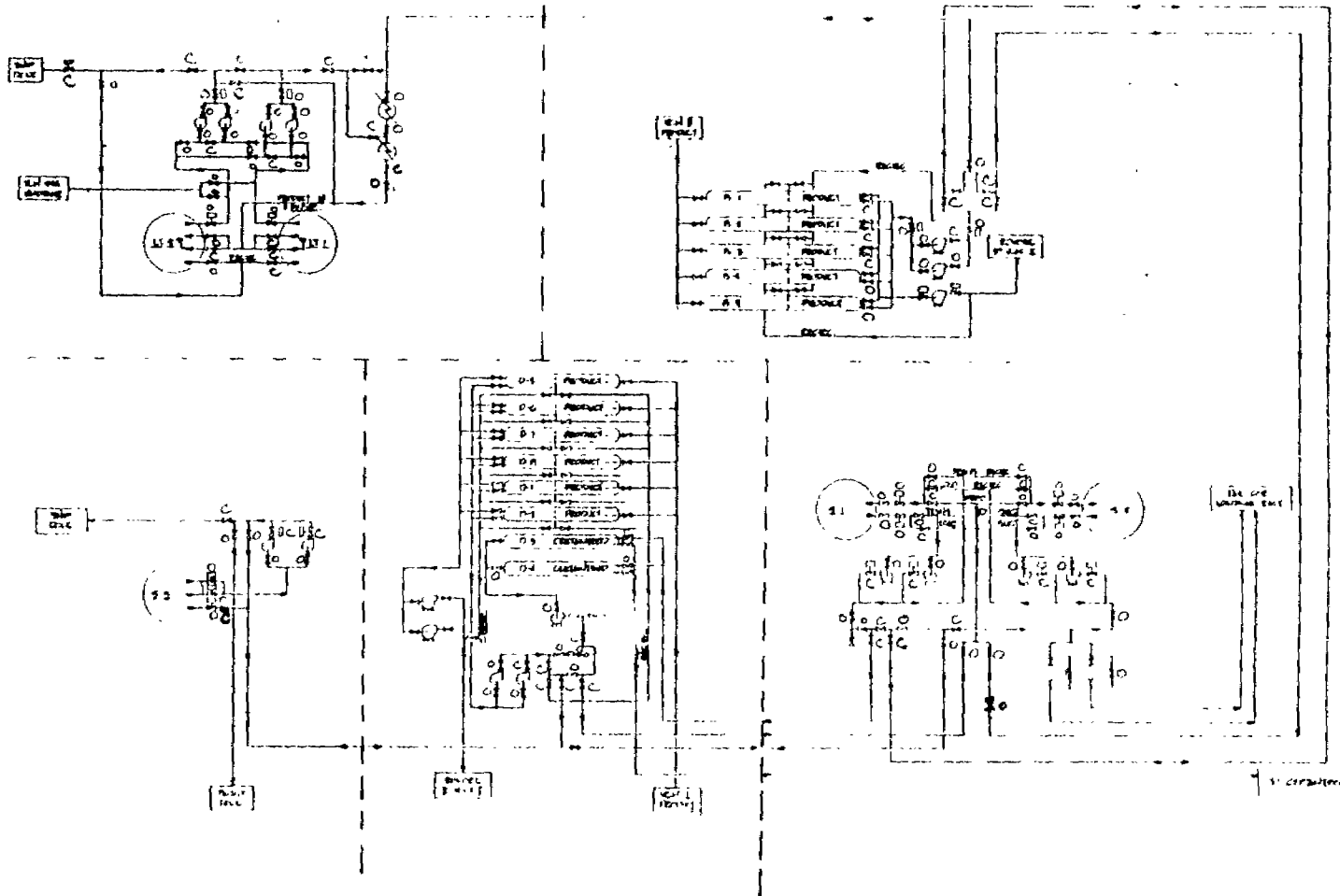
$$\text{LEVEL} = \frac{(57 - 42)(19.23)}{7.672}$$

$$= \frac{288.45}{7.672}$$

$$= 37.6 \text{ ft}$$

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STORAGE AREA LINE FLOATING = TIME

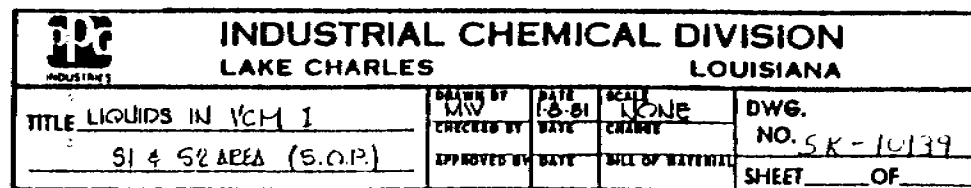


INDUSTRIAL CHEMICAL DIVISION	
NEW STORAGE SYSTEM	
DATE: 10/1/67	BY: J. H. HARRIS
REVIEWED BY: J. H. HARRIS	DATE: 10/1/67

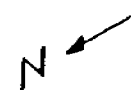
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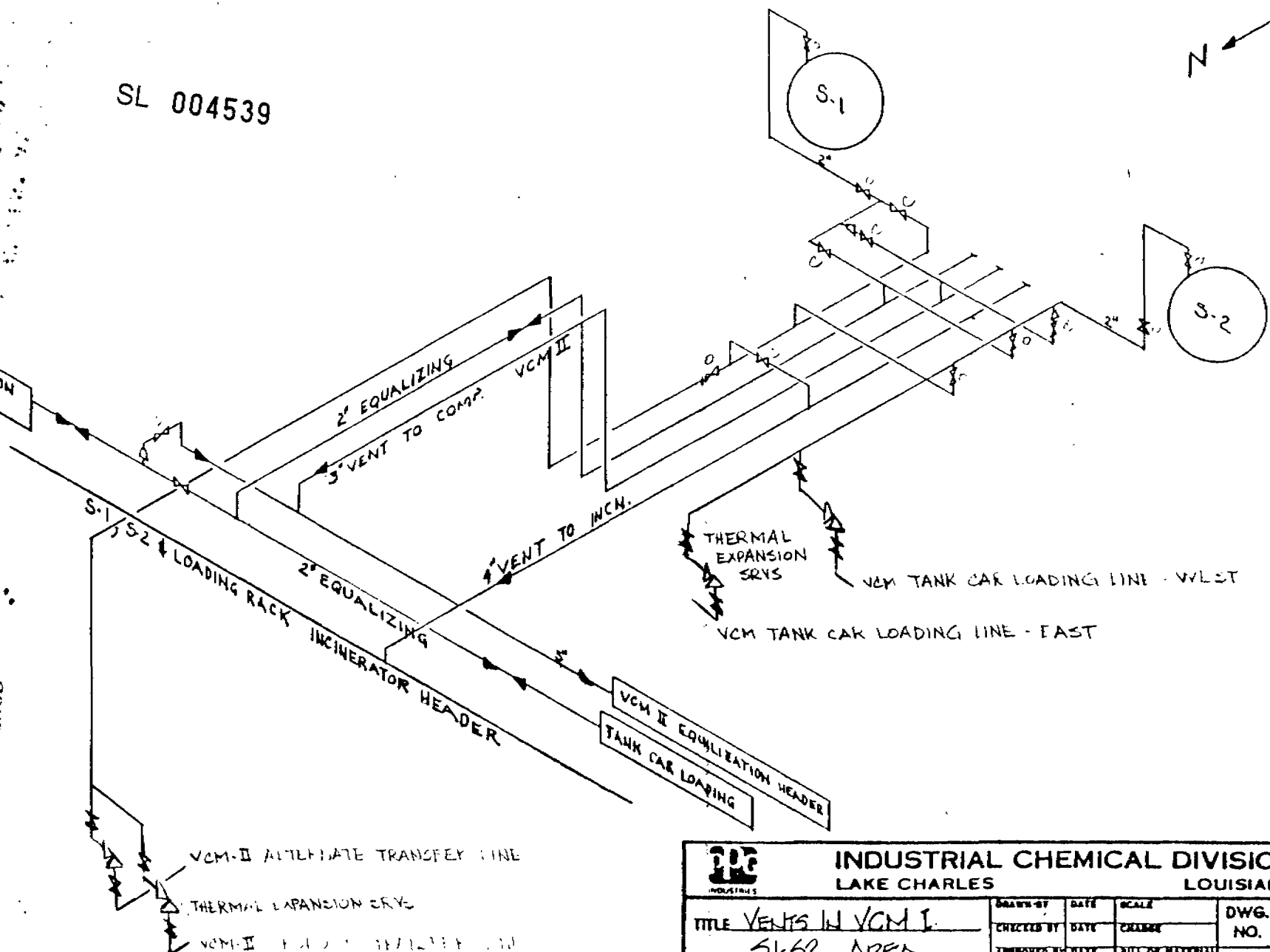


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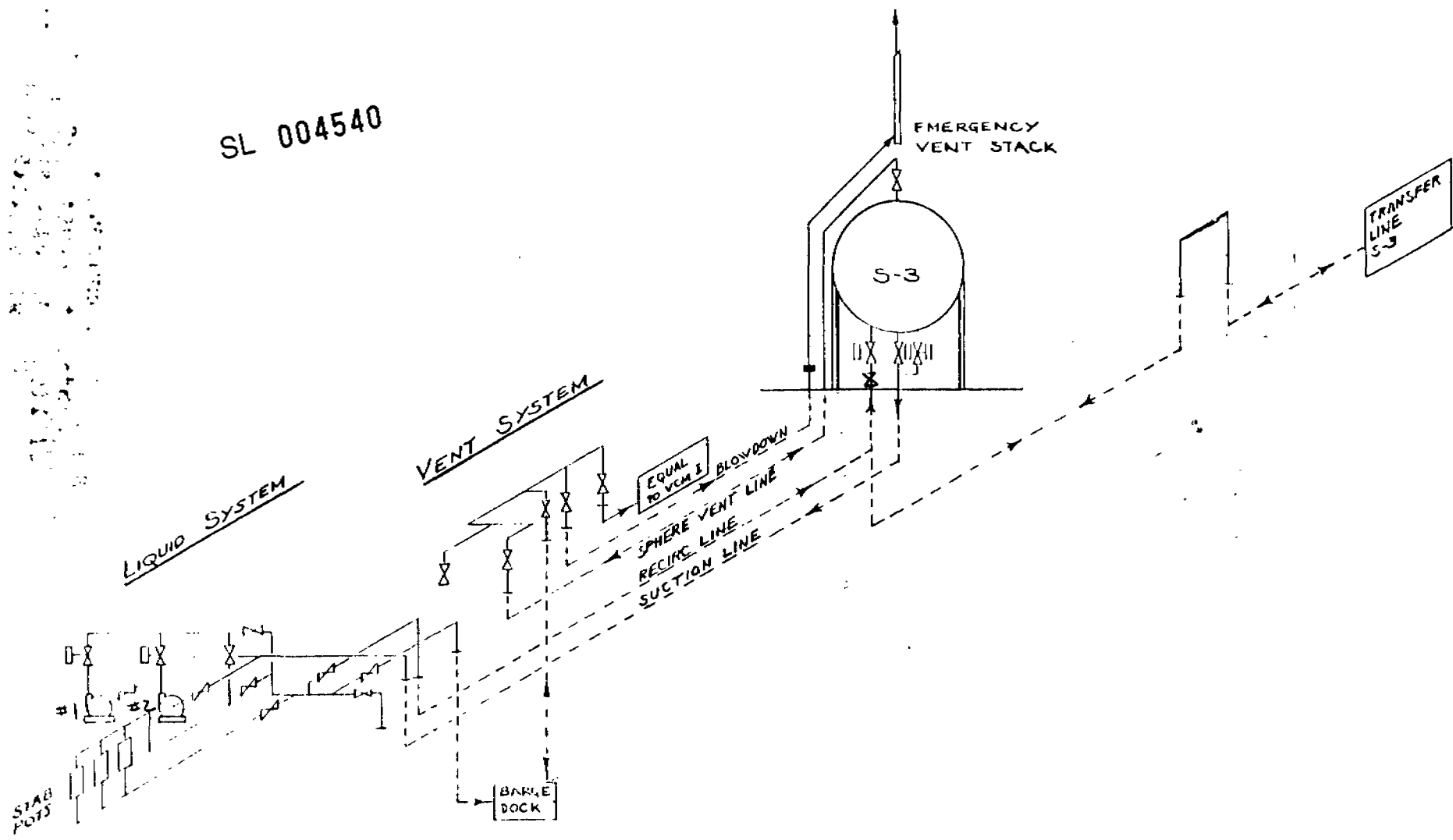
VCM I EQUALIZATION
HEADER

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INDUSTRIAL CHEMICAL DIVISION LAKE CHARLES, LOUISIANA			
TITLE	DRAWN BY	DATE	SCALE
VENTS IN VCM I	CHECKED BY	DATE	CHECKED
SI-S2 DREG	APPROVED BY	DATE	BILL OF MATERIAL
DWG. NO. SK-10143			SHEET ____ OF ____

SL 004540

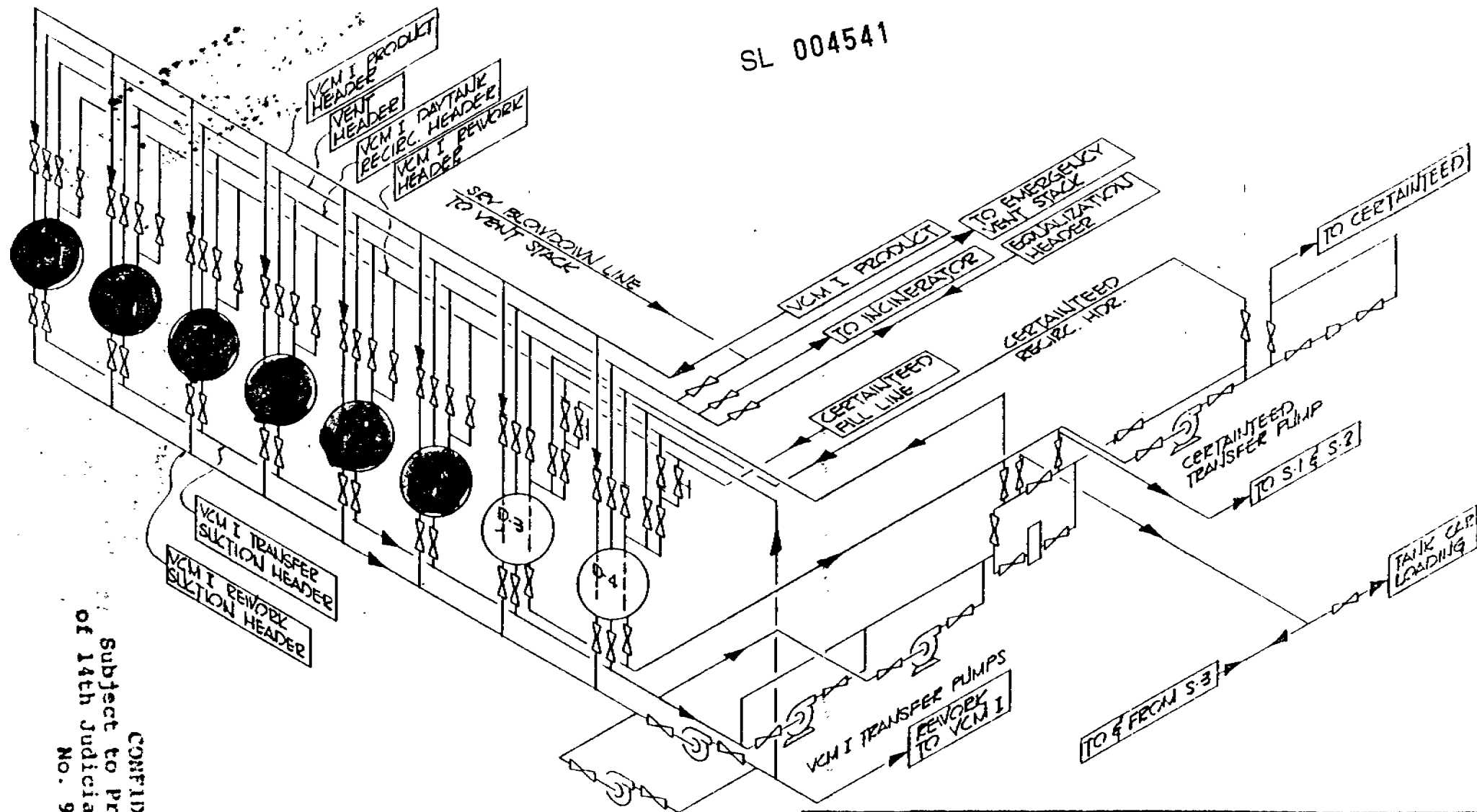


-----UNDERGROUND PIPING-----

		INDUSTRIAL CHEMICAL DIVISION LAKE CHARLES, LOUISIANA		
		DRAWN BY CHECKED BY APPROVED BY	DATE DATE DATE	SCALE CHANGE BILL OF MATERIAL
TITLE DOCK STORAGE SPHERE PIPING SYSTEMS & VCM				

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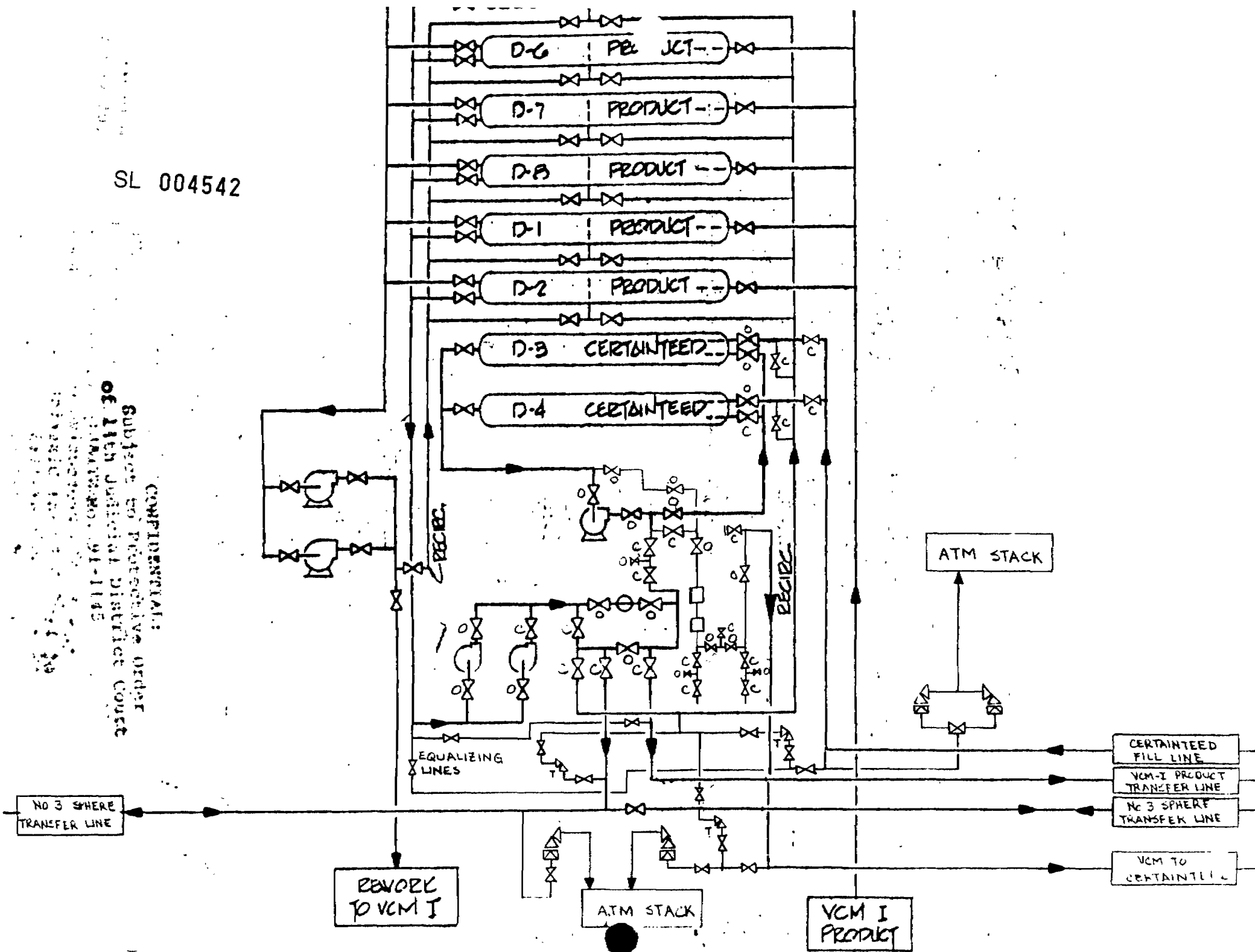


 INDUSTRIAL CHEMICAL DIVISION LAKE CHARLES LOUISIANA			
TITLE VCM I & CERTAINTIED STORAGE SYSTEMS		DRAWN BY MIV CHECKED BY DATE APPROVED BY DATE	DATE 1-12-81 SCALE NONE BILL OF MATERIALS
		DW . NO. SK-10147 SHEET ____ OF ____	

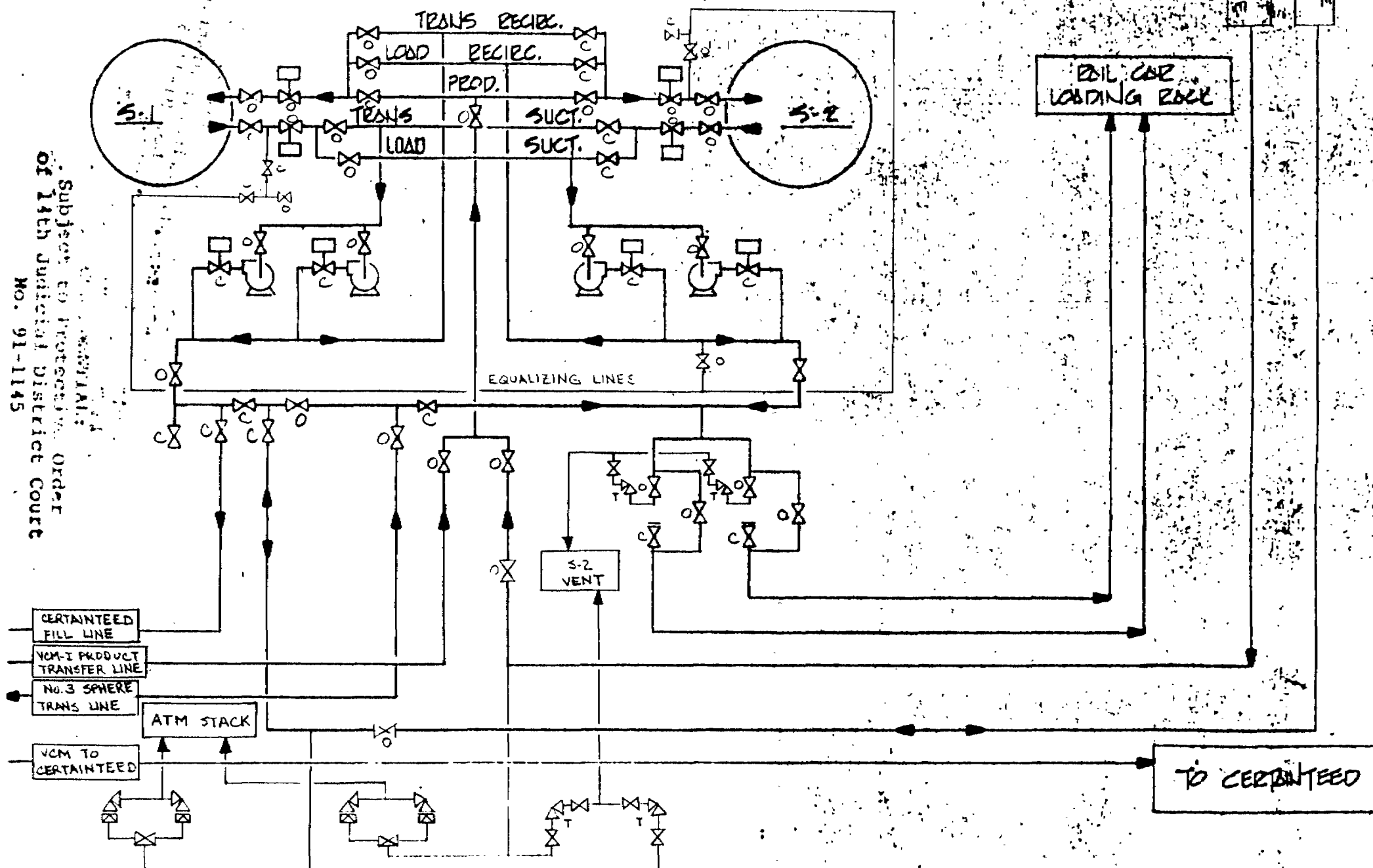
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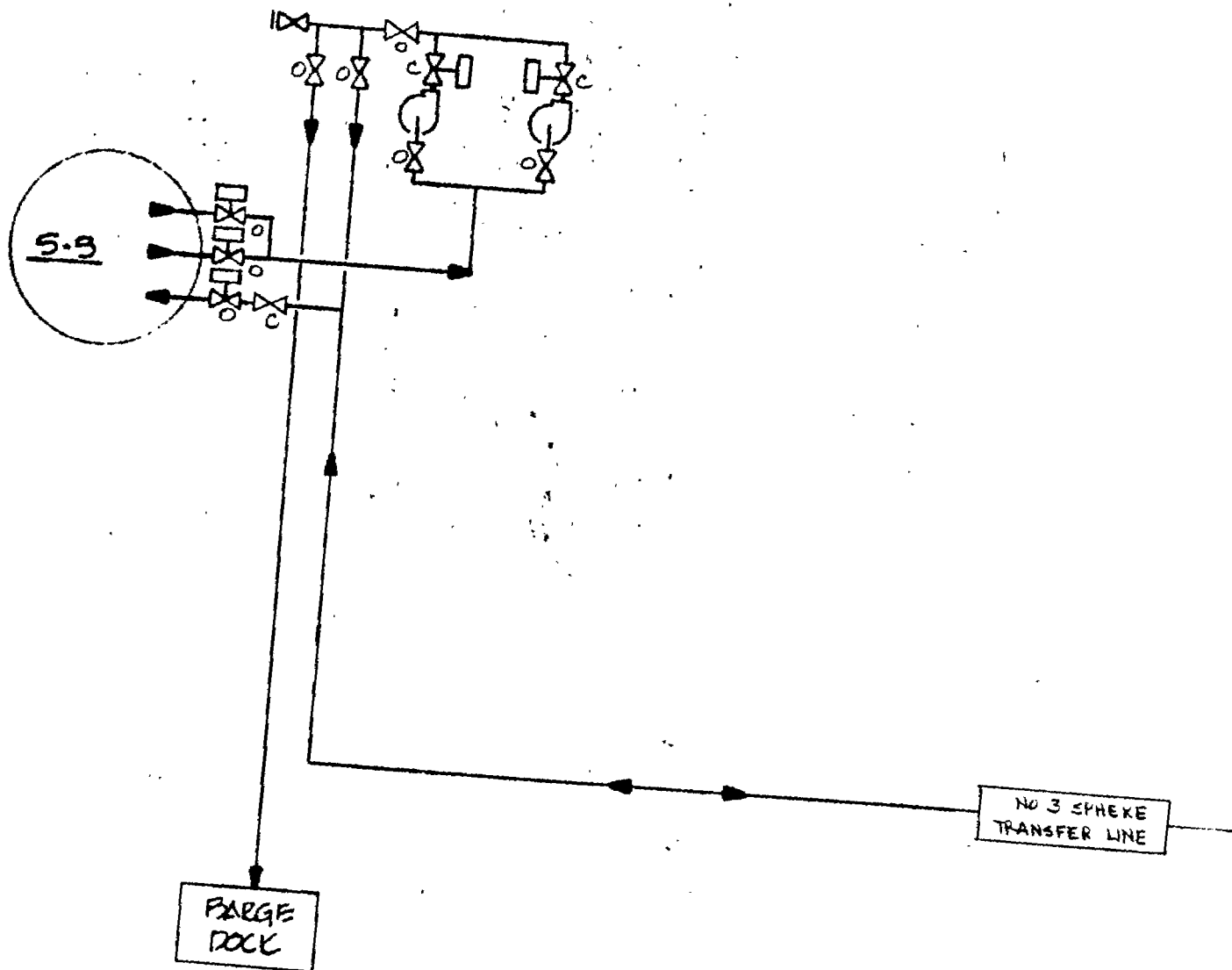
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Case No. 91-1145



Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

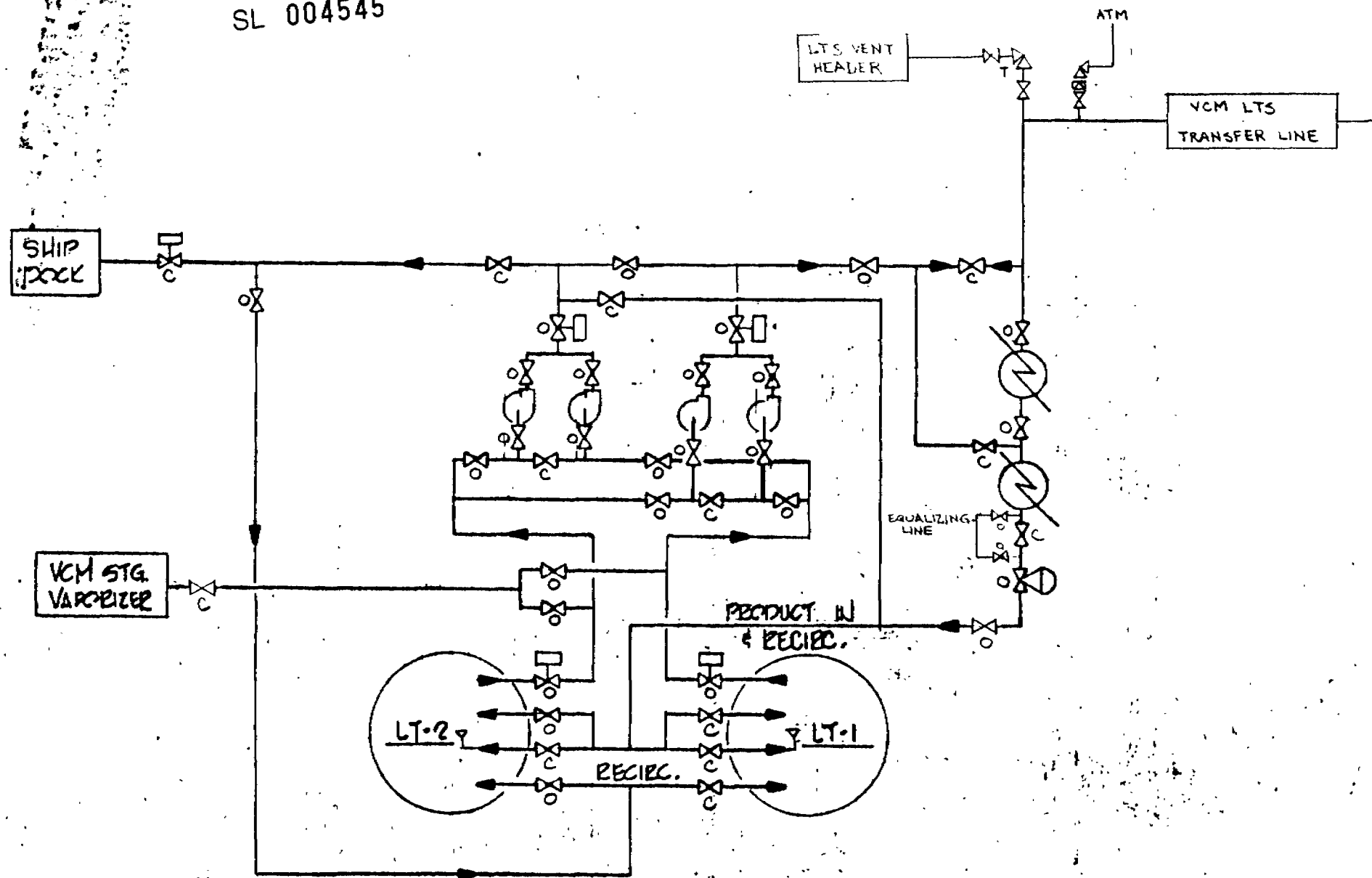




SL 004544

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 of 14th Judicial District Court
 No. 91-1143

SL 004545



CONFIDENTIAL
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1145

SL 004546

CONFIDENTIAL: Order
subject to Protective Court
of 14th Judicial District
No. 91-1445

