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 FACIL: 50-275 Diablo Canyon Nuclear Power Plant, Unit 1, Pacific Gas
 50-323 Diablo Canyon Nuclear Power Plant, Unit 2, Pacific Gas
 AUTH. NAME: CRANE, P. A. AUTHOR AFFILIATION: Pacific Gas & Electric Co.
 RECIP. NAME: MIRAGLIA, F. J. RECIPIENT AFFILIATION: Licensing Branch 3

DOCKET #
 05000275
 05000323

SUBJECT: Forwards certifications clarifying Charpy VEE-notch impact tests for 26-inch ID pipes, Heat Numbers 63L106 & EO 8600.

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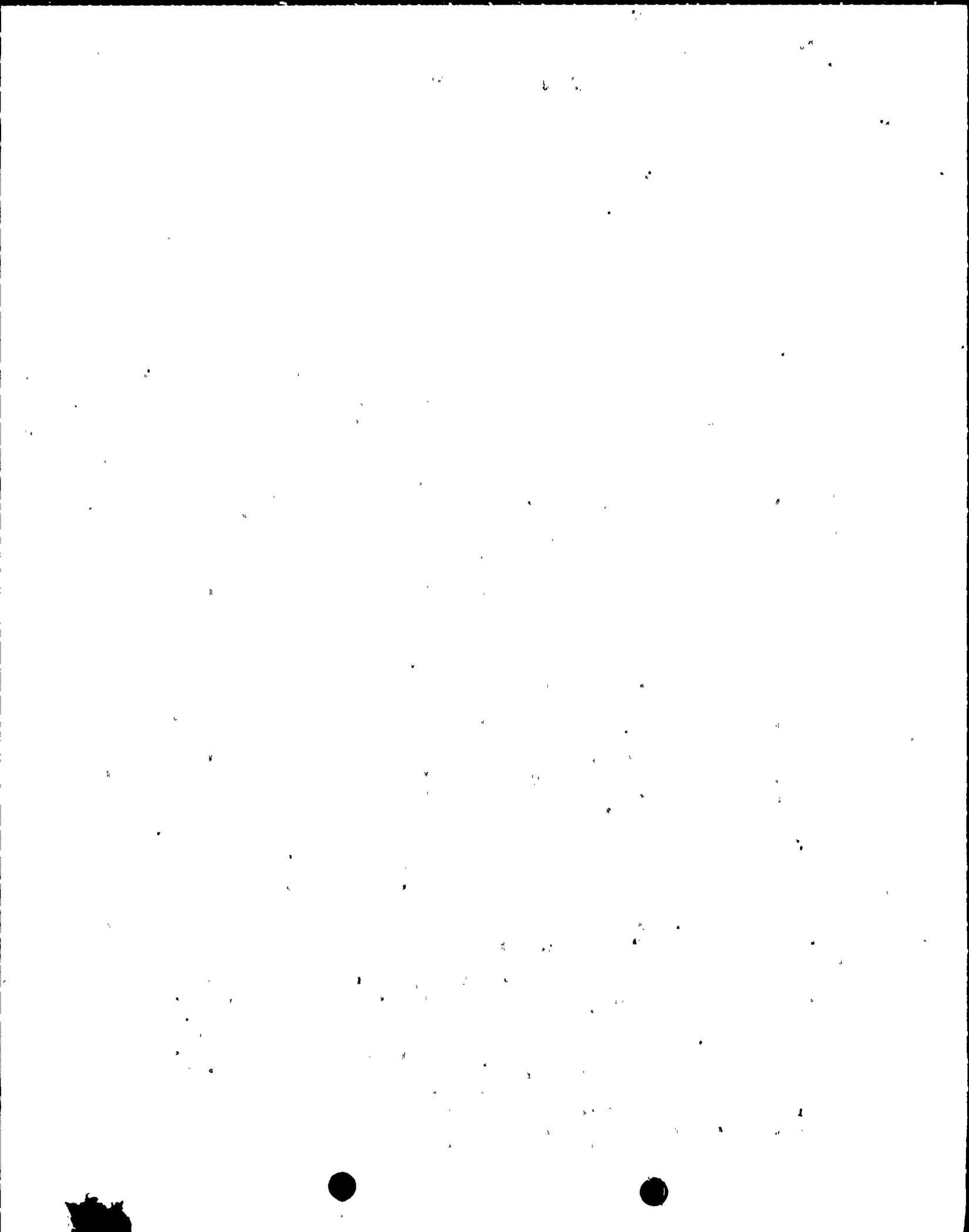
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INTERNAL:	ACCID	EVAL BR26	1	1	AUX SYS BR	07	1	1
	CHEM	ENG BR 08	1	1	CONT SYS BR	09	1	1
	CORE	PERF BR 10	1	1	EFF TR SYS BR	12	1	1
	EMERG	PREP 22	1	0	EQUIP QUAL BR	13	3	3
	GEOSCIENCES	14	1	1	HUM FACT ENG BR		1	1
	HYD/GEO	BR 15	2	2	I&C SYS BR	16	1	1
	I&E	06	3	3	LIC GUID BR		1	1
	LIC	QUAL BR	1	1	MATL ENG BR	17	1	1
	MECH	ENG BR 18	1	1	MPA		1	0
	NRG	PDR 02	1	1	OELD		1	0
	OP	LIC BR	1	1	POWER SYS BR	19	1	1
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REG	FILE 01	1	1	SIT ANAL BR	24	1	1	
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APR 29 1981

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PACIFIC GAS AND ELECTRIC COMPANY

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April 23, 1981

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Mr. Frank J. Miraglia, Jr., Chief
Licensing Branch No. 3
Division of Licensing
Office of Nuclear Reactor Regulations
U. S. Nuclear Regulatory Commission
Washington, DC 20555



Re: Docket No. 50-275
Docket No. 50-323
Diablo Canyon Units 1 and 2

Dear Mr. Miraglia:

Enclosed are the certifications recently obtained from the vendor clarifying the Charpy VEE-notch impact tests for the 26-inch ID pipes, heat Nos. 63 L106 (CU4MAC) and EO 8600 (DH4RJ). These supplement our March 12, 1981 letter to Mr. Frank J. Miraglia, Jr. on Containment Pressure Boundary documentation.

Very truly yours,

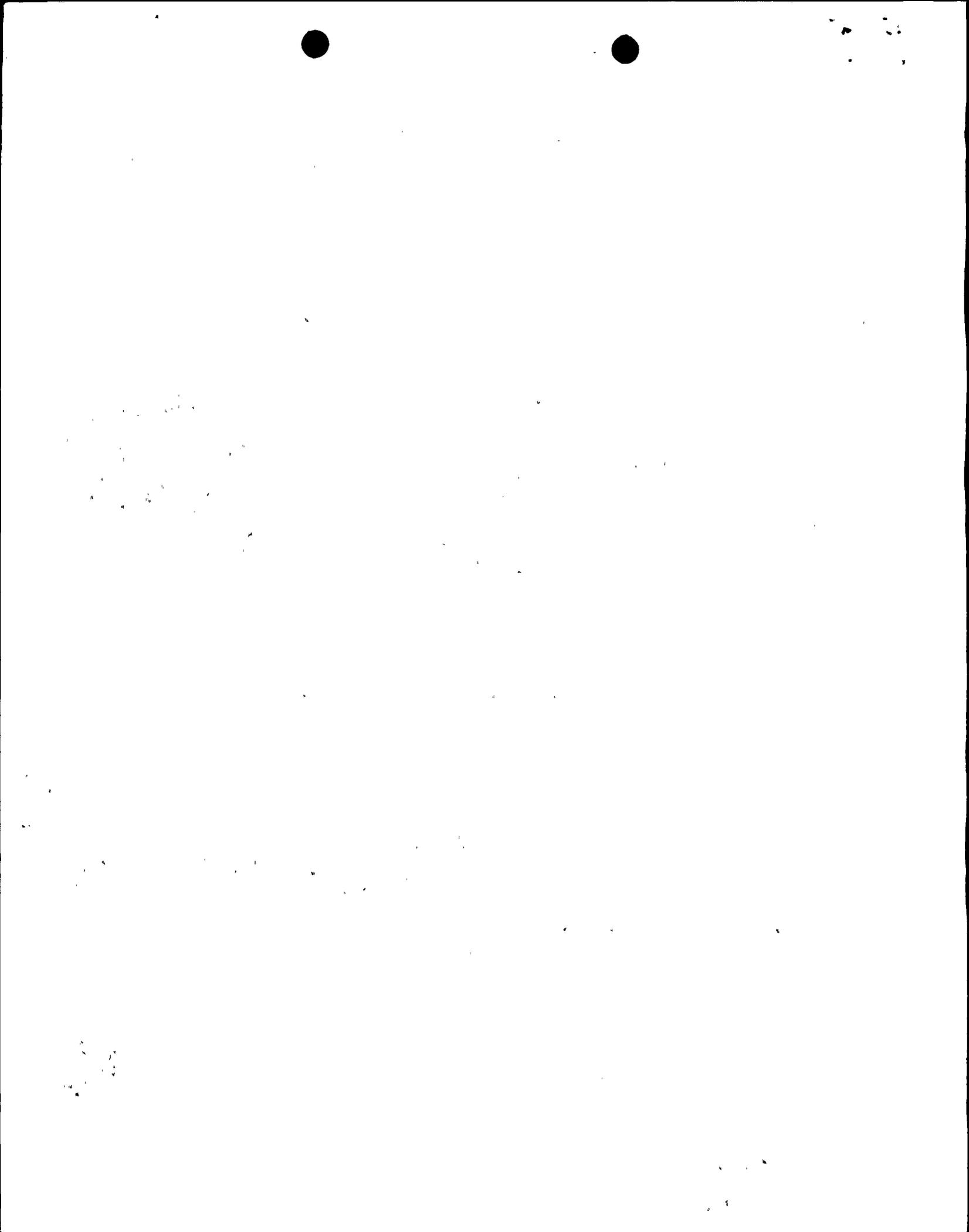
Philip A. Crane

Enclosures

CC w/enclosures: Service List

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S/L*

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LADISH CO.
Material Analysis Report
METALLURGICAL DEPARTMENT

PURCHASER The M. W. Kellogg Company - Power Piping Division

CUDAHY, WIS., September 14, 1970

PURCHASER'S ORDER NO. N 8504 1

LSO NO. E80696H

ADDRESS P.O. Box 881 Reach Road - Williamsport, PA

INVOICE NO. N 28557

Re-typed 3-26-81

NO. PCS.	DESCRIPTION AND SPECIFICATION	HEAT NO. AND CODE	CHEMICAL COMPOSITION								PHYSICAL PROPERTIES				
			C	MN	P	S	SI	NI	CR	MO	YIELD STRENGTH KSI	ULTIMATE STRENGTH KSI	ELONG. %	REMARKS	
	Item 1	63L106 CU4MAC	<u>LADLE ANALYSIS</u>								<u>PARENT METAL</u>				
	26" I.D. x 1.002 M/W Rolled and Welded Carbon Steel Pipe		.24	1.05	.008	.020	.19					42.1	74.7	22.5	
	A155 KCF 70 and Kellogg Spec. N8504- ES-1		.26	1.04	.008	.018	.19						70.3		
	Pipe manufactured from A516 Gr. 70 plate		Charpy VEE notch impact tested at 0°F.								10x10x8 mm - Parent Metal				
			27	26	24	ft. lbs.									
			64	61	52% shear										
	Weld No. J88-1		<u>ANALYSIS OF WELD WIRE</u>												
			.14	1.94	.011	.021	.05								

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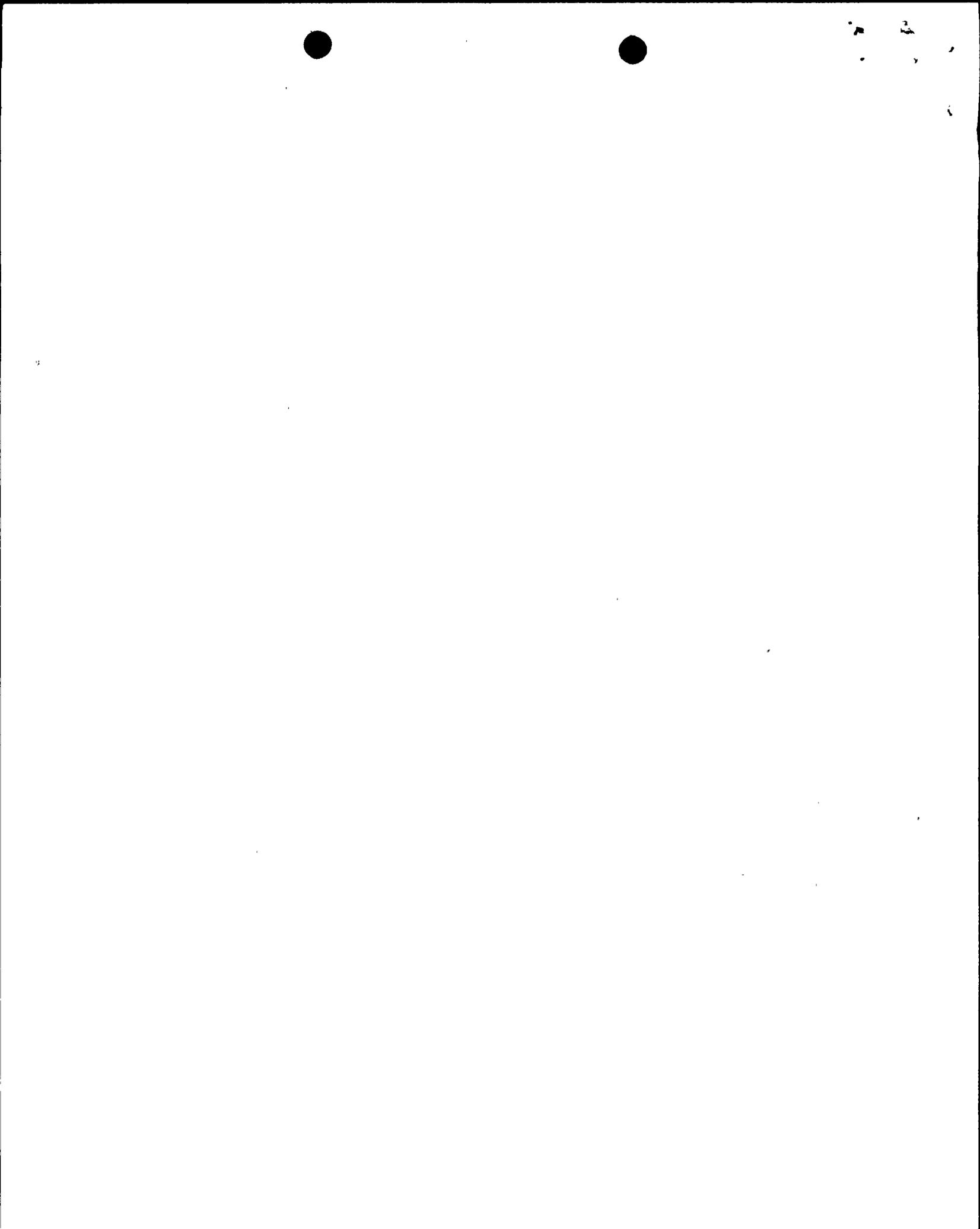
I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE REPORT IS TRUE AND CORRECT.

DAY OF _____ 19 _____



NOTARY PUBLIC

MY COMMISSION EXPIRES _____



Material Analysis Report
METALLURGICAL DEPARTMENT

PURCHASER The M. W. Kellogg Company

CUDAHY, WIS., September 14, 19 70

PURCHASER'S ORDER NO. N8504-1

LSO NO. E80696H

ADDRESS P.O. Box 881 Reach Road - Williamsport, PA

INVOICE NO. N 28557

Transverse hardness survey - 163 - 170 BHN

Guided weld bends - root & face of each weld - satisfactory.

Pipe was welded in accordance with (L) Procedure 16-F-001 Rev. 5.

Welds were radiographically inspected per (L) Procedure 9-Q-212 and Instruction Sheet No. 1 - satisfactory. X-rays submitted.

Welds were magnetic particle inspected per (L) Procedure 9-Q-105 Rev.1 - satisfactory.

Pipe conforms to the specified hydrostatic test requirements.

SUBSCRIBED AND SWORN TO BEFORE ME THIS

Page 2 of 2

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE
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LADISH CO.
Material Analysis Report
METALLURGICAL DEPARTMENT

PURCHASER The M. W. Kellogg Company-Power Piping Division

CUDAHY, WIS., March 25, 19 71 A.

PURCHASER'S ORDER NO. N8504-1

LSO NO. E80696H

ADDRESS P.O. Box 881 Reach Road - Williamsport, PA 17704

INVOICE NO. N 39848

Re-typed 3-26-81

NO. PCS.	DESCRIPTION AND SPECIFICATION	HEAT NO. AND CODE	CHEMICAL COMPOSITION								PHYSICAL PROPERTIES				
			C	MN	P	S	SI	NI	CR	MO	YIELD STRENGTH KSI	ULTIMATE STRENGTH KSI	ELONG. %	RED. OF AREA	
	Item 1														
	26" I.D. x 1.002 M/W Rolled and Welded Carbon Steel Pipe	E08660 DH4RJ		<u>LADLE ANALYSIS</u>								<u>PARENT METAL</u>			
			.26	1.00	.013	.022	.20					46.8	78.7	25.5	
	A155 KCF 70 and Kellogg Spec. N8504- ES-1			<u>CHECK ANALYSIS</u>								<u>CENTER WELD</u>			
			.25	1.04	.013	.020	.19						71.9		
	Pipe manufactured from A516 Gr. 70 plate		Charpy VEE notch impact tested at 0°F. 10x10x8 mm - Parent Metal												
				111 -	57 -	40	ft. lbs.								
				77 -	52 -	43%	shear								
				.084 -	.049 -	.041	lateral expansion								
				<u>ANALYSIS OF WELD WIRE</u>											
		411A7211	.14	1.84	.013	.020	.04								
	Weld No's. T3-1 T3-2														

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LADISH CO.
Material Analysis Report
METALLURGICAL DEPARTMENT

PURCHASER The M. W. Kellogg Company-Power Piping Division

CUDAHY, WIS., March 25, 19 71

PURCHASER'S ORDER NO. N8504-1

LSO NO. E80696H

ADDRESS P.O. Reach Road - Williamsport, PA 17704

INVOICE NO. N39848

Guided weld bends - satisfactory.

Transverse hardness survey - 149 - 197 BHN.

Pipe was welded in accordance with (L) Procedure 16-F-001 Rev. 5

Welds were radiographically inspected per (L) Procedure 9-Q-212 and Instruction Sheet No. 1 - satisfactory. X-Rays submitted

Weld was magnetic particle inspected per (L) Procedure 9-Q-105 Rev. 3 - satisfactory.

Pipe conforms to the specified hydrostatic test requirements.

Heat treated per (L) Procedure 13-F-470. Tempered at 1200°F.

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