



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

CASPER DISTRICT OFFICE

951 N. Poplar

Casper, Wyoming 82601

Telephone: (307) 261-5101

IN REPLY REFER TO:

9243

71

ms-16

Nuclear Regulatory Commission
Attn: Mr. Jack E. Whitten
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76012

FEB 0 6 1986

RE: Control No. 418656

Dear Mr. Whitten:

The following information has been requested so that you can renew our NRC material license.

- 1a. We require that the individuals who will use or directly supervise the use of licensed material attend the 24-hour course, "Safety School Well Logging." Both Harry Cureton and Don Rhea have satisfactory completed such a course sponsored by Gulf Nuclear, Inc.

The main topics of instruction included radiation physics, detection and measurement techniques, biological effects of radiation, protection practices, use of radioactive sources, transportation and storage safety requirements, and reports and records requirements for radioactive materials. The course covered all seven areas that are outlined in your letter.

- b. Enclosed are certificates issued by Gulf Nuclear, Inc. showing satisfactory completion of the course. Both had to pass a written examination before the certificate was issued.

Harry Cureton also attended a second 24-hour "Radiation Safety for Well Loggers" course, certificate attached.

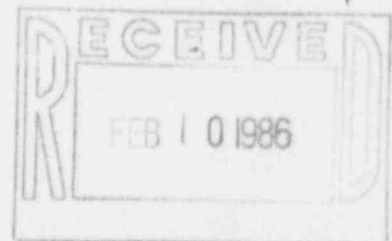
- c. On-the-job training is provided to a summer temporary helper. All sources are handled by Harry Cureton and he also provides direct supervision to the equipment operator. The training is a review of the course content from the Gulf Nuclear workbook and the Radiation Protection Program. We do this for the safety of the temporary employee and feel this meets the requirements as Harry Cureton is with the unit and is the only one authorized to handle the sources.

B603240530 B60310
REG4 LIC30
49-19256-01

PDR

FEE EXEMPT

418656

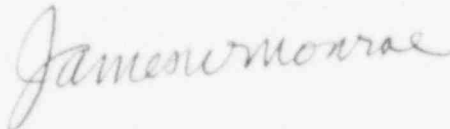


Don Rhea has attended the course and is the supervisor of the entire drilling operations. Harry Cureton supervises the field crews and is in charge of the actual work being done in the field.

2. See 7.1 of the "Radiation Protection Program." Also attached is a floor plan of the 111 South Wolcott Street storage area. This is the only permanent location where we store radioactive material. When the materials are in use they are locked up in the logging van (see 7.2).
3. Attached is a sketch of the logging tools (also see 4.2 of the "Radiation Protection Program"). We have made the point to never hand-hold a source.
4. Attached is a copy of the utilization record. This form has been revised to meet the requirements outlined in your memo.
5. Amendments to the "Radiation Protection Program" have been made which requires inspection and maintenance of source holder, logging tools, source handling tools, storage transport containers to assure proper labeling, and the devices' physical condition. Inspection will be done on 6-month intervals.
6. Revised copy of "Radiation Protection Program" is attached.
7. All the documentation required will be available at the temporary job site.
8. The only office is in Casper and all items listed will be available. Presently we have all the information except a semi-annual physical inventory; however, we do have leak tests for our three sources which are done semi-annually. In future, records will be maintained for physical inventory.
9. All personnel who work in and around or visit a restricted area will be informed by the RPO. They will be informed about radiation hazards and appropriate precautions upon being hired. The handling of all sources is restricted to the RPO. Any and all people within the immediate area will be required to wear a badge and individual records are maintained. We have a briefing of the Radiation Protection Program and a review of Gulf Nuclear's course for these people. There is no formal training; however, the employees are not allowed to handle the sources and the RPO is present at the job site at all times.
10. Enclosed are sketches of the storage/transport containers that we utilized.
11. The well logging consists of coal test holes.

12. Enclosed is a sketch of the transport containers showing the markings. We do not transport any sources as a separate piece of equipment. All of our sources are sealed.

Sincerely,

A handwritten signature in cursive script, reading "James W. Morrow". The signature is written in dark ink and is positioned above the typed name.

District Manager

Enclosures



Certificate

This certificate indicates that DON RHEA
*has satisfactorily completed an instruction and handling training course for Radiation
Safety for oil well logging.*

JANUARY 13, 1984

Date

**Gulf Nuclear, Inc.
Houston, Texas**

Wally Rood
INSTRUCTOR

Support Consultants & Associates

This is to certify that

HARRY R. CURETON

has successfully completed the Educational Course in

RADIATION SAFETY FOR WELL LOGGERS

as prescribed under The Training Program presented by
Support Consultants & Associates

U. S. GEOLOGICAL SURVEY

H. Bradley

Kurt L. Inman
Training Officer

MARCH 26, 1981

Date

Certificate

This certificate indicates that HARRY R. CURETON
has satisfactorily completed an instruction and handling training course for Radiation
Safety for oil well logging.

JANUARY 24, 1978

Date

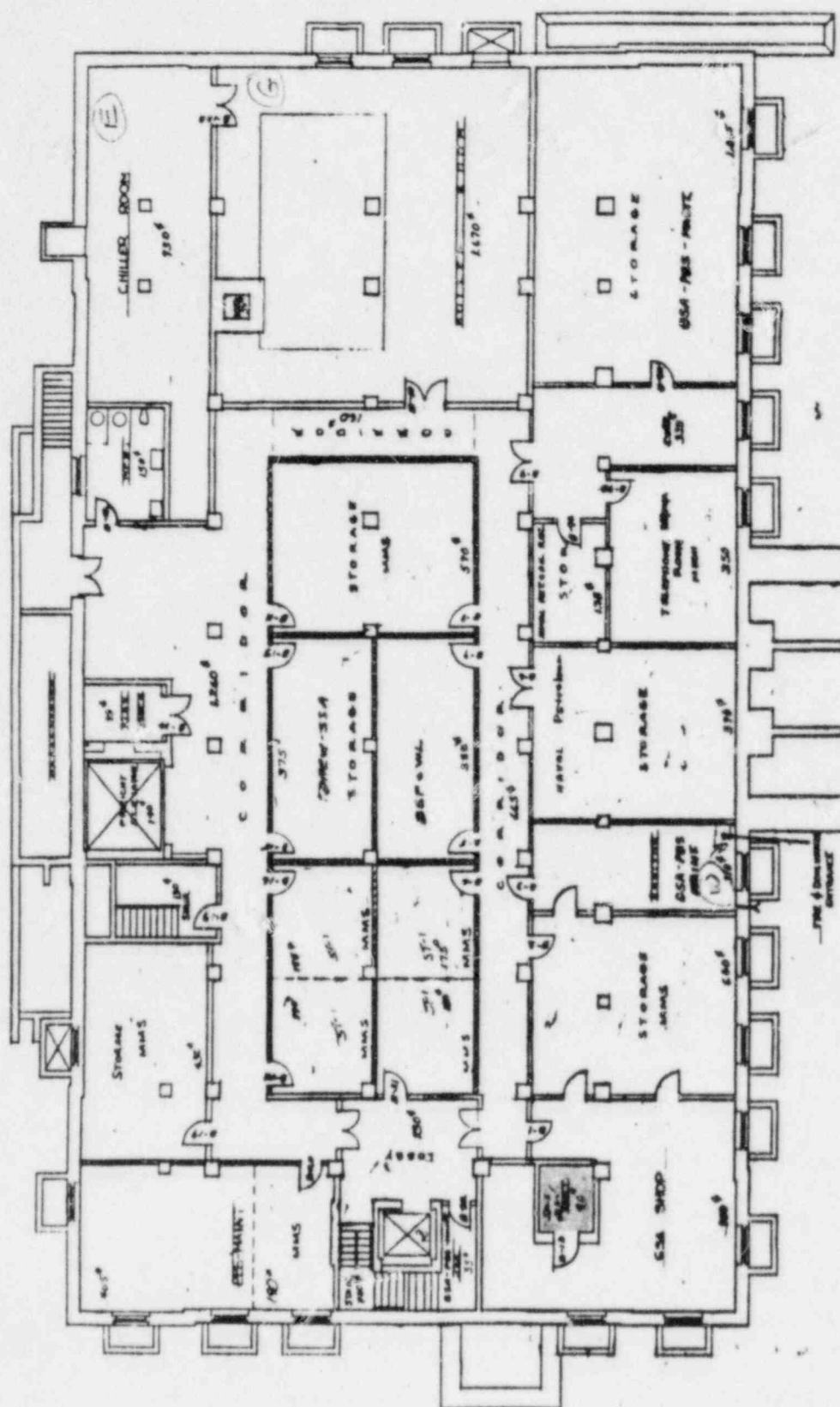
**Gulf Nuclear, Inc.
Houston, Texas**

Frank Malek

Instructor

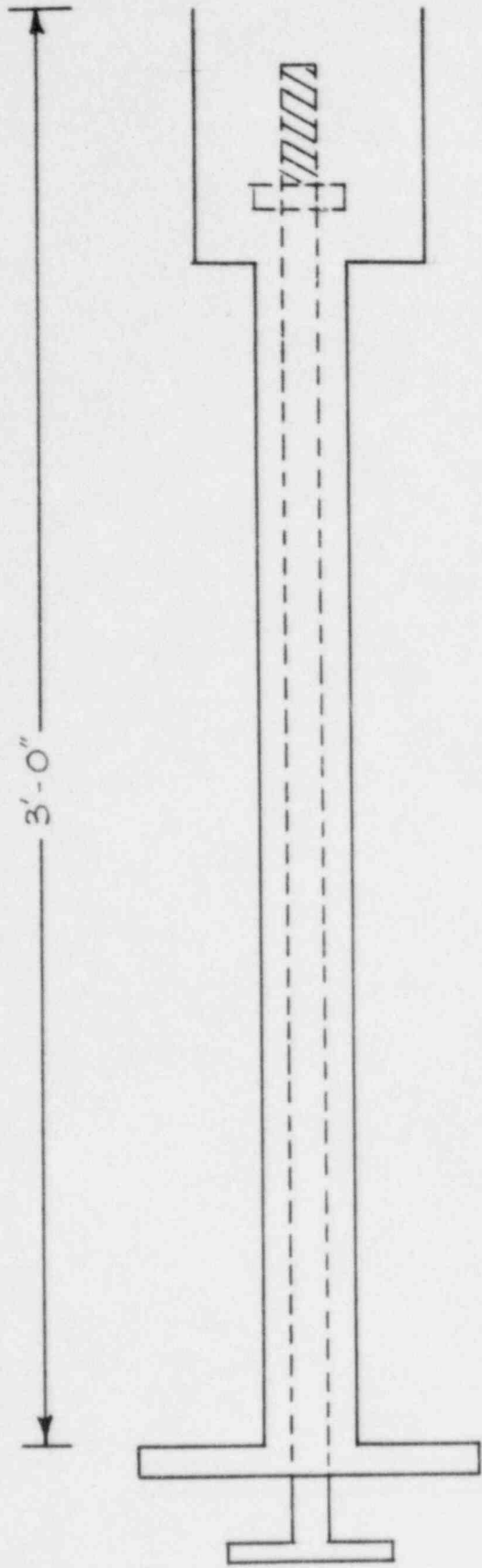
Walter P. Peebles, Jr.

Walter P. Peebles, Jr.
President

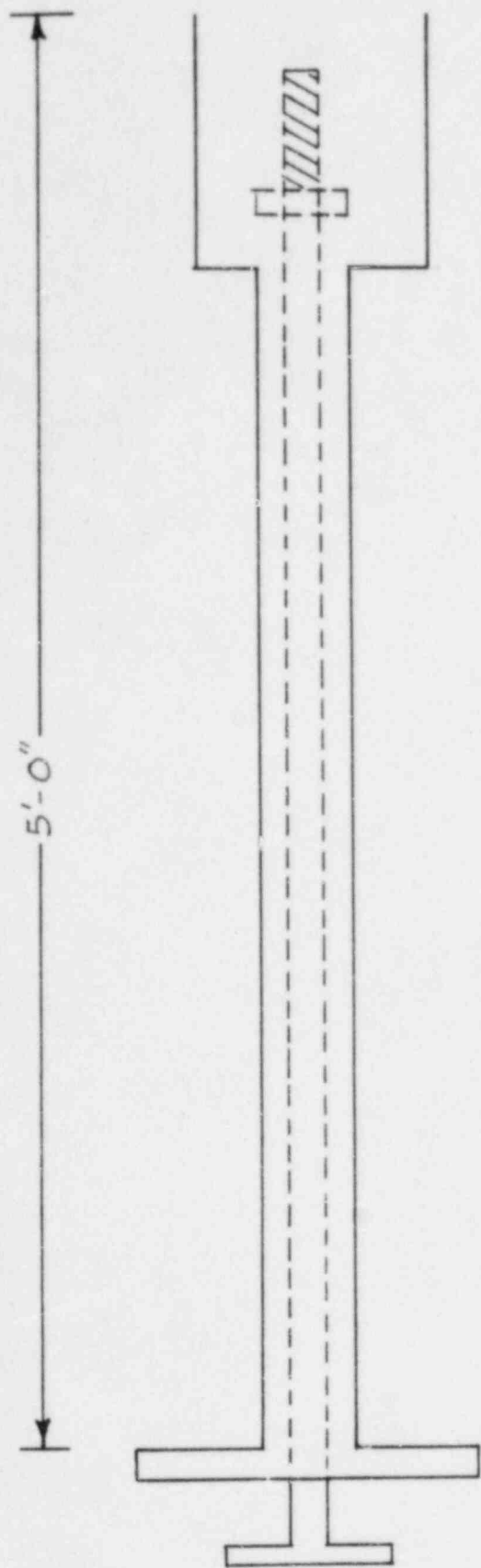
[illegible]

BASEMENT FLOOR PLAN





HANDLING TOOL



HANDLING TOOL

INVENTORY, INSPECTION, AND MAINTENANCE OF EQUIPMENT

<u>Logging Tools</u>	<u>Date</u>	<u>Signature of Inspector</u>	<u>Remarks</u>
LMS 3003			
LMG 15-5DH			
LMN-22N			
<u>Source Holder</u>			
Gulf Nuclear CSV-125			
Gamma Ind. NBHP			
Gulf Nuclear AMBF-1			
<u>Storage/Transport</u>			
Shield assembly LMSS-1-6			
Logging tool incarement LMSS-2-6			
Shield assembly DOT 7A Type A			
<u>Source Handling Tool</u>			
3-foot tool			
5-foot tool			
<u>Radiation Detection Meters</u>			
Ludlum serial no. 8106			
Victorian serial no. 2266			

Inventory, inspection, and maintenance to be completed every six months.

[illegible]

Date Returned

HANDLE SHIPPING IDENTIFICATION TAG

IDENTIFICATION TAG
ENGRAVED

HASP
LOCK

Circular Steel
Welded to Sphere

FRONT

OPTIONAL DEPTH

DEPENDENT ON BULL PLUG
TAG HOLDER

INSERT WELDED ON SPHERE

PARAFIN FILLED
PROPRIETARY
INCREASED DEPTH PLUG

KEYHOLE FOR BOLT
IN PLACE

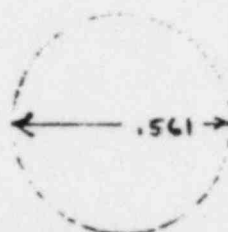
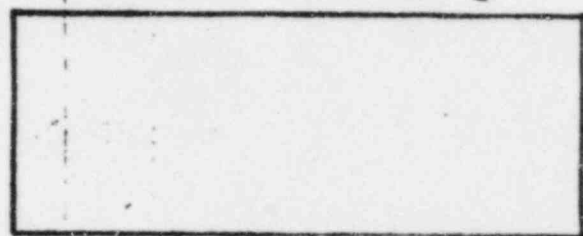
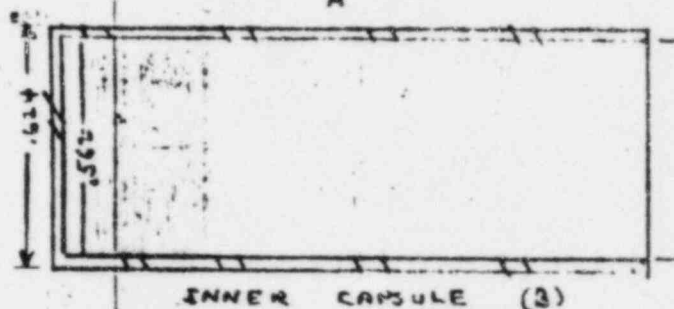
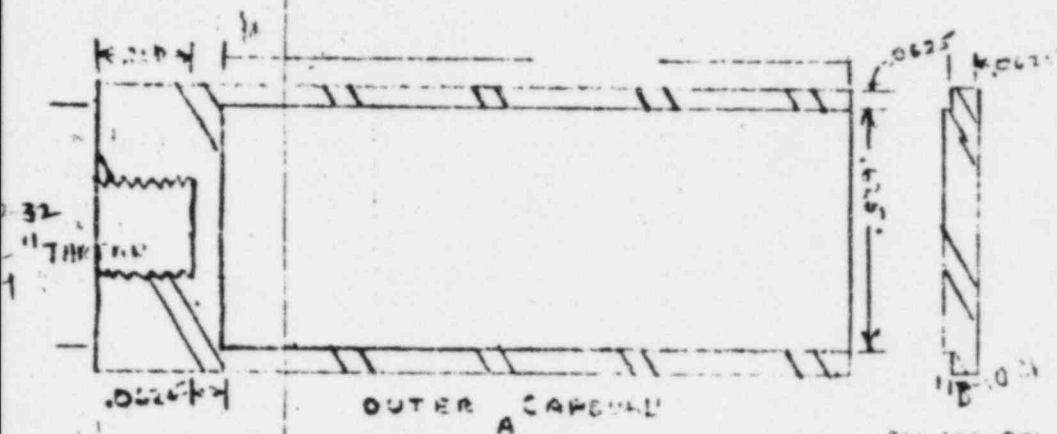
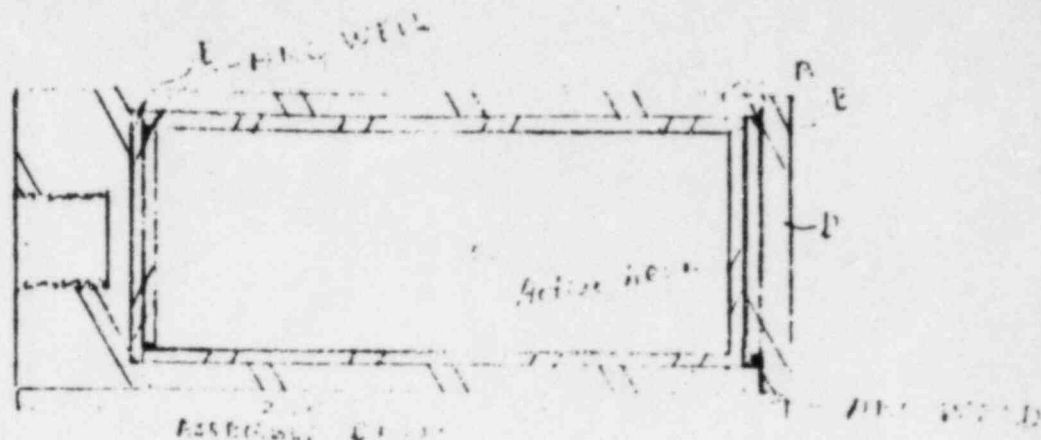
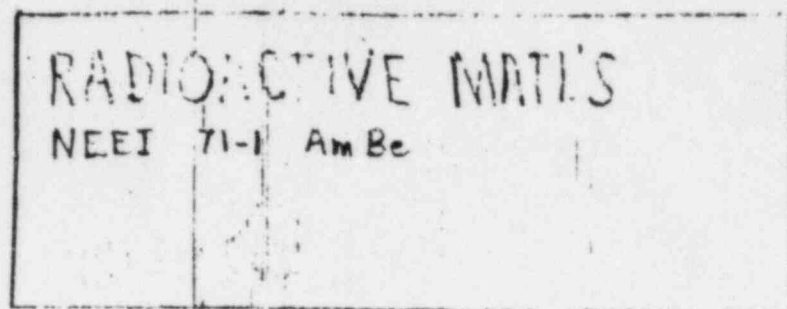
BOTTOM

TOP

SHIELD 14" 18 GA. steel wt. 70 lb

PARAFIN - SWELWAY 55-ORFQITEMVENT

SHIELD 14" 18 GA. steel wt. 70 lb
DOT SPEC 70
Scale 1/2" = 1"
Date 1/19/72



PRESSURE RATED 30,000 PSI

NUCLEAR ENV. ENGR., INC.

4-1-72 NEEI 71-1 A

AMERICIUM-241 - BERYLLIUM

SCALE 2" = 1"

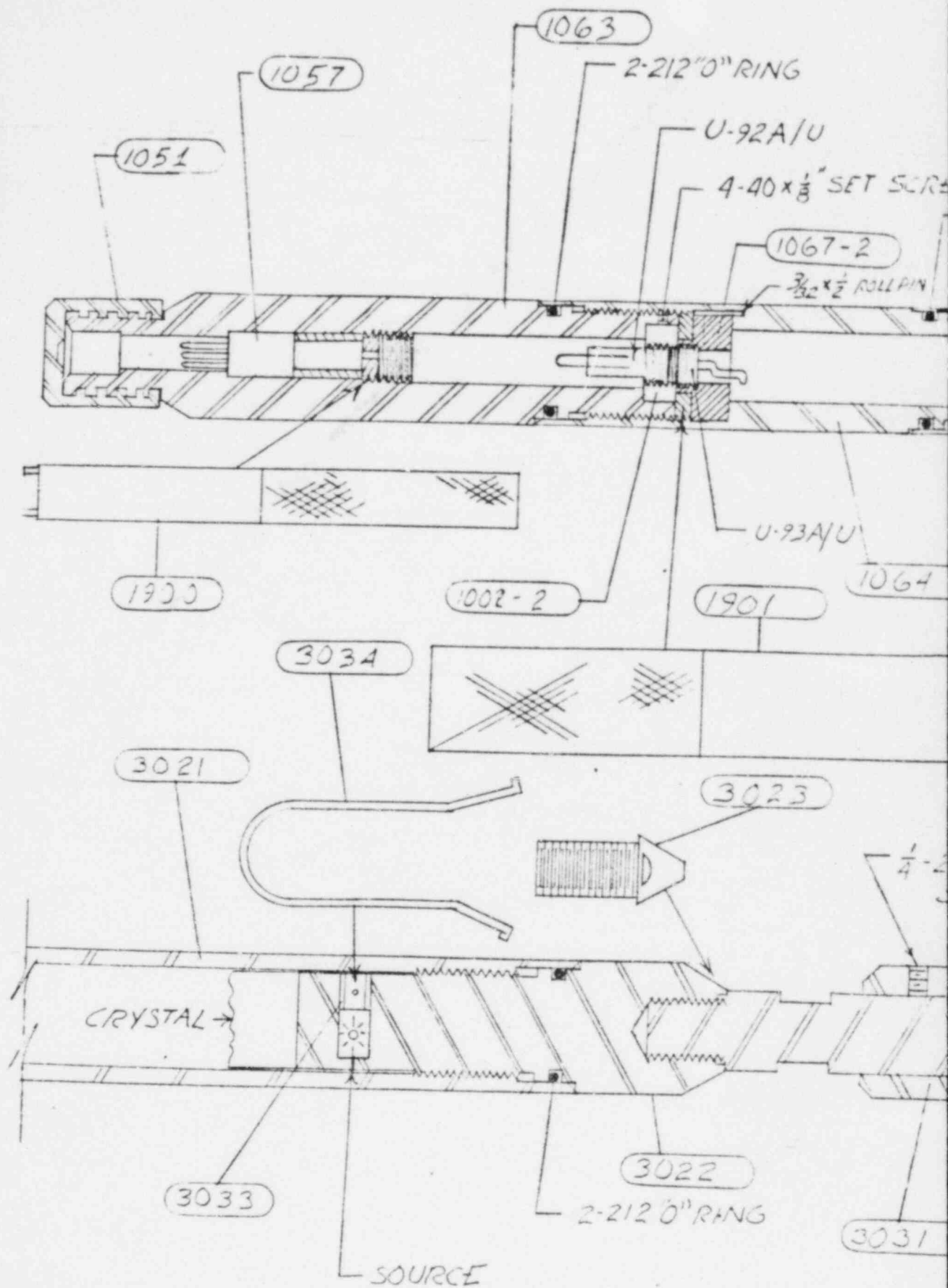
MATERIAL 316 SST

MANUFACTURE A,B,D+E

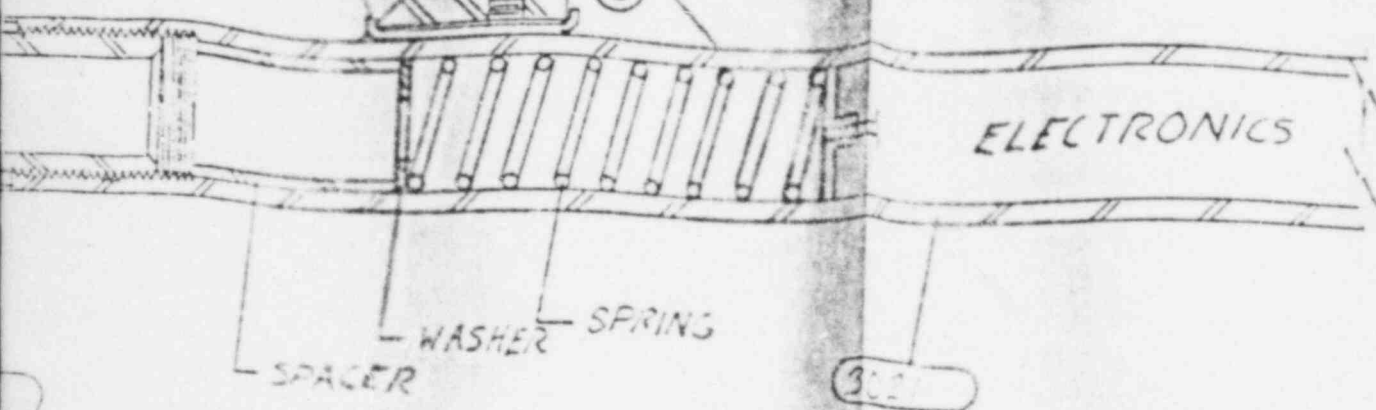
A,B,D+E - PRESS FIT

6.6×10^6 W/CM²/SEC. 3,000

1.0×10^7 W/CM²/SEC. 5,000



W
2-212 "O" RING



5/16" 24 x 1/2
ST. STL. SET SCREW

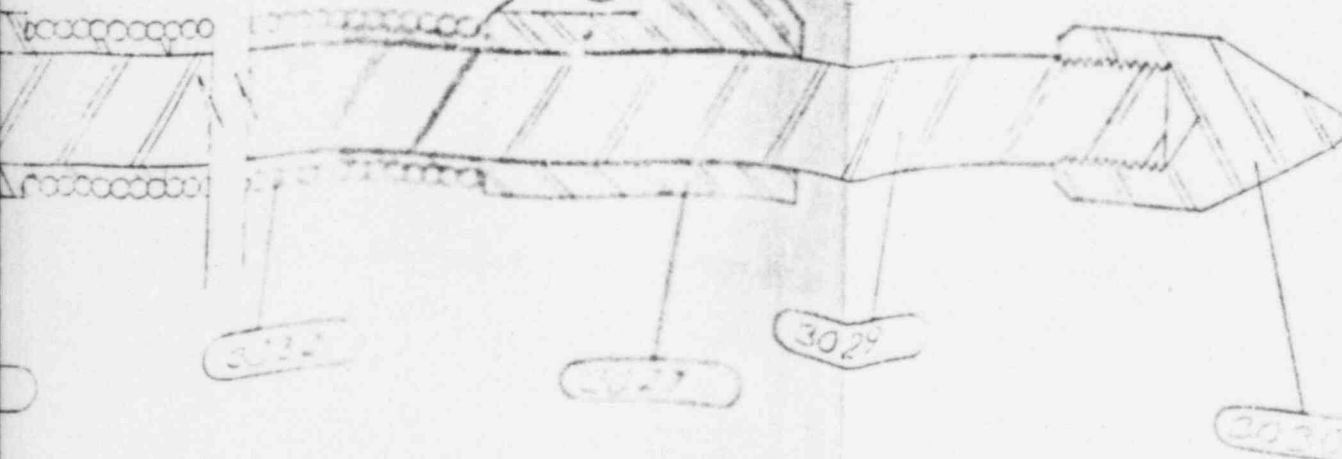
1/4 x 1 1/4 ST STL
ROLL PIN

2-20 x 3/8 FLAT HEAD (ST. STL)

ELECTRONICS

SPACER
WASHER
SPRING

3/8 x 1/2 ST. STL
SET SCREW

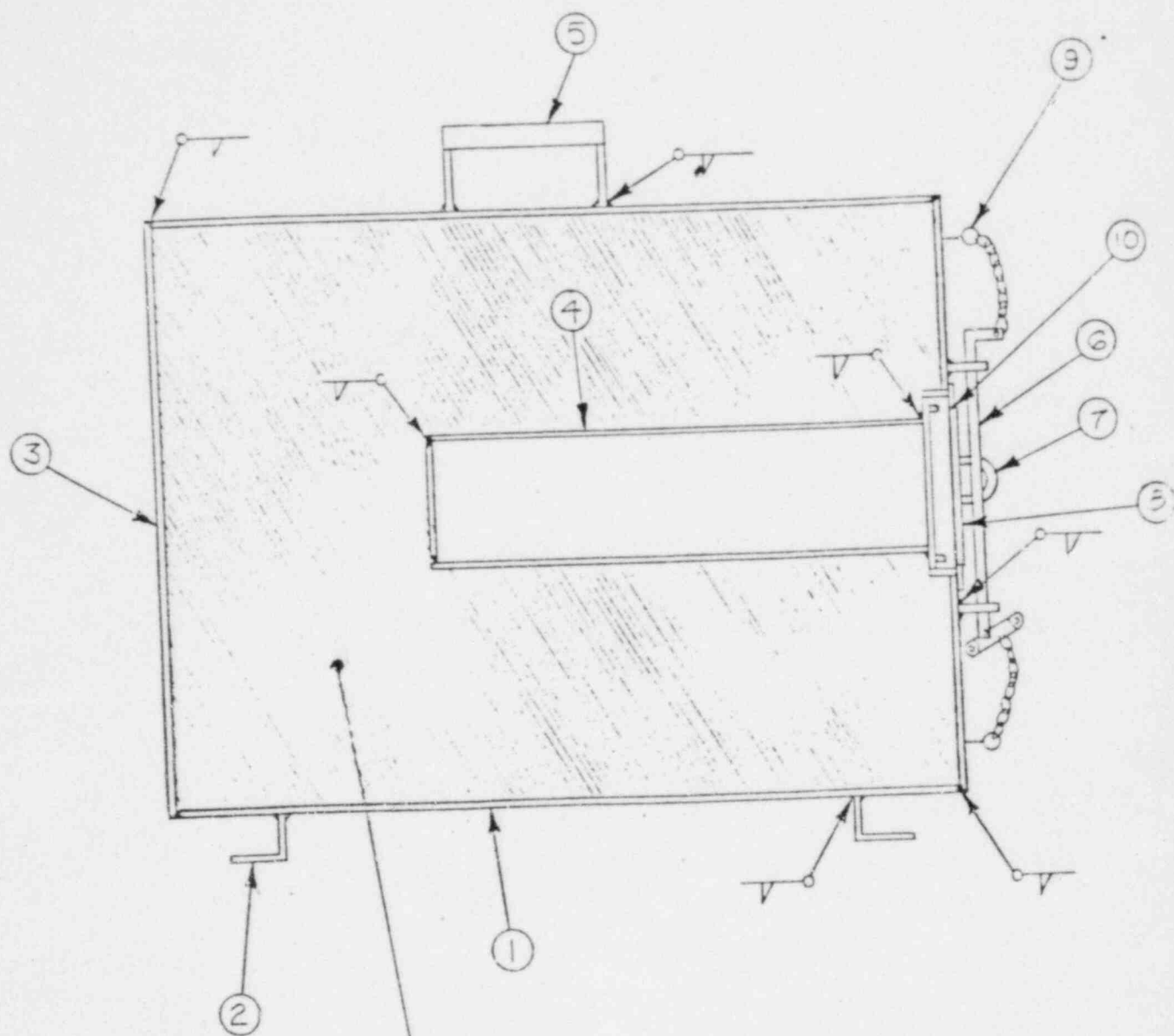


TI
APERTURE
CARD

Also Available On
Aperture Card

8603241530 - 01

HIGH RESOLUTION DENSITY TOOL



— BORIC ACID POLY. RESIN FILLER

PART NO.	PARTS LIST	MATERIAL
	DESCRIPTION	
1	14" O.D. X 4" LONG 11 GA. CYLINDER	H.R.M.S.
2	14" X 1 1/2" X 1 1/2" X 1/4" ANGLE IRON LEG (2 REQ.)	H.R.M.S.
3	14" O.D. 11 GA. PLATE (2 REQ.)	H.R.M.S.
4	3 1/2" O.D. X 9" LONG 11 GA. CYLINDER	H.R.M.S.
5	HANDLE - 4 1/2" LONG X 1" O.D. TUBE 5" OF 1" X 1/4" FLAT BAR	C.R.M.S.
6	LOCKPIN 6" X 3/8" O.D. BAR STOCK	C.R.M.S.
7	"U" GUIDES (3 REQ.) 7 1/2" X 1/4" O.D. BAR STOCK	C.R.M.S.
8	DOOR 5" X 4" X 1/4" PLATE	H.R.M.S.
9	1/4-20 EYE BOLT 1" LONG (2 REQ.)	S.S.
10	DOOR HINGE 2 3/4" X 1 1/2" X 5/16" TUBE 4" X 1/2" O.D. BAR STOCK	C.R.M.S.

* 50 LBS. BORIC ACID POWDER
3 GAL. POLYESTER RESIN
1 OZ. HARDNER

ATI
APERTURE
CARD

Also Available On
Aperture Card

ASURED FULL*

REVISIONS			GULF NUCLEAR, INC.		
NO.	DATE	BY			
1			14 X 14 NEUTRON SHIELD		
2					
3			DRAWN BY MPA	SCALE NONE	MATERIAL
4			CHK'D	DATE 1-24-85	DRAWING NO.
5			TRACED	APP'D	316+5

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