

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-1-78
County	Barton	Sec.	13	Twp.	19
		Rng.	13	Elevation	
Company	L. G. Stephenson			Test No.	1
Contractor	Red Tiger			Zone Tested	Topeka
Charge To	L. G. Stephenson			Ticket #	3006
Approved By	James W. Spellman			Tester	Randy Lackey

Initial Hydro Mud Press. 1572 P.S.I.

Initial Flow Press. 53 To 28 P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. 771 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 45 To 33 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 707 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1486 P.S.I. TIME TOOL OPEN 11:45 P.M.

Temperature 117

Mud Weight 9.7 Viscosity 38

Fluid Loss 8.0

Interval Tested 2924 To 2950

Top Packer Depth 2919 Surface Choke Size

Bottom Packer Depth 2924 Bottom Choke Size 5/8

Total Depth 2950 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow Weak - dead at end of I.F.P. flushed tool at begining of F.F.P. dead in 5 min. dead rest of F.F.P.

Recovery 65' muddy water (trace of oil in tool) Slid 10' to T.D.

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-3-78
County	Barton	Sec.	13	Twp.	19
		Rng.	13	Elevation	
Company	L. G. Stephenson			Test No.	2
Contractor	Red Tiger			Zone Tested	Lancing
Charge To	L.G. Stephenson			Ticket #	3007
Approved By	James W. Spellman			Tester	Randy Lackey

Initial Hydro Mud Press. 1805 P.S.I.

Initial Flow Press. 53 To 53 P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. 65 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 65 To 65 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 96 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1770 P.S.I. TIME TOOL OPEN 1:15 A.M.

Temperature 118

Mud Weight 9.8 Viscosity 38

Fluid Loss 10.0

Interval Tested 3138 To 3185

Top Packer Depth 3133 Surface Choke Size

Bottom Packer Depth 3138 Bottom Choke Size 5/8

Total Depth 3185 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow Very weak dead in 12 min. dead rest of I.F.P. Flushed tool at start of F.F.P. very weak dead in 1 min. Dead rest of F.F.P.

Recovery 640' Mud

Slid 6' to T.D.

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-3-78
County	Barton	Sec.	13	Elevation	
		Twp.	19	Test No.	3
		Rng.	13	Zone Tested	Lancing
Company	L.G. Stephenson			Ticket #	3008
Contractor	Red Tiger			Tester	Randy Lackey
Charge To	L. G. Stephenson				
Approved By	James W. Spellman				

Initial Hydro Mud Press. 1710 P.S.I.

Initial Flow Press. 125 To 258 P.S.I. Initial Flow Period 60 Min.

Initial Shut-in Press. 484 P.S.I. Initial Shut-in 45 Min.

Final Flow Press. 332 To 400 P.S.I. Final Flow Period 90 Min.

Final Shut-in Press. 473 P.S.I. Final Shut-in 45 Min.

Final Hydro Mud Press. 1684 P.S.I. TIME TOOL OPEN 2:30 P.M.

Temperature 126

Mud Weight 9.9 Viscosity 42

Fluid Loss 12.0

Interval Tested 3180 To 3224

Top Packer Depth 3175 Surface Choke Size 1/8

Bottom Packer Depth 3180 Bottom Choke Size 5/8

Total Depth 3224 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow Very strong - gas to surface 37 min. 40 min. 22,900. 50 min. 12,100. 60 min. 4,400 I.F.P. F.F.P. 10 min. 2,760, 20 min. 4,420, 30 min. 5,260 40 min. 5,260 50 min. 4,470 Rest of F.F.P. 3,920

~~RECOVERY~~

RECOVERY 1120' oil gravity 38.3

120' slightly oi cut water

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-4-78
County	Barton	Sec.	13	Twp.	19
		Rng.	13	Elevation	
Company	L. G. Stephenson			Test No.	4
Contractor	Red Tiger			Zone Tested	Lancing
Charge To	L. G. Stephenson			Ticket #	3009
Approved By	James W. Spellman			Tester	Randy Lackey

Initial Hydro Mud Press. 1813 P.S.I.

Initial Flow Press. 93 To 197 P.S.I. Initial Flow Period 60 Min.

Initial Shut-in Press. 964 P.S.I. Initial Shut-in 45 Min.

Final Flow Press. 269 To 387 P.S.I. Final Flow Period 60 Min.

Final Shut-in Press. 931 P.S.I. Final Shut-in 45 Min.

Final Hydro Mud Press. 1787 P.S.I. TIME TOOL OPEN 1:15 P.M.

Temperature 126

Mud Weight 9.8 Viscosity 41

Fluid Loss 14.0

Interval Tested 3274 To 3330

Top Packer Depth 3269 Surface Choke Size 1/8

Bottom Packer Depth 3274 Bottom Choke Size 5/8

Total Depth 3330 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow Gas to surface in 26 min. 30 min. 5,640, 40 min. 5,260, 50 min. 4,840, 60 min. 4,420 end of I.F.P. - F.F.P. 10 min. 6,720, 20 min. 6,390, 30 min. 7,700, 40 min. 8,590, 50 min. 10,500, 60 min. 10,500 end of F.F.P.

Recovery

RECOVERY: 1466' gassy oil Grav. 41

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-5-78
County	Barton	Sec.	13	Elevation	
		Twp.	19	Test No.	5
		Rng.	13	Zone Tested	Lancing
Company	L.G. Stephenson			Ticket #	3010
Contractor	Red Tiger			Tester	Randy Lackey
Charge To	L.G. Stephenson				
Approved By	James W. Spellman				

Initial Hydro Mud Press. 1856 P.S.I.

Initial Flow Press. 38 To 34 P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. 48 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 36 To 36 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 38 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1744 P.S.I. TIME TOOL OPEN 8:00 A.M.

Temperature 123

Mud Weight 9.8 Viscosity 41

Fluid Loss 14.0

Interval Tested 3330 To 3385

Top Packer Depth 3325 Surface Choke Size

Bottom Packer Depth 3330 Bottom Choke Size 5/8

Total Depth 3385 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow Very weak, dead 4 min. into I.F.P. Flushed tool on F.F.P. very weak dead in 1 min. Dead rest of F.F.P.

Recovery 20' mud.

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-5-78
County	Barton	Sec.	13	Twp.	19
		Rng.	13	Elevation	
Company	L.G. Stephenson			Test No.	6
Contractor	Red Tiger			Zone Tested	Arbuckle
Charge To	L. G. Stephenson			Ticket #	3011
Approved By	James W. Spellman			Tester	Randy Lackey

Initial Hydro Mud Press. P.S.I.

Initial Flow Press. To P.S.I. Initial Flow Period Min.

Initial Shut-in Press. P.S.I. Initial Shut-in Min.

Final Flow Press. To P.S.I. Final Flow Period Min.

Final Shut-in Press. P.S.I. Final Shut-in Min.

Final Hydro Mud Press. P.S.I. TIME TOOL OPEN

Temperature

Mud Weight 9.8 Viscosity 45

Fluid Loss 12.0

Interval Tested 3416 To 3430

Top Packer Depth 3411 Surface Choke Size

Bottom Packer Depth 3416 Bottom Choke Size 5/8

Total Depth 3430 Main Hole Size 7 7/8

Drill Pipe Size 4½ x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow

Recovery Unable to get to bottom. Hit bridge at 3380

.....

.....

.....

.....

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-6-78
County	Barton	Sec. 13	Twp. 19	Rng. 13	Elevation
Company	L. G. Stephenson				Test No. 7
Contractor	Red Tiger				Zone Tested Arbuckle
Charge To	L. G. Stephenson				Ticket # 3012
Approved By	James W. Spellman				Tester Randy Lackey

Initial Hydro Mud Press. 1917 P.S.I.

Initial Flow Press. 68 To 130 P.S.I. Initial Flow Period 45 Min.

Initial Shut-in Press. 1052 P.S.I. Initial Shut-in 45 Min.

Final Flow Press. 192 To 237 P.S.I. Final Flow Period 45 Min.

Final Shut-in Press. 1017 P.S.I. Final Shut-in 45 Min.

Final Hydro Mud Press. 1874 P.S.I. TIME TOOL OPEN 6:30 A.M.

Temperature 134

Mud Weight 9.8 Viscosity 45

Fluid Loss 12.0

Interval Tested 3416 To 3435

Top Packer Depth 3411 Surface Choke Size

Bottom Packer Depth 3416 Bottom Choke Size 5/8

Total Depth 3435 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 x H Wt Rubber Size 6 3/4

Drill Collar I.D. Ft. Run

Blow Fair Building to strong 18 min. into I.F.P. Strong thru out F.F.P.

Recovery 10' slightly oil cut water. 520' water

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Button	Well No.	2	Date	10-6-78
County	Barton	Sec. 13	Twp. 19	Rng. 13	Elevation
Company	L.G. Stephenson				Test No. 8
Contractor	Red Tiger Drlg.				Zone Tested Arbuckle
Charge To	L.G. Stephenson				Ticket # 3013
Approved By	James W. Spellman				Tester Richard Bowman

Initial Hydro Mud Press. 1736 P.S.I.

Initial Flow Press. 13 To 13 P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. 463 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 13 To 13 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 392 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1719 P.S.I. TIME TOOL OPEN

Temperature

Mud Weight 9.2 Viscosity 44

Fluid Loss 14.0

Interval Tested 3374 To 3419

Top Packer Depth 3374 Surface Choke Size

Bottom Packer Depth 3419 Bottom Choke Size 5/8

Total Depth 3435 Main Hole Size 7 7/8

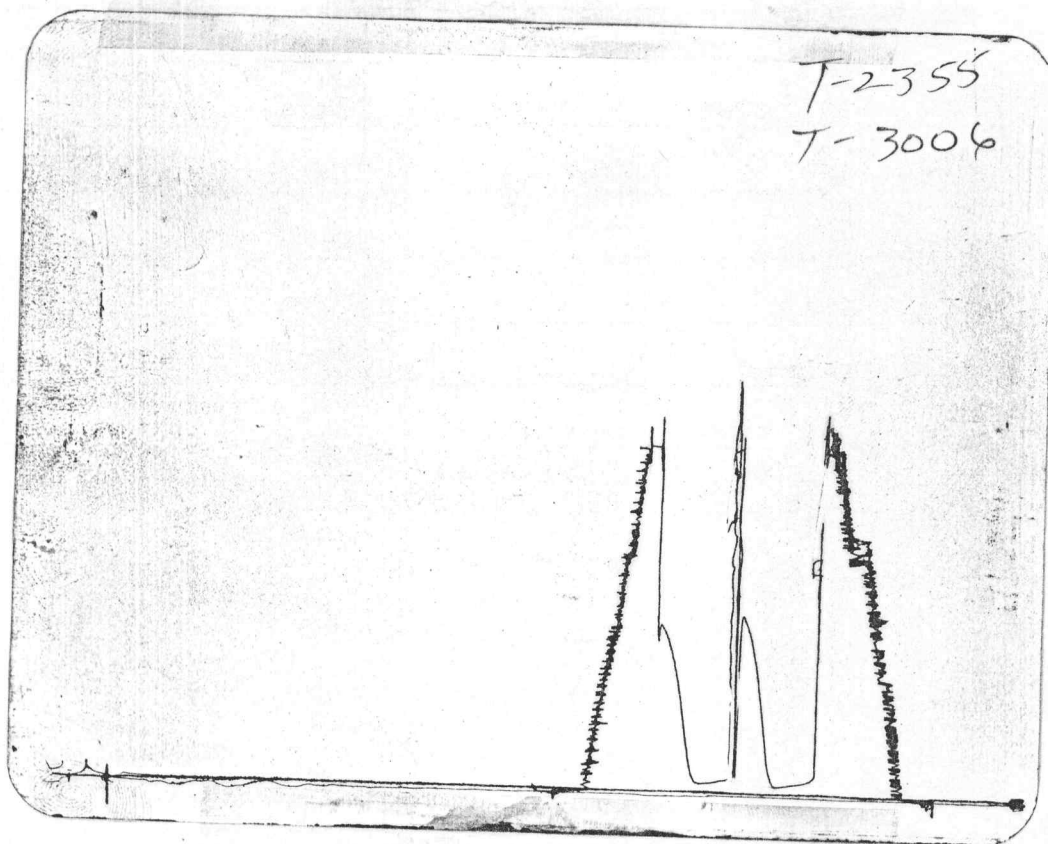
Drill Pipe Size 4 1/2 x H Wt 4 1/2 x H Rubber Size 6 3/4

Drill Collar I.D. 2.25 Ft. Run None

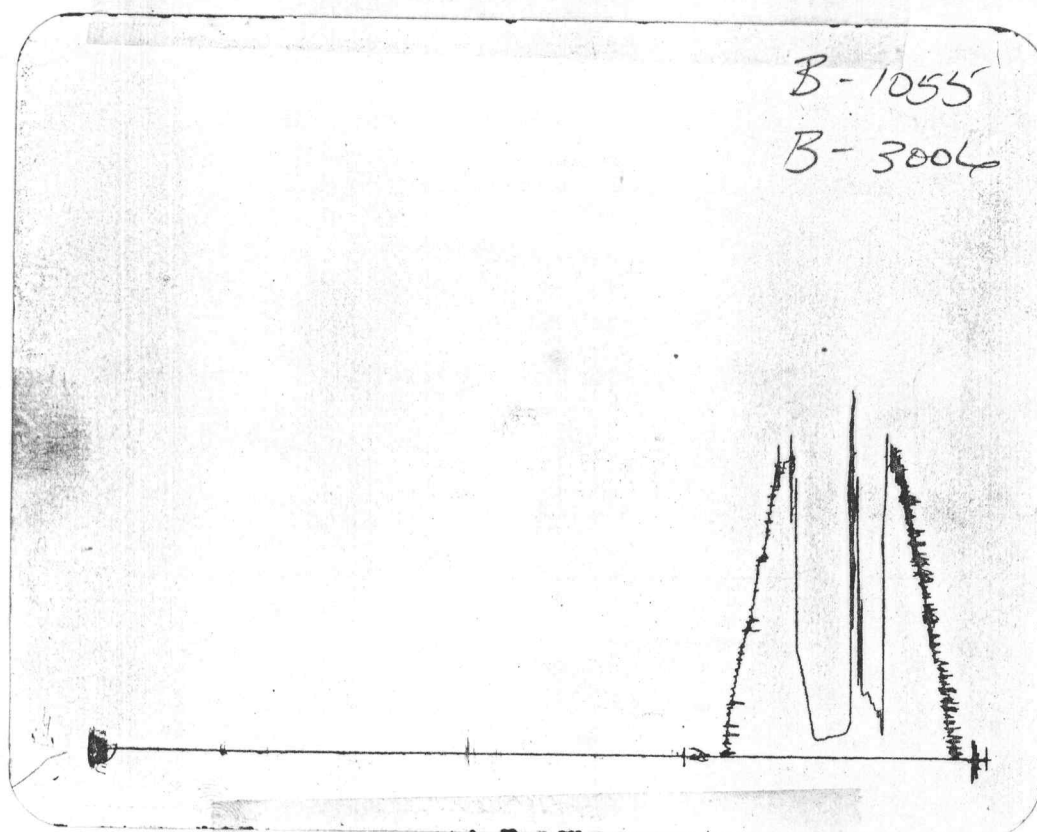
Blow Very weak blow through out test

Recovery 30' mud 5' mud with oil spots

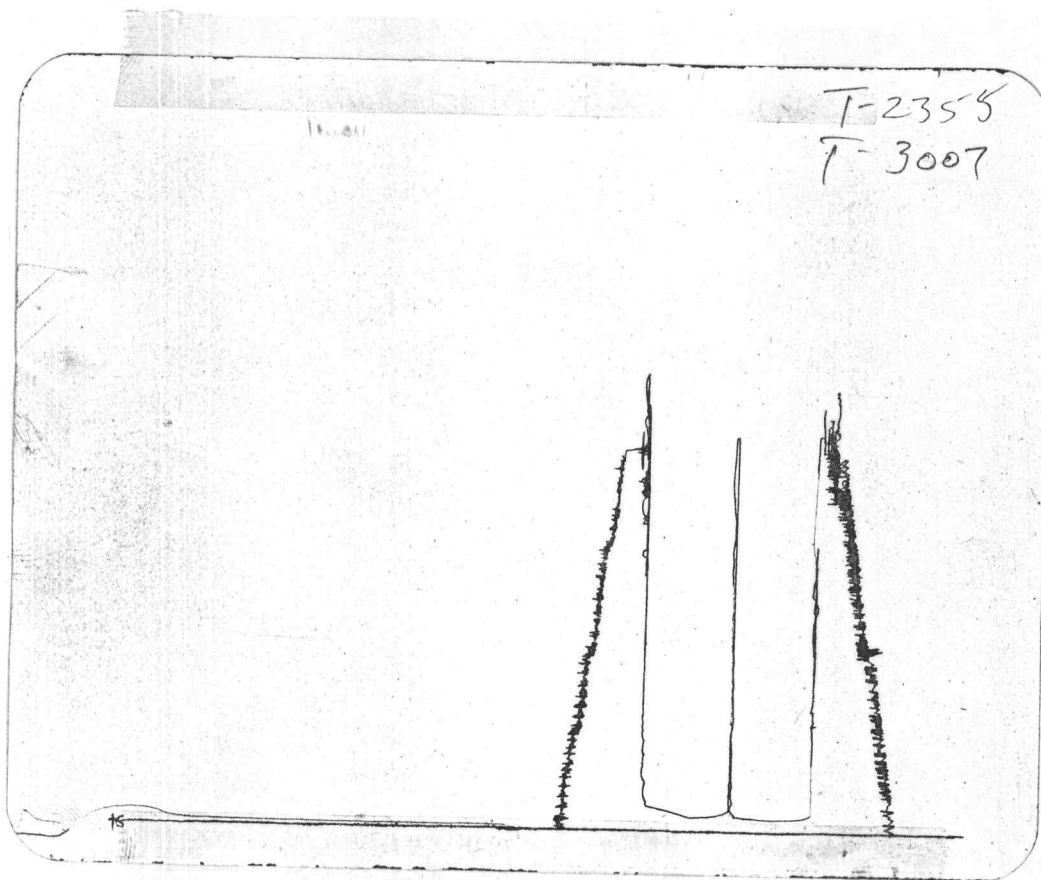
TOP



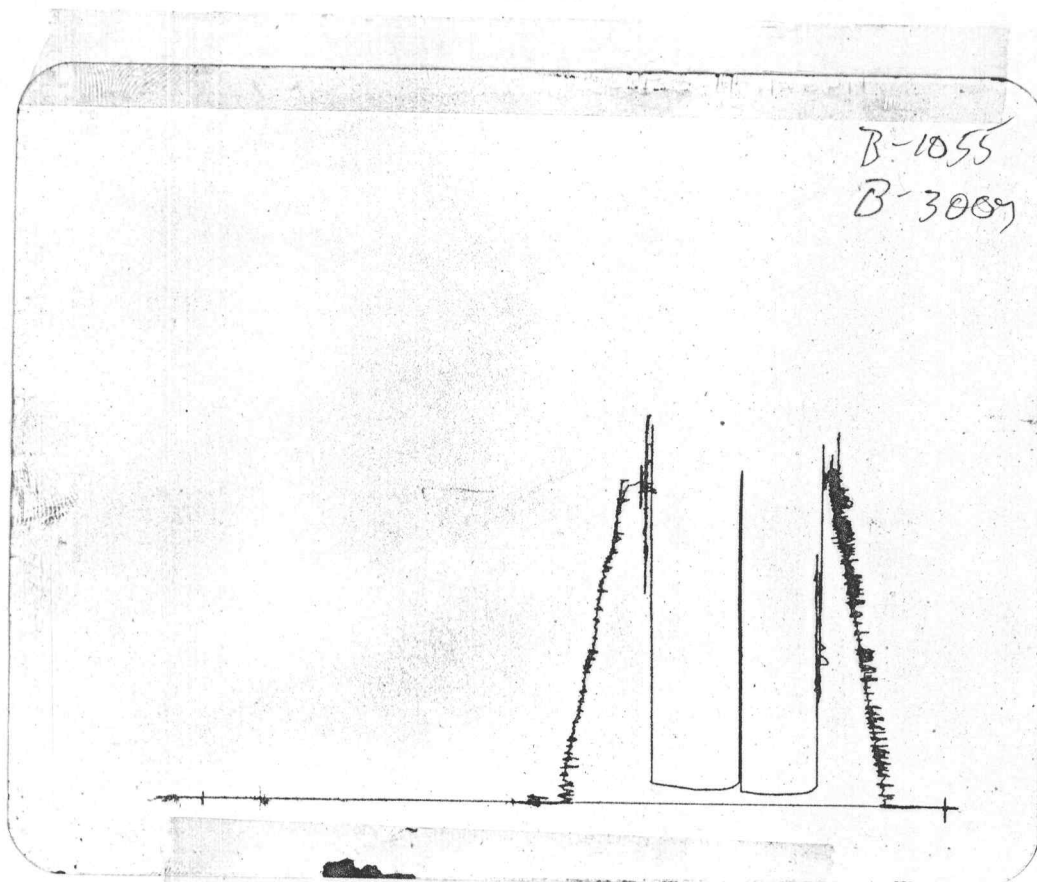
BOTTOM



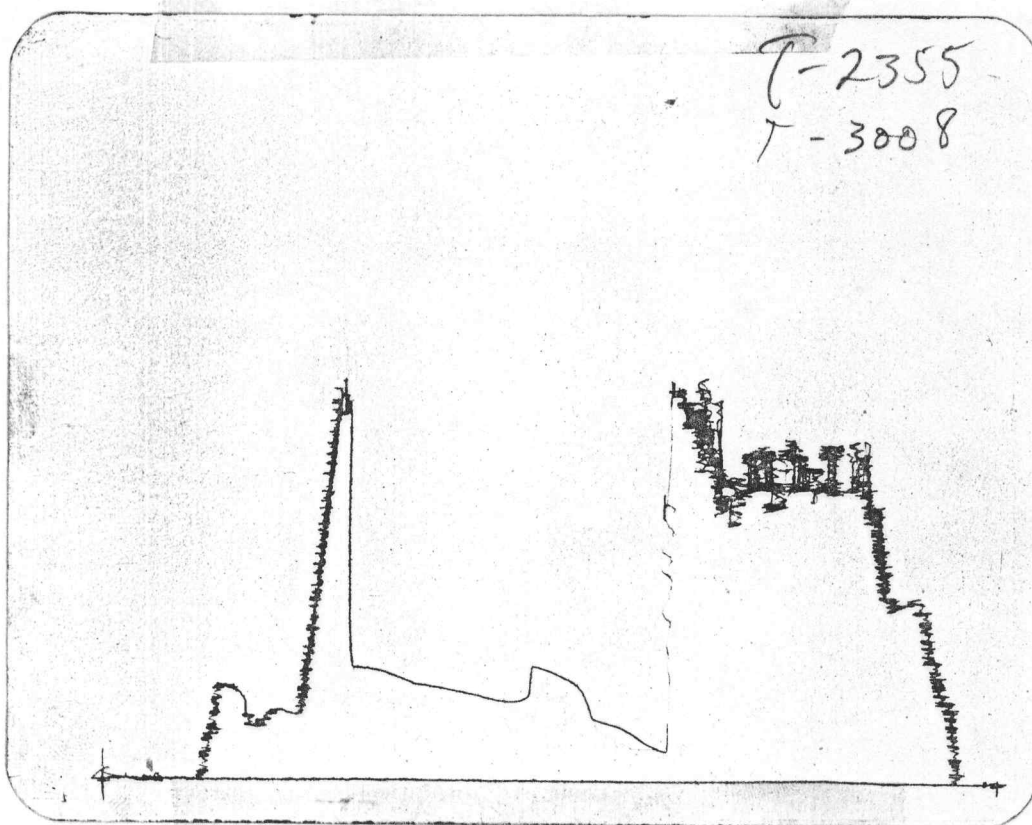
TOP



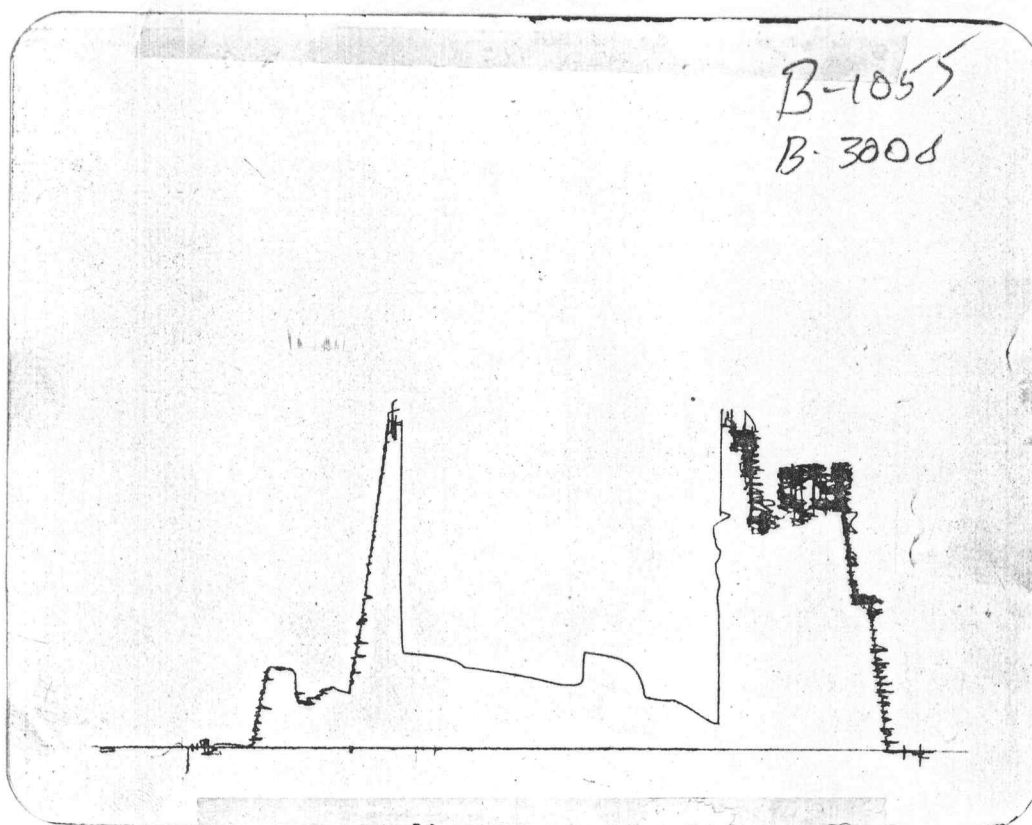
BOTTOM



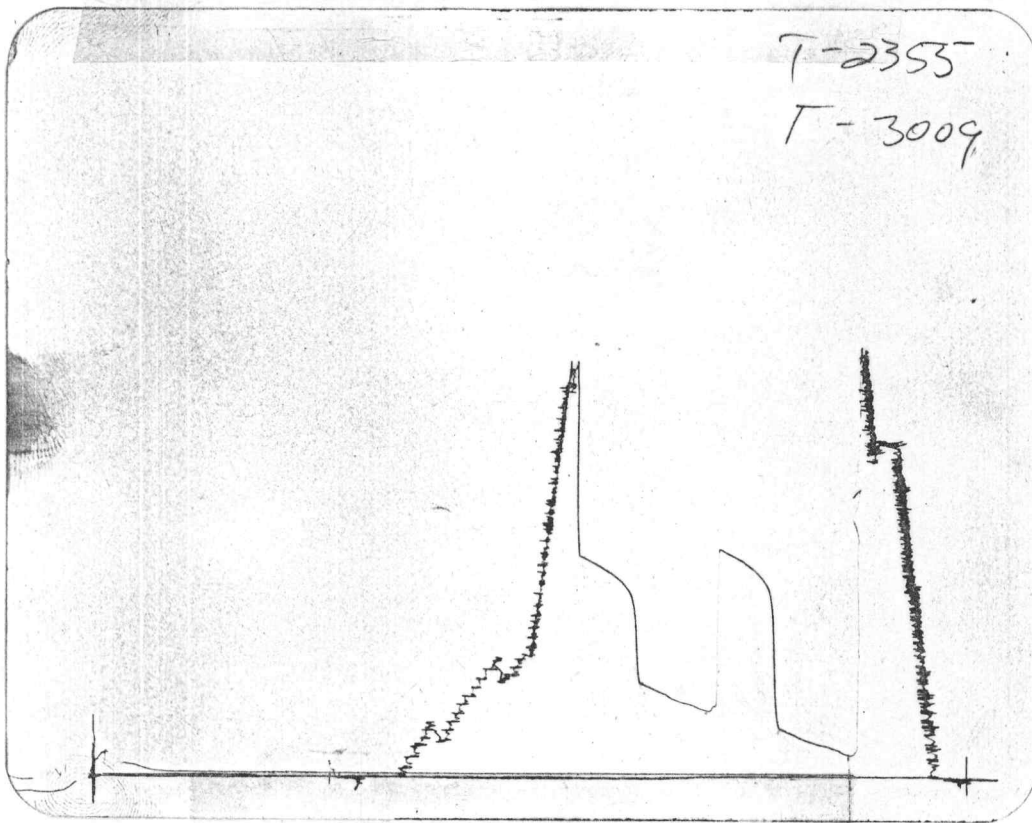
TOP



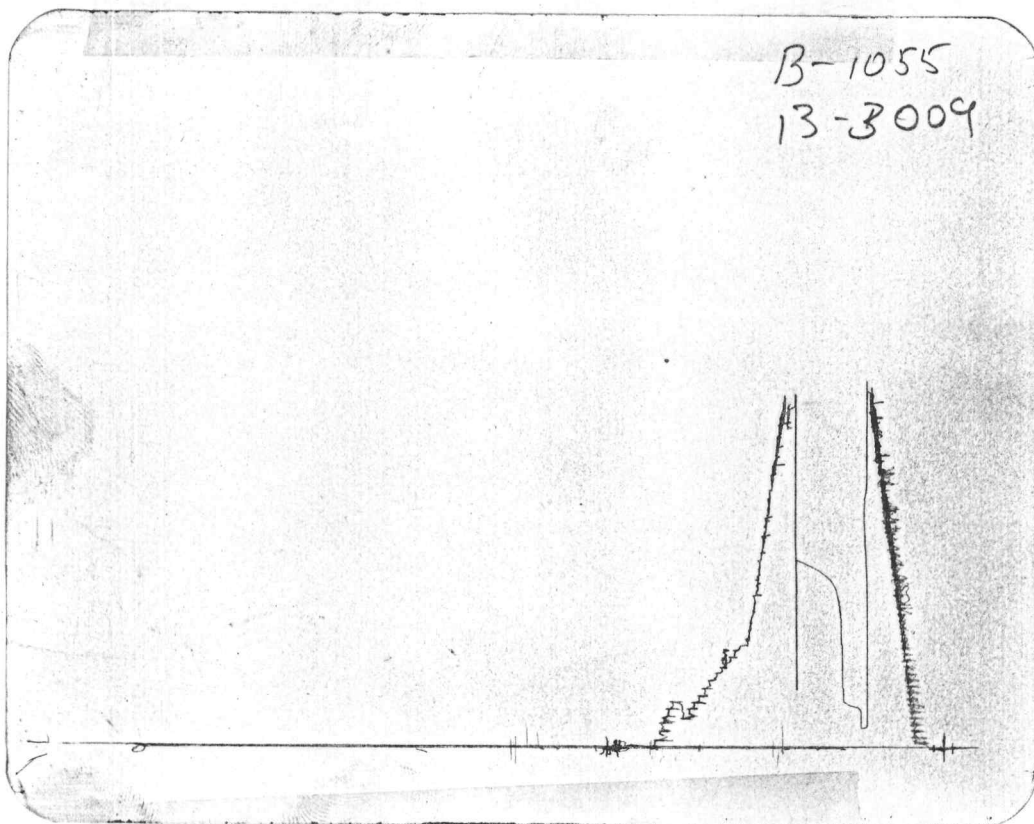
BOTTOM



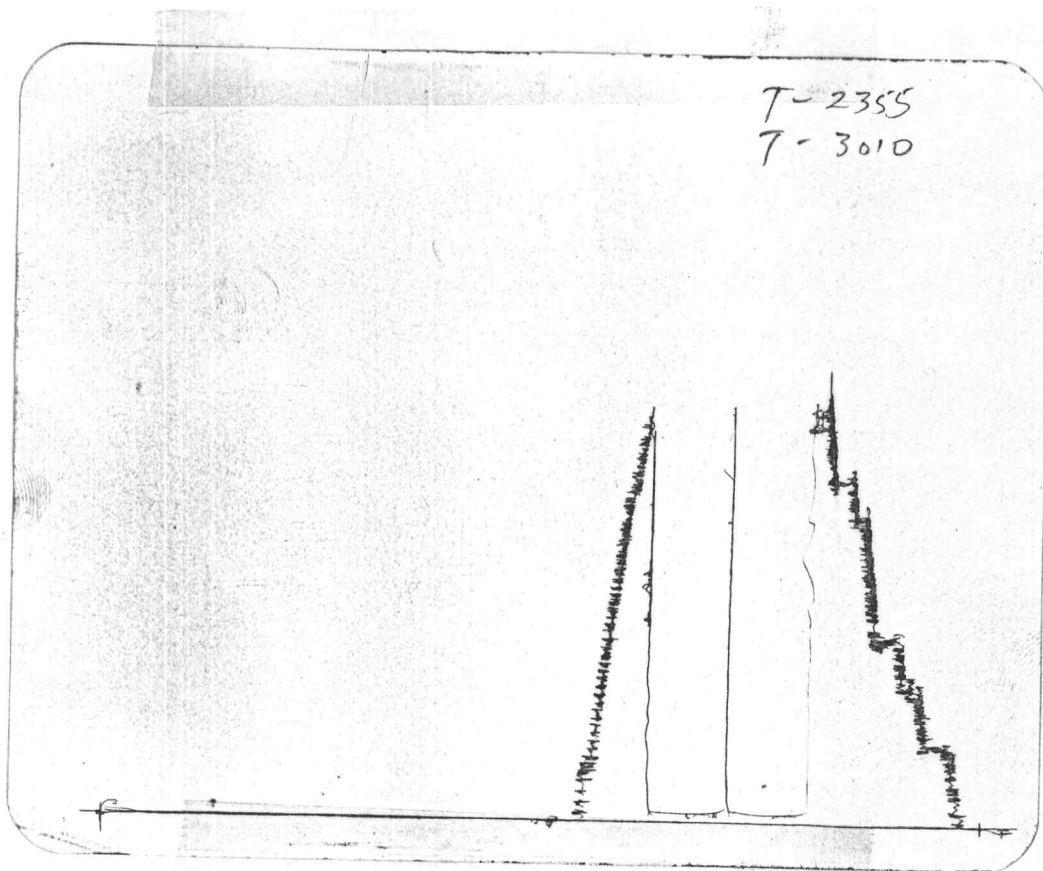
TOP



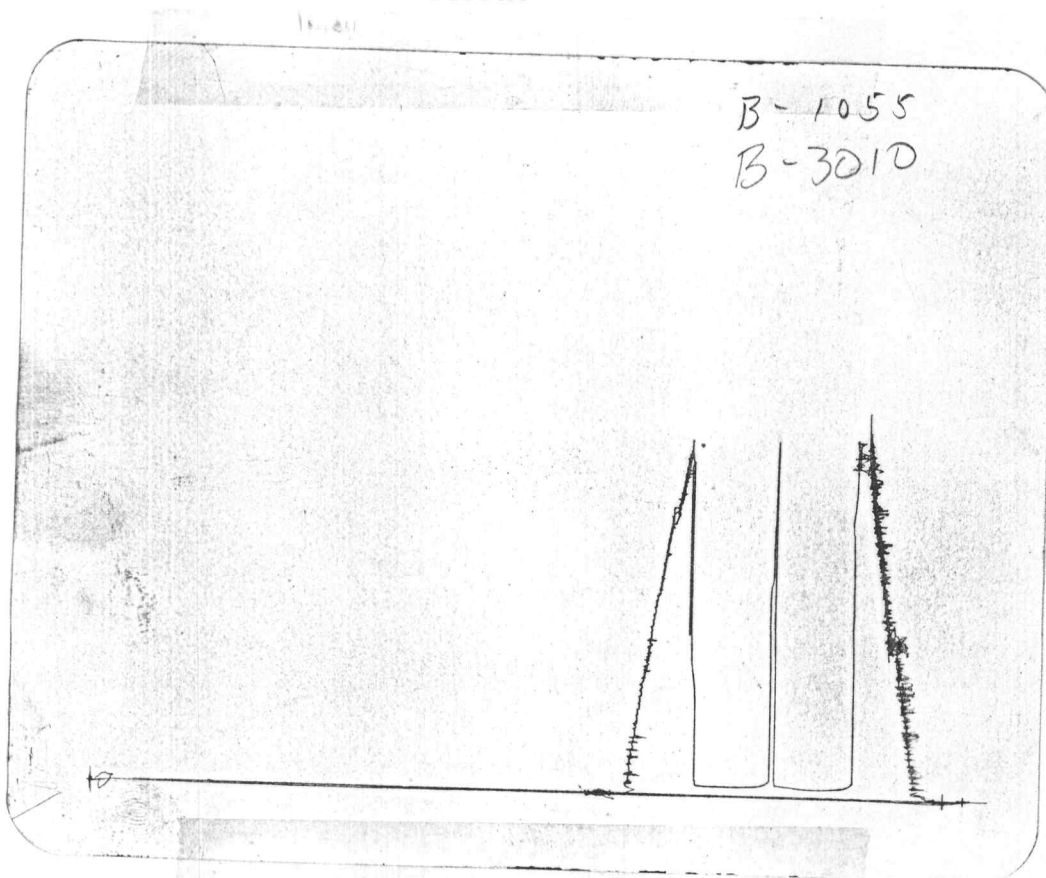
BOTTOM



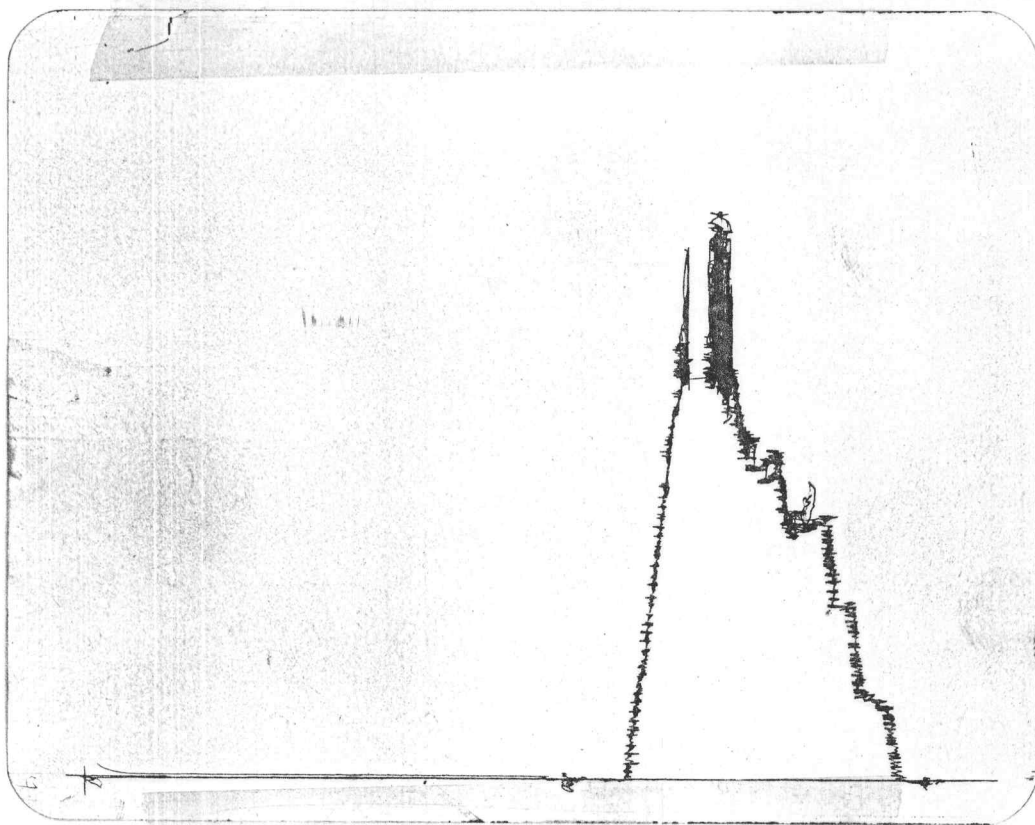
TOP



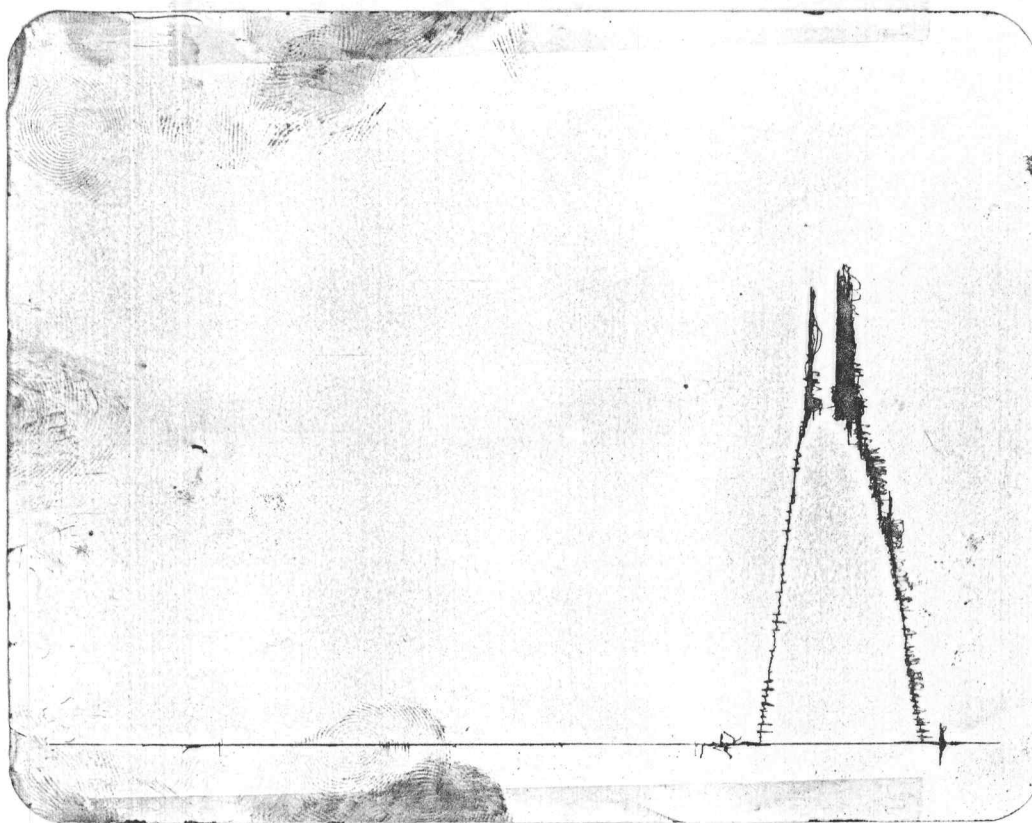
BOTTOM



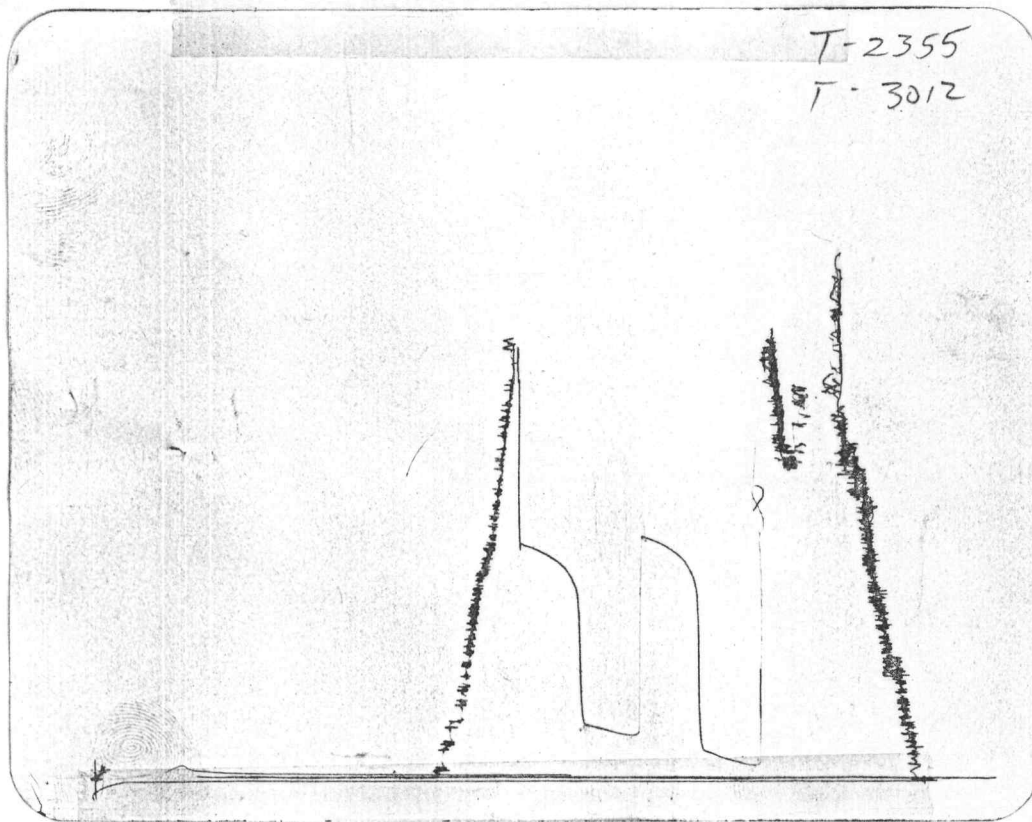
TOP



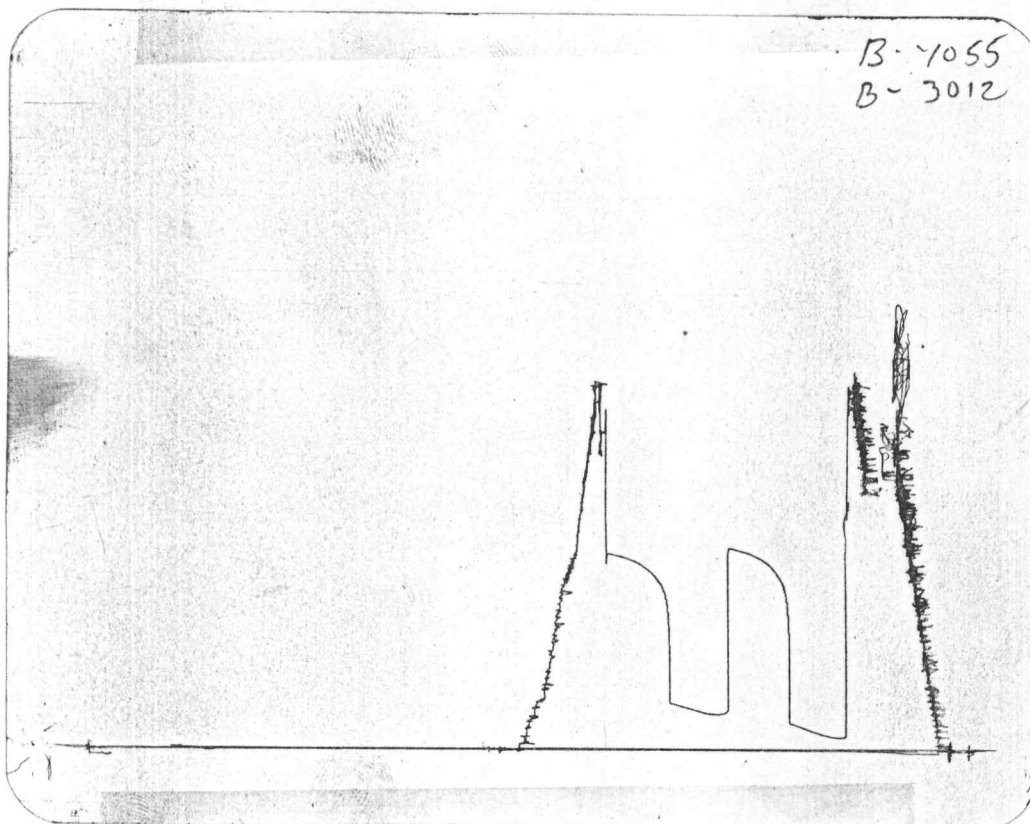
BOTTOM



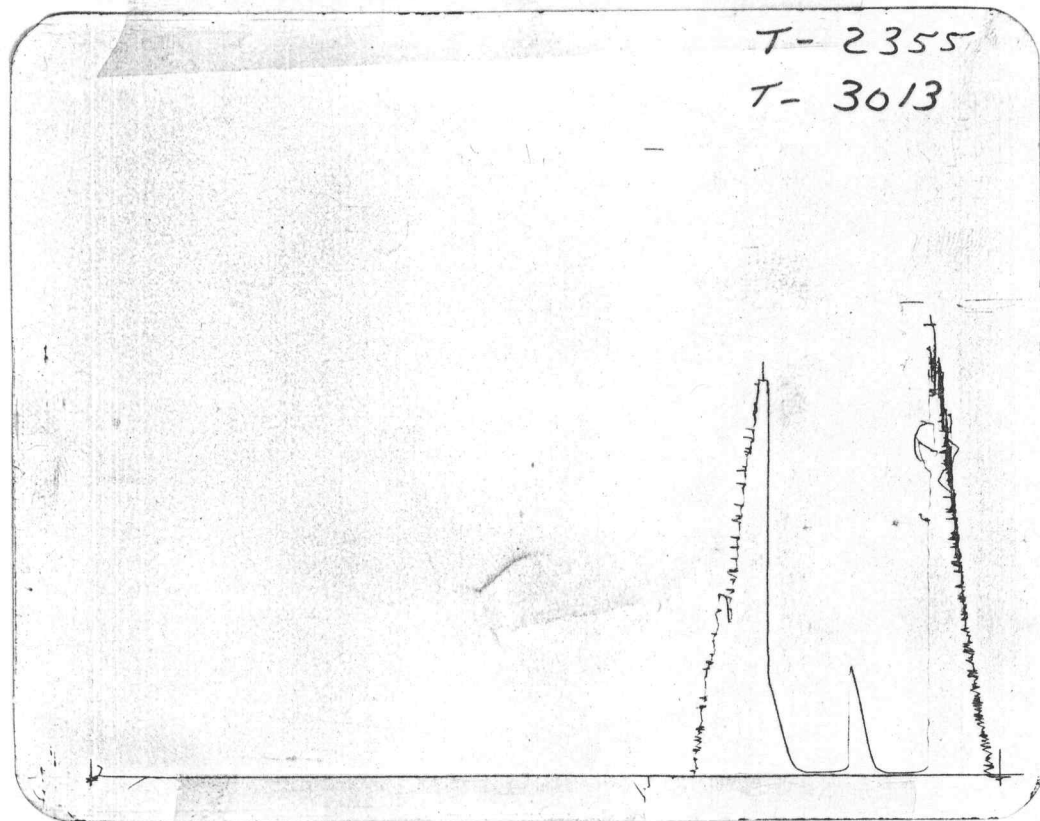
TOP



BOTTOM



TOP



BOTTOM

