

Drafts

Accident Investigation Report

Stockyard Fire

July 1, 1983

HIAWATHA NATIONAL FOREST
Rapid River Ranger District

STOCKYARD FIRE

July 1, 1983

Accident Investigation Team:

- Team Leader - George McLaughlin, Forest Service, Escanaba
- Charles Palo, DNR, Escanaba
- Morris Wheeler, DNR, Ishpeming
- Claudia Hielke, Forest Service, Escanaba
- Art Easterbrook, Forest Service, Escanaba
- Pete Day, Forest Service, Escanaba

Accident victim:

- Jeff Noble, 327 S. 16th St., Escanaba, MI 49829
- Birthdate - 4/30/53
- Age - 30 years

Injuries sustained:

- Burns to face, arms, shoulder and leg. 20% of body received second degree burns with some scattered third degree burns.
- Transported to the Milwaukee, Wisconsin, Burn Center for treatment

Property damaged:

- J.D. 350 Dozer with rear mounted fire plow.
- Owned by DNR.
- Loss is total (except for salvage).

Accident location:

- Fire map coordinates D9
- SE NE, Sec. 6, T40N-R21W

Witnesses:

1. Gordon Rice, P.O. Box 376, Gwinn, MI 49841
Home: (906) 346-3276
Work: (906) 346-9201
DNR/FTE
Gwinn Field Station
2. Terry Popour, 30 W. Jarvi Road, Mgaunee, MI 49866
Home: (906) 475-7527
Work: (906) 346-9201
DNR/F.O., Gwinn Field Station

3. Gary Olson, 746 North 15th St., Gladstone, MI 49837
Home: (906) 423-2605
Work: (906) 341-5666
USFS, Technician, Manistique R.D.
4. Harold Pratt, 7803 Goddard Rd., Rapid River, MI 49878
Home: (906) 474-6850
Contract Dozer Operator/USFS

Cause of Accident.

1. Human error - Miscalculation on how close to the edge of the fire they should develop the dozer line. This would appear to be the primary cause.
2. Equipment. - The radio communication was less than optimum and may have been a contributing factor.

Stockyard Fire

Overview:

July 1, 1987

Gary Olson (F.S.) as Tractor Boss, was leading a group of three tractors along the west line of the fire developing a fire break. A safety man (Gordon Rice, DNR) followed the group and whose job it was to see that fire was not crossing the line behind.

The lead tractor was a contract unit (Harold Pratt) and since it was the larger unit, it was in front to push over trees. No radio was on this unit. Tractor 2 (Terry Popour) and 3 (Jeff Noble) were both DNR units and operators. Both had radios, however, contact between them was not good.

MINNAPARC NATIONAL FOREST

The tractors were travelling south and creating a double plow line on the site of an old woods road. As the fire was across the road ahead, the group then deviated into the plantation. The plantation trees were 3-6" + in diameter and ranged around 25-30' high. The tractors were operating from 30-50 feet from the edge of the fire which was backing toward the west. Reportedly, conditions suddenly became calm and the fire then started to grow straight up. People contacted did not indicate that a wind shift occurred but acknowledged that the fire was creating its own wind.

Gary was leading the tractors toward a 2-track where he intended to have everyone take a 5-minute break. As he was about to give such instructions to the operator of Tractor 1, he noticed the flames rapidly building behind Tractor 2. He then directed them (1 & 2) to throttle up and get clear of the area. He then proceeded back toward the fire to locate the other tractor and operator which were not visible to him. Radio communication from Tractor 2 had not gained any response.

Gary discovered Jeff running through the plantation and observed him go down. He are uncertain whether he tripped or collapsed. Gary

extinguished the fire on Jeff's clothing and then Gary and Jeff walked out together.

Jeff's tractor was subsequently found adjacent to the plow line and completely burned out. Indications are that the tractor was still operating with both plows in an up position when left by Jeff.

Accident Investigation Team:

Jeff Noble was taken to the Burn Center in Milwaukee, Wisconsin, for treatment. He had received second degree burns to 20% of his body with scattered third degree burns. Recovery is estimated to be 2-4 weeks.

- Morris Maslan, DNR, Ishpeming
- [unclear] Forest Service, [unclear]
- [unclear] Forest Service, [unclear]
- [unclear] Forest Service, [unclear]

Finding #1:

1. The human error of misjudging or not realizing the potential of this fire seemed to be the primary accident cause. The most prevailing point made by the witnesses was that the situation was not normal and that the tractors were operating at a distance from the edge of the fire that they normally would be operating, i.e., 30-50 feet. The significance of this is that this fire and others occurring under these extreme conditions are not the norm. The extreme drought and the conditions of the fuel would not have been a familiar experience by anyone on this fire and especially not Gary nor the people under his command. The Review Team basically feels that this tractor group was working too close to the edge of the fire in too heavy fuels.

Recommendation #1:

Increase the margin of safety by operating at a greater distance from the edge of the fire. We are not certain what the exact distance should be but feel that whichever distance would normally be operated at that this distance at least be doubled while these conditions continue. Therefore, if it would be normal to work within 30-50 feet of the fire, the distance should be increased to 60-100 feet or more.

Finding #2: no coordinator
 - CC 12, Sec. 6, 7401-2017

Radio communications were less than desirable and may have been a contributing factor. The Tractor Boss had a F.S. radio, the lead tractor had none and Tractors 2 and 3 both had DNR radios and the rear safety man had none. Further, the reception on Tractor 3 was not adequate during the fire, warranting the operator of Tractor 3 to dismount and go on foot to talk with the operator of Tractor 2.

The significance of this radio situation is that it may have taken more time to communicate or realize the urgency of the situation by all persons involved.

Recommendation #2:

Provide compatible radios within each firefighting group. This is important where mixing organizational units such as DNR and Forest Service or others. Good communications allows for a prompt and

uniform reaction by all involved. Poor communications does not and warrants an even greater margin of safety to assure the safety of all firefighters.

Finding #3:

There may have been some unique fire behavior factors which occurred relating to a horizontal rollover vortex. However, no one on the team was adequately versed in this phenomenon to evaluate it.

Recommendation #3:

The Forest Supervisor should consider whether or not further evaluation by fire behavioral experts is warranted. We do not anticipate that the other recommendations would be impacted by such an evaluation.

Finding #4:

That Gary Olson, Tractor Boss and Crew Leader for the tractor units, may have averted a more significant occurrence at some risk to himself by going back toward the fire to seek out the missing tractor operator. Once Gary was assured that Tractors 1 and 2 were in the clear, he then went back to recover the third tractor and operator. He then saw the operator, Jeff Noble, running through the trees. Jeff went down, fell or tripped, with his clothing on fire. Gary extinguished a fire from Jeff's clothing and helped him to his feet. Together they then walked to a safe area on Hy. 513 where Jeff was given first aid for his burns and then taken to a hospital by ambulance. Jeff reportedly received second degree burns to 20% of his body with scattered third degree burns. Skin grafting will be warranted.

We find Gary's action to be commendable.

Recommendation #4:

Gary should receive a letter of commendation signed by the Forest Supervisor and commending him for his brave action which may have averted a possible tragedy.

Recommended By:

George McLaughlin
GEORGE MC LAUGHLIN
Team Leader

Date 7/6/83

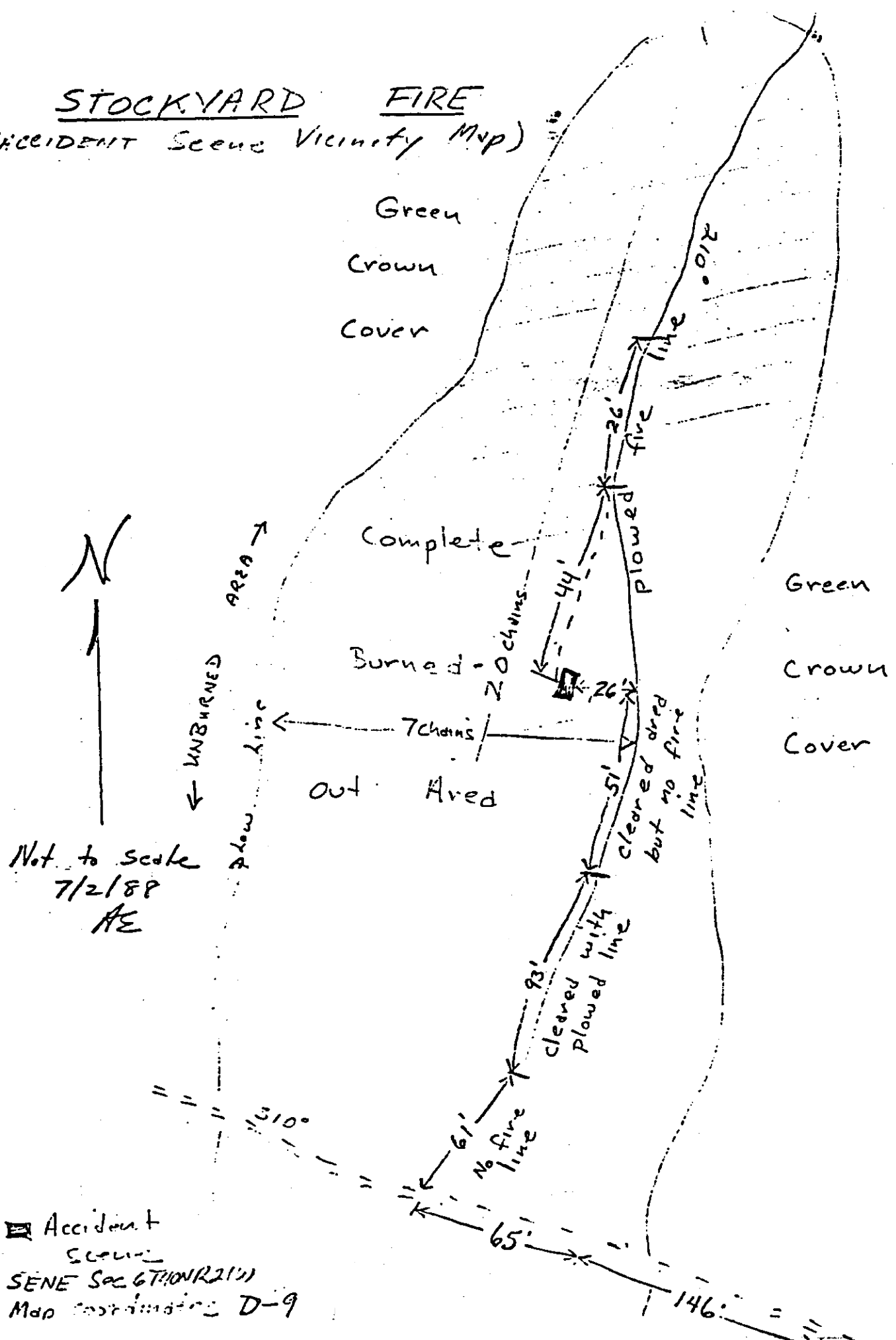
Approved By:

KEN HOLTJE
Forest Supervisor

Date _____

STOCKYARD FIRE

(Accident Scene Vicinity Map)



Not to scale
7/2/88
AE

☐ Accident Scene
SENE SECTION R2121
Map coordinates D-9



United States
Department of
Agriculture

Forest
Service

Hiawatha National Forest
P.O. Box 316
Escanaba, Michigan 49829

Reply to: 5100


Date: July 6, 1988

Subject: Accident Investigation Review

To: District Rangers, S.O. Staff and Ken Holtje

Executive Summary of Accident Investigation Review: The following points are being briefly shared with you in the hope that it may serve to prevent a similar occurrence as we progress through this fire emergency.

1. Allow a greater margin of safety than normal. The fire conditions of extreme drought and the condition of fuels would not be familiar to most of the firefighters as these are record conditions. Whichever distance you would normally operate from the fire edge we ask you to at least double that distance for margin of safety should the unexpected occur.
2. Provide for compatible radio communication. This is important where mixing DNR and Forest Service or other organizational units. Good communications allows for a prompt and uniform reaction by all involved. Poor communications does not, and warrants an even greater margin of safety to insure the safety of all firefighters.


GEORGE McLAUGHLIN
Accident Investigation Team Leader

GM/cd

cc: R.O.
Forest Fire Staff Officer



DEPARTMENT OF NATURAL RESOURCES

W-Stock your time

MONTH	YEAR	DIVISION	UNIT	LOC.	CALL LETTERS	PAGE NO.	TRAFFIC ORIGIN				NATURE OF TRANSMISSION	OPERATOR SIGNATURE
							IN	OUT	IN	OUT		
	83	DNR	frequency I	K.R. Station	15-53							
18:30			Lungqvist	From 1550						Go down Skarvare Lake Road - protect structures		
/										1550 - ? ETA		
/										Keto = Esky Station		
/										Ishemms 53 - Esky St. - Keto plowing line near homes		
/										Kessell = Gwinn 56		
/										1550 - 1553 - look for Esky 53 - Clear - Haven & heard from him in a while.		
/										1553 - Escanaba 56 - Saw Noble 20 min ago on road Gwinn 5? - was behind him - had to make a run for it.		
/										Escanaba 56 - 1550 - tractor plow near you? Yes - Mary 53 will head your way.		
/										Go ahead Escanaba 503?		
/										Escanaba - Gwinn 53 out on main road - no tractor		
/										Escanaba Station - 3134 - Where do you want me		
/										Mary 53 - I'm on the way		
/										1550 - Escanaba 56 - houses south of yard in jeopardy.		
/										Thompson 53 - Thompson 57 - no answer		
/										1550 - 1553 Escanaba 53 disabled - Locate Noble		
/										Stand on 513 - 2 houses going to go.		

NOTE: Do not record calls for two different months on a sheet. Use new sheet at start of each month.

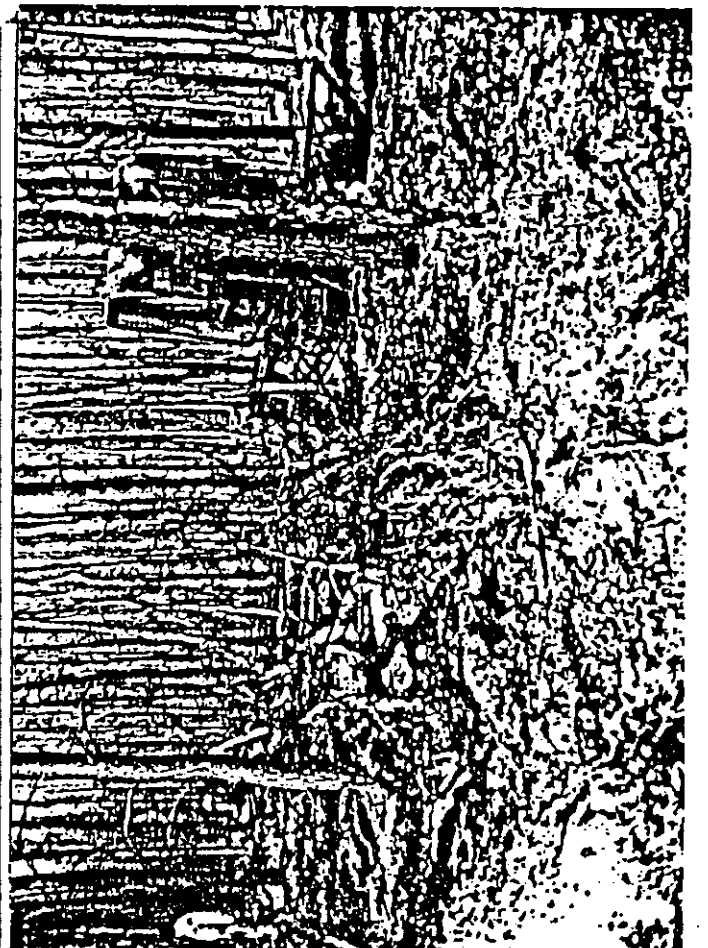
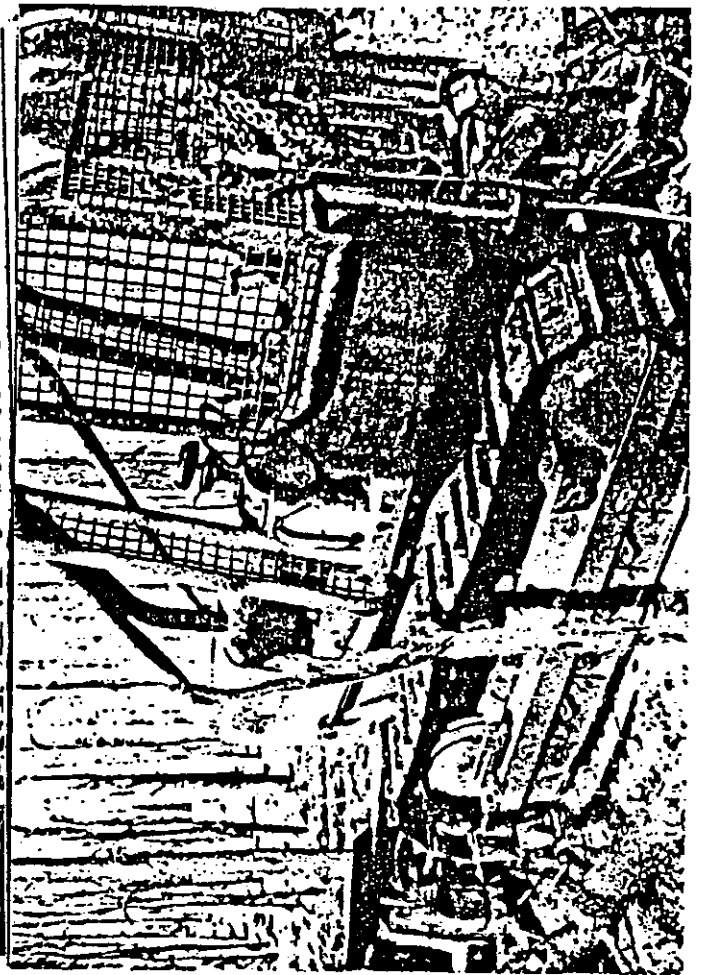
7/11

DEPARTMENT OF NATURAL RESOURCES

MONTH	YEAR	DIVISION		FOR UNIT		CALL LETTERS		NATURE OF TRANSMISSION	OPERATOR SIGNATURE	Page No.
		TRAFFIC ORIGIN	UNIT SERVICE	IN	OUT	IN	OUT			
18:40								Escamaba Station - 3134 - where do you want the 15 numbers to go 350 - News were sent from Escamaba		
/								1553-1550 Noble is with EMT's - is on his way to St. Francis Hospital. Spatter Rice out on road with forest Service Crew - Rice OK		
/								Escamaba Station - 1550 Re: Fire Officer Noble - TX Family list - and digree burns 30-50% of Upper Toriso		
18:50								1550 - Escamaba 56 - There's a trouble got near you - it's obvious		
/								Escamaba Station - 1550 - get message to 15-1 at 20-50		
/								Escamaba Station - 1550 Abulance just left		
8:52								7 - Escamaba 58 Fire just ahead of us near U.S.-2		
/								Escamaba - Escamaba 58 - No Reply		
/								Thompson 53 - Thompson 57 - out on main road Thompson 57 doesn't know where he is - headed out		
/								Thompson 57 - Thompson 53 get Thompson 57 out to news spot		

RADIO

NOTE: Do not record calls for two different months on a sheet. Use new sheet at start of each month.



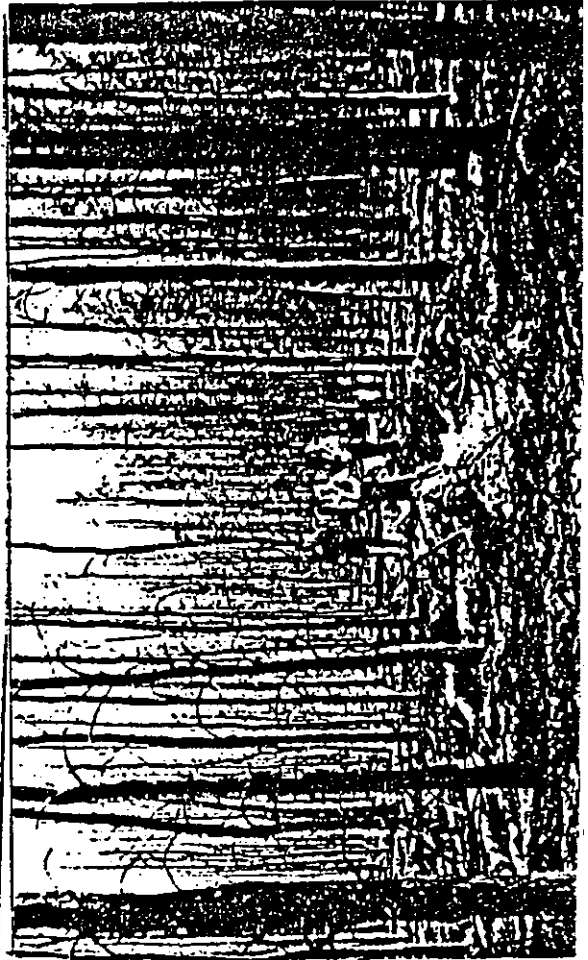
STOCK YARD FIRE 7/1 - 7/5 1988
ACCIDENT INVESTIGATION
TAKEN BY C. NIELER USAF.A.S.

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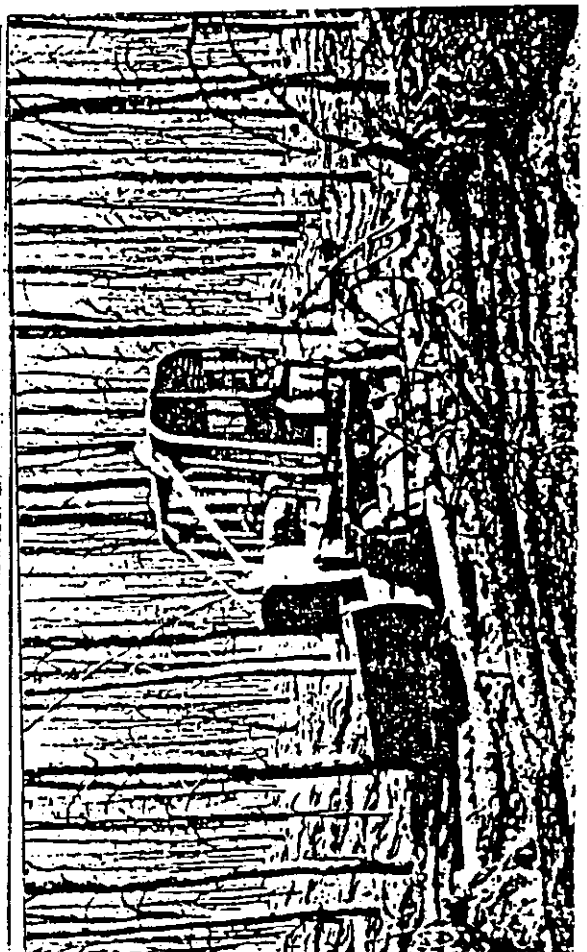
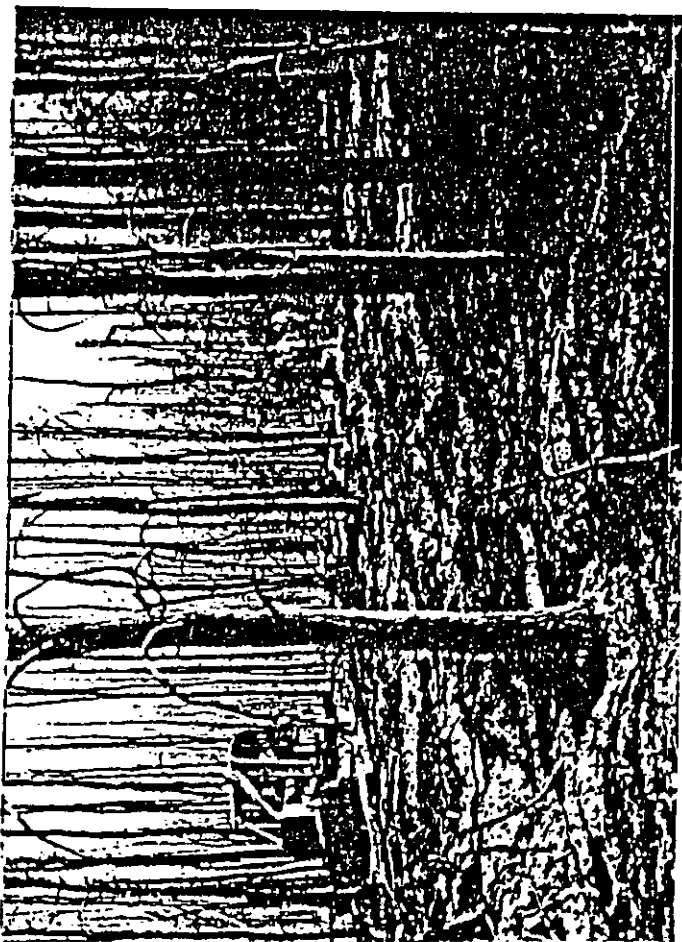


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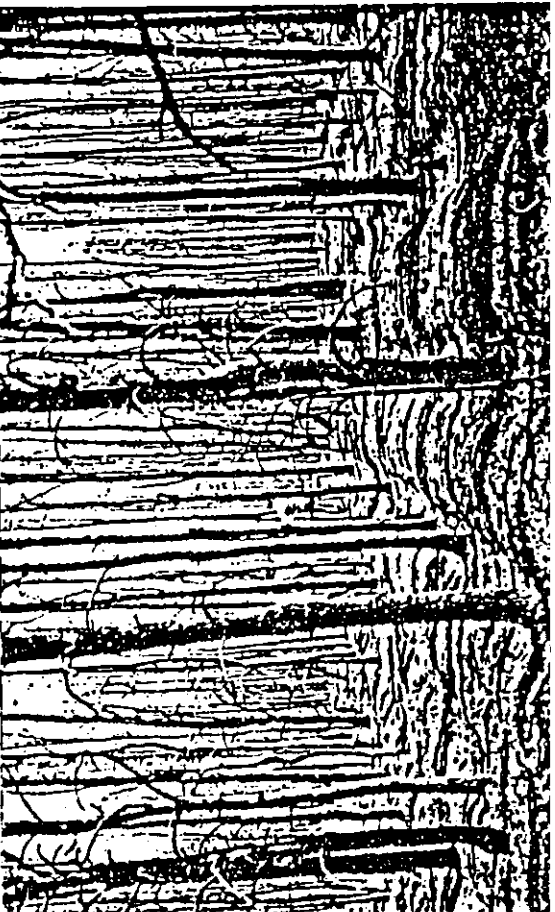
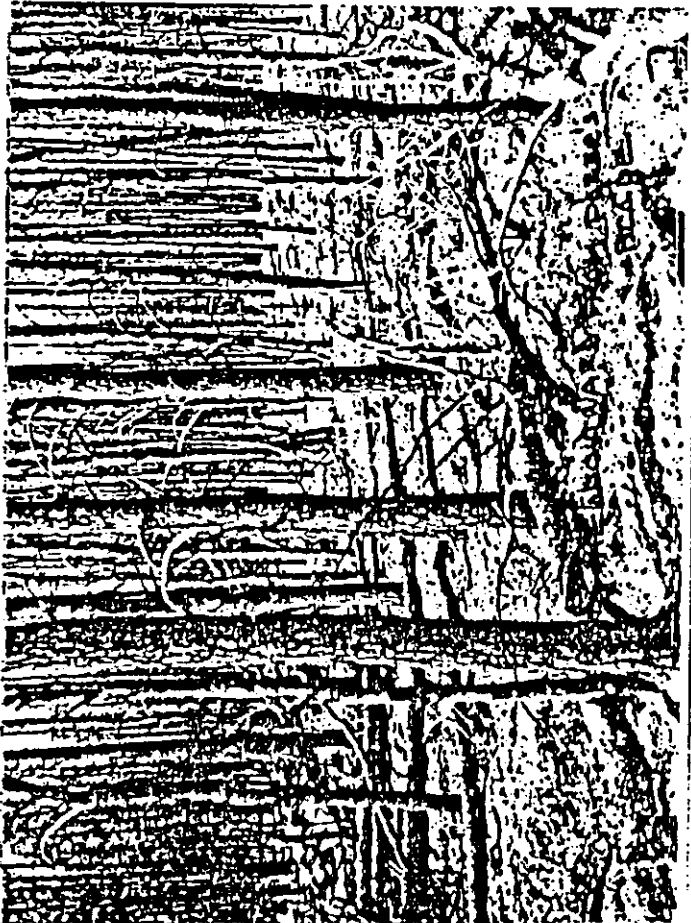
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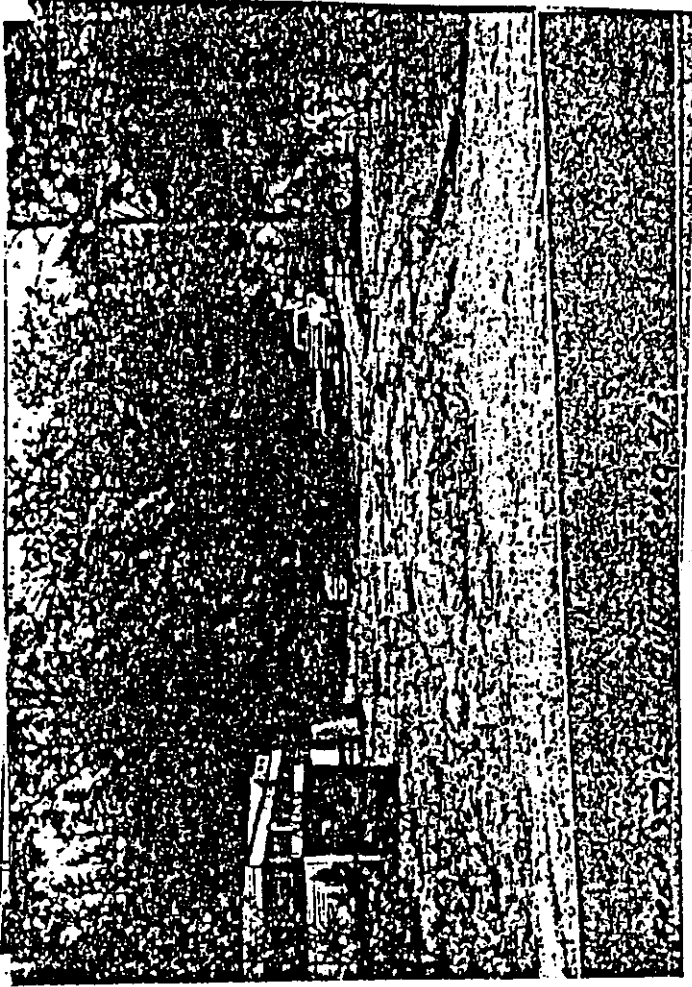


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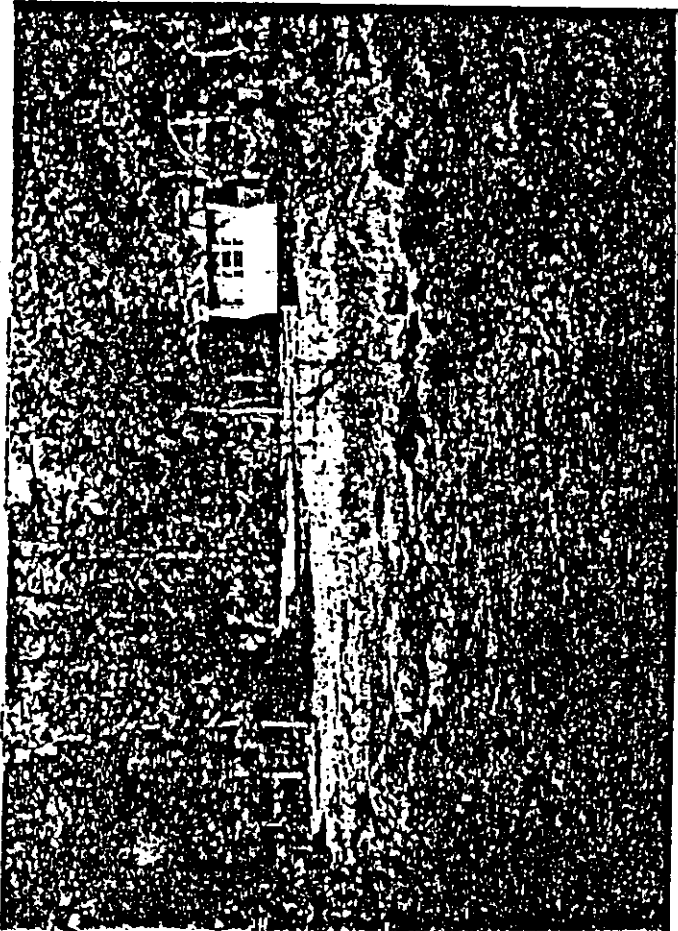


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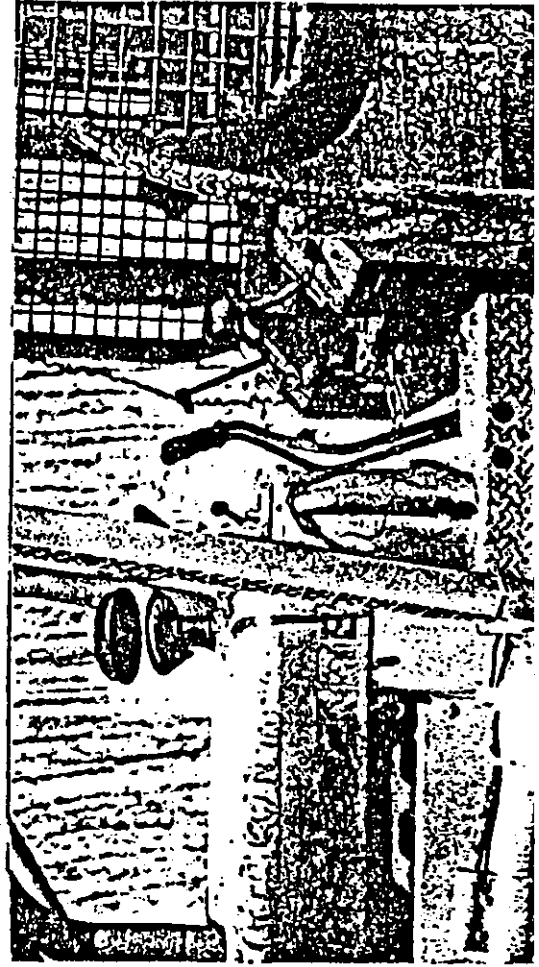
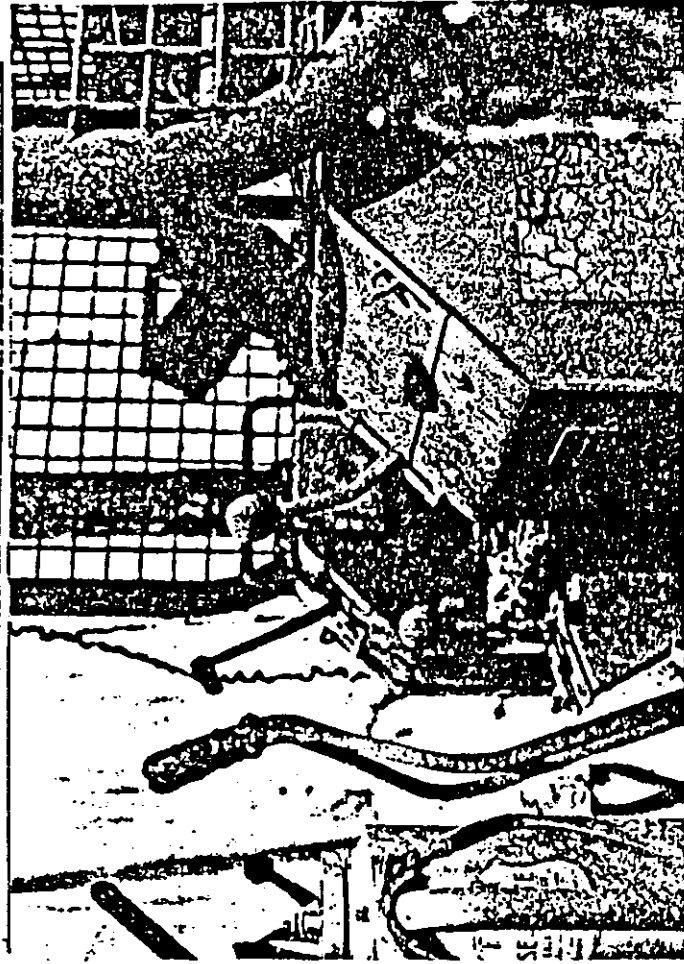
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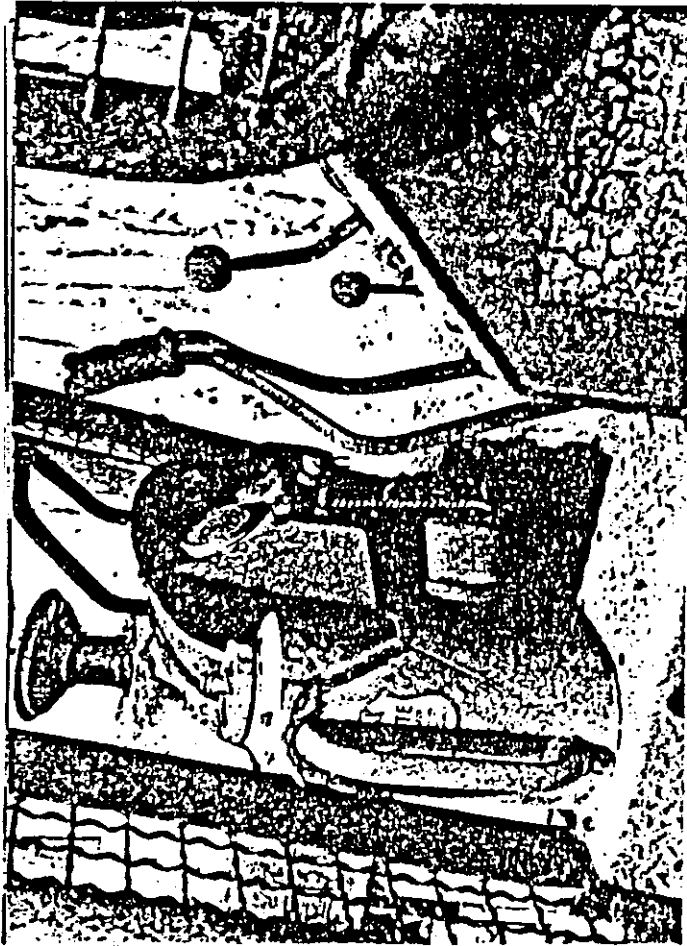


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DOZER DETRALS LEFT SIDE

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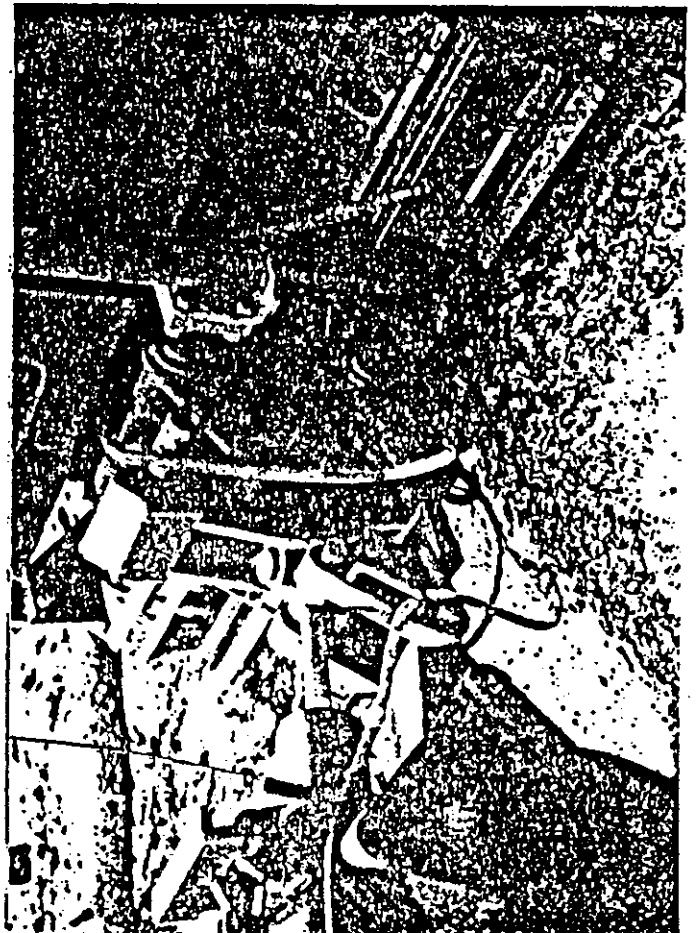
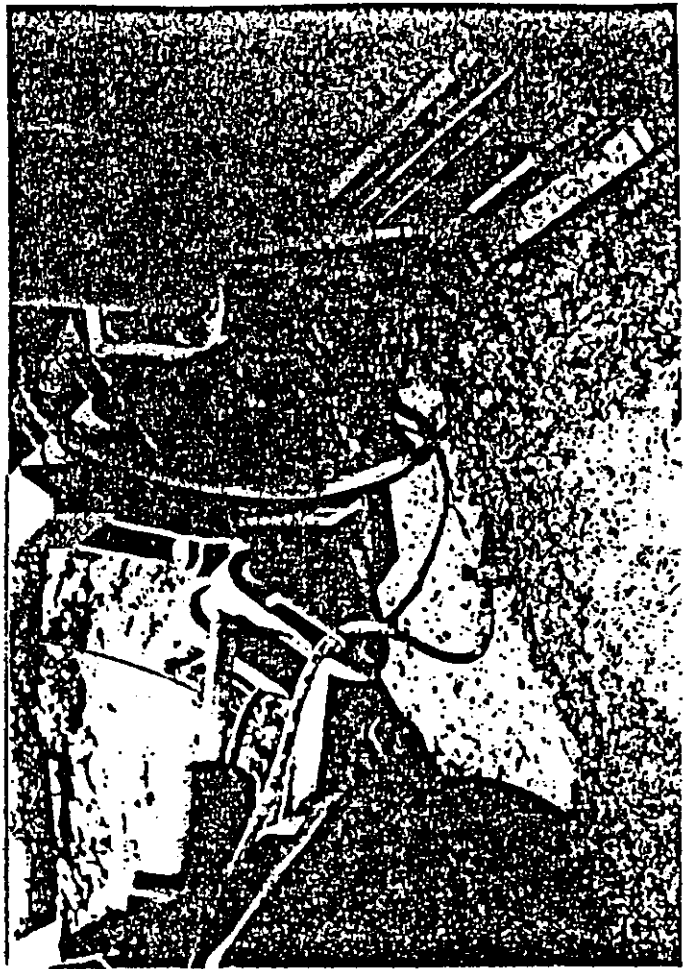
POZER DETAILS: RIGHT SIDE.

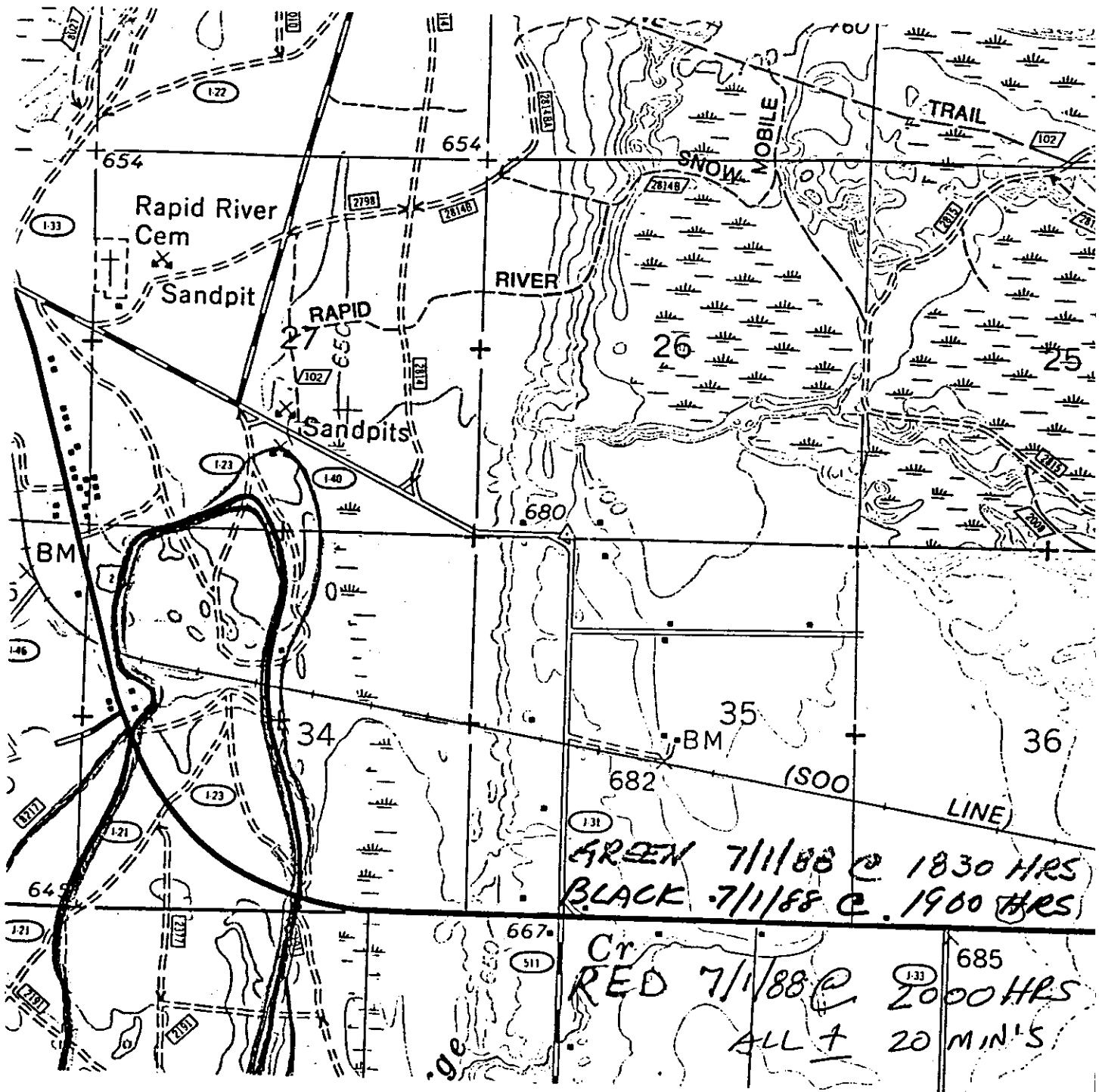
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Rapid River Cem

Sandpit

RAPID

Sandpits

RIVER

SNOW MOBILE TRAIL

GREEN 7/1/88 @ 1830 HRS
BLACK 7/1/88 @ 1900 HRS

Cr
RED 7/1/88 @ 2000 HRS
ALL + 20 MIN'S