Mr. George

30 June 1955

1 cy to Lt Col Weisemann 14 July
5 cys to Lt Col Allen 5 Aug. Ltr 001960

TO: District Engineer
Alaska District
Corps of Engineers, U. S. Army
Anchorage, Alaska

FROM: Morris Plank
Engineering Consultant
Room 207 Citizens Bank Building
Tulsa, Oklahoma

PROGRESS REPORT NO. 2 Period 15 June to 30 June 1955

SUBJECT: Haines-Fairbanks Products Pipeline - Testing and Operating

SUMMARY

1. The writer reports that the early phase of the hydrostatic testing program is progressing without any unusual events. Some suggestions and sample forms are also offered which are designed to assist the future manager of pipe line operations.

ANALYSIS

1. The 8" pipe was filled with water for a distance of approximately 200 miles north from Haines station. The hydrostatic testing program was started by the contractor on 23 June 1955. I have observed a large part of the testing activities north through the Canadian section of the line and wish to report that in my opinion the work is progressing satisfactorily. Several small leaks occurred in flange gaskets and valve lubricating fittings. Several leaks occurred due to splits in laminated sections of the English pipe. We expected to find a few leaky fittings on the valves. We expected to find a few bad joints of pipe in the Canadian section. Therefore we can report the testing progress is normal and generally satisfactory.

2. You will get reports from other members of your staff which will describe the details of pressures, temperatures, leaks, line walking, etc. I have worked with Captain Trimble and Mr. Soliss who are witnessing every detail of the testing activities and are collecting the pertinent data.

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I believe the proper methods are being used and the contract provisions are being met. I have observed some "fumbling" and poor planning on the part of the contractor's crew but all hands are making an effort to get the job done and I think the net results can be classed as generally satisfactory.

3. At this time I wish to express my views on the Haines-Fairbanks Products Pipeline system as a whole. It's a good pipeline. The stations are good stations. I am not too well qualified to judge the quality of the accessories and service equipment but it looks good to me. There are dozens of minor changes that will need to be made to add efficiency and convenience to the operation of the system. However, I see no serious errors in design inspection or installation.

4. I believe some changes will be necessary to simplify the arrangement of the station control instruments. Pulsation dampeners or pressure snubbers are needed to protect the pressure instruments from pump pulsations. Certified measure cans will be needed to properly calibrate the meter prover tank. A sampling sink and cabinet should be provided at each station. The dispatching control board will be needed soon. The yard lines from the tanks to the yard manifold will need to be changed from their present position over the dikes to a new position under the dikes. Several more scraper barrels should be installed in the main line to decrease the length of scraper runs from the present 200 miles to some shorter distance more reasonable. None of these items require urgent action. These, and many other, minor items may need to be revised as operating experience reveals the exact extent of their inefficiency.

5. The contractors have been able to add a number of experienced pump station operating personnel to their working force during the past two weeks. Some new people are now being trained as shift operators. Mr. Tom Nelson has transferred a number of his men to this line for training during the coming period of pressure testing and mechanical testing of the system. Mr. Chas. Wrigley, our instrument engineer from Service Pipe Line Company is now on the job. I understand one or two laboratory technicians from the Quartermaster Corps will be provided soon, with the proper equipment to monitor the interfaces as they travel up the line and insure proper quality control from Haines station to destination.

6. With the writer and Captain Trimble to observe the overall operations, Mr. Wrigley to observe the mechanical control and metering, the Quartermaster people to watch for contamination, we should be able to detect and report any irregularity in operation which may result in damage or loss of product.

7. The writer believes that an operating manual should be designed to fit the specific conditions of the particular pipe line on which it is to be used. The most important part of this manual should be in the form of a series on instruction letters signed by the pipe line Manager and kept in a

book type file for ready reference. Each letter should cover only one subject or one phase of operation. This method provides flexible, convenient means of revision without confusion.

8. I have prepared a number of sample instruction letters which you will find attached hereto. These seven sample letters are clipped together in the order that they would appear in the official instruction letter file. The complete file (Bible) would probably contain more than fifty letters to begin the operation and perhaps require twenty-five more letters during the first year of operation to provide necessary additions and revisions.

RECOMMENDATIONS

1. I recommend that we continue our present program of close inspection of the hydrostatic testing activities and also continue our plans for monitoring the movement of petroleum products when these operations start in the near future.

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