

INTER-OFFICE MEMORANDUM



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TO
AT

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DATE

June 11, 1968

FROM

O. A. Finsand

AT

O. A. Finsand
Middletown Construction

JOB NO.

7100

SUBJECT

KAISER ENGINEERS' WEEKLY FIELD ACTIVITY REPORT

Transmitted herewith is the subject report for the week ending June 11, 1968.

OAF/LM/sec

Distribution

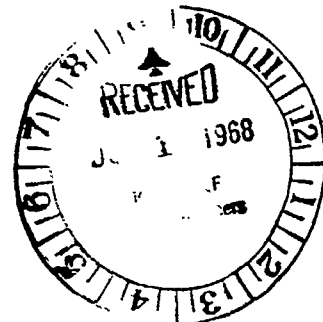
Armco

D. C. Osborne
C. G. Kramer
F. W. Barnes
T. R. Foley
P. R. Smith
D. Cox
J. S. Lotz
R. L. Brannaman

Kaiser

R. J. Wolf (Oakland)
W. F. Bort (Oakland)
D. A. Daly
F. X. Kast
S. Ustel
V. L. Frankson
A. L. Gordon
H. C. Boucher

cc: Central File
Kaiser Reading File
Armco Reading File



KEN 004282

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

WEATHER: Hot and clear.

CLIENT: Armco Steel Corporation

TEMPERATURE: Minimum - 65 degrees
Maximum - 96 degrees

LOCATION: Middletown, Ohio

JOB NUMBER: 6471

JOB VISITORS

None

SUMMARY FORCE REPORT

	<u>Kaiser Engineers</u>		<u>Subcontractors</u>	<u>Foothill</u>	
	<u>Exempt</u>	<u>Non-Exempt</u>		<u>Electric</u>	<u>Total</u>
Management	4	4		1	9
General Supervision	15		17	5	37
Field Engineering	40	15	12	14	81
Warehouse & Mtl. Control	3	6		1	10
Survey	1	13	3		17
Office Service & Repro.	1	5			6
Clerical			13	11	24
Craft *	—	<u>606</u>	<u>756</u>	<u>474</u>	<u>1,836</u>
TOTAL	64	649	801	506	2,020

* Average for week of men on payroll.

Average for week of Crafts is as follows:

Kaiser Engineers 496
Subcontractors 557
Foothill Electric 410

Total Crafts Working 1,463

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

PROJECT PROGRESS

1. 7148 - HOT STRIP MILL

In the hot strip mill, coiling operations were continued on a one shift basis throughout the period with the exception of Sunday, June 9th. During this period, 1,142 coils were processed for a daily average of 190 coils. 10,394 coil tons were recorded for a daily average of 1,732 tons based on six turns during the period. In the furnace area, the #3 induced draft fan unit was reassembled and tested. Because of continued excess vibration and noise, it was taken apart for re-examination. It was found that excess stress in some of the pipelines leading to the turbine unit could have been the cause of the vibration. These stresses are now being relieved and the unit is being reassembled for additional testing. Boil-out of the #1 boiler is continuing to be delayed until this fan is operable. Dry-out of #3 furnace continued throughout the period and is scheduled to be completed on Thursday, June 13th. Furnace #3 was accepted by Armco on June 12th. The refabricated discharge doors have been installed for the three furnaces. Pipe insulation work was completed at furnace #2 and is continuing at furnace #3. #1 furnace was partly operated on fuel oil during the period. Ironworkers completed the platform requirements in the downcoiler area and are now working on additional ladder requirements in this area. The dry scale skip hoist repair work was completed. Pipefitters completed the pump installation and remaining piping for the #5 dewatering well. This unit is scheduled for test operations next period. In bag houses, new vacuum breakers are on order and will be installed on the steam outlet piping in order to prevent a vacuum condition at the coils. It was necessary to remove some sections of siding in the upper portion of the waste heat boiler building in order to release excess heat accumulated in the area. Temperatures reached 140 degrees in this area during the hot weather. Louvers are on order to install in openings. Foothill Electric maintained an average work force of forty-five men in the hot strip mill during the period.

2. 7146 - SLAB MILL

- 2.1 Excavation and Backfill: 700 cubic yards of backfill was made on the east side of the slab mill between the crop conveyor and column 2.5.
- 2.3 Structural and Miscellaneous Steel: An average work force of nine ironworkers continued with miscellaneous iron in the slab mill. During the period, progress was continued on handrails and platforms in the main mill aisle. At the fume eliminator, siding is now 90% complete.

4-

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

- 2.5 Heating and Ventilating: Wiring for the main office area heating and ventilating system was completed this period and charging of the unit is scheduled for next period. #1 bag house was completed and is now ready for check-out and bag installation. Bag house #2 is complete and ready for operations. The other three bag houses are now operating.
- 2.6 Mechanical: Eichleay Corporation maintained an average work force of twenty-five men on remaining mechanical installation and start-up support work. At the main mill, uncoupled tests were performed for both horizontal mill drive motors. Chock blocks and ventilation covers are being installed on the vertical mill motor. Uncoupled tests are scheduled for this motor next period. In the main mill aisle, all roll tables have been operated. Insufficient clearances were noted at tables 12 through 15 and adjustments are now being made. All other tables appear in satisfactory condition. Uncoupled tests were completed on the manipulator side guides and #1 and 2 piler. Coupled tests were made on the crop pusher, manipulator finger lift and the pump controls for hydraulic system #1.
- 2.7 Piping: Hunter Corporation maintained an average work force of sixty-one men on slab mill piping systems. Major piping systems worked on during the period were: plant air, natural gas, steam, scarfer water, slab mill air, hydraulic system 1 and bulk grease. 2,361 feet of piping was installed for a total to date of 46,904 feet. A corrected total of 6,288 feet remain to be installed. Piping for the scarfer system is now 75% complete. Linde Company's representative is scheduled to arrive at the job site next period to conduct the check-out and completion of the scarfer unit. Instrumentation work in the scale pit pump room is now 90% complete. The grease header pipe has been completed and filled with grease.
- 2.8 Electrical: Foothill Electric Corporation maintained an average work force of one hundred and fifty-one electricians in the slab mill. 4,266 lbs. of exposed conduit was installed for a total to date of 222,242 lbs. or 97% complete. 41 lbs. of structure grounding was installed for a total to date of 33,847 lbs. or 84% complete. 2,700 feet of low voltage cable was installed for a total to date of 484,000 feet or 99% complete. 4 low voltage terminations were made for a total to date of 228,700 feet or 97% complete. 48 control cable terminations were made for a total to date of 9,048 or 90% complete. 3,153 lbs. of lighting conduit, 5,044 feet of lighting wire and 70 fixtures were installed.
3. 7143 - SOAKING PITS
- 3.3 Structural and Miscellaneous Steel: During the period, a crew of ironworkers continued with installation of the windbreak screen at the skip hoist structure. This unit is now 75% complete.

KEN 004285

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

- 3.6 Mechanical: Loftus Engineering maintained an average work force of one hundred and twenty-one men on battery installation. Battery 6 is now ready for dry-out. Painting and pipe insulation is in progress at batteries 4 and 5. At battery 3, the final refractory lining was completed. Refractory lining was continued in battery 2 which is now 75% complete. Remaining electrical conduit and wire pulling was concentrated in the battery 1 through 3 area during the period. The skip hoist and belt conveyor was operated in the presence of the manufacturer's representative and it was noted that some adjustments will be required on the cable travel. The hoist for the recuperator together with the battery room hoist relocation was completed this period.
- 3.7 Piping: The grease header is now complete and charged with grease to the soaking pit area. The soaking pit header is expected to be charging next period. Ventilation piping for the burning stations was completed. Pressure testing was completed in all piping systems except the oxygen line. Leaking ball valves are delaying this pressure test. Toilets are now in operation with temporary water. Pipe installation is essentially completed for the soaking pits.
- 3.8 Electrical: Foothill Electric Corporation maintained an average work force of seventy-eight electricians in the soaking pits during the period. 1,565 lbs. of exposed conduit was installed for a total to date of 124,280 lbs. or 88% complete. 1,769 lbs. of lighting conduit, 7,280 feet of lighting wire and nine fixtures were installed. 160 feet of low voltage cable was installed for a total to date of 45,275 feet or 84% complete. 3 low voltage terminations were made for a total to date of 362 or 89% complete. 578 lbs. of structure grounding was installed for a total to date of 6,775 lbs. or 67% complete. 800 feet of communication wire was installed and 18 terminations were made. 1,700 feet of welding and utility feeders was installed for a total to date of 12,570 feet or 48% complete. 24 welding and utility feeder terminations were made for a total to date of 24 or 10% complete.
4. 7128 - BASIC OXYGEN FACILITY
- 4.1 Excavation and Backfill: 3,391 cubic yards of backfill was completed for a total to date of 262,484 cubic yards. Backfill included storm sewer from manhole #728 to 800, underground conduit and areas both inside and outside the electrical control room.
- 4.2 Concrete: 703 cubic yards of concrete was placed during the period for a total to date of 23,156 cubic yards. This concrete included the cooling tower base slab, operating floor from column 25.5 to 27, the service floor from column 26 to 27 and various underground conduit and fill concrete. Carpenters and rebar men are limiting concrete placement.

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

- 4.3 Structural and Miscellaneous Steel: The welding of the bins has now been completed and welding of the liner plates continued during the period with approximately three weeks work remaining on the liner plates. Checkered plate flooring was being welded on the flux load-in floor.
- 4.6 Mechanical: Combustion Engineering continued assembly of the #1 and 2 gas coolers. Progress during the period included the welding of #1 gas cooler sections at elevation 200. Fitting and welding of the skirt frame continued on unit #1. The doors for unit #1 was erected and fitted. At unit #2, fitting and welding of the pressure seals continued on the upper section.
- 4.7 Piping: A total of 584 feet of piping was installed at the B.O.F. during the period. Progress continued on the roof drains at H line with 78 feet installed during the period. Natural gas piping was being installed between columns 19.5 and 21.5 on H line with 80 feet installed during the period. Service piping continued outside the B.O.F. building. Plumbing was completed to toilet room #3 and the water fountain stub-ups are complete to column 17. Pipe supports were being installed on H line and D line between column 17 and 27.
- 4.8 Electrical: Foothill Electric continued installation of the underground conduit in the electrical control room and in the pump building enclosure and slurry area. Electrical work continued on cranes 506 and 507 together with embedded conduit at column 22 for crane 503. Distribution panels were being wired on the operating floor and high bay hangers and brackets and conduits were being installed in the service, teeming and maintenance areas. Foothill Electric installed 428 lbs. of structure grounding for a total to date of 6,519 lbs. or 54% complete. 24,476 lbs. of embedded conduit was installed for a total to date of 349,740 lbs. or 76% complete. 91 feet of crane feeder bus was installed for a total to date of 125 feet or 9% complete.
- 4.9 Miscellaneous Subcontracts: Chicago Bridge and Iron continued assembly of the B.O.F. furnaces during the period. Welding of the furnace #1 seams is virtually completed including the lip ring, brick retainers and repairs to two seams. The #1 trunnion is completely welded and grinding and cleaning of welds is in progress. Welding has been started on the vertical seams on the base and side walls for the #2 furnace. Preheaters are now being installed at #2 trunnion. At the lab and office building, McGraw Construction Company continued with restricted progress due to the labor disputes. Three lighting panels and two transformers are now on site. All subfloor duct has been placed.

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

Otis Elevator continued with the installation of the counterweight guides for the freight elevator.

Stuart Painting continued progress on the structural steel along H line and on the columns on E line from column 23 westward.

5. 7150, 7156 and 7159 - PICKLE AREA

- 5.1 Excavation and Backfill: Backfill at various areas on #5 pickle line was continued during the period.
- 5.2 Concrete: 108 cubic yards of concrete was placed on pickle line #4 during the period for a total to date of 14,533 cubic yards. This concrete included the floor slab between columns 35 and 37 and the #4 acid waste disposal foundation. 135 cubic yards of concrete was placed at pickle line #5 during the period for a total to date of 7,745 cubic yards. This concrete included encased conduit between columns 16 and 17 and 19 and 21 and at #5 pickle line south lean-to between columns 30 and 32.
- 5.4 Roofing and Siding: During the period, 2,440 square feet of siding was installed along H line and across column line 48 in the pickled coil storage building.
- 5.6 Mechanical: The only activity by Ohio Valley Riggers during the period was work on miscellaneous items on the pickle tank structure.
- 5.7 Piping: Delta Pipeline Constructors continued installation of the service piping along F line and at the #4 pickle tanks. 1,060 feet of piping was installed during the period for a total to date of 14,610 feet. Steam and water piping was installed along the #1 pickle tanks. Prefabrication continued on the various sections of pipe in preparation for the steam header installation. KE pipefitters will now install the extra pipe support steel required for the steam line installation.
- 5.8 Electrical: In the green coil storage building, the intercommunication station has been installed on B line. Remaining work includes the completion of the crane intercommunication system. In the pickle lines, Lake Erie Electric continued with terminations on the welder stations on G line. Conduit runs to the welder stations in the maintenance aisle are presently being installed. Installation of equipment in the #4 delivery motor room was started on June 7th with motor control centers and control panels being moved into position. Conduit grounding in this delivery motor room is presently in progress. In the pickled coil storage building, electrical installation is virtually complete for crane 407 apart from the magnet cables and final check-out. Cable terminations are being made on crane 406 and installation of the collector rail is now 85% complete.

WEEKLY FIELD ACTIVITY REPORT
Week Ending June 11, 1968

6. 7160 - COLD MILL

During the period, 2,296 cubic yards of excavation was completed for a total to date of 137,753 cubic yards. 536 cubic yards of backfill was completed for a total to date of 4,255 cubic yards. Installation of the subdrainage piping was completed on June 6th. Setting of electrical conduit continued between columns 30 and 34 on L line with approximately 11,000 lbs. of conduit installed to date. No forming or rebar was done this period because of craft absence.

7. 7186 - WASTE DISPOSAL FOR THE PICKLE FACILITY

During the period, 56 cubic yards of concrete was placed for a total to date of 3,435 cubic yards. This concrete was for conduit encasement. A total of 185 feet of piping was installed during the period together with the fabrication and installation of pipe supports. Piping installed included 61 feet of floor drain, 32 feet of clarified water, 52 feet of well water and 40 feet of steam piping. Erection of the storage room at the 107 foot elevation was started during the period.

8. UTILITIES

7110 - Power Distribution: Installation of circuit number and phase identification signs on the 13.8 KV and 132 KV towers was started on June 6th.

7112 - Drainage and Site Development: 15,772 cubic yards of excavation was completed for a total to date of 845,442 cubic yards. 5,073 cubic yards of backfill was placed for a total to date of 1,081,602 cubic yards. Westinghouse Electric continued with cable trenching on circuit #5 near the mold prep building. Circuit 6 is complete apart from the power supply from the soaking pits. Trenching was started on circuit 3 during the period.

OAF/lm/sec

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