

UMAT  
2586

Application No. U-349  
Permit No. U-324  
Well No. Hinkle #1

4 1/2 28-27 J1  
27 dac

REPORT ON COMPLETION OF WELL

RECEIVED

SEP 1 1950

STATE ENGINEER  
SALEM, OREGON

(Note: This report should be submitted to the State Engineer, Salem, Oregon, as soon as possible after the well is completed. If more than one well is covered by this permit, a separate report shall be filed for each)

Date of Report July 28, 1950

1. Location of well: NE 1/4 SE 1/4 of Section 27 Twp. 4N Rge. 28E, W.M.
2. Name of nearest natural surface stream Umatilla River
3. Distance from well to that stream: 1500 feet.
4. If the well is less than 1300 feet from a natural surface stream, give the difference in elevation between the ground surface at the well and the lowest point in stream channel: 110 feet.
5. Date of beginning drilling or digging January 15, 1950.
6. Date well was completed June 21, 1950.

LOG OF MATERIALS ENCOUNTERED

Character of Material	Depth at which encountered	Thickness of stratum
Silty Sand	At surface	31 ft.
Gravel & Sand	31 ft.	124 ft.
Blue Clay & Broken Rock	155 ft.	45 ft.
Gray Clay	200 ft.	20 ft.
Green Gumbo	220 ft.	25 ft.
Basalt	245 ft.	173 ft.
Blue Shale	418 ft.	5 ft.
Basalt	423 ft.	124 ft.

Remarks: See RE Dwg. No. 533 - Log of Well

WELL INFORMATION

8. Diameter of well 16" & 12 1/2" inches. Depth of well 547 feet.
9. Depth at which water was first encountered 147 feet.
10. Water level when completed: 155 feet below ground surface.
11. Additional information regarding well; such as soil conditions, quick sand, caves, obstructions, rock, etc.: Necessary to carry 20" surface pipe to depth of 264 feet during drilling operations in order to hold caving sand and gravels.

PUMP INFORMATION

12. Manufacturer of pump: Fairbanks Morse Co.
13. Address: Chicago, Illinois
14. Data on name or base plate: Serial No. PL 4156
15. Data on pump bowl assembly: None
16. Size of pump: 8 inch
17. Rated capacity: 600 gallons per minute.
18. Rated speed: 1750 revolutions per minute.
19. Number of stages: 7
20. Size of intake pipe; 8 inch

- 21. Size of discharge pipe: 8 inch
- 22. Length of intake pipe: 216 Feet
- 23. Length of discharge pipe: 205 Feet
- 24. Suction lift: (difference in elevation between water surface in well and pump) 155 feet
- 25. Discharge lift: (difference in elevation between pump and end of discharge line) 72 feet
- 26. Depth of pump intake below ground surface: 216 feet.
- 27. Remarks: See RE Dwg. 533 - Pump details

MOTOR OR ENGINE INFORMATION

- 28. Name of manufacturer: Fairbanks-Morse Company
- 29. Address: Chicago, Illinois
- 30. Type of motor or engine: Electric Induction Motor
- 31. Data on name or base plate: 50 HP, 3 Phase, 60 Cycle, 440 Volt, 61 Amp, Type OZKV, Frame 2005 PV, Serial No. 589560, BM No. H6L1088A1 SO No. PL 4156
- 32. Rated horsepower: 50
- 33. Rated speed of motor or engine: 1750 revolutions per minute.
- 34. Rated Capacity of Pump (with described motor) - 600 g.p.m.
- 35. Remarks: Motor is direct connected to pump bowls by means of an oil lubricated drive shaft.

CAPACITY TEST

- 36. Date of test: May 6, 1950
- 37. Temperature of water      °F. or      °C.
- 38. Motor speed during test: 1750 RPM
- 39. Test made by (weir, tank or other means): orifice with free discharge.
- 40. Total lift                      Gallons                      °Feet to                      Draw-  
     in feet                      per min.                      water level                      down
- 165 ft.                      1000                      163 ft.                      7 ft.
- 165 ft.                      1150                      163 ft.                      10 ft.
- 41. Installation will work efficiently under normal head of 275 ft.
- 42. Water is discharged into: 350,000 gallon elevated water tank.
- 43. Was water lowered to pump intake by test? No
- 44. Remarks: Well pumped at 1000 GPM for 6 hrs. 20 min. well pumped at 1150 GPM for 1 hr. 5 min.

GENERAL INFORMATION

- 45. Name of contractor or other party who drilled or dug well: A.A. Durand & Son  
 Address: Walla Walla, Wash.

- 46. Pump and motor were installed by: Union Pacific Railroad Company
- 47. Capacity test was made by: Union Pacific Railroad Company
- 48. General Remarks: Chemical analysis of water reveals safe for drinking and domestic use and satisfactory for use in boilers. Total incrusting solids 6.31 g.p.g. Total non-incrusting solids 7.10 g.p.g.

Report Made By:



General Manager

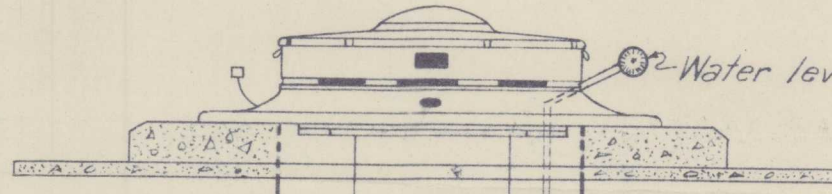
OREGON-WASHINGTON RAILROAD & NAVIGATION  
COMPANY-UNION PACIFIC RAILROAD COMPANY



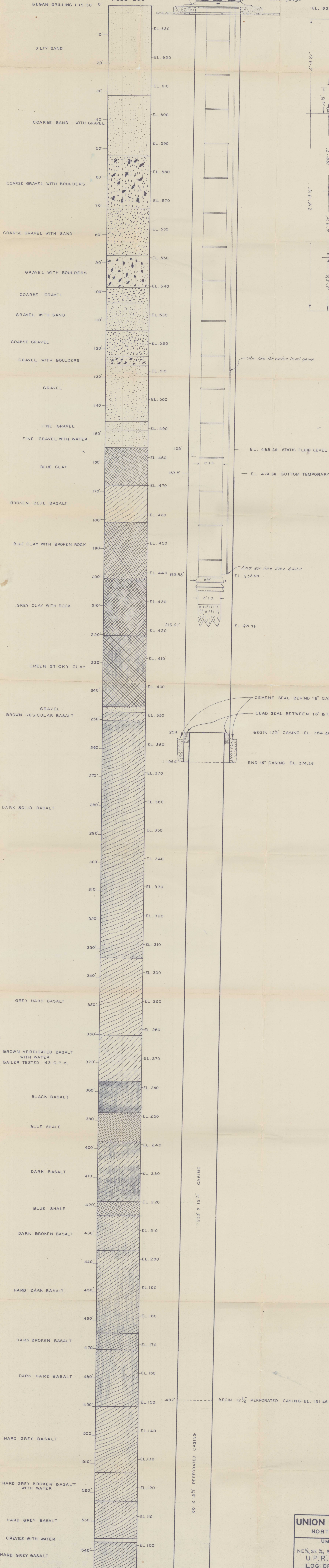
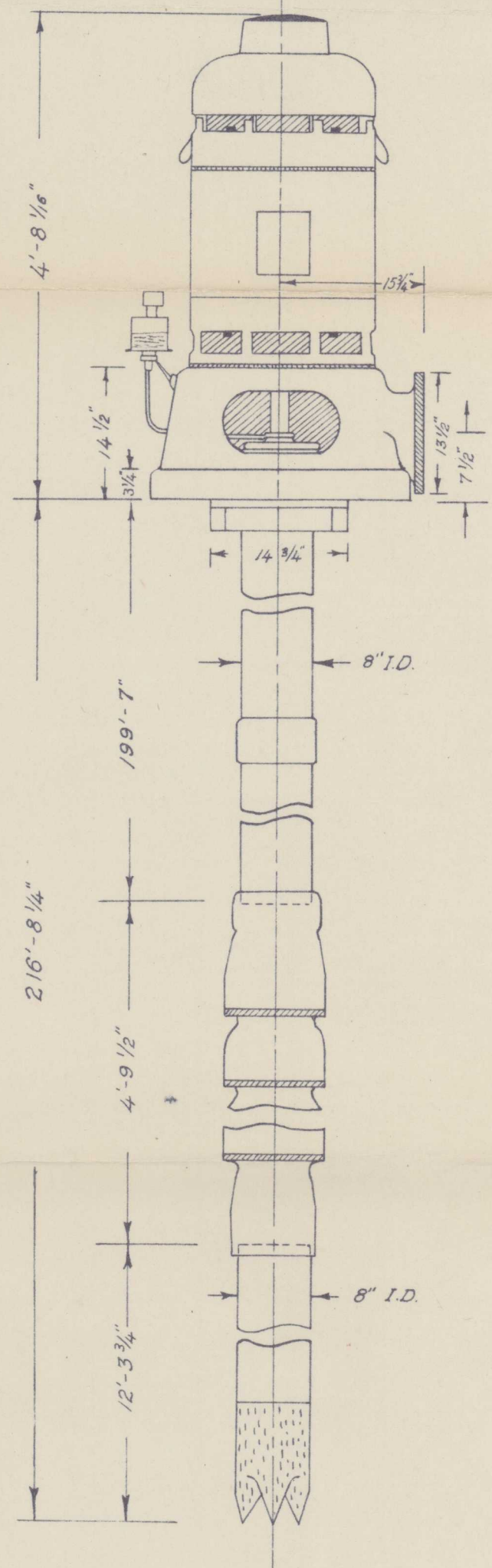
Fairbanks, Morse & Co.  
POMONA PUMP

7 STAGE  
10" L.C. FIG. 6972 TURBINE PUMP WITH 8" COLUMN.  
MOTOR TYPE F.M. - Q.Z.K.V.  
50 HORSE POWER, 440 VOLT, 3 PHASE, 60 CYCLE, 61 AMP.  
PUMP SPEED 1750 R.P.M.  
MOTOR FRAME 2005 P.V.

WELL LOG



EL. 638.46, BEGIN 16" CASING



Air line for water level gauge

End air line Elev. 440.0  
EL. 438.88

CEMENT SEAL BEHIND 16" CASING  
LEAD SEAL BETWEEN 16" & 12 1/2" CASINGS

BEGIN 12 1/2" CASING EL. 384.46

END 16" CASING EL. 374.46

BEGIN 12 1/2" PERFORATED CASING EL. 151.46

END 12 1/2" PERFORATED CASING

RECEIVED  
SEP 1 1950  
STATE ENGINEER  
SALEM, OREGON

**UNION PACIFIC RAILROAD CO.**  
NORTHWESTERN DISTRICT

UMATILLA COUNTY, OREGON.  
HINKLE, OREGON.  
NE 1/4, SE 1/4, SECTION 27. T. 4 N. R. 28 E. W. M.  
U.P.R.R. Co. WATER WELL No. 1.  
LOG OF WELL & PUMP DETAILS

OFFICE OF RESIDENT ENGINEER  
HERMISTON, OREGON.

SCALE: VER. 1" = 10'  
DATE: JUNE 24, 1950.

FIELD NOTES W.N.S.  
DRAWN E.B.J.  
CHECKED R.M.B.

R.E. DRWG. No. 533

PUMPED 1000 G.P.M. DRAW DOWN 7 FT. MAY 6, 1950.  
PUMPED 1150 G.P.M. DRAW DOWN 10 FT. MAY 6, 1950.