

## INTER-OFFICE MEMORANDUM

SUBJECT: Summary of Fish Lake 88-11 Temperature and Pressure Surveys, Fish Lake Project, Esmeralda County, Nevada (4868A)      DATE: July 6, 1984  
cc: W. M. Dolan  
H. D. Pilkington

TO: H. J. Olson

FROM: J. E. Deymonaz

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Date

5/2/84      Time-Temp Survey at 4319 ft. Tool on bottom for 6 hrs., max. Kuster temp 296.6°F, MRT's 280, 280, 280, 280°F. Projected equilibration temp 361°F.

5/12/84      Time-Temp Survey at 6147 ft. Tool on bottom for 6 hrs., max. Kuster temp 186.7°F, Projected equilibration temp. at 6147 ft. 365-368°F (Crosby method) and 405°F (Roux et al method).

6/1/84      Pressure Profile (Run 01) Stations to 5000 ft., fluid level at 500 ft.

6/3/84      Pressure Profile (Run 02) run with temp traverse (Run 03). Fluid level at 1750 ft. Run after unloading hole with N<sub>2</sub> and self flow. Flow had decreased after unloading from open section of hole. Unable to get tool past 7435 ft.

6/3/84      Pressure Hang (Run 2A) run at end of pressure profile Run 02, hang at 7435 for 2 hr. Fluid level at approx. 1750 ft. at start of survey. Level increased 180 ft/hr. while on bottom to 1375 ft. at end of survey.

6/3/84      Temp Survey (Run 03) with stops at 800, 1060, 2000, 3000, 4000, 5820, 6820, and 7435 ft. Run with pressure survey (Run 02) max. Kuster temp. 342°F, MRT's 340, 343, 344°F.

6/3/84      Temp Hang (Run 3A) at 7435 with pressure tool (Run 2A)

NOTE:      7" slotted liner run 6/6/84.

6/9/84 Temp. Traverse (Run 01) run after unloading hole with N<sub>2</sub> for approx. 2 1/2 days. Max Kuster temp 364.4°F, MRT's 364.5, 366, 366°F.

6/9/84 Pressure Profile (Run 1A) run with temp run 01. Fluid level at 350 ft.

6/11/84 Temp Traverse (Run 02) run 20 ft/min. 700'-1200', 50 ft/min. 1200'-6500', and 20 ft/min 6500'-8100'. Survey after unloading hole with N<sub>2</sub> since 6/7/84 and unable to maintain self-flow. Survey just prior to pumping approx. 1000 bbl fresh water down hole. Max. Kuster temp 364.7°F, MRT's 367.5, 368, 368, 368°F.

6/11/84 Pressure Profile (Run 2A) run with temp. run 02. Fluid level at 375 ft.

6/11/84 Temp. Traverse (Run 03) run 20 ft/min. 700'-2740' just after pumping approx. 1000 bbl fresh water down hole.

NOTE: 7" slotted liner perforated 6/4/84.

NOTE: Well flowing with no assist 6/16/84 thru 6/21/84.

6/21-22/84 Temp. Traverse (Run 04) run 20 ft/min 700'-1700', 15 min. stops at 3000, 4000, and 5000 ft., 50 ft/min. 6000'-8000'. Start run 1-2 hr after shutting in well. Max. Kuster temp. 364.4°F, MRT's 386, 387, 387, 388°F.

6/21-22/84 Pressure Profile (Run 4A) run with temp. survey 04. Fluid level at 350 ft.

6/22/84 Temp. Traverse (Run 05) run 20 ft/min. 240'-700' and 6000-8100'. Max. Kuster temp. 359.9°F, MRT's 362, 363, 363°F.

6/22/84 Pressure Profile (Run 5A) run with temp. survey 05. Fluid level at 250 ft.