

6107338-5

INTEROFFICE CORRESPONDENCE

date September 28, 1979
 to RRFO Manager
 from Test Planning and Coordination
 subject ADDENDUM TO FET-7-79 - RRGE-1 PRODUCTION TEST TO RRG-6 and RRG-7
 INJECTION TEST - FET-14-79: PULSE TESTING CHECKOUT AT RRG-6 AND
 RRG-7

Approved by:

Reservoir Eng. _____ Date _____
 Drilling Eng. _____ Date _____
 Design Eng. _____ Date _____
 Environmental Eng. _____ Date _____
 RRFO Eng. _____ Date _____
 Safety Eng. _____ Date _____
 Chemistry Eng. _____ Date _____
 Test Planning & Coord. _____ Date _____
 Quality Review Only _____ Date _____

Authorized for Release

 G. M. Millar Date

REV.	RELEASE DATE

1.0 PURPOSE OF TEST

This is an addendum to FET-7-79. The purpose is to determine maximum pump/injection rates due to existing pump characteristics.

2.0 RESPONSIBILITIES

- 2.1 Raft River Operations will have overall responsibility for conducting the test gathering, operational data; retrieving and transmitting data, installing hardware/instrumentation, and overall project safety. Manager, RRFO or his assigned designate, will have responsibility for signoffs on this procedure.
- 2.2 Engineering will have responsibility for design and material procurement for permanent lines and instrumentation.
- 2.3 Reservoir Engineering will have responsibility for data analysis and reporting for hydrologic and thermal data.
- 2.4 Test Planning & Coordination (T&C) will have responsibility for test plans, scheduling, construction contracts, and test coordination.

3.0 REFERENCES: FET-7-79, RRG-1 production to RRG-6 and RRG-7 injection.

4.0 SAFETY

- 4.1 All personnel operating experiments at Raft River will be under the cognizance of the Raft River Field Operations Manager and subject to written site operating rules.
- 4.2 Any experiment or experimental procedure deemed unsafe will be shut down by the Raft River Field Operations Manager, the Raft River Experiment Coordinator or the Safety Division representative.
- 4.3 Raft River Field Operations is responsible for all site safety. Any unsafe condition developing through the operation of an experiment shall be reported immediately to the Manager of Raft River Operations.
- 4.4 Safety Manual uses required:
 - 4.4.1 Hazardous Material Safety No. 6020.
 - 4.4.2 Material Handling Safety No. 6030.
 - 4.4.3 Electrical Safety No. 6040.
 - 4.4.4 High/Pressure/Temperature System Safety No. 6060.
 - 4.4.5 General Protective Clothing and Equipment No. 6070.
 - 4.4.6 Fire Protection Systems No. 7030.
- 4.5 Reference: Geothermal Well Re-Entry, SHA-22-79 by C. R. Shaber, dated 8-29-79, is to be adhered to.

5.0 MATERIAL & EQUIPMENT

- 5.1 Flow orifice for FE-7-10. Size as directed by engineering.
- 5.2 Flow recorder compatible with item 5.1.

6.0 PREREQUISITES

- 6.1 All prerequisites for RRGE-1 to RRG1-7 pulse test, FET-7-79.
- 6.2 Orifice and flow recorders installed and working properly at FE-7-10.
- 6.3 Perform or check valve lineup per Table 1A, FET-7-79.
- 6.4 Ensure all specified data for the RRGE-1 to RRG1-7 pulse test is taken for the 7.0 Section.

EXCEPTION: Take wellhead pressure at RRG1-7 every minute of Section 7.2 and 7.3.

7.0 PROCEDURE

- _____ 7.1 Start pumps at RRGE-1 and RRG1-7 per engineering direction.
- _____ 7.2 Inject at 1000 GPM for 30 minutes.
- _____ 7.3 After 30 minutes, increment flow to 1100 GPM and inject for 30 minutes. Continue 100 GPM increments at 30 minutes each until pump cutout on high line pressure or 1500 GPM, whichever is first, (or other problem). Record all actions.
- _____ 7.4 If a pump is shutoff, or cuts out from high pressure, contact Reservoir Engineer and Test and Coordination immediately for further direction.
- _____ 7.5 RECOVERY: Shut in RRGE-1 and RRG1-7 and recover for the total injection time for Sections 7.2 and 7.3 plus one hour or as directed by Reservoir Engineer.

8.0 RRGE-1 PRODUCTION TO RRG1-6 and RRG1-7 INJECTION

- _____ 8.1 Perform or check valve lineup in Table 1A, FET-7-79.
- _____ 8.2 Start pumps at RRGE-1, RRG1-6, and RRG1-7 as directed by engineering.
- _____ 8.3 Initial flowrates:

RRGE-1: 1000 GPM
RRG1-6: 500 GPM
RRG1-7: 500 GPM

Flow for 30 minutes, and then increment flow at RRGE-1 to 100 GPM for 30 minutes, splitting flow evenly between RRG1-6 and RRG1-7.

Continue 100 GPM increments for 30 minutes each until a pump cutout occurs, or the 1500 GPM flowrate is run for 30 minutes. Record all comments.

- 8.4 Shutoff pumps, shut in RRGE-1, RRG1-6 and RRG1-7 and recover for the total time from Step 8.3, plus one hour, or as directed by Reservoir Engineer. Record all comments.