

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GEOTHERMAL WELL COMPLETION REPORT**

FORM APPROVED
OMB NO. 1004-0132
Expires: September 30, 1990

The Bureau of Land Management (BLM) requires this form or other BLM-approved forms to be prepared and filed in duplicate with requisite attachments with the authorized officer within 30 days after completion of permitted operations.

- 1a. Well Type: Production Injection Disposal Water Supply Observation
 Cold Heat Exchange Other
- 1b. Completion: New Workover Deepened Plugback Redrill
 Recompleted Drilled & Abandoned Other

2. Name of Lessee/Operator
Anadarko Petroleum Corporation

3. Address of Lessee/Operator
835 Piner Rd., Suite A, Santa Rosa CA 95403

18. Location of Well
At Surface: **From NW corner: 875' S and 2800' E.**
At Top of Production Zone: **Same**
At Total Depth: **Same**

19. Total Depth
Measured **2520** True Vertical:

20. Plugback Total Depth
Measured: **NA** True Vertical:

21. Elevation: Estimated Final **4086**
Reference Datum: GR MAT DF KB RT Casinghead Flange Other

22. Drilling Media: Air Water Mud Foam Other
List Characteristics:
MW: 8.4 - 9.1, V: 35 - 74

23. Log Type & Intervals **Geologic log (mud & core): 0 - 2520. Temperature and pressure logs: 0 - 2296 (12/5/93).**

24. CASING RECORD

Size	Weight	Grade	Collars & Threads	Depths Set		Hole Size	Cementing Record (slurry volume)
				Top	Shoe		
9-5/8"	40	J-55	STD	0	46	12-1/4"	42 cu-ft
7"	23	J-55	STD	0	332	8-1/2"	75 cu-ft
4-1/2"	11.6	WC-75	EJ	0	1322	6-1/8"	214 cu-ft

25. LINER RECORD

Size	Weight	Grade	Collars & Threads	Top	Bottom	Perforated Intervals	Cementing Record (slurry volume)

26. TUBING RECORD

Size	Weight	Grade	Depth Set	Packer Depth

27. Cement Squeeze, Acid, Fracture, etc. (detail type, amount, intervals)

28. PERFORATION RECORD

Type	Total No.	Density (No./ft)	Size	Intervals

29. Attachments & Previous Submittals: List all reports, surveys, tests and logs, not listed in item 23, which have resulted from drilling and completion operations. List relevant previously furnished data with date of submittal referenced. **(1) Well history, (2) well test report (Therma Source), (3) geochemical data - 3 samples**

30. Well Status: Producing Shut-In Suspended Injection Disposal Heat Exchange Abandoned Water Supply Other

31. Do you consider the well to be commercial? Yes No Explain:
The well is not commercial due to small bore size. Well will be used for reservoir monitoring only.

32. I hereby certify the information on this report and the attached information is complete and accurate according to the best of my knowledge.

Signed: *RC Edwards* Title Atty-in-Fact Date 1/18/94

4. Lease Serial No.
OR-23843

5. Surface Manager: BLM FS
 Other

6. Unit Agreement Name
NA

7. Well No. **52-22A** 8. Permit No.

9. Field or Area
Pueblo Valley

10. Sec., T., R., B. & M.
Sec 22, T37S, R33E, W6M

11. County
Harney

12. State
Oregon

13. Spud Date **11/15/93** Date T.D. Reached **12/4/93**

14. Completion Date (Ready to produce)
NA

15. Directionally Drilled Intervals
None

16. Surveyed Intervals
None

17. Core Size and Intervals
2.5": 1325 - 2520

33. WELL TEST

Test Date 12/6/93	Production Method: <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping - include size, type, intake depth, etc. <input type="checkbox"/> Other
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34. PRODUCTION

Hours Tested	Production During Test			Enthalpy (Btu/lb)
	Total Liquids (lb)	Steam (lb)	Water (lb)	
4	391,600	48,800	344,800	

35. STATIC TEST DATE

Depth	Surface Pressure (psig)	Subsurface Pressure (psig)	Subsurface Temperature (°F)	Water Analysis	
				Total Dissolved Solids	pH
2150	49.2 PSIA	942.5 PSIA	304.7 @ 2296' (unstabilized)	1433	9.06

36. FLOWING TEST DATA

Surface Pressure	Subsurface Pressure at _____ feet	Surface Temperature	Subsurface Temperature at top of perms.	Avg. Total Mass Flow Rate Per Hour		
				Total (lb/hr)	Steam (lb/hr)	Water (lb/hr)
Wellhead: 68.0 PSIA Separator: Not recorded	2150 939.7 PSIA	290	311.5	97,900	11,700	86,200

37. SUMMARY OF POROUS ZONES. Show all important porous zones and contents of each; cored intervals with recoveries, drill stem or formation tests with depth of interval tested, time open, cushion used, and flowing and shut-in pressures, temperatures and recoveries.

38. GEOLOGIC MARKERS (TOP)

Formation	Top	Bottom	Description of Details	Name	Measured Depth	True Vertical Depth
Xtal Tuff	2194	2336	Open, high-angle fractures in xtal tuff of varying composition. Complete circulation loss in fracture at 2194. Entire interval cored with 95% + recovery. See Geologic log and well test report for further details.	Ash Tuff (top of volcanics)	1509	1509
				Siltstone	1648	1648
				Xtal Tuff	2067	2067

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.