

G K I - Power Ranch Inc #1

3/16	6163'	} 385'	splashes of steam - alot of water 2034'/70 hrs. HIGH DRILLING RATE	
3/17	6588'			
3/18	7050'	} 502'		
3/19	7878'	} 328'		
3/20	8197'	} 319'		
3/21	8312'	} 115'		
3/22	8997'	} 685'		800'/23 hrs.
3/23	9065'	} 68'		
		} 0		
3/24	9065' T.D.			left 3 cones
3/29	9065' T.D.		all cones recovered! began cementing	
}	cementing			
	4/5	7932' T.D.		
4/6	8971'		drilled cement	
4/7	-		unloading hole	
4/8	9207 T.D.		- hit basement @ 9181'	

Max temp July 19, 1973 242.3°F @ 8015'

.. .. July 20, 1973 268.2°F @ 9050'

July 24, 1973 306° - 313°

Flow: Production Interval:
 0-5404' MUD
 6153'-9207' AERATED WATER
 6167'-8998'

6/7/73: Well pumped hot water approx 1WK - shut in - lack of space to contain water

7/17/73: Difficulties with Reda Pump

When well is pumping, the water produced is too cool to flash to steam.

7/9 - 300 gal/min pumped

7/10 200 gal/min ..

7/11 150 gal/min ..

}
7/17 150 gal/min ..

P.R. #2

mainly 3-5% porosity

6/5	5401	}	0
6/6	5401		854'
6/7	6255	}	745'
6/8	7000		0 WOC
6/9	7000		
6/12	7023	}	Repair
6/13	7271		248'
6/14	7694	}	423'
6/15	7694		196
6/16	7890	}	28
7/17	7918		495
6/18	8413	}	157
6/19	8570		361
6/20	8931	}	212
6/21	9143		

7/8-8/5 drilling problems

→ 8/15 temp logging; conditioning mud.

8/15	9181'	}	208'	some fractures
8/16	9389'		111'	
8/17	9500'	}	190'	
8/18	9690'		208'	
8/19	9898'	}	91'	
8/20	9989'		136'	
8/21	10,125	}	163'	
8/22	10,285		166'	
8/23	10,454		T.D.	

max temp of hole 330°F on 8/25

365°F on 9/28

9/10-9/14 Pumping well @ 120-150 gpm, 189°

- Porosity in volc. $\sim 5\%$ near maximum -

later log & focused array elec logs to evaluate borehole invasion.
esp w. 17,500 or 18,500 ppm chloride?

Where are conclusions reached that hole was damaged.

NOT SIMILAR TO: GEYSERS

: ROOSEVELT

: VALLES CALDERA ??

DIXIE VALLEY - 1 discovery steam well

1 offset well $< 2000'$ not producer, poss. well damage

2 wells Thermal Pur/Southland - Temp, not suff flow.

COVE FORT - TEMP - NO FLOW

- ECONOMICS OF PUMPING FROM 8,000 - 10,000' elec required
- Reduction of ^{open} fracture space at greater depth, severe even in the Geysers at these depths (10,000'); lithostatic pressure
- Geysers success rate $\sim 90\%$ from 0 - 10,000' - extremely active seismic area

- May not be able to lift cuttings with water below 8000'
- Need standby well

- 900 gpm @ 350°F

R. Wall
Aminail

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