

GL03007-395

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

GEOHERMAL RESOURCE WELL

DESIGNATE TYPE OF COMPLETION: Status: Testing

NEW WELL WORK OVER DEEPEN PLUG BACK SAME RESERVOIR DIFFERENT RESERVOIR DRY STEAM HOT WATER DRY

DESCRIPTION OF WELL AND LEASE

OPERATOR: Geothermal Kinetics Inc. ADDRESS: 301 W. Indian School Road, #117 Phoenix, Arizona 85013

FEDERAL, STATE OR INDIAN LEASE NUMBER OR NAME OF LESSOR IF FEE LEASE: Power Ranches Inc. WELL NUMBER: 2 FIELD & RESERVOIR: Power Geothermal Prospect

LOCATION: 1980'S & 660'W of the NE Cor. Sec. 1, T2S, R6E COUNTY: Maricopa

SEC. TWP-RANGE OR BLOCK & SURVEY: 1 T2S R6E

DATE SPUNDED: 5-13-74 DATE TOTAL DEPTH REACHED: 8-23-73 DATE COMPLETED, READY TO PRODUCE: testing ELEVATION (OF, RKB, RT OR GR.): 1356.5 FT. FEET ELEVATION OF CASING HD. FLANGE: FEET

TOTAL DEPTH: 10454 ft. P.B.T.D.: none AIRDRILLED (INTERVAL): none FLUIDRILLED (INTERVAL): mud 0-5400 then to T.D. Water 5400 -

PRODUCING INTERVAL (S) FOR THIS COMPLETION: 0 to 10434 ROTARY TOOLS USED (INTERVAL): none CABLE TOOLS USED (INTERVAL): none

WAS THIS WELL DIRECTIONALLY DRILLED? no WAS DIRECTIONAL SURVEY MADE? Totco only WAS COPY OF DIRECTIONAL SURVEY FILED? no DATE FILED:

TYPE OF ELECTRICAL, TEMPERATURE, CEMENT BOND OR OTHER LOGS RUN (CHECK LOGS, FILED WITH THE COMMISSION): GRN, I.E., BHC Acousticlog, Temp. Log DATE FILED:

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL-CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB./FT.)	DEPTH SET	SACKS CEMENT	AMT. PULLED
SURFACE	26"	20"	49	197	350 SX	27% CaCl
Intermed	17 1/2"	13 3/8"	49 72# 59 lbs 4#	Surface - 2704	1700 SX	30% SiO ₂
Top of Pay	12 1/4"	9 3/8"	47	2537 to 5400	813 SX	30% SiO ₂ 3/101 70 D13
Pay Zone	8 1/2"	7"	blank slotted 52.63 to 102.29	250 SX	250 SX	30% SiO ₂ 3/101 70 D13

TUBING RECORD

LINER RECORD

SIZE IN.	DEPTH SET FT.	PACKER SET AT FT.	SIZE IN.	TOP FT.	BOTTOM FT.	SACKS CEMENT	SCREEN (FT.)

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FT.	SIZE & TYPE	DEPTH INTERVAL	AMT. & KIND OF MATERIAL USED	DEPTH INTERVAL

INITIAL PRODUCTION testing

DATE	STATIC TEST SHUT IN WELL HEAD		ANALYSES OF FLUIDS & GASES									
			TOTAL MASS FLOW DATA				SEPARATOR DATA					
			TEMP. °F	PRES. PSIG.	LBS./HR	TEMP. °F	PRES. PSIG.	ENTHALPY	ORIFICE	WATER CUFT/HR	STEAM LBS/HR	PRES. PSIG.

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Exec. Vice Pres. OF THE Geothermal Kinetics Inc (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT: AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Feb. 27, 1974

SIGNATURE

Mike J. Donnell

RECEIVED

13/4
O & G CON. COMM.

PERMIT NO. 611

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

FILE ONE COPY

FORM NO. 6-1

COUNTY Maricopa AREA Higley LEASE NO. Power Ranches

WELL NAME GEOHERMAL KINETICS SYSTEM CORPORATION POWER RANCHES NO. 2

LOCATION SE/NE SEC 1 TWP 2S RANGE 6E FOOTAGE 1980 FSL - 660 FWL

ELEV 1336 GR 1356 KB SPUD DATE 5-13-73 STATUS T & A TOTAL DEPTH 10,454

CONTRACTOR Geothermal Drilling Corporation COMP. DATE T. D. connected - 8-23-73

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	
<u>20"</u>	<u>197KB</u>	<u>350 sks</u>	<u>9 5/8 @ 5400' *</u>	<u>DRILLED BY CABLE TOOL</u>	<u>X</u>
<u>13 3/8"</u>	<u>2704</u>	<u>1700sks</u>	<u>7" O.D. @ 10,229</u>	<u>PRODUCTIVE RESERVOIR</u>	<u>INITIAL PRODUCTION</u>
			<u>(w/ 30% Bot. 2473 of liner silica flour)</u>	<u>slotted.</u>	

TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
<u>B.R.N. 3 BHC Acoustic log</u>	<u>slotted liner F/7752</u>		<u>SAMPLE DESCRP.</u>
<u>.E. 2 Temp. Log - 2</u>	<u>to 10,225-open hole</u>		<u>SAMPLE NO. 1739</u>
	<u>below liner</u>		<u>CORE ANALYSIS</u>
			<u>DSTs None</u>

REMARKS Est. top of volcanics 5100' - * After original cement job on 9 5/8" liner it was necessary to squeeze

APP. TO PLUG PLUGGING REP. COMP. REPORT 2-27-74

AFTER WELL ACCEPTED BY _____

BOND CO. Reliance Trust Company BOND NO. B 72 10 28

BOND AMT. \$ 5,000 CANCELLED _____ DATE _____ ORGANIZATION REPORT 1-3-73

DRILLING RECEIPT 2951 LOC. PLAT X WELL BOOK X PLAT BOOK X

PI NO. 02-013-20005 DATE ISSUED 5-4-73 DEDICATION NE/4 Sec 1

PERMIT NUMBER 611 **CONFIDENTIAL**

DETAIL OF FORMATIONS PENETRATED

FORMATION	TOP	BOTTOM	DESCRIPTION

* SHOW ALL IMPORTANT ZONES OF POROSITY, DETAIL OF ALL CORES, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSTOMER USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

INSTRUCTIONS:
 ATTACH DRILLERS LOG OR OTHER ACCEPTABLE LOG OF WELL.

THIS WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG SHALL BE FILED WITH THE STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION NOT LATER THAN THIRTY DAYS AFTER PROJECT COMPLETION.

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEOHERMAL RESOURCES WELL

APPLICATION TO DRILL

RE-ENTER OLD WELL

GEOHERMAL KINETICS SYSTEMS CORPORATION

NAME OF COMPANY OR OPERATOR

301 WEST INDIAN SCHOOL ROAD

PHOENIX

ARIZONA

ADDRESS :

CITY

STATE

GEO DRILLING INC.

DRILLING CONTRACTOR

301 WEST INDIAN SCHOOL ROAD

PHOENIX

ARIZONA

ADDRESS

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FREE LEASE,
NAME OF LESSOR

Power Ranches Inc.

WELL NUMBER

2

ELEVATION (GROUND)

1,336'

NEAREST DISTANCE FROM PROPOSED LOCATION
TO PROPERTY OR LEASE LINE:

660

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

1,320

FEET

NUMBER OF ACRES IN LEASE:

1,791

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

2

IF LEASE, PURCHASED WITH ONE OR MORE
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

- 0 -

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)
1980' S. & 660' W of NE Corner of
Sec. J

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY
C-SE/4 NE/4 Sec. 1 T2S R6E

DEDICATION
(COMPLY WITH RULE G-105)
NE/4 Sec. 1-2S-6E

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

Field

COUNTY

Maricopa

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

2 Miles SE of Higley

PROPOSED DEPTH:

6,500'

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

May 10, 1973

BOND STATUS

AMOUNT

\$5,000.00 (Attached)

ORGANIZATION REPORT

ON FILE X

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED X

REMARKS:

We have shown the NE/4 of Section 1-T2S-R6E dedicated to the well and after completion it might be desirable, based upon the information obtained, to adjust the dedication either up or down.

(TIGHT HOLE)

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Vice President

OF THE Geothermal Kinetics Systems Corporation (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Walter D. Donnell
SIGNATURE

May 4, 1973
DATE

PERMIT NUMBER: 611
APPROVAL DATE: 5-4-1973
APPROVED BY: *[Signature]*

NOTICE:
BEFORE FILING IN THIS FORM BE SURE THAT YOU HAVE GIVEN ALL INFORMATION REQUESTED, MUCH UNNECESSARY CORRESPONDENCE WILL THEN BE AVOIDED.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
APPLICATION TO DRILL OR RE-ENTER
FILE TWO COPIES

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

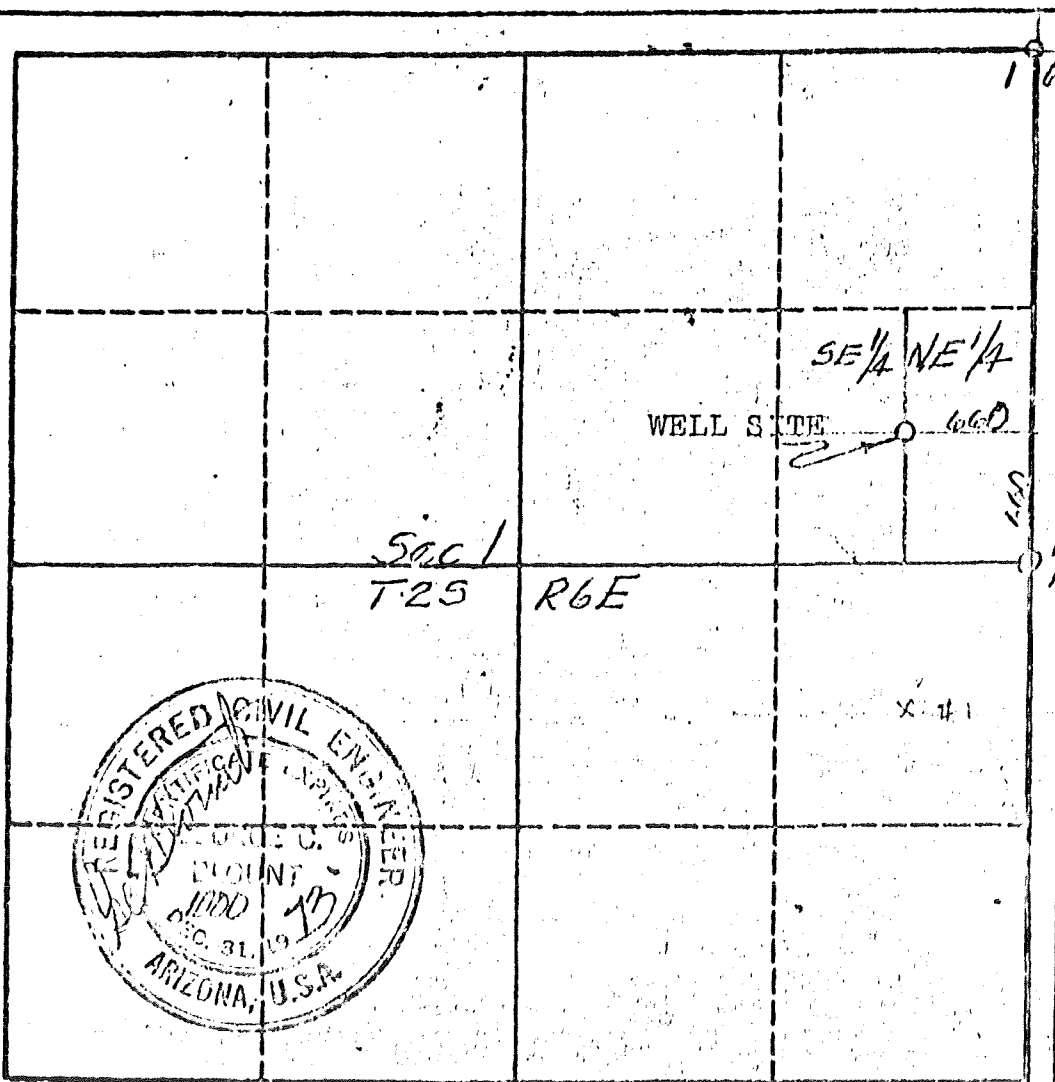
ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES X NO _____

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES _____ NO _____. IF ANSWER IS "YES" TYPE OF CONSOLIDATION _____

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner Powers Ranches Inc.	Land Description SE 1/4 NE 1/4 of Section 1, T2S, R6E of G&SRB&M, Maricopa County, Arizona
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CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name Mike O'Donnell
 Position Vice President
 Company Geothermal Kinetics Systems Corporation
 Date May 4 1973

I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed April 27, 1973
 Registered Professional Engineer and/or Land Surveyor George C. Blount P.E.
 Certificate No. 1000 P.E. 4579 RES

350 600 900 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depth	Sacks Cement
20"	94.0#	H-40	0	200	200	350
13 3/8"	61.0#	ARMCO	0	2,500	0 - 2,500	1,200
9 5/8"	40.0#	ACO	2,300	5,900	2,300 - 5,900	750

PLEASE DETACH BEFORE DEPOSITING CHECK

DATE	INVOICE NO	DESCRIPTION	GROSS	DISC OR DEDU	NET
5/4/73		Permit No. 611			25.00

GEOHERMAL — KINETICS SYSTEMS CORPORATION



PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

GEOHERMAL KINETICS SYSTEMS CORP.

To:

(OPERATOR)

to drill a well to be known as

POWER RANCHES INC. #2

(WELL NAME)

located

1980 S. & 660 W of NE Corner of Sec 1

Section 1 Township 2S Range 6E Maricopa County, Arizona.

The NE/4 Sec 1-2S-6E of said

Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 4th day of May, 19 73.

OIL AND GAS CONSERVATION COMMISSION

By

EXECUTIVE SECRETARY

PERMIT **Nº 611**

RECEIPT NO. 2951

API NO. 02-013-20005

SAMPLES ARE REQUIRED

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill

FORM NO. 27