

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

SUBMIT IN DUPLICATE\*

(See other In-  
structions on  
reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

GL04420

5. LEASE DESIGNATION AND SERIAL NO.

USL-U27391

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.

KGRA 52-21

10. FIELD AND POOL, OR WILDCAT

Roosevelt Hot Springs

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 21, T27S, R9W, SLB&M

12. COUNTY OR PARISH

Beaver

13. STATE

Utah

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1a. TYPE OF WELL: OIL WELL  - GAS WELL  DRY  Other Geothermal

b. TYPE OF COMPLETION: NEW WELL  WORK OVRD  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Getty Oil Company

3. ADDRESS OF OPERATOR  
Rt. 1, Box 197-X, Bakersfield, CA 93308

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 2310' W, 990' S of NE corner Sec. 21, T27S, R9W, SLB&M  
At top prod. interval reported below  
At total depth

14. PERMIT NO. 0046 DATE ISSUED 10-17-77

15. DATE SPUDDED 2-02-78 16. DATE T.D. REACHED 5-04-78 17. DATE COMPL. (Ready to prod.) \_\_\_\_\_ 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5882 KB 19. ELEV. CASINGHEAD 5855

20. TOTAL DEPTH, MD & TVD 7500 21. PLUG, BACK T.D., MD & TVD \_\_\_\_\_ 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_ 23. INTERVALS DRILLED BY \_\_\_\_\_ ROTARY TOOLS X CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* \_\_\_\_\_ 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN FIL, FDC-CNL, DIL, Sonic, Temperature Logs 27. WAS WELL CORED Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
30"	Line Pipe	30' (MAT)	36"	Ready Mix	
20"	94#	182' (KB)	28"	310 sks class B & additives	
13-3/8"	54.5#	765' (KB)	17-1/2"	465 sks class B & additives	
9-5/8"	40#	2039' (KB)	12-1/4"	535 sks class B & additives	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
		DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\* PRODUCTION (Not on production)  
DATE FIRST PRODUCTION \_\_\_\_\_ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) \_\_\_\_\_ WELL STATUS (Producing or shut-in) \_\_\_\_\_

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY \_\_\_\_\_

35. LIST OF ATTACHMENTS \_\_\_\_\_

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED C. G. Bursell TITLE Agent DATE 6-02-78

\*(See Instructions and Spaces for Additional Data on Reverse Side)

HISTORY OF GEOTHERMAL RESOURCES WELL

Operator: Getty Oil Company

Field: Roosevelt Hot Springs

Well No.: KGRA 52-21, U.S.L. U-27391, Section 21, T27S/R9W, SLB&M.

Date: May 23, 1978

Signed: C. G. Bursell

C. G. Bursell

Rt. 1, Box 197-X,  
Bakersfield, CA 93308 (805) 399-2961

Title: District Production  
Manager--SJV-East

Date:

1978

- 2-3 Rigged up Coastal Drilling Company, rig number 2. Mixed mud; spudded well at 3 p.m., February 2, 1978. Drilled 12-1/4" hole to 182'. Made up and ran 17-1/2" hole opener. Drilled 17-1/2" hole to 125' at 6 a.m. Mud weight 68.5, viscosity 61, temperature in 60°, temperature out 60°.
- 2-4 Drilled 17-1/2" hole to 182'. P.O.O.H. changed 17-1/2" hole opener to 28" hole opener. Drilled 28" hole to 175' at 6 a.m.  
Note: Slight amount of hole sloughing at 103'.  
Mud weight 69, viscosity 52, temperature in 60°, temperature out 60°.
- 2-5 Continued running 28" hole opener. Drilled 28" hole to 182'. Conditioned mud and circulated. Tagged bottom--no fill. Ran 182'-20" H-40, 94# slip joint casing. Casing equipped with guide shoe. First centralizer 10' above shoe. Second centralizer 80' above shoe. Cemented casing with 310 sacks Class B cement, 1:1 perlite, 40% silica flour, 5/10 of 1% CFR-2, 2% gel, 2% CaCl. 10 BBLS water ahead. Displaced with 57 BBLS. 72 BBLS of returns. Cement in place at 5:20 p.m. WOC eight hours. Welded on 20" casing head. Assembling 20" B.O.P. stack at 6 a.m.
- 2-6 Nippled-up B.O.P.E.
- 2-7 Completed nipping up of B.O.P.E. B.O.P. stack consisted of two 20" series 900 Shaffer double B.O.P., Hydril GK B.O.P. Tested casing blind rams, pipe rams, hydril, kill line valves and blowdown manifold valves to 500 psi with mud. All checked o.k. USGS witnessed. Picked up 9" drill collars. R. F. Smith logging equipment installed and commenced operating at 182'. Prepared to drill out shoe at 6 a.m.
- 2-8 Drilled out shoe at 182' with water. Changed over to mud. Drilled 17-1/2" hole to 345' at 6 a.m.  
Mud weight 68.5, viscosity 51, temperature in 73°, temperature out 75°.

1978

- 2-9 Drilled 17-1/2" hole to 586'. Drilling ahead at 6 a.m.  
Mud weight 67.5, viscosity 54, temperature in 91°, temperature out 95°
- 2-10 Tripped for bit. 9" collars would not break. Wait on tongs. Made up new bit and drilling assembly. Prepared to drill ahead at 6 a.m.
- 2-11 Drilled 17-1/2" hole to 634'. Pulled out of hole at 6 a.m.  
Mud weight 67.5, viscosity 47, temperature in 91°, temperature out 95°
- 2-12 Tried to break and lay down 9" drill collars. Collars would not break. Cut and layed down collars. Ran in hole with drilling assembly.  
Drilled 17-1/2" hole to 667' at 6 a.m.  
Mud weight 68, viscosity 47, temperature in 96°, temperature out 99°
- 2-13 Drilled 17-1/2" hole to 725' at 6 a.m.  
Mud weight 67.5, viscosity 46, temperature in 105°, temperature out 109°
- 2-14 Drilled 17-1/2" hole to 765'. Circulating and conditioning mud for loggers at 6 a.m.  
Mud weight 67.5, viscosity 47, temperature in 102°, temperature out 105°
- 2-15 Rigged up and ran Schlumberger logs, DIL, FDC-CNL, temperature log. Rigged up and ran Agnew & Sweet temperature and pressure survey. Recorded stabilized B.H.T. of 111°F at 765'. Ran in hole, tagged bottom, no fill, circulated. Prepared to run casing at 6 a.m.
- 2-16 Ran 765', 13-3/8" K-55, 54.5# buttress casing. Casing equipped with guide shoe. First centralized 10' above shoe. Remaining centralizers every other joint. Cemented casing with 465 sacks Class B cement, 1:1 perlite, 40% silica flour, 5/10 of 1% CFR-2, 2% gel. 10 BBLS water ahead. Displaced with 114 BBLS. 50 BBLS of returns. Bumped plug with 1000 psi. Held 500 psi shut-in. Cement in place 2:56 p.m. WOC eight hours. Tearing out 20" B.O.P.E. stack at 6 a.m.
- 2-17 Completed tearing out 20" B.O.P.E. Welded on 13-3/8" casing head. Nippling up 12" B.O.P.E. stack at 6 a.m.
- 2-18 Nippling up 12" B.O.P.E. stack at 6 a.m.
- 2-19 Completed nippling up 12" B.O.P.E. stack. Stack consisted of two 12" series 900 Shaffer double B.O.P. Hydril GK B.O.P. and Grant rotating head. Pressure tested to 1000 psi. Pressure test failed. Line repair and rig repair at 6 a.m.
- 2-20 Rig repair.



1978

- 2-21 Picked up 9" drill collars and drilling assembly. Completed pressure test of B.O.P.E. USGS witnessed. Drilled out shoe at 765' with water. Changed over to mud. Drilled 12-1/4" hole to 789' at 6 a.m. Mud weight 65.4, viscosity 40, temperature in 90°, temperature out 94°
- 2-22 Drilled 12-1/4" hole to 879'. Drilling ahead at 6 a.m. Mud weight 64, viscosity, 41, temperature in 110°, temperature out 114°
- 2-23 Drilled 12-1/4" hole to 1004'. Drilling ahead at 6 a.m. Mud weight 65.2, viscosity 32, temperature in 111°, temperature out 116°
- 2-24 Drilled 12-1/4" hole to 1105'. Drilling ahead at 6 a.m. Mud weight 67, viscosity 32, temperature in 104°, temperature out 109°
- 2-25 Drilled 12-1/4" hole to 1249'. Drilling ahead at 6 a.m. Mud weight 66.3, viscosity 30, temperature in 112°, temperature out 117°
- 2-26 Drilled 12-1/4" hole to 1386'. Drilling ahead at 6 a.m. Mud weight 65.6, viscosity 27, temperature in 108°, temperature out 112°
- 2-27 Drilled 12-1/4" hole to 1508'. Tripped for bit. Drilling ahead at 6 a.m. Mud weight 65, viscosity 28, temperature in 105°, temperature out 110°
- 2-28 Drilled 12-1/4" hole to 1633'. Drilling ahead at 6 a.m. Mud weight 65, viscosity 29, temperature in 112°, temperature out 117°
- 3-1 Drilled 12-1/4" hole to 1749'. Hole took fluid at 6 BBL/hr. for three hour period at ~1680'. Drilling ahead at 6 a.m. Mud weight 65.7, viscosity 27, temperature in 117°, temperature out 122°
- 3-2 Drilled 12-1/4" hole to 1874'. Drilling ahead at 6 a.m. Mud weight 65.7, viscosity 27, temperature in 113°, temperature out 118°
- 3-3 Drilled 12-1/4" hole to 1950'. Drilling ahead at 6 a.m. Mud weight 63.9, viscosity 26, temperature in 113°, temperature out 118°
- 3-4 Drilled 12-1/4" hole to 2041'. Conditioned mud and circulated. Pulled out of hole and laying down 9" drill collars at 6 a.m. Mud weight 63.9, viscosity 32, temperature in 114°, temperature out 120°
- 3-5 Completed laying down 9" drill collars. Rigged up and ran Schlumberger DIL, FDC-CNL, sonic, temperature logs. Rigged up and ran Agnew & Sweet temperature and pressure surveys. Recorded static B.H.T. of 238.5° at 2041'. Picked up drill string and ran in hole. Circulating at 6 a.m.

1978

- 3-6 Pulled out of hole. Rigged up casing tong crew. Ran 2039', 9-5/8", 40# K-55 buttress casing. Casing equipped with float collar on top of first joint; stop collar ten foot off bottom. Remaining centralizers every other joint. Installed W.K.M. casing slips. Prepared to cement at 6 a.m.
- 3-7 Cemented casing with 535 sacks Class B cement, 1:1 perlite, 40% silica flour, 2% gel, 5/10 of 1% CFR-2. Pumped 10 BBLs water ahead. Bumped plug with 1000 psi. 30 BBLs cement returns. Cement in place at 7:45 a.m. WOC 12 hours. Picked up B.O.P.E. stack. Installed W.K.M. expansion spool and master gate valve. Nippling-up B.O.P.E. stack at 6 a.m.
- 3-8 Completed nippling up B.O.P.E., pressure tested with water to 1000 psi. USGS witnessed. Drilled out cement to 2041'. Drilling ahead at 6 a.m. Mud weight 63, viscosity 26, temperature in 99°, temperature out 106°
- 3-9 Drilled 8-1/2" hole to 2142'. Pulled out of hole. Picked up stabilized drilling assembly. Ran in hole. Reamed hole to 2142'. Drilling ahead at 6 a.m. Mud weight 63, viscosity 26, temperature in 120°, temperature out 126°
- 3-10 Drilled 8-1/2" hole to 2306'. Drilling ahead at 6 a.m. Mud weight 62.9, viscosity 27, temperature in 126°, temperature out 132°
- 3-11 Drilled 8-1/2" hole to 2378'. Twisted off #4-7" drill collar. 108' fish. Circulated. Pulled out of hole. Layed down drill collars. Called out fishing tools. Waiting on fishing tools at 6 a.m. Mud weight 62.9, viscosity 27, temperature in 131°, temperature out 137°
- 3-12 Made up fishing tools. Ran in hole. Circulated and worked over fish. Pulled out of hole with fish. Broke and layed down fishing tools. Made up drilling assembly with new bit. Serviced all tool connections. Reamed from 2318-2378'. Drilled 8-1/2" hole to 2426'. Drilling ahead at 6 a.m. Mud weight 63.7, viscosity 29, temperature in 128°, temperature out 134°
- 3-13 Drilled 8-1/2" hole to 2542'. Drilling ahead at 6 a.m. Mud weight 64.8, viscosity 35, temperature in 139°, temperature out 148°
- 3-14 Tripped for additional stabilization. Drilled 8-1/2" hole to 2650'. Drilling ahead at 6 a.m. Mud Weight 63.7, viscosity 33, temperature in 136°, temperature out 142°

1978

- 3-15 Drilled 8-1/2" hole to 2762'. Drilling ahead at 6 a.m.  
Mud weight 65.5, viscosity 32, temperature in 150°, temperature out 157°
- 3-16 Drilled 8-1/2" hole to 2819'. Pulled out of hole looking for washed out pipe. #7 drill collar washed out. Picked up additional drill collars. Replaced 6 pt. reamer and bit. Ran in hole. Reamed from 2786-2819'. Drilling ahead at 6 a.m.  
Mud weight 65.4, viscosity 31, temperature in 142°, temperature out 149°
- 3-17 Drilled 8-1/2" hole to 2957'. Drilling ahead at 6 a.m.  
Mud weight 65.2, viscosity 32, temperature in 148°, temperature out 155°
- 3-18 Drilled 8-1/2" hole to 3094'. Drilling ahead at 6 a.m.  
Mud weight 64.8, viscosity 33, temperature in 149°, temperature out 155°
- 3-19 Drilled 8-1/2" hole to 3254'. Drilling ahead at 6 a.m.  
Mud weight 64.8, viscosity 33, temperature in 151°, temperature out 157°
- 3-20 Drilled 8-1/2" hole to 3336'. Tripped for bit. Reamed from 2860' to 3356' at 6 a.m.  
Mud weight 64.6, viscosity 34, temperature in 159°, temperature out 164°
- 3-21 Drilled 8-1/2" hole to 3499'. Drilling ahead at 6 a.m.  
Mud weight 64.4, viscosity 33, temperature in 155°, temperature out 161°
- 3-22 Drilled 8-1/2" hole to 3567'. Pulled out of hole. Rigged up and ran Agnew & Sweet temperature and pressure surveys. Recorded static bottom hole temperature of 255°F. Rigged down loggers, picked up core barrel at 6 a.m.  
Mud weight 64.4, viscosity 33, temperature in 151°, temperature out 158°
- 3-23 Ran in hole with core barrel. Circulated. Rig repair at 6 a.m.
- 3-24 Rig repair last 24 hours.
- 3-25 Reamed from 3502-3567' with 8-1/2" core bit. Cored and recovered 12' core. Layed down core barrel. Picked up monel collar and multishot survey tool. Surveyed every second stand from 3551-2120'. Pulled out of hole at 6 a.m.  
Mud weight 63.7, viscosity 32, temperature in 147°, temperature out 152°
- 3-26 Made up drilling assembly. Drilled 8-1/2" hole to 3710'. Loosing mud at ~5 to 6 BBL/Hr. Drilling ahead at 6 a.m.  
Mud weight 64, viscosity 30, temperature in 165°, temperature out 169°

1978

- 3-27 Drilled 8-1/2" hole to 3884'. Drilling ahead at 6 a.m.  
Mud weight 64.6, viscosity 33, temperature in 171°, temperature out 179°
- 3-28 Drilled 8-1/2" hole to 4055'. Drilling ahead at 6 a.m.  
Mud weight 64.8, viscosity 33, temperature in 175°, temperature out 181°
- 3-29 Drilled 8-1/2" hole to 4250'. Drilling ahead at 6 a.m.  
Mud weight 64.1, viscosity 33, temperature in 183°, temperature out 189°
- 3-30 Drilled 8-1/2" hole to 4335'. Tripped for bit. Drilling ahead at 6 a.m.  
Mud weight 64.4, viscosity 33, temperature in 180°, temperature out 185°
- 3-31 Drilled 8-1/2" hole to 4510'. Losing fluid at ~9 BBLs/Hr. Drilling  
ahead at 6 a.m.  
Mud weight 64.4, viscosity 35, temperature in 172°, temperature out 180°
- 4-01 Drilled 8-1/2" hole to 4701'. Drilling ahead at 6 a.m.  
Mud weight 65.2, viscosity 32, temperature in 175°, temperature out 180°
- 4-02 Drilled 8-1/2" hole to 4751'. Tripped for bit. Replaced stabilizing  
assembly. Reamed from 4631-4751' at 6 a.m.  
Mud weight 64.4, viscosity 31, temperature in 168°, temperature out 176°
- 4-03 Drilled 8-1/2" hole to 4910'. Drilling ahead at 6 a.m.  
Mud weight 63.4, viscosity 28, temperature in 166°, temperature out 172°
- 4-04 Drilled 8-1/2" hole to 5094'. Drilling ahead at 6 a.m.  
Mud weight 63.4, viscosity 29, temperature in 165°, temperature out 171°
- 4-05 Drilled 8-1/2" to 5257'. Drilling ahead at 6 a.m.  
Mud weight 64.4, viscosity 29, temperature in 163°, temperature out 171°
- 4-06 Drilled 8-1/2" hole to 5430'. Tripping for bit at 6 a.m.  
Mud weight 64.4, viscosity 29, temperature in 166°, temperature out 173°
- 4-07 Tripped for bit. Reamed from 5340-5430'. Drilled 8-1/2" hole to 5584'.  
Drilling ahead at 6 a.m.  
Mud weight 64.4, viscosity 32, temperature in 176°, temperature out 181°
- 4-08 Drilled 8-1/2" hole to 5786'. Drilling ahead at 6 a.m.  
Mud weight 64.8, viscosity 29, temperature in 172°, temperature out 179°
- 4-09 Drilled 8-1/2" hole to 5987'. Drilling ahead at 6 a.m.  
Mud weight 63.7, viscosity 31, temperature in 172°, temperature out 178°
- 4-10 Drilled 8-1/2" hole to 6174'. Drilling ahead at 6 a.m.  
Mud weight 63.7, viscosity 31, temperature in 173°, temperature out 180°

1978

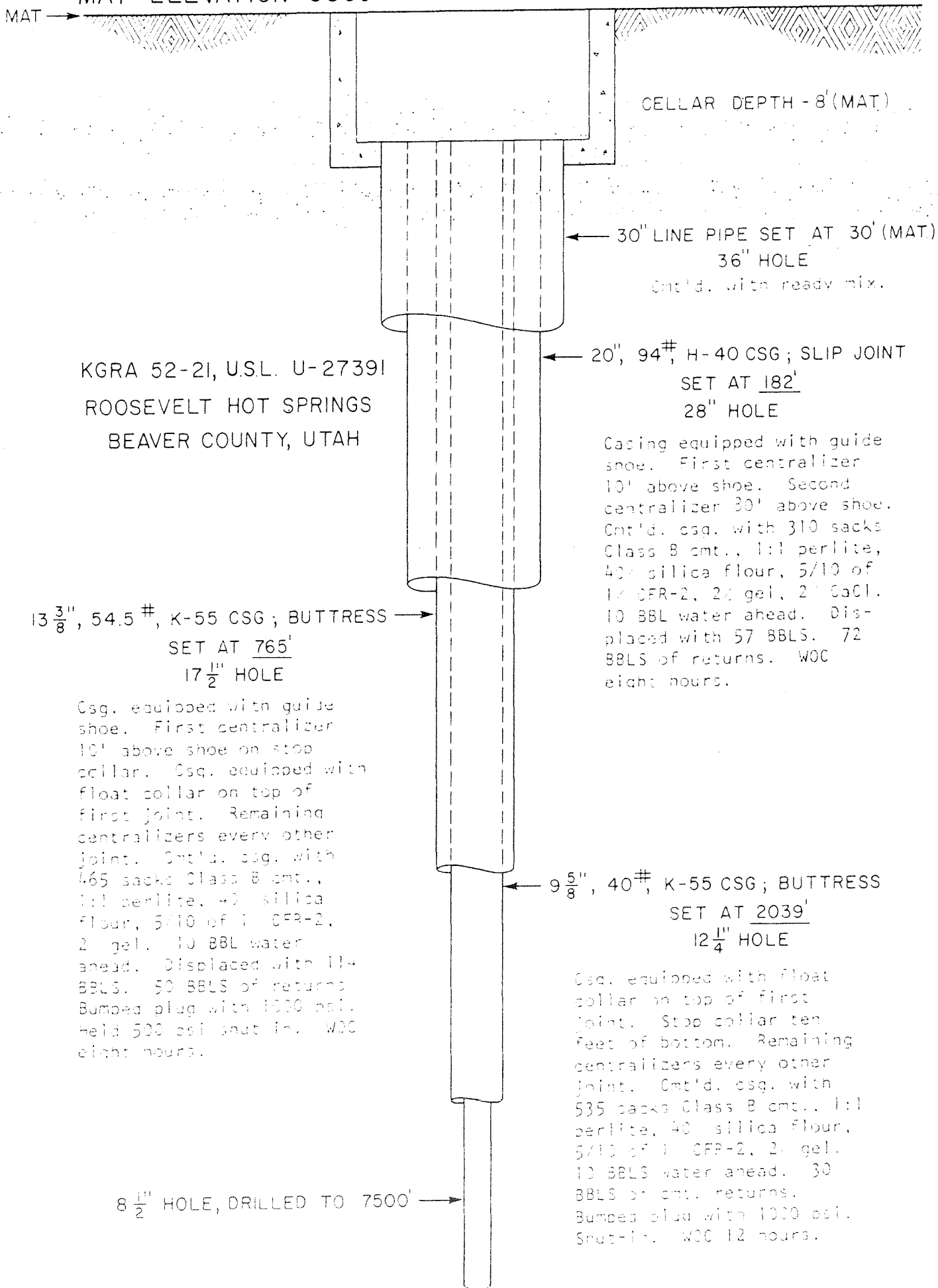
- 4-11 Drilled 8-1/2" hole to 6252'. Made 5 stand wiper run. Circulated. Checked for fill. No fill. Measured out of hole at 6 a.m. Mud weight 63.7, viscosity 31, temperature in 188°, temperature out 193°
- 4-12 Pulled out of hole. Rigged up Schlumberger logs: FDC-CNL, FIL, temperature log would not operate. Run in hole with sonic at 6 a.m.
- 4-13 Pulled out of hole. Rigged up Agnew & Sweet pressure and temperature log. Recorded static bottom hole temperature of 340°F at 6252'. Ran in hole with 4-1/2" drill pipe. Prepared swabbing tool (would not operate). Changing out pipe rams at 6 a.m.
- 4-14 Swabbing tool would not operate. Pulled out of hole laying down 4-1/2" drill pipe. Picked up new reamer and bit. Measured and picked up 3-1/2" drill pipe. Ran in hole at 6 a.m.
- 4-15 Completed running in hole with 3-1/2" drill pipe. Attempted to circulate. Plugged bit. Tripped for plugged bit. Made up and ran in swabbing tool at 6 a.m.
- 4-16 Swabbed well noting fluid temperature. No perceivable loss in fluid level. Tripped to pick up drilling assembly at 6 a.m.
- 4-17 Completed trip in. Circulated and conditioned mud. Reamed from 5870-6246'. Bit would not penetrate at 6246'. Excessive metal cuttings coming over shaker. Pulled out of hole. Four rollers on 6 point reamer locked up. Ran in hole with new reamer at 6 a.m. Mud weight 64, viscosity 29
- 4-18 Mixed and conditioned mud. Made 4 surveys on bottom--indicated moderate dog leg. Drilled 8-1/2" hole to 6287'. Tripped for bit. Ran in hole. Reaming 1 joint at 6 a.m. Mud weight 63.7, viscosity 32, temperature in 186°, temperature out 194°
- 4-19 Drilled 8-1/2" hole to 6380'. Drilling ahead at 6 a.m. Mud weight 63.7, viscosity 31, temperature in 190°, temperature out 198°
- 4-20 Drilled 8-1/2" hole to 6484'. Drilling ahead at 6 a.m. Mud weight 63.7, viscosity 29, temperature in 180°, temperature out 188°
- 4-21 Tripped for bit. Drilled 8-1/2" hole to 6543'. Drilling ahead at 6 a.m. Mud weight 64.6, viscosity 33, temperature in 188°, temperature out 200°
- 4-22 Drilled 8-1/2" hole to 6679'. Drilling ahead at 6 a.m. Mud weight 64.7, viscosity 31, temperature in 183°, temperature out 195°



1978

- 4-23 Drilled 8-1/2" hole to 6862'. Drilling ahead at 6 a.m.  
Mud weight 63.7, viscosity 30, temperature in 186°, temperature out 197°
- 4-24 Drilled 8-1/2" hole to 6980'. Tripped for bit at 6 a.m.  
Mud weight 64.4, viscosity 31, temperature in 175°, temperature out 184°
- 4-25 Ran in hole. Reamed from 6730-6980'. Drilled 8-1/2" hole to 7071'.  
Drilling ahead at 6 a.m.  
Mud weight 64, viscosity 32, temperature in 188°, temperature out 201°
- 4-26 Drilled 8-1/2" hole to 7205'. Drilling ahead at 6 a.m.  
Mud weight 64, viscosity 34, temperature in 184°, temperature out 196°
- 4-27 Drilled 8-1/2" hole to 7253'. Tripped for bit. Reamed from 7150-7253'.  
Drilling ahead at 6 a.m.  
Mud weight 63.4, viscosity 33, temperature in 186°, temperature out 198°
- 4-28 Drilled 8-1/2" hole to 7350'. Drilling ahead at 6 a.m.  
Mud weight 64.6, viscosity 34, temperature in 192°, temperature out 206°
- 4-29 Drilled 8-1/2" hole to 7450'. Drilling ahead at 6 a.m.  
Mud weight 64.4, viscosity 34, temperature in 195°, temperature out 206°
- 4-30 Drilled 8-1/2" hole to 7500'. Mixed gel pill and circulated. Pulled out  
of hole measuring out. Laying down drill collars at 6 a.m.  
Mud weight 65.4, viscosity 36, temperature in 194°, temperature out 204°
- 5-01 Completed laying down drill collars. Ran in hole with open ended drill  
pipe with tool catcher on bottom. Dumped mud tanks and changed over to  
water. Circulated to cool hole. Pulled out of hole. Rigged up and  
running Schlumberger FIL at 6 a.m.
- 5-02 Completed running Schlumberger logs: FIL, FDC-CNL, DIL, Sonic, tempera-  
ture log. Rigged up and ran Agnew & Sweet temperature and pressure  
survey. Recorded static bottom hole temperature of 376°F. Ran in hole  
with open ended drill pipe with tool catcher on bottom. Rigged up  
nitrogen and pressured up well at 6 a.m.
- 5-03 Completed pressuring well with nitrogen, purged fluid from well. Well  
did not flow. Rigged up swabbing tool to check fluid level. Tagged  
fluid at 433' (124°F). Rigged down swabbing tool. Pulled out of hole  
laying down drill pipe. Shut-in well. Tearing out B.O.P.E. at 6 a.m.
- 5-04 Completed tearing out B.O.P.E. stack. Installed wellhead assembly.  
Tearing out choke manifold and flare stacks at 6 a.m.  
Released contract rig at 12 noon 5-04-78.

KGRA 52-21, ROOSEVELT HOT SPRINGS, BEAVER COUNTY, UTAH  
 K.B. ELEVATION: 5882', ALL MEASUREMENTS FROM K.B.  
 MAT ELEVATION: 5860'



CELLAR DEPTH - 8' (MAT)

← 30" LINE PIPE SET AT 30' (MAT)  
 36" HOLE  
 Cmt'd. with ready mix.

← 20", 94# H-40 CSG; SLIP JOINT  
 SET AT 182'  
 28" HOLE

Casing equipped with guide shoe. First centralizer 10' above shoe. Second centralizer 30' above shoe. Cmt'd. csg. with 310 sacks Class B cmt., 1:1 perlite, 40% silica flour, 5/10 of 1 CFR-2, 2% gel, 10 BBL water ahead. Displaced with 57 BBLS. 72 BBLS of returns. WOC eight hours.

13  $\frac{3}{8}$ " , 54.5 #, K-55 CSG; BUTTRESS  
 SET AT 765'  
 17  $\frac{1}{2}$ " HOLE

Csg. equipped with guide shoe. First centralizer 10' above shoe on stop collar. Csg. equipped with float collar on top of first joint. Remaining centralizers every other joint. Cmt'd. csg. with 465 sacks Class B cmt., 1:1 perlite, 40% silica flour, 5/10 of 1 CFR-2, 2% gel, 10 BBL water ahead. Displaced with 114 BBLS. 50 BBLS of returns. Bumped plug with 1000 psi. Held 500 psi shut in. WOC eight hours.

← 9  $\frac{5}{8}$ " , 40# K-55 CSG; BUTTRESS  
 SET AT 2039'  
 12  $\frac{1}{4}$ " HOLE

Csg. equipped with float collar on top of first joint. Stop collar ten feet of bottom. Remaining centralizers every other joint. Cmt'd. csg. with 535 sacks Class B cmt., 1:1 perlite, 40% silica flour, 5/10 of 1 CFR-2, 2% gel, 10 BBL water ahead. 30 BBLS of cmt. returns. Bumped plug with 1000 psi. Shut-in. WOC 12 hours.

8  $\frac{1}{2}$ " HOLE, DRILLED TO 7500'

KGRA 52-21, U.S.L. U-27391  
 ROOSEVELT HOT SPRINGS  
 BEAVER COUNTY, UTAH

COUNTY		FIELD		STATE		SECTION		TOWNSHIP		RANGE		LOCATION		WELL NO.						
BLAINE		MOOSE CREEK		UTAH		2A		215		9W		2316 W. SPONGS N.E. CORNER		KORA						
CONTRACTOR		RIG NO.		OPERATOR		PUMP NO. 1		PUMP NO. 2		TOOLPUSHER		SALESMAN								
CONSON DRILLING CO.		2		GUTTY ORL CO.		16" STROCK		EMSCO D-500		KNOX		TAM		M.T. McDONNARD						
SPUD		UNDER SURF.		SET SAND ST.		REACHED T.D.		PUMP NO. 1		PUMP NO. 2		LINER		TYPE MUD						
2 1/2" 18'		2 1/2" 18'		2 1/2" 18'		2 1/2" 18'		EMSCO D-500		EMSCO D-500		6"		GCL						
DRILL PIPE		TOOL JOINTS		TYPE		O.D.		NUMBER		O.D.		LENGTH								
1 1/2" 16.6'		FH		FH		5 1/2"		10		7 1/2"		12 x 15								
NO.	SIZE	MAKE	TYPE	JET 32ND IN	SERIAL	DEPTH OUT	FEET	HOURS	FT/HR	ACCUM DRAG. HRS.	WT. 1000 LBS.	R P M	VERT. DEV.	PUMP PRESS.	PUMP OPER. ACTION	S P M	MUD	DULL. COND.	FORMATION REMARKS	
1	1 1/2"	HWC	OSC3AJ	60T	CC107	182	152	7			7/16	15	8 1/2	500		75	61	55	NC	SAND GRANULE
	1 1/2"	HWC				184	154	9			1 1/8	100		400		70	64	54	"	"
	2 1/2"	"				184	154	20			1 1/8	100		400		75	68	60	"	"
2	1 1/2"	SMITH	DST	1 1/4	92480	586	404	3 1/2			1 1/4	60	10	500		60	51	52	NC	SAND GRANULE
3	1 1/2"	HWC	CWVJT	"	AB141	634	48	15 1/4			1 1/4	80	10	500		60	53	NC	4 3/4"	"
4	1 1/2"	SMITH	3JS	"	605 KJ	765	131	48 1/4			1 1/2	750		500		60	50	"	4 6 1/2"	VOLCANICS
5	1 1/2"	HWC	OSC16J	"	LR373	792	27	10			1 1/2	100		750		68	38	"	7 4 1/2"	"
6	1 1/2"	HWC	F33	"	VF867	1058	266	45 1/4			1 1/2	60		600		68	38	"	8 3 1/2"	GRANODIORITE
RR	8 1/2"	"	"	1 1/4	"	1404	346	54			1 1/2	55	4	800		72	31	"	5 5 1/2"	"
7	1 1/2"	SMITH	FA	"	3E81A	2041	637	119 1/2			1 1/2	55	5	800			32	"		QUARTZ
8	8 1/2"	"	F5	"	377MK	2142	101	26			1 1/2	50		800		60	26	"	2 2 1/2"	MUNONITE
RR	8 1/2"	"	"	"	"	2378	236	34 1/4			1 1/2	50	6	800		60	26	"	5 4 1/2"	GRANODIORITE
9	8 1/2"	HWC	F55	"	AV687	2556	178	31 1/2			1 1/2	75	7	1100		64	33	"	3 4 1/2"	"
10	8 1/2"	HWC	F55	"	J5372	2819	263	46 1/2			3/8	60	8	1100		68	32	"	3 4 1/2"	"
11	8 1/2"	HWC	F77	"	JM963	3336	517	79			3/8	60	10	1000		62	35	"	6 6 1/2"	"
12	8 1/2"	HWC	F55	"	AM704	3567*	231	27			3/8	60	10	1000		60	33	"	8 6 1/2"	"
13	8 1/2"	HWC	F88	"	FA603	4254†	663	86 1/4			3/8	60	11	1000		64	33	"	7 5 1/2"	"
14	8 1/2"	HWC	F77	"	JM964	4751	497	66 1/4			3/8	60	11	1000		60	32	"	7 7 1/2"	"
15	8 1/2"	HWC	F99	1 1/4	TR256	5430	679	88 1/2			3/8	60	12	1000			30	"	6 7 1/2"	"
16	8 1/2"	SMITH	F9	1 1/4	F33AT	6252	822	98 1/2			3/8	40	14	1000		64	31	"	7 7 1/2"	"
17	8 1/2"	HWC	F99	1 1/4	MA017	6267	35	10 1/4			3/8	60	18	900		58	30	"	7 7 1/2"	"
18	8 1/2"	SMITH	F9	"	H96F	6489	202	43 1/2			3/8	60	18	1500		54	30	"	5 5 1/2"	"

\* 1 1/2" LINE TAKEN 500' TO 3579' † 12' DEPTH CORRECTION

**DIT RECORD**

COUNTY	FIELD	STATE	SECTION	TOWNSHIP	RANGE	LOCATION	WELL NO. <b>KGRA 52-21</b>
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CONTRACTOR	RIG NO.	OPERATOR	TOOLPUSHER	SALESMAN
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SPUD	UNDER SURF	UNDER INTER.	SET SAND ST.	REACHED T.D. <b>4-29-78</b>	PUMP NO. 1	LINER	PUMP NO. 2	LINER	PUMP POWER	TYPE MUD
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DRILL PIPE	TOOL JOINTS	SIZE	TYPE	O.D.	NUMBER	O.D.	I.D.	LENGTH	DRAWWORKS POWER
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NO.	SIZE	MAKE	TYPE	JET 32ND IN	SERIAL	DEPTH OUT	FEET	HOURS	FT/HR	ACCUM DRLG. HRS.	WT. 1000 LBS.	R P M	VERT DEV.	PUMP PRESS	PUMP OPER- ATION	S P M		MUD			DULL. COND.				FORMATION REMARKS		
																1	2	WT.	VIS.	W.L.	T	B	G	OTHER			
19	8 1/2	HTC	J-99	1 1/16	CE953	6980	491	71 1/2			35	50/60	21	1160		62		64	31	NC	7	7	1/8		GRANODIORITE		
20	8 1/2	HTC	J-99	"	2X819	7253	273	49 1/2			"	10/60	22	"		60		64	34	NC	5	6	1/8				
21	8 1/2	HTC	J-99	2 1/16	2X617	7500	247	60 1/2			35	"		1200		56		64	36	NC	5	7	1/8				
						TD 8111 4-29-78																					
						30" LINE PIPE @ 30' (MAT.)																					
						20" H40 - 94" @ 182'		22 K.B.																			
						13 3/8" K55-54.5" @ 765'																					
						9 1/8" K55-40" @ 2039'																					





# AGNEW AND SWEET

3914 GILMORE AVENUE

BAKERSFIELD, CALIFORNIA

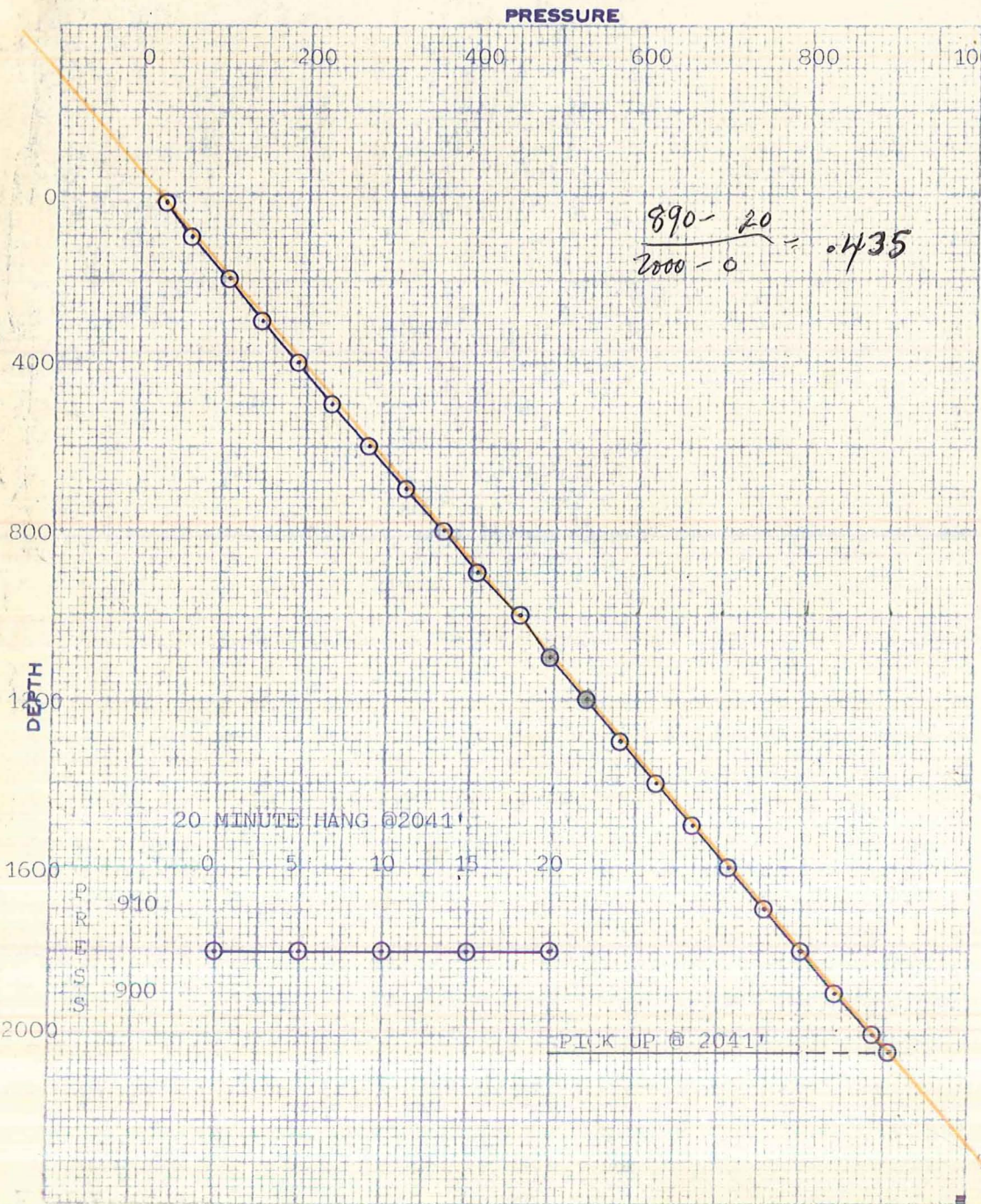
93308

24 HOUR PHONE 327-2267  
AREA CODE 805

## SUBSURFACE PRESSURE SURVEY

OWNER	GETTY OIL COMPANY	FIELD	ROOSEVELT	WELL NAME	KGRA 52 - 21
CASING	13-5/8" @ 765'	ELEV.	5808'	DATE	March 5, 1978
LINER DESCRIPTION:				ZERO POINT	D.F.
				DEPTH	2041'
				ZONE	
TUBING DETAIL:				INSTRUMENT	1800 PSIG
				SERIAL NO.	5702
PUMP SHOE	GAS ANCHOR	INTAKE:		12 hour	7 1/2 turn
PURPOSE	STATIC PRESSURE TRAVERSE GRADIENT SURVEY			MAX. TEMP.	200.7°F @ 2041'
REMARKS:	Traverse 20' per min. open hole. Stopped circulating @ 6:00 am 3-4-78				

STABILIZATION PERIOD	
GROSS OIL RATE B/D	
NET OIL RATE B/D	
FORMATION GAS MCF/D	
GOR CFT/BBL.	
CIRCULATED GAS MCF/D	
OIL DRY GRAVITY °API	
PRESSURES.	OBS COR
CASING, PSI	
TUBING, PSI	



DEPTH	PRESSURE	GRADIENT
20	29	
100	60	.388
200	105	.450
300	145	.400
400	188	.430
500	233	.450
600	276	.430
700	321	.450
800	364	.430
900	407	.430
1000	458	.510
1100	494	.360
1200	540	.460
1300	582	.420
1400	626	.440
1500	668	.420
1600	713	.450
1700	750	.430
1800	800	.440
1900	843	.430
2000	885	.420
2041	905	.438

20 MINUTE HANG @ 2041'	
0	905
5 min.	905
10	905
15	905
20	905

Time on bottom 4:18 am  
Time off bottom 4:38 am  
BY: SUNDBERG & MEADOR





# AGNEW AND SWEET

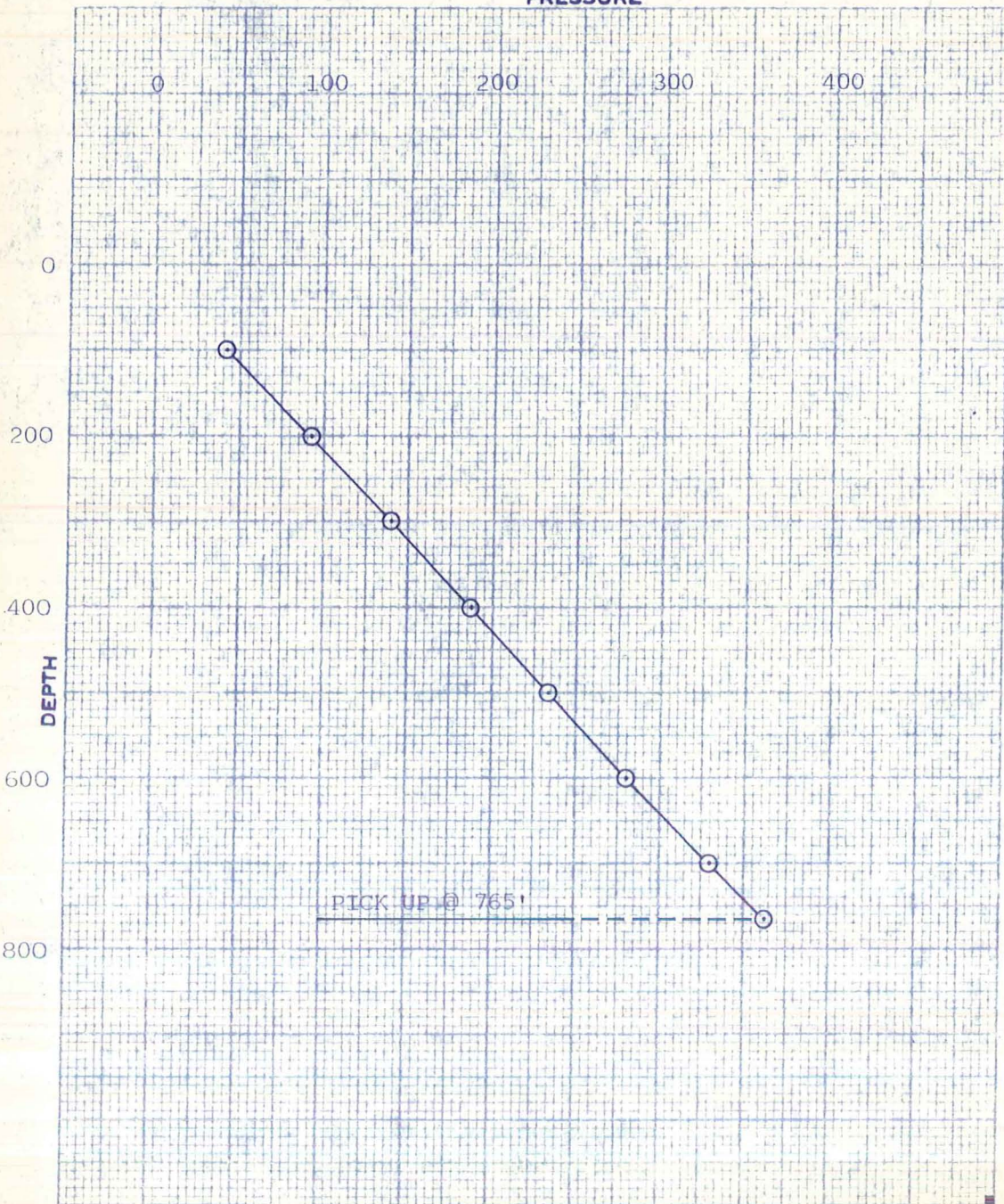
3914 GILMORE AVENUE  
 BAKERSFIELD, CALIFORNIA  
 93308

24 HOUR PHONE 327-2267  
 AREA CODE 805

## SUBSURFACE PRESSURE SURVEY

OWNER	GETTY OIL COMPANY	FIELD	ROOSEVELT	WELL NAME	KGRA 52 - 21
CASING		ELEV.		DATE	February 14, 1978
LINER DESCRIPTION:				ZERO POINT	D.F.
				DEPTH	
				ZONE	
TUBING DETAIL:	Open Hole			INSTRUMENT	1000 PSIG
				SERIAL NO.	39980
PUMP SHOE		GAS ANCHOR		INTAKE:	3 hour 15 turn
PURPOSE	STATIC PRESSURE GRADIENT SURVEY			MAX TEMP.	111.3 °F @ 765'
REMARKS:					

### PRESSURE



STABILIZATION PERIOD		
GROSS OIL RATE B/D		
NET OIL RATE B/D		
FORMATION GAS MCF/D		
GOR CFT/BBL		
CIRCULATED GAS MCF/D		
OIL DRY GRAVITY °API		
PRESSURES.	OBS	COR
CASING, PSI		
TUBING, PSI		

DEPTH	PRESSURE	GRADIENT
100	42	
200	93	.510
300	140	.470
400	187	.470
500	234	.470
600	281	.470
700	330	.490
765	363	.507

Time on bottom 11:19 pm  
 Time off bottom 11:34 pm

BY: WILSON & SUNDBERG

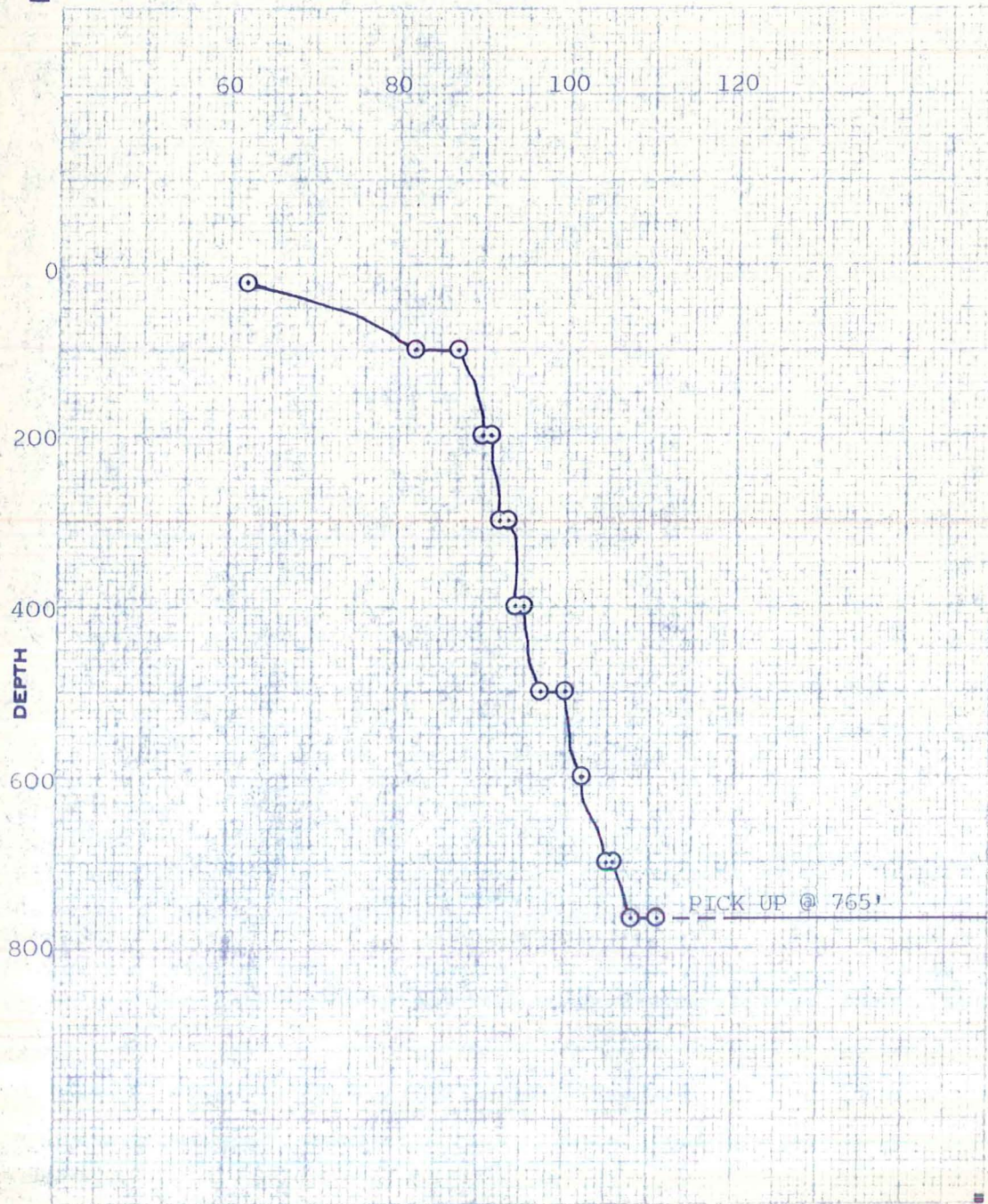




**SUBSURFACE TEMPERATURE SURVEY**

OWNER GETTY OIL COMPANY FIELD ROOSEVELT WELL NAME KGRA 52 - 21  
 CASING \_\_\_\_\_ ELEV. \_\_\_\_\_ DATE: February 14, 1978  
 LINER DESCRIPTION: \_\_\_\_\_ ZERO POINT D.F.  
 \_\_\_\_\_ DEPTH \_\_\_\_\_  
 \_\_\_\_\_ ZONE \_\_\_\_\_  
 TUBING DETAIL: Open Hole INSTRUMENT 45 - 232 ° FAHR.  
 SERIAL NO 3290  
 PUMP SHOE \_\_\_\_\_ GAS ANCHOR \_\_\_\_\_ INTAKE: 3 hour 15 turn  
 PURPOSE STATIC TEMPERATURE TRAVERSE SURVEY MAX. TEMP. 111.3 °F @ 765'  
 REMARKS: 20'/Min. with stops every 100'

**TEMPERATURE**



STABILIZATION PERIOD \_\_\_\_\_  
 GROSS OIL RATE B/D \_\_\_\_\_  
 NET OIL RATE B/D \_\_\_\_\_  
 FORMATION GAS MCF/D \_\_\_\_\_  
 GOR CFT BBL. \_\_\_\_\_  
 CIRCULATED GAS MCF/D \_\_\_\_\_  
 OIL DRY GRAVITY °API \_\_\_\_\_  
 PRESSURES. OBS COR  
 CASING. PSIG \_\_\_\_\_  
 TUBING. PSIG \_\_\_\_\_

DEPTH	TEMP.	DEPTH	TEMP.
20	63.9	420	95.3
40	69.9	440	95.8
60	75.8	460	95.8
80	79.9	480	96.5
100	82.6	500	97.4
	87.7		100.0
120	88.1	520	100.2
140	89.0	540	100.5
160	89.5	560	100.7
180	90.5	580	101.0
200	90.2	600	102.1
	91.1		102.1
220	91.1	620	102.1
240	91.6	640	102.8
260	91.9	660	104.2
280	92.3	680	104.9
300	92.6	700	105.4
	93.9		105.9
320	94.2	720	106.5
340	94.2	740	107.2
360	94.4	760	107.5
380	94.4	765	108.3
400	94.6		111.3
	95.3		

Time on bottom 11:19 pm  
 Time off bottom 11:34 pm

BY: WILSON & SUNDBERG