

Well History

Getty Oil Company - Operator

Well No. USL-1GH#1

Location: Section 26 - T28N - R32E; Pershing County, Nevada

Elevation: 4325 ± Grnd.

Drilled by: K. O. Burt Drilling Co., Inc. Springville, Utah

- 3-4-80 Rig arrived on location at 1000 a.m. Started rigging up, prep to spud. Hauled water, mixed spud mud. Unloaded pipe and other tools. Suction hose to pump to short, Pusher will go to Reno for new one. One crew back to Utah for extra mud pump.
- 3-5-80 Pusher to Reno, crew hauling water and refilling pits. Conditioned mud and spudded well at 1700 hours p.m. Drilled one hour with rerun Hughes 9 7/8" Tricone Bit. Conditioned mud and circulated hole, repaired rig. Shut down at 2000 hours p.m. Will run 12 hour tours only.
- 3-6-80 Crew on location 0700 hours. Depth 66', mud weight 8.9# Gal., Vis 45-50 sec, Gel-H₂O system. RIH, drilled ahead, lost circulation at 135', mixed LCM into mud system. Drilled ahead with partial returns. Regained full system 175'-180'. Drilled to 198'. Bit plugged. POOH at 1500 hours. Jets and bit sub plugged with rocks. C O Bit & Sub, RIH to bottom, drilled ahead to 1900 hours with hole taking some fluid. Mixed mud and LCM during drilling operations. Pulled off bottom, shut down rig for night. Depth 236'.
- 3-7-80 Crew on location 0700 a.m. Pusher wanted backhoe to C.O. pits. Had berms raised round pits to increase volume and drop out cuttings. Mixed and conditioned mud, on bottom drilling ahead at 1030 a.m. Crew back from Utah with extra mud pump. Can now mix and jet pits while drilling ahead with other pump. Drilled until 1500 hours, POOH, bit not cutting hard quartzite formation. Lost circulation during drilling. Mixed new mud and LCM, filled hole with mud. Put crew on standby and shut rig down at 1600 hours to 1900 hours while waiting on new bit. Depth 269'. Formation - hard dense chert.
- 3-8-80 Crew on location at 0700 hours. RIH with new Smith 9-7/8" journal insert bit. On bottom prepared to drill ahead at 0850 a.m. Mixed and conditioned mud, drilling with hole taking fluid. Lost circulation and regained. Mixing mud and LCM all day. Hit hard black Phylittic slate at 345'. Made hole down to 351' (casing point) at 1645 p.m. Pulled up off bottom, mixed heavy mud, added LCM and pumped hole slowly. Pulled up 100', repeated circulation procedure and pumped hole for 15 minutes. Hole stabilized at that point. POOH at 1830 p.m. filled hole with mud, secured rig at 1900 hours. Called B.J. Hughes in Woodland, CA. Will send pump truck from Beowawe and bulk truck from Woodland.

- 3-9-80 Crew on location at 0700 hours. RIH with bit to turn over mud, tagged bottom, pulled up circulated for 20 minutes. Hole OK with fluid level in pit holding. POOH with D.P. and bit. Measured casing and started in hole with shoe joint at 1000 a.m. Ran 19 joints of K55, 23#, 8 Rnd, ST & C, to 361'. Bottom 10' shoe joint equipped with drillable cement guide shoe and insert valve at the top dressed with a centralizer and at each 80' thereafter. Tack welded each collar except last three inside conductor pipe. Rigged up B. J. Hughes Cementers at 1330 p.m. Loaded H₂O, dropped ball, pressured up, ruptured insert valve at 200#, mixed cement, sent 30 cu/ft H₂O ahead, followed with 135 sacks class 'G' cement treated with 3% CaCl. Displaced cement with H₂O and bumped plug with 500# at 1450 p.m. Reciprocated casing during cementing operations. No returns after bumping plug. Broke head off with cement in place at 1500 p.m. Rigged up 1" BLP, ran in to feel for cement in annulus. Hit firm cement at 23'. Mixed 25 sacks class 'G' treated with 3% CaCl, pumped down annulus, good returns immediately. Pumped away 15 sacks, voided rest into sump. Rigged down B. J. Hughes at 1650 p.m., cleaned out "1" Pipe, Standing cemented at 1700 hours.
- 3-10-80 Crew on location at 0700 a.m., cut off 12" conductor 1 ft below ground level. Cut off 7" casing, welding on landing plate and 7" SOW Casing Head. Installed a Shaftco Hydraulic Class II 3000# Blow-Out Preventer. Cleaned out mud pits with a backhoe, ran flow line to shaker, mixed mud, made up Hughes 6 1/4" re-run bit. RIH to 200', closed Pipe Rams; pressured up with mud to 300#. Held for 10 minutes. No leaks. Closed flow line valve to mud pump. Held for 15 minutes at 300#. Tested OK, bled off pressure, opened rams, ran to bottom, drilled out insert valve, 10' cement and guide shoe. Drilled ahead to 368'. Secured rig at 1845 hours. Hole took some fluid during drilling operations.
- 3-11-80 Mixed and conditioned mud, added LCM, drilled ahead with partial returns. Bottoms up temperature 114° F. Drilled until 0930 a.m. Pulled up, dropped Totco. POOH to change bits, depth 387'. Totco 6° with baffle ring turned sideways on top of bit. RIH with Hughes 6 1/4" rerun bit. On bottom, drilling at 1120 a.m. Drilled to 448' in hard dense black phylittic slate with trace pyrite and quartz. Secured rig at 1900 hours p.m.
- 3-12-80 On location at 0700 a.m., ran bit to bottom, broke off Kelly, dropped Totco. POOH with bit. Rigged up air hammer and compressor. Deviation 5 1/4°. On bottom with hammer at 1945 a.m., blew mud out of hole, drilled ahead at 1100 a.m. Shut down, made shield for table, drilled until 1830 p.m. Set back two stands. Shut down for night, depth 672'. Hit hot H₂O aquifer at 445'-450', temp. 140°-150° F. Flowing in hole at 30-50 gpm mixed with foam.

- 3-13-80 Crew on location at 0730 a.m., ran to bottom, drilling ahead at 0755 a.m. Made 40' to 712' depth. POOH to check hammer. Changed to 6 1/8" hammer, RIH pressured up, blew fluid out, drilled ahead to 732'. Hole getting very hot with flowline temps 150°-160° F. Can not circulate very well thru hammer ports if mud needed to kill well, will POOH and put on tricone bit. Made trip, changed bits, reamed down last two singles of 6 1/8" hammer hole. On bottom, drilled 15', bit plugged. POOH, on bank at 1730 p.m. Drill collar sub and bit full of gravel. C. O., put in check valve. RIH and secured location at 1945 p.m. Depth 747'.
- 3-14-80 On location 0715 a.m., ran to bottom, pressured up air, drilled ahead. Drilling rate 60'/hr. Made hole til 1415 p.m. with depth 1047'. Circulating temperature 155°-158°F. After connection 174°-178° F for 5-10 secs. Drilled to 1107'. Pulled back to 700' to wipe hole. On bottom again drilling at 1720 p.m. Lost circulation, pulled up 120' added more soap emulsifier, staged back to bottom, drilled ahead to 1147', picked up single, could not regain circulation after connection. Stuck DP, worked pipe, pumped mud, got loose at 2140 p.m. Pulled up, set back 6 stands, secured location 2230 p.m.
- 3-15-80 Crew on location 0715 a.m. POOH to check bit. Mixed and conditioned mud, added Barite. Mud Weight 9-9.5#. Staged back to bottom, reamed tight spots in hole. Circulating off bottom, rerigged shaker. Flowline temperature 98°-100° F with mud. Heavy mud shut off hot fluid entry into hole. Drilled until 2200 p.m., POOH to 1000', shut down rig 2230 p.m. Depth 1313'. Formation hard dense black Phyllitic slate with thin interbeds of fine sand and clay stringers.
- 3-16-80 Crew on location 0750 a.m., rig, mud hose, pits all partially frozen, temperature overnight 15°F. Thawed out, ran to bottom, drilling ahead at 0805 a.m. Put Schlumberger on standby notice for tomorrow. Drilled until 2145 p.m., depth 1501 ± . Pulled up 6 stands, filled hole with mud, secured rig at 2245 p.m. Released Strata-Log logging unit.
- 3-17-80 Crew on location 0815 a.m., RIH to bottom, circulated for 20 minutes, hole in excellent shape. Schlumberger on location, POOH, rigged up Schlumber, RIH with DILL Log at 1105 a.m. Logged out, RIH with FDC-CNL Sonde and Temperature tool on top. Temperature tool ceased to function in open hole. Ran Sonic, N.G., rigged down loggers. Secured location 1900 hours p.m.
- 3-18-80 Crew on location at 0700 a.m., RIH with bit to 1500 T.D., circulating for 15 minutes on bottom. POOH laying down drill pipe and collars. OOH at 1105 a.m. Filled hole with heavy mud. Tore out BOPE including picher nipple and blowdown and kill lines to casing head. Ran 47 joints including on 10' pup of 2 3/8" 4.7# E.U.E. ST & C tubing and hung at 1482' ± from 7' combination casing-tubing flange bolted to the casing head. Filled with fresh H₂O and installed 2" full gate valve above tubing flange. Well finished 1800 p.m. 3-18-80. Released Contractor
- 3-19-80 Clean up location.

Wayne A. Shaw
Agent

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved
Budget Bureau No. 42-255.5.

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 OVER DEEP-EN PLUG BACK DIFF. RESVR. Other **Temp. Observ**

2. NAME OF OPERATOR
Getty Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 5237 Bakersfield, California 93388

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface **1150' South, 1550' East of NW/Cor**

At top prod. interval reported below

At total depth

14. PERMIT NO. **ACS 133-N13320** DATE ISSUED **Aug 6, 1979**

15. DATE SPUNDED **3-5-80** 16. DATE T.D. REACHED **3-18-80** 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, REB, RT, OR, ETC.) **4325'**

20. TOTAL DEPTH, MD & TVD **1500'** 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY? 23. INTERVALS DRILLED BY **1500'**

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

26. TYPE ELECTRIC AND OTHER LOGS RUN
DILL, FDC-CNL WITH GAMMA-CALIPER, SONIC (NG) TEMP (NG)

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD
12"	32#	40'	16"	Ready Mix
7"	23#	350'	9 7/8"	ESS Glass

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH (MD)
					2 3/8"	1482'

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, GEL PERMEAMETER, SQUEEZER

DEPTH INTERVAL (MD)	AMOUNT AND TYPE OF MATERIAL

33. PRODUCTION
DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

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

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

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 W. A. Shaw TITLE Agent DATE 4-1-80

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

INSTRUCTIONS

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22; and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, FIRM TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38.

GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TRUE VERT. DEPTH