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Dec 79
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EPP-8

EARTH POWER PRODUCTION COMPANY
522 SOUTH BOSTON AVENUE
P.O. BOX 1566, TULSA, OKLA. 74101
918-587-9704

August 24, 1979

Mr. Joseph N. Fiore, Project Engineer,
Geothermal Branch Engineering
The Department of Energy
Nevada Operations Office
P. O. Box 14100
Las Vegas, Nevada 89114

Dear Joe:

Please be advised that the drilling operations pursuant to our Contract #DE-AC08-79ET27007 were completed July 31, 1979. Some additional temperature logging was accomplished during August.

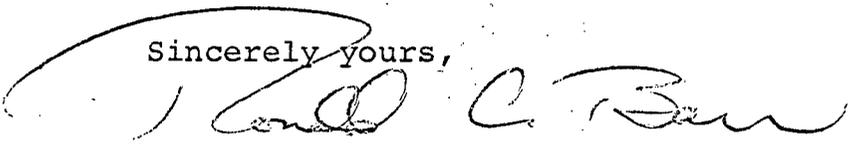
The deliverables required pursuant to our contract are the temperature logs, drilling and completion histories, and drill cutting samples. The samples will be sent next week to Mr. Ross at the University of Utah; the temperature data and drilling and completion histories are enclosed herewith.

The data covers 4638' of cased hole. You previously reimbursed us for 1581' out of the 4500' for which we are entitled to be reimbursed at a rate of \$19.95 per foot.

We herewith request that you reimburse us for 2919' at \$19.95 per foot for a total amount of \$58,234.05.

Your attention to this matter is appreciated.

Sincerely yours,



Ronald C. Barr
President
Enclosures

cc: Mr. H. P. Ross w/enclosures

DRILLING HISTORY

Baltazor 1500-1, Humboldt County, Nevada

5 May - 5 June 79

1. OPERATOR: Earth Power Production Company
Tulsa, Oklahoma
 2. CONTRACTOR: American Geothermal Drilling Co.
Tulsa, Oklahoma
 3. WELL LOCATION: T.46N, R.28E, Sec. 14 - NW NE NW
Elevation: 4218'
 4. SPUD DATE: 5 May 79
 5. COMPLETION DATE: 5 June 79
 6. RIG DESCRIPTION: Portadrill Model 524, Serial #662,
60,000 lb. mast, 5½x8 Gardner-Denver
mud pump, Atlas Copco 125 psi @ 330
CFM air compressor. 2000 ft. 2-7/8"
IF drill pipe. 80 ft. 4½" drill
collars.
 7. TOTAL DEPTH: 1581'
Cased to 1528½' with 2-3/8" API
tubing.
-

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|--|
| 5 May 79 | 0-88 | Rig up. Dig mud pits. Spud with 12¼" bit at 3:15 p.m. Drive 20 ft. 14" casing in soft clay. Begin drilling with 12¼" bit below conductor pipe. Lost circulation at 25 ft. Add cottonseed hulls and Fibertex to mud. Circulation recovered. Depth is 88 ft. at 8:00 p.m. Trip out of hole. |
| 6 May 79 | 88-154 | Trip into hole. Drilling in basaltic gravels with occasional clay layers. Return circulation good. Initial mud return temperature = 145°F, dropping to 80°F as circulation continues. Lost circulation at 115 ft. Static water level drops from 3 ft. to 8 ft. below ground level. Add LCM to mud system. Circulation partially recovered. Severe lost circulation at 151 ft. Make up fresh mud pits. Pump in mud and LCM slowly. No recovery. Static water level at 5 ft. Mix up new pits. No recovery. Out of mud. Rig up to drill with foam. Trip up the hole to 40 ft. Well blows out when air is turned on. Much steam and hot water. Kill well by pumping 1500 gals. cold water. |
| 7 May 79 | 154-154 | Out of mud. Well apparently flowed overnight. Well blows out at 11:00 a.m. and dies spontaneously. Pump 3000 gals. of cold water to cool hole. Mud arrives 10:30 p.m. |
| 8 May 79 | 154-166 | Mix up new mud pits. Trip into hole. 15 ft. of fill up on bottom. Cannot keep hole clean because of low viscosity. Mud weight of 9 lbs./gal. or more results in lost circulation. Static water level at 8 ft. Trip out of hole at 166 ft. Decide to case to 166 ft. |
| 9 May 79 | 166 | Trip into hole. 3 ft. of fill up on bottom. Prepare to case. Begin running casing. Run 158 ft. of 8-5/8" T&C, K-55 casing. Rig up to cement casing. Cement thru casing with 38 sax Portland Type I-II low alkali neat cement and water to make 440 gals. No return to surface. W.O.C. |
| 10 May 79 | 166 | Probe down annulus to 151 ft. with plastic pipe. No sign of cement. Come out of hole |

DATEDEPTHSUMMARY OF OPERATIONS

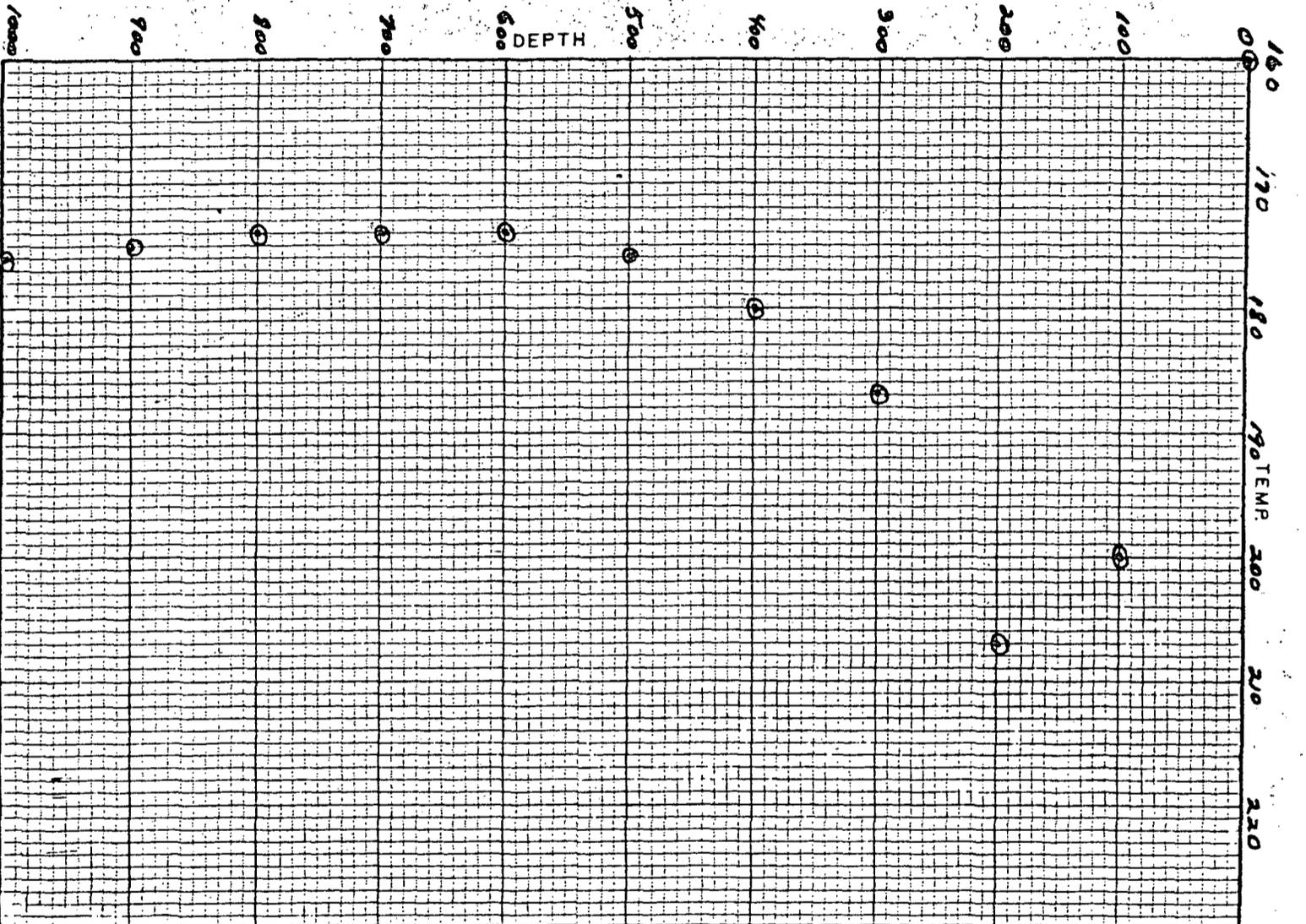
with plastic pipe. Drop 120 ft. of pipe. Fish out pipe. Run in annulus with iron pipe. Hole open to 149 ft. Prepare to cement. Cement thru iron pipe in annulus at 149 ft. Stage 3, 200 gal. slugs of cement. W.O.C.

| | | | |
|--------|----|---------|--|
| 11 May | 79 | 166-10 | Run iron pipe down annulus. Annulus bridged at 20 ft. Try to wash out bridge. Cannot break thru bridge. Pressure up on casing. Casing leaking at 100 psi. Cement 12 sax down annulus. Mix up cement to pump down annulus (25 sax cement with 3 sax hulls). Pump cement down casing. Casing comes up out of hole 2½ ft. Decide to abandon hole because of bad cement job. Move rig 15 ft. west. Spud new hole with 12¼" bit; set 10 ft. of 14" conductor. |
| 12 May | 79 | 10-130 | Mix up mud pits. Drilling with 12¼" bit. Lost circulation at 126 ft. Mix up new pits with hulls and Fibertex. Cannot recover circulation. Trip out of hole. |
| 13 May | 79 | 130-153 | Mix up pits. Trip into hole. 15 ft. of fill up on bottom. Slight return flow begins at 136 ft. Prepare to case at 153 ft. |
| 14 May | 79 | 153-156 | Trip into hole. Hole is clean. Drill to 156 ft. to make extra hole for casing. Trip out of hole. Set 153' 6" of 8-5/8" T&C, K-55 casing at 155 ft. Cement baskets at 150 and 140 ft. Prepare to cement. Cement thru casing with 24 sax neat cement. Cement down annulus with 1" pipe with 26 sax. W.O.C. 6 Hrs. Cement down annulus with 24 sax. W.O.C. 8 Hrs. |
| 15 May | 79 | 156 | Cement down annulus with 22 sax neat cement and 2 sax hulls. W.O.C. 6 Hrs. Probe down annulus. Cement at 35 ft. and still soft. W.O.C. 7 Hrs. Cement down annulus with 44 sax cement and 3 sax hulls. W.O.C. 8 Hrs. |
| 16 May | 79 | 156 | Probe down annulus. Cement at 26 ft. and hard. Cement down annulus with 20 sax cement and 2 sax hulls. Cement returns to surface, approximately 50 gals. Cement down annulus of previously abandoned hole with 12 sax. Prepare to nipple up. |

| <u>DATE</u> | <u>DEPTH</u> | |
|-----------------------|--------------|---|
| 16 May 79 (cont'd) | | Wellhead as installed from casing up: a) 900 series flange screw into 8-5/8" casing collar, b) 900-600 series drilling spool 2" line pipe side outlets, c) Double manual schaffer 2000-3000 B.O.P. with blind rams on bottom and 2-7/8" pipe rams on top, d) 600 series companion flange, e) flow nipple. Test B.O.P. Close blind rams. Pressure up to 250 psi. Pressure drops to 221 psi after 10 minutes. Close 2-7/8" rams on drill pipe. Pressure up to 250 psi. Pressure drops to 225 after 10 minutes. Test passes. |
| 17 May 79 | 156-181 | Trip into hole. Top of cement at 110 ft. Begin drilling out cement with 6-3/4" bit. 161 ft. lost circulation. Mix up new pits with hulls and Fibertex. Trucks arrive at noon with mud, LCM, drill pipe and collars. Drilling with no returns. Trip up into casing. |
| 18 May 79 | 181-261 | Trip into hole. Drilling with no returns. Occasional 2-3 ft. cavern from 181-201 ft. Bottom of hole staying clean with 33-35 vis. Trip up into casing |
| 19 May 79 | 261-381 | Trip into hole. Hole bridged at 185 ft. Wash out bridge. No fill up on bottom. Consuming ~6000 gals. hr. of mud drilling with no returns. Drilling at 25 ft./hr. at 281 ft. 320-381 soft rock drilling at 40-60 ft./hr. Trip up into casing. |
| 20 May 79 | 381-519 | Trip into hole. Mix mud. Hole bridged at 171 and 188 ft. Drilling with no returns. Bottom of hole staying clean. Trip up into casing. |
| 21 May 79 | 519-610 | Trip into hole. Drilling with no returns. Trip out of hole. |
| 22 May 79 | 610-721 | New 6-3/4" bit. Trip into hole. Drilling with no returns. Water truck cannot keep up with lost circulation. Trip up into casing. |

| <u>DATE</u> | <u>DEPTH</u> | |
|-------------|--------------|---|
| 23 May 79 | 721-819 | Trip into hole. Drilling with no returns. Trip out of hole with plugged bit. Trip into hole. Drilling with no returns. Trip up into casing. |
| 24 May 79 | 819-881 | Trip into hole. Drilling with no returns. Trip out of hole. Rig down. Build fence around drill site. Move equipment. |
| 25 May 79 | | Rig in Reno for maintenance on auxiliary transmission. |
| 4 June 79 | 881-1044 | Rig up. Mix up new pits. Begin tripping into hole at 2:15 p.m. Hole bridged at 165, 171, 185 and 240 ft. Drilling with no returns at 20 ft./hr. Static water level at 5 ft. when not drilling and at 8-9 ft. when drilling. Drilling thru interlayered hard and soft: Hard rock is 20 ft./hr. for 10-15 ft. then 3-5 ft. of 40 ft./hr. material. Trip up 60 ft. of bottom and rotate. |
| 5 June 79 | 1044-1581 | Drill with no returns. Trip out of hole. |
| 6 June 79 | 1581 | Standby for logging truck. Century Geophysical truck arrives at 2:30 p.m. to run Gamma-SP-Resistivity. Hole bridged at 210 ft. Loggers probe not working. No log. Run 1528½ ft. of 2-3/8" API tubing. Wellhead consists of homemade casing hammer and 2" Hi pressure ball valve on 2-3/8" tubing. |
| 7 June 79 | | Rig down. Clean up site. |

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 160.9 | 500 | 176.7 |
| 20 | 163.9 | 520 | 175.8 |
| 40 | 178.9 | 540 | 175.6 |
| 60 | 188.4 | 560 | 175.3 |
| 80 | 195.8 | 580 | 175.1 |
| 100 | 200.4 | 600 | 174.9 |
| 120 | 204.1 | 620 | 174.7 |
| 140 | 207.4 | 640 | 174.7 |
| 160 | 210.1 | 660 | 174.4 |
| 180 | 209.6 | 680 | 174.0 |
| 200 | 207.7 | 700 | 174.0 |
| 220 | 200.8 | 720 | 173.8 |
| 240 | 193.5 | 740 | 173.8 |
| 260 | 189.3 | 760 | 174.0 |
| 280 | 187.5 | 780 | 174.0 |
| 300 | 187.3 | 800 | 174.2 |
| 320 | 187.1 | 820 | 174.4 |
| 340 | 185.7 | 840 | 174.7 |
| 360 | 183.5 | 860 | 174.7 |
| 380 | 181.9 | 880 | 174.9 |
| 400 | 180.8 | 900 | 175.6 |
| 420 | 179.6 | 920 | 175.6 |
| 440 | 178.5 | 940 | 175.8 |
| 460 | 178.0 | 960 | 175.8 |
| 480 | 177.8 | 980 | 175.8 |



Baltazor HOLE # 1500-1
LITHOLOGY

15 Min. Heavy @
1398' 182.8
0 Min. 183.0
2 183.2
4 183.2
6 183.2
8 183.2
10 183.2
12 183.2
14 183.2
15 183.2

Notes: Hole bridged
at 1398'

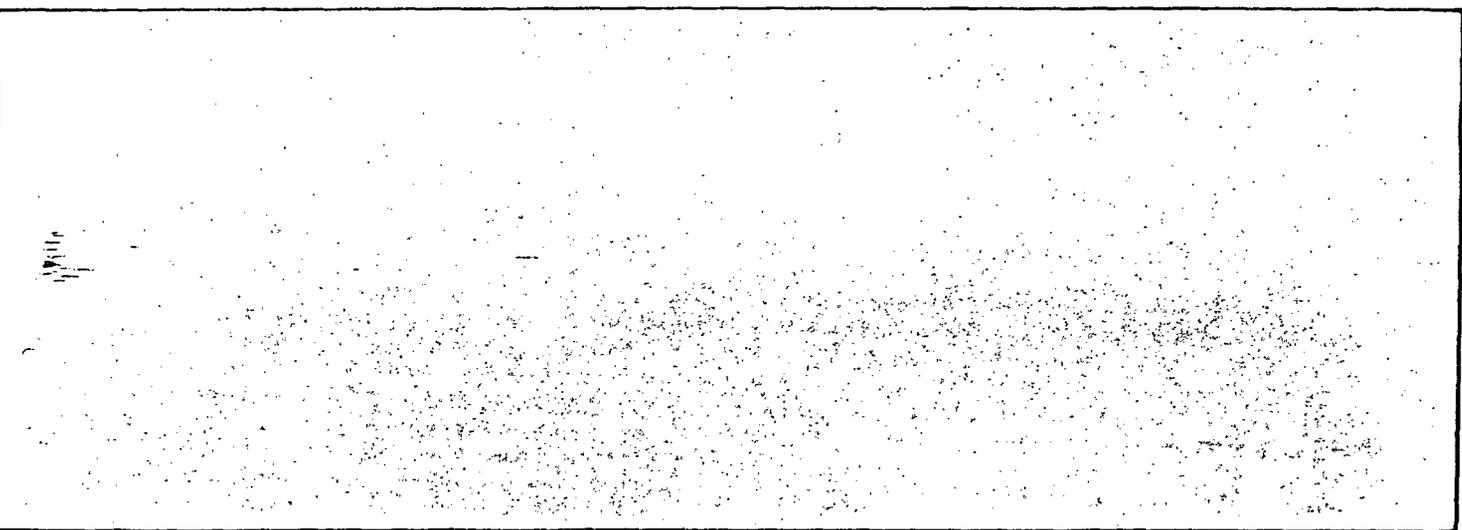
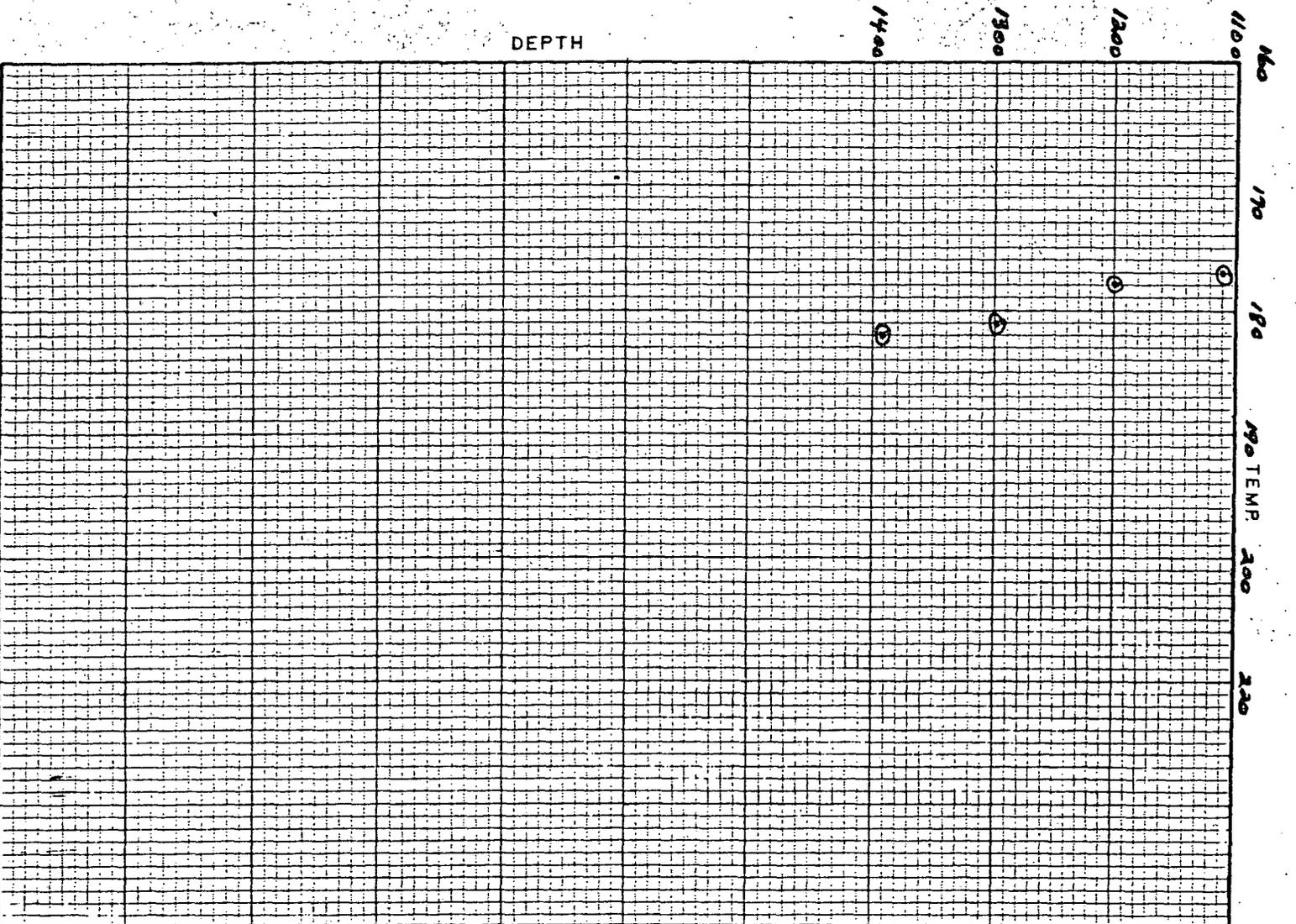
EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT Baltazor
LOCATION Humboldt Co. Nevada
SURF. ELEV. _____
DATE DRLD. 5 JUNE 79

GRADIENT _____
T. D. 1581
TEMP. AT T.D. 182.8
SURVEY DATE 25 JUNE 79
SURVEY BY AGNEW & SWEET

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1000 | 176.0 | | |
| 1020 | 175.5 | | |
| 1040 | 176.9 | | |
| 1060 | 177.1 | | |
| 1080 | 177.4 | | |
| 1100 | 177.6 | | |
| 1120 | 177.8 | | |
| 1140 | 178.0 | | |
| 1160 | 178.3 | | |
| 1180 | 178.7 | | |
| 1200 | 178.9 | | |
| 1220 | 179.2 | | |
| 1240 | 180.1 | | |
| 1260 | 180.5 | | |
| 1280 | 181.0 | | |
| 1300 | 181.2 | | |
| 1320 | 181.7 | | |
| 1340 | 181.9 | | |
| 1360 | 182.3 | | |
| 1380 | 182.8 | | |
| 1398 | 182.8 | | |

7.77

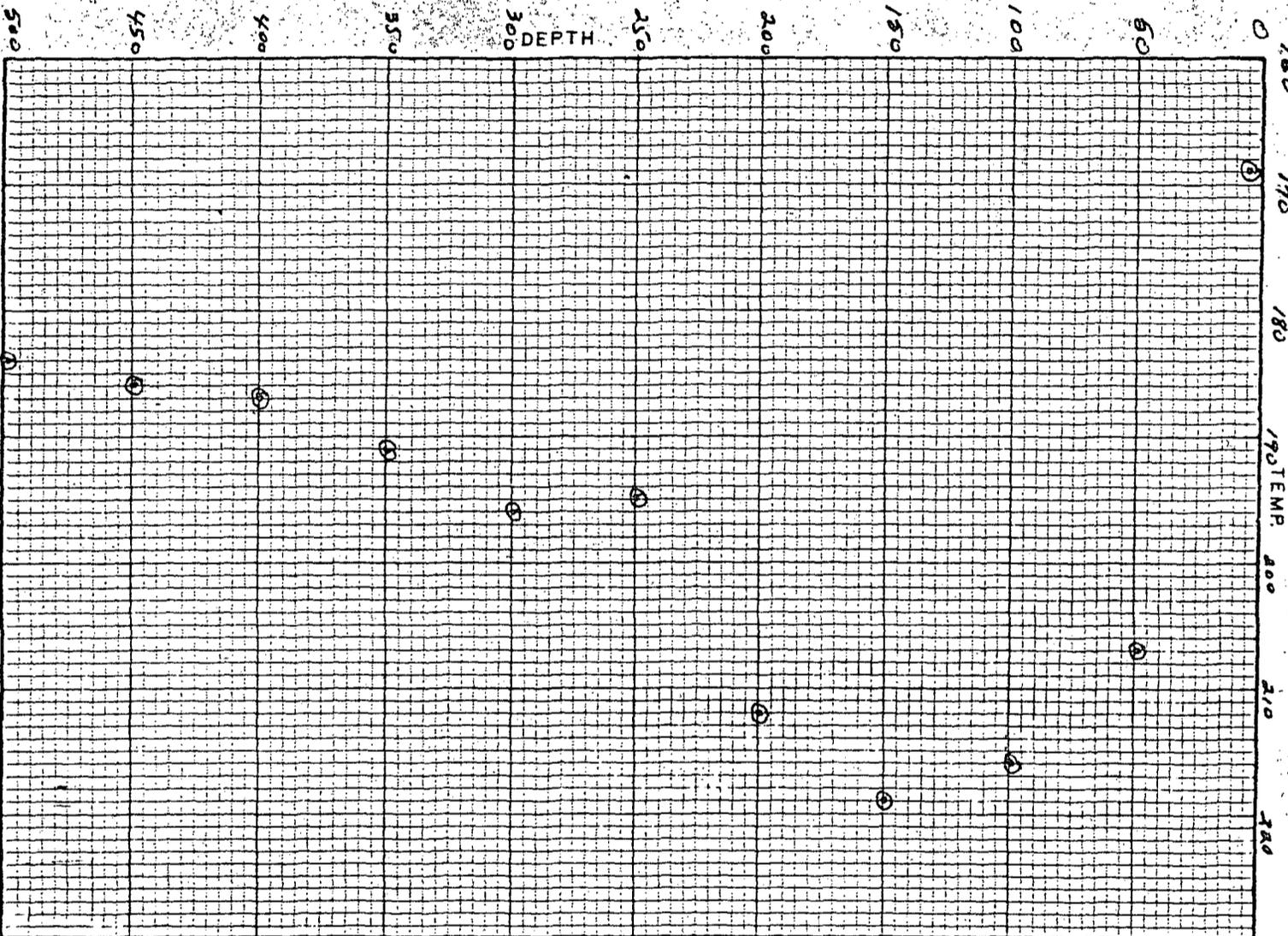


Baltzer LITHOLOGY HOLE # 1500-1

EARTH POWER
 PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltzer GRADIENT _____
 LOCATION Humboldt Co., T.D. 1581'
Navajo TEMP. AT T.D. 182.8
 SURF. ELEV. _____ SURVEY DATE 25 JUNE 79
 DATE DRLD. 5 JUNE 79 SURVEY BY AGNEW + SWEET

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 169.3 | 250 | 193.2 |
| 10 | 171.7 | | 195.6 |
| | 187.2 | | 196.0 |
| | 196.5 | | 196.4 |
| | 202.3 | | 196.6 |
| 50 | 207.0 | 300 | 196.7 |
| | 210.1 | | 196.2 |
| | 213.0 | | 195.4 |
| | 214.6 | | 194.0 |
| | 216.0 | | 192.3 |
| 100 | 216.8 | 350 | 191.0 |
| | 217.2 | | 189.6 |
| | 217.8 | | 189.2 |
| | 218.4 | | 188.6 |
| | 218.8 | | 188.2 |
| 150 | 219.2 | 400 | 187.4 |
| | 219.3 | | 186.9 |
| | 218.8 | | 186.5 |
| | 216.4 | | 186.3 |
| | 214.2 | | 186.1 |
| 200 | 212.4 | 450 | 186.2 |
| | 209.7 | | 195.5 |
| | 203.5 | | 185.1 |
| | 194.9 | | 184.9 |
| | 194.6 | | 184.6 |



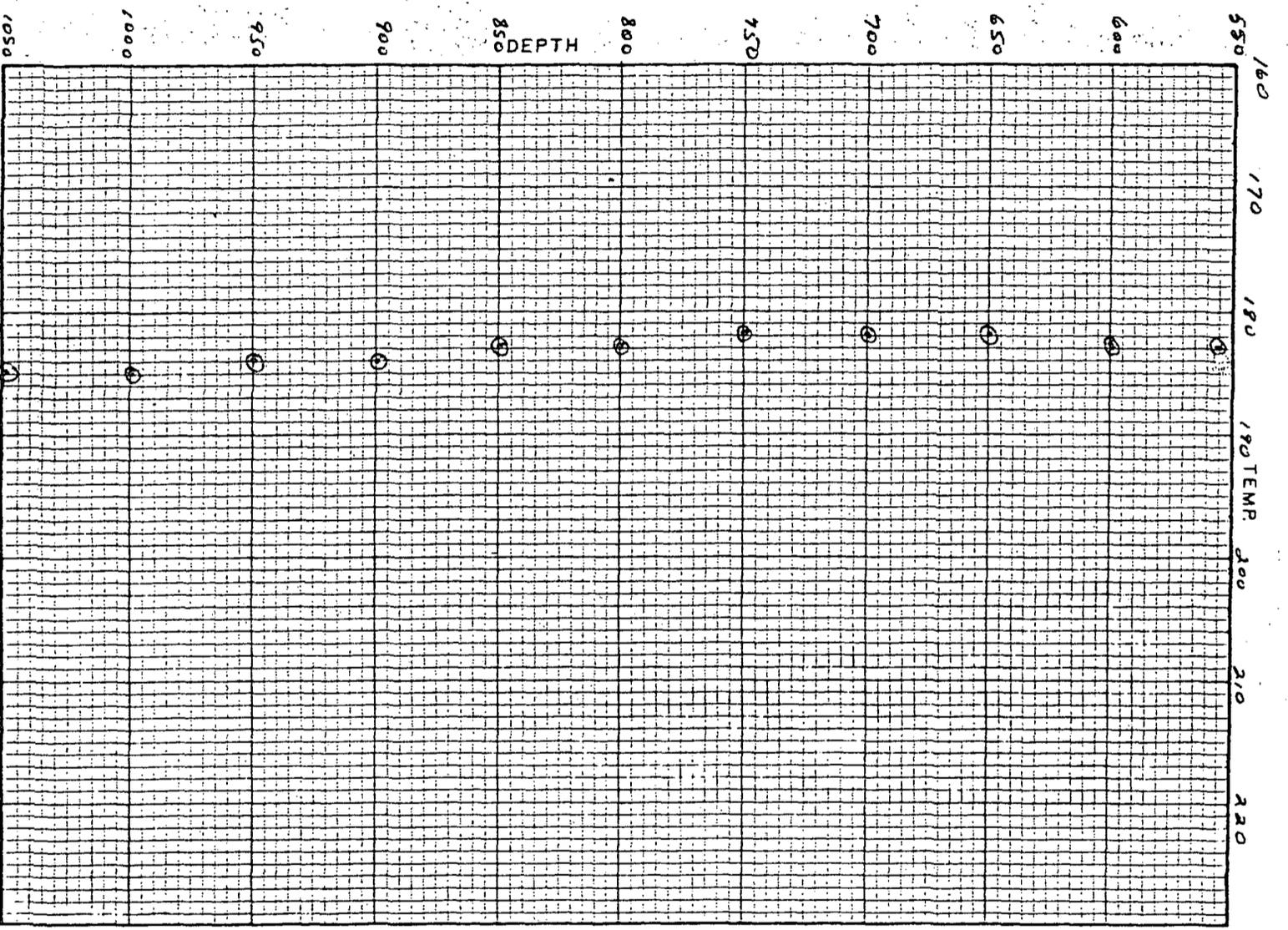
Baltazor
LITHOLOGY HOLE # 1500-1

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT Baltazor GRADIENT _____
 LOCATION Bumholdt Co., T.D. 1581
Nevada TEMP. AT T.D. 195.0
 SURF. ELEV. _____ SURVEY DATE 26 July 79
 DATE DRLD. 7 July 79 SURVEY BY EPPC

Page 2

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 500 | 184.4 | 750 | 182.7 |
| | 184.3 | | 182.8 |
| | 184.2 | | 182.9 |
| | 184.0 | | 183.0 |
| | 183.8 | | 183.0 |
| 550 | 183.8 | 800 | 183.0 |
| | 183.7 | | 183.1 |
| | 183.6 | | 183.2 |
| | 183.5 | | 183.2 |
| | 183.4 | | 183.4 |
| 600 | 183.4 | 850 | 183.6 |
| | 183.2 | | 183.6 |
| | 183.0 | | 183.7 |
| | 183.0 | | 183.8 |
| | 182.9 | | 183.9 |
| 650 | 182.7 | 900 | 184.0 |
| | 182.6 | | 184.1 |
| | 182.5 | | 184.1 |
| | 182.2 | | 184.2 |
| | 182.1 | | 184.2 |
| 700 | 182.4 | 950 | 184.2 |
| | 182.6 | | 184.6 |
| | 182.6 | | 184.8 |
| | 182.6 | | 185.0 |



LITHOLOGY

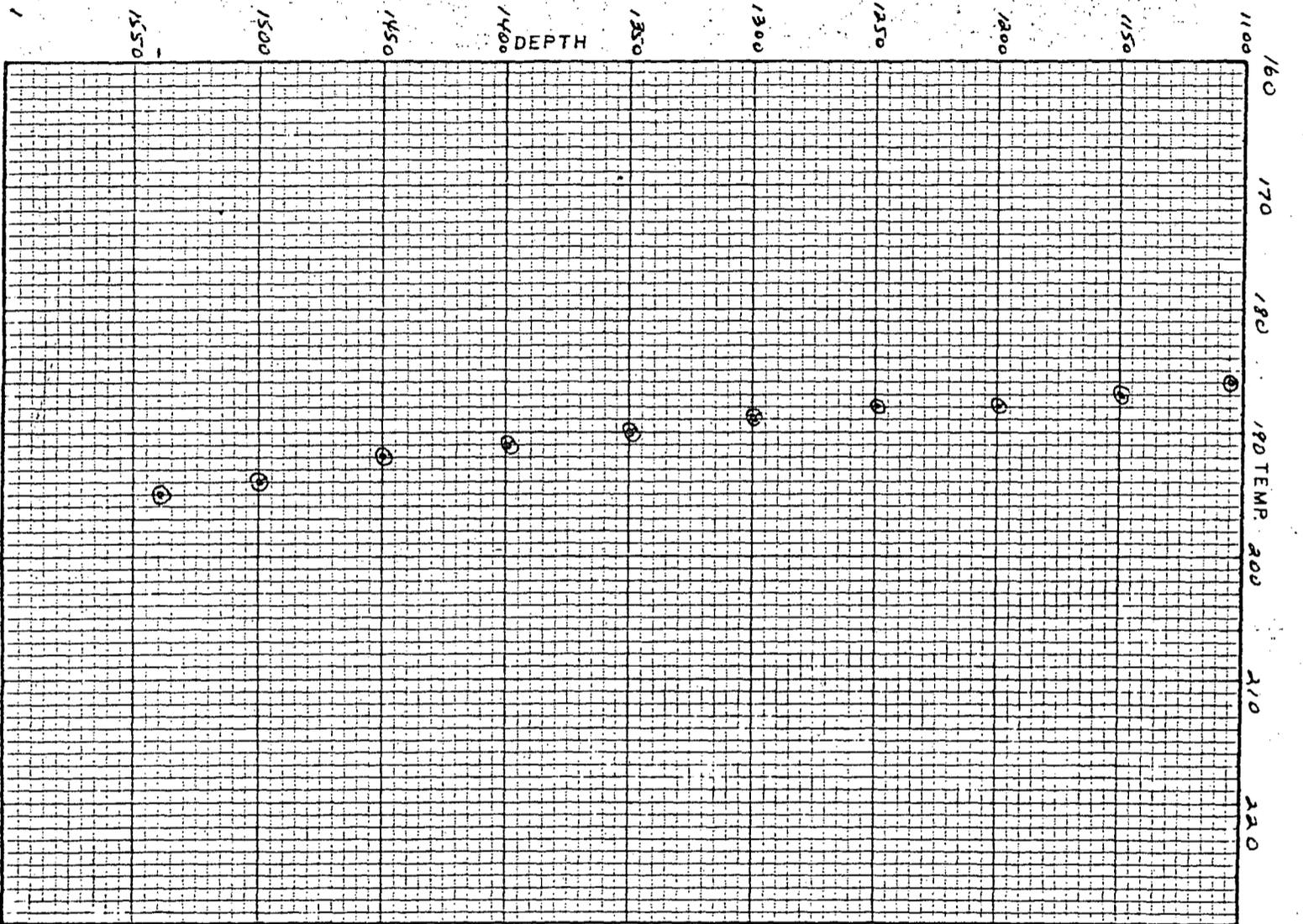
Baltazar HOLE # 1500-1

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltazar GRADIENT _____
 LOCATION Humboldt Co., Nevada T. D. 1581'
 SURF. ELEV. _____ TEMP. AT T.D. 195.0
 DATE DRLD. 7 July 79 SURVEY DATE 26 July 79
 SURVEY BY EPPC

20-3

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1000 | 185.1 | 1250 | 188.9 |
| | 185.2 | | 189.0 |
| | 185.3 | | 189.3 |
| | 185.4 | | 189.4 |
| | 185.6 | | 189.5 |
| 1050 | 185.7 | 1300 | 189.7 |
| | 185.8 | | 189.9 |
| | 186.0 | | 190.1 |
| | 186.1 | | 190.4 |
| | 186.5 | | 190.6 |
| 1100 | 186.4 | 1350 | 190.7 |
| | 186.5 | | 190.8 |
| | 186.8 | | 191.0 |
| | 186.9 | | 191.3 |
| | 187.1 | | 191.5 |
| 1150 | 187.2 | 1400 | 191.7 |
| | 187.3 | | 191.9 |
| | 187.4 | | 192.0 |
| | 187.7 | | 192.2 |
| | 187.8 | | 192.5 |
| 1200 | 188.0 | 1450 | 192.7 |
| | 188.1 | | 192.9 |
| | 188.2 | | 193.1 |
| | 188.4 | | 193.4 |
| | 188.7 | | 193.7 |



LITHOLOGY

Baltazar HOLE # 1500-1

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

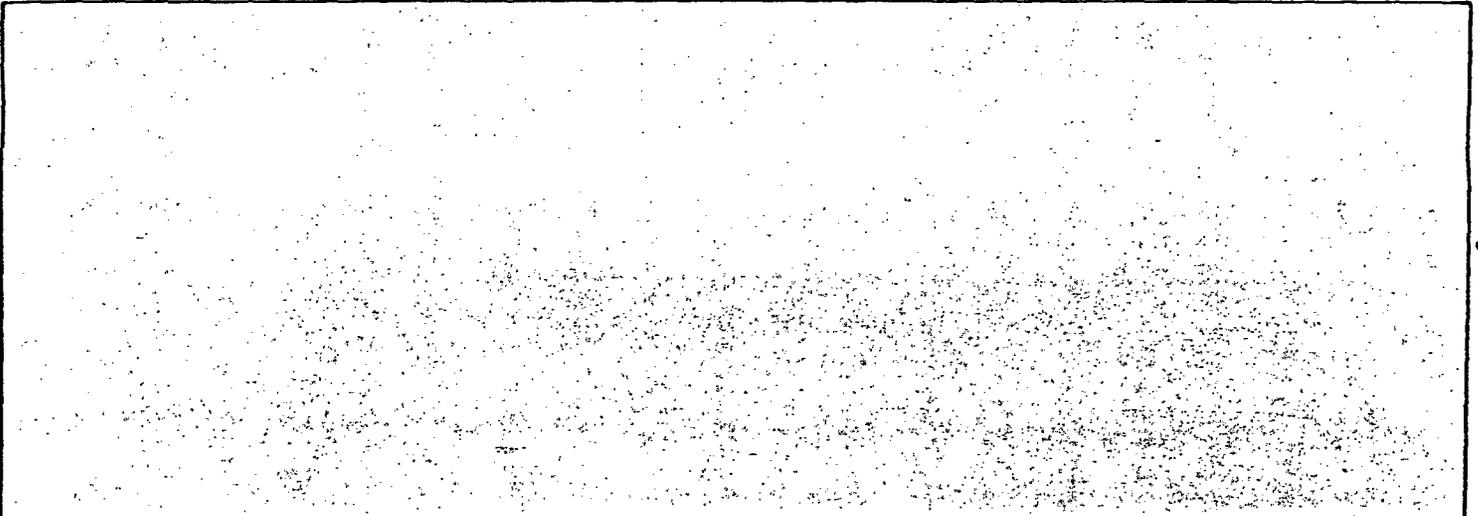
PROSPECT Baltazar GRADIENT _____
 LOCATION Humboldt Co., T.D. 1581
Thule TEMP. AT T.D. 195.0
 SURF. ELEV. _____ SURVEY DATE 26 July 79
 DATE DRLD. 7 July 79 SURVEY BY EPPC

Page 4

| | | | | | | | | | | | | | | | DEPTH | TEMP. | DEPTH | TEMP. |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|-------|-------|-------|
| | | | | | | | | | | | | | | | 1500 | 194.4 | | |
| | | | | | | | | | | | | | | | T.D. 1543 | 195.0 | | |
| | | | | | | | | | | | | | | | | 194.8 | | |
| | | | | | | | | | | | | | | | | 194.6 | | |
| | | | | | | | | | | | | | | | | 194.4 | | |
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DEPTH

TEMP.



Baltazor
LITHOLOGY HOLE # 1500-1

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltazor GRADIENT _____
 LOCATION Dumbell Co., Nevada T.D. 1581
 SURF. ELEV. _____ TEMP. AT T.D. 195.0
 DATE DRLD. 7 July 79 SURVEY DATE 26 July 79
 SURVEY BY EPPC

DRILLING HISTORY

McGee 1500-2, Humboldt County, Nevada

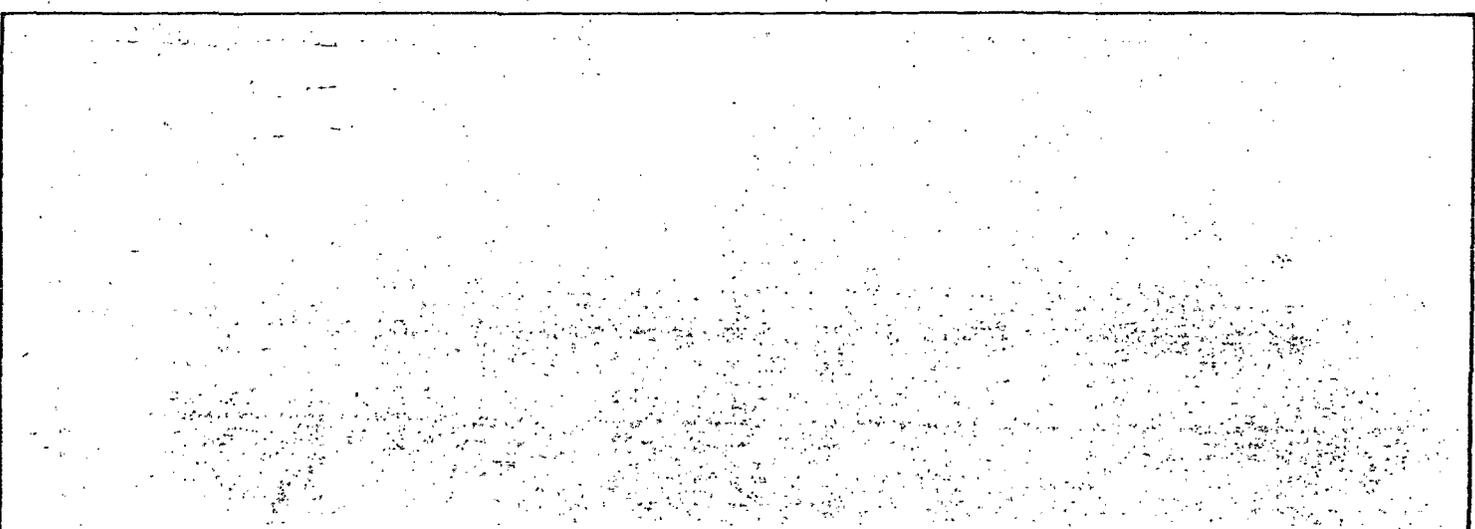
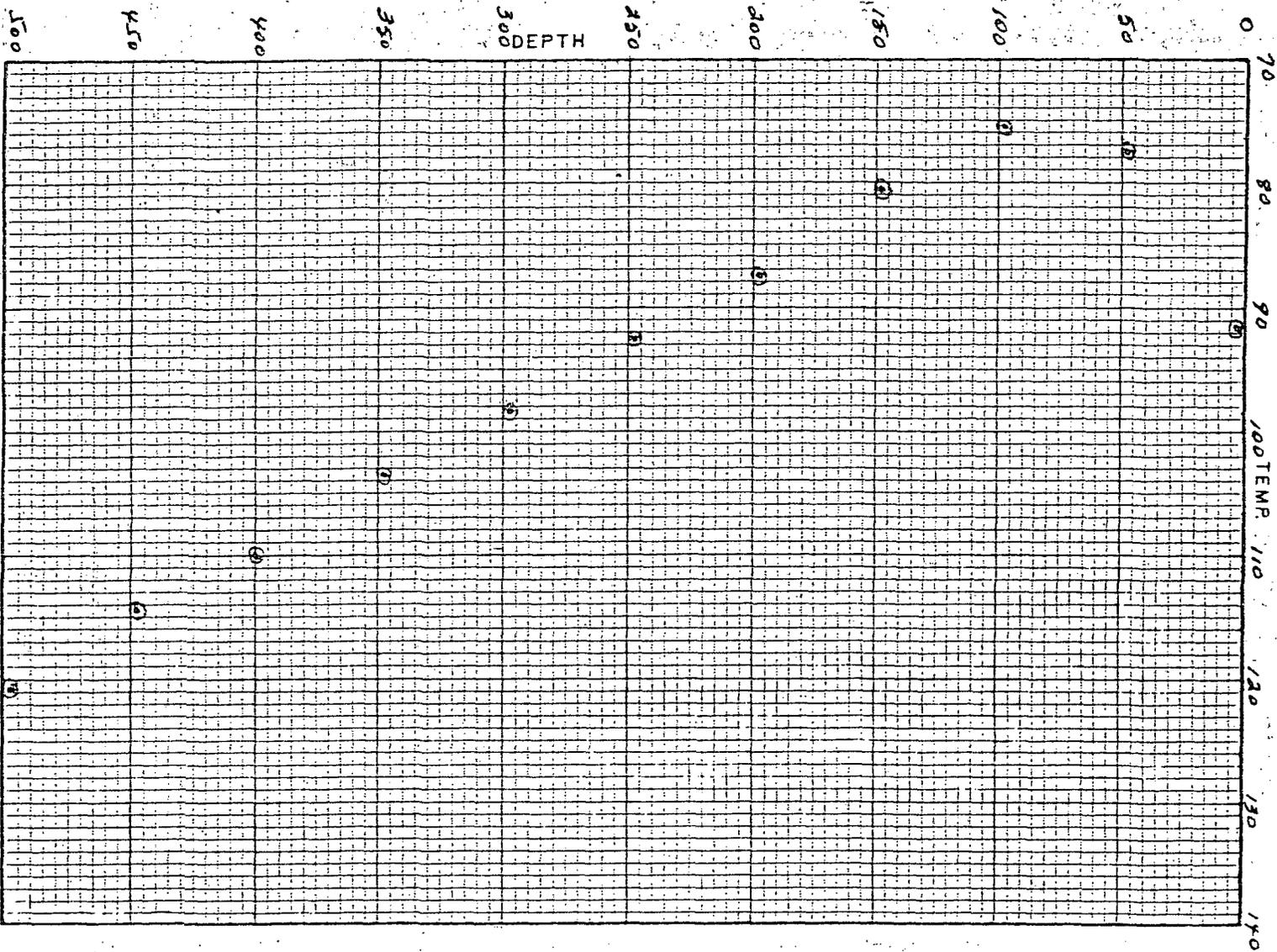
10 June - 23 June 79

1. OPERATOR: Earth Power Production Company
Tulsa, Oklahoma
 2. CONTRACTOR: American Geothermal Drilling Co.
Tulsa, Oklahoma
 3. WELL LOCATION: T.45N, R.27E, Sec. 26 - NE NE
Elevation: 4610'
 4. SPUD DATE: 10 June 79
 5. COMPLETION DATE: 23 June 79
 6. RIG DESCRIPTION: Portadrill Model 524, Serial #662,
60,000 lb. mast, 5½x8 Gardner-Denver
mud pump, Atlas Copco 125 psi @ 330
CFM air compressor. 2000 ft. 2-7/8"
IF drill pipe. 80 ft. 4½" drill
collars.
 7. TOTAL DEPTH: 1680'
Cased to 1670' with 2-3/8" tubing.
-

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|---|
| 10 June 79 | 0-400 | Rig up. Spud 9-7/8" hole with air at 11:15 a.m. Large cavities forming in hole. Hole won't stay clean. Set 10 ft. of 8-5/8" casing. Drill with 6-3/4" bit. Depth is 120 ft. at 2:30 p.m. Drilling with air but hole is too wet to stay clean. Mud up. Drilling is fast in interlayered sandstones. Thin air fall tuff at 110 ft. Depth is 400 ft. at midnight. |
| 11 June 79 | 400-500 | Depth is 500 ft. at 2:30 a.m. Trip out of hole. Rig shut down from 3:00 a.m. until noon. At noon, run 463 ft. of 2-3/8" tubing. Standby for temperature survey. |
| 12 June 79 | 0-209 | Pull 2-3/8" tubing after temperature survey. Pull 8-5/8" conductor. Ream hole with 12-1/4" bit to 209 ft. Run 202 ft. of 8-5/8" T&C casing set at 205 ft. Cement thru casing with 72 sax Portland Type I-II cement. Plug down at 11:00 p.m. Clean out mud pumps. |
| 13 June 79 | 209 | Cement 25 ft. down (6 ft. above top casing collar). Cement with 6 sax to surface. Nipple up to 6" double manual BOP; blind rams on bottom, 2-7/8" pipe rams on top. Pressure up to 250 psi on blind rams. Pressure drops to 242 after 30 minutes. Go in hole with drill pipe. Pressure up on pipe rams to 225 psi. Pressure steady at 225 for 30 minutes. BOP test passes. Begin drilling out cement at 2:30 p.m. Top of cement @ 100 ft. Drill out cement to 160'. Stop to pump out mud pits. Haul contaminated mud to Denio dump. |
| 14 June 79 | 209-785 | Drill cement to 209 ft. with 6" bit. Clean out mud pits once more. Mix up fresh pits. Wash to 505 ft. Hole is fairly clean. Depth is 605 ft. at noon. Depth is 780 ft. at 10:00 p.m. Bit not cutting. |

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|--|
| 15 June 79 | 780 | Trip for new bit. Bearings frozen and bit worn flat. Out of 6" bits. Re-enter hole with 6-1/4" bit. Wash to 505 ft. Ream to 780 ft. by noon. Mud pump clutch shot. Rig is down. |
| 16 June 79 | 780 | Rig down. Work on clutches. |
| 17 June 79 | 780 | Rig down. |
| 18 June 79 | 780 | Rig down. |
| 19 June 79 | 780-1020 | Rig back in operation at 4:00 p.m. Trip into hole with 6" bit. Making mud at 900 ft. At 1020 ft. mud too thick to pump. Pump out pits. |
| 20 June 79 | 1020-1200 | Pump out mud pits. Mix up fresh pits. Drilling again at 4:00 a.m. Depth is 1120 at 8:00 a.m. Drawworks clutch overheated. Trip out of hole. Work on drawworks clutch. Trip into hole at 8:00 p.m. Drilling ahead at 9:00 p.m. Depth is 1200 ft. at midnight. |
| 21 June 79 | 1200-1550 | Drilling ahead. Intermittently hard and soft layers. Hole still making mud. Depth is 1520 at noon. Pump out pits. Mix up fresh pits. |
| 22 June 79 | 1550-1680 | Trip out at 1:00 a.m. for new bit. Trip in with 5-5/8" bit. On bottom at 5:45 a.m. Depth is 1680 ft. @ 10:00 a.m. Trip out of hole. Mix up fresh pit to condition hole. Condition hole for 4 hours. |
| 23 June 79 | 1680 | Trip out of hole. Haul tubing to site. Run 1670 ft. of 2-3/8" tubing. |

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 92.5 | 250 | 93.3 |
| 10 | 85.5 | | 94.2 |
| | 82.3 | | 95.4 |
| | 81.0 | | 96.1 |
| | 79.7 | | 97.6 |
| 50 | 78.5 | 300 | 99.0 |
| | 77.5 | | 100.2 |
| | 77.0 | | 101.2 |
| | 76.7 | | 102.5 |
| | 76.5 | | 103.4 |
| 100 | 76.4 | 350 | 104.5 |
| | 76.4 | | 105.5 |
| | 76.5 | | 106.8 |
| | 76.6 | | 107.9 |
| | 76.9 | | 109.1 |
| 150 | 81.4 | 400 | 110.1 |
| | 82.7 | | 111.2 |
| | 83.9 | | 112.4 |
| | 85.4 | | 113.7 |
| | 87.0 | | 114.8 |
| 200 | 88.2 | 450 | 115.8 |
| | 89.4 | | 116.8 |
| | 90.0 | | 118.1 |
| | 90.8 | | 119.4 |
| | 92.1 | | 119.9 |

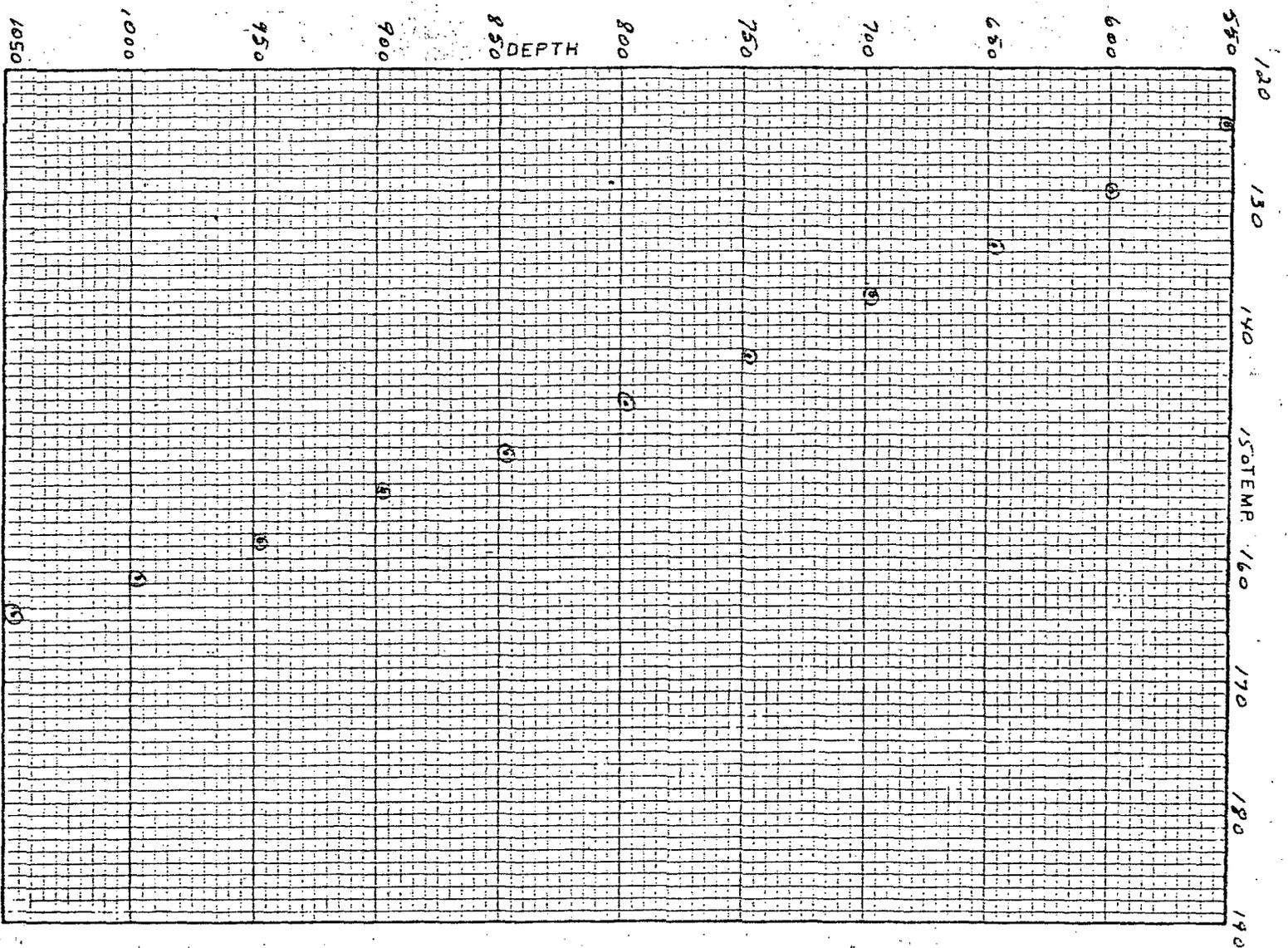


McGEE HOLE # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT McGEE GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1680'
 SURF. ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRLD. 23 JUNE 79 SURVEY DATE 27 July 79
 SURVEY BY EPPC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 500 | 121.0 | 750 | 144.1 |
| | 122.0 | | 145.0 |
| | 123.2 | | 145.8 |
| | 123.8 | | 146.2 |
| | 124.6 | | 147.0 |
| 550 | 125.7 | 800 | 148.0 |
| | 127.1 | | 148.9 |
| | 127.6 | | 149.8 |
| | 128.8 | | 150.3 |
| | 130.8 | | 151.4 |
| 600 | 130.8 | 850 | 152.2 |
| | 131.6 | | 152.5 |
| | 133.0 | | 153.6 |
| | 134.0 | | 154.8 |
| | 134.6 | | 155.3 |
| 650 | 135.5 | 900 | 155.6 |
| | 136.5 | | 156.0 |
| | 137.1 | | 157.0 |
| | 138.3 | | 158.0 |
| | 139.9 | | 159.1 |
| 700 | 139.7 | 950 | 159.7 |
| | 140.7 | | 160.1 |
| | 141.4 | | 160.5 |
| | 142.4 | | 161.0 |
| | 143.1 | | 161.6 |



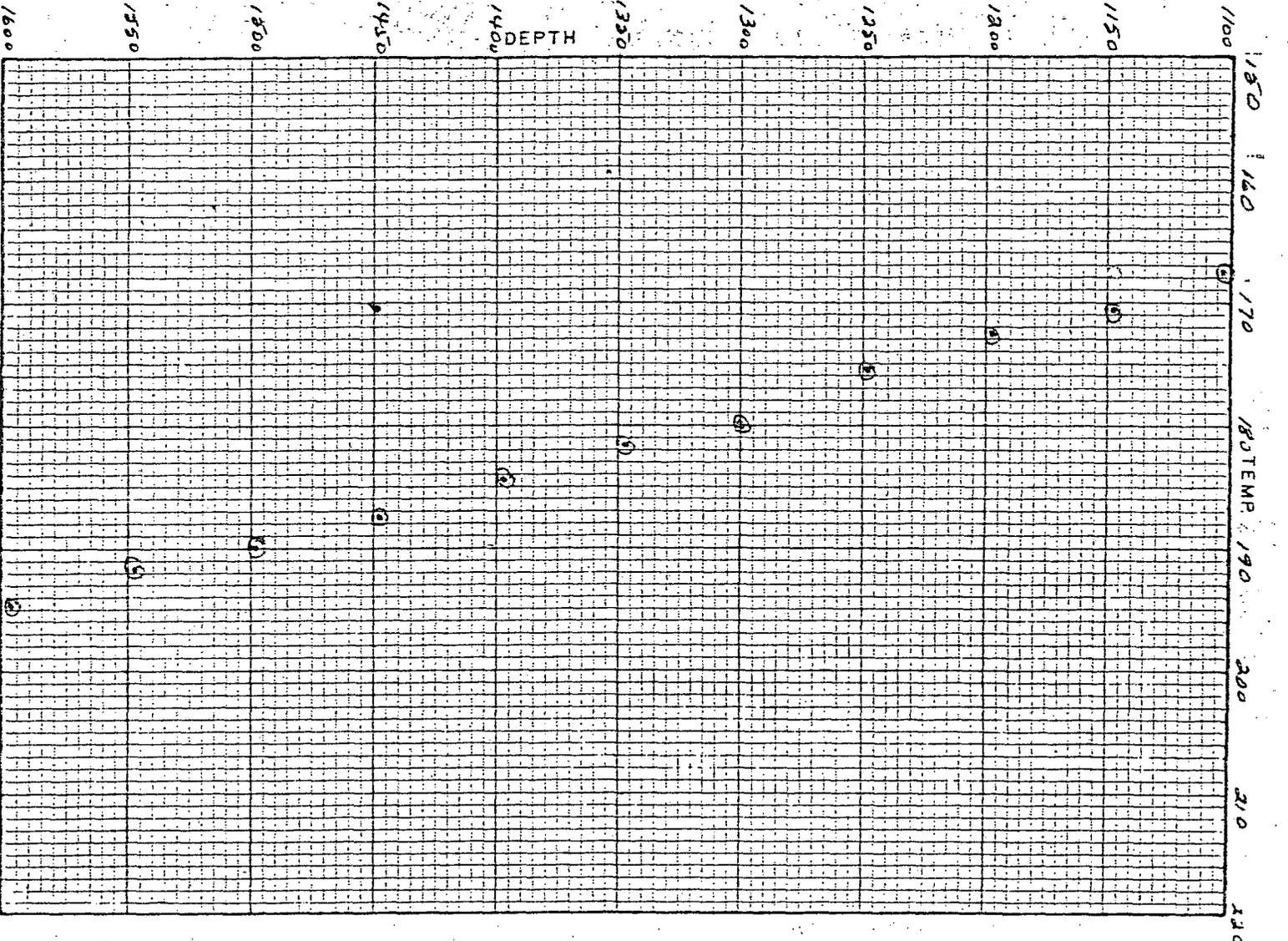
LITHOLOGY

MCGEE HOLE # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT MCGEE GRADIENT _____
 LOCATION Dumboldt Co., Nevada T.D. 1680'
 SURF. ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRLD. 23 JUNE 79 SURVEY DATE 27 JULY 79
 SURVEY BY EPPC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1000 | 162.2 | 1450 | 176.8 |
| | 163.1 | | 177.8 |
| | 163.6 | | 178.6 |
| | 164.2 | | 179.5 |
| | 164.7 | | 180.0 |
| 1050 | 165.4 | 1300 | 180.6 |
| | 166.2 | | 180.9 |
| | 166.8 | | 181.3 |
| | 167.3 | | 181.7 |
| | 168.0 | | 182.2 |
| 1100 | 168.4 | 1350 | 182.8 |
| | 169.1 | | 183.3 |
| | 169.8 | | 184.1 |
| | 170.5 | | 184.2 |
| | 171.1 | | 185.2 |
| 1150 | 171.7 | 1400 | 185.6 |
| | 172.1 | | 186.1 |
| | 172.5 | | 186.7 |
| | 173.0 | | 186.9 |
| | 173.6 | | 187.6 |
| 1200 | 173.9 | 1450 | 188.1 |
| | 174.5 | | 188.4 |
| | 175.0 | | 189.0 |
| | 175.2 | | 189.4 |
| | 176.2 | | 190.1 |

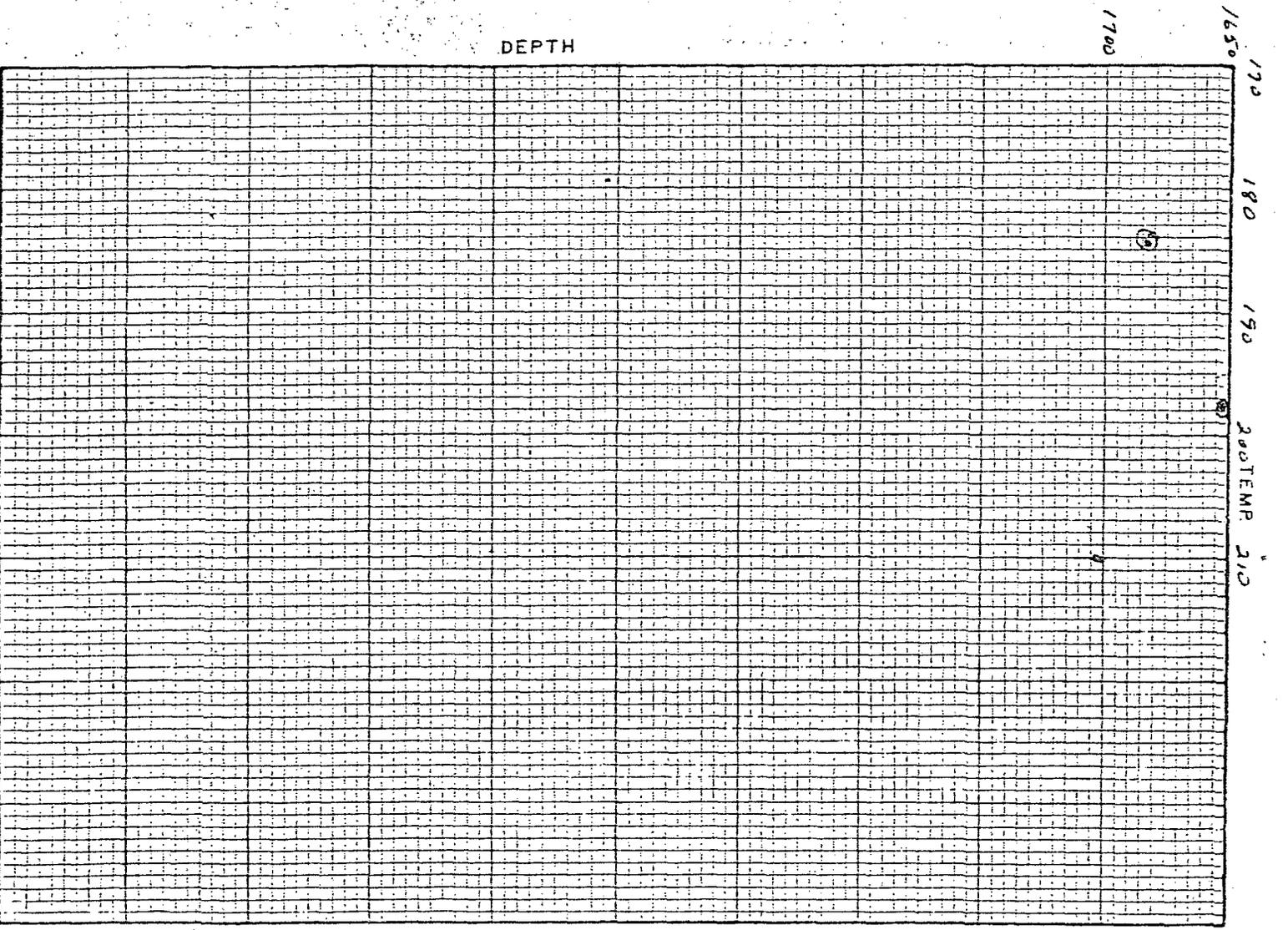


McGee HOLE # 1500-2
LITHOLOGY

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT McGee
 LOCATION Humboldt Co., Nevada
 SURF. ELEV. _____
 DATE DRLD. 23 JUNE 79
 GRADIENT _____
 T.D. 1680'
 TEMP. AT T.D. 200.2
 SURVEY DATE 27 JULY 79
 SURVEY BY EPPC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1500 | 190.6 | | |
| | 190.1 | | |
| | 191.5 | | |
| | 192.3 | | |
| | 192.7 | | |
| 1550 | 192.9 | | |
| | 193.0 | | |
| | 193.7 | | |
| | 194.3 | | |
| | 194.8 | | |
| 1600 | 195.5 | | |
| | 196.2 | | |
| | 196.8 | | |
| | 197.1 | | |
| | 197.5 | | |
| 1650 | 198.4 | | |
| | 198.9 | | |
| | 199.3 | | |
| | 200.0 | | |
| 1684 | 200.2 | | |



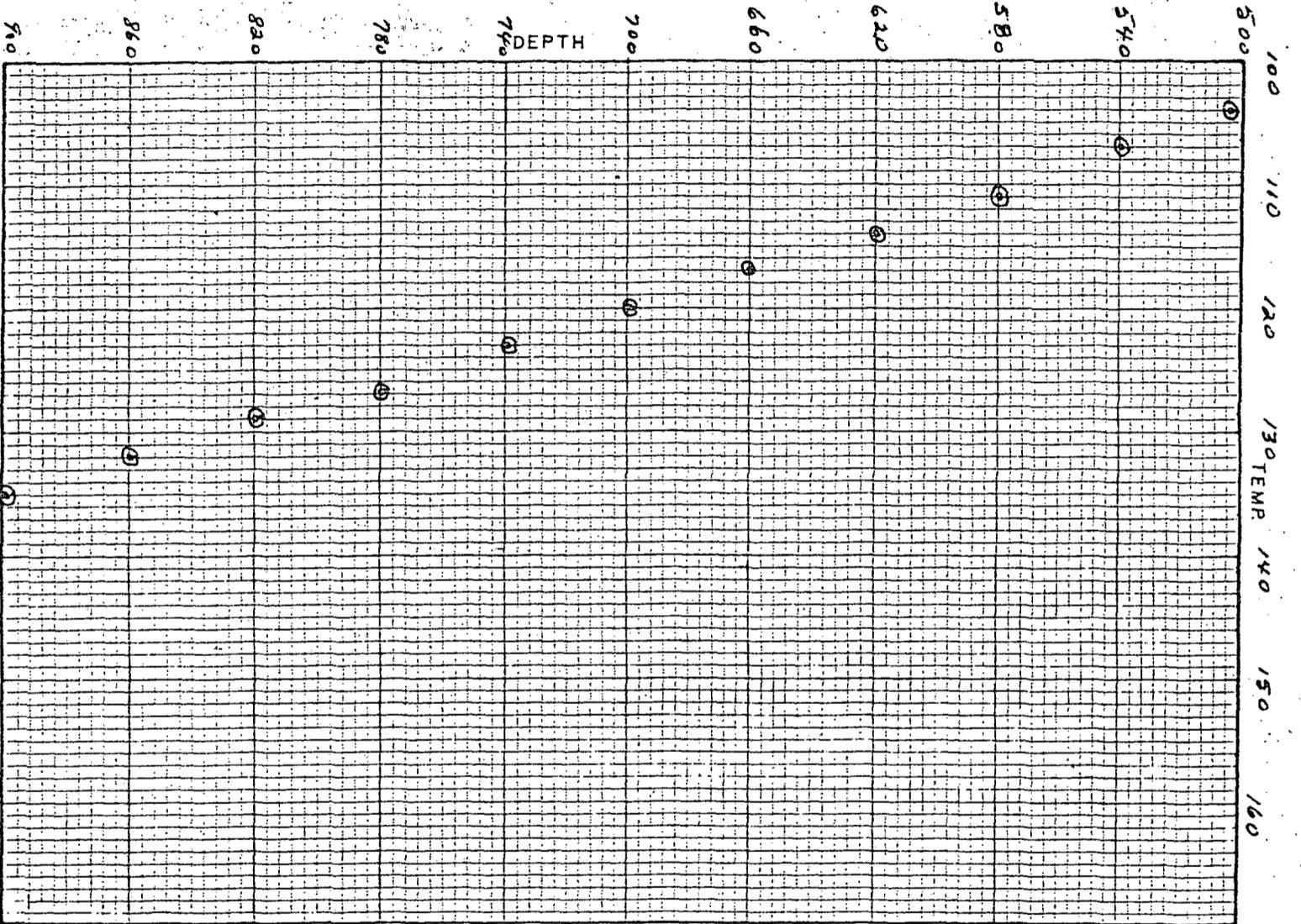
LITHOLOGY

19.5 HOLE # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT McGee GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1680'
 SURF. ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRLD. 23 JUNE 79 SURVEY DATE 27 July 79
 SURVEY BY EPCC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 460 | - 97 | 940 | 137.8 |
| 460 | 100.5 | 960 | 138.8 |
| 480 | 102.2 | 980 | 140.0 |
| 500 | 104.1 | 1000 | 141.6 |
| 520 | 105.6 | 1020 | 143.0 |
| 540 | 107.7 | 1040 | 144.6 |
| 560 | 109.4 | 1060 | 145.3 |
| 580 | 111.3 | 1080 | 147.6 |
| 600 | 113.0 | 1100 | 148.3 |
| 620 | 114.6 | 1120 | 150.1 |
| 640 | 116.0 | 1140 | 151.4 |
| 660 | 117.8 | 1160 | 152.6 |
| 680 | 118.7 | 1180 | 154.1 |
| 700 | 120.1 | 1200 | 155.9 |
| 720 | 122.9 | 1220 | 156.4 |
| 740 | 123.6 | 1240 | 157.1 |
| 760 | 124.5 | 1260 | 159.3 |
| 780 | 127.1 | 1280 | 160.7 |
| 800 | 128.3 | 1300 | 161.6 |
| 820 | 129.9 | 1320 | 162.0 |
| 840 | 130.8 | 1340 | 162.7 |
| 860 | 132.0 | 1360 | 163.4 |
| 880 | 133.6 | 1380 | 164.1 |
| 900 | 135.3 | 1394 | 166.5 |
| 920 | 136.0 | | |



| DEPTH | TEMP. |
|-------|-------|
| 0 | 166.5 |
| 2 | 167.2 |
| 4 | 167.4 |
| 6 | 167.7 |
| 8 | 167.9 |
| 10 | 168.1 |
| 12 | 168.4 |
| 14 | 168.6 |
| 16 | 168.8 |
| 18 | 168.8 |
| 20 | 168.8 |

20 Min. Run @
1394' 166.5

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT McGEE
 LOCATION Humboldt Co., Nevada
 SURF ELEV. _____
 DATE DRLD. 23 June 79

GRADIENT _____
 T.D. 1680
 TEMP. AT T.D. 166.5
 SURVEY DATE 25 JUNE 79
 SURVEY BY AGNEW + SWEET

McGEE HOLE # 1500 - 2
LITHOLOGY

EARTH POWER PRODUCTION COMPANY
522 SOUTH BOSTON AVENUE
P.O. BOX 1566, TULSA, OKLA. 74101
918-587-9704

OFR
Dec 79
NV/Cal/
EPP-8

August 24, 1979

Mr. Joseph N. Fiore, Project Engineer,
Geothermal Branch Engineering
The Department of Energy
Nevada Operations Office
P. O. Box 14100
Las Vegas, Nevada 89114

Dear Joe:

Please be advised that the drilling operations pursuant to our Contract #DE-AC08-79ET27007 were completed July 31, 1979. Some additional temperature logging was accomplished during August.

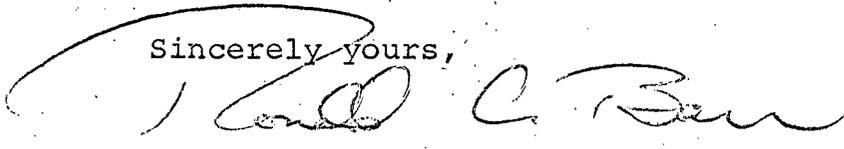
The deliverables required pursuant to our contract are the temperature logs, drilling and completion histories, and drill cutting samples. The samples will be sent next week to Mr. Ross at the University of Utah; the temperature data and drilling and completion histories are enclosed herewith.

The data covers 4638' of cased hole. You previously reimbursed us for 1581' out of the 4500' for which we are entitled to be reimbursed at a rate of \$19.95 per foot.

We herewith request that you reimburse us for 2919' at \$19.95 per foot for a total amount of \$58,234.05.

Your attention to this matter is appreciated.

Sincerely yours,



Ronald C. Barr
President
Enclosures

cc: Mr. H. P. Ross w/enclosures

DRILLING HISTORY

Baltazor 1500-1, Humboldt County, Nevada

5 May - 5 June 79

1. OPERATOR: Earth Power Production Company
Tulsa, Oklahoma
 2. CONTRACTOR: American Geothermal Drilling Co.
Tulsa, Oklahoma
 3. WELL LOCATION: T.46N, R.28E, Sec. 14 - NW NE NW
Elevation: 4218'
 4. SPUD DATE: 5 May 79
 5. COMPLETION DATE: 5 June 79
 6. RIG DESCRIPTION: Portadrill Model 524, Serial #662,
60,000 lb. mast, 5½x8 Gardner-Denver
mud pump, Atlas Copco 125 psi @ 330
CFM air compressor. 2000 ft. 2-7/8"
IF drill pipe. 80 ft. 4½" drill
collars.
 7. TOTAL DEPTH: 1581'
Cased to 1528½' with 2-3/8" API
tubing.
-

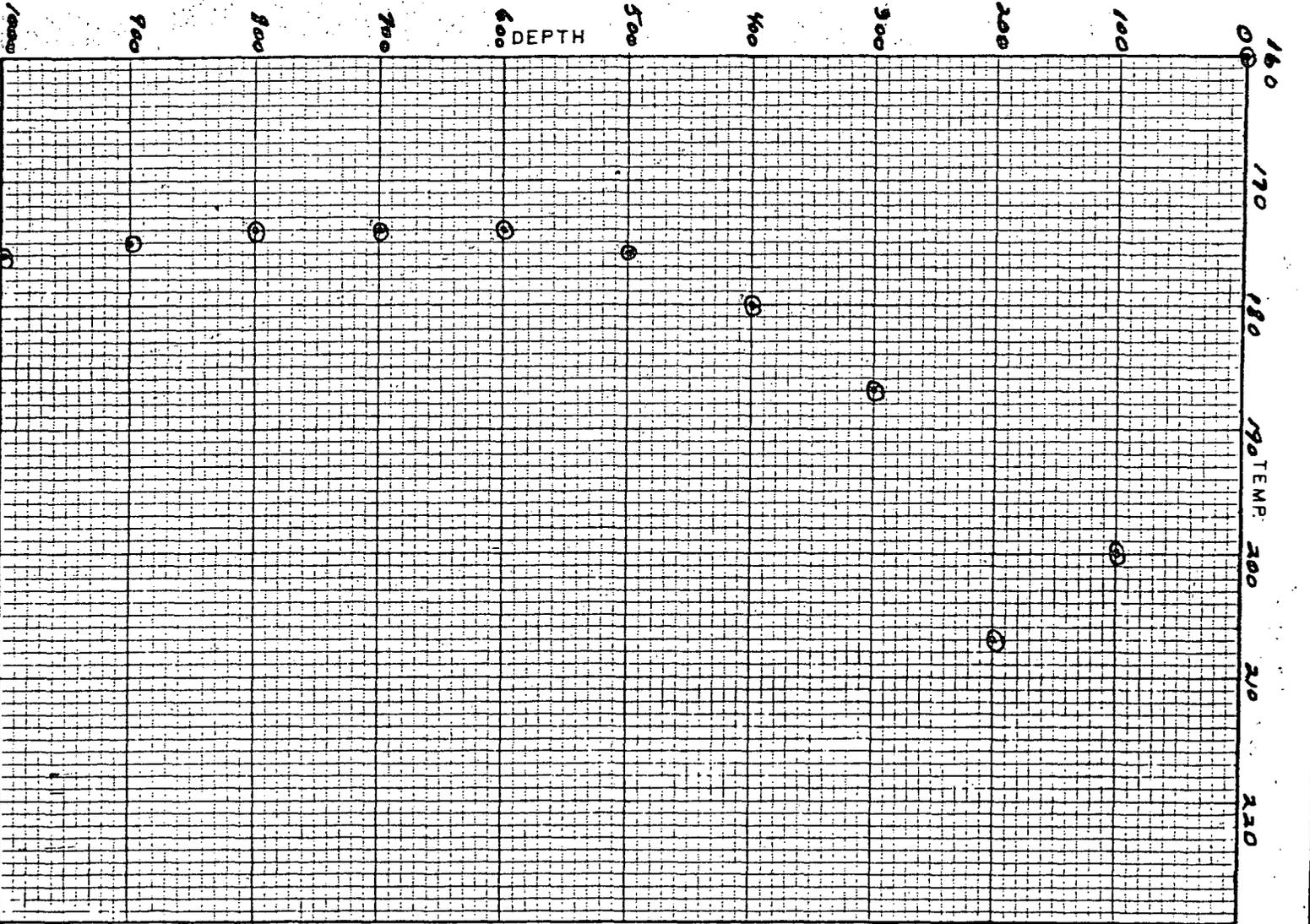
| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|--|
| 5 May 79 | 0-88 | Rig up. Dig mud pits. Spud with 12¼" bit at 3:15 p.m. Drive 20 ft. 14" casing in soft clay. Begin drilling with 12¼" bit below conductor pipe. Lost circulation at 25 ft. Add cottonseed hulls and Fibertex to mud. Circulation recovered. Depth is 88 ft. at 8:00 p.m. Trip out of hole. |
| 6 May 79 | 88-154 | Trip into hole. Drilling in basaltic gravels with occasional clay layers. Return circulation good. Initial mud return temperature = 145°F, dropping to 80°F as circulation continues. Lost circulation at 115 ft. Static water level drops from 3 ft. to 8 ft. below ground level. Add LCM to mud system. Circulation partially recovered. Severe lost circulation at 151 ft. Make up fresh mud pits. Pump in mud and LCM slowly. No recovery. Static water level at 5 ft. Mix up new pits. No recovery. Out of mud. Rig up to drill with foam. Trip up the hole to 40 ft. Well blows out when air is turned on. Much steam and hot water. Kill well by pumping 1500 gals. cold water. |
| 7 May 79 | 154-154 | Out of mud. Well apparently flowed overnight. Well blows out at 11:00 a.m. and dies spontaneously. Pump 3000 gals. of cold water to cool hole. Mud arrives 10:30 p.m. |
| 8 May 79 | 154-166 | Mix up new mud pits. Trip into hole. 15 ft. of fill up on bottom. Cannot keep hole clean because of low viscosity. Mud weight of 9 lbs./gal. or more results in lost circulation. Static water level at 8 ft. Trip out of hole at 166 ft. Decide to case to 166 ft. |
| 9 May 79 | 166 | Trip into hole. 3 ft. of fill up on bottom. Prepare to case. Begin running casing. Run 158 ft. of 8-5/8" T&C, K-55 casing. Rig up to cement casing. Cement thru casing with 38 sax Portland Type I-II low alkali neat cement and water to make 440 gals. No return to surface. W.O.C. |
| 10 May 79 | 166 | Probe down annulus to 151 ft. with plastic pipe. No sign of cement. Come out of hole |

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|--|
| | | with plastic pipe. Drop 120 ft. of pipe. Fish out pipe. Run in annulus with iron pipe. Hole open to 149 ft. Prepare to cement. Cement thru iron pipe in annulus at 149 ft. Stage 3, 200 gal. slugs of cement. W.O.C. |
| 11 May 79 | 166-10 | Run iron pipe down annulus. Annulus bridged at 20 ft. Try to wash out bridge. Cannot break thru bridge. Pressure up on casing. Casing leaking at 100 psi. Cement 12 sax down annulus. Mix up cement to pump down annulus (25 sax cement with 3 sax hulls). Pump cement down casing. Casing comes up out of hole 2½ ft. Decide to abandon hole because of bad cement job. Move rig 15 ft. west. Spud new hole with 12¼" bit; set 10 ft. of 14" conductor. |
| 12 May 79 | 10-130 | Mix up mud pits. Drilling with 12¼" bit. Lost circulation at 126 ft. Mix up new pits with hulls and Fibertex. Cannot recover circulation. Trip out of hole. |
| 13 May 79 | 130-153 | Mix up pits. Trip into hole. 15 ft. of fill up on bottom. Slight return flow begins at 136 ft. Prepare to case at 153 ft. |
| 14 May 79 | 153-156 | Trip into hole. Hole is clean. Drill to 156 ft. to make extra hole for casing. Trip out of hole. Set 153' 6" of 8-5/8" T&C, K-55 casing at 155 ft. Cement baskets at 150 and 140 ft. Prepare to cement. Cement thru casing with 24 sax neat cement. Cement down annulus with 1" pipe with 26 sax. W.O.C. 6 Hrs. Cement down annulus with 24 sax. W.O.C. 8 Hrs. |
| 15 May 79 | 156 | Cement down annulus with 22 sax neat cement and 2 sax hulls. W.O.C. 6 Hrs. Probe down annulus. Cement at 35 ft. and still soft. W.O.C. 7 Hrs. Cement down annulus with 44 sax cement and 3 sax hulls. W.O.C. 8 Hrs. |
| 16 May 79 | 156 | Probe down annulus. Cement at 26 ft. and hard. Cement down annulus with 20 sax cement and 2 sax hulls. Cement returns to surface, approximately 50 gals. Cement down annulus of previously abandoned hole with 12 sax. Prepare to nipple up. |

| <u>DATE</u> | <u>DEPTH</u> | |
|-----------------------|--------------|---|
| 16 May 79 (cont'd) | | Wellhead as installed from casing up: a) 900 series flange screw into 8-5/8" casing collar, b) 900-600 series drilling spool 2" line pipe side outlets, c) Double manual schaffer 2000-3000 B.O.P. with blind rams on bottom and 2-7/8" pipe rams on top, d) 600 series companion flange, e) flow nipple. Test B.O.P. Close blind rams. Pressure up to 250 psi. Pressure drops to 221 psi after 10 minutes. Close 2-7/8" rams on drill pipe. Pressure up to 250 psi. Pressure drops to 225 after 10 minutes. Test passes. |
| 17 May 79 | 156-181 | Trip into hole. Top of cement at 110 ft. Begin drilling out cement with 6-3/4" bit. 161 ft. lost circulation. Mix up new pits with hulls and Fibertex. Trucks arrive at noon with mud, LCM, drill pipe and collars. Drilling with no returns. Trip up into casing. |
| 18 May 79 | 181-261 | Trip into hole. Drilling with no returns. Occasional 2-3 ft. cavern from 181-201 ft. Bottom of hole staying clean with 33-35 vis. Trip up into casing |
| 19 May 79 | 261-381 | Trip into hole. Hole bridged at 185 ft. Wash out bridge. No fill up on bottom. Consuming ~6000 gals. hr. of mud drilling with no returns. Drilling at 25 ft./hr. at 281 ft. 320-381 soft rock drilling at 40-60 ft./hr. Trip up into casing. |
| 20 May 79 | 381-519 | Trip into hole. Mix mud. Hole bridged at 171 and 188 ft. Drilling with no returns. Bottom of hole staying clean. Trip up into casing. |
| 21 May 79 | 519-610 | Trip into hole. Drilling with no returns. Trip out of hole. |
| 22 May 79 | 610-721 | New 6-3/4" bit. Trip into hole. Drilling with no returns. Water truck cannot keep up with lost circulation. Trip up into casing. |

| <u>DATE</u> | <u>DEPTH</u> | |
|-------------|--------------|---|
| 23 May 79 | 721-819 | Trip into hole. Drilling with no returns. Trip out of hole with plugged bit. Trip into hole. Drilling with no returns. Trip up into casing. |
| 24 May 79 | 819-881 | Trip into hole. Drilling with no returns. Trip out of hole. Rig down. Build fence around drill site. Move equipment. |
| 25 May 79 | | Rig in Reno for maintenance on auxiliary transmission. |
| 4 June 79 | 881-1044 | Rig up. Mix up new pits. Begin tripping into hole at 2:15 p.m. Hole bridged at 165, 171, 185 and 240 ft. Drilling with no returns at 20 ft./hr. Static water level at 5 ft. when not drilling and at 8-9 ft. when drilling. Drilling thru interlayered hard and soft: Hard rock is 20 ft./hr. for 10-15 ft. then 3-5 ft. of 40 ft./hr. material. Trip up 60 ft. of bottom and rotate. |
| 5 June 79 | 1044-1581 | Drill with no returns. Trip out of hole. |
| 6 June 79 | 1581 | Standby for logging truck. Century Geophysical truck arrives at 2:30 p.m. to run Gamma-SP-Resistivity. Hole bridged at 210 ft. Loggers probe not working. No log. Run 1528½ ft. of 2-3/8" API tubing. Wellhead consists of homemade casing hammer and 2" Hi pressure ball valve on 2-3/8" tubing. |
| 7 June 79 | | Rig down. Clean up site. |

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 160.9 | 500 | 176.7 |
| 20 | 162.9 | 520 | 175.8 |
| 40 | 178.9 | 540 | 175.6 |
| 60 | 188.4 | 560 | 175.3 |
| 80 | 195.8 | 580 | 175.1 |
| 100 | 200.4 | 600 | 174.9 |
| 120 | 204.1 | 620 | 174.7 |
| 140 | 207.4 | 640 | 174.7 |
| 160 | 210.1 | 660 | 174.4 |
| 180 | 209.6 | 680 | 174.0 |
| 200 | 207.7 | 700 | 174.0 |
| 220 | 200.8 | 720 | 173.8 |
| 240 | 193.5 | 740 | 173.8 |
| 260 | 189.3 | 760 | 174.0 |
| 280 | 187.5 | 780 | 174.0 |
| 300 | 187.3 | 800 | 174.2 |
| 320 | 187.1 | 820 | 174.4 |
| 340 | 185.7 | 840 | 174.7 |
| 360 | 183.5 | 860 | 174.7 |
| 380 | 181.9 | 880 | 174.9 |
| 400 | 180.8 | 900 | 175.6 |
| 420 | 179.6 | 920 | 175.6 |
| 440 | 178.5 | 940 | 175.8 |
| 460 | 178.0 | 960 | 175.8 |
| 480 | 177.8 | 980 | 175.8 |



15 Min. Run @
 1398' Lithology

| | | |
|----|-----|-------|
| 0 | Min | 182.8 |
| 2 | | 183.0 |
| 4 | | 183.2 |
| 6 | | 183.2 |
| 8 | | 183.2 |
| 10 | | 183.2 |
| 12 | | 183.2 |
| 14 | | 183.2 |
| 15 | | 183.2 |

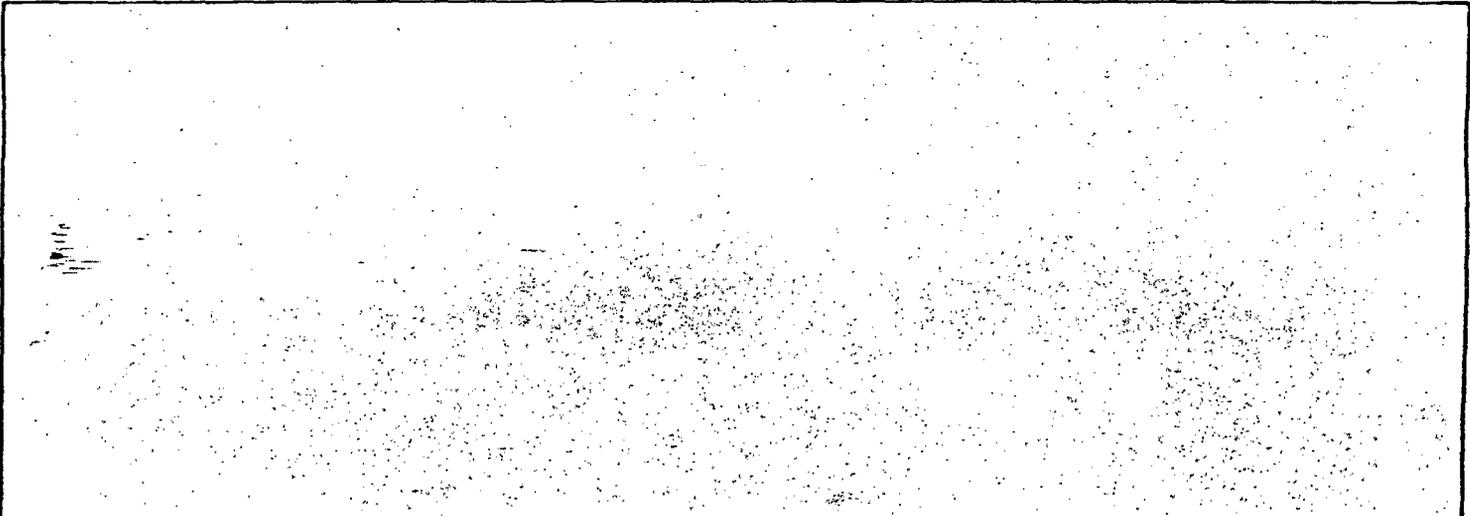
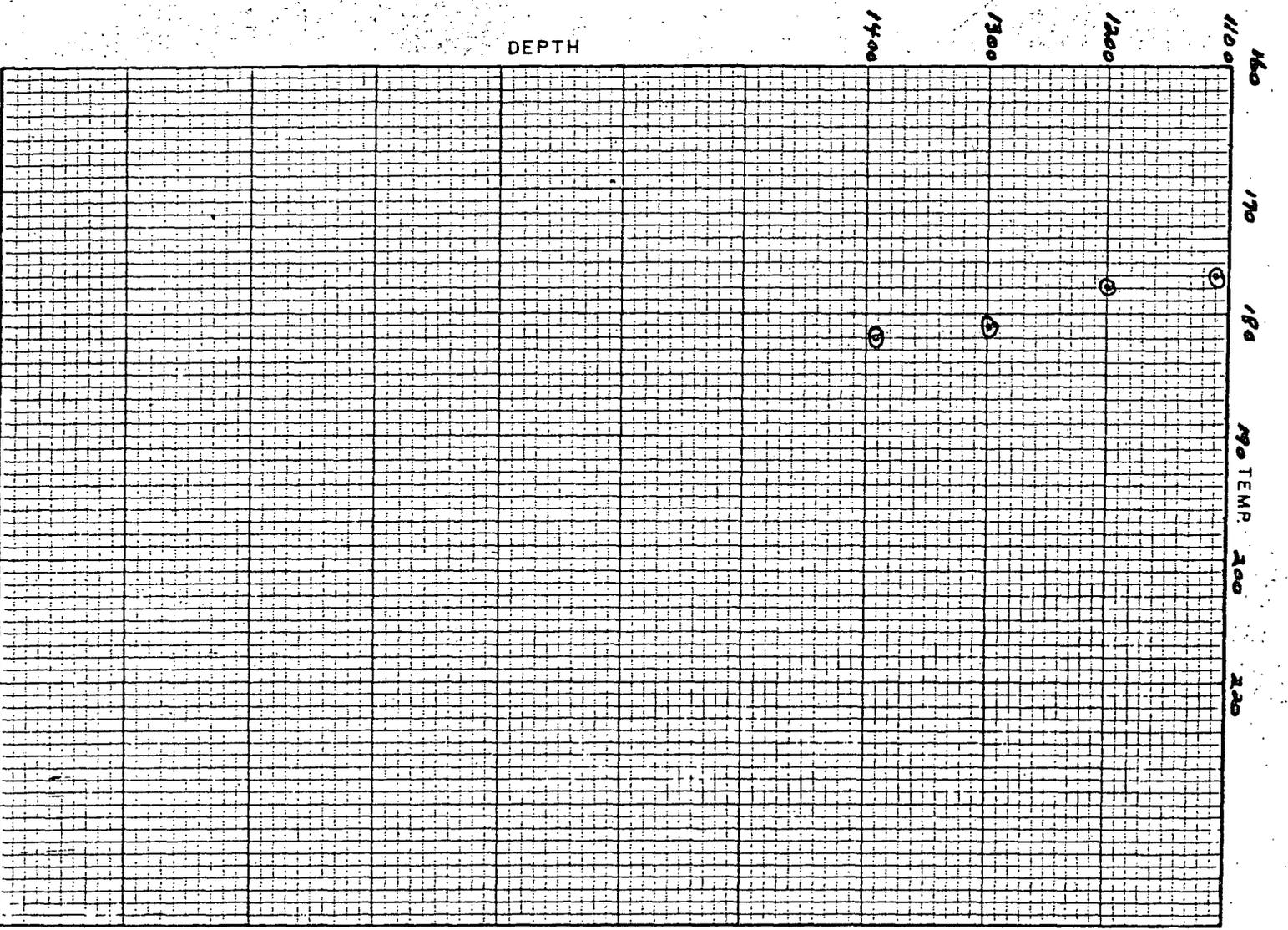
Notes: Hole drilled at 1398'

EARTH POWER
 PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltax GRADIENT _____
 LOCATION Humboldt Co. Nevada T.D. 1581
 SURF. ELEV. _____ TEMP. AT T.D. 182.8
 DATE DRLD. 5 JUNE 79 SURVEY DATE 25 JUNE 79
 SURVEY BY AGNEW & SWEET

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1000 | 176.0 | | |
| 1020 | 175.5 | | |
| 1040 | 176.9 | | |
| 1060 | 177.1 | | |
| 1080 | 177.4 | | |
| 1100 | 177.6 | | |
| 1120 | 177.8 | | |
| 1140 | 178.0 | | |
| 1160 | 178.3 | | |
| 1180 | 178.7 | | |
| 1200 | 178.9 | | |
| 1220 | 179.6 | | |
| 1240 | 180.1 | | |
| 1260 | 180.5 | | |
| 1280 | 181.0 | | |
| 1300 | 181.2 | | |
| 1320 | 181.7 | | |
| 1340 | 181.9 | | |
| 1360 | 182.3 | | |
| 1380 | 182.8 | | |
| 1398 | 182.8 | | |

717

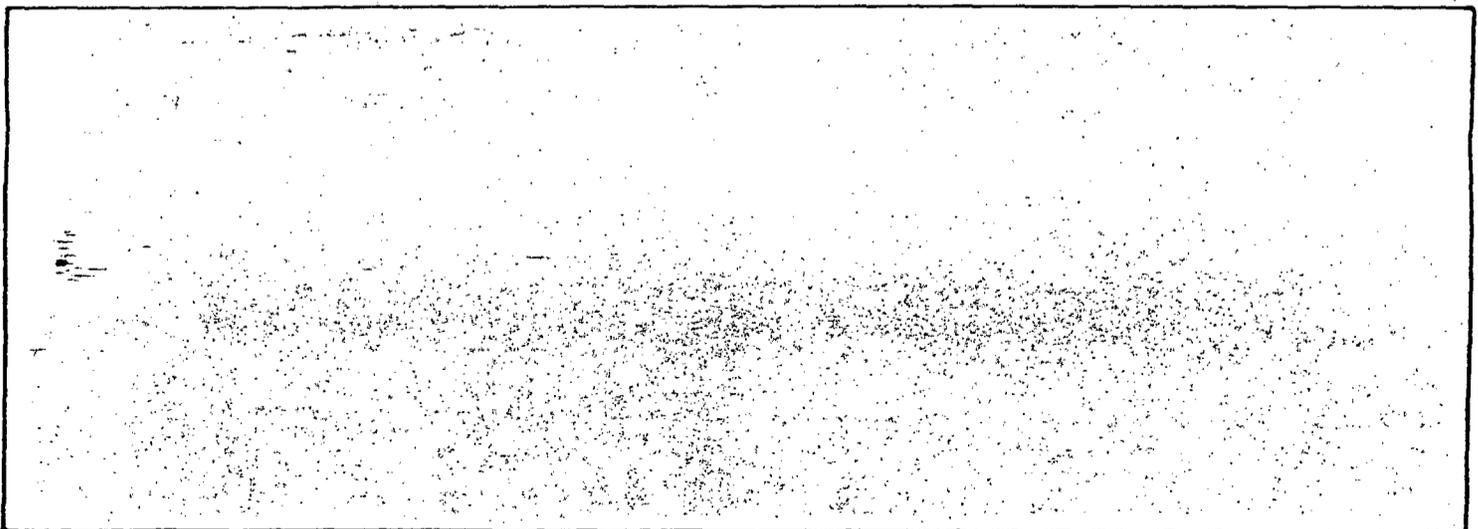
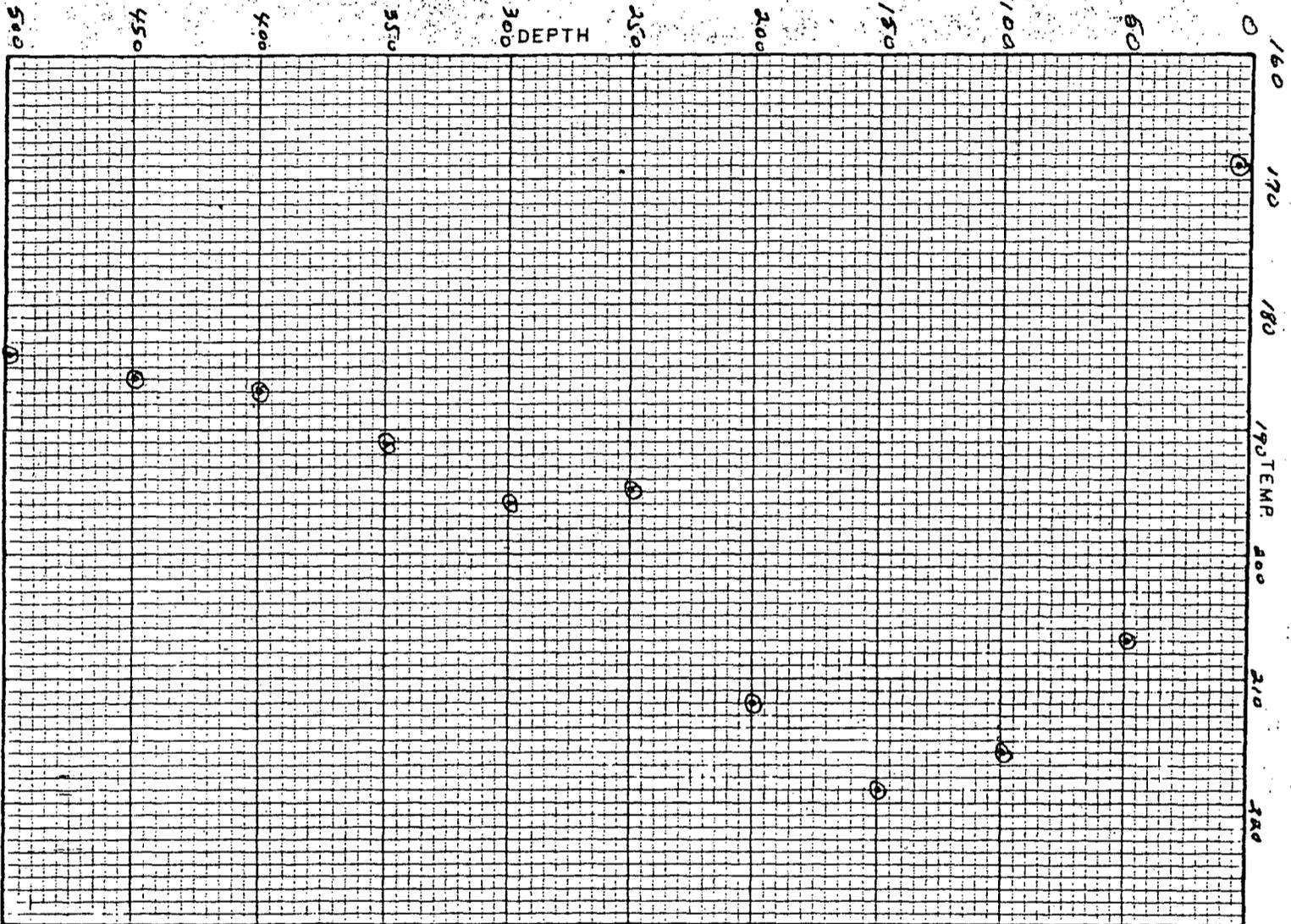


Baltagon
LITHOLOGY HOLE #

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltagon GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1581'
 SURF. ELEV. _____ TEMP. AT T.D. 182.8
 DATE DRLD. 5 JUNE 79 SURVEY DATE 25 JUNE 79
 SURVEY BY AGNEW + SWEET

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 169.3 | 250 | 195.2 |
| 10 | 171.7 | | 195.6 |
| | 187.2 | | 196.0 |
| | 196.5 | | 196.4 |
| | 202.3 | | 196.6 |
| 50 | 207.0 | 300 | 196.7 |
| | 210.1 | | 196.2 |
| | 213.0 | | 195.4 |
| | 214.6 | | 194.0 |
| | 216.0 | | 192.3 |
| 100 | 216.8 | 350 | 191.0 |
| | 217.2 | | 189.6 |
| | 217.8 | | 189.2 |
| | 218.4 | | 188.6 |
| | 218.8 | | 188.2 |
| 150 | 219.2 | 400 | 187.4 |
| | 219.3 | | 186.9 |
| | 218.8 | | 186.5 |
| | 216.4 | | 186.3 |
| | 214.2 | | 186.1 |
| 200 | 212.4 | 450 | 186.2 |
| | 209.7 | | 185.5 |
| | 203.5 | | 185.1 |
| | 194.9 | | 184.9 |
| | 194.6 | | 184.6 |

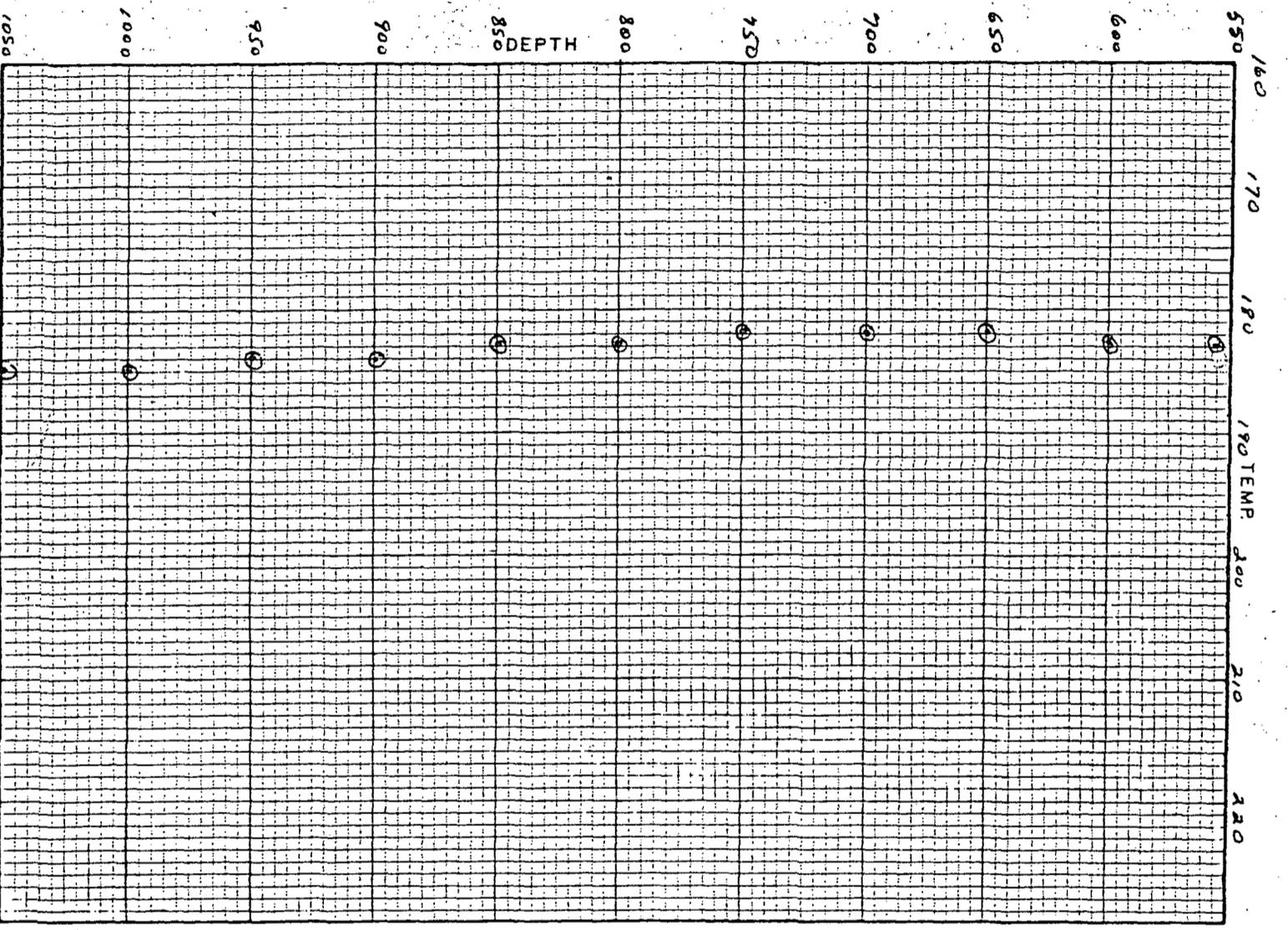


EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltazor GRADIENT _____
 LOCATION Bumholdt Co., T.D. 1581
Nevada TEMP. AT T.D. 195.0
 SURF. ELEV. _____ SURVEY DATE 26 July 79
 DATE DRLD. 7 July 79 SURVEY BY EPPC

Baltazor LITHOLOGY HOLE # 1500-1

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 500 | 184.4 | 750 | 182.7 |
| | 184.3 | | 182.8 |
| | 184.2 | | 182.9 |
| | 184.0 | | 183.0 |
| | 183.8 | | 183.0 |
| 550 | 183.8 | 800 | 183.0 |
| | 183.7 | | 183.1 |
| | 183.6 | | 183.2 |
| | 183.5 | | 183.2 |
| | 183.4 | | 183.4 |
| 600 | 183.4 | 850 | 183.6 |
| | 183.2 | | 183.6 |
| | 183.0 | | 183.7 |
| | 183.0 | | 183.8 |
| | 182.9 | | 183.9 |
| 650 | 182.7 | 900 | 184.0 |
| | 182.6 | | 184.1 |
| | 182.5 | | 184.1 |
| | 182.2 | | 184.2 |
| | 182.1 | | 184.2 |
| 700 | 182.4 | 950 | 184.2 |
| | 182.5 | | 184.2 |
| | 182.6 | | 184.6 |
| | 182.6 | | 184.8 |
| | 182.6 | | 185.0 |



Blank area for lithology notes.

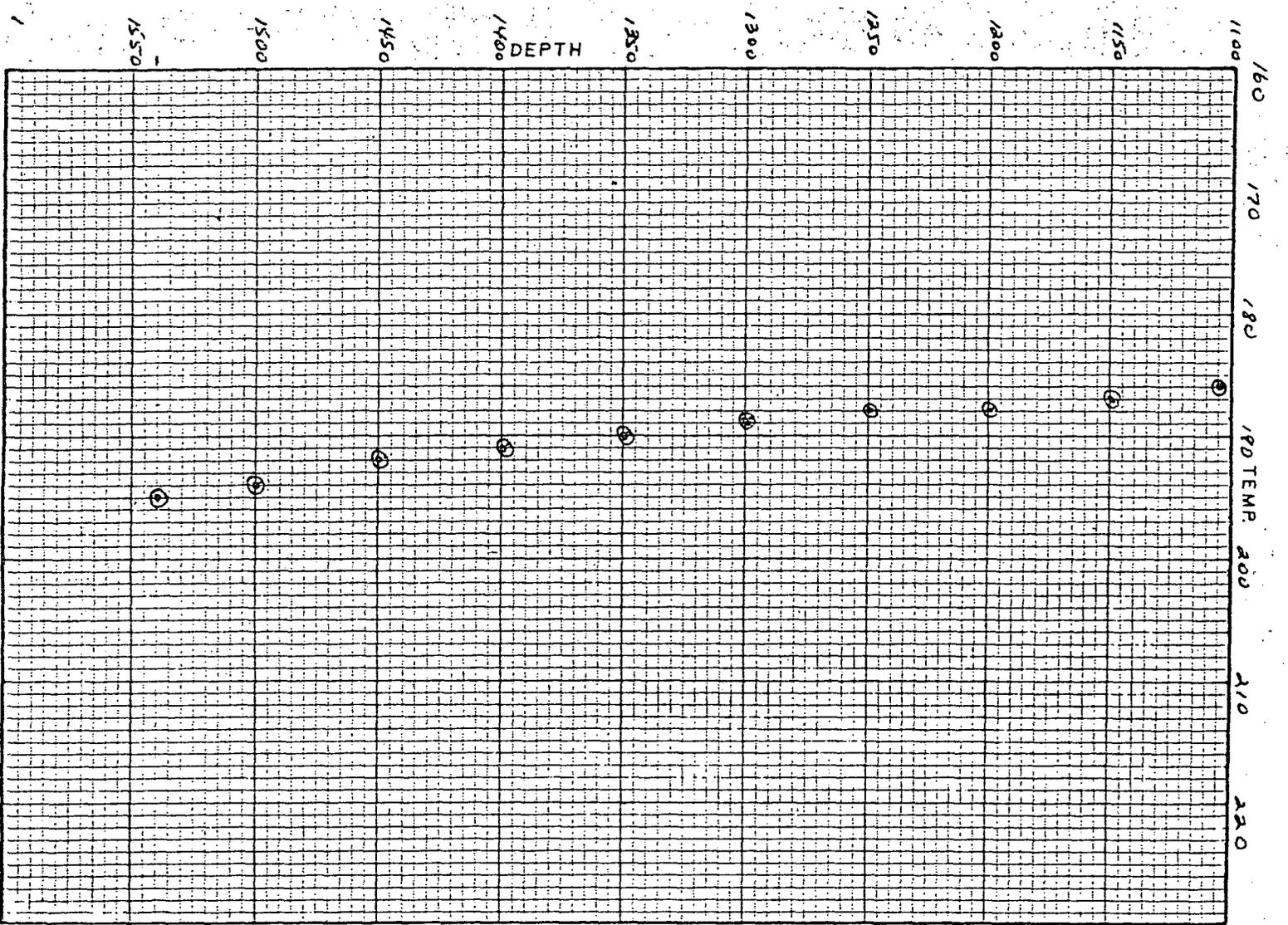
Baltazar
LITHOLOGY HOLE # 1500-1

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT Baltazar GRADIENT _____
 LOCATION Humboldt Co, Nevada T.D. 1581'
 SURF. ELEV. _____ TEMP. AT T.D. 195.0
 DATE DRLD. 7 July 79 SURVEY DATE 26 July 79
 SURVEY BY EPCC

203

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1000 | 185.1 | 1250 | 189.9 |
| | 185.2 | | 189.0 |
| | 185.3 | | 189.3 |
| | 185.4 | | 189.4 |
| | 185.6 | | 189.5 |
| 1050 | 185.7 | 1300 | 189.7 |
| | 185.8 | | 189.9 |
| | 186.0 | | 190.1 |
| | 186.1 | | 190.4 |
| | 186.3 | | 190.6 |
| 1100 | 186.4 | 1350 | 190.7 |
| | 186.5 | | 190.8 |
| | 186.8 | | 191.0 |
| | 186.9 | | 191.3 |
| | 187.1 | | 191.5 |
| 1150 | 187.2 | 1400 | 191.7 |
| | 187.3 | | 191.9 |
| | 187.4 | | 192.0 |
| | 187.7 | | 192.2 |
| | 187.8 | | 192.5 |
| 1200 | 188.0 | 1450 | 192.7 |
| | 188.1 | | 192.9 |
| | 188.2 | | 193.1 |
| | 188.4 | | 193.4 |
| | 188.7 | | 193.7 |



Blank area for lithology notes.

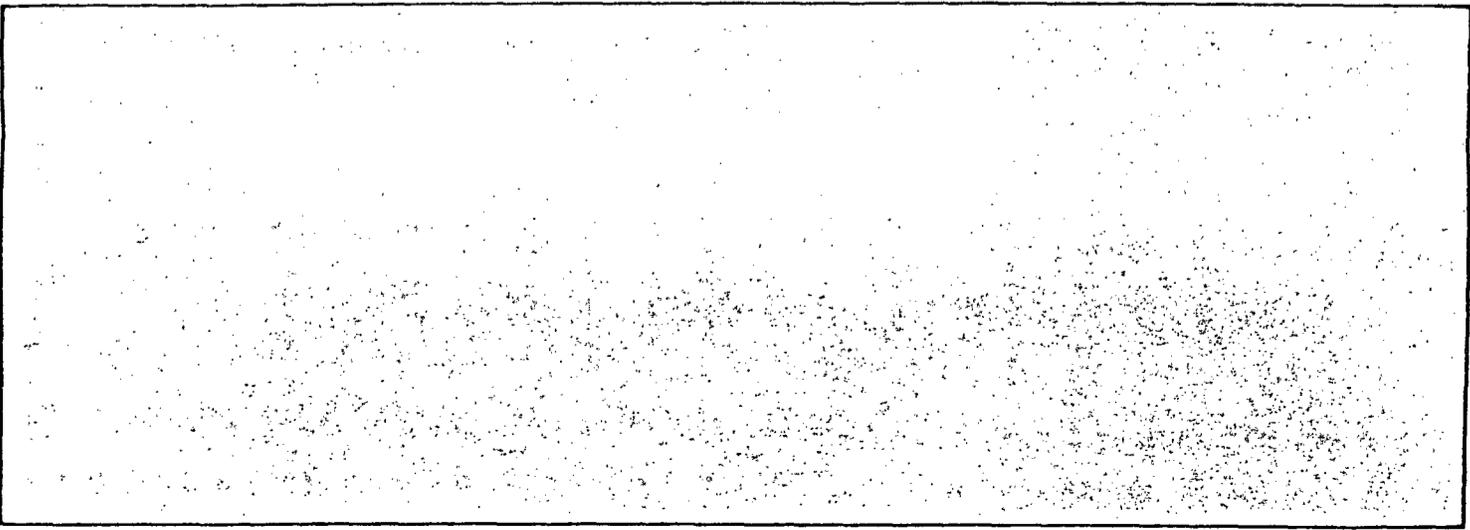
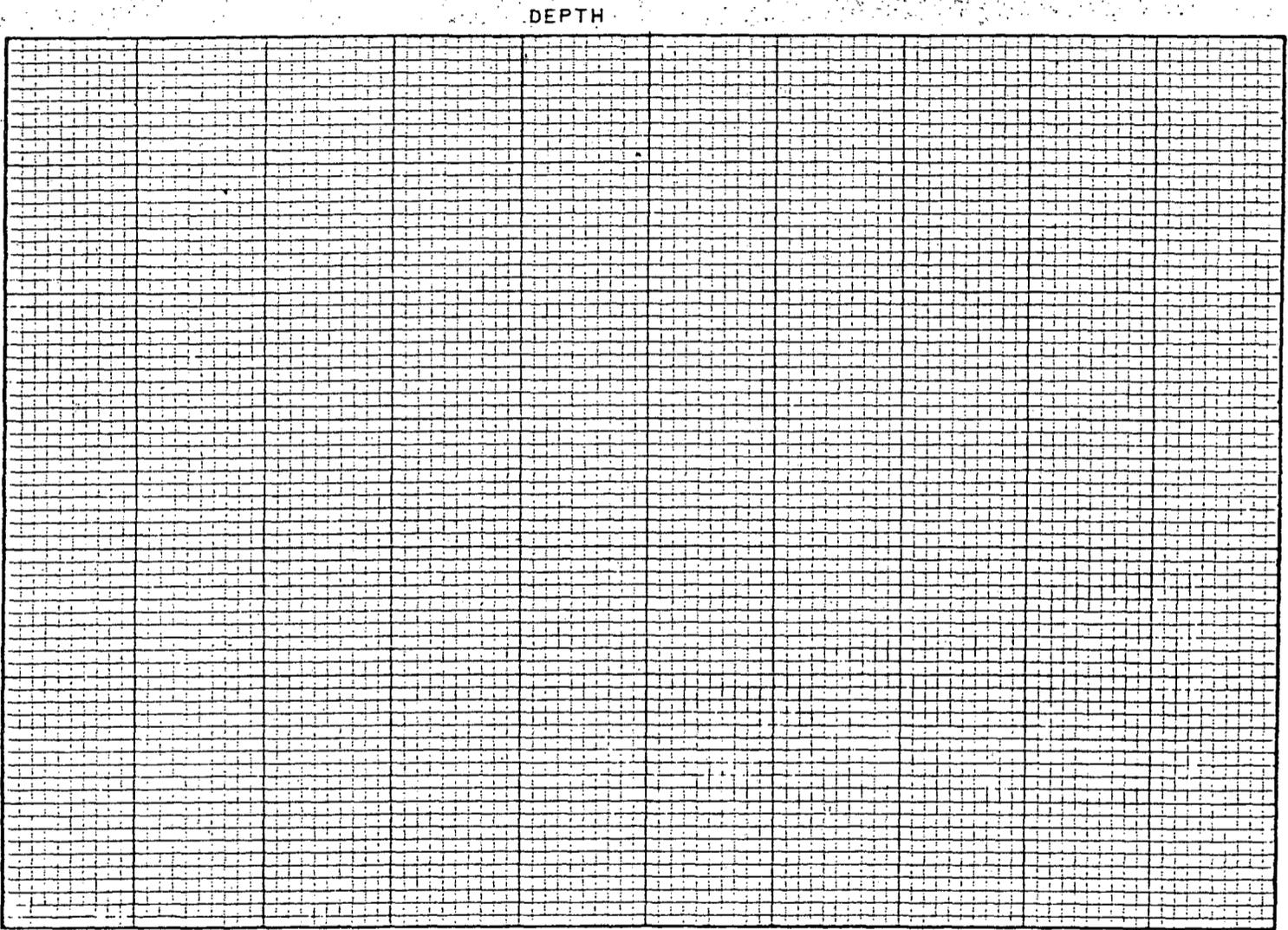
Baltazar LITHOLOGY HOLE # 1500-1

EARTH POWER
 PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baltazar GRADIENT _____
 LOCATION Humboldt Co., T.D. 1581
Thule
 SURF. ELEV. _____ TEMP. AT T.D. 195.0
 DATE DRLD. 7 July 79 SURVEY DATE 26 July 79
 SURVEY BY EPPC

Page 4

| | | | | | | | | | | | | | | T.D. | DEPTH | TEMP. | DEPTH | TEMP. |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|-------|-------|-------|-------|
| | | | | | | | | | | | | | | 1543 | 194.4 | | | |
| | | | | | | | | | | | | | | | 194.8 | | | |
| | | | | | | | | | | | | | | | 194.6 | | | |
| | | | | | | | | | | | | | | | 194.4 | | | |
| | | | | | | | | | | | | | | | 194.2 | | | |
| | | | | | | | | | | | | | | | | | | |



LITHOLOGY HOLE # 1500-1

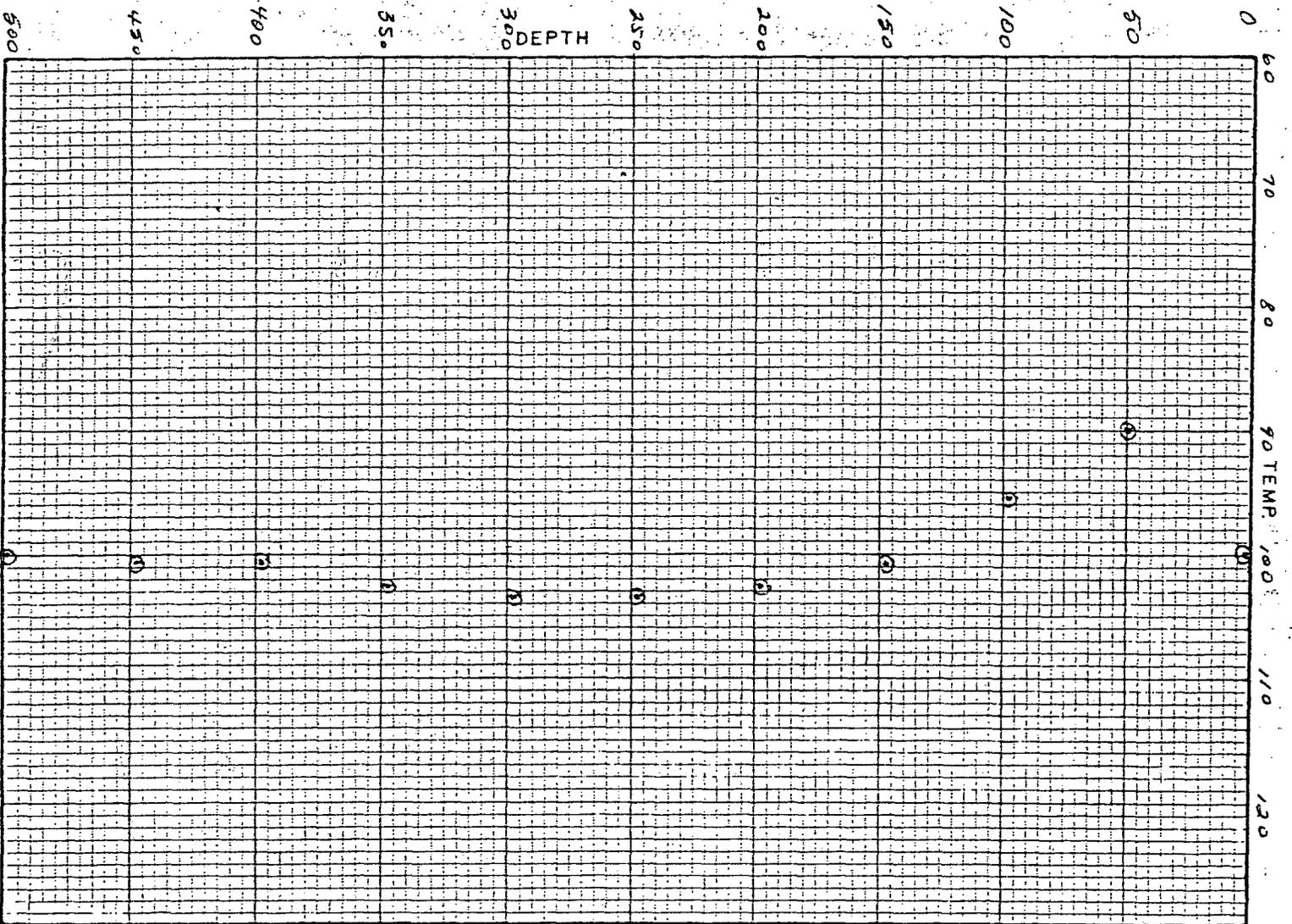
EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Battosai GRADIENT _____
 LOCATION Dumbert Co., Nevada T.D. 1581
 SURF. ELEV. _____ TEMP. AT T.D. 195.0
 DATE DRLD. 7 July 79 SURVEY DATE 26 July 79
 SURVEY BY EPCC

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|---|
| 28 June 79 | 0-40 | Set up water pipeline from Continental Lake. Repair road to site. Rig up. Mix mud. Spud at 5:30 p.m. in coarse gravels and cobbles with 6-3/4" bit. |
| 29 June 79 | 0-120 | Drilling pilot hole with 6-3/4" bit. Hole not staying clean due to large cuttings and gravel. Moderate lost circulation. Depth is 300 ft. at 7:45 p.m. Trip out of hole. Ream hole with 9-7/8" bit. Hole is reamed to 120 ft. at midnight. |
| 30 June 79 | 120-220 | Hole is reamed to 220 ft. at 1:30 a.m. Run 203 ft. of 7" T&C casing hung at 205 ft. Cement basket at 90ft. Cement thru casing with 56 sax Portland Type I-II. Cement returns ~ 35 Gals. to surface. Cement job done at 7:00 a.m. W.O.C. Nipple up at 5:00 p.m. to double manual B.O.P. with blind rams on bottom and 2-7/8" pipe rams on top. Haul mud. Change oil pump. At 10:15 p.m. pressure up on pipe rams on B.O.P. to 250 psi; pressure drops to 234 after 10 Mins. Trip into hole and begin drilling out cement |
| 1 July 79 | 220-445 | Drill out cement to 210' with 6" bit. Wash to 300 ft. Encounter hard basalt at 340. Depth is 350 at noon. Trip out for new bit. Trip in. Interlayered hard basalt and cinders. Depth is 445 at midnight. |
| 2 July 79 | 445-620 | Trip out for new bit. Trip in. Hard formation at 450 ft. Drilling faster at 475. Depth is 580 ft. at noon. Trip out for new bit. Trip in. Depth is 620' at midnight. |
| 3 July 79 | 620-1000 | Trip out at 620 ft. New bit. Trip in. Very hard to 710'. Intermittent hard to 820'. Very hard to 880'. Depth is 880 at noon. Depth is 970' at 8:00 p.m. Mud return temperature is 80° F. Depth is 1000 at 10:00 p.m. Trip out of hole. |

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|--|
| 4 July 79 | 1000 | Holiday. |
| 5 July 79 | 1000-1200 | Start up again at 6:00 a.m. Rebuild swivel. Trip into hole. Wash to 400. Losing circulation. Mix up new pits with LCM. Circulation recovered. On bottom at noon. Depth is 1050' @ 2:10 p.m. Mud return temperature is 91° F. Depth is 1200 ft. at midnight. |
| 6 July 79 | 1200-1487 | Drilling thru intermittent hard basalts ~2-5 ft. thick. Lost circulation at 1240'. Mix up new pits with LCM. Circulation recovered. Very hard formation 1355-1405 ft. Depth is 1420 ft. at noon. Depth is 1487 ft. at 4:30 p.m. Mud return temperature is 96° F. Mud pump breaks down. Trip out of hole. |
| 7 July 79 | 1487 | Haul tubing to site. Run 1410 ft. of 2-3/8" tubing. Rig down. |
| 18 July 79 | 1487 | Add 30 ft. of 2-3/8" tubing to bring total to 1440 ft. |

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 100.4 | 250 | 104.9 |
| | 95.4 | | 105.0 |
| | 92.0 | | 105.0 |
| | 89.0 | | 104.9 |
| | 88.6 | | 104.8 |
| 300 | 90.5 | 300 | 104.4 |
| | 91.8 | | 104.2 |
| | 92.6 | | 104.0 |
| | 93.7 | | 103.7 |
| | 95.2 | | 103.4 |
| 100 | 96.8 | 350 | 103.1 |
| | 98.2 | | 102.8 |
| | 99.0 | | 102.6 |
| | 99.9 | | 102.3 |
| | 100.9 | | 102.0 |
| 150 | 101.6 | 400 | 101.8 |
| | 102.2 | | 101.4 |
| | 102.8 | | 101.1 |
| | 103.2 | | 101.2 |
| | 103.5 | | 101.3 |
| 200 | 103.8 | 450 | 101.2 |
| | 104.1 | | 100.4 |
| | 104.4 | | 98.2 |
| | 104.5 | | 98.2 |
| | 104.7 | | 99.0 |



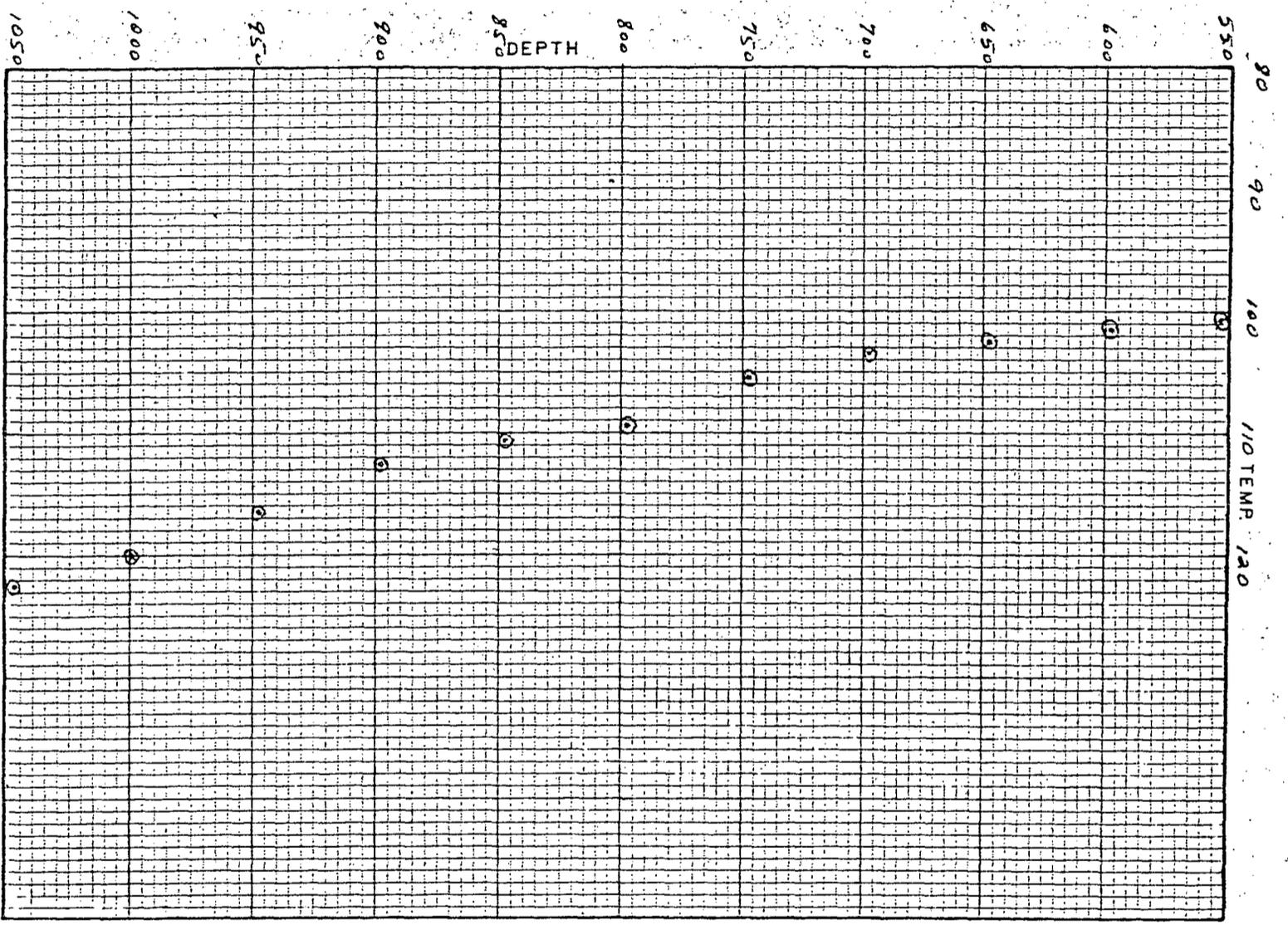
LITHOLOGY

Baitzer HOLE # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Baitzer GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1487'
 SURF. ELEV. _____ TEMP. AT T.D. 154.3
 DATE DRLD. 7 July 79 SURVEY DATE 27 July 79
 SURVEY BY EPCC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 500 | 100.3 | 750 | 106.9 |
| | 101.0 | | 107.1 |
| | 101.3 | | 107.6 |
| | 101.5 | | 107.8 |
| | 101.6 | | 108.3 |
| 550 | 101.7 | 800 | 109.1 |
| | 101.8 | | 109.4 |
| | 101.9 | | 109.6 |
| | 102.1 | | 110.1 |
| | 102.5 | | 110.9 |
| 600 | 102.7 | 850 | 111.3 |
| | 102.9 | | 111.4 |
| | 103.0 | | 111.7 |
| | 103.1 | | 113.1 |
| | 103.2 | | 113.4 |
| 650 | 103.5 | 900 | 113.6 |
| | 103.7 | | 114.9 |
| | 103.8 | | 115.9 |
| | 104.1 | | 116.8 |
| | 104.4 | | 117.5 |
| 700 | 104.8 | 950 | 117.8 |
| | 105.2 | | 118.2 |
| | 105.6 | | 118.8 |
| | 106.0 | | 119.2 |
| | 106.4 | | 120.0 |



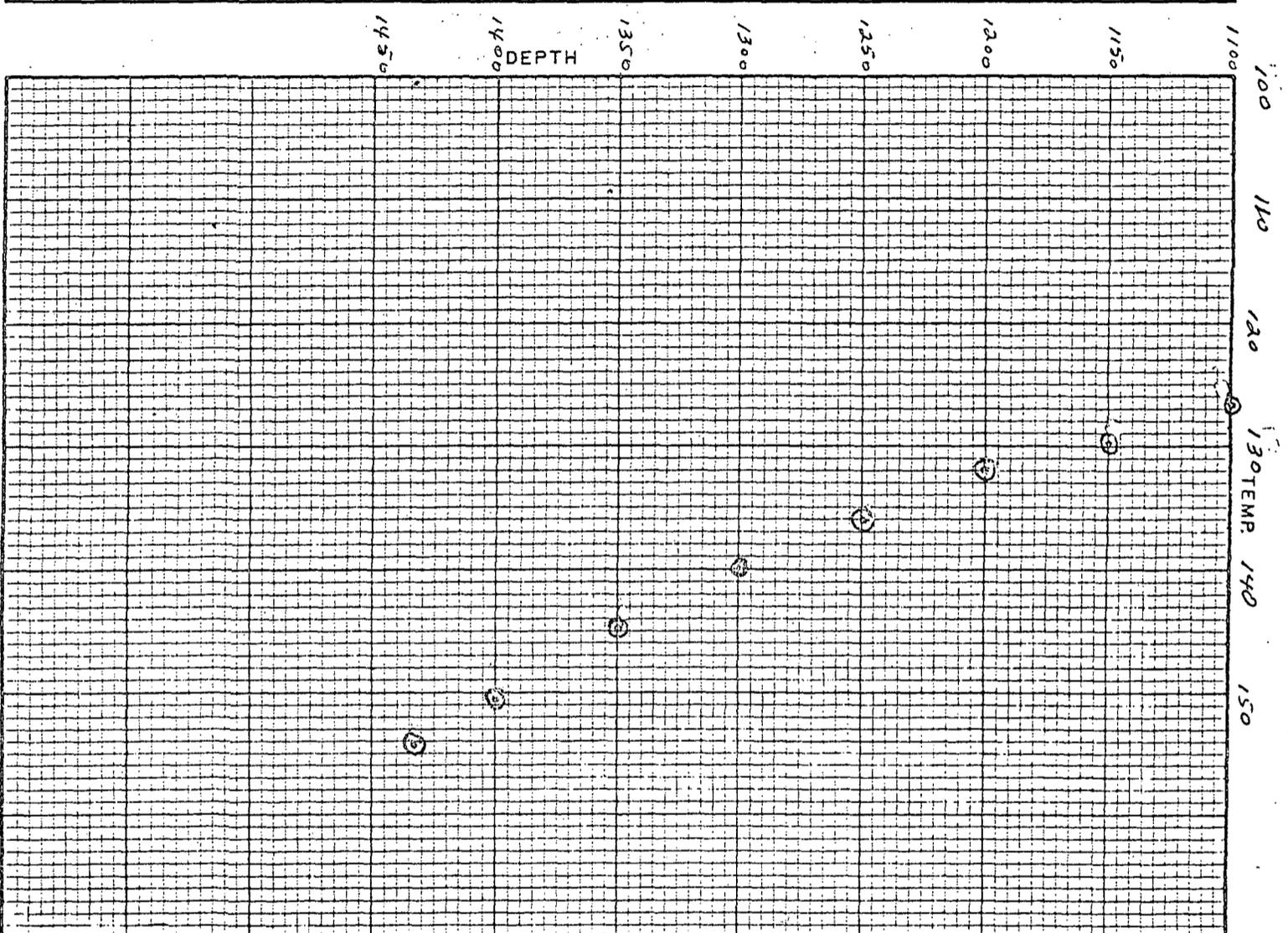
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Baltazor HOLE # 1500-2
LITHOLOGY

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT Baltazor GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1487'
 SURF. ELEV. _____ TEMP. AT T.D. 154.3
 DATE DRLD 7 July 79 SURVEY DATE 27 July 79
 SURVEY BY EPAC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|------------|-------|
| 1000 | 120.4 | 1250 | 136.0 |
| | 120.9 | | 136.2 |
| | 121.6 | | 136.9 |
| | 122.5 | | 138.0 |
| | 123.0 | | 139.0 |
| 1050 | 123.4 | 1300 | 140.0 |
| | 124.0 | | 141.0 |
| | 125.0 | | 142.0 |
| | 125.6 | | 143.1 |
| | 126.1 | | 143.8 |
| 1100 | 126.9 | 1350 | 144.9 |
| | 127.5 | | 145.9 |
| | 128.1 | | 147.2 |
| | 128.7 | | 148.2 |
| | 129.3 | | 149.5 |
| 1150 | 129.8 | 1400 | 150.6 |
| | 130.1 | | 151.9 |
| | 130.5 | | 153.0 |
| | 131.2 | | 154.1 |
| | 131.6 | TD 1434 | 154.3 |
| 1200 | 132.0 | | |
| | 132.4 | | |
| | 133.1 | | |
| | 134.1 | | |
| | 134.8 | | |



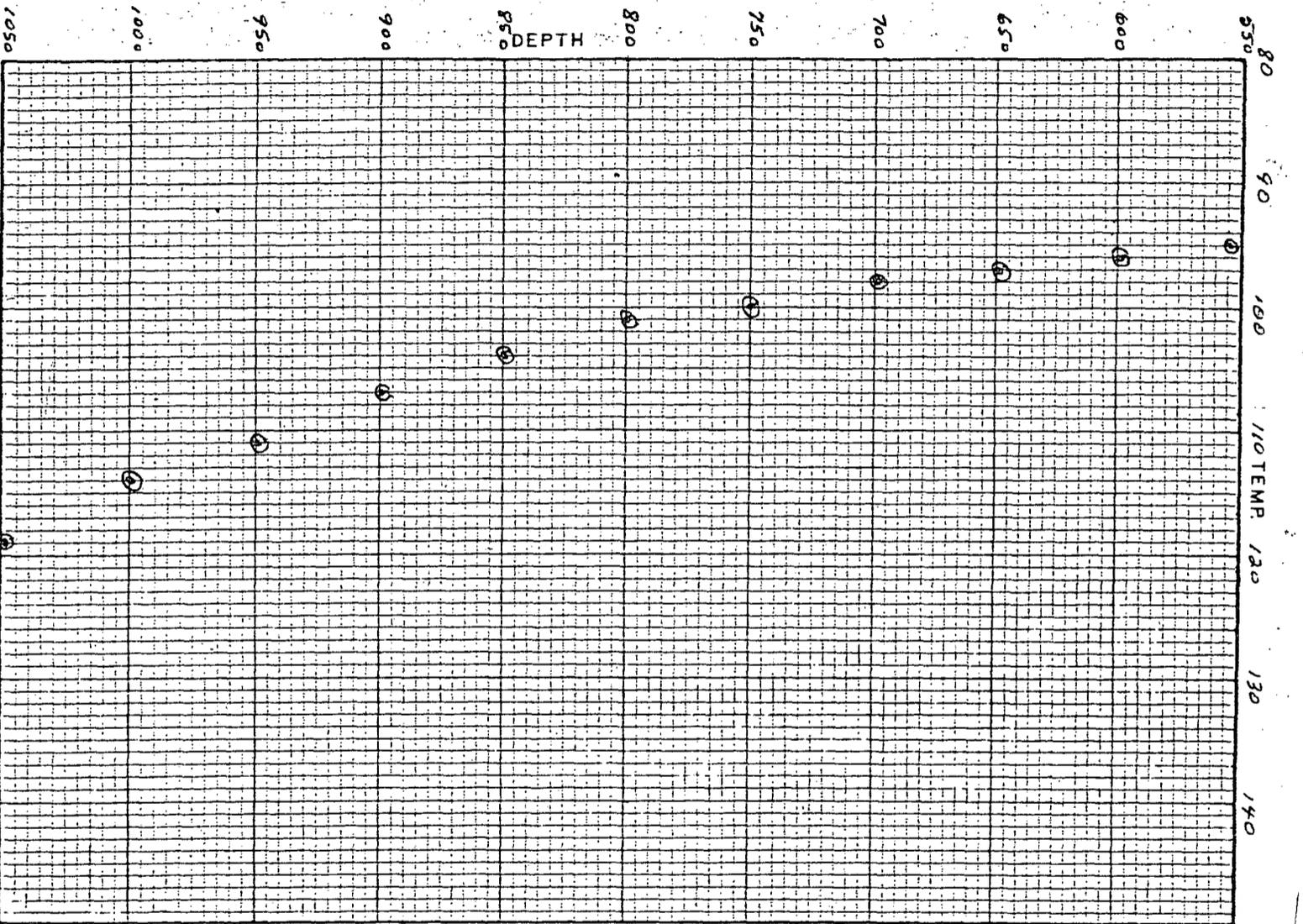
LITHOLOGY

Ballinger Hole # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT Ballinger GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1487'
 SURF. ELEV. _____ TEMP. AT T.D. 154.3
 DATE DRLD. 7 July 79 SURVEY DATE 27 July 79
 SURVEY BY EPCC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 510 | 94.6 | | 100.5 |
| | 95.0 | | 100.8 |
| | 95.2 | | 101.4 |
| | 95.4 | | 102.0 |
| 550 | 95.4 | 800 | 102.5 |
| | 95.5 | | 102.9 |
| | 95.5 | | 103.9 |
| | 96.0 | | 104.3 |
| | 96.2 | | 104.6 |
| 600 | 96.2 | 850 | 104.8 |
| | 96.5 | | 105.1 |
| | 96.7 | | 105.5 |
| | 96.9 | | 105.5 |
| | 97.1 | | 106.2 |
| 650 | 97.3 | 900 | 107.6 |
| | 97.4 | | 108.4 |
| | 97.6 | | 109.4 |
| | 97.8 | | 110.1 |
| | 98.1 | | 110.8 |
| 700 | 98.4 | 950 | 111.4 |
| | 98.8 | | 112.0 |
| | 99.0 | | 112.7 |
| | 99.4 | | 113.4 |
| | 99.4 | | 114.1 |
| 750 | 100.0 | 1000 | 114.9 |



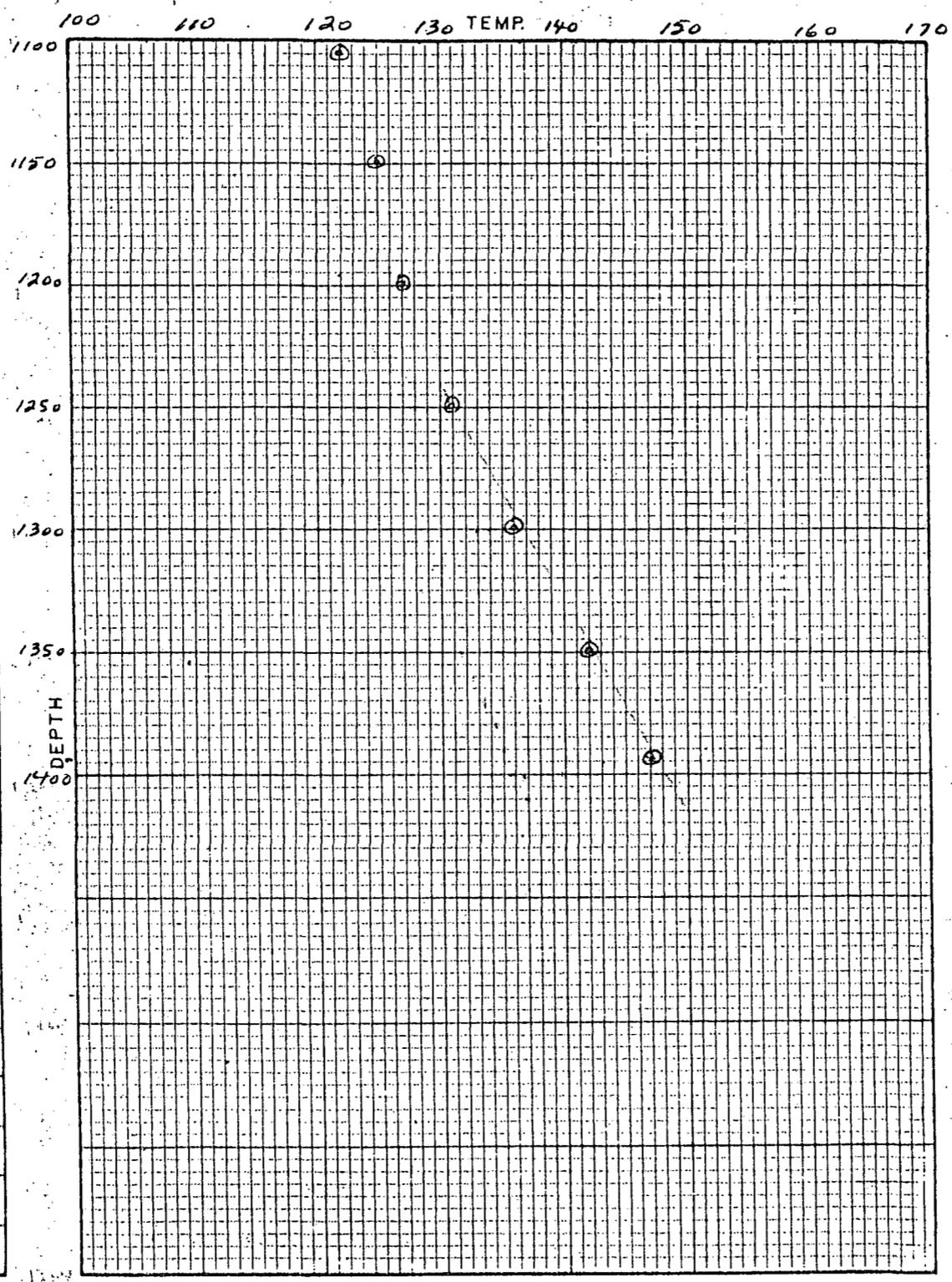
LITHOLOGY

EARTH POWER
 PRODUCTION COMPANY
 TULSA, OKLAHOMA

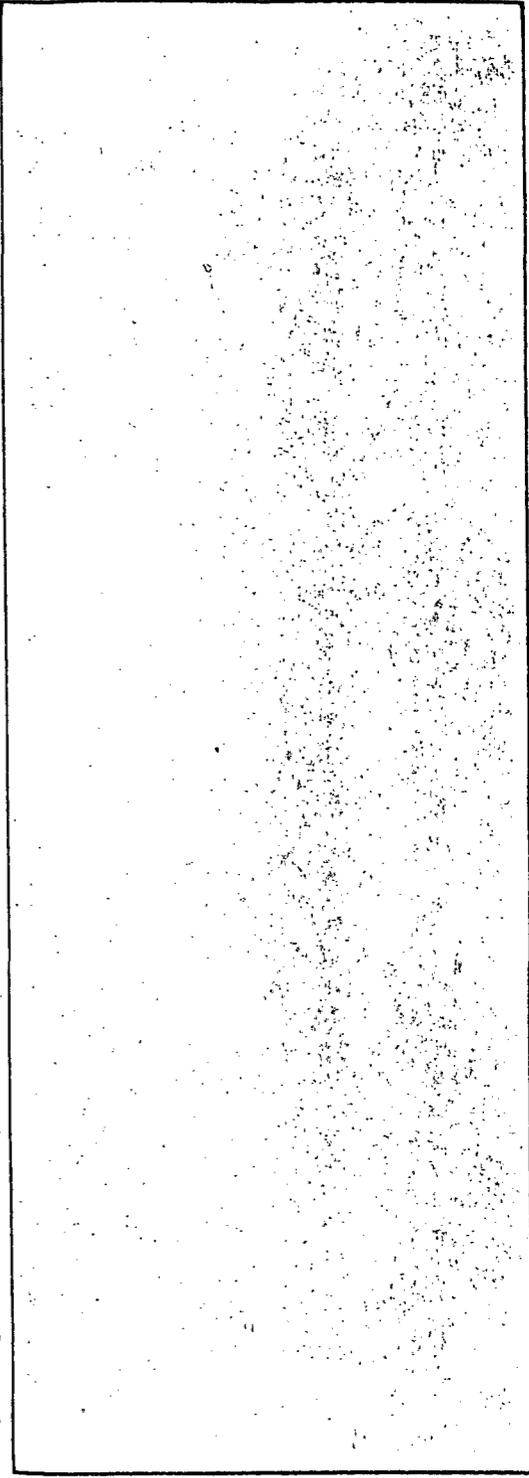
PROSPECT Baltozor GRADIENT _____
 LOCATION Humboldt Co., T.D. 1487'
Twada TEMP. AT T.D. 147.3
 SURF. ELEV. _____ SURVEY DATE _____
 DATE DRLD. 7 July 79 SURVEY BY _____

Page 5

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|------------|-------|
| 1010 | 115.7 | | 132.5 |
| | 116.5 | | 133.4 |
| | 117.3 | | 135.2 |
| | 118.2 | | 136.0 |
| 1050 | 119.0 | 1300 | 136.9 |
| | 119.6 | | 137.9 |
| | 120.4 | | 138.9 |
| | 121.0 | | 140.1 |
| | 121.8 | | 141.4 |
| 1100 | 122.3 | 1350 | 142.7 |
| | 123.0 | | 143.6 |
| | 123.6 | | 144.8 |
| | 124.2 | | 146.1 |
| | 124.7 | | 147.1 |
| 1150 | 125.2 | TD 1395 | 147.3 |
| | 125.5 | | |
| | 125.8 | | |
| | 126.4 | | |
| | 126.8 | | |
| 1200 | 127.3 | | |
| | 128.1 | | |
| | 129.2 | | |
| | 130.1 | | |
| | 131.2 | | |
| 1250 | 131.6 | | |



Bellinger LITHOLOGY HOLE #



PROSPECT Bellinger
 LOCATION Hamblett Co., Nevada
 SURF. ELEV. _____
 DATE DRLD. 7 July 79

GRADIENT _____
 T.D. 1487'
 TEMP. AT T.D. 147.3
 SURVEY DATE _____
 SURVEY BY _____

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

DRILLING HISTORY

McGee 1500-2, Humboldt County, Nevada

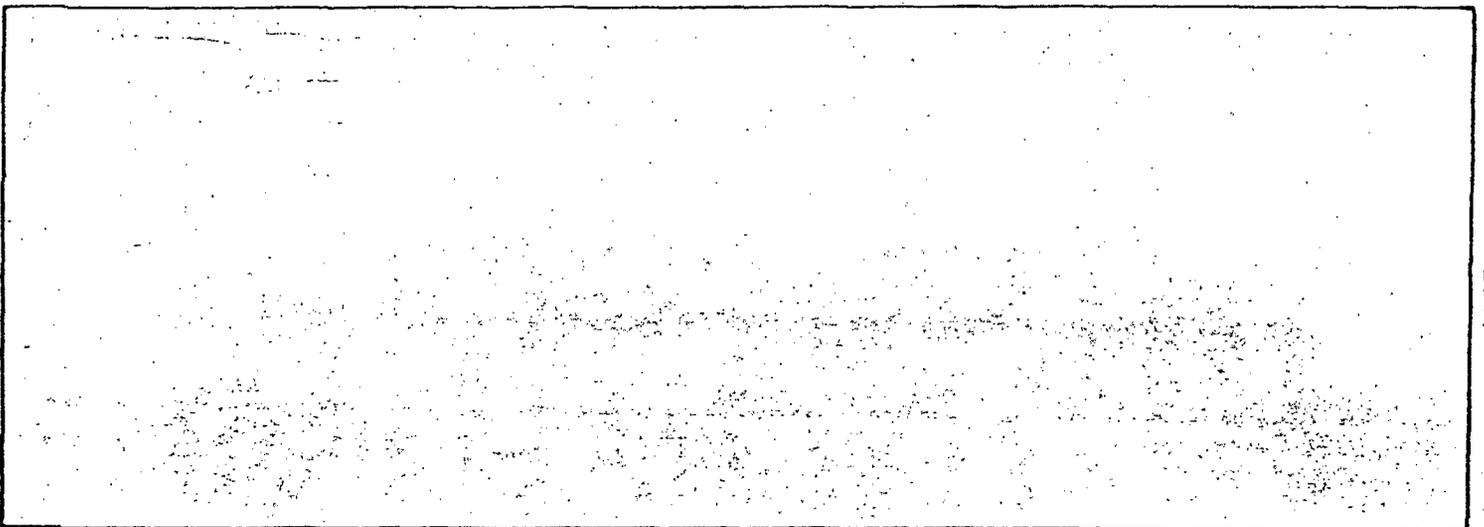
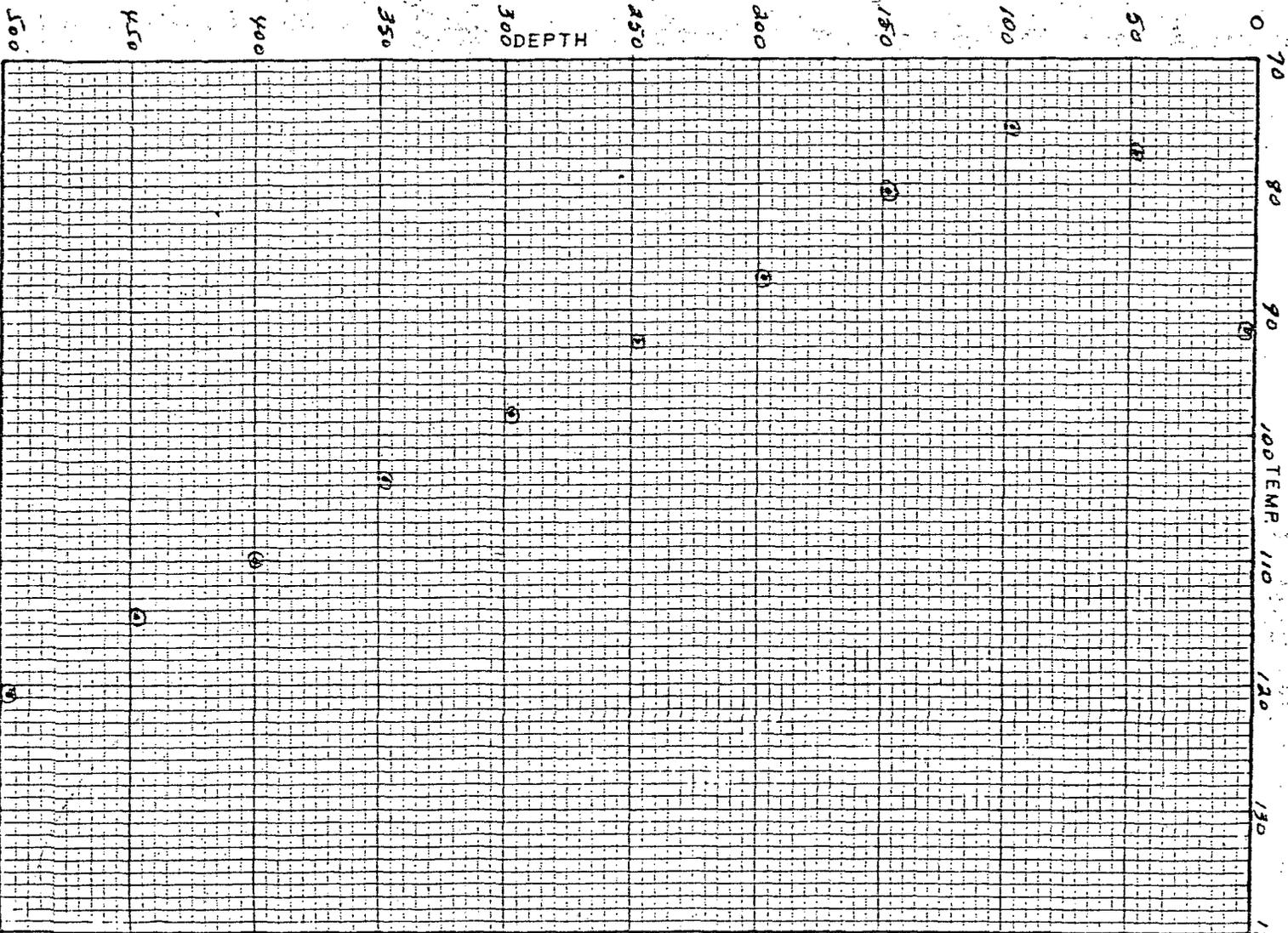
10 June - 23 June 79

1. OPERATOR: Earth Power Production Company
Tulsa, Oklahoma
 2. CONTRACTOR: American Geothermal Drilling Co.
Tulsa, Oklahoma
 3. WELL LOCATION: T.45N, R.27E, Sec. 26 - NE NE
Elevation: 4610'
 4. SPUD DATE: 10 June 79
 5. COMPLETION DATE: 23 June 79
 6. RIG DESCRIPTION: Portadrill Model 524, Serial #662,
60,000 lb. mast, 5½x8 Gardner-Denver
mud pump, Atlas Copco 125 psi @ 330
CFM air compressor. 2000 ft. 2-7/8"
IF drill pipe. 80 ft. 4½" drill
collars.
 7. TOTAL DEPTH: 1680'
Cased to 1670' with 2-3/8" tubing.
-

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|---|
| 10 June 79 | 0-400 | Rig up. Spud 9-7/8" hole with air at 11:15 a.m. Large cavities forming in hole. Hole won't stay clean. Set 10 ft. of 8-5/8" casing. Drill with 6-3/4" bit. Depth is 120 ft. at 2:30 p.m. Drilling with air but hole is too wet to stay clean. Mud up. Drilling is fast in interlayered sandstones. Thin air fall tuff at 110 ft. Depth is 400 ft. at midnight. |
| 11 June 79 | 400-500 | Depth is 500 ft. at 2:30 a.m. Trip out of hole. Rig shut down from 3:00 a.m. until noon. At noon, run 463 ft. of 2-3/8" tubing. Standby for temperature survey. |
| 12 June 79 | 0-209 | Pull 2-3/8" tubing after temperature survey. Pull 8-5/8" conductor. Ream hole with 12-1/4" bit to 209 ft. Run 202 ft. of 8-5/8" T&C casing set at 205 ft. Cement thru casing with 72 sax Portland Type I-II cement. Plug down at 11:00 p.m. Clean out mud pumps. |
| 13 June 79 | 209 | Cement 25 ft. down (6 ft. above top casing collar). Cement with 6 sax to surface. Nipple up to 6" double manual BOP; blind rams on bottom, 2-7/8" pipe rams on top. Pressure up to 250 psi on blind rams. Pressure drops to 242 after 30 minutes. Go in hole with drill pipe. Pressure up on pipe rams to 225 psi. Pressure steady at 225 for 30 minutes. BOP test passes. Begin drilling out cement at 2:30 p.m. Top of cement @ 100 ft. Drill out cement to 160'. Stop to pump out mud pits. Haul contaminated mud to Denio dump. |
| 14 June 79 | 209-785 | Drill cement to 209 ft. with 6" bit. Clean out mud pits once more. Mix up fresh pits. Wash to 505 ft. Hole is fairly clean. Depth is 605 ft. at noon. Depth is 780 ft. at 10:00 p.m. Bit not cutting. |

| <u>DATE</u> | <u>DEPTH</u> | <u>SUMMARY OF OPERATIONS</u> |
|-------------|--------------|--|
| 15 June 79 | 780 | Trip for new bit. Bearings frozen and bit worn flat. Out of 6" bits. Re-enter hole with 6-1/4" bit. Wash to 505 ft. Ream to 780 ft. by noon. Mud pump clutch shot. Rig is down. |
| 16 June 79 | 780 | Rig down. Work on clutches. |
| 17 June 79 | 780 | Rig down. |
| 18 June 79 | 780 | Rig down. |
| 19 June 79 | 780-1020 | Rig back in operation at 4:00 p.m. Trip into hole with 6" bit. Making mud at 900 ft. At 1020 ft. mud too thick to pump. Pump out pits. |
| 20 June 79 | 1020-1200 | Pump out mud pits. Mix up fresh pits. Drilling again at 4:00 a.m. Depth is 1120 at 8:00 a.m. Drawworks clutch overheated. Trip out of hole. Work on drawworks clutch. Trip into hole at 8:00 p.m. Drilling ahead at 9:00 p.m. Depth is 1200 ft. at midnight. |
| 21 June 79 | 1200-1550 | Drilling ahead. Intermittently hard and soft layers. Hole still making mud. Depth is 1520 at noon. Pump out pits. Mix up fresh pits. |
| 22 June 79 | 1550-1680 | Trip out at 1:00 a.m. for new bit. Trip in with 5-5/8" bit. On bottom at 5:45 a.m. Depth is 1680 ft. @ 10:00 a.m. Trip out of hole. Mix up fresh pit to condition hole. Condition hole for 4 hours. |
| 23 June 79 | 1680 | Trip out of hole. Haul tubing to site. Run 1670 ft. of 2-3/8" tubing. |

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0 | 92.5 | 250 | 93.3 |
| 10 | 85.5 | | 94.2 |
| | 82.3 | | 95.4 |
| | 81.0 | | 96.1 |
| | 79.7 | | 97.6 |
| 50 | 78.5 | 300 | 99.0 |
| | 77.5 | | 100.2 |
| | 77.0 | | 101.2 |
| | 76.7 | | 102.5 |
| | 76.5 | | 103.4 |
| 100 | 76.4 | 350 | 104.5 |
| | 76.4 | | 105.5 |
| | 76.5 | | 106.8 |
| | 76.6 | | 107.9 |
| | 76.9 | | 109.1 |
| 150 | 81.4 | 400 | 110.1 |
| | 82.7 | | 111.2 |
| | 83.9 | | 112.4 |
| | 85.4 | | 113.7 |
| | 87.0 | | 114.8 |
| 200 | 88.2 | 450 | 115.8 |
| | 89.4 | | 116.8 |
| | 90.0 | | 118.1 |
| | 90.8 | | 118.4 |
| | 92.1 | | 119.9 |

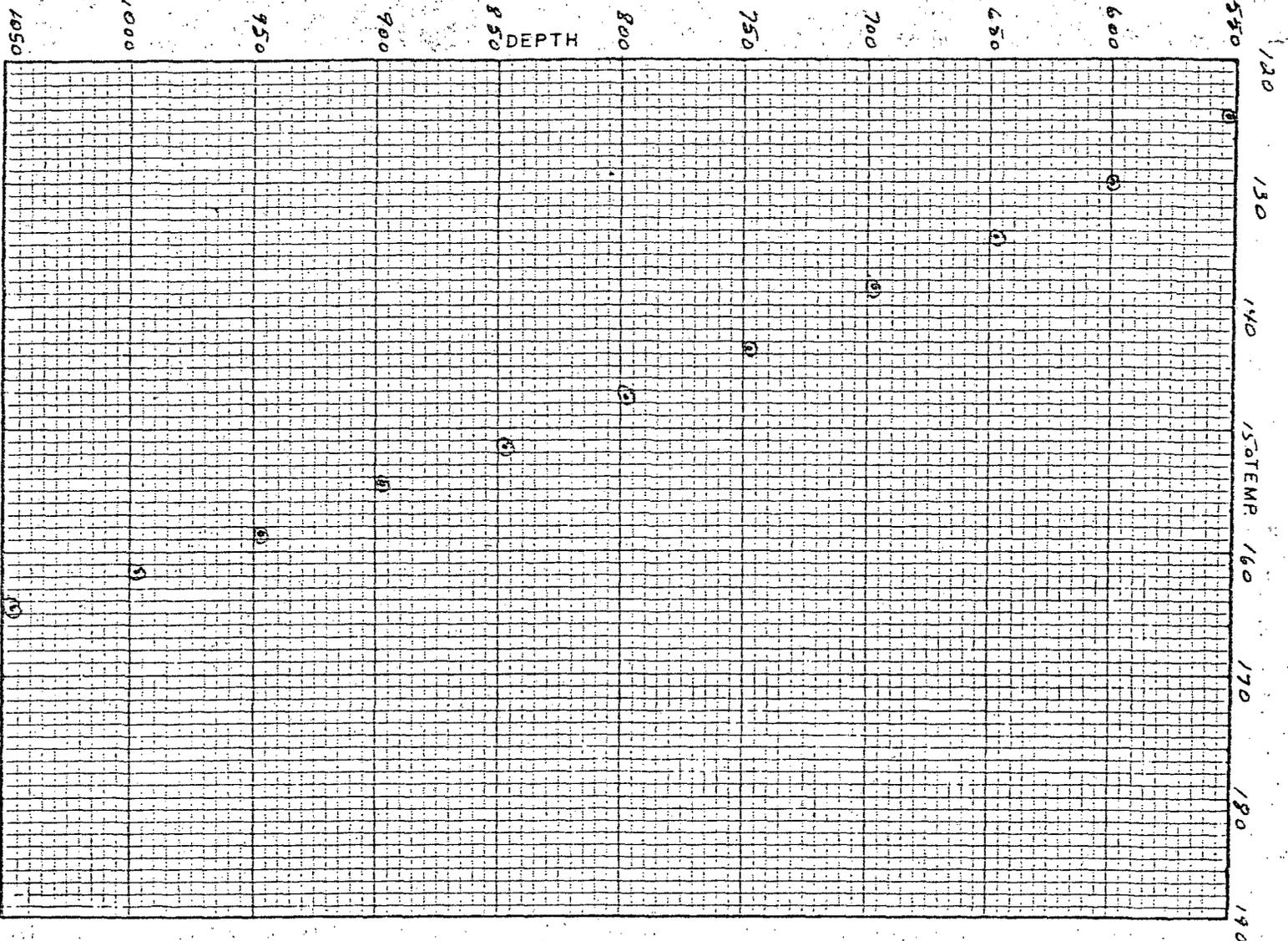


McGEE HOLE # 1500-2
LITHOLOGY

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT McGEE GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1680'
 SURF. ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRLD. 23 JUNE 79 SURVEY DATE 27 July 79
 SURVEY BY EPPC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 500 | 121.0 | 750 | 144.1 |
| | 122.0 | | 145.0 |
| | 123.2 | | 145.8 |
| | 123.8 | | 146.2 |
| | 124.6 | | 147.0 |
| 550 | 125.7 | 800 | 148.0 |
| | 127.1 | | 148.9 |
| | 127.6 | | 149.8 |
| | 128.8 | | 150.3 |
| | 130.8 | | 151.4 |
| 600 | 130.8 | 850 | 152.2 |
| | 131.6 | | 152.5 |
| | 133.0 | | 153.6 |
| | 134.0 | | 154.8 |
| | 134.6 | | 155.3 |
| 650 | 135.5 | 900 | 155.6 |
| | 136.5 | | 156.0 |
| | 137.1 | | 157.0 |
| | 138.3 | | 158.0 |
| | 138.9 | | 159.1 |
| 700 | 139.7 | 950 | 159.7 |
| | 140.7 | | 160.1 |
| | 141.4 | | 160.5 |
| | 142.4 | | 161.0 |
| | 143.1 | | 161.6 |



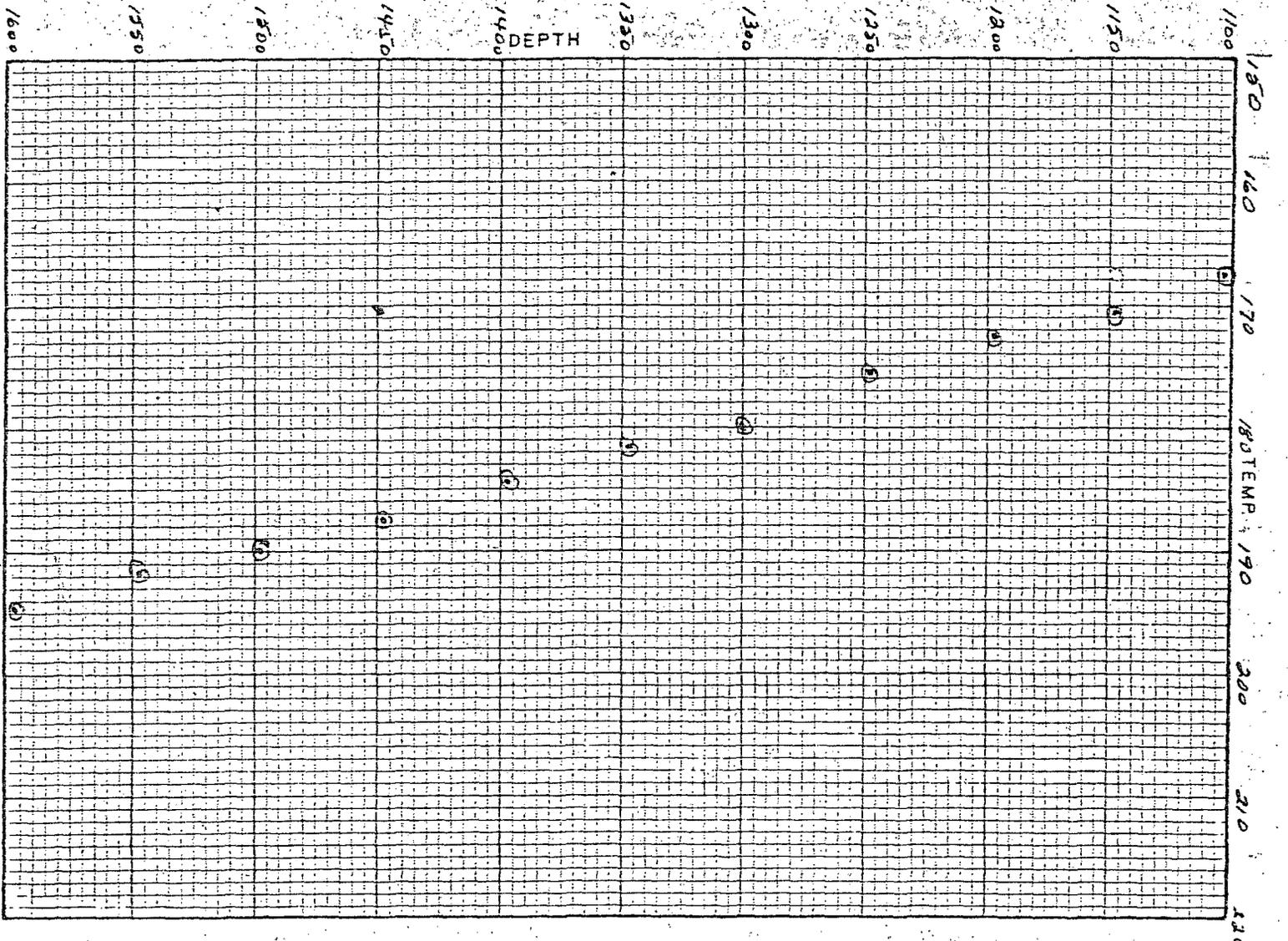
LITHOLOGY

McGEE HOLE # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT McGEE GRADIENT _____
 LOCATION Idumboldt Co., Nevada T.D. 1680'
 SURF ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRLD. 23 JUNE 79 SURVEY DATE 27 JULY 79
 SURVEY BY EPRC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 1000 | 162.2 | 1450 | 176.8 |
| | 163.1 | | 177.8 |
| | 163.6 | | 178.6 |
| | 164.2 | | 179.5 |
| | 164.7 | | 180.0 |
| 1050 | 165.4 | 1300 | 180.6 |
| | 166.2 | | 180.9 |
| | 166.8 | | 181.3 |
| | 167.3 | | 181.7 |
| | 168.0 | | 182.2 |
| 1100 | 168.4 | 1350 | 182.8 |
| | 169.1 | | 183.3 |
| | 169.8 | | 184.1 |
| | 170.5 | | 184.2 |
| | 171.1 | | 185.2 |
| 1150 | 171.7 | 1400 | 185.6 |
| | 172.1 | | 186.1 |
| | 172.5 | | 186.7 |
| | 173.0 | | 186.9 |
| | 173.6 | | 187.6 |
| 1200 | 173.9 | 1450 | 188.1 |
| | 174.5 | | 188.4 |
| | 175.0 | | 189.0 |
| | 175.2 | | 189.4 |
| | 176.2 | | 190.1 |



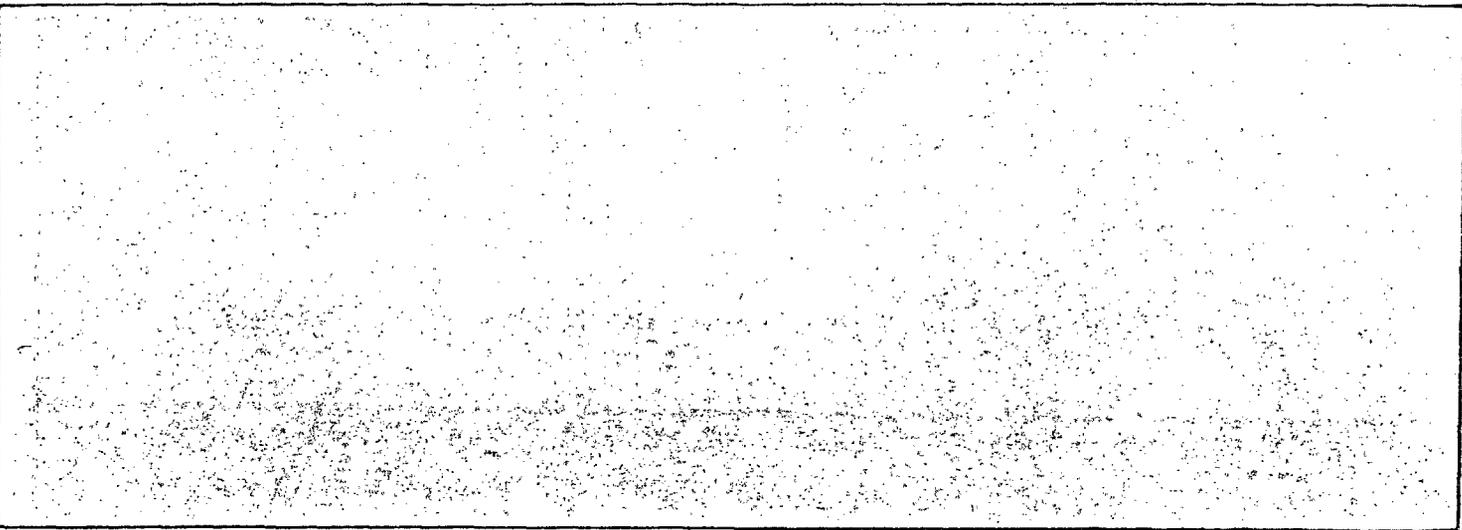
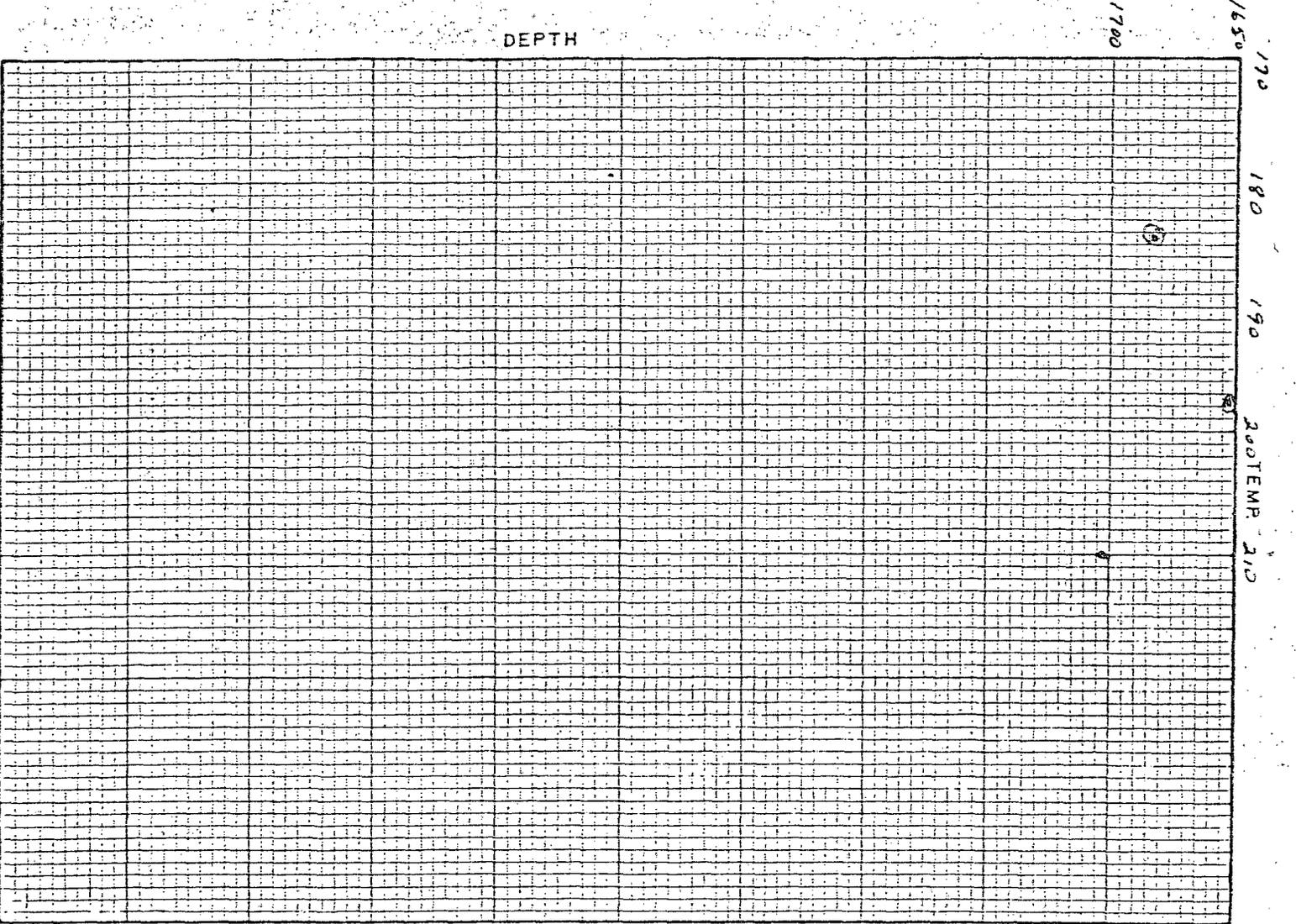
LITHOLOGY

McGEE HOLE # 1500-2

EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT McGEE GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1680
 SURF. ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRLD. 23 JUNE 79 SURVEY DATE 27 JULY 79
 SURVEY BY EPPC

| DEPTH | TEMP. | DEPTH | TEMP. |
|---------|-------|-------|-------|
| 1500 | 190.6 | | |
| | 190.1 | | |
| | 191.5 | | |
| | 192.3 | | |
| | 192.7 | | |
| 1550 | 192.9 | | |
| | 193.0 | | |
| | 193.7 | | |
| | 194.3 | | |
| | 194.8 | | |
| 1600 | 195.5 | | |
| | 196.2 | | |
| | 196.8 | | |
| | 197.1 | | |
| | 197.5 | | |
| 1650 | 198.4 | | |
| | 198.9 | | |
| | 199.3 | | |
| | 200.0 | | |
| TO 1684 | 200.2 | | |

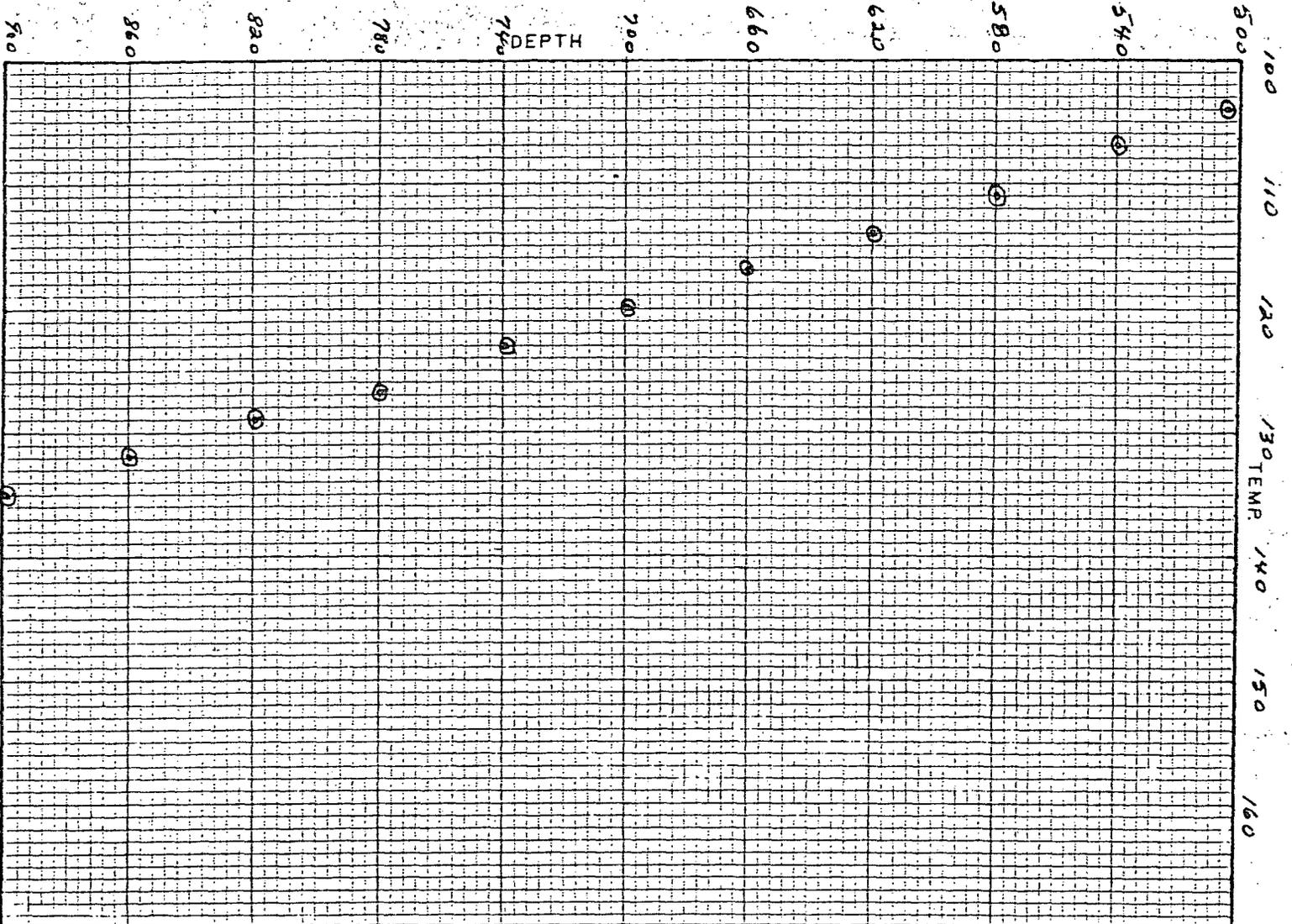


M.S. Hole # 1500-2
LITHOLOGY

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT McGee GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1680'
 SURF. ELEV. _____ TEMP. AT T.D. 200.2
 DATE DRILL 23 JUNE 79 SURVEY DATE 27 July 79
 SURVEY BY EPCC

| DEPTH | TEMP. | DEPTH | TEMP. |
|-------|-------|-------|-------|
| 0- | | | |
| 460 | -97 | 940 | 137.8 |
| 460 | 100.5 | 960 | 138.8 |
| 480 | 102.2 | 980 | 140.0 |
| 500 | 104.1 | 1000 | 141.6 |
| 520 | 105.6 | 1020 | 143.0 |
| 540 | 107.7 | 1040 | 144.6 |
| 560 | 109.4 | 1060 | 145.3 |
| 580 | 111.3 | 1080 | 147.6 |
| 600 | 113.0 | 1100 | 148.3 |
| 620 | 114.6 | 1120 | 150.1 |
| 640 | 116.0 | 1140 | 151.4 |
| 660 | 117.8 | 1160 | 152.6 |
| 680 | 118.7 | 1180 | 154.1 |
| 700 | 120.1 | 1200 | 155.9 |
| 720 | 122.9 | 1220 | 156.4 |
| 740 | 123.6 | 1240 | 157.1 |
| 760 | 124.5 | 1260 | 159.3 |
| 780 | 127.1 | 1280 | 160.7 |
| 800 | 128.3 | 1300 | 161.6 |
| 820 | 129.9 | 1320 | 162.0 |
| 840 | 130.8 | 1340 | 162.7 |
| 860 | 132.0 | 1360 | 163.4 |
| 880 | 133.6 | 1380 | 164.1 |
| 900 | 135.3 | 1394 | 166.5 |
| 920 | 136.0 | | |



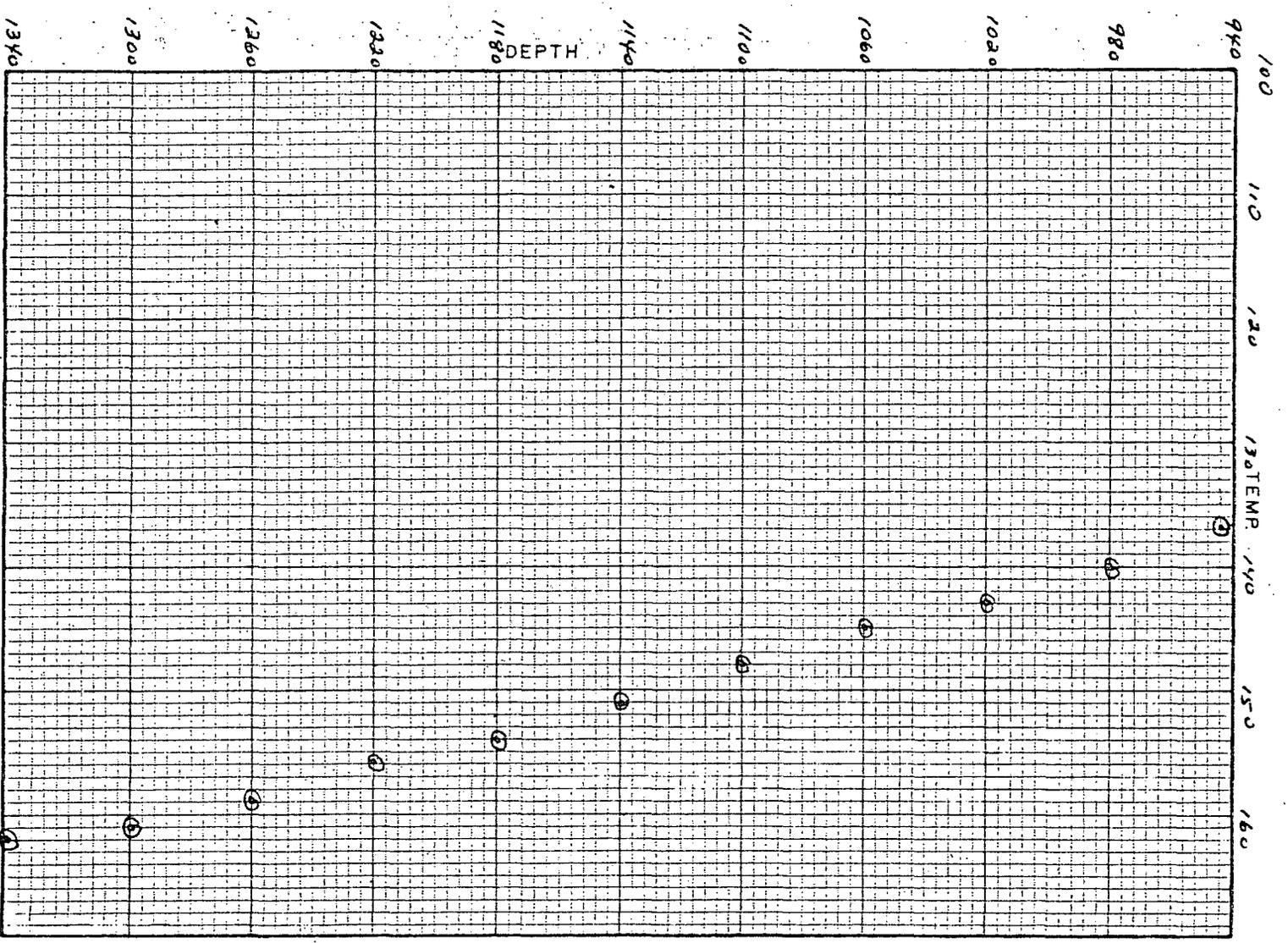
| DEPTH | TEMP. |
|-------|-------|
| 0 | 139.4 |
| 2 | 166.5 |
| 4 | 167.2 |
| 6 | 167.4 |
| 8 | 167.7 |
| 10 | 167.9 |
| 12 | 168.1 |
| 14 | 168.4 |
| 16 | 168.6 |
| 18 | 168.8 |
| 20 | 168.8 |

McGEE HOLE # 1500-2
LITHOLOGY

EARTH POWER
PRODUCTION COMPANY
TULSA, OKLAHOMA

PROSPECT McGEE GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1690'
 SURF. ELEV. _____ TEMP. AT T.D. 166.5
 DATE DRLD. 23 June 79 SURVEY DATE 25 JUNE 79
 SURVEY BY AGNEW + SWEET

| | | | | | | | | | | | | | | | | | | | | |
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LITHOLOGY

HOLE # 1500-2

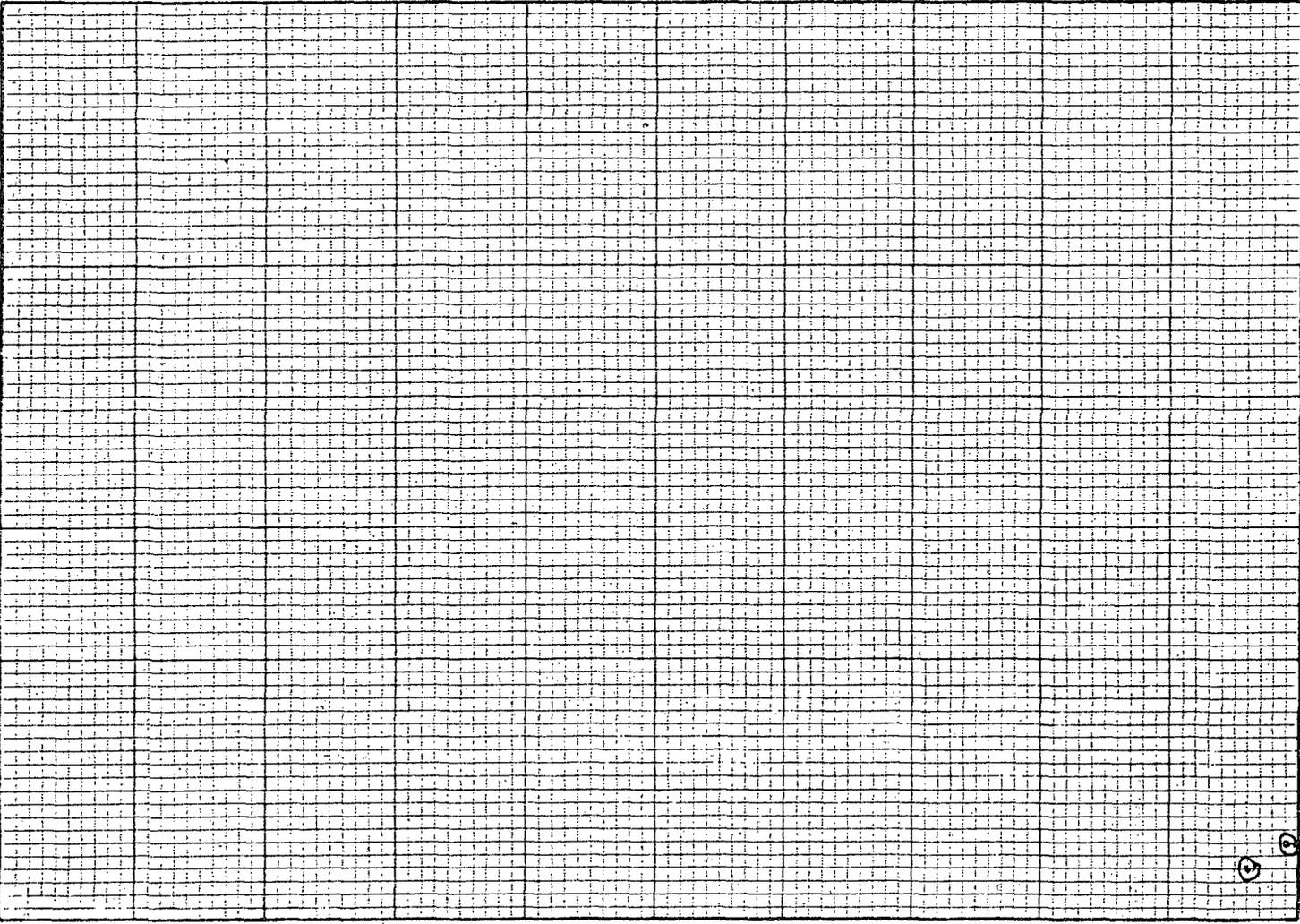
EARTH POWER
PRODUCTION COMPANY
 TULSA, OKLAHOMA

PROSPECT McGee GRADIENT _____
 LOCATION Humboldt Co., Nevada T.D. 1680'
 SURF. ELEV. _____ TEMP AT T.D. 166.5
 DATE DRLD. 23 JUNE 79 SURVEY DATE 25 JUNE 79
 SURVEY BY AGNEW + SWEET

| | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
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DEPTH

138' 143'
 100
110
120
130
140
150
160



LITHOLOGY HOLE #

1500-A

**EARTH POWER
 PRODUCTION COMPANY**
 TULSA, OKLAHOMA

PROSPECT McGee GRADIENT _____
 LOCATION Idumboldt Co., T.D. 1680'
Nevada TEMP. AT T.D. 166.5
 SURF. ELEV. _____ SURVEY DATE 25 JUNE 79
 DATE DRLD. 23 JUNE 79 SURVEY BY AGNEW & SWEET