

CRC-7 ( 61024100 (

Completion Report  
New Well PRO-318

*Well No. 33  
20N 28E 33  
Soda Lake  
36-78*

Field Soda Lake

Property: Federal

Well No. Soda Lake 36-78

Sec. 33 T. 20N R. 28E MD B.&M.

Location SW $\frac{1}{4}$  of NE $\frac{1}{4}$  of NW $\frac{1}{4}$  of Sec. 33

Churchill Co. Nevada

Elevation 3980' Derrick Floor

D.F. is \_\_\_\_\_ ' above mat.

Date 6-20-78

*mej*  
B.D. Garrett/ R. B. Murray

(For Operations Manager, Producing Dept.)

Drilled By CXM Drilling Co.

Date Commenced Drilling March 7, 1978

Date Completed Drilling March 16, 1978

Date of Initial Production \_\_\_\_\_

| Production: | Daily Average, 1st _____ | Days _____ | Gravity _____ | °API _____ | Pump _____     |
|-------------|--------------------------|------------|---------------|------------|----------------|
| Oil         | _____                    | Bbls.      | T.P. _____    | PSI _____  | Flowing _____  |
| Water       | _____                    | Bbls.      | C.P. _____    | PSI _____  | Gas Lift _____ |
| Gas         | _____                    | Mcf.       | Bean _____    | /64" _____ |                |

Summary

Total Depth: 2000'

Casing: 6 5/8" x 20# Buttress cemented at 214'  
1 1/2" F.J. tubing cemented at 1971'

Logs: None

SODA LAKE 36-78

- Mar 7 Moved in, rigged up. Set 14' of 12" conductor
- Mar 8 Mixed 75 bbls. gel mud. Spudded in at 2:30 p.m. Drilled 9 7/8" to 230'. P00H. Ran 209' of 6 5/8" x 20# buttress casing. Landed casing 5' below ground level. Cemented with 75 sx class G cement. Bumped plug at 300 psi.

Casing Detail

208.31' (7 jts) 6 5/8" x 20# buttress casing of unknown manufacture with float shoe landed at 5' below ground - Shoe at 214'

- Mar 9 Weather delay
- Mar 10 Installed BOPE consisting of Shaffer double ram gate and hydril G.K. Tested to 500 psi.
- Mar 11 Mixed 75 bbls gel mud. RIH and drilled cement and plug 180' to 214'. Drilled ahead 5 7/8" to 875'.
- Mar 12 Drilled ahead 5 7/8" to 1490'.
- Mar 13 Drilled ahead 5 7/8" to 1690'. Trip hole for new bit. Could not circulate, P00H, found float valve plugged with a rag. RIH to 1600', could not circulate. P00H, float valve plugged with sand. RIH to 1690' in stages. Drill ahead 5 7/8" to 1750', bit stopped. P00H bit locked up.
- Mar 14 Repaired swivel  
Drilled ahead 5 7/8" to 2000'. Conditioned mud 1 hr. Pulled up to 215' and shut down (No night crew)
- Mar 15 RIH to TD, circulated hole clean. P00H and layed down drill pipe. Ran 1970' (62 jts) 1 1/2" F.J. tubing. Hung tubing 1' below ground level, bottom at 1971'. Cemented tubing through 1" pipe hung at 200', with 45 sx of class G cement, with good returns to surface. P00H with 1" pipe, cleaned BOPE

Mar 16

Removed BOPE and tubing head. Welded  $\frac{1}{2}$ " steel plate on  $6 \frac{5}{8}$ " x  $1 \frac{1}{2}$ " annulus, installed plug and lock on  $1 \frac{1}{2}$ " tubing. Cleaned site, Rigged down and out at 4:00 p.m.

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May 13, 1978

Hole abandoned by plugging at  $\sim 20'$ , filling  $1 \frac{1}{2}$ " tubing with cement and covering with dirt.

CRC-7

CHEVRON WELL NO. 36-78  
SODA LAKE UNIT  
CHURCHILL COMPANY, NEVADA.

SAMPLE DESCRIPTIONS

| <u>DEPTH</u> | <u>LITHOLOGY</u>                      |
|--------------|---------------------------------------|
| 220 - 240    | coarse sand, granule gravel           |
| 240 - 260    | as above (a/a), some clay             |
| 260 - 280    | granule gravel                        |
| 280 - 300    | coarse sand, granule gravel           |
| 300 - 320    | coarse sand                           |
| 320 - 340    | fine to coarse sand, some clay        |
| 340 - 360    | fine to medium sand, some clay        |
| 360 - 380    | fine to medium sand                   |
| 380 - 400    | a/a                                   |
| 400 - 420    | coarse sand, granule gravel           |
| 420 - 440    | medium to coarse sand                 |
| 440 - 460    | a/a                                   |
| 460 - 480    | a/a                                   |
| 480 - 500    | a/a                                   |
| 500 - 520    | medium to coarse sand, granule gravel |
| 520 - 540    | a/a                                   |
| 540 - 560    | a/a                                   |
| 560 - 580    | fine sand                             |
| 580 - 600    | fine to medium sand                   |
| 600 - 620    | coarse sand, granule gravel           |
| 620 - 640    | a/a                                   |
| 640 - 660    | medium to coarse sand                 |
| 660 - 680    | medium to coarse sand                 |
| 680 - 700    | medium to coarse sand                 |
| 700 - 720    | medium to coarse sand, granule gravel |
| 720 - 740    | coarse sand                           |
| 740 - 760    | medium sand                           |
| 760 - 780    | medium to coarse sand                 |
| 780 - 800    | a/a                                   |
| 800 - 820    | a/a                                   |
| 820 - 840    | a/a, granule gravel                   |
| 840 - 860    | fine to medium sand                   |
| 860 - 880    | no sample                             |
| 880 - 900    | no sample                             |
| 900 - 920    | no sample                             |
| 920 - 940    | no sample                             |
| 940 - 960    | no sample                             |
| 960 - 980    | no sample                             |
| 980 - 1000   | no sample                             |
| 1000-1020    | no sample                             |
| 1020-1040    | medium sand                           |
| 1040-1060    |                                       |
| 1060-1080    | medium sand                           |

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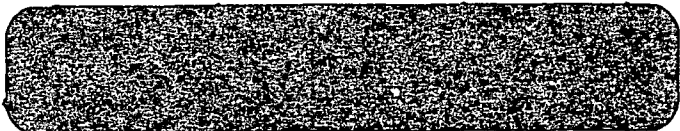
SAMPLE DESCRIPTIONS

| <u>DEPTH</u> | <u>LITHOLOGY</u>  |
|--------------|---|
| 1080-1100    | medium sand   |
| 1100-1120    | a/a   |
| 1120-1140    | a/a   |
| 1140-1160    | a/a   |
| 1160-1180    | a/a   |
| 1180-1200    | a/a   |
| 1200-1220    | sand, medium to fine  |
| 1220-1240    | sand, medium to fine  |
| 1240-1260    | sand, medium to fine  |
| 1260-1280    | sand, coarse to medium granule gravel   |
| 1280-1300    | a/a   |
| 1300-1320    | coarse sand, fine gravel  |
| 1320-1340    | a/a   |
| 1340-1360    | a/a   |
| 1360-1380    | coarse sand   |
| 1380-1400    | a/a   |
| 1400-1420    | medium to fine sand   |
| 1420-1440    | medium sand   |
| 1440-1460    | medium to fine sand   |
| 1460-1480    | a/a   |
| 1480-1500    | a/a   |
| 1500-1520    | coarse sand, fine gravel  |
| 1520-1540    | fine to medium sand   |
| 1540-1560    | no sample   |
| 1560-1580    | no sample   |
| 1680-1600    | no sample   |
| 1600-1620    | sandstone some granitics?; calcite cement some<br>pyrite-greenish east to cuttings alteration?                                      |
| 1620-1640    | as above with some gypsum   |
| 1640-1660    | sand and some sandstone, volcanic breccia frag.,<br>some granitics; calcite cement  |
| 1660-1680    | sands of volcanic and granitic material some<br>sandstone; gypsum calcite and pyrite xls.   |
| 1680-1700    | same as 1660-1680   |
| 1700-1720    | fine to coarse grain sand; rounded granitic frags.;<br>pyrite gypsum, biotite   |
| 1720-1740    | same as 1700-1720   |
| 1740-1760    | fine to coarse grain sand - some rounded pebbles;<br>rounded to subrounded granitic? pebbles; pyrite,<br>biotite, epidote?, calcite |
| 1760-1780    | same as 1740-1760; lots of sluff.   |
| 1780-1800    | same as 1740-1760   |

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SAMPLE DESCRIPTIONS

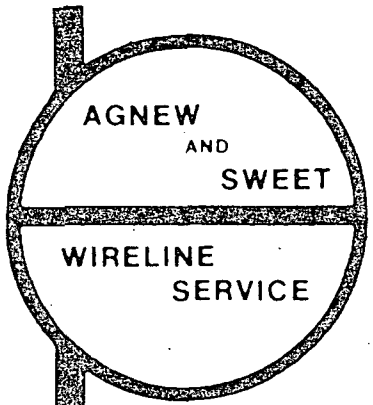
| <u>DEPTH</u> | <u>LITHOLOGY</u>   |
|--------------|--|
| 1800-1820    | fine to coarse sand - few granules of volcanics and granitics; biotite pyrite, calcite   |
| 1820-1840    | same as 1740-1760  |
| 1840-1860    | fine to coarse grain sand; some volcanic and granitic grains, rounded to subrounded - massive pyrite and pyrite cubes, a trace of chlorite and epidote |
| 1860-1880    | fine to coarse grain subangular to subrounded sand; some volcanic and granitic grains - aggregates of pyrite; calcite cemented sandstone frags.        |
| 1880-1900    | fine to coarse grain subangular to subrounded sand - ~30% fine grained angular volcanic frags. - trace of biotite and calcite - fair amount of pyrite  |
| 1900-1920    | ~40% fine to coarse grain mostly quartz sand, with detrital(?) hornblende - ~60% angular volcanic frags. - some biotite and pyrite                     |
| 1920-1940    | ~60% sand as above; 40% volcanic frags., pyrite  |
| 1940-1960    | 70% fine to coarse grain subangular to subrounded sand, lots of quartz - 30% volcanic frags. - biotite, pyrite, epidote                                |
| 1960-1980    | 90% very fine to coarse grain sand, lots of quartz - 10% volcanic frags. - chlorite, epidote, pyrite   |
| 1990-2000    | same as 1960-1980  |



RETURN TO DENVER

# AGNEW and SWEET

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BAKERSFIELD, CALIFORNIA  
93308



## SUBSURFACE SURVEY

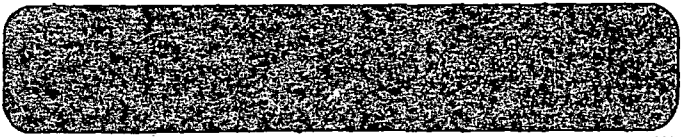
Temperature

|                    |                           |       |           |            |                |
|--------------------|---------------------------|-------|-----------|------------|----------------|
| OWNER              | CHEVRON RESOURCES COMPANY | FIELD | SODA LAKE | WELL NAME  | 36 - 78        |
| CASING             |                           | ELEV. |           | DATE       | March 17, 1978 |
| LINER DESCRIPTION: |                           |       |           | ZERO POINT | Ground         |
| PERFORATIONS:      |                           |       |           | MPP        |                |
| TUBING DETAIL:     |                           |       |           | DEPTH      | 2000' ZONE     |

|               |  |                |               |                      |               |
|---------------|--|----------------|---------------|----------------------|---------------|
| WELL STATUS   | Static   | PUMP SHOE      |               | ON PRODUCTION        |               |
| SURVEYED      | TUB <input checked="" type="checkbox"/> ANN              | SHUT IN        |               | DISENGAGE STYLUS     | 9:30 am       |
| PICK UP @     | 1966'  | ENGAGE STYLUS  | 7:16 am       | TIME OFF BOTTOM      | 9:24 am       |
| ELEMENT RANGE | 76-648 & 134-691   | TIME ON BOTTOM | 9:08 am       | CLOCK 3 hour TURN    | 15            |
| PURPOSE       | STATIC TEMPERATURE TRAVERSE SURVEY                       | SERIAL NO.     | 10025 & 10030 | MAX. F               | 328.2 @ 1966' |
| REMARKS:      | Traverse 20' per minute to pickup. 16 Minute hang @1966' |                |               | STABILIZATION PERIOD |               |

| PRESSURES      | START   | FINISH |
|----------------|---------|--------|
| DATE           |         |        |
| CASING PSI OBS |         |        |
| CASING PSI COR |         |        |
| TUBING PSI OBS |         |        |
| TUBING PSI COR |         |        |
| PRESS STATUS   | Static  | Static |
| INSTRUMENT     | @ 1966' |        |

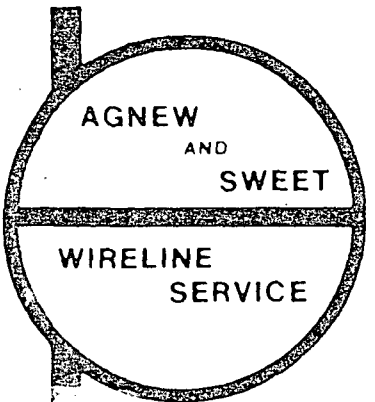
3



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## SUBSURFACE SURVEY

|                    |   |                |               |                      |                |
|--------------------|---|----------------|---------------|----------------------|----------------|
| OWNER              | CHEVRON RESOURCES                           | FIELD          | SODA LAKE     | WELL NAME            | 36 - 78        |
| CASING             |   | ELEV           |               | DATE                 | March 28, 1978 |
| LINER DESCRIPTION: | Churchill, NV                               |                |               | ZERO POINT           | Ground         |
| PERFORATIONS       | 33-20N-28E                                  |                |               | MPP                  |                |
| TUBING DETAIL:     |   |                |               | DEPTH                | 2000' ZONE     |
|                    |   | PUMP SHOE      |               |                      |                |
| WELL STATUS        | Static                                      | SHUT IN        |               | ON PRODUCTION        |                |
| SURVEYED           | TUB <input checked="" type="checkbox"/> ANN | ENGAGE STYLUS  | 8:33 am       | DISENGAGE STYLUS     | 10:53 am       |
| PICK UP @          | 1963'                                       | TIME ON BOTTOM | 10:28 am      | TIME OFF BOTTOM      | 10:42 am       |
| ELEMENT RANGE      | 80-656 & 123-698                            | SERIAL NO.     | 10025 & 10030 | CLOCK                | 3 hour TURN 15 |
| PURPOSE            | STATIC TEMPERATURE TRAVERSE SURVEY          |                |               | MAX. @               | 1961'          |
| REMARKS            | Traverse 20" per minute.                    |                |               | STABILIZATION PERIOD |                |

| PRESSURES:     | START   | FINISH |
|----------------|---------|--------|
| DATE           |         |        |
| CASING PSI OBS |         |        |
| CASING PSI COR |         |        |
| TUBING PSI OBS |         |        |
| TUBING PSI COR |         |        |
| PRESS STATUS   | Static  |        |
|                | @ 1961' |        |