SHELL OIL COMPANY

Pool Four #1

Wildcat

DRILLING REPORT FOR PERIOD ENDING

(SECTION OR LEASE)

(FIELD)

Sandoval, New Mexico

8-29-57

T 21N, R5W

(TOWNSHIP OR RANCHO)

| Location: 675° N and 650° W of SE Corner of Section 22, T 21 5 W, NMPM, Sandoval County, New Mexico Elevations: DF 7240.3 Grd 7232.4 KB 7242.2 8-15 0 217 Spudded 4:00 AM Ran and cemented 8 5/8", 28#, J-55 casing at 215° with 150-streated construction cement. Good returns to surface. Flar and waited on cement. Pressure tested casing and BOP with 8 8-21 8-22 3801 4020 Drilled 219° DST# 1 3686-3801 Johnston testers, 2 65/8" to | REMARKS | | | | | |
|---|--|--|--|--|--|--|
| Spudded 4:00 AM 8-16 217 Ran and cemented 8 5/8", 28#, J-55 casing at 215' with 150-streated construction cement. Good returns to surface. Flar and waited on cement. Pressure tested casing and BOP with 8 Drilled 3584' 8-22 3801 4020 Drilled 219' DST# 1 3686-3801 Johnston testers, 2 65/8" to | | | | | | |
| treated construction cement. Good returns to surface. Flar and waited on cement. Pressure tested casing and BOP with 8 217 to 8-21 S-22 3801 4020 Drilled 219° DST# 1 3686-3801 Johnston testers, 2 65/8° 1 | 1 N, R | | | | | |
| treated construction cement. Good returns to surface. Flar and waited on cement. Pressure tested casing and BOP with 8 217 to 8-21 8-22 3801 4020 Drilled 219 DST# 1 3686-3801 Johnston testers, 2 65/8* 1 | 1957 | | | | | |
| treated construction cement. Good returns to surface. Flar and waited on cement. Pressure tested casing and BOP with 8 217 to 8-21 8-22 3801 4020 Drilled 219 DST# 1 3686-3801 Johnston testers, 2 65/8* 1 | by / | | | | | |
| to 8-21 8-22 3801 4020 <u>Drilled 219[®] DST# 1 3686-3801</u> Johnston testers, 2 65/8 [®] b | nged up | | | | | |
| | | | | | | |
| packers at 3680° and 3686°, I inside pressure recorder at 36 outside pressure recorders at 3801°, 3/4° subsurface bean ar surface bean. Perforations 3686-3728. Used 30° (0.2 bbls) cushion. Initial shut in 30 minutes, open 1 hr, 30 min. Find 45 minutes. Steady weak blow throughout test. Recovered (10.3 bbls) total fluid including: 172° (.8 bbls) slightly omud, 860° (8.5 bbls) slightly oil cut watery mud and 73° (1 salt water. ISIP failed, IFP 95, FFP 475, FSIP 1164 (nearly HP 1862. | 671', 2 and 1" air inal shut d 1105' oil cut 1.0 bbls) | | | | | |
| 8-23 4020 4811 <u>Drilled 791.</u> Lost circulation at 4591, recovered with los circulation material. | st | | | | | |
| 8-29 4811 5095 Drilled 284 DST#2 4740-4811 (Gallup) Johnston testers, 2 tail packers at 4733 and 4740. 1 inside pressure recorder at 2 outside pressure recorders (Amerada and T) at 4811, 3/4 surface bean and 1 surface bean. Perforations 4740-62 and Used 60 (.414 bbls) air cushion. Initial shut in 30 minutes hour, final shut in 30 minutes. Faint blow decreasing to decomposition at BEGINNING OF PERIOD minutes. Recovered 120 (0.59 bbls | at 4725 (T), 'sub- 1 4791-98. ces, open 1 lead in 45 | | | | | |

| | HOLE | | CASING SIZE | DEPTH SET |
|------|----------|----|-------------|-----------|
| SIZE | FROM | то | | |
| | 1 | | | |
| | | | | |
| | | | | |
| | | | | |
| | ł | | 1 | |
| | <u> </u> | | -} | |
| LL | PIPE | | 1 | |

fluid including: 30' (.15 bbls) slightly oil cut mud and 90' (.45 bbls) mud. ISIP failed, IFP 111, FFP 148 FSIP 175, HP 2392 Ran Electrical-Induction and Microlog.

SHELL OIL COMPANY

Pool Futt #_ WELL NO.

DRILLING REPORT FOR PERIOD ENDING

9-1-57

(SECTION OR LEASE) T21N, R5W

(TOWNSHIP OR RANCHO)

Sandoval New Mexic

Wildcat

PAY 57

8-30

to 8-7

PDAA

Ri

2.50 PRINTED IN U. S. A.

BEMARKS

DEPTH

Took 26 sidewall samples recovered 11. Waited on orders.

With open end drill pipe plugged as follows:

50 sacks at 4800°

50 sacks at 3900°

50 sacks at 1560'

50 sacks at 2501

Located top of cement at 83%. Cemented at surface with 10 sack cement cap, installed marker. Released rig 3:00 PM, 9-1-57, abandoned.

Checked BOP Daily

Mud Summary Wt 9.4 to 9.8 #/gal Vis 40 to 84 sec WL 6 to 8.7 cc FC 2/32 in pH 8-10

CONDITION AT BEGINNING OF PERIOD HOLE DEPTH SET CASING SIZE FROM SIZE TO 215 215 8 5/8 12 1/4 0 7 7/8 215 5095 DRILL PIPE 4 1/2

Contractor: Force Drilling Company

Drillers: J. S. Wortman

C. McKenney

C. H. Isgar

A. V. Humphyries

Examined by Field or Area Divide FROM TO SHOWS UNDERLINED SAMPLES LAGGED NOT Shale, as above. Sandstone, as above. Shale, as above. Sandstone, as above. Shale. Sandstone. Shale. Sandstone. Shale. Sandstone, fine-medium. Shale. Sandstone. Shale, as above. Shale. Sandstone. Shale. Sandstone. Shale, medium green-medium brown. Sandstone, fine-medium, some free quartz granuls or crystals. some pyrite. Shale, as above. Sandstone, as above. Shale, inter bedded medium green and medium brown. Shale, as above. Coal. Shale, dark brown, small dark green, carbonaceous, silty. Shale, as above.

| Examined by to | Well | Pool #1 |
|----------------|---------------|---------|
| | Field or Area | Divide |

| FROM | ТО | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|--------|------|-----|--|
| 1090 | 1110 | 10 | Shale, as above. |
| 10 / 0 | | 90 | Sandstone, as above. |
| 1110 | 1130 | 70 | Shale, as above. |
| 111 | | 30 | Sandstone, as above. |
| 1130 | 1140 | 80 | Shale. |
| | · | 20 | Sandstone. |
| 1140 | 1170 | 90 | Shale. |
| · | | 10 | Sandstone. |
| 1170 | 1180 | 20 | Shale. |
| | | 80 | Sandstone, fine-medium. |
| 1180 | 1190 | 70 | Shale. |
| | ý | 30 | Sandstone. |
| 1190 | 1210 | 100 | Shale, as above. |
| 1210 | 1220 | 90 | Shale. |
| | | 10 | Sandstone. |
| 1220 | 1250 | 60 | Shale. |
| | | 40 | Sandstone. |
| 1250 | 1260 | 40 | Shale, medium green-medium brown. |
| | | 60 | Sandstone, fine-medium, some free quartz granuls or crystals, some pyrite. |
| 1260 | 1270 | 50 | Shale, as above. |
| | | 50 | Sandstone, as above. |
| 1270 | 1290 | 100 | Shale, inter bedded medium green and medium brown. |
| 1290 | 1300 | 90 | Shale, as above. |
| | | 10 | Coal. |
| 1300 | 1320 | 100 | Shale, dark brown, small dark green, carbonaceous, silty. |
| 1320 | 1330 | 80 | Shale, as above. |
| | | | |

| | | to | Well | Pool #1 |
|------------|----|----|---------------|---------|
| Examined t |)y | 10 | Ciald on Anna | Divide |
| | | to | Field or Area | |

| FROM | ТО | % | SHOWS UNDERLINED SAMPLES LAGGED NOT | _ |
|------|------|-----|---|---|
| 1330 | 1340 | 100 | Shale, medium gray-brown, silty. | |
| 1340 | 1350 | 60 | Shale, as above. | |
| | | 40 | Sandstone, fine-medium, slightymicaceous. | |
| 1350 | 1360 | 80 | Shale, as above. | |
| | | 20 | Sandstone, as above. | |
| 1360 | 1370 | 100 | Shale, medium brown-dark brown, carbonaceous. | |
| 1370 | 1400 | 100 | Shale, as above, slightlycarbonaceous. | |
| 1400 | 1410 | 70 | Shale, as above. | |
| | - | 30 | Sandstone, white, fine-medium, angular. | |
| 1410 | 1450 | 100 | Shale, medium green, gray-medium brown, slightlysilty. | |
| 1450 | 1460 | 100 | Sandstone, white-light gray, very fine-fine, slight micaceous? | |
| 1460 | 1470 | 50 | Shale, medium brown, carbonaceous flecks, silty in part. | |
| | | 50 | Sandstone, as above. | |
| 1470 | 1480 | 100 | Sandstone, medium gray, very fine-medium. | |
| 1480 | 1500 | 100 | Coal. | |
| 1500 | 1510 | 100 | Sandstone, white-clear, angular, fine-medium, particles consolidated in part. | |
| 1510 | 1520 | 50 | Shale, medium gray-brown, slightysilty. | |
| | | 50 | Sandstone, as above. | |
| 1520 | 1530 | 100 | Sandstone, as above. | |
| 1530 | 1540 | 50 | Shale, as above. | |
| | | 50 | Sandstone, as above. | ٠ |
| 1540 | 1550 | 100 | Sandstone, as above. | |
| 1550 | 1580 | 60 | Shale, as above. | ٠ |
| | | 40 | Sandstone, as above. | |
| 1580 | 1590 | 50 | Shale, as above. | |
| | | 50 | Sandstone, as above. | |

| FROM | то | % | SHOWS UNDERLINED SAM | MPLES | LAGGED | HOT |
|----------|------|-----|---|---|---------|---------------|
| <u> </u> | 1930 | 90 | Shale, as above, very silty. | , | | 2 |
| 1900 | 1950 | 10 | Sandstone, as above. | | | |
| 2000 | 30/0 | | Shale, as above. | | | |
| 1930 | 1940 | 100 | Shale, as above, becomes less silty. | | | |
| 1940 | 1970 | 100 | | | | |
| 1970 | 1990 | 70 | Shale, brown and gray. Sandstone, very fine, tightly cemented with | രമസ്ഥ | naceous | particles. |
| | | 30 | | Carbo | naccous | paroroso |
| 1980 | 1990 | 90 | Shale, as above. | | | |
| | | 10 | Sandstone, as above. | | | |
| 1990 | 2000 | 80 | Shale, as above. | | | |
| | | 20 | Sandstone, as above. | | | |
| 2000 | 2010 | 100 | Sandstone, as above. | | | |
| 2010 | 2020 | 100 | Shale, as above. | | | |
| 2020 | 2040 | 90 | Shale, as above. | | | |
| | · | 10 | Sandstone, as above. | | | 2 1 |
| 2040 | 2050 | 100 | Shale, as above. | | | |
| 2050 | 2060 | 100 | Shale, becomes less silty and vari-colored. | | | |
| 2060 | 2080 | 100 | Shale, as above. | | | |
| 2080 | 2090 | 90 | Shale, as above. | | | |
| | | 10 | Sandstone, as above. | | | |
| 2090 | 2120 | 100 | Shale, as above. | | | |
| 2120 | 2140 | 100 | Shale, as above, with trace Sandstone. | | | |
| 2140 | 2200 | 100 | Shale, gray, green brown. | | | |
| 2200 | 2210 | 100 | Shale, as above, with Silstone. | | | |
| 2210 | 2350 | 100 | Shale, as above. | | | |
| 2350 | 2400 | 100 | Shale, medium gray-brown. | | | |
| 2400 | 2450 | 100 | Shale, as above. | | | |
| | | | | | | |

| | | 4 | Well | Pool #1 |
|----------|---------------------------------------|------|-------------------|---------|
| Examined | by | | Field or Area | Divide |
| | · · · · · · · · · · · · · · · · · · · | 10 _ | TIGIO DI ATTO | |

| | | | to |
|------|----------|-----|--|
| FROM | то | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
| | | | |
| 1590 | 1600 | 40 | Shale, as above. |
| | | 60 | Sandstone, as above. |
| 1600 | 1620 | 60 | Shale, as above. |
| | | 40 | Sandstone, as above. |
| 1620 | 1630 | 20 | Shale, as above. |
| | ** | 80 | Sandstone, as above, very fine-fine, sub angular, poorly sorted, |
| 1630 | 1640 | 10 | Shale, as above. |
| | | 90 | Sandstone, as above. |
| 1640 | 1650 | 30 | Shale, as above. |
| | | 70 | Sandstone, as above. |
| 1650 | 1660 | 60 | Shale, as above. |
| | i | 40 | Sandstone, as above. |
| 1660 | 1690 | 10 | Shale, as above. |
| | <u> </u> | 90 | Sandstone, as above. |
| 1690 | 1700 | 20 | Shale, as above. |
| | | 80 | Sandstone, as above. |
| 1700 | 1710 | 90 | Shale, dark gray, very silty. |
| | | 10 | Sandstone, as above. |
| 1710 | 1800 | 100 | Shale, as above. |
| 1800 | 1840 | 100 | Shale, gray-brown, slightysilty. |
| 1840 | 1880 | 100 | Shale, becomes more silty with carbonaceous particles. |
| 1880 | 1890 | 90 | Shale, as above. |
| | | 10 | Sandstone, gray, very fine. |
| 1890 | 1900 | 50 | Shale, as above. |
| | | 50 | Sandstone, as above. |
| | | | |

| FROM | ТО | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|--------------|---------------|------------|--|
| 2450 | 2490 | 90 | Shale, as above. |
| | | 10 | Sandstone, fine-medium, very slight/calcareous, occasionally, pyritic. |
| 2490 | 2500 | | Skip. |
| 2500 | 2520 | 100 | Shale, medium green-gray-medium green, slightysilty in part, very slightycalcareous. |
| 2520 | 2570 | 100 | Shale, medium gray-brown. |
| 2570 | 2580 | 90 | Shale, as above. |
| | | 10 | Sandstone, fine-medium, clear-milky granuls; sublangular; r, very slight calcareous. |
| 2580 | 2600 | 80 | Shale, as above. |
| | | 20 | Sandstone, as above. |
| 2600 | 2610 | 7 5 | Shale, as above. |
| | í | 25 | Sandstone, with trace pyrite. |
| 2610 | 26.50 | 70 | Shale, as above. |
| | ī. | 30 | Sandstone, as above. |
| 2650 | 2700 | 90 | Shale, as above. |
| | | 10 | Sandstone, as above. |
| 2700 | 2720 | 80 | Shale, medium gray-brown, silty in part. |
| | | 20 | Sandstone, with milky, fine-medium, sub angular, pyrite. |
| 2720 | 2 79 0 | 100 | Shale, as above. |
| 2790 | 2800 | 80 | Shale, as above. |
| | | 20 | Silstone, medium gray-medium brown, slight micaceous. |
| 2800 | 2820 | 70 | Shale, as above. |
| | | 30 | Silstone, as above. |
| 2 820 | 2850 | 50 | Shale, as above. |
| | | 50 | Silstone, as above. |
| 2850 | 2900 | 100 | Shale, as above, slight/sandy. |
| | | | |

| | | | Pool #1 |
|-------------|----|---------------|---------------|
| | to | Well | |
| Examined by | 10 | Field or Aren | <u>Divide</u> |
| | 10 | FIELD OF ALEX | |

| | - | | |
|-------|---------------|-------|--|
| FROM | .TO | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
| 2450 | 2490 | 90 | Shale, as above. |
| | | 10 | Sandstone, fine-medium, very slight calcareous, occasionally pyritic. |
| 2490 | 2500 | | Skip. |
| 2500 | 2520 | 100 | Shale, medium green-gray-medium green, slightlysilty in part, very slightlycalcareous. |
| 2520 | 2570 | 100 | Shale, medium gray-brown. |
| 2570 | 2580 | 90 | Shale, as above. |
| | | 10 | Sandstone, fine-medium, clear-milky granuls, sublangular, very slight/calcareous. |
| 2580 | 2600 | 80 | Shale, as above. |
| | | 20 | Sandstone, as above. |
| 2600 | 2610 | 75 | Shale, as above. |
| | í | 25 | Sandstone, with trace pyrite. |
| 2610 | 26. 50 | 70 | Shale, as above. |
| | 7 | 30 | Sandstone, as above. |
| 2650 | 2700 | 90 | Shale, as above. |
| | | 10 | Sandstone, as above. |
| 2700 | 2720 | 80 | Shale, medium gray-brown, silty in part. |
| | | 20 | Sandstone, with milky, fine-medium, sub angular, pyrite. |
| 2720° | 27 9 0 | 100 | Shale, as above. |
| 2790 | 2800 | 80 | Shale, as above. |
| | | 20 | Silstone, medium gray-medium brown, slightymicaceous. |
| 2800 | 2820 | 70 | Shale, as above. |
| | | 30 | Silstone, as above. |
| 2820 | 2850 | 50 | Shale, as above. |
| | | 50 | Silstone, as above. |
| 2850 | 290 | 0 100 | Shale, as above, slightlysandy. |

| FROM | ТО | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|--------------|------|-----|--|
| 2900 | 2910 | 100 | Shale, as above, with slight inclusions in trace of Sandstone. |
| 2910 | 2920 | 90 | Shale, as above. |
| | | 10 | Sandstone, very fine, white. |
| 2920 | 2930 | 90 | Shale, as above. |
| | | 10 | Sandstone, as above. |
| 2930 | 2940 | 100 | Shale, as above, trace Sandstone as above. |
| 2940 | 2950 | 100 | Shale, Gray, brown and green. |
| 2950 | 2960 | 100 | Shale, as above. |
| 2960 | 2970 | 100 | Shale, as above. |
| 2970 | 2980 | 100 | Shale, as above. |
| 2980 | 2990 | 100 | Shale, as above. |
| 2990 | 3000 | 100 | Shale, as above. |
| 3000 | 3010 | 100 | Shale, as above. |
| 3010 | 3020 | 100 | Shale, as above. |
| 3020 | 3030 | 100 | Shale, as above. |
| 3030 | 3040 | 100 | Shale, as above. |
| 3040 | 3050 | 90 | Shale, as above. |
| | | 10 | Sandstone, very fine, gray green. |
| 3050 | 3060 | 90 | Shale, as above. |
| | | 10 | Sandstone, as above. |
| 30 60 | 3070 | 100 | Shale, as above. |
| 3070 | 3080 | 100 | Shale, as above. |
| 3080 | 3090 | 100 | Shale, as above. |
| 3 090 | 3100 | 90 | Shale, light gray to brown, slightly silty. |
| | | 10 | Coal. |

| FROM | TO | % | SHOWS UNDERLINED | SAMPLES LAGGED NOT |
|------|------|-----|--------------------------------------|---------------------------------------|
| 3100 | 3110 | 100 | Shale, as above. | |
| 3110 | 3120 | 90 | Shale, as above. | |
| | | 10 | Sandstone, very fine, sub angular. | |
| 3120 | 3130 | 80 | Shale, as above. | |
| | | 20 | Sandstone, as above. | \mathcal{S}_{-1} |
| 3130 | 3140 | 80 | Shale, as above. | |
| | | 20 | Sandstone, as above. | |
| 3140 | 3150 | 100 | Shale, as above. | |
| 3150 | 3160 | 90 | Shale, as above. | • |
| | | 10 | Sandstone, fine to medium, sub angul | ar, white. |
| 3160 | 3170 | 90 | Shale, as above. | |
| | | 10 | Sandstone, white mineral | |
| 3170 | 3180 | 90 | Shale, as above. | - - |
| | : | 10 | Sandstone, as above. | · · · · · · · · · · · · · · · · · · · |
| 3180 | 3190 | 100 | Shale, as above. | |
| 3190 | 3200 | 100 | Shale, medium gray, slightycalcareou | as, slightly silty. |
| 3200 | 3210 | 90 | Shale, as above. | |
| | | 10 | Coal. | |
| 3210 | 3220 | 80 | Shale, as above. | |
| | | 20 | Coal. | |
| 3220 | 3230 | 50 | Shale, as above. | |
| | | 50 | Coal. | |
| 3230 | 3240 | 90 | Shale, as above. | |
| • | | 10 | Coal. | |
| 3240 | 3250 | 100 | Shale, as above. | |
| | | | | , |
| | | | | |
| | | | | |

| FROM | TO | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|------|--------------|-----|--|
| 3250 | 3260 | 40 | Shale, medium gray to light brown. |
| | | 40 | Sandstone, white, fine-medium grain, sub angular. |
| | | 20 | Coal. |
| 3260 | 3270 | 50 | Shale, as above. |
| | | 50 | Sandstone, as above. |
| 3270 | 3280 | 20 | Shale, as above. |
| | | 80 | Siltstone, medium brown to gray brown, slight calcareous. |
| 3280 | 3290 | 100 | As above. |
| 3290 | 3300 | 50 | Shale, as above. |
| | | 50 | Siltstone, as above. |
| 3300 | 3310 | 80 | Siltstone, medium gray to medium brown. |
| | -i | 20 | Sandstone, white, very fine-fine grain, fair to poor consolidation. |
| 3310 | 3320 | 100 | As above. |
| 3320 | 3340 | 100 | Shale, white, very fine-fine, sub round, fair to poor consolidation. |
| 3340 | 3350 | 100 | Shale, medium gray to light brown. |
| 3350 | 3360 | 50 | Siltstone, medium brown, sandy. |
| | | 50 | Sandstone, white to light green, very fine to fine, silty in part. |
| 3360 | 3380 | 100 | Sandstone, as above, occasionally. |
| 3380 | 3400 | 50 | Shale, medium gray to medium brown, very fine, sandy in part. |
| | | 50 | Sandstone, as above, occasionally pyritic. |
| 3400 | 3 450 | 25 | Shale, as above, silty in part. |
| | | 75 | Sandstone, white, very fine to fine, poor to fair consolidation. |
| 3450 | 3480 | 25 | Siltstone, light gray to medium brown, trace fluorescence. No Color, Cut Fluorescence. |
| | | 75 | Sandstone, as above. |
| 3480 | 3500 | 100 | Shale, medium gray to light gray brown. |

| FROM | ТО | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|--------------|------|------------|---|
| 2500 | 2520 | 100 | Shale, as above, silty in part. |
| 3500 | 3530 | | |
| 3530 | 3560 | 90 | Shale, as above. |
| | | 10 | Coal. |
| 3560 | 3570 | 80 | Shale, as above. |
| | | 20 | Coal. |
| 3570 | 3580 | 20 | Shale, as above. |
| | | 10 | Coal. |
| | | 70 | Sandstone, white, very fine to fine, sub round, poor to fair consolidate. |
| 3580 | 3600 | 40 | Shale. |
| | | 20 | Coal. |
| | | 40 | Sandstone. |
| 3600 | 3610 | 20 | Shale, light brown to medium gray, silty. |
| | - | 50 | Sandstone, white, very fine to fine, sub round to sub angular. |
| | • | 30 | Coal. |
| 3610 | 3620 | 100 | Shale, medium gray-brown. |
| 3620 | 3630 | 90 | Shale, as above. |
| | | 10 | Coal. |
| 3630 | 3640 | 7 5 | Shale, as above. |
| | | 25 | Coal. |
| 3640 | 3650 | 80 | Shale, white, poor consolidation. |
| | | 20 | Coal. |
| 365 0 | 3660 | 50 | Shale, light gray-brown, silty. |
| | | 50 | Coal. |
| 3660 | 3670 | 80 | Shale, as above. |
| - | | 20 | Coal. |
| | | | <u> </u> |

| Examined by | to | Well | Pool #1 |
|-------------|----|---------------|---------|
| Examined by | to | Field or Area | Divide |

| FROM | ТО | % | SHOWS UNDERLINED | SAMPLES LAGGED NOT |
|---------------|---------------|-----|--|---|
| 3670 | 3700 | 50 | Shale, as above. | |
| | | 50 | Sandstone, as above. | |
| 3 70 0 | 3710 | 50 | Shale, medium gray to medium brown cut fluorescence, colorles: | n, silty, fluoremence 30%. Good milky s cut. |
| | | 50 | Sandstone, as above. | |
| 3 71 0 | 3720 | 20 | Shale, as above. | |
| | | 40 | Sandstone, as above. | Show as above. |
| | | 40 | Coal. | |
| 3720 | 3730 | 60 | Shale, as above. | Show as above. |
| | | 20 | Sandstone, as above. | |
| | | 20 | Coal. | |
| 3730 | 3 7 50 | 100 | Sandstone, white, sub round to su micaceous, occasionally | b angular. Very fine to fine, slight y pritic, 30-40% Fluorescence. |
| 3750 | 3 77 0 | 100 | Sandstone, as above | Cut Fluorescence. |
| 3 7 70 | 3 79 0 | 50 | Shale, as above. | · • |
| | | 50 | Sandstone, as above. | Cut as above. |
| 3790 | 3800 | 70 | Shale, silty. | |
| | | 30 | Sandstone, as above. | Cut as above. |
| 3800 | 3810 | | Skip ₄ | |
| 38 10 | 3820 | 50 | Shale, light to medium gray, silt | ty in part. |
| | | 50 | Sandstone, white, very fine to f | ine, sub angular. |
| 3820 | 3830 | 30 | Shale, as above. | |
| | | 70 | Sandstone, as above, with some m | icaceous. |
| 3830 | 3840 | 50 | Shale, as above. | • |
| | | 50 | Sandstone, as above. | |

| Examined by | to | Well | Pool #1 |
|-------------|--------|---------------|---------|
| | to | Field or Area | Divide |

| FROM | ТО | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|----------------------|------|------------|--|
| 4170 | 4180 | 70 | Shale, as above |
| | | 30 | Sandstone, as above. |
| 4180 | 4200 | 7 0 | Shale, as above. |
| | | 30 | Sandstone, as above. |
| 4200 | 4230 | 50 | Shale, mediam gray, silty. |
| | | 50 | Sandstone, white to light gray, very fine to fine. |
| 4230 | 4250 | 70 | Shale, as above. |
| | | 30 | Sandstone, as above. |
| 4 2 50 | 4300 | 50 | Shale, as above. |
| | | 50 | Sandstone, as above, some gray, very fine. |
| 4300 | 4330 | 20 | Shale, as above. |
| | | 80 | Sandstone, as above. |
| 4330 | 4350 | 30 | Shale, as above. |
| | • | 70 | Sandstone, as above. |
| 4350 | 4380 | 30 | Shale, as above. |
| | | 70 | Sandstone, as above. |
| 4380 | 4400 | 60 | Shale, as above. |
| | | 40 | Sandstone, as above. |
| 4400 | 4440 | 100 | Shale, medium. |
| 4440 | 4450 | 70 | Shale, as above. |
| | | 30 | Coal. |

| Examined byto | Well | Pool #1 |
|---------------|---------------|---------|
| to | Field or Area | Wildcat |

| | • | | Tield of Area <u>Hitagodo</u> |
|---------------|------|----------|---|
| FROM | то | % | SHOWS UNDERLINED SAMPLES LAGGED Not |
| 4450 | 4500 | 80 20 | Shale Sandstone |
| 4500 | 4550 | | Skip |
| 4550 | 4600 | 100 | Shale |
| 4600 | 4650 | 90 10 | Shale Sandstone |
| 4650 | 4730 | 100 | Shale |
| 4730 | 4750 | 90 10 | Shale Sandstone, fine-medium, sub angular |
| 4 75 7 | 5030 | | Shale and sandstone interbedded with 10% fluorescence 4750-4810 |
| 30 30 | 5050 | 90 10 | Shale Sandstone |
| 5030 | 5095 | TD 100 | Shale |