

WELL HISTORY REPORT

Shell Peel R. YT L-19

REPORT NO. 1000

1

Shell Well R. W. L-19

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SECTION 1 - WELL IDENTIFICATION

WELL NUMBER

Well Peel R. YF L-19

PERMITTEE

Shell Canada Limited

NAME OF OPERATOR

Shell Canada Limited, P. O. Box 106, Edmonton, Alberta

LOCATION

Unit L, Section 19, Grid 66° 50' 135° 15'
Latitude 66° 48' 39" 1302 N
Longitude 135° 18' 23" 1719 W

PERMIT NO.

3617

DRILLING CONTRACTOR

Regent Drilling Limited, Rig No. 21 (Rotary)

DRILLING AUTHORITY NO.

No. 233, April 5, 1966

CLASSIFICATION

Wildcat

ELEVATION

G.L.: 299.6 K.B.: 312.2

DATE SPUNDED

10:00 a.m., April 11, 1966

DATE COMPLETED OPERATIONS

June 12, 1966

DATE COMPLETED DRILLING

June 8, 1966

TOTAL DEPTH & PLUGGED BACK TOTAL DEPTH

T.D.: 6500' Driller; P.B.T.D.: Surface

WELL STATUS

Dry and Abandoned

RIG RELEASED

4:00 p.m., June 12, 1966

HOLE SIZES

10" to 25', 13-1/4" to 369', 12-1/4" to 665', 6-3/4" to 6500'

CASING

10" conductor at 25' with 160 sacks Portland & 50% CaCl₂
9-5/8", J-55, 36#, Mannesman Casing at 664 K.B. with 500 sacks
Portland + 2% CaCl₂

SECTION II - GEOLOGICAL SUMMARY

FORMATION TO BE

Spudded in Lower Mississippian
Top Upper Devonian 800' K.B.

CORED INTERVALS

Recovered 26 sidewall cores at 6100, 5500, 5000, 4500, 4035, 3305,
3290, 3280, 2879, 2878, 2500, 2020, 1920, 1800, 1705, 1600, 1500,
1300, 1200, 1000, 900, 860, 800, 750, 696, and 670.

CORE DESCRIPTIONS

None

SAMPLE DESCRIPTIONS

Attached.

SHELL, PEEL R. YT 1-10

K.B. 312.2'

LATITUDE: 66° ^{48'}~~57'~~ 39" N.

T.D. 6500'

LONGITUDE: 135° 18' 23.710" W.

0 - 30'	Sandstone	70% medium to microgranular. Lithic, sandy. Sorted to moderately sorted. Quartzitic. 30% medium grey, shale. Trace of illite and pyrite. Trace of coal.
30 - 40'	Shale	Medium grey. Cryptogranular. 5% ironstone. Pyritic and micaceous.
40 - 50'	Sandstone	Medium to extremely fine. Trace of ironstone. Pyritic. Lithic.
50 - 60'	Shale	50-55: medium grey shale. 10% coal. 55-60: medium grey shale. 20% coal.
60 - 70'	Sandstone	Fine to extremely fine. Lithic. 40% medium grey shale. Trace of ironstone. 5% coal.
70 - 80'	Sandstone	Fine to extremely fine. Lithic. 40% medium grey, shale. Trace of ironstone. 5% coal. Pyritic.
80 - 90'	Shale	Medium grey-medium brown grey. 10% coal. Pyritic. Medium grey, shale: hard. Medium brown grey shale: soft.
90 - 100'	Sandstone	Coarse to extremely fine. Lithic. Quartzitic. 10% medium grey shale. Pyritic. Trace of coal.
100 - 110'	Shale	Medium grey-medium brown grey. 0-10% sandstone. Pyritic. Micaceous. 5% coal. Trace of ironstone.

110 - 120'	Shale	Medium grey-medium brown grey. 10% sandstone, medium to extremely fine. Lithic. Trace of coal.
120 - 140'	Shale	Medium grey-medium brown grey. Trace of iron silt. 10% coal. Micaceous.
140 - 150'	Shale	Medium brown grey. Trace of coal.
150 - 160'	Shale	Medium brown grey/medium grey. Trace of ironstone. Trace of coal. Pyritic. Micaceous. 45% sandstone, very fine to extremely fine.
160 - 180'	Shale	Medium brown grey/black. 10% silt, microgranular. Pyritic. Micaceous.
180 - 190'	Sandstone	Medium brown grey/black. Pebble to microgranular. Quartzitic. 30% shale. Trace of siltite. Pyritic and micaceous.
190 - 200'	Shale	Medium brown grey/black. 0-5% sandstone. Pyritic and micaceous.
200 - 250'	Sandstone	White-light grey. Pebble to microgranular. Quartzitic, conglomerate. Pyritic. 10-15% matrix is sandstone silt and siliceous matter of siltite.
250 - 260'	Shale	Medium brown grey. Cryptogranular.
260 - 300'	Sandstone	White-light grey. Pebble to medium, very fine to microgranular.
300 - 310'	Sandstone	Medium brown grey. Medium to extremely fine. Quartzitic sandstone. Trace pyritic.

310 - 320'	Sandstone	White-light grey. Quartzitic conglomerate. Pebble to microgranular. Pyritic.
320 - 380'	Sandstone	Light medium brown grey. 0-10% shale. Quartzitic. Medium to microgranular. Traces of coal as streaks.
380 - 390'	Sandstone	Light medium brown grey. Quartzitic. Trace to 5% shale. Trace of coal as streak.
390 - 400'	Sandstone	Light grey-white. Quartzitic, medium to extremely fine.
400 - 420'	Sandstone	Light grey/white to light medium brown grey. Quartzitic sandstone conglomerate. Trace of coal as streak.
420 - 430'	Sandstone	Light grey white/light medium brown grey. Pebble to extremely fine. Quartzitic sandstone conglomerate. Trace of coal as streak.
430 - 440'	Sandstone	Light grey. Quartzitic sandstone, fine to extremely fine.
440 - 450'	Sandstone	Light grey/medium brown grey. Quartzitic sandstone. Fine to extremely fine. 30% shale.
450 - 460'	Sandstone	Light grey-medium brown grey. Medium to extremely fine. Quartzitic. Trace of coal as streak.
460 - 470'	Sandy Shale	Light grey-medium brown grey. Quartzitic sandstone, fine to extremely fine.
470 - 480'	Shale	Medium grey. Trace of sand- stone. Trace of plants and streak of coal. Pyritic. Micaceous.

480 - 520'	Shale	Medium grey silt. Trace of plant remains and streaks of coal. Pyritic and micaceous.
520 - 550'	Shale	Medium grey black. Plant remains. Streaks of coal. Pyritic. Micaceous. 8-20% sandstone.
550 - 570'	Sandstone	Medium grey - light grey. Quartzitic sandstone and siltstone. 10% shale. Trace of plant remains and streaks of coal. Pyritic.
580 - 660'	Shale	Medium grey-light grey. 10% sandstone. Traces of shale in sandstone. Plant remains and streaks of coal. Pyritic.
665 - 810'		No Samples.
810 - 815'	Shale	Medium brown grey/light grey. 20% lithic siltstone. Trace of pyrite and plant remains.
815 - 820'	Siltstone	Lithic. 10% medium brown grey/light grey shale.
820 - 825'	Shale	Medium brown grey/light grey. 20% lithic siltstone.
825 - 830'	Siltstone	Medium brown grey/light grey. 10% shale.
830 - 835'	Shale	Medium brown grey/light grey. 20% lithic siltstone.
835 - 840'	Siltstone	Medium brown grey/light grey. 10% shale.
840 - 845'	Shale	Medium brown grey/light grey. 30% lithic siltstone.
845 - 850'	Siltstone	Medium brown grey/light grey. 10% shale.
850 - 855'	Shale	Medium brown grey/light grey. 20% lithic siltstone.
855 - 860'	Siltstone	Medium brown grey/light grey. 10% shale.

860 - 865'		Medium brown grey/light grey. 20% lithic siltstone. Pyritic and plant remains.
865 - 870'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic and plant remains.
870 - 875'	Shale	Medium brown grey/light grey. 20% lithic siltstone. Pyritic and plant remains.
875 - 880'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic and plant remains.
880 - 885'	Shale	Medium brown grey/light grey. 20% lithic siltstone. Pyritic and plant remains.
885 - 890'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic and plant remains.
890 - 895'	Shale	Medium brown grey/light grey. 20% siltstone, lithic. Pyritic and plant remains.
895 - 900'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic and plant remains.
900 - 905'	Shale	Medium brown grey/light grey. 20% lithic siltstone. Pyritic.
905 - 910'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic.
910 - 915'	Shale	Medium brown grey/light grey. 20% lithic siltstone. Pyritic.
915 - 920'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic.
920 - 925'	Shale	Medium brown grey/light grey. 20% lithic siltstone. Pyritic.
925 - 930'	Siltstone	Medium brown grey/light grey. 10% shale. Pyritic.

930 - 1000'		
1000 - 1060'	Vec	No samples.
1080 - 1230'	Muc	No samples.
1260 - 1290'	Shale	Light brown. Soft, flaky shale. Plant remains. Sil. shaw.
1290 - 1320'	Interbedded	1295-95: Siltstone, white-light grey. Pyritic and plant remains. 1295-1300' Shale, light-dark brown grey. 10-20% siltstone. Pyritic and plant remains. 1300-05: siltstone, white-light grey. Pyritic and plant remains. 1305-10' Shale, light-dark brown grey. 10-20% siltstone. Pyritic and plant remains.
1320 - 1440'	Interbedded As above.	
1440 - 1460'	Interbedded	1440-45: Light-medium brown grey/light grey-white. 30% very fine to SL siltstone. Micaceous, pyrite and plant remains. 1445-50: as above. 1450 - 60: Siltstone, light grey white. 10% shale. Micaceous, pyrite and plant remains.
1460 - 1480'	Interbedded	As above.
1480 - 1500'	Interbedded	1480-85: Shale, light-medium brown grey. 20% lithic, fine to SL siltstone. Micaceous, pyritic and plant remains. 1485 - 1490: Sandy silt. Light grey-white. 5% shale. Trace of ironstone. Micaceous, pyritic and plant remains.
1500 - 1560	Interbedded	1500-10: shale, light-medium brown grey. 30% lithic, siltstone. 1510-20: Siltstone, lithic. 10% shale.

1800 - 1810'	Interbedded	1800-05: Shale, light grey to light brown grey, lithic, with plant remains. Microscopic plant remains. 1805-10: Shale, light grey/light brown grey. Trace of siltstone.
1810 - 1830'	Interbedded	As above with a trace of ironstone.
1830 - 1840'	Shale	Light grey/light brown grey. 10% sandstone, very fine to microgranular.
1840 - 1850'	Interbedded	1840-45: Sandstone, quartzitic. Light grey-white. Lithic. 1845-50: Sandstone, quartzitic. Light grey-white. 10% shale.
1850 - 1860'	Interbedded	1850-55: Sandstone, light grey-white. Lithic. Medium to microgranular. 10% light brown grey, shale. 1855-60: Shale, light brown grey. 30% lithic, siltstone.
1860 - 1890'	Interbedded	Every 5' is 90% sandstone, light grey-white. Lithic. 10% light brown grey, shale. 60% shale, light brown grey.
1890 - 1900'	Interbedded	1890-95: Sandstone, light grey-white. 10% shale, light brown grey. 1895-1900: Shale, light brown grey. 20% siltstone, lithic.
1900 - 1930'	Interbedded	Every 5': 00-05: Shale, light brown grey. 20% very fine to microgranular, sandy silt. Pyritic and plant remains. 05-10: Shale, light brown grey. Trace of lithic siltstone.
1930 - 1960'	Interbedded	1930-35: Shale, light brown grey. 30% very fine to microgranular, sandy silt. Lithic. 1935-40: Shale, light brown grey. Trace of siltstone. Pyrite and plant remains.

1930 - 1960'	Continued	1940-45:Shale, light brown grey. 30% siltstone, sandy and lithic. Plant remains and pyritic. 1945-50:Shale, light brown grey. Trace of lithic sandy siltstone. Pyritic and plant remains. 1950-55:Shale, light brown grey. 30% lithic sandy siltstone. Pyritic and plant remains. 1955-60:Shale, light brown grey. Trace of lithic sandy siltstone. Pyritic and plant remains.
1960 - 1970'	Sandstone	Quartzitic sandstone. Medium to cryptogranular. 20% light brown grey shale. Pyritic and plant remains.
1970 - 1980'	Sandstone	Quartzitic sandstone. Coarse to cryptogranular. 10% light brown grey shale. Micaceous, pyritic and plant remains.
1980 - 1985'	Sandstone	Quartzitic sandstone, coarse to cryptogranular. 5% light grey/light brown grey shale. 5% Ironstone. Micaceous, pyritic and plant remains.
1985 - 1990'	Sandstone	Quartzitic sandstone. 25% light grey/light brown grey shale. 5% Ironstone. Micaceous, pyritic and plant remains.
1990 - 1995'	Sandstone	Quartzitic sandstone. 25% light grey/light brown grey shale. 5% Ironstone. Micaceous, pyritic and plant remains.
1995 - 2000'	Sandstone	Quartzitic sandstone. 25% light grey/light brown grey shale. 5% ironstone. Micaceous, pyritic and plant remains.
2000 = 2005'	Sandstone	Quartzitic sandstone, coarse to cryptogranular. 5% light grey/light brown grey shale. 5% ironstone. Micaceous, pyritic and Plant remains.

2005 - 2010'	Sandstone	Quartzitic sandstone. 25% light grey/light brown grey shale. 5% ironstone. Micaceous, pyritic and plant remains.
2010 - 2015'	Sandstone	Quartzitic sandstone, medium to cryptocranular. 20% light brown grey/light grey, shale. Micaceous.
2015 - 2020'	Shale	Light brown grey/light grey. Trace of quartzitic sandstone. Micaceous and plant remains. Trace of pyrite.
2020 - 2070'	Shale	2020-25:Quartzitic sandstone. Medium to cryptocranular. 20% light brown grey/light grey, shale. Micaceous and pyritic. 2025-30:Shale, light brown grey/light grey shale. Trace of quartzitic sandstone. Micaceous, pyritic and plant remains. 2030-35:Quartzitic sandstone, medium to cryptocranular. 20% light brown grey/light grey, shale. Micaceous and pyritic. 2035-40:Shale, light brown grey/light grey shale. Trace of quartzitic sandstone. Micaceous, pyritic and plant remains. 2040-45:Quartzitic sandstone, medium to cryptocranular. 20% light brown grey/light grey, shale. Micaceous and pyritic. 2045-50:Shale, light brown grey/light grey. Trace of quartzitic sandstone. Micaceous, pyritic and plant remains. 2050-55:Quartzitic sandstone, medium to cryptocranular. 20% light brown grey/light grey shale. Micaceous and pyritic. 2055-60:Shale, light brown grey/light grey. Trace of quartzitic sandstone. Micaceous, pyritic and plant remains. 2060-65:Quartzitic sandstone, medium to cryptocranular. 20% light brown grey/light grey shale. Micaceous and pyritic. 2065-70:Shale, light brown grey/light grey. Trace of quartzitic sandstone. Micaceous, pyritic and plant remains.

2070 - 2080'	Shale	<p>2070-75:Shale, light brown grey. 20% extremely fine to crypto-granular. Lithic, siltstone. Micaceous, plant remains and traces of pyrite.</p> <p>2075-80:Shale, light brown/grey. Trace of coarse siltstone. Micaceous, plant remains and pyritic.</p>
2080 - 2090'	Interbedded	<p>2080-85:Lithic, very fine to crypto-granular sandy siltstone. 20% light brown grey/grey shale. Micaceous, plant remains and pyritic.</p> <p>2085-90:Shale, light brown/ grey. Trace of lithic siltstone.</p>
2090 - 2100'	Interbedded	<p>2090-95:Shale, light brown/grey. 20% extremely fine to crypto-granular, lithic siltstone. Micaceous, plant remains, and pyritic.</p> <p>2095-2100:Shale, light brown grey. Trace of lithic siltstone.</p>
2100 - 2110'	Interbedded	<p>2100-05:medium to crypto-granular, lithic sandy siltstone. 20% light brown/medium brown grey shale. Micaceous, plant remains and pyritic.</p> <p>05-10:Shale, light brown/medium brown grey. Trace of lithic siltstone.</p>
2110 - 2120'	Interbedded	<p>10-15:Shale, light brown/medium brown grey. 20% lithic, extremely fine to crypto-granular siltstone. Trace of coarse crystalline limestone. Micaceous, plant remains and pyritic.</p> <p>15-20:Shale, light brown/medium brown grey. Trace of lithic siltstone.</p>
2120 - 2130'	Interbedded	<p>20-25:Shale, light brown/medium brown grey. 10% extremely fine to crypto-granular, lithic siltstone. Micaceous, plant remains and pyritic.</p>

2120 - 2130'	Interbedded (Continued)	25-30:Shale, light brown/medium brown grey. Trace of lithic siltstone.
2130 - 2140'	Interbedded	30-35:Medium to cryptocranular, lithic sandy siltstone. 20% light brown/medium brown grey shale. Micaceous, plant remains and pyritic. 35-40:Shale, light brown/medium brown grey. Trace of lithic siltstone. Trace of ironstone. Micaceous, plant remains and pyritic.
2140 - 2150'	Interbedded	40-45:Shale, light brown/medium brown grey. 20% extremely fine to cryptocranular, lithic siltstone. Micaceous, plant remains and pyritic. 45-50:Shale, light brown/medium brown grey. Trace of lithic siltstone. Papery laminated.
2150 - 2160'	Interbedded	50-55:Shale, light brown/medium brown grey. 20% extremely fine to cryptocranular, lithic siltstone. Micaceous, plant remains and pyritic. 55-60:Shale, light brown/medium brown grey. Trace of lithic siltstone. Papery laminated.
2160 - 2170'	Interbedded	60-65:Very coarse to cryptocranular, quartzitic sandstone/siltstone. 20% light brown grey/light grey shale. Plant remains and pyritic. 65-70:Shale, light brown grey/light grey. 30% extremely fine to cryptocranular, lithic siltstone. 5% ironstone. Plant remains and pyritic.
2170 - 2180'	Sandstone	Very coarse to cryptocranular, lithic, quartzitic sandstone/siltstone. 20% light brown grey/light grey shale. 5% ironstone. Plant remains and pyritic.

2180 - 2200'		Very coarse to cryptogranular, lithic calcareous sandstone/siltstone. 10% light brown grey/light grey shale. 5% ironstone. Plant remains and pyritic.
2200 - 2230'	Interbedded every 5'	<p>2200-05:Shale, light brown grey/dark brown grey. 10% extremely fine to cryptogranular siltstone. Also dark brown grey, carbonaceous shales. Papery laminated.</p> <p>05-10:Shale, light brown grey/dark brown grey. Trace of lithic siltstone. Trace of ironstone.</p> <p>10-15:Shale, light brown grey/dark brown grey. 10% extremely fine to cryptogranular siltstone. Also dark brown grey, carbonaceous, shales. Papery laminated.</p> <p>15-20:Shale, light brown grey/dark brown grey. Trace of lithic siltstone. Trace of ironstone.</p> <p>20-25:Shale, light brown grey/dark brown grey. 10% extremely fine to cryptogranular siltstone. Also dark brown grey carbonaceous, shales. Papery laminated.</p> <p>25-30:Shale, light brown grey/dark brown grey. Trace of lithic siltstone. Trace of ironstone.</p>
2230 - 2240'	Interbedded	<p>30-35:Medium to cryptogranular, sandy siltstone. Lithic. 30% light brown grey/dark brown grey, shale. Pyritic.</p> <p>35-40:Shale, light brown grey/dark brown grey. Trace of lithic siltstone.</p>
2240 - 2250'	Interbedded	<p>40-45:Shale, light brown grey/dark brown grey. 10% medium to cryptogranular, lithic siltstone. Pyritic.</p> <p>45-50:Shale, light brown grey/dark brown grey. Trace of lithic siltstone.</p>
2250 - 2260'	Interbedded	<p>50-55:Medium to cryptogranular, sandy siltstone. Lithic. 30% light brown grey/dark brown grey, shale. Pyritic.</p> <p>55-60:Shale, light brown grey/dark brown grey. Trace of lithic siltstone.</p>
2260 - 2270'	Interbedded	<p>60-65:Shale, light brown grey/medium brown grey. 20% extremely fine to cryptogranular, lithic siltstone.</p>

2260 - 2270'	Interbedded	60-70:Shale, light brown/medium brown grey. Trace of lithic siltstone. Papery laminated. Plant remains, micaceous and pyritic.
2270 - 2280'	Interbedded	70-75:Medium to cryptocranular, sandy siltstone. Lithic. 30% light brown grey/dark brown grey, shale. Pyritic. 75-80:Shale, light brown grey/dark brown grey. Trace of lithic siltstone.
2280 - 2290'	Interbedded	80-85:Shale, light brown grey/medium brown grey. 20% extremely fine to cryptocranular, lithic siltstone. 85-90:Shale, light brown/medium brown grey. Trace of lithic siltstone. Papery laminated. Plant remains, micaceous and pyritic.
2290 - 2300'	Interbedded	90-95:Medium to cryptocranular, sandy siltstone. Lithic. 30% light brown grey/dark brown grey shale. Pyritic. 95-2300:Shale, light brown grey/dark brown grey. Trace of lithic siltstone.
2300 - 2310'	Interbedded	2300-05:Medium to cryptocranular, lithic siltstone. Sandy. 10% light brown grey/dark brown grey, shale. 05-10:Medium to cryptocranular, lithic siltstone. Sandy. 30% light brown grey/dark brown grey, shale. Trace of ironstone.
2310 - 2320'	Interbedded	10-15:Quartzitic sandstone/siltstone. 30% light brown grey, shale. Trace of ironstone.. Micaceous, plant remains and pyritic. 15-20:Quartzitic sandstone/siltstone. Coarse to cryptocranular. 10% light brown grey shale.
2320 - 2335'	Interbedded	20-25:quartzitic sandstone/siltstone. Lithic. Coarse to cryptocranular. 30% light brown grey shale. Trace of ironstone. Micaceous, plant remains and pyritic.

2320 - 2335'	Siltstone	35-55:50% lithic siltstone, extremely fine to cryptogranular. 50% light brown gray/medium brown shale. Trace of ironstone. Micaceous, plant remains and pyrite.
2335 - 2350'		35-50:Shale, medium brown. Trace of lithic siltstone.
2350 - 2360'		50-55:50% lithic, extremely fine to cryptogranular siltstone. 50%, medium brown shale. Trace of ironstone. Micaceous, plant remains and pyritic.
2360 - 2375'		55-60:Shale, medium brown. Trace of lithic siltstone. 60-65:Quartzitic sandstone/siltstone. Coarse to cryptogranular. Lithic. 30% shale, medium brown. Plant remains, pyrite and micaceous. 65-75:Shale, medium brown. 45% coarse to cryptogranular. Lithic. Silty and sandy. 5% ironstone. Plant remains, pyritic and micaceous.
2375 - 2380'	Shale	Medium brown. Trace of lithic siltstone. Trace of mica, plants and pyrite.
2380 - 2390'		80-85:Shale, medium brown. 45% extremely fine to cryptogranular, lithic siltstone. 5% ironstone. Micaceous, plant remains and pyrite. 85-90:Shale, medium brown. Trace of lithic siltstone. 5% ironstone. Micaceous, plants and pyritic.
2390 - 2400'		90-95:medium to cryptogranular lithic sandstone. Silty. Trace of medium brown shale. 5% ironstone. Mica, plant remains and pyrite.
2400 - 2420'	Shale	Medium brown. Trace of lithic siltstone. Trace of ironstone. Micaceous, plant remains and pyrite.

2420 - 2440'	Siltstone and shale	30-35: 50% lithic siltstone. 50% light brown grey-dark brown grey shale. Trace of ironstone. Micaceous, plant remains, pyrite. 25-40: Shale, light brown-dark brown grey. Trace of ironstone. Micaceous, plant remains, pyrite.
2440- 2460'	Siltstone- Sandstone	40-45: Siltstone to medium grained sandstone, lithic, 20% light brown grey shale, 5% ironstone, micaceous, plant remains, pyrite. 45-50: 50% lithic siltstone and 50% light brown grey shale, micaceous plant remains, pyrite. 50-55: same as 40-45. 55-60: same as 45-50.
2460 - 2470'	Siltstone & Shale	60-65: 50% lithic siltstone, 50% shale, light brown grey-medium brown grey, micaceous, plant remains, pyrite. 65-70: Light-medium brown grey shale, trace of lithic siltstone, 5% ironstone.
2470 - 2500'	Shale	Light brown grey, trace of lithic siltstone, micaceous, plant remains, pyrite.
2500 - 2520'	Siltstone- Shale	00-05: 50% lithic siltstone, 50% light brown grey shale. Micaceous, plant remains, pyrite. 05-20" Shale, light brown grey, trace of lithic siltstone.
2520 - 2530'	Sandstone- Siltstone & Shale	20-25: Quartzitic siltstone to medium grained sandstone, 30% brown grey shale. 5% Ironstone, plant remains. 25-30: Shale, light brown grey, 20% lithic siltstone.
2530 - 2580'	Siltstone- Sandstone	Light brown to greyish white siltstone to very coarse grained sandstone. Trace of shale, 5% ironstone, plant remains interbedded every 5' with Siltstone to very fine grained sandstone, lithic, 30% argillaceous content, plant remains.

2580 - 2590'	Siltstone-Sandstone	Siltstone to very coarse grained sandstone, lithic, trace of argillaceous content, (brown) white.. Plant remains.
2590 - 2600'	Siltstone-Sandstone	90-95: Siltstone to coarse grained sandstone, lithic, trace of argillaceous content, (brown) white: plant remains. 95-2600: Siltstone to very fine grained sandstone, lithic, 30% argillaceous content, light brown grey, 10% Ironstone, plant remains.
2600 - 2620'	Siltstone-Sandstone	Siltstone to medium grained sandstone, lithic, 50%. 50% light brown grey shale, Trace of ironstone, plant remains.
2620 - 2730'	Shale	Light brown grey shale with 10% lithic siltstone interbedded with shale, light brown grey, trace of siltstone, micaceous, plant remains, pyrite. 2660-80: Trace of ironstone.
2730 - 2740'	Siltstone-Sandstone & Shale	Siltstone to medium grained sandstone, lithic, 50% shale, light brown grey, trace of ironstone, micaceous, plant remains, pyrite, interbedded with shale, light brown grey, 10% siltstone content.
2740 - 2760'	Shale	Shale, light brown grey, 10% lithic siltstone content interbedded with Shale, light brown grey with a trace of lithic siltstone.
2760'- 2770'	Shale	Light brown grey, trace of lithic siltstone, micaceous, plant remains, pyritic.
2770 - 2780'	Siltstone-Sandstone	70-75: Siltstone to very coarse grained, quartzitic sandstone, 10% argillaceous content, light brown grey, trace of ironstone, plant remains. 75-80: 50% siltstone to medium grained sandstone, quartzitic, 50% shale, light brown grey.

2780 - 2790'	Siltstone - Sandstone	80-85: Quartzitic siltstone to very coarse grained sandstone, trace of argillaceous content, light grey-light brown grey, plant remains. 85-90: Quartzitic siltstone to very coarse grained sandstone, 30% argillaceous content, light grey-light brown grey, trace of ironstone.
2790 - 2800'	Siltstone	Lithic, medium grey, 30% argillaceous content.
2800 - 2810'	Sandstone	Light grey, fine to coarse grained, mostly light colored chert, angular-subrounded, quartzitic.
2810 - 2830'	Shale	Medium to dark grey, micaceous.
2830 - 2900'	Sandstone	Light grey, very fine to pebbly, white, light grey and green chert, poor to fair sorting.
2900 - 2915'	Shale	Medium to dark grey, 30% lithic siltstone content.
2915 - 2920'	Sandstone	Light grey, fine to very fine grained, lithic.
2920 - 2925'	Shale	Medium to dark grey-light grey, 30% lithic siltstone content.
2925 - 2930'	Sandstone	Light grey, fine to very fine grained, lithic.
2930 - 2935'	Shale	Medium dark grey-light grey, 10% lithic siltstone content.
2935 - 2940'	Sandstone	Light grey, very fine to medium grained, lithic.
2940 - 2945'	Shale - Siltstone	50% medium dark grey-light grey shale. 50% lithic siltstone, ovoid spheres.
2945 - 2970'	Siltstone- Sandstone	Light grey siltstone to very fine grained sandstone, lithic.
2970 - 2990'	Shale	Medium brown grey.
2990 - 3000'	Siltstone- Sandstone	Very light grey siltstone to medium grained sandstone, lithic.

3000 - 3010'	Siltstone-Sandstone	Very light grey, lithic, siltstone to fine grained sandstone.
3010 - 3020'	Sandstone	Very light grey, lithic, very fine grained to coarse sandstone.
3020 - 3030'	Sandstone	Very light grey, lithic, very fine to coarse grained, some very coarse grains.
3030 - 3040'	Siltstone-Shale	50% lithic siltstone, 50% shale, medium brown grey.
3040 - 3050'	Sandstone	Very light grey, lithic, very fine to fine grained, some coarse grains.
3050 - 3060'	Sandstone	Very light grey, lithic, very fine to medium grained.
3060 - 3070'	Sandstone	Light grey, lithic, fine to very fine grained, band of shale.
3070 - 3080'	Sandstone	Light grey, lithic, fine to very fine grained, band of shale.
3080 - 3090'	Sandstone	Light grey, very fine to fine grained, some very coarse to pebbly, lithic.
3090 - 3100'	Sandstone	Light grey, very fine to coarse grained, lithic.
3100 - 3110'	Siltstone-Sandstone	Light grey, siltstone to fine grained sandstone, lithic.
3110 - 3155'	Shale	Medium brown grey.
3155 - 3160'	Sandstone-Siltstone	Light grey, siltstone to very fine grained sandstone, lithic.
3160 - 3175'	Sandstone-Siltstone	Light grey, siltstone to very fine grained sandstone, lithic, quartzitic.
3175 - 3180'	Shale	Light grey - medium grey.
3180 - 3185'	Siltstone-Shale	50% lithic siltstone and 50% shale, medium grey-light grey.

3185 - 3190'	Sandstone	Light grey, very fine to coarse grained, lithic.
3190 - 3200'	Sandstone	Light grey, very fine to fine grained sandstone, lithic, band of coarse grained limestone.
3200 - 3210'	Shale	Light grey, 10% lithic siltstone content.
3210 - 3230'	Sandstone	Light grey, very fine to medium grained, lithic.
3230 - 3240'	Sandstone	Light grey, very fine to medium grained, lithic. Band of shale.
3240 - 3250'	Sandstone	Light grey, very fine to fine grained, lithic.
3250 - 3260'	Sandstone	Light grey, very fine to coarse grained, lithic.
3260 - 3270'	Siltstone-Sandstone	Light-medium grey, siltstone to very fine grain sandstone, lithic, 10% argillaceous content.
3270 - 3280'	Sandstone	White, very fine to fine grained and very coarse to pebbly, lithic.
3280 - 3315'	Sandstone	White, coarse to pebbly, lithic. Chips of chert, few grain boundaries visible, are tightly cemented, mostly white chert, few bright green grains.
3315 - 3320'	Sandstone	White, lithic, very fine to coarse grained.
3320 - 3330'	Sandstone	Light grey, lithic, very fine to fine grained. Band of coarse to very coarse grained sandstone.
3330 - 3340'	Shale	Medium brown grey, trace of lithic siltstone.
3340 - 3350'	Sandstone	Light grey, lithic, very fine to medium grained.
3350 - 3355'	Shale	Medium grey to light grey.
3355 - 3360'	Sandstone	Light grey, medium to very fine grained, lithic.
3360 - 3365'	Shale	Medium grey to light grey.

3365 - 3370'	Siltstone	Light grey, lithic, very fine to medium grained.
3370 - 3380'	Sandstone- Siltstone	Light grey, siltstone to very fine grained sandstone, lithic.
3380 - 3410'	Siltstone- Sandstone	Light grey, lithic, siltstone to fine grained sandstone.
3410 - 3415'	Siltstone- Sandstone	Light grey, lithic, siltstone to very fine grained sandstone, trace of argillaceous content.
3415 - 3420'	Shale	Medium grey.
3420 - 3430'	Siltstone- Sandstone	Light medium grey, siltstone to very fine grained sandstone, lithic, trace of argillaceous content.
3430 - 3440'	Siltstone- Sandstone	Light medium grey, siltstone to fine grained sandstone, lithic, trace of argillaceous content.
3440 - 3515'	Shale	Medium brown-grey.
3515 - 3520'	Shale	Medium brown grey, 30% lithic siltstone content.
3520 - 3545'	Shale	Medium brown grey.
3545 - 3550'	Shale	Medium brown grey, 30% lithic siltstone content.
3550 - 3560'	Shale	Medium brown grey.
3560 - 3570'	Shale	Medium brown grey, 20% lithic siltstone content.
3570 - 3610'	Shale	Medium brown grey.
3610 - 3640'	Shale	Medium brown grey, band of very fine to fine, lithic sandstone.
3640 - 3660'	Shale	Medium brown grey.
3660 - 3670'	Shale	Medium brown grey, band of lithic siltstone.
3670 - 3680'	Siltstone	Medium brown grey, lithic siltstone, 20% argillaceous content.

3680 - 3690'	Shale	Medium brown grey, 20% lithic silty content.
3690 - 3700'	Shale	Medium brown grey.
3700 - 3710'	Siltstone	Medium brown grey, lithic siltstone with 10% argillaceous content.
3710 - 3720'	Shale	Medium brown grey.
3720 - 3730'	Siltstone	Medium brown grey, lithic siltstone with 10% argillaceous content.
3730 - 3740'	Shale	Medium brown grey, 10% lithic siltstone content.
3740 - 3745'	Shale	Medium grey.
3745 - 3750'	Siltstone-Sandstone	Medium grey, siltstone to medium grained sandstone, lithic, 10% argillaceous content; dolomite crystals filling fractures.
3750 - 3755'	Shale	Medium grey.
3755 - 3760'	Siltstone-Sandstone	Medium grey, lithic siltstone to fine grained sandstone, some medium grains, 10% argillaceous content.
3760 - 3770'	Shale	Medium grey.
3770 - 3780'	Shale	Medium grey, few pyrite spheres.
3780 - 3785'	Shale	Medium to light grey.
3785 - 3790'	Siltstone-Sandstone	Medium to light grey, lithic, siltstone to medium grained sandstone.
3790 - 3795'	Shale	Medium to light grey.
3795 - 3800'	Siltstone-Sandstone	Medium to light grey, lithic siltstone to very fine grained sandstone.
3800 - 3810'	Shale	Medium grey.
3810 - 3820'	Siltstone-Sandstone	Medium to light grey, siltstone to fine grained sandstone, lithic.

3820 - 3830'	Shale	Medium grey with 10% silty content, lithic.
3830 - 3835'	Siltstone-Sandstone	Medium grey, siltstone to fine grained sandstone, lithic.
3835 - 3840'	Shale	Medium grey.
3840 - 3850'	Shale	Medium to dark grey.
3850 - 3860'	Shale	Medium to dark grey, band of lithic siltstone to very fine grained sandstone.
3860 - 3870'	Shale	Medium to dark grey.
3870 - 3880'	Shale	Medium to dark grey with 30% lithic siltstone content. Band of lithic siltstone to coarse grained sandstone.
3880 - 3890'	Shale	Medium to dark grey.
3890 - 3900'	Shale	Medium to dark grey, band of lithic siltstone to fine grained sandstone. Band contains 10% argillaceous content.
3900 - 3910'	Shale	Medium to dark grey.
3910 - 3920'	Shale	Medium to dark grey. Band of lithic siltstone with 10% argillaceous content.
3920 - 3930'	Shale	Medium to dark grey. Band of lithic siltstone to very fine grained sandstone.
3930 - 3940'	Siltstone-Sandstone	Light to medium grey, siltstone to fine grained sandstone, lithic, trace of argillaceous content, plant remains.
3940 - 3950'	Siltstone-Sandstone	Medium grey siltstone to medium grained sandstone, lithic, 10% argillaceous content, fractures infilled with dolomite.
3950 - 3970'	Shale	Medium grey.
3970 - 3980'	Siltstone-Sandstone	Medium grey, lithic, siltstone to fine grained sandstone, 30% argillaceous content.

3980 - 4000'	Shale	Dark grey, 10% lithic siltstone content.
4000' - 4005'	Shale	Dark grey.
4005 - 4010'	Siltstone-Sandstone	Dark grey, lithic siltstone to fine grained sandstone, 30% argillaceous content.
4010 - 4020'	Shale	Dark grey.
4020 - 4025'	Shale	Medium grey.
4025 - 4030'	Siltstone-Sandstone	Medium grey, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
4030 - 4040'	Shale and Siltstone-Sandstone	37-39: Medium grey shale, 39-40: Medium grey, siltstone to fine grained sandstone, lithic, 10% argillaceous content. Band of ironstone. Micaceous.
4040 - 4050'	Shale	Medium to dark grey. Band of lithic siltstone to very fine grained sandstone.
4050 - 4080'	Shale	Medium to dark grey.
4080 - 4090'		No Sample.
4090 - 4095'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to very fine grained sandstone, trace of argillaceous content; some coarse grained sandstone.
4095 - 4100'	Shale	Medium to dark grey.
4100 - 4110'	Shale	Medium to dark grey. Band of lithic siltstone, 10% argillaceous content.
4110 - 4120'	Shale	10-15: Shale, medium to dark grey, 30% lithic siltstone content. 15-20: Shale, medium to dark grey. Micaceous.
4120 - 4125'	Shale	Medium to dark grey.
4125 - 4130'	Siltstone-Shale	50% shale and 50% lithic siltstone, medium to dark grey.

4130 - 4150'	Shale	Medium to dark grey, band of lithic siltstone to very fine grained sandstone.
4150 - 4160'	Shale	Medium to dark grey.
4160 - 4170'	Shale	Medium to dark grey, 50% lithic siltstone. Micaceous.
4170 - 4180'	Shale	Medium to dark grey, band of lithic siltstone with 10% arenaceous content.
4180 - 4200'	Shale	Medium to dark grey.
4200 - 4210'	Shale	Medium to dark grey, trace of lithic siltstone.
4210 - 4235'	Shale	Dark grey.
4235 - 4240'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, trace of arenaceous content. Pyrite spheres.
4240 - 4245'	Shale	Dark grey, trace of dolomite.
4245 - 4250'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to very fine grained sandstone. Slickensides.
4250 - 4260'	Shale	Dark grey.
4260 - 4270'	Shale	Dark grey, slightly micaceous.
4270 - 4275'	Siltstone-Sandstone	Light grey, lithic, siltstone to very fine grained sandstone, trace of dolomite.
4275 - 4280'	Shale	Medium to dark grey, slightly micaceous throughout.
4280 - 4300'	Shale	Dark grey.
4300 - 4310'	Shale and Siltstone-Sandstone	4300-05: Shale, medium to dark grey. 05-10: Siltstone to very fine grained sandstone, 10% arenaceous content. Plant remains, micaceous.
4310 - 4320'	Shale	Medium to dark grey.
4320 - 4330'	Shale	Medium to dark grey, band of lithic siltstone.

4330 - 4340'	Shale	Medium to dark grey.
4340 - 4350'	Shale	Medium to dark grey, band of lithic siltstone to very fine grained sandstone, plant remains, micaceous.
4350 - 4360'	Shale	Medium to dark grey, 50% lithic siltstone content. Plant remains, micaceous.
4360 - 4370'	Shale	Medium to dark grey, 50% lithic siltstone content. Plant remains, micaceous.
4370'-4375'	Shale	Medium to dark grey, 10% lithic siltstone content.
4375 - 4380'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to very fine grained sandstone, 50% argillaceous content.
4380 - 4390'	Shale	Medium to dark grey, band of lithic siltstone.
4390 - 4400'	Shale	Medium to dark grey, trace of lithic siltstone.
4400 - 4410'	Shale	Medium to dark grey, band of lithic siltstone to very fine grained sandstone with 10% argillaceous content.
4410 - 4420'	Siltstone	Medium to dark grey, 50% argillaceous content, trace of dolomite.
4420 - 4430'	Shale	Medium to dark grey.
4430 - 4440'	Siltstone-Sandstone	Medium grey, lithic siltstone to medium grained sandstone, trace of argillaceous content.
4440 - 4455'	Siltstone-Sandstone	Medium grey, lithic siltstone to medium grained sandstone, 20% argillaceous content.
4455 - 4470'	Shale	Dark grey.
4470 - 4480'	Shale	Dark grey, band of lithic very fine to medium sand grains - floating.

4480 - 4490'		Pyritic.
4490 - 4500'	Shale	Dark grey.
4500 - 4510'	Shale	Dark grey, 40% lithic siltstone content, micaceous.
4510 - 4520'	Shale	Dark grey, pyritic.
4520 - 4530'	Shale	Dark grey.
4530 - 4540'		No Sample.
4540 - 4560'	Shale	Dark grey.
4560 - 4570'	Siltstone-Sandstone	Medium grey, lithic siltstone to medium grained sandstone, 10% argillaceous content. Band of shale. Few quartz crystals in fractures.
4570 - 4580'	Siltstone-Sandstone	Medium grey, lithic siltstone to medium grained sandstone, 20% argillaceous content. Band of shale. Sparry dolomite crystals.
4580 - 4590'	Siltstone-Sandstone	Medium grey, lithic siltstone to medium grained sandstone, 10% argillaceous content.
4590 - 4600'	Siltstone-Sandstone	Medium grey, lithic siltstone to medium grained sandstone, 10% argillaceous content. Band of shale. Trace of ironstone.
4600 - 4610'	Siltstone-Sandstone	Medium grey, lithic siltstone to fine grained sandstone, 40% argillaceous content.
4610 - 4620'	Siltstone-Sandstone and Shale	10-15: Siltstone to very fine grained sandstone, lithic, 40% argillaceous content, medium grey. 15-20: Medium grey shale. Micaceous.
4620 - 4630'	Siltstone-Sandstone and Shale	20-25: Medium grey, lithic siltstone to fine grained sandstone, 10% argillaceous content. 25-30: Medium grey shale. Plant remains and pyrite.
4630 - 4640'	Siltstone-Sandstone and Shale	30-35: Medium grey, lithic siltstone to medium grained sandstone, 10% argillaceous content, trace of dolomite. 35-40: Medium grey shale.

4590 - 4640'		... argillaceous, ... hash or bluish ... bedding planes. ... chert, angular to subrounded.
4640 - 4660'	Shale	Dark grey, ...
4660 - 4670'	Siltstone-Sandstone	Light grey, lithic siltstone to fine grained sandstone, 10% argillaceous content.
4670 - 4680'	Siltstone-Sandstone	Medium grey, lithic siltstone to fine grained sandstone, 10% argillaceous content.
4680 - 4690'	Shale	Dark grey.
4690 - 4695'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content.
4695 - 4700'	Shale	Medium to dark grey.
4700 - 4710'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to very fine grained sandstone, 10% argillaceous content.
4710 - 4715'	Shale	Medium to dark grey.
4715 - 4720'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to very fine grained sandstone, 10% argillaceous content.
4720 - 4725'	Shale	Medium to dark grey.
4725 - 4730'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, 10% argillaceous content.
4730 - 4740'	Shale	Dark grey.
4740 - 4745'	Siltstone-Sandstone	Medium grey, lithic siltstone to very fine grained sandstone, trace of argillaceous content.
4745 - 4750'	Shale	Medium grey.
4750 - 4755'	Siltstone-Sandstone	Medium grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content.

4755 - 4765'		
4760 - 4765'	Siltstone-Sandstone	Medium grey, lithic siltstone to fine grained sandstone, trace of argillaceous content.
4765 - 4770'	Shale	Medium grey.
4770 - 4775'	Siltstone	Medium grey, lithic siltstone, 10% argillaceous content.
4775 - 4780'	Shale	Medium grey.
4780 - 4785'	Siltstone-Sandstone	Medium grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content.
4785 - 4790'	Shale	Medium grey.
4790 - 4795'	Siltstone-Sandstone	Medium grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content.
4795 - 4800'	Shale	Medium grey.
4800 - 4810'	Shale	Dark grey.
4810 - 4820'	Shale	Dark grey with a band of lithic siltstone to very fine grained sandstone.
4820 - 4830'	Siltstone-Sandstone	Medium grey, lithic siltstone to very fine grained sandstone, 10% argillaceous content, micaceous.
4830 - 4840'	Siltstone-Sandstone	Medium grey, lithic siltstone to fine grained sandstone, 20% argillaceous content.
4840 - 4845'	Shale	Medium grey.
4845 - 4850'	Siltstone	Medium grey, lithic siltstone with 10% argillaceous content.
4850 - 4855'	Shale	Medium to dark grey.
4865 - 4870'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, 10% argillaceous content.
4870 - 4875'	Shale	Medium to dark grey.

4875 - 4880'	Shale	Medium to dark grey, lithic, siltstone, fine grained sandstone, 10% arillaceous content.
4880 - 4885'	Shale	Medium to dark grey.
4885 - 4890'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 10% arillaceous content.
4890 - 4895'	Shale	Medium to dark grey.
4895 - 4900'	Siltstone	Medium to dark grey, lithic siltstone with 20% arillaceous content.
4900 - 4910'	Shale	Dark grey with a band of lithic, siltstone to very fine grained sandstone which contains 10% arillaceous content.
4910 - 5010'	Shale	Dark grey.
5010 - 5020'	Shale	Dark grey with a band of lithic, siltstone to very fine grained sandstone.
5020 - 5025'	Shale	Medium to dark grey, micaceous, plant remains.
5025 - 5030'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to very fine grained sandstone, 10% arillaceous content, plant remains, micaceous.
5030 - 5040'	Shale	Medium to dark grey.
5040 - 5045'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone.
5045 - 5050'	Shale	Medium to dark grey.
5050 - 5055'	Siltstone-Shale	Medium to dark grey, 50% shale and 50% lithic siltstone.
5055 - 5060'	Shale	Medium to dark grey.
5060 - 5065'	Shale	Medium to dark grey.
5065 - 5070'	Siltstone	Medium to dark grey, 20% arillaceous content.

5070 - 5080'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content. Band of shale.
5090 - 5100'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content. Band of shale.
5100 - 5110'	Siltstone-Sandstone	Medium gray, lithic, siltstone to very fine grained sandstone, some fine shells, 10% argillaceous content, micaceous.
5110 - 5115'	Siltstone-Sandstone	Medium gray, lithic, siltstone to medium grained sandstone, trace of argillaceous content.
5115 - 5150'	Shale	Dark gray.
5150 - 5160'	Siltstone-Sandstone	Medium gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
5160 - 5165'	Shale	Medium to dark gray, plant remains.
5165 - 5170'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
5170 - 5175'	Shale	Medium to dark gray.
5175 - 5180'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to medium grained sandstone, 10% argillaceous content.
5180 - 5185'	Shale	Medium to dark gray.
5185 - 5190'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
5190 - 5195'	Shale	Dark gray.
5200 - 5210'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 20% argillaceous content.
5210 - 5215'	Shale	Medium to dark gray.
5215 - 5220'	Siltstone-Sandstone	Medium to dark gray, lithic, siltstone to very fine grained sandstone, 10% argillaceous content.

5220 - 5230'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content, band of shale.
5230 - 5240'	Shale	Dark gray.
5240 - 5250'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 20% argillaceous content.
5250 - 5260'	Shale	Dark gray.
5260 - 5275'	Shale	Medium to dark gray.
5275 - 5280'	Siltstone- Shale	Medium to dark gray, lithic siltstone and 50% shale.
5280 - 5290'	Shale	Dark gray, vertical.
5290 - 5295'	Shale	Medium to dark gray.
5295 - 5300'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
5300 - 5305'	Shale	Medium to dark gray.
5305 - 5310'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 50% argillaceous content.
5310 - 5315'	Shale	Medium to dark gray.
5315 - 5320'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
5320 - 5325'	Shale	Medium to dark gray.
5325 - 5330'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to very fine grained sandstone, 20% argillaceous content.
5330 - 5335'	Shale	Medium to dark gray.
5335 - 5340'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 20% argillaceous content.
5340 - 5345'	Shale	Medium to dark gray.
5345 - 5350'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 20% argillaceous content.
5350 - 5355'	Shale	Medium to dark gray.
5355 - 5360'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 50% argillaceous content.
5360 - 5365'	Shale	Medium to dark gray.
5365 - 5370'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 10% argillaceous content.
5370 - 5375'	Shale	Medium to dark gray.
5375 - 5380'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to very fine grained sandstone, 20% argillaceous content.
5380 - 5385'	Shale	Medium to dark gray.
5385 - 5390'	Siltstone- Sandstone	Medium to dark gray, lithic, siltstone to fine grained sandstone, 20% argillaceous content.
5390 - 5395'	Shale	Medium to dark gray.

5395 - 5400'	Shale	Medium to dark grey, silty, siltstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5400 - 5405'	Shale	Dark grey, silty.
5405 - 5420'	Siltstone-shale	Medium to dark grey, silty, siltstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5420 - 5425'	Shale	Dark grey.
5425 - 5430'	Siltstone-sandstone	Dark grey, silty, siltstone to sandstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5430 - 5440'	Shale	Dark grey.
5440 - 5450'	Shale	Dark grey, band of ironstone.
5450 - 5460'	Shale	Dark grey, silty.
5460 - 5465'	Shale	Medium to dark grey, silty.
5465 - 5470'	Siltstone	Medium to dark grey, silty, siltstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5470 - 5480'	Shale	Dark grey.
5480 - 5490'	Siltstone-sandstone	Medium to dark grey, silty, siltstone to very fine grained sandstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5490 - 5500'	Shale	Dark grey.
5500 - 5505'	Shale	Medium to dark grey.
5505 - 5510'	Siltstone-sandstone	Medium to dark grey, silty, siltstone to fine grained sandstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5510 - 5520'	Shale	Dark grey, silty, siltstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5520 - 5530'	Shale	Dark grey, silty, siltstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5530 - 5535'	Siltstone-sandstone	Medium to dark grey, silty, siltstone to very fine grained sandstone, 10% mica, 10% quartz, 10% feldspar, 10% calcite, 10% pyrite.
5535 - 5540'	Shale	Dark grey.

5530 - 5535'		
5535 - 5540'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 20% or less silty sandstone content.
5540 - 5550'	Shale	Dark gray.
5550 - 5555'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 20% or less silty sandstone content.
5555 - 5560'	Shale	Medium to dark gray.
5560 - 5565'	Shale	Medium to dark gray.
5565 - 5570'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, trace of argillaceous content.
5570 - 5575'	Shale	Medium to dark gray.
5575 - 5580'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 20% argillaceous content.
5580 - 5585'	Shale	Medium to dark gray.
5585 - 5590'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 30% argillaceous content.
5590 - 5595'	Shale	Medium to dark gray.
5595 - 5600'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 10% argillaceous content.
5600 - 5605'	Shale	Dark gray.
5610 - 5615'	Shale	Medium to dark gray.
5615 - 5620'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 10% argillaceous content.
5620 - 5625'		Bank of ironstone.
5625 - 5630'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 10% argillaceous content, some or little, silty sandstone with some plant remains.

5630 - 5635'		
5635 - 5640'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to fine grained sandstone, 10% argillaceous content.
5640 - 5645'	Shale	Dark grey.
5645 - 5650'	Siltstone	Medium to dark grey, lentic, 50% argillaceous content, oolitic.
5650 - 5655'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to fine grained sandstone, 10% argillaceous content, oolitic.
5655 - 5660'	Shale	Dark grey.
5660 - 5665'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 30% argillaceous content.
5665 - 5670'	Shale	Medium to dark grey.
5670 - 5675'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to fine grained sandstone, 10% argillaceous content.
5675 - 5680'	Shale	Medium to dark grey.
5680 - 5685'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 40% argillaceous content.
5685 - 5690'	Shale	Dark grey.
5690 - 5695'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to fine grained sandstone, 20% argillaceous content.
5695 - 5700'	Shale	Medium to dark grey.
5700 - 5705'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 40% argillaceous content.
5705 - 5710'	Shale	Dark grey.
5710 - 5715'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to fine grained sandstone, 20% argillaceous content.
5715 - 5720'	Shale	Dark grey.
5720 - 5725'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 20% argillaceous content.
5725 - 5730'	Shale	Dark grey.
5730 - 5735'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 20% argillaceous content.
5735 - 5740'	Shale	Medium to dark grey.
5740 - 5745'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 20% argillaceous content.
5745 - 5750'	Shale	Medium to dark grey.
5750 - 5755'	Siltstone-Sandstone	Medium to dark grey, lentic, siltstone to very fine grained sandstone, 20% argillaceous content.

5760 - 5765'		Medium to dark gray, lithic, silty to dark gray, silty, 20% argillaceous content.
5765 - 5770'	Siltstone-Sandstone	Medium to dark gray, lithic, silty to dark gray, silty sandstone, 20% argillaceous content.
5770 - 5775'	Shale	Medium to dark gray.
5775 - 5780'	Siltstone-Sandstone	Medium to dark gray, lithic, silty to dark gray, silty sandstone, 20% argillaceous content.
5780 - 5785'	Shale	Medium to dark gray.
5785 - 5790'	Siltstone	Medium to dark gray, lithic, 30% argillaceous content.
5790 - 5795'	Shale	Medium to dark gray.
5795 - 5800'	Siltstone	Medium to dark gray, lithic, 30% argillaceous content.
5800 - 5810'	Siltstone-Sandstone	Medium gray, lithic siltstone to medium grained sandstone, 20% argillaceous content, trace of ironstone.
5810 - 5815'	Shale	Medium gray.
5815 - 5820'	Siltstone	Medium gray siltstone with 20% argillaceous content.
5820 - 5830'	Shale	Medium gray, trace of oolite.
5830 - 5840'	Siltstone	Medium gray, 20% argillaceous content, lithic, trace of oolite.
5840 - 5850'	Shale	Medium gray, trace of oolite.
5850 - 5860'	Siltstone-Sandstone	Medium gray, lithic, siltstone to very fine grained sandstone, 20% argillaceous content, trace of oolite and mica.
5860 - 5865'	Shale	Medium to dark gray, trace of oolite.
5865 - 5870'	Siltstone	Medium gray to dark gray, lithic siltstone with 20% argillaceous content.
5870 - 5880'	Shale	Medium gray to dark gray, oolitic.

5880 - 5900'	Siltstone	Medium grey to dark grey, lithic siltstone with 10% argillaceous content, trace of ironstone, trace of pyrite.
5900 - 5905'	Siltstone-Sandstone	Medium grey to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content, trace of ironstone and pyrite.
5905 - 5910'	Shale	Medium grey to dark grey, pyritic.
5910 - 5915'	Siltstone-Sandstone	Medium grey to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content, pyritic.
5915 - 5920'	Shale	Medium grey to dark grey.
5920 - 5935'	Siltstone-Sandstone	Medium grey to dark grey, lithic, siltstone to medium grained sandstone, 20% argillaceous content, pyritic.
5935 - 5945'	Shale	Medium grey to dark grey, pyritic.
5945 - 5950'	Siltstone	Medium grey to dark grey, lithic, 10% argillaceous content, trace of ironstone, trace of pyrite.
5950 - 5970'	Shale	Medium grey to dark grey, trace of pyrite.
5970 - 5980'	Siltstone-Sandstone	Medium grey to dark grey, lithic siltstone to fine grained sandstone, 5-20% argillaceous content, trace of ironstone, pyritic.
5980 - 5985'	Shale	Medium grey to dark grey, pyritic.
5985 - 5990'	Siltstone-Sandstone	Medium grey to dark grey, lithic siltstone to medium grained sandstone, 20% argillaceous content, pyritic.
5990 - 5995'	Shale	Medium grey to dark grey, trace of ironstone, pyritic.
5995 - 6000'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 20% argillaceous content, pyritic, trace of shale with abundant pink-brown micas.

6000 - 6005'		Trace of pyrite, trace of quartz.
6005 - 6010'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone, 20% argillaceous content, trace of pyrite.
6010 - 6015'	Shale	Medium to dark gray, silty.
6015 - 6020'	Siltstone	Medium to dark gray, silty, silty sandstone, 20% argillaceous content, trace of pyrite.
6020 - 6030'	Shale	Medium to dark gray, silty, silty sandstone.
6030 - 6040'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to fine grained sandstone, 20% argillaceous content, trace of ironstone, pyrite.
6040 - 6050'	Shale	Medium to dark gray, trace of pyrite.
6050 - 6060'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, trace of pyrite, 20% argillaceous content, trace of plant remains.
6060 - 6065'	Shale	Medium to dark gray, pyrite.
6065 - 6070'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 20% argillaceous content, pyrite.
6070 - 6080'	Shale	Medium to dark gray, trace of pyrite.
6080 - 6090'	Siltstone-Sandstone	Medium to dark gray, silty, silty sandstone to very fine grained sandstone, 20% argillaceous content, pyrite.
6090 - 6100'	Shale	Light to dark gray, silty.
6095 - 6100'	Siltstone-Sandstone	Light to dark gray, silty, silty sandstone to very fine grained sandstone, 20% argillaceous content, pyrite.

6100 - 6110'	Shale	Light to dark grey, pyritic.
6110 - 6120'	Siltstone-Sandstone	Light to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content, pyritic.
6120 - 6140'	Shale	Light to dark grey, pyritic.
6140 - 6145'	Siltstone-Sandstone	Light to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content, pyritic.
6145 - 6150'	Shale	Light to dark grey, trace of dolomite vein.
6150 - 6160'	Siltstone	Light to dark grey, lithic, 20% argillaceous content, trace of ironstone, pyritic.
6160 - 6170'	Shale	Light to dark grey, pyritic and micaceous.
6170 - 6180'	Siltstone	Light to dark grey, lithic, 20% argillaceous content, trace of ironstone, pyritic and micaceous.
6180 - 6185'	Shale	Light to dark grey, pyritic.
6185 - 6190'	Siltstone	Light to dark grey, lithic, 20% argillaceous content, pyritic.
6190 - 6200'	Shale	Light to dark grey, pyritic, trace of coal.
6200 - 6210'	Siltstone-Sandstone	Light to dark grey, lithic siltstone to fine grained sandstone, 20% argillaceous content, pyritic.
6210 - 6225'	Shale	Light to dark grey, pyritic and micaceous.
6225 - 6230'	Siltstone-Sandstone	Light to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content, trace of ironstone, pyritic.
6230 - 6235'	Shale	Light to dark grey, pyritic.
6235 - 6240'	Siltstone-Sandstone	Light to dark grey, lithic siltstone to very fine grained sandstone, 20% argillaceous content, pyritic.

6350 - 6360'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, 20% argillaceous content, trace of ironstone, trace of pyrite.
6360 - 6365'	Shale	Medium to dark grey, massive, 30% lithic siltstone content.
6365 - 6370'	Shale	Medium to dark grey, massive.
6370 - 6390'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 20% argillaceous content, trace of quartz with calcite veins, trace of pyrite.
6390 - 6410'	Shale	Medium to dark grey, 30% lithic siltstone content, trace of pyrite, plant remains interbedded every 5' with Shale, medium to dark grey, trace of siltstone content (lithic).
6410 - 6415'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, trace of argillaceous content, trace of ironstone.
6415 - 6420'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, 20% argillaceous content, trace of ironstone and pyrite.
6420 - 6425'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, trace of argillaceous content, trace of ironstone.
6425 - 6430'	Siltstone-Sandstone	Medium to dark grey, lithic siltstone to fine grained sandstone, 20% argillaceous content, trace of ironstone and pyrite.
6430 - 6440'	Shale	Medium to dark grey, trace of pyrite.
6440 - 6445'	Shale	Medium to dark grey, 30% lithic siltstone content, trace of pyrite.
6445 - 6450'	Shale	Medium to dark grey, trace of pyrite.

6450 - 6455'	Shale	Medium to dark grey, lithic siltstone contains trace of pyrite.
6455 - 6460'	Shale	Medium to dark grey, trace of pyrite.
6460 - 6465'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 20% argillaceous content, trace of pyrite.
6465 - 6470'	Shale	Medium to dark grey, pyritic.
6470 - 6475'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 20% argillaceous content, trace of pyrite.
6475 - 6480'	Shale	Medium to dark grey, pyritic.
6480 - 6490'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 20% argillaceous content, trace of pyrite.
6490 - 6495'	Shale	Medium to dark grey, pyritic.
6495 - 6500'	Siltstone-Sandstone	Medium to dark grey, lithic, siltstone to fine grained sandstone, 20% argillaceous content, pyritic.

TOTAL DEPTH 6500'

SHELL, PEEL RIVER L-19 (NO. 5)

66° 48' 30" N.
135° 18' 24" W.

Sidewall Core

670	Shale	Light to dark grey, 10% lithic silt to fine grained sand content.
696	Shale	Light to dark grey, 10% lithic silt to fine grained sand content.
750	Shale	Light to dark grey, 10% lithic silt to fine grained sand content.
800	Shale	Light to dark grey, 10% lithic silt to fine grained sand content.
860	Siltstone	Medium brown-light grey, lithic, 10% argillaceous content, pyritic.
900	Siltstone	Medium brown-light grey, lithic, 10% argillaceous content, pyritic.
1000	Siltstone	Medium brown-light grey, lithic, 10% argillaceous content, pyritic.

Sidewall Core

1200	Siltstone	Medium brown-light grey, lithic, 10% argillaceous content, pyritic.
1300	Siltstone	White-light grey, lithic, pyritic.
1500	Siltstone	White-light grey, lithic, slightly argillaceous, micaceous and pyritic.
1600	Siltstone	White-light grey, lithic, 10% argillaceous content, micaceous and pyritic.
1705	Shale	Light to medium brown grey, 30% lithic silt content, pyritic and micaceous.
1800	Shale	Light brown grey, pyritic.
1920	Shale	Light brown grey, slightly silty, micaceous.
2020	Shale	Light brown grey, slightly silty, pyritic and micaceous.
2500	Shale	Light brown grey, slightly silty, pyritic and micaceous.
2878	Sandstone	Light grey, lithic, fine grained to pebbles, poor-fair sorting.

Sidewall Core

2879	Sandstone	Light grey, lithic, fine grained to pebbles, poor-fair sorting.
3280	Sandstone	White, lithic, very fine to fine grained, some very coarse grained to pebbles.
3290	Sandstone	White, lithic, coarse grained to pebbles.
3305	Sandstone	White, lithic, coarse grained to pebbles.
4035	Shale	Medium grey.
4500	Shale	Dark grey.
5000	Shale	Dark grey.
5500	Shale	Dark grey.
6100	Shale	Medium to dark grey, pyritic.

SECTION III - ENGINEERING SUMMARY

DRILL TEST RESULTS

No.	Interval	T.O.	Flow Rate & Recovery	I.F.P.	F.F.P.	I.S.I.I./Time	F.O.S.I./Time
1	5264-5323	60 min.	800' fresh water	144	415	1484/15 min.	1403/60 min.

CASING RECORD

18" conductor 25' set at 25' K.B. w/160 sacks portland cement + 50# CaCl₂.
9-5/8", J-55 36# 650' set at 664 K.B. w/500 sacks portland cement + 2% CaCl₂.

I.H.H.P. - 1575; F.H.H.I. - 1574

BIT RECORD

No.	Size	Type	Depth Out	Footage	Time/Hours
1A	13-1/4"	S3	206	206	10-1/2
2A	13-1/4"	S3	233	27	9-3/4
3A	13-1/4"	S3	255	22	6-1/2
4A	13-1/4"	S3	282	27	6
5A	13-1/4"	S3	292	10	3-1/4
6A	13-1/4"	S3	325	33	9-1/4
7A	13-1/4"	S3	369	44	11-1/4
8A	12-1/4"	S6	398	29	7-3/4
9A	12-1/4"	W7	439	41	15-3/4
10A	12-1/4"	W7R	551	112	22-1/4
11A	12-1/4"	W7R	665	114	14
1	6-3/4"	M4N	947	282	9
2	6-3/4"	M4L	1189	242	10
3	6-3/4"	M4N	1527	338	9-1/2
4	6-3/4"	M4N	1732	205	10-1/4
5	6-3/4"	M4N	1756	24	4-1/2
6	6-3/4"	H7UG	1832	76	3-1/4

BIT RECORDS

No.	Size	Type	Depth	Footage	Time/Hours
7	6-3/4	H7	2000	56	8-1/4
8	6-3/4	YHW2	2050	70	7-1/4
9	6-3/4	H7R2	2078	50	7-5/4
10	6-3/4	YHW2	2091	84	7-1/2
11	6-3/4	YHW2	2101	59	6-1/4
12	6-3/4	RRG7XJ	2110	65	12
13	6-3/4	YHW2J	2121	75	8-1/4
14	6-3/4	YHW2J	2360	69	10-3/4
15	6-3/4	YHW2J	2392	32	4
16	6-3/4	H7UGJ	2475	83	9-1/4
17	6-3/4	H7UGJ	2588	113	7-1/4
18	6-3/4	H7U	2603	15	3
19	6-3/4	H7UGJ	2677	74	11-1/2
20	6-3/4	H7UGJ	2709	122	12
21	6-3/4	YHW2J	2824	25	4-1/2
22	6-3/4	H7UJ	2893	69	10-1/2
23	6-3/4	H7UJ	2952	59	8-1/2
24	6-3/4	H7	2999	47	6-1/4
25	6-3/4	H7	3063	64	10
26	6-3/4	H7UJ	3093	30	6
27	6-3/4	H7UGJ	3162	69	9
28	6-3/4	H7UGJ	3178	16	4-1/4
29	6-3/4	H&J	3323	145	20-1/2
30	6-3/4	H7UGJ	3354	21	6-1/4
31	6-3/4	H7UG	3405	51	8-1/4
32	6-3/4	H7UG	3463	58	7-1/2
33	6-3/4	H7	3547	84	11
34	6-3/4	M4N	3595	52	5-1/4
35	6-3/4	W7	3617	22	4-1/2
36	6-3/4	H7UJ	3631	14	5-3/4
37	6-3/4	RRG7XJ	3704	73	11-1/2
38	6-3/4	RG7XJ	3750	86	21-1/4
39	6-3/4	H7	3841	51	12-1/4
40	6-3/4	YHW2J	3867	26	7-1/4
41	6-3/4	H7UJ	3942	75	14
42	6-3/4	H7	4020	78	11
43	6-3/4	M4L	4060	40	10-1/2
44	6-3/4	H7	4101	41	8
45	6-3/4	H7	4113	12	5
46	6-3/4	RG7	4114	1	1-1/2
47	6-3/4	YHW2	4195	81	19-1/4
48	6-3/4	M4N	4270	75	13-1/4
49	6-3/4	YTL	4347	77	14-1/2
50	6-3/4	YTL	4432	85	14
51	6-3/4	M4L	4474	42	13-1/4
52	6-3/4	H7	4534	60	10-3/4
53	6-3/4	S6J	4561	47	8
54	6-3/4	YH	4651	70	16-1/4
55	6-3/4	S6	4691	40	8
56	6-3/4	H7UGJ	4802	111	24
57	6-3/4	OWC	4836	84	15-3/4
58	6-3/4	M4L	4955	97	16-3/4
59	6-3/4	OSC	5083	100	15
60	6-3/4	S6	5148	65	8-3/4

LOG RECORD

No.	Size	Weight	Feet	Feet	Time/Hours
61	6-3/4	YN	200	45	9-3/4
62	6-3/4	W7	200	113	20-1/4
63	6-3/4	S6	200	155	20-3/4
64	6-3/4	S6	200	159	18-1/4
65	6-3/4	S6	200	142	19-1/4
66	6-3/4	S4	200	105	10-1/2
67	6-3/4	S4	200	93	12-1/4
68	6-3/4	YT1A	200	99	15
69	6-3/4	YT1A	200	96	15-3/4
70	6-3/4	S6J	200	103	14-1/2
71	6-3/4	H7UG	200	58	10-1/2
72	6-3/4	OSC	200	93	13-1/4
73	6-3/4	OSC	200	86	12-1/4

LOG RECORD

Type	Quantity
Gel	1100 Sacks
Caustic	4600 Lbs.
Peltex	15,650 Lbs.
Soda Ash	11 Sacks
Techni Plast	700 Lbs.
C. M. C.	300 Lbs.

DEVIATION RECORD

206 - 1/2	2600 - 6-1/2
282 - 3/4	2790 - 6-1/2
369 - 1	2950 - 6-1/4
439 - 3/4	3160 - 6-1/4
551 - 1/2	3350 - 5-1/4
665 - 1/4	3547 - 3-7/8
947 - 1-1/2	3700 - 3-1/4
1189 - 3	4150 - 5-1/4
1527 - 4	4430 - 8-1/2
1732 - 5-1/4	5275 - 17
1830 - 5-1/2	6000 - 10-1/2
2150 - 5-1/2	6150 - 10-1/4

CEMENT PLUGS

1. 6500' - 6400' w/ 45 sacks Portland No feel.
2. 2950' - 2800' w/50 sacks Portland + 2% CaCl₂ Felt at 2775'.
3. 850' - 600' w/ 180 sacks Portland + 2% CaCl₂ Felt at 505'.
Casing cut 5' below ground - 10 sacks in casing, weld on name plate - 5 sacks in Rat Hole and 5 sacks in Mouse Hole.

SECTION III - AIRFIELD INSPECTION

LOST CIRCULATION ZONES

None

BLOWOUTS

None

T.G. EASTLAND — testers Ltd.

S.W. NO. 6 NORTH • EDMONTON, ALBERTA

TEST No. One
Date May 3, 1966
Ticket No. 7751

SERVICE REPORT

Well Name: Shell Peel River #3 Y T L-19

L.S.D. L-19

Formation Tested:

TEST RESULT DATA

TYPE OF TEST: Standard Duals Straddle Casing

Started in Hole: 11 pm Tool Opened: 1:45 am

From: 3264 To: 3323 Tail Pipe: 58.45

Initial Shut-in: 15 Min. Flow Period: 60 Min

Main Hole Depth: 63 1/2" Rat Hole Depth:

Final Shut-in: 60 Min. Out of Hole: 5:30 am

Hole Size Tested: 6 3/4" Main Hole Rat Hole

Choke Bottom: 1/2"

Casing Depth: 655" Size: 9 5/8" Weight: 36

Choke Surface: 1/4"

Type of Drill Pipe: 3 1/2 I.F. Tubing:

Flow Rate: Mcf/day Flare Line Riser:

Type of Packer(s): 2 Conventional

Mcf/day measured by:

Size of Rubber Element(s): 6"

Fluid Cushion: Max. Well Temp: 96 °F

REMARKS: Open on pre flow - got fair to strong blow. When opened on 1/2" choke, got fair blow - died to very weak blow.

DRLG. FLUID: Viscosity: 34 Weight: 8.9 W.L. 8

FIELD (est.) CORRECTED

1584 Initial Hydrostatic Pressure psig 1575

1488 Shut-In Press. #1 After 15 Min. psig 1484

144 Initial Flowing Pressure psig 144

240 Max. Flowing Pressure psig 415

1488 Shut-In Press. #2 After 60 Min. psig 1483

FLUID RECOVERY: 800' Sweet water. (Ran 23 Drili collars above tool, 4 1/2" O.D. 2 1/4" I.D.)

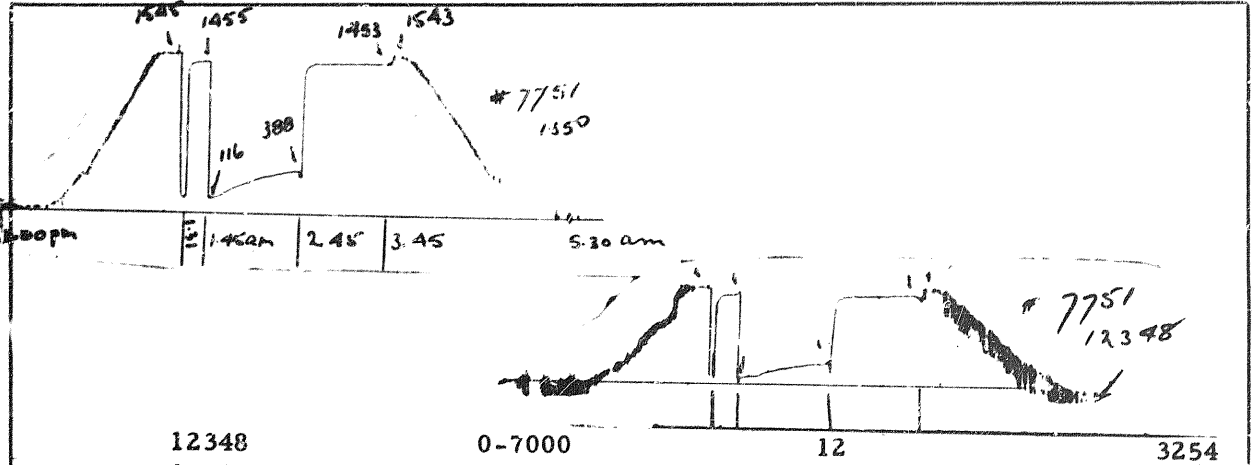
PRESENT DURING TEST

Your Representative R.B. Cumber

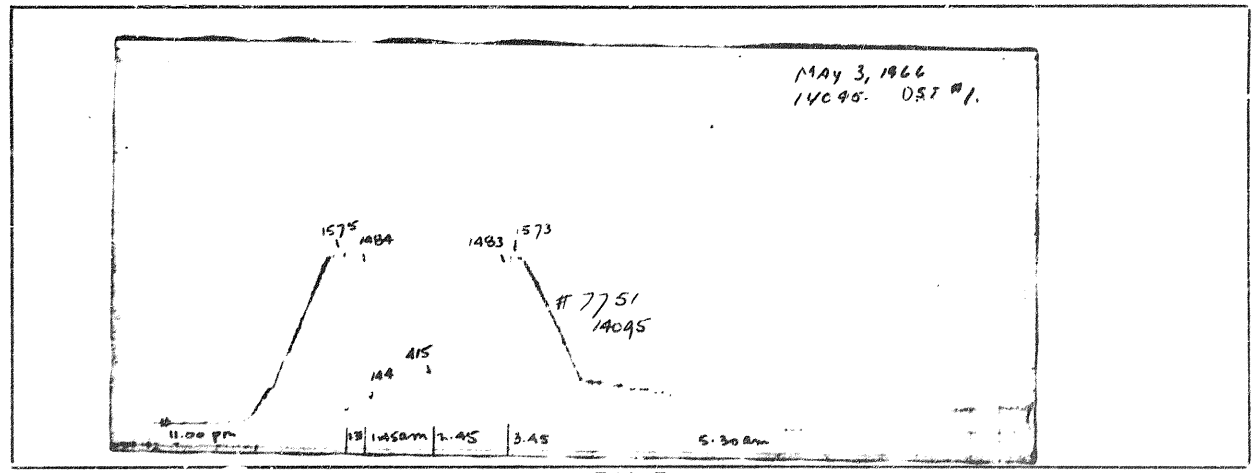
Our Operator M. Matson

Toolpusher

Drig. Contractor Regent Rig No. 21



RECORDER No. 1550 ELEMENT RANGE 0-4300 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH 3238!
RECORDER No. 14095 ELEMENT RANGE 0-3000 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH 3302!



TIME

Form No. T-20

PRESSURE

PRESSURE

T.G. EASTLAND—testers ltd.

R.R. No. 6 NORTH EDMONTON, ALBERTA

TEST No. One
Date May 3, 1966
Ticket No. 7751

DRILL STEM TEST PRESSURE REPORT

WELL NAME Shell Peel River No. 5 Y.T. L-19 LSD L-19
INTERVAL 3264'-3323'K.B. FORMATION B.H. TEMP. °F 96
GAUGE No. 14095 DEPTH OF ELEMENT 3302'KB CALIBRATION EQUATION P_c 1552.06 - 0.83

	Time	T	Pressure
		mins	psig
Initial Hydrostatic	-----		1575
Initial Shut-in	1:31am	0	136
	1:34	3	1421
	1:37	6	1469
	1:40	9	1474
	1:43	12	1480
	1:45	14	1484
Flowing Pressure	-----	F ₁	144
		F ₂	415
Final Shut-in	2:45am	0	415
	2:48	3	1280
	2:51	6	1446
	2:54	9	1460
	2:57	12	1466
	3:00	15	1467
	3:03	18	1472
	3:06	21	1475
	3:09	24	1477
	3:12	27	1477
	3:15	30	1478
	3:18	33	1478
	3:21	36	1480
	3:24	39	1480
	3:27	42	1480
	3:30	45	1481
	3:33	48	1481
	3:36	51	1481
	3:39	54	1483
	3:42	57	1483
	3:45	60	1483
Final Hydrostatic	-----		1573

SECTION IV - LOGS

Formation Density Log	6495 - 664)	
Induction Electric Log	6492 - 665)	
Microlog Caliper	6495 - 664)	
Borehole Compensated Sonic	67)	June 8 - 10, 1966
Gamma Ray	6495 - 664)	
	700)	
Seismic Reference Survey	6450 - 664)	

SECTION 7 - ANALYSIS

CORE ANALYSIS

None

WATER ANALYSIS

Attached

GAS ANALYSIS

None

OIL ANALYSIS

None

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. E66-935-1

Received: May 11, 1966 Reported: May 17, 1966 Well: Location: Shell Peel River Y.T. L-19
 Operator: Shell Canada Limited Field or Area: *Seal*
 Elev.: K.B. 312.2' Grd. 299.6' Zone/Formation: Sample Interval: 3264' - 3323'
 Method of Production: D.S.T. #1 Sampled from: 800' above D.S.T. tool Sampled by: W.P. Jones Date: May 3, 1966

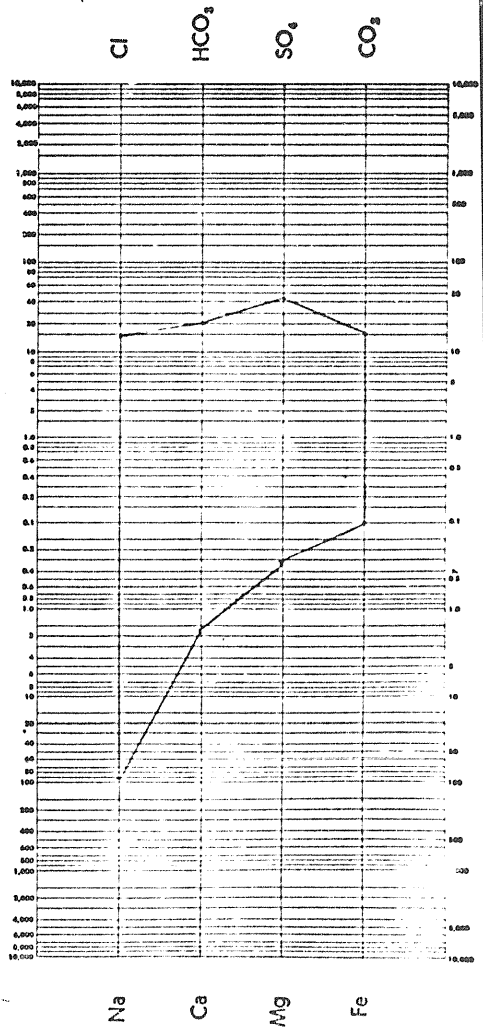
OTHER PERTINENT DATA Recovered 800' water
 W.E. T.D. 3323' P.B.T.D. 3323'
 Pressure and temperature at point of sampling: 442 psig. and 96°F

(Signed)

	Na	K	Ca	Mg	SO ₄	Cl	CO ₂	HCO ₃
Mg./L	2,114		38	4	2,107	500	458	1,280
Meq./L	91.94		1.90	0.33	43.83	14.10	15.25	20.99
Meq. %	48.82		1.01	0.17	23.27	7.49	8.10	11.14

Total Solids Mg/L: By Evaporation 13,100 Fe Much Specific Gravity 1.006 @60°F Observed pH 9.5 @ 75 °F
 Calculated 6,501 After Ignition 6,300 H₂S Nil Refractive Index 1.3380 @25°C Resistivity 1.36 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Much organic matter present. The sample as received consisted of watery mud. The water extracted from the mud was dark brown in color.

SECTION VI - COMPLETION SUMMARY

TUBING RECORD

None

PERFORATION RECORD

None

CEMENTATION RECORD

None

ACIDIZATION AND FRACTURING RECORD

None

BACK PRESSURE AND PRODUCTION TESTS

None