

WELL HISTORY REPORT

INEXCO HUSKY et al PORCUPINE YT G-31

KANDIK BASIN

YUKON TERRITORY

April 12, 1972

H.B. Tiffin, P. Geol.
K.N. Sobkovich, P. Eng.

INDEX

	<u>Page No.</u>
Section I - Summary of Well Data	1
Section II - Geological Summary	2
Section III - Engineering Summary	19
Section IV - Logs	23
Section V - Analysis	24

SECTION I

SUMMARY OF WELL DATA

- (a) INEXCO HUSKY et al PORCUPINE YT G-31
- (b) Permittee, Licencee or Lessee: Inexco Oil Co. and Husky Oil Ltd.
- (c) Operator: Inexco Oil Company
10th Floor, Aquitaine Tower
Calgary 1, Alberta
- (d) Location: Grid: 66-30-140-00
66° 20' 22" N, 140° 06' 13" W.
U.W.I. 300G316630140000
U.W.L. 66.33944N, 140.10361W
- (e) Co-ordinates:
- (f) Permit or Lease Number: 5995
- (g) Drilling Contractor: Commonwealth Rig 31
- (h) Drilling Authority: .559; November 15, 1971
- (i) Classification: Wildcat
- (j) K.B.: 3025' (estimated) Ground: 3010'
- (k) Spudded: 6:00 a.m., December 31, 1971
- (l) Completed Drilling: March 20, 1972
- (m) Total Depth: 8720' (driller) 8719' (logger)
- (n) Well Status: Dry & Abandoned
- (o) Rig Released: March 24, 1972
- (p) Hole Sizes: 17 1/2" 0 - 988
 12 1/4" 988 - 4900
 8 3/4" 4900 - 8720
- (q) Casing: (a) Ran 31 Jts. 990.45', 13 3/8", K-55, 54.5# Casing.
 Landed at 988.05' K.B. with 250 Sax Fondu and
 650 Sax Oilwell cement.
 Plug Down: 3:45 a.m. January 7, 1972
- (b) Ran 121 Jts., 9 5/8", 4909.70', 40 & 36#, K-55 & N-80 Casing.
 Landed at 4900' K.B. with 800 sax + 8% gel and 350 Sax
 Neat Cement.
 Plug Down: 6:52 p.m. February 28, 1972.

- 2

SECTION II

GEOLOGICAL SUMMARY

INEXCO HUSKY et al PORCUPINE YT G-31

Formation Tops

<u>Formation</u>	<u>Sample</u>	<u>E-Log</u>	<u>Datum</u>
Devonian-Mississippian Shale	Surface	Surface	+3025
Middle Devonian Ogilvie	3210	3200	- 175
Lower Devonian Gossage	4095	4095	-1070
Ordivician-Cambrian	5740	5730	-2075
Pre-Cambrian Tindir	8270	8298	-5273
Total Depth: Driller		8720	-5695
	Schlumberger	8719	-5694

Cored Intervals

<u>Diamond Core No.</u>	<u>Interval</u>	<u>Formation</u>	<u>Recovery</u>
1	5012-5042	Gossage	29 ft.
2	6793-6815	Ordivician Cambrian	15 ft.

CORE DESCRIPTIONS

INEXCO HUSKY et al PORCUPINE YF G-31

Diamond Core #1 - 5012-5042' Cut 30' - Rec. 29'

Penetration Rate (mins/ft.) 12, 9, 7, 8, 9, 9, 8, 9, 5, 6, 7, 7, 6, 6, 7, 6, 7,
8, 7, 7, 6, 6, 7, 7, 7, 5, 7, 7, 7, 7.

6.0'
(5012-18)

Dolomite - medium grey, fine to medium crystalline, argillaceous, hard, siliceous dolomite, moderate amounts white coarse crystalline dolomite and calcite filled fractures, few stylolitic partings, abundant poorly preserved crinoid fragments and casts (occasional 2 holed ossicle).

23.0'
(5018-5041)

Dolomite - dark grey to black, very fine to fine crystalline, argillaceous, hard, siliceous dolomite, abundant coarse fractures and coarse breccia filled with white, coarse crystalline dolomite and calcite, scattered black shale filled stylolitic partings, shale has sooty texture and stains fingers black, abundant poorly preserved crinoid fragments and casts (occasional 2 holed ossicle).

Diamond Core #2 - 6793-6815' Cut 22' - Rec. 15'

Penetration Rate (mins/ft.) 3, 5, 6, 6, 6, 7, 7, 8, 9, 13, 12, 14, 9, 17, 15,
18, 12, 20, 12, 11, 14, 18.

3.0'
(6793-96)

Dolomite - medium grey, medium to coarse crystalline, reefoid dolomite, in part with pelletal texture, abundant large vugs with secondary white coarse crystalline infil, pink stain from alizarin red on inside of vug infil, scattered finely disseminated chalcopyrite and pyrite in vugs and fractures, porosity infil estimated at 80%, estimated residual porosity 4%, no visible stain or fluorescence.

3.0'
(6796-99)

Dolomite - light greenish grey and buff, finely crystalline, very slightly argillaceous dolomite, moderate amounts white coarse crystalline filled fine vugs and fractures, traces pink alizarin red stain on vugs and fractures, no visible porosity.

4.0'
(6799-6803)

Dolomite - coarsely brecciated, medium grey, medium to coarse crystalline, reefoid dolomite and white to pale grey, medium to coarse crystalline dolomite, abundant white coarse crystalline dolomite infil and fractures, traces pink alizarin red stain on fractures, traces of very fine vuggy porosity.

5.0'
(6803-6808)

Dolomite - banded and brecciated medium grey, fine to medium crystalline, very slightly argillaceous dolomite; with thin argillaceous laminae; light grey, medium crystalline dolomite with poor fine vuggy porosity partially infilled with white coarse crystalline dolomite and medium grey coarse crystalline reefoid dolomite with abundant white coarse crystalline dolomite infil. Moderate amounts white dolomite filled fractures, light pink stain from alizarin red on fractures and vugs.



SAMPLE DESCRIPTIONS

INEXCO HUSKY et al PORCUPINE YT G-31

- 20 - 100 Shale - dark grey to black, micromicaceous, sub-fissile shale in part carbonaceous, trace fine disseminated pyrite.
- 100 - 250 Shale - shale as above, with scattered blocky siliceous interbeds.
- 250 - 290 Shale - dark grey to black, soft, micromicaceous shale.
- 290 - 310 Shale - dark grey to black, firm, sub-fissile, finely pyritic shale.
- 310 - 400 Shale - dark grey to black, micromicaceous, somewhat blocky, carbonaceous shale.
- 400 - 450 Shale - shale as above, with fractures filled with white chert and a buff, calcareous kaolinitic shale.
- 450 - 500 Shale - black, micaceous, blocky, slightly siliceous and slightly calcareous shale, minor amounts fine disseminated pyrite.
- 500 - 630 Shale - dark grey to black, sub-fissile, micromicaceous, slightly carbonaceous shale.
- 630 - 650 Shale - shale as above with few white chert filled fractures.
- 650 - 690 Shale and Chert - dark grey to black, blocky, slightly siliceous and slightly calcareous, micromicaceous shale, with abundant white chert filled fractures, traces of slickensiding.
- 690 - 750 Shale - dark grey to black, sub-fissile, micromicaceous, firm shale, minor amounts fine disseminated pyrite, trace slickensiding.
- 750 - 780 Shale - shale as above, becoming more siliceous and pyritic.
- 780 - 980 Shale - dark grey to black, sub-fissile, micromicaceous shale, trace fine disseminated pyrite, scattered white chert filled veinlets.
- 980 - 1000 Shale - dark grey to black, micromicaceous, slightly siliceous, somewhat blocky shale, in part highly pyritic and slightly calcareous.
- 1000 - 1010 Shale - dark grey to black, micromicaceous, shale, trace pyrite.

- 1010 - 1090 No samples, Started air and then foam drilling - no sample recovered at surface.
- 1090 - 1290 Shale - dark grey to black, sub-fissile, micromicaceous shale with minor amounts white chert veinlets and fine disseminated pyrite (pyritic chips slightly calcareous)
- 1290 - 1400 Shale - shale as above, becoming slightly siliceous.
- 1400 - 1410 Shale - black, in part dark grey, firm, somewhat blocky, pyritic shale, in part siliceous. Scattered white chert veinlets.
- 1410 - 1450 Shale - dark grey to black, slightly blocky, pyritic shale, in part siliceous, with white chert filled veinlets.
- 1450 - 1460 Sample missing.
- 1460 - 1510 Shale - dark grey to black, micromicaceous, fissile shale, occasional chert veinlets.
- 1510 - 1520 Shale - shale as above, in part siliceous with abundant white chert filled veinlets.
- 1520 - 1570 Shale - dark grey to black, slightly blocky, firm, micromicaceous shale, trace pyrite and chert veinlets.
- 1570 - 1620 Shale - dark grey to black, blocky, micaceous shale, in part siliceous, pyritic and calcareous (white calcite crystals). Trace chert veinlets.
- 1620 - 1640 Shale - dark grey to black, blocky, micaceous pyritic shale, in part siliceous with abundant white chert veinlets, occasional calcite veinlets. Trace slickensiding.
- 1640 - 1680 Shale - dark grey to black, sub-fissile shale, minor amounts pyrite and chert veinlets.
- 1680 - 1750 Shale - shale as above, in part siliceous.
- 1750 - 1800 Shale - shale as above, becoming more pyritic (pyritic chips slightly calcareous). Trace slickensiding.
- 1800 - 1900 Shale - dark grey to black, blocky, slightly pyritic shale, in part siliceous and in part slightly carbonaceous. Trace chert veinlets and slickensiding.
- 1900 - 1930 Shale - shale as above, abundant white chert veinlets.
- 1930 - 2120 Shale - dark brownish grey, blocky, micaceous, slightly siliceous shale, in part slightly pyritic, trace chert veinlets and slickensiding.
- 2120 - 2150 Shale - dark grey to black, micromicaceous, blocky, slightly siliceous and pyritic shale.
- 2150 - 2160 Sample missing.

- 2160 - 2220 Shale - shale as above
- 2220 - 2250 Shale - dark grey to black, blocky, micromicaceous, slightly pyritic shale, few highly siliceous and calcareous interbeds. Trace white chert veinlets.
- 2250 - 2290 Shale - dark grey to black, micromicaceous, blocky shale, in part slightly pyritic and siliceous.
- 2290 - 2310 Shale - shale as above with thin black highly siliceous interbeds.
- 2310 - 2330 Samples missing - water heading - no samples recovered at surface.
- 2330 - 2341 Shale - shale as above.
- 2341 - 2362 No samples - twisted pin off button bit at 2341' - milling and fishing for 18 1/2 days.
- 2362 - 2377 Shale - dark grey to black, micromicaceous, blocky shale, in part pyritic and siliceous, moderate amounts white chert veinlets.
- 2377 - 2384 Milled with globe basket and clusterite shoe. Recovered pieces of 9" core.
Shale - dark grey to black, micromicaceous, sub-fissile and blocky, in part siliceous and fine pyritic. Occasional fine blebs of pyrite and lenses finely disseminated pyrite.
- 2384 - 2520 Shale - dark grey to black, micromicaceous, sub-fissile and blocky shale, in part pyritic and siliceous.
- 2520 - 2600 Shale - shale as above, trace white chert veinlets.
- 2600 - 2650 Shale - shale as above. Minor amounts white chert veinlets, in part calcareous.
- 2650 - 2690 Shale - dark grey to black, micromicaceous, sub-fissile and blocky shale, in part pyritic and slightly siliceous.
- 2690 - 2700 Sample missing.
- 2700 - 2780 Shale - dark grey to black, micromicaceous, sub-fissile and slightly blocky shale, trace to minor amounts pyrite and thin siliceous interbeds.
- 2780 - 2840 Shale - dark grey to black, micromicaceous, sub-fissile and blocky shale, minor amounts thin siliceous pyritic and slightly calcareous interbeds.
- 2840 - 2850 Shale - dark grey to black, micromicaceous, sub-fissile and blocky shale, trace siliceous interbeds.

- 2850 - 2950 Shale - shale as above, minor amounts siliceous pyritic and slightly calcareous interbeds, trace white chert veinlets.
- 2950 - 2980 Shale - shale as above, moderate amounts siliceous, pyritic and slightly calcareous interbeds.
- 2980 - 3060 Shale - shale as above, minor amounts siliceous, pyritic and slightly calcareous interbeds. Trace white chert veinlets.
- 3060 - 3180 Shale - shale as above, minor amounts siliceous, pyritic and slightly calcareous interbeds.
- 3180 - 3210 Shale - dark grey to black; micromicaceous, sub-fissile and blocky shale, moderate amounts siliceous, pyritic and slightly calcareous interbeds. Minor amounts white chert veinlets.
- MIDDLE DEVONIAN OGILVIE 3200' (-175')
- 3210 - 3280 Shale - dark grey to black, sub-fissile and blocky, carbonaceous shale, moderate amounts siliceous interbeds and white chert veinlets. Trace pyrite.
- 3280 - 3320 Shale - dark grey to black, micromicaceous, sub-fissile and blocky shale, in part carbonaceous. Minor amounts siliceous interbeds and pyrite.
- 3320 - 3340 Shale and Chert - dark grey to black, micromicaceous, sub-fissile and blocky shale, in part siliceous. Moderate amounts white chert veinlets.
- 3340 - 3350 Shale and Chert - shale as above, minor amounts chert as above.
- 3350 - 3360 Shale and Chert - shale as above, in part carbonaceous, minor amounts chert as above.
- 3360 - 3430 Shale - shale as above becoming more carbonaceous, in part siliceous, abundant white chert and calcite veinlets, trace pyrite and slickensiding.
- 3430 - 3560 Shale - dark brownish grey to black, blocky, siliceous, fine pyritic shale, minor amounts white chert and calcite veinlets.
- 3560 - 3600 Shale - shale as above, moderate amounts white chert and calcite veinlets.
- 3600 - 3650 Shale - shale as above and dark grey, slightly siliceous, platy carbonaceous shale (possible plant spores in bedding planes). Minor amounts white chert and calcite veinlets.
- 3650 - 3800 Shale - dark grey to black, hard, siliceous, blocky, finely pyritic shale, trace white chert and calcite veinlets.

- 3800 - 3910 ° Shale - dark brownish grey to black, hard, blocky, in part with conchoidal fracture, highly siliceous and cherty, fine pyritic shale, minor amounts white calcite veinlets.
- 3910 - 4000 Shale - shale as above, in part slightly calcareous, with minor amounts white calcite and chert veinlets.
- 4000 - 4050 Shale - shale as above, becoming in part with crystalline texture and calcareous, minor amounts white calcite veinlets.
- 4050 - 4090 Shale - dark grey, hard, siliceous, calcareous, blocky shale with crystalline texture and dark grey to black, hard, blocky, siliceous shale, minor amounts white calcite and chert veinlets.

LOWER DEVONIAN GOSSAGE 4095' (-1070')

- 4090 - 4100 Shale and Dolomite - shale as above, and medium-dark grey and mottled white, fine to medium crystalline, hard, siliceous, argillaceous, dense dolomite, abundant white massive and coarse crystalline dolomite in blebs and veinlets.
- 4100 - 4170 Dolomite - medium to dark grey and mottled white dolomite as above. Trace white calcite veinlets.
- 4170 - 4220 Dolomite - dolomite as above, becoming very fine to finely crystalline. Trace white calcite veinlets.
- 4220 - 4250 Dolomite and Shale - dolomite as above, with minor amounts dark brownish grey to black, hard, siliceous, calcareous, blocky shale.
- 4250 - 4400 Dolomite - dolomite as above, trace white calcite veinlets.
- 4400 - 4600 Dolomite - dolomite as above, calcite veinlets more predominant bare trace possible organic structure (Crinoids). Calcite and dolomite crystals indicate some open fractures.
- 4600 - 4630 Dolomite - dolomite as above with minor amounts dark grey to black, highly argillaceous to shaley interbeds.
- 4630 - 4650 Dolomite and Shale - dolomite as above, with minor amounts dark grey to black, blocky, calcareous limy shale.
- 4650 - 4680 Dolomite and Shale - dolomite as above, with moderate amounts shale as above, moderate amounts white calcite blebs and veinlets; few scattered fossil fragments (Crinoids?).

- 4680 - 4720 Dolomite and Shale - dark grey to black and mottled white, very finely crystalline, hard, siliceous, argillaceous and shaley dolomite, minor amounts white calcite blebs and veinlets. Minor amounts dark grey to black, blocky, dolomitic shale.

- 4720 - 4800 Dolomite - dark grey and mottled white, very finely crystalline, hard, siliceous, argillaceous dolomite with scattered shaley interbeds, abundant white calcite and dolomite blebs and veinlets.

- 4800 - 4820 Dolomite and Shale - dolomite as above, with moderate amounts dark grey to black; blocky, calcareous limy shale.

- 4820 - 4840 Dolomite - dolomite as above.

- 4840 - 4850 Dolomite and Limestone - dolomite as above with moderate amounts dark brownish grey, cryptocrystalline, blocky, argillaceous, highly shaley limestone, occasional Crinoid fragments.

- 4850 - 4880 Limestone - limestone as above, scattered Crinoids and graptolite spicules.

- 4880 - 4890 Limestone and Dolomite - dark brownish grey, cryptocrystalline argillaceous, dense, limestone, fossil fragments (Brachiopods & Crinoids), moderate amounts dark brownish grey, finely crystalline, argillaceous, siliceous dolomite with abundant white dolomite blebs and veinlets.

- 4890 - 4900 Dolomite - dolomite as above.

- 4900 - 4960 Dolomite - medium to dark grey, very fine to finely crystalline, hard, siliceous, argillaceous dolomite, abundant white crystalline dolomite and calcite blebs and veinlets, in part brecciated.

- 4960 - 5012 Dolomite - dark grey to black, fine to medium crystalline, dolomite as above.

- Diamond Core #1 5012-5042' Cut 30' - Rec. 29'

- 5042 - 5080 Dolomite - dark grey to black, fine to medium crystalline, hard, siliceous, argillaceous dolomite, abundant white coarse crystalline dolomite and calcite blebs and veinlets, in part brecciated, occasional clear dolomite rhomb crystals indicating open fractures.

- 5080 - 5170 Dolomite - medium to dark grey, coarse crystalline, hard, siliceous, argillaceous dolomite, abundant white coarse crystalline dolomite and calcite blebs and veinlets, rare fine vugs, no stain.

- 5170 - 5210 Dolomite - dark grey to black, fine crystalline dolomite as above.
- 5210 - 5260 Dolomite - medium to dark grey, coarse crystalline, argillaceous, siliceous dolomite, abundant white coarse crystalline dolomite and calcite blebs and veinlets, rare fine vugs and open fractures.
- 5260 - 5350 Dolomite - medium to dark grey, medium crystalline, argillaceous, hard, siliceous, dolomite, abundant white coarse crystalline dolomite and calcite blebs and veinlets. Minor amounts white, medium crystalline dolomite with trace intercrystalline porosity, pyrobitumin staining. Scattered black bitumin shaley interbeds. In part brecciated.
- 5350 - 5460 Dolomite - dark grey to black, fine to medium crystalline, argillaceous, hard, siliceous dolomite, in part brecciated, abundant white coarse crystalline dolomite and calcite blebs and veinlets, rough drilling indicates open fractures - hole making more water.
- 5460 - 5490 Dolomite - fine crystalline dolomite as above, traces of intercrystalline gilsonite.
- 5490 - 5500 Dolomite - medium to dark grey, fine crystalline, hard, siliceous, argillaceous dolomite, abundant white coarse crystalline dolomite and calcite blebs and veinlets, in part brecciated. Trace open fractures.
- 5500 - 5570 Dolomite - dolomite as above, becoming dark grey to black and more argillaceous and very fine to finely crystalline.
- 5570 - 5590 Dolomite - dolomite as above with scattered shaley interbeds, minor amounts white coarse crystalline dolomite veinlets.
- 5590 - 5620 Dolomite and Shale - dark grey, very fine to finely crystalline, hard, siliceous, argillaceous, shaley dolomite and moderate amounts dark grey to black, blocky, dolomitic shale, in part finely pyritic, minor white dolomite veinlets.
- 5620 - 5650 Dolomite and Shale - dolomite and shale as above, with moderate amounts light grey, very finely crystalline, hard, argillaceous dolomite with shaley interbeds, in part finely pyritic.
- 5650 - 5670 Dolomite, Shale and Sandstone - light to medium grey, cryptocrystalline, hard, argillaceous shaley dolomite and light grey, dolomitic hard shale, in part sandy and pyritic. Minor amounts pale grey, fine to medium grained, subangular, medium sorted, dolomitic, quartzitic and pyritic sandstone.

- 5670 - 5680 Dolomite, Mudstone & Sandstone - light to medium grey dolomite as above, moderate amounts light buff, sandy, pyritic, slightly dolomitic mudstone, moderate amounts sandstone as above.
- 5680 - 5700 Dolomite, Mudstone, Sandstone and Limestone - pale buff, cryptocrystalline, slightly argillaceous dolomite, light buff to maroon mudstone as above, minor sandstone as above and minor pale buff to cream, cryptocrystalline, dense limestone.
- 5700 - 5720 Mudstone and Limestone - pale grey and buff to maroon, sandy, pyritic mudstone, in part siliceous and quartzitic, minor amounts pale buff to cream, cryptocrystalline, dense limestone, in part dolomitic.
- 5720 - 5740 Mudstone - pale grey, sandy, highly pyritic mudstone, in part siliceous and in part slightly dolomitic.
- ORDOVICIAN-CAMBRIAN 5730' (-2705')
- 5740 - 5780 Dolomite - white to pale grey, medium to coarse crystalline, dolomite, white coarse crystals indicate possible vug infil, trace fine vuggy & intercrystalline porosity, no stain or show.
- 5780 - 5800 Dolomite and Mudstone - light medium grey dolomite as above, slightly argillaceous and in part sandy. Moderate amounts vari-colored light buff, maroon and in part green, sandy, siliceous, pyritic mudstone.
- 5800 - 5810 Mudstone & Limestone - mudstone as above and dark grey, finely crystalline, highly argillaceous, siliceous, slightly pyritic limestone.
- 5810 - 5850 Dolomite - white to pale grey, finely crystalline dolomite, with abundant coarse crystalline dolomite infil, infil in part calcite. Trace fine vuggy and inter-crystalline porosity, no show.
- 5850 - 5930 Dolomite - white to pale grey, coarse crystalline, dolomite, trace fine vuggy & intercrystalline porosity, abundant secondary infil, in part calcitic. Minor fine disseminated pyrite.
- 5930 - 5960 Dolomite - dolomite as above, in part medium grey, finely crystalline, argillaceous and pyritic.
- 5960 - 6040 Dolomite - white to pale grey, medium to coarsely crystalline dolomite as above, trace fine vuggy and inter-crystalline porosity, abundant secondary infil.

- 6040 - 6070 Dolomite - dolomite as above, in part medium grey, argillaceous and pyritic.
- 6070 - 6120 Dolomite - white to pale grey, medium to coarse crystalline dolomite, trace fine vuggy and intercrystalline porosity, no show, abundant secondary infil.
- 6120 - 6180 Dolomite - white to pale grey, fine to medium crystalline dolomite, moderate amounts coarse crystalline dolomite infil, trace fine vuggy and intercrystalline porosity, no show.
- 6180 - 6260 Dolomite - white to pale grey, medium to coarse crystalline dolomite, abundant coarse crystalline dolomite infil, trace fine vuggy and intercrystalline porosity, no show.
- 6260 - 6430 Dolomite - white to pale grey, fine to medium crystalline dolomite, minor amounts coarse crystalline dolomite infil, bare trace fine vuggy and intercrystalline porosity, no stain.
- 6430 - 6510 Dolomite - dolomite as above, in part light and medium grey.
- 6510 - 6630 Dolomite - white to medium grey, fine to medium crystalline dolomite, minor amounts coarse crystalline dolomite infil, bare trace fine vuggy and intercrystalline porosity, no show, medium grey dolomite has pelletal texture and slightly calcareous in part.
- 6630 - 6660 Dolomite - white to pale grey, fine to medium crystalline dolomite, in part with pelletal and organic texture, minor amounts coarse crystalline dolomite infil, calcareous in part, bare trace fine vuggy and intercrystalline porosity, no show.
- 6660 - 6690 Dolomite - light to medium grey, medium crystalline dolomite with pelletal texture and organic structure in part, no visible porosity.
- 6690 - 6760 Dolomite - white to light grey dolomite as above, bare trace intercrystalline porosity, no show, minor amounts coarse crystalline dolomite infil.
- 6760 - 6780 Dolomite - light to medium grey, medium-coarse crystalline dolomite, pelletal or granular texture, indications of organic structure, no visible porosity.
- 6780 - 6793 Dolomite - white to light grey dolomite as above, bare trace fine vuggy and intercrystalline porosity, no show.
- Diamond Core #2 6793-6815' Cut 22' Rec. 15'
- 6815 - 6840 Dolomite - white to light grey, fine to medium crystalline dolomite, abundant white coarse crystalline dolomite infil, bare trace fine vuggy and intercrystalline porosity, no show.

- 6840 - 6880 Dolomite - light grey, medium crystalline dolomite, minor amounts white coarse crystalline dolomite infil, bare trace fine vuggy and intercrystalline porosity, no show, in part with pelletal and granular texture, trace fine disseminated pyrite.
- 6880 - 6900 Dolomite - white to medium grey, coarse crystalline dolomite, moderate amounts white coarse crystalline dolomite infil, trace porosity as above, trace fine disseminated pyrite.
- 6900 - 6920 Dolomite - white to pale grey, medium crystalline dolomite as above.
- 6920 - 6950 Dolomite - light to medium grey, medium and coarse crystalline dolomite, in part with granular and pelletal texture, minor amounts white coarse crystalline dolomite infil, bare trace porosity as above.
- 6950 - 6970 Dolomite - white to pale grey, fine to medium crystalline dolomite, no visible porosity.
- 6970 - 7000 Dolomite - light to medium grey, medium to coarse crystalline dolomite, in part with pelletal texture, minor amounts white coarse crystalline dolomite infil, bare trace fine vuggy and intercrystalline porosity.
- 7000 - 7070 Dolomite - white to pale grey, fine to medium crystalline dolomite as above.
- 7070 - 7180 Dolomite - light to medium grey, fine to medium crystalline, very slightly argillaceous dolomite, in part with pelletal texture, minor amounts white coarse crystalline dolomite infil, bare trace fine vuggy and intercrystalline porosity, no show.
- 7180 - 7220 Dolomite - light to medium grey, dolomite as above, trace white dolomite infil, no visible porosity.
- 7220 - 7250 Dolomite - pale grey, very fine to finely crystalline, dense dolomite with moderate amounts light to medium grey, fine to medium crystalline dolomite as above.
- 7250 - 7260 Dolomite - pale to medium grey, medium to coarse crystalline dolomite, in part with pelletal texture, no visible porosity.
- 7260 - 7280 Dolomite - pale to medium grey, very fine to finely crystalline dense dolomite, trace pyrite.
- 7280 - 7310 Dolomite - dolomite as above with minor amounts light to medium grey, medium crystalline dolomite, no visible porosity, moderate amounts white dolomite infil and veinlets.
- 7310 - 7340 Dolomite - medium grey, very fine to finely crystalline, very slightly argillaceous, dense dolomite, minor amounts pale grey and white dolomite blebs and veinlets.

- 7340 - 7360 Dolomite - very finely crystalline dolomite, as above.
- 7360 - 7380 Dolomite - medium grey and buff, cryptocrystalline dolomite as above.
- 7380 - 7390 Dolomite - medium to dark grey, very fine to finely crystalline dense, hard, siliceous dolomite, abundant white dolomite blebs and veinlets.
- 7390 - 7420 Dolomite - light buff, cryptocrystalline, dense dolomite, minor white dolomite veinlets, in part pyritic.
- 7420 - 7440 Dolomite - dolomite as above, in part medium grey, very fine to finely crystalline.
- 7440 - 7450 Dolomite - medium to dark grey, fine to medium crystalline dolomite, minor amounts white dolomite blebs and veinlets.
- 7450 - 7520 Dolomite - light buff, cryptocrystalline, dense, slightly siliceous dolomite, minor white dolomite veinlets, trace pyrite.
- 7520 - 7570 Dolomite - dolomite as above, in part dark grey, argillaceous and siliceous.
- 7570 - 7600 Dolomite - light buff, cryptocrystalline, dense, slightly siliceous dolomite, minor white dolomite veinlets, trace pyrite.
- 7600 - 7620 Dolomite - dolomite as above, in part medium grey and medium crystalline, bare trace fine vuggy and intercrystalline porosity, no show.
- 7620 - 7640 Dolomite - white to pale buff, very finely crystalline, dolomite, abundant white coarse crystalline dolomite infil and veinlets, bare trace fine vuggy and intercrystalline porosity, no show, trace pyrite.
- 7640 - 7670 Dolomite - medium grey, in part mottled white and brecciated, fine to medium crystalline, very slightly argillaceous dolomite, abundant white coarse crystalline dolomite infil and veinlets, trace fine vuggy and intercrystalline porosity, no show.
- 7670 - 7680 Dolomite - dolomite as above, in part cherty and pyritic.
- 7680 - 7740 Dolomite - pale buff and grey, very fine crystalline, very slightly argillaceous dolomite, in part medium grey, medium crystalline and brecciated, moderate amounts white dolomite veinlets, no visible porosity.
- 7740 - 7750 Dolomite - pale buff to medium grey, finely crystalline, very slightly argillaceous dolomite, in part brecciated with white dolomite veinlets.

- 7750 - 7800 Dolomite - medium grey, in part dark grey, finely crystalline, very slightly argillaceous, slightly siliceous dolomite moderate amounts white dolomite veinlets, no visible porosity.
- 7800 - 7820 Dolomite - dolomite as above, becoming cryptocrystalline to very finely crystalline, in part medium crystalline with pelletal texture, rare dolomite rhombs indicating open fractures.
- 7820 - 7840 Dolomite - pale to light grey, cryptocrystalline, dense, hard, slightly siliceous dolomite, minor veinlets and fractures.
- 7840 - 7920 Dolomite - light to medium grey, very fine to finely crystalline hard, very slightly argillaceous, slightly siliceous dolomite, in part with pelletal texture, minor veinlets and fractures.
- 7920 - 7940 Dolomite - dolomite as above, moderate amounts light buff, very finely crystalline, dense, slightly siliceous dolomite, moderate amounts white dolomite veinlets and fractures, no visible porosity.
- 7940 - 8000 Dolomite - medium grey and light buff, very finely crystalline dolomite as above.
- 8000 - 8040 Dolomite - light buff, cryptocrystalline to very finely crystalline, dense, slightly siliceous dolomite, minor amounts white dolomite veinlets and fractures, no visible porosity.
- 8040 - 8070 Dolomite - light to medium grey, very fine to finely crystalline, dense, slightly siliceous, very slightly argillaceous dolomite, minor amounts white dolomite veinlets and fractures, no visible porosity.
- 8070 - 8090 Dolomite - dolomite as above, becoming cryptocrystalline to very finely crystalline.
- 8090 - 8120 Dolomite - dolomite as above, bare trace fracture porosity, no show.
- 8120 - 8140 Dolomite - dolomite as above, no visible porosity.
- 8140 - 8170 Dolomite - medium to dark grey, very finely crystalline, slightly argillaceous, siliceous dense dolomite, moderate amounts white dolomite filled veinlets and fractures.
- 8170 - 8180 Dolomite & Siltstone - dolomite as above, becoming more siliceous, minor amounts pale grey, dolomitic, quartzitic siltstone.
- 8180 - 8190 Dolomite - dolomite as above.

- 8190 - 8200 Dolomite and Shale - medium to dark grey, cryptocrystalline, highly argillaceous in part, dense, siliceous dolomite, minor amounts dark grey to black, dolomitic, hard, platy shale.
- 8200 - 8240 Dolomite - dolomite as above, becoming cryptocrystalline to very finely crystalline, minor white dolomite veinlets.
- 8240 - 8260 Dolomite - light to medium grey, cryptocrystalline, very slightly argillaceous, slightly siliceous dolomite, scattered dark grey shaley and cherty interbeds, moderate amounts white dolomite veinlets and fractures.
- 8260 - 8270 Dolomite - light grey, cryptocrystalline, very slightly argillaceous, slightly siliceous dolomite, minor amounts white dolomite veinlets and fractures.
- 8270 - 8280 Dolomite, Quartzite and Shale - dolomite as above, in part cherty; trace clear to pale grey, dolomitic and argillaceous in part, hard quartzite; trace olive green, dolomitic, hard, platy shale, in part sandy.
- 8280 - 8290 Dolomite, Quartzite and Shale - dolomite as above with minor amounts quartzite and shale as above.
- 8290 - 8300 Quartzite - clear, white to pale grey, slightly dolomitic, fine to medium grained quartzite, in part finely pyritic, slightly calcareous, reddish and greenish in color with shale staining.
- PRE-CAMBRIAN TINDIR 8298' (-5273')
- 8300 - 8315 Quartzite and Mudstone - quartzite as above with moderate amounts impregnated and bedded green and mustard yellow, hard mudstone.
- 8315 - 8350 Shale - dark grey to black, in part green and rusty red shale, in part hard and siliceous and in part calcareous, occasional whitish limy interbeds.
- 8350 - 8370 Shale - medium greenish grey, in part rusty red and dirty white, soft, slightly calcareous shale, minor amounts fine disseminated pyrite, trace white calcite veinlets.
- 8370 - 8460 Shale - shale as above, predominantly rust red, in part mottled white, red and green, trace white calcite veinlets.
- 8460 - 8480 Shale - rusty red shale as above, in part siliceous. Trace white calcite veinlets.
- 8480 - 8500 Shale - grey green, rusty red, in part whitish, slightly calcareous shale, in part siliceous. Trace-minor amounts white calcite veinlets.

SECTION IIIENGINEERING SUMMARYINEXCO HUSKY et al PORCUPINE YT G-31(a) REPORT OF DRILL STEM TESTS

Three DST's were run during the drilling of Inexco Husky et al Porcupine YT G-31. These are summarized below:

DST #1 - 5380' - 6181' (Gossage formation)
T.O. - 50/32, S.I. - 32/60. Strong initial puff with strong air blow for 50 minutes. Weak air blow on second flow. Recovered 4250' fresh water.

DST #2 - 4893' - 5001' (Gossage formation)
T.O. - 5/30, S.I. - 30/60. Weak initial blow. Weak air blow on second flow decreasing to very poor in 30 minutes. Recovered 230' fresh water.

DST #3 - 6315' - 6815' (Ordovician - Cambrian)
T.O. - 5/60, S.I. - 30/60. Good initial puff. Strong air blow on preflow. Strong air blow on second flow decreasing after 30 minutes, dead in 45 minutes. Recovered 600' muddy water and 4330' fresh water.

Copies of the service companies' DST reports are included at the end of the report.

(b) CASING RECORD

Surface casing: Ran 31 jts (990.45') 13 3/8", 54.5#, K-55, Smls 8 rd casing. Landed at 988' K.B. Cemented with 250 Sx fondu cement & 650 Sx oilwell cement. Plug down at 3:40 A.M., Jan. 7, 1972. Good returns to surface.

Intermediate casing: Ran 212 jts (4909.70') 9 5/8", 36#, K-55 and N-80, Smls 8 rd casing. Landed at 4900' K.B. Cemented with 800 Sx oilwell cement + 8% gel and 350 Sx oilwell cement. Plug down at 6:52 P.M., Feb. 28, 1972.

(c) BIT RECORD

See page 20.

BIT RECORD

INEXCO HUSKY et al PORCUPINE YT G-31

<u>Bit No.</u>	<u>Type</u>	<u>Size</u>	<u>Jets</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Hours</u>	<u>Cond.</u>
1A	DSJ	12 1/4	1/24 2/12	0	653	653	39	67I
2A	DSJ	12 1/4	1/24 2/12	653	893	240	24 3/4	67I
3A	M4L	12 1/4	1/24	893	986	93	11	46I
4A	HO	17 1/2	3/11	0	812	812	20 3/4	
5A	HO	17 1/2	3/11	812	917	105	12 3/4	44I
6A	HO	17 1/2	3/11	917	988	71	6 1/2	24I
1	M4LG	12 1/4	2/18 1/15	988	1060	72	4 1/2	
2	M88	12 1/4	open	1060	1431	371	18 1/4	11I
2RR	M88	12 1/4	open	1431	1813	382	34 1/4	31I
3	H88	12 1/4	open	1831	2341	528	39 1/2	Twist Off
4	RX55R	12 1/4	open	2352	2366	14	1	Locked
5	DMNJ	12 1/4	open	2366	2374	8	3 3/4	Locked
6RR	M4L	12 1/4	open	2374	2528	154	11 1/4	62I
7	M4L	12 1/4	open	2528	2871	343	28 1/4	55I
8RR	X55R	12 1/4	open	2871	3185	314	18 1/4	42I
9	DMN	12 1/4	open	3185	3716	531	50 1/2	670
10	DMN	12 1/4	open	ream to 3716	3716	156	5 1/2	
				3716	3910	194	19	880
11	M4L	12 1/4	open		ream	50	1 1/2	
				3910	3915	5	3/4	640
12	C2G	12 1/4	open	3915	4251	336	33	26I
13RR	M88	12 1/4	open	4251	4505	254	32 1/2	43I
14	RX55R	12 1/4	open	4505	4900	395	48	22I
1	YS1G	8 3/4	open	4900	4905	5	1/2	
2	RX55R	8 3/4	open	4905	5012	107	8	
Core 1	Dia.	6 1/8		5012	5042	30	3 3/4	Good
3	SCM5	8 3/4	open	5012	5042	30	2 3/4 (ream)	
				5042	5548	506	27 3/4	840
4	SHG	8 3/4	open	5488	5548	142 (ream)	9 1/4	22I
5	SCM5	8 3/4	open	5548	6181	633	39	540
6	X55R	8 3/4	open	6181	6793	612	40 3/4	32I
1RR	Dia.	6 1/8		6793	6815	22	4 3/4	Good
7RR	SHGJ	8 3/4	3/15	6793	6815	22	6 (ream)	
				6815	6822	7	1 1/2	22I
8R	X55R	8 3/4	3/15	6822	7281	459	32	Lost 2 cones
9	H7UGJ	8 3/4	3/15	7281	7303	22	2 3/4	53I
10R	7XJ	8 3/4	3/14	7303	7751	448	25 3/4	68I
11R	RG1XJ	8 3/4	3/14	7751	8228	477	30 1/4	77I
12	H88	8 3/4	3/14	8228	8720	492	42 1/2	35I

(d) MUD REPORT

<u>ADDITIVES</u>	<u>AMOUNT</u>
Gel	35,000 lbs.
Caustic	750 lbs.
Bicarb	400 lbs.
Kwik Seal	360 lbs.
Sawdust	25 Sx.
Diesel Fuel	25 bbls.
Soap	31 bbls.
Hagatreat	1,550 lbs.
Calgon	2,200 lbs.
X-pel G.	475 lbs.

(e) DEVIATION RECORD

See page 22.

(f) ABANDONMENT PLUGS

Plug #1 - 8720' - 8520' with 120 Sx neat oilwell cement. Plug down at 10:30 P.M., Mar. 23/72.

Plug #2 - 5200' - 4800' with 240 Sx oilwell cement plug 2% CaCl₂. Plug down at 12:00 midnight, Mar. 23/72. Felt Plug #2 at 4843'.

Plug #3 - 5 Sx cement used at surface. Welded on steel plate.

(g) LOST CIRCULATION ZONES

The Porcupine well was drilled from surface to 6080' using foam as the drilling fluid and any lost circulation zones in this interval were not detected. Intermediate casing was set at 4900'. From 6080' - T.D. water was used as the drilling fluid. After switching over to a water system, it was apparent that some portion of the hole was taking on fluid since water had to be continually added to the system to maintain the required mud volumes. However, since the fluid loss was not considered significant, the hole was drilled to T.D. by continual additions of water to the system. At T.D. and just prior to logging, 100% circulation was achieved by mixing 9000# gel, 150# caustic and 25 bags of sawdust.

(h) REPORT OF BLOWOUTS

None

DEVIATION RECORD

INEXCO HUSKY et al PORCUPINE YT G-31

<u>Depth</u>	<u>Dev. - Degrees</u>	<u>Depth</u>	<u>Dev. - Degrees</u>
170	1/2	2985	7
268	3/4	3018	6 1/2
328	1/8	3050	8
387	1/4	3080	7 1/2
400	1/2	3112	8 1/2
560	1/2	3143	8 1/2
660	1	3175	9 1/2
697	1 1/4	3205	8 3/4
758	1 1/2	3268	8 1/2
824	1 1/4	3332	8 1/4
821	1 1/4	3395	8
851	1 3/4	3455	7 3/4
883	1 3/4	3520	7 1/2
920	1 1/2	3612	7 3/4
988	1 3/4	3645	7 3/4
1115	2	3706	8
1168	2	3733	7 1/4
1231	2	3796	6 1/2
1326	2	3856	6 3/4
1483	3	3929	6 1/2
1514	3 1/8	3960	6 1/4
1550	2 1/2	4023	7 1/4
1610	4 1/2	4055	7
1640	4	4148	7
1702	4 1/2	4241	7 1/4
1776	5	4336	6 3/4
1806	5 1/2	4430	6 1/4
1836	5 1/4	4523	6
1870	4 3/4	4615	6 1/2
1900	4 1/2	4709	6
1930	4 1/2	4804	5 3/4
1990	4 1/4	4890	6 1/4
2050	4 1/8	5000	5 1/2
2111	3 7/8	5125	4 1/2
2210	4 1/8	5535	4 1/2
2300	4	6034	4
2423	4 1/2	6568	3 1/2
2518	6	6790	2 1/4
2550	5 1/4	7260	2
2602	6	7741	3 1/2
2642	5	8228	8 1/2
2705	5 1/4	8720	13 1/2
2765	5		
2831	5 1/4		
2892	5		
2955	6 1/2		

SECTION IV - LOGSINEXCO HUSKY et al PORCUPINE YT G-31

<u>Type</u>	<u>Date</u>	<u>Interval</u>	<u>Scale</u>
Dual Induction Laterolog	Feb. 26/72	990-4882	2" & 5"
	Mar. 21/72	4900-8714	2" & 5"
BHC Sonic-Gamma-Ray-Caliper	Feb. 26/72	990-4885	2" & 5"
	Mar. 21/72	4900-8719	2" & 5"
Formation Density Compensated Log	Feb. 26/72	990-4885	2" & 5"
	Mar. 22/72	4900-8716	2" & 5"
Sidewall Neutron Porosity Log	Feb. 26/72	990-4885	2" & 5"
	Mar. 22/72	4900-8718	2" & 5"
Four-Arm Dipmeter	Feb. 26/72	990-4885	
	Mar. 22/72	4900-8715	

SECTION V

ANALYSIS

INEXCO HUSKY et al PORCUPINE YT G-31

Included in this section of the report are copies of the following analysis:

(a) Core Analysis

Core #1 and Core #2

(b) Water Analysis

DST #1, #2, and #3.
Rig and camp water supply.

(c) Gas Analysis

None

(d) Oil Analysis

None

CANADA CORE ANALYSTS LTD.

DATA

CALGAR ALBERTA

COMPANY INEXCO OIL COMPANY FORMATION MIDDLE DEVONIAN PAGE 1
 WELL INEXCO HUSKY ET AL PORCUPINE YT G-31 CORING FLUID WATER BASE FILE CCI-72-118
 LOCATION NORTH LAT. 66° 20' 22.00" WEST LONG. 140° 06' 13.00" CORING EQUIPMENT DIAMOND DATE MAR. 15/72
 FIELD PORCUPINE R. AREA ELEVATION 3025 G.L. ANALYST WB, MG, DH
 PROVINCE YUKON REMARKS FULL DIAMETER ANALYSIS

SUMMARY

SUMMARY INTERVAL 5012.0' - 6793.0'
 TOTAL FOOTAGE 1781.0
 FOOTAGE ANALYZED 29.3
 FOOTAGE NOT ANALYZED RUBBLE .0 DENSE .0 LOST .7 DRILLED 1751.0 NOT ANALYZED .0 1751.7

PERMEABILITY RANGE	FOOTAGE	WEIGHTED AVERAGE PERM. MD.	PERMEABILITY FEET	WEIGHTED AVERAGE POROSITY %	POROSITY FEET	WEIGHTED AVERAGE RESIDUAL SAT. % PORE	
						OIL	TOTAL WATER
TOTAL ANALYZED	29.3	2.84	83.33	.88	25.81		
10. MD. AND GREATER	3.5	20.57	72.00	1.46	5.10		
1.0 MD. TO 9.9 MD.	4.0	2.50	10.00	1.10	4.40		
0.50 MD. TO 0.99 MD.	.0	.00	.00	.00	.00		
0.01 MD. TO 0.49 MD.	21.8	.06	1.33	.75	16.31		
LESS THAN 0.01 MD.	.0	.00	.00	.00	.00		

% POROSITY & MD.

CANADA CORE ANALYSTS LTD.
CALGARY ALBERTA

DATA

COMPANY	INEXCO OIL COMPANY	FORMATION	SILURIAN OR	PAGE 3
WELL	INEXCO HUSKY ET AL PORCUPINE YT G-31	CORING FLUID	ORDOVICIAN WATER BASE	FILE CC1-72-118
LOCATION	NORTH LAT. 66° 20' 22.00" WEST LONG. 140° 06' 13.00"	CORING EQUIPMENT	DIAMOND	DATE MAR. 15/72
FIELD	PORCUPINE R. AREA	ELEVATION	3025 G.L.	ANALYST WB, MG, DH
PROVINCE	YUKON	REMARKS	FULL DIAMETER ANALYSIS	

SUMMARY

SUMMARY INTERVAL	6793.0 - 6815.0
TOTAL FOOTAGE	22.0
FOOTAGE ANALYZED	14.6
FOOTAGE NOT ANALYZED	7.4
RUBBLE .0 DENSE .0 LOST 7.4 DRILLED .0 NOT ANALYZED .0	


PERMEABILITY RANGE	FOOTAGE	WEIGHTED AVERAGE PERM. MD.	PERMEABILITY FEET	WEIGHTED AVERAGE POROSITY %	POROSITY FEET	WEIGHTED AVERAGE RESIDUAL SAT. % PORE	
						OIL	TOTAL WATER
TOTAL ANALYZED	14.6	10.67	155.82	1.01	14.78		
10. MD. AND GREATER	1.9	73.47	139.60	3.43	6.52		
1.0 MD. TO 9.9 MD.	4.8	3.20	15.36	.90	4.32		
0.50 MD. TO 0.99 MD.	.0	.00	.00	.00	.00		
0.01 MD. TO 0.49 MD.	4.7	.18	.86	.63	2.98		
LESS THAN 0.01 MD.	3.2	.00	.00	.30	.96		

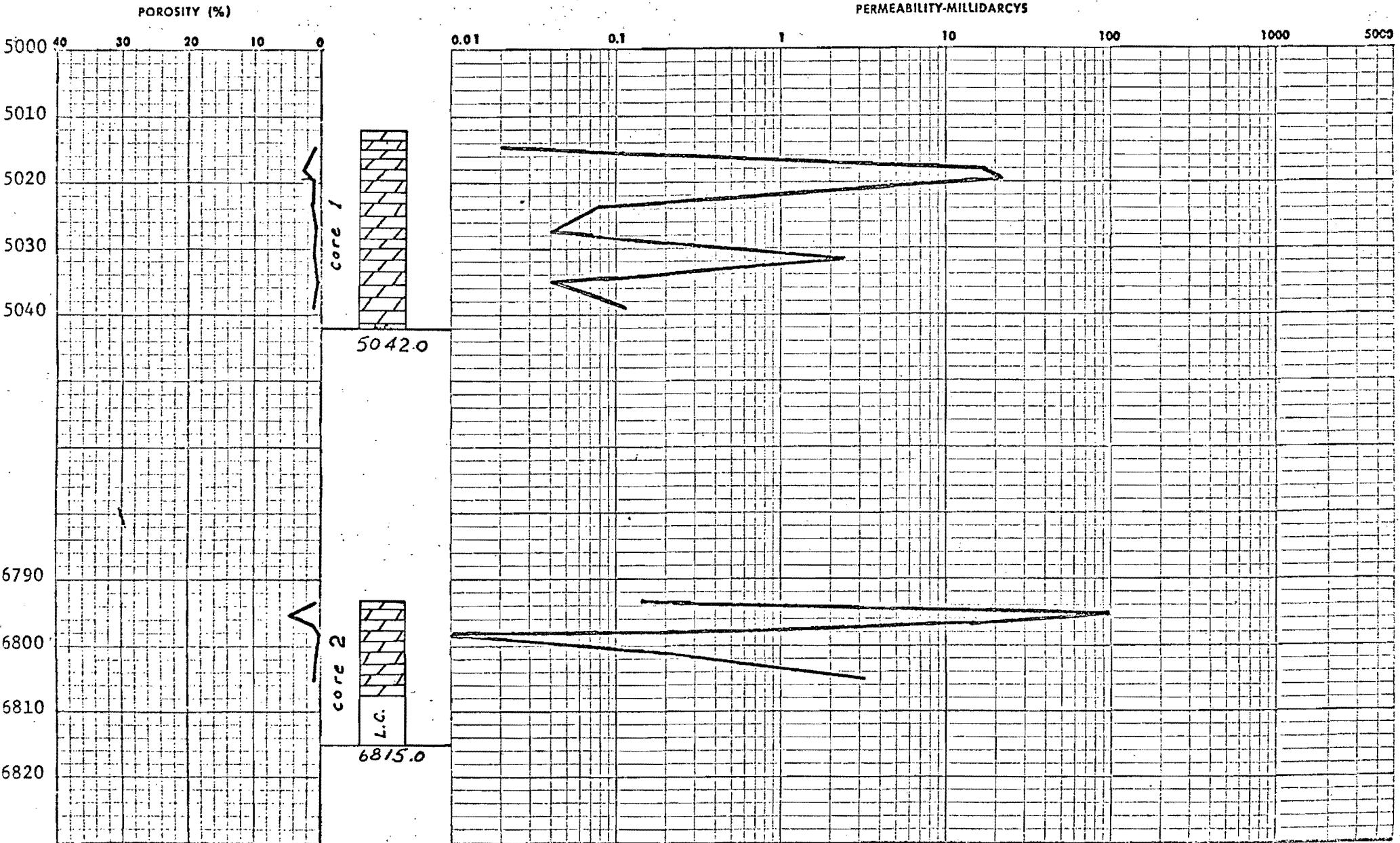
% POROSITY & MD.

CANADA COR. ANALYSTS LTD.
CALGARY, ALBERTA

COMPANY INEXCO OIL COMPANY
WELL INEXCO HUSKY ET AL PORCUPINE YT G-31

PAGE 5
FILE CC1-72-118

 DOLOMITE



CORE DESCRIPTION SYMBOLS

A Anhydrite
 Ang Angular
 AST Appears Similar to
 Bd Bands
 BlSh Black Shale
 Bn Bentonite
 Br Brecciated
 Bt Buttoned
 C Coarse
 Ca Calcite
 Carb Carbonaceous
 Cg Conglomerate
 Ch Chert
 Cm Cement
 Co Coralline Fragments
 CSS Coarse Sandstone
 De Dense
 Dol Dolomite
 F Fine
 Fe Ironstone
 Fg Fragmental
 foss Fossiliferous
 fSL Fine Sand Lenses
 fSS Fine Sandstone
 FD Full Diameter
 Gl Glaucconitic
 HC Horizontal Crack
 HF Horizontal Fracture

I Intergranular
 InB Interbedded
 Ka Kaolinite
 Lam Laminations
 Lst Limestone
 LV Large Vugs
 M Medium
 MSS Medium Sandstone
 mudst Mudstone
 O Open
 Occ Occasional
 ool oolitic
 PPV Pin Point Vugs
 PTSL Paper-Thin Shale Laminations
 Py Pyrites
 Pyb Pyrobitumen
 RC Random Cracks
 RF Random Fractures
 Rnd Rounded
 S Stained
 Sd Sand
 Sdy Sandy
 Sh Shale

ShL Shale Lenses
 Shy Shaly
 Sil Siltstone
 Sl/ Slightly
 SL Sand Lenses
 SP Small Plug
 St Stylolite
 Stk Streaks
 Subrnd Subrounded
 Subang Subangular
 SV Small Vugs
 TR Trace
 U Unconsolidated
 V Vuggy
 VC Vertical Crack
 VF Vertical Fracture
 V.F. Very Fine
 X Crystals
 Xln Crystalline
 * Broken Core [K₉₀ used for summary purpose]
 ** Permeability > 30,000 md.
 - .01 Permeability < .01 md.



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



Company Inexco Oil Company Page 1 of 5
Well Inexco Husky et al Porcupine YT G-31 File 921-2239
Field Porcupine River Area, Yukon Analyst RT
Location 66 20'22.00 N.L.
140 06'13.00 W.L. Elevation: K.B. _____ Grd. 3025'
Formation _____ Depth _____ 5300' - 6181'
Sampled from DST #1 by Johnston Testers
Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
Date sampled March 6/72 Date received March 13/72 Date analysed March 16/72
Container pressure _____ Mud _____ Water cushion _____
Recovery or flowrate: DST Recovery: 4250' Liquid.
Tool Recovery: 700 cc's Water.

Analysis

Sample #1: *Benzene = Less than 0.5 ppm by volume
*Toluene = Less than 0.5 ppm by volume
Sample #2: *Benzene = Less than 0.5 ppm by volume
*Toluene = Less than 0.5 ppm by volume
Sample #3: *Benzene = Less than 0.5 ppm by volume
*Toluene = Less than 0.5 ppm by volume

* Masked by other hydrocarbons.



CORE LABORATORIES - CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS



File 921-2239 Page 2 of 5

Company Inexco Oil Company

Well Inexco Husky et al Porcupine YT G-31 K.B. Grd. 3025'

Location 66 20'22.00 N.L. 140 06'13.00 W.L. Field Porcupine River Area Province Yukon

Formation Interval 5300' - 6181'

Sampled from DST #1 (MFE Tool 550) by Johnston Testers

Date sampled March 6/72 Date analysed March 16/72 Analyst LK

Recovery DST Recovery: 4250' Liquid. Tool Recovery: 700 cc's Water.

Mud type Water cushion

Resistivity 4.51 Ohm-meters @ 68 of Total Solids: Calculated 1,977 mg/liter
Specific gravity 1.0024 @ 60°F By evaporation @ 110°C - mg/liter
pH 9.05 H2S Absent By evaporation @ 180°C - mg/liter
Refractive Index 1.3334 @ 70°F At ignition - mg/liter

MILLIGRAMS PER LITER

Table with 12 columns: Na+K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 607, 9, 5, Pres., Abs., -, -, 258, 722, 352, 24, Nil.

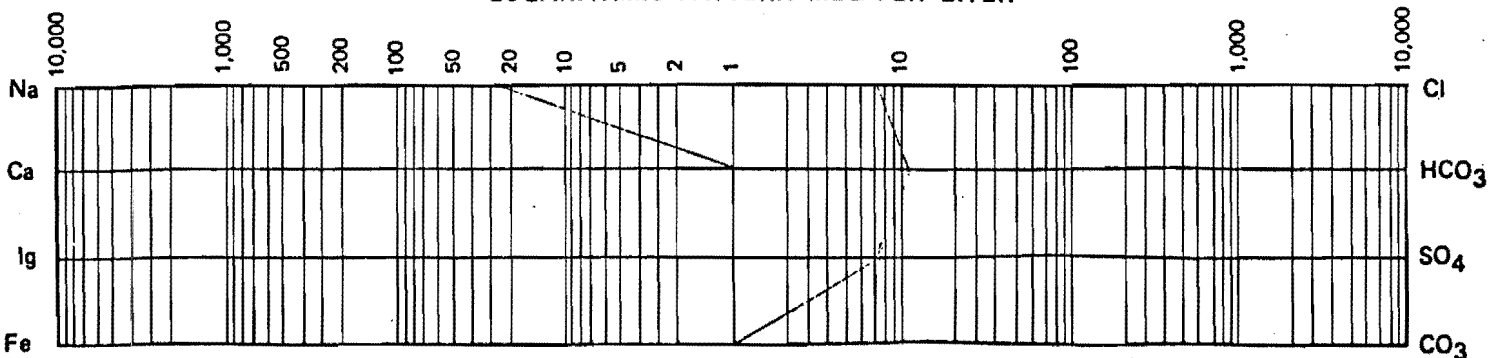
PER CENT CALCULATED SOLIDS

Table with 12 columns: Na+K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 30.7, .5, .3, Pres., Abs., -, -, 13.1, 36.5, 17.8, 1.2, .0.

MEQ PER LITER

Table with 12 columns: Na+K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 26.4, .4, .4, Pres., Abs., -, -, 7.3, 11.8, 7.3, .8, .0.

LOGARITHMIC PATTERN MEQ PER LITER



1285. 607.0



CORE LABORATORIES – CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



Company Inexco Oil Company Page 3 of 5
 Well Inexco Husky et al Porcupine YT G-31 File 921-2239
 Field Porcupine River Area, Yukon Analyst RT
 Location 66 20'22.00 N.L.
140 06'13.00 W.L. Elevation: K.B. _____ Grd. 3025'
 Formation _____ Depth 4893' - 5001'
 Sampled from DST #2 by Johnston Testers
 Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
 Date sampled _____ Date received March 13/72 Date analysed March 16/72
 Container pressure _____ Mud _____ Water cushion _____
 Recovery or flowrate: DST Recovery: 230' Liquid.
 Tool Recovery: 2600 mls Water.

Analysis

- Sample #1: *Benzene = Less than 0.5 ppm by volume
 *Toluene = Less than 0.5 ppm by volume
- Sample #2: *Benzene = Less than 0.5 ppm by volume
 *Toluene = Less than 0.5 ppm by volume
- Sample #3: *Benzene = Less than 0.5 ppm by volume
 *Toluene = Less than 0.5 ppm by volume

*Masked by other hydrocarbons.



CORE LABORATORIES - CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS



File 921-2239 Page 4 of 5

Company Inexco Oil Company

Well Inexco Husky et al Porcupine YT G-31 K.B. _____ Grd. 3025'
66 20'22.00 N.L.

Location 140 06'13.00 W.L. Field Porcupine River Area Province Yukon

Formation _____ Interval 4893' - 5001'

Sampled from DST #2 (MFE Chamber 527) by Johnston Testers

Date sampled _____ Date analysed March 16/72 Analyst LK

Recovery DST Recovery: 230' Liquid.
Tool Recovery: 2600 mls Water.

Mud type _____ Water cushion _____

Resistivity 5.16 Ohm-meters @ 66 °F Total Solids: _____

Specific gravity 1.0018 @ 60°F Calculated 1,618 mg/liter

pH 8.7 H₂S Absent By evaporation @ 110°C - mg/liter

Refractive Index 1.3327 @ 70°F By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
520	8	3	Trace	Abs.	-	-	287	366	424	10	Nil

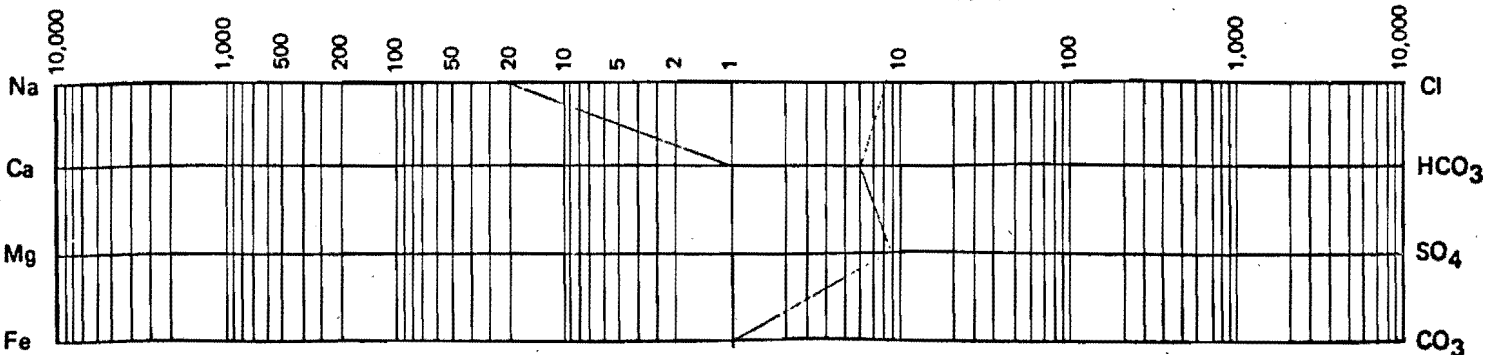
PER CENT CALCULATED SOLIDS

32.1	.5	.2	Trace	Abs.	-	-	17.7	22.6	26.2	.6	.0
------	----	----	-------	------	---	---	------	------	------	----	----

MEQ PER LITER

22.6	.4	.2	Trace	Abs.	-	-	8.1	6.0	8.8	.3	.0
------	----	----	-------	------	---	---	-----	-----	-----	----	----

LOGARITHMIC PATTERN MEQ PER LITER



1145. 520.0



CORE LABORATORIES - CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS



File 921-2239 Page 5 of 5

Company Inexco Oil Company

Well Inexco Husky et al Porcupine YT G-31 K.B. Grd. 3025'
66 20'22.00 N.L.

Location 140 06'13.00 W.L. Field Porcupine River Area Province Yukon

Formation Interval 5200 - Blaney line

Sampled from Drilling Fluid Sample by Johnston Testers

Date sampled March 7/72 Date analysed March 16/72 Analyst LK

Recovery

Mud type Water cushion

Resistivity 1.99 Ohm-meters @ 66 °F Total Solids: Calculated 3,639 mg/liter
Specific gravity 1.0033 @ 60°F By evaporation @ 110°C - mg/liter
pH 7.5 H2S Absent By evaporation @ 180°C - mg/liter
Refractive Index 1.3338 @ 70°F At ignition - mg/liter

MILLIGRAMS PER LITER

Table with 12 columns: Na + K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 1024, 201, 68, Trace, Abs., -, -, 1693, 273, 380, Nil, Nil

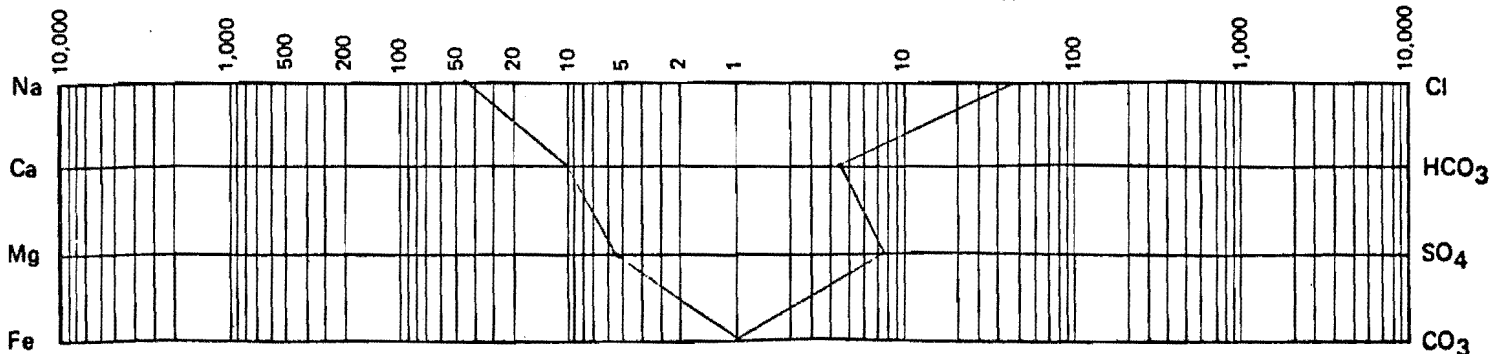
PER CENT CALCULATED SOLIDS

Table with 12 columns: Na + K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 28.1, 5.5, 1.9, Trace, Abs., -, -, 46.5, 7.5, 10.4, .0, .0

MEQ PER LITER

Table with 12 columns: Na + K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 44.5, 10.0, 5.6, Trace, Abs., -, -, 47.7, 4.5, 7.9, .0, .0

LOGARITHMIC PATTERN MEQ PER LITER



3308. 1024.0



CORE LABORATORIES – CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



Company Inexco Oil Company Page 1 of 5
 Well Inexco Husky et al Porcupine YT G-31 File 921-2317
 Field Porcupine River Area, Yukon Analyst RT
 Location 66 20'22.00 N.L.
140 06'13.00 W.L. Elevation: K.B. 3039' Grd. 3025'
 Formation Silurian Ordovician Depth 6315' - 6815'
 Sampled from DST #3 by Johnston Testers
 Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
 Date sampled March 23/72 Date received March 28/72 Date analysed March 30/72
 Container pressure _____ Mud _____ Water cushion _____
 Recovery or flowrate: 4930' Liquid.

Benzene and Toluene Determinations

<u>Sampled From</u>	<u>Description</u>	<u>Benzene (Volume %)</u>	<u>Toluene (Volume %)</u>
Sample Chamber	Clear Water	Trace (<0.05 ppm)	Trace (<0.05 ppm)
700' from Top	Grayish Brown Mud	Trace (<0.05 ppm)	Trace (<0.05 ppm)

Remarks: Traces of other hydrocarbons present. The can containing the sample chamber sample had apparently been opened prior to receipt in the lab. Some benzene and toluene may have been lost.



CORE LABORATORIES – CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS



File 921-2317 Page 2 of 5

Company Inexco Oil Company
 Well Inexco Husky et al Porcupine YT G-31 K.B. 3039' Grd. 3025'
66 20'22.00 N.L.
 Location 140 06'13.00 W.L. Field Porcupine River Area Province Yukon
 Formation Silurian Ordovician Interval 6315' - 6815'
 Sampled from DST #3 (Sample Chamber) by Johnston Testers
 Date sampled March 23/72 Date analysed March 30/72 Analyst LK
 Recovery 4930' Liquid.

Mud type _____ Water cushion _____

Resistivity 5.79 Ohm-meters @ 72 °F
 Specific gravity 1.0010 @ 60°F
 pH 7.5 H₂S Absent
 Refractive Index 1.3325 @ 74°F

Total Solids:
 Calculated 1,202 mg/liter
 By evaporation @ 110°C - mg/liter
 By evaporation @ 180°C - mg/liter
 At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
262	74	37	Trace	Abs.	-	-	191	132	506	Nil	Nil

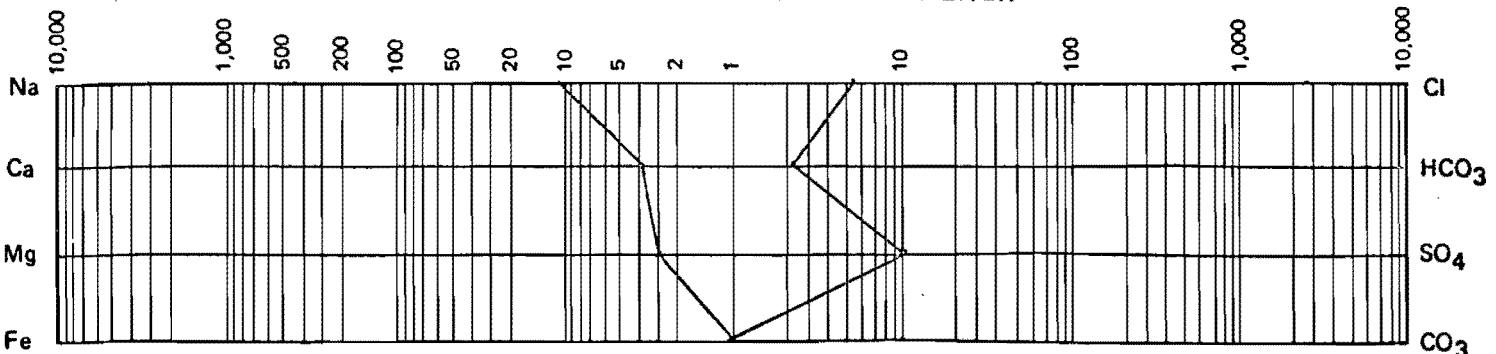
PER CENT CALCULATED SOLIDS

21.8	6.2	3.1	Trace	Abs.	-	-	15.9	11.0	42.1	.0	.0
------	-----	-----	-------	------	---	---	------	------	------	----	----

MEQ PER LITER

11.4	3.7	3.0	Trace	Abs.	-	-	5.4	2.2	10.5	.0	.0
------	-----	-----	-------	------	---	---	-----	-----	------	----	----

LOGARITHMIC PATTERN MEQ PER LITER



886. 262.0



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



Company Inexco Oil Company Page 3 of 5
Well Inexco Husky et al Porcupine YT G-31 File 921-2317
Field Porcupine River Area, Yukon Analyst LK
Location 66 20'22.00 N.L.
140 06'13.00 W.L. Elevation: K.B. 3039' Grd. 3025'
Formation Silurian Ordovician Depth 6315' - 6815'
Sampled from DST #3 (700' From Top) by Johnston Testers
Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
Date sampled March 23/72 Date received March 28/72 Date analysed March 30/72
Container pressure _____ Mud _____ Water cushion _____
Recovery or flowrate: 4930' Liquid.

Mud Filtrate Analysis

Resistivity 6.09 Ohm-meters @ 70°F
Chloride 15 mg/liter



CORE LABORATORIES - CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS



File 921-2317 Page 4 of 5

Company Inexco Oil Company

Well Inexco Husky et al Porcupine YT G-31 K.B. 3039' Grd. 3025'

Location 66 20'22.00 N.L. 140 06'13.00 W.L. Field Porcupine River Area Province Yukon

Formation Interval

Sampled from Water Supply by Johnston Testers

Date sampled March 24/72 Date analysed March 30/72 Analyst LK

Recovery

Mud type Water cushion

Resistivity 10.93 Ohm-meters @ 70 of Total Solids: Calculated 710 mg/liter
Specific gravity 1.0001 @ 60°F By evaporation @ 110°C - mg/liter
pH 6.2 H2S Absent By evaporation @ 180°C - mg/liter
Refractive Index 1.3325 @ 73°F At ignition - mg/liter

MILLIGRAMS PER LITER

Table with 12 columns: Na + K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 25, 158, 21, Pres., -, -, -, 52, 49, 405, Nil, Nil

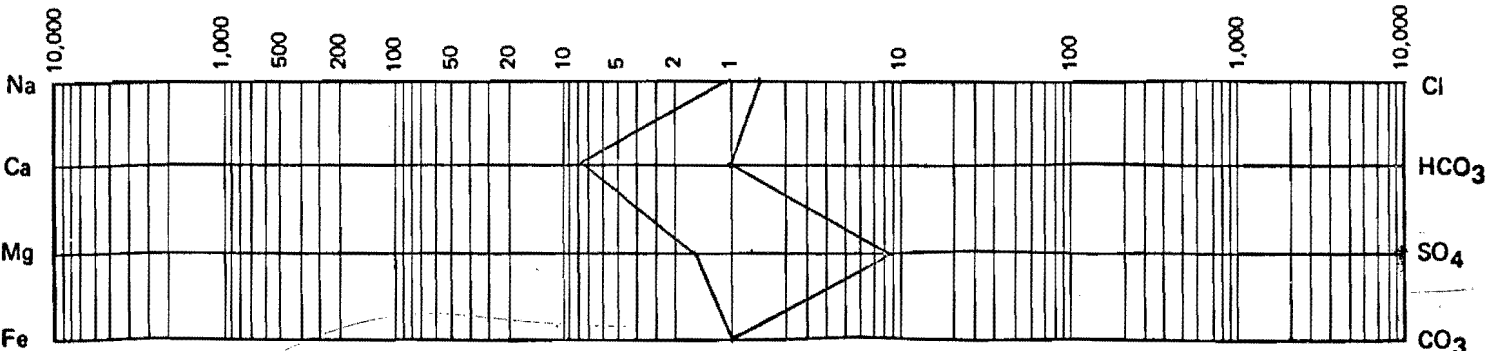
PER CENT CALCULATED SOLIDS

Table with 12 columns: Na + K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 3.5, 22.3, 3.0, Pres., -, -, -, 7.3, 6.9, 57.0, .0, .0

MEQ PER LITER

Table with 12 columns: Na + K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 1.1, 7.9, 1.7, Pres., -, -, -, 1.5, .8, 8.4, .0, .0

LOGARITHMIC PATTERN MEQ PER LITER



485. 25.0



CORE LABORATORIES - CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS



File 921-2317 Page 5 of 5

Company Inexco Oil Company

Well Inexco Husky et al Porcupine YT G-31 K.B. 3039' Grd. 3025'

Location 66 20'22.00 N.L. 140 06'13.00 W.L. Field Porcupine River Area Province Yukon

Formation Interval

Sampled from Water Supply by Johnston Testers

Date sampled March 24/72 Date analysed March 30/72 Analyst LK

Recovery

Mud type Water cushion

Resistivity 10.55 Ohm-meters @ 70 of

Specific gravity 1.0001 @ 60°F

pH 6.2 H2S Absent

Refractive Index 1.3325 @ 74°F

Total Solids:

Calculated 656 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Table with 12 columns: Na+K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 9, 155, 19, Pres., -, -, -, 7, 59, 407, Nil, Nil.

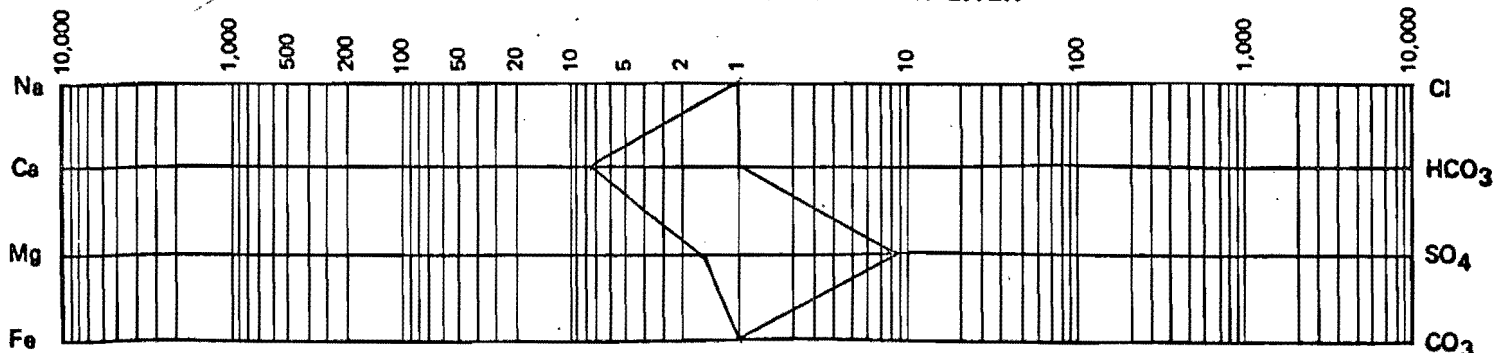
PER CENT CALCULATED SOLIDS

Table with 12 columns: Na+K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: 1.4, 23.6, 2.9, Pres., -, -, -, 1.1, 9.0, 62.0, .0, .0.

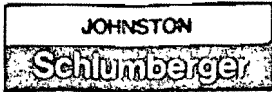
MEQ PER LITER

Table with 12 columns: Na+K, Ca, Mg, Fe, Ba, Br, I, Cl, HCO3, SO4, CO3, OH. Values: .4, 7.7, 1.6, Pres., -, -, -, .2, 1.0, 8.5, .0, .0.

LOGARITHMIC PATTERN MEQ PER LITER



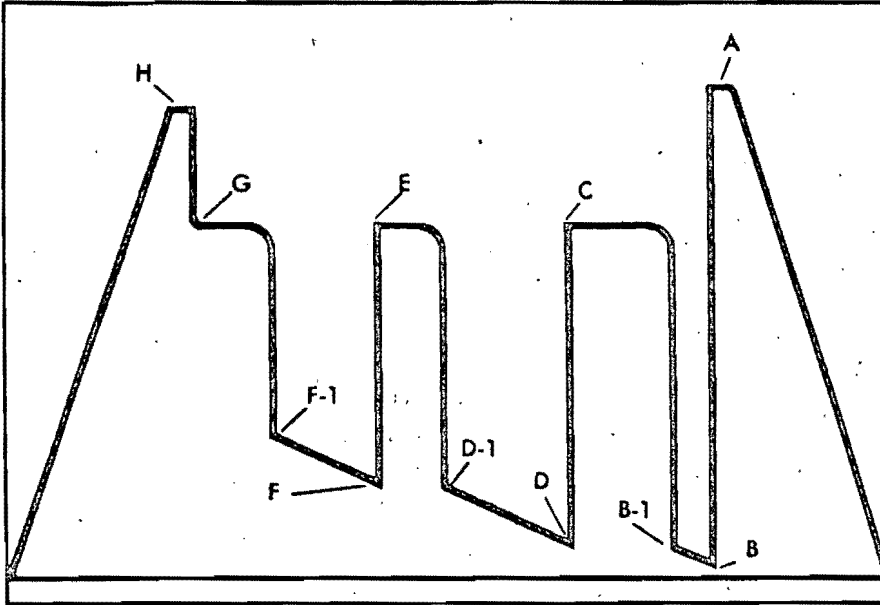
421. 9.0



GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.
D06302

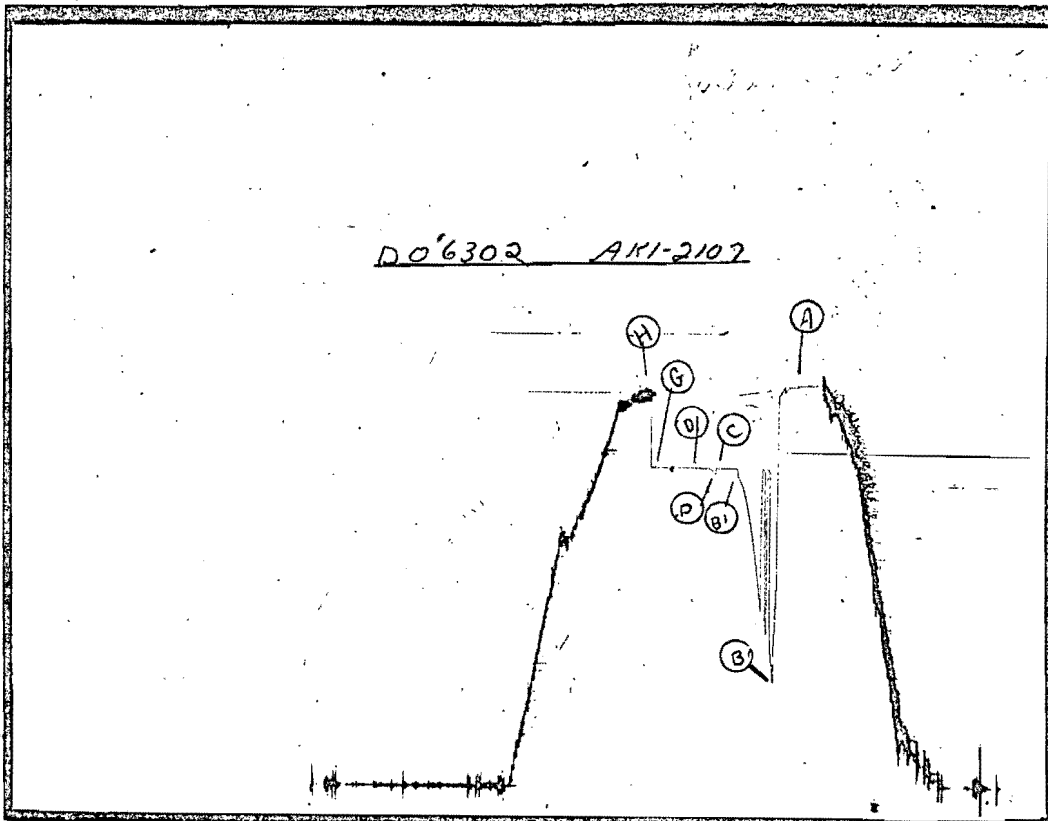
RECORDER NO.
AK1-2107

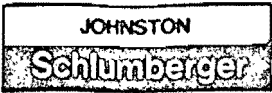


- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.





JOHNSTON TESTERS 321 50TH AVENUE S.E. • CALGARY 24, ALBERTA • PH. 259-1181
 A DIVISION OF SCHLUMBERGER CANADA LIMITED

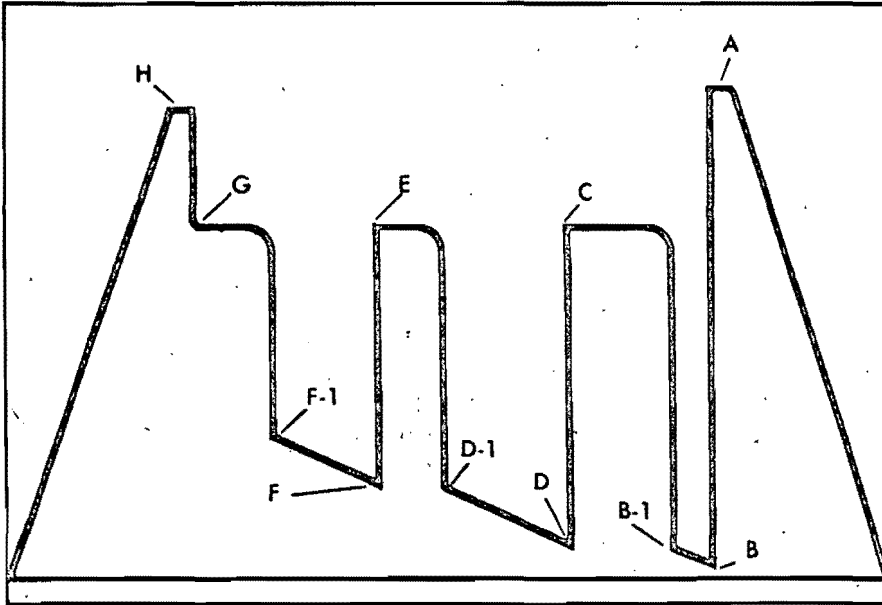
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD REPORT NO.

D06302

RECORDER NO.

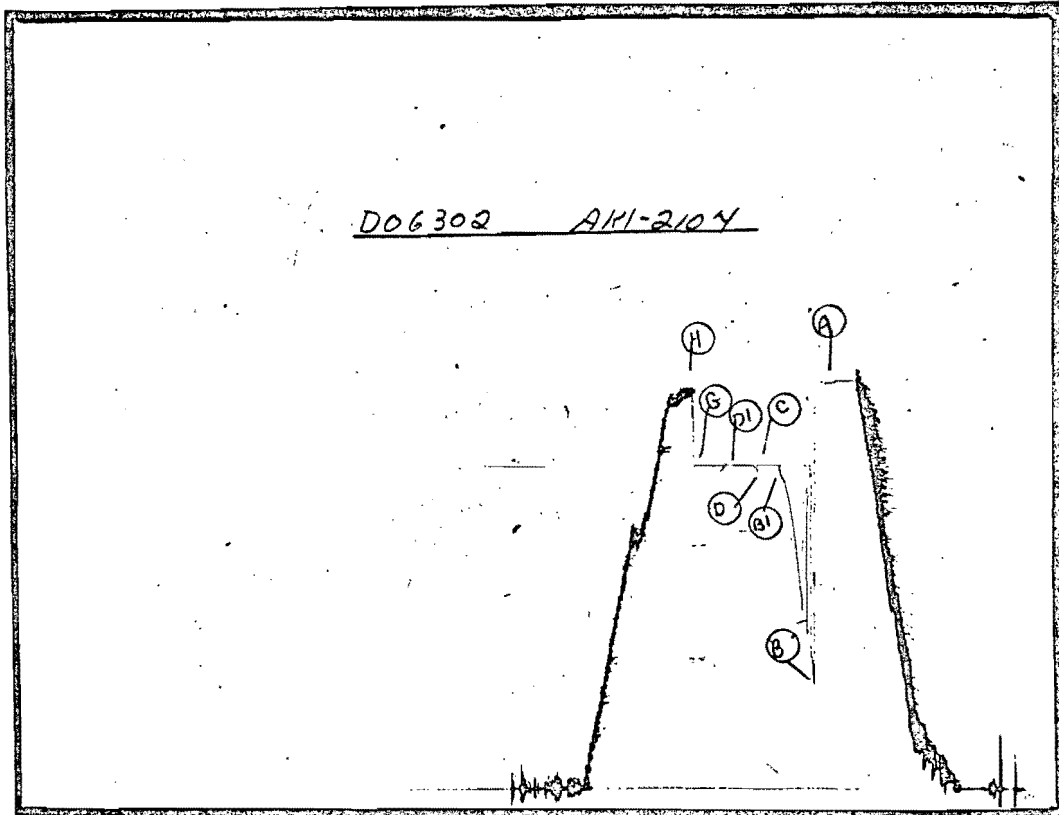
AK1-2104

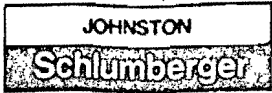


- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.



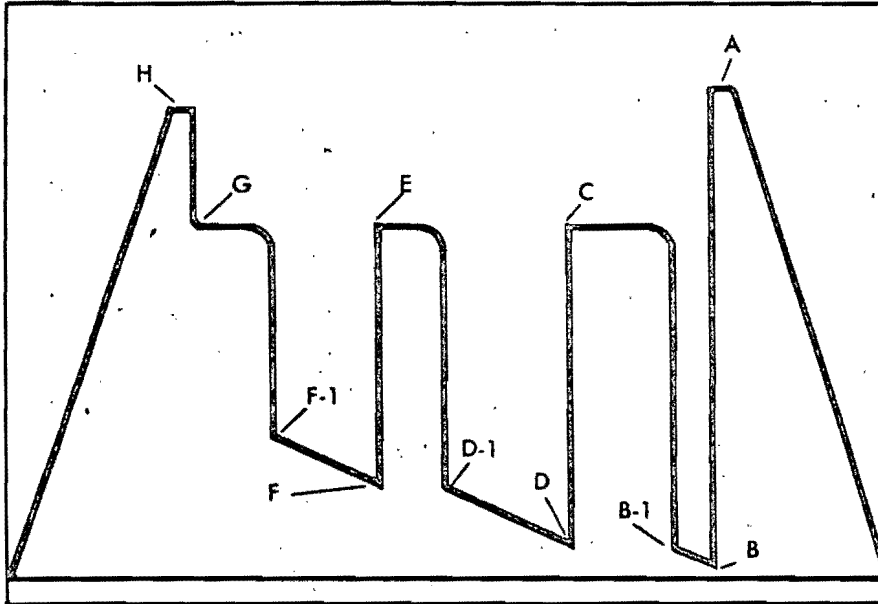


JOHNSTON TESTERS 321 - 50TH AVENUE S.E. • CALGARY 24, ALBERTA • PH. 255-1151
 A DIVISION OF SCHLUMBERGER CANADA LIMITED

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD REPORT NO.
 D06303

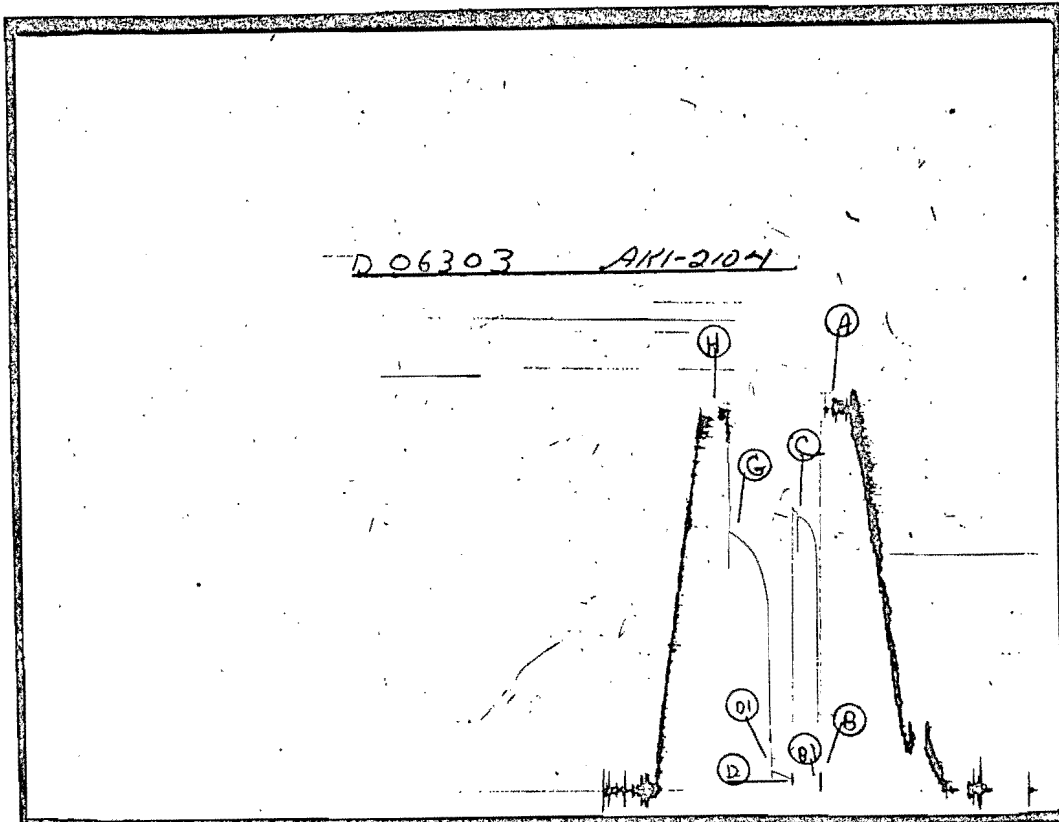
RECORDER NO.
 AK1-2104



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

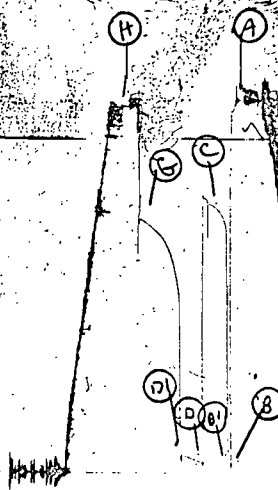
The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.



DO6303

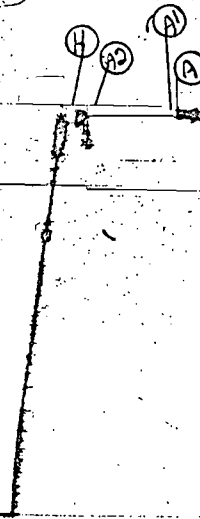
AKI-2107

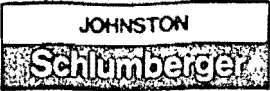


DO6303

AKI-2119

ran below straddle





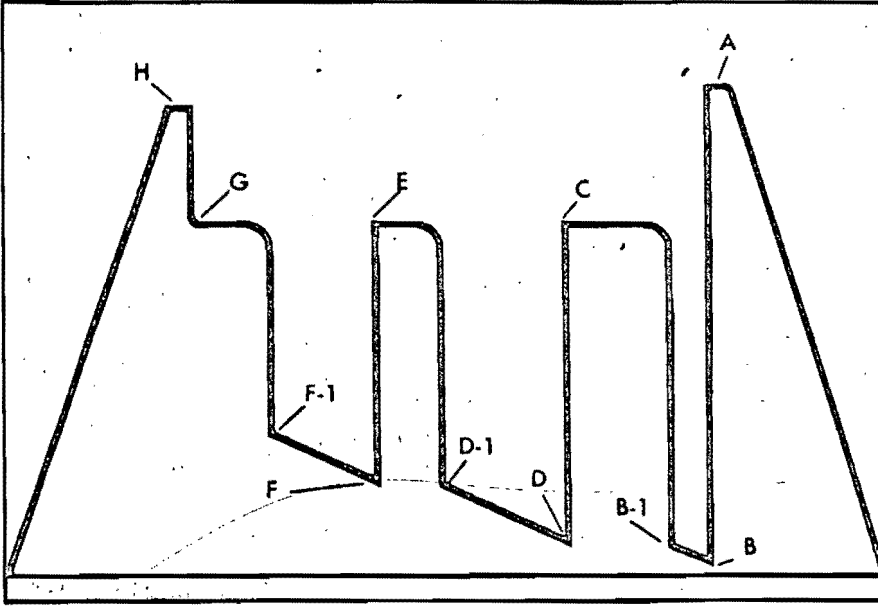
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

RECORDER NO.

D07176

AK1-2563



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown.

