

CORE LABORATORIES - CANADA, LTD.
CALGARY, ALBERTA

COMPANY PAN AMERICAN PETROLEUM CORPORATION
WELL PAN AM SHELL MERRILL YT-L-60

PAGE 4 of 5
FILE CNP-1-9544

SAMPLE NUMBER	INTERVAL REPRESENTED FEET		PERMEABILITY TO AIR MILLIDARCYS			PERMEABILITY FEET	POROSITY %	POROSITY FEET	DENSITY		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
80	5346.1-5346.7	0.6	* *	26.16	0.15	15.70	6.2	3.72	2.68	2.85	LV SV
81	5346.7-5347.8	1.1	62.96	17.84	0.19	69.26	4.4	4.84	2.72	2.84	LV SV
82	5347.8-5348.6	0.8	*	64.74	82.39	51.79	7.0	5.60	2.55	2.74	LV SV
83	5348.6-5349.6	1.0	18.87	17.17	0.31	18.87	2.8	2.80	2.75	2.83	LV SV Sty.
84	5349.6-5350.7	1.1	* *	35.62	0.08	39.18	5.8	6.38	2.68	2.84	LV SV
	5350.7-5351.2	0.5	* *	14628.00	1.30	7314.00	14.0	7.00	2.45	2.84	LV SV
	5351.2-5351.9	0.7	4.37	3.16	0.41	3.06	4.0	2.80	2.75	2.86	LV SV
87	5351.9-5352.5	0.6	119.00	52.71	0.35	71.40	8.0	4.80	2.61	2.84	LV SV
88	5352.5-5353.0	0.5	15.63	7.80	0.89	7.82	2.2	1.10	2.78	2.85	LV SV
89	5353.0-5353.7	0.7	71.82	32.66	0.37	50.27	4.8	3.36	2.70	2.84	LV SV
90	5353.7-5354.4	0.7	* *	45.35	0.79	31.75	3.7	2.59	2.74	2.84	LV SV Sty. HF
91	5354.4-5355.0	0.6	19.22	11.76	2.59	11.53	2.3	1.38	2.78	2.85	LV SV Sty.
92	5355.0-5355.7	0.7	* *	42.07	1.51	29.45	4.5	3.15	2.71	2.84	LV SV HF
93	5355.7-5356.7	1.0	57.90	43.04	0.18	57.90	4.8	4.80	2.68	2.82	LV SV
94	5356.7-5357.3	0.6	11862.00	39.33	12.18	7117.20	5.7	3.42	2.66	2.82	LV SV HF
95	5357.3-5358.3	1.0	* *	10.39	1.93	10.39	4.5	4.50	2.71	2.84	LV SV
96	5358.3-5358.8	0.5	* *	5337.00	14.18	2668.50	9.9	4.95	2.56	2.84	LV SV
97	5358.8-5359.4	0.6	31.07	24.13	18.17	18.64	2.2	1.32	2.78	2.84	SV Sty. HF
98	5359.4-5360.3	0.9	132.00	83.46	52.92	118.80	5.5	4.95	2.68	2.83	LV SV
99	5360.3-5360.7	0.4	*	129.00	21.41	51.60	8.4	3.36	2.59	2.83	LV SV
100	5360.7-5362.0	1.3	118.00	51.00	14.94	153.40	4.1	5.33	2.72	2.83	LV SV HF VF

Core No. 4 Cont'd

WELL:

PAN AM SHELL MERRILL YT L-60

FORMATION:

PAGE: 5 of 5

SUMMARY INTERVAL:

5240.0 - 5362.0

FILE: CNP-1-9544

TOTAL FOOTAGE:

122.0

FOOTAGE ANALYZED

121.0

FOOTAGE NOT ANALYZED:

TOTAL: 1.0 DENSE .0 LOST 1.0 DRILLED .0 NABR .0 RUBBLE .0

SUMMARY
OF
ANALYZED CORE:

TOTAL

FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS. %	POROSITY FEET	WEIGHTED AVERAGE PERM. MD.	PERM. FEET	WEIGHTED AVERAGE RESID. OIL %	WEIGHTED AVERAGE TOT. WATER %
121.0	100.00	2.68	324.53	171.04	20696.25	.00	.00
BY PERM RANGES:							
LESS THAN 0.10 Md.	7.2	5.95	.65	4.69	.00	.00	.00
0.10 0.49 Md.	6.0	4.96	.98	5.88	.29	1.72	.00
0.50 0.99 Md.	7.2	5.95	1.24	8.90	.80	5.73	.00
1.00 9.99 Md.	28.2	23.31	1.62	45.68	5.08	143.27	.00
GREATER THAN 9.99 Md.	72.4	59.83	3.58	259.38	283.78	20545.53	.00

BY
PERM
RANGES:

LESS THAN 0.10 Md.

7.2 5.95 .65 4.69 .00 .00 .00 .00

0.10 0.49 Md.

6.0 4.96 .98 5.88 .29 1.72 .00 .00

0.50 0.99 Md.

7.2 5.95 1.24 8.90 .80 5.73 .00 .00

1.00 9.99 Md.

28.2 23.31 1.62 45.68 5.08 143.27 .00 .00

GREATER THAN 9.99 Md.

72.4 59.83 3.58 259.38 283.78 20545.53 .00 .00

Received Mar. 4, 1969 Reported: Mar. 8, 1969

Well Location: (Pan Am. Shell Merrill A-1)

Operator: PAN AMERICAN PETROLEUM CORPORATION

Field or Area: Yukon

Level: K.B. Grd. Zone/Formation: Nahanni

Sample Interval: 4989' - 5362'

Method of Production: D.S.T. #1 Sampled from: Bottom

Sampled by: Date: Mar. 2, 1969

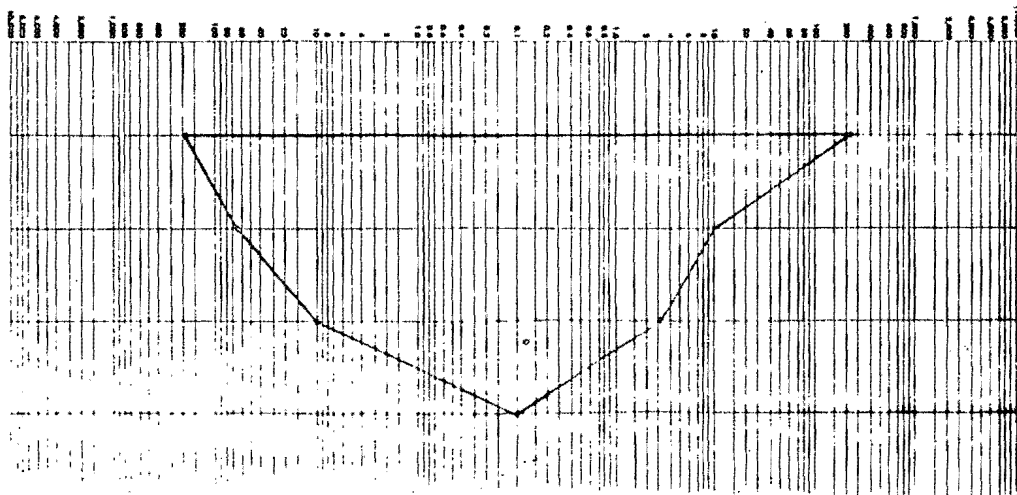
OTHER PERTINENT DATA

(Signed)

Na	K	Ca	Mg					SO ₄	Cl			CO ₂	HCO ₃		
4203		1299	126					155	8668				630		
182.81		64.82	10.36					3.22	244.44				10.33		
% 35.43		12.56	2.01					0.62	47.37				2.00		

Total Solids Mg/L: By Evaporation 16,536 Fe Present Specific Gravity 1.013 @60°F Observed pH 6.7 @ 72 °F
 Calculated 15,081 After Ignition 14,904 H₂S Nil Refractive Index 1.3362 @25°C Resistivity 0.511 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks & Conclusions: Analysis determined on colourless water filtered from muddy water.

- E69-9401-1 Drill fluid. Colourless water filtered from mud. Resistivity: 1.70 OHM meters @68°F
- E69-9401-2 Top. Colourless water filtered from mud. Resistivity: 0.923 OHM meters @68°F
- E69-9402-3 Middle. Colourless water filtered from slightly muddy water. Resistivity: 0.511 OHM meters @68°F

Received: March 13, 1969 Reported: March 18, 1969 Well: Location: (Pan Am Shell Merrill A-1) YT. L-60 60° 19' 30" 124° 26' 00"
 Operator: PAN AMERICAN PETROLEUM CORPORATION Field or Area: Yukon
 Elev.: K.B. Grd. Zone/Formation: Nahanni Sample Interval: 4989' - 5362'
 Method of Production: D.S.T. #1 Sampled from: Bottom Sampled by: --- Date: March 2, 1969

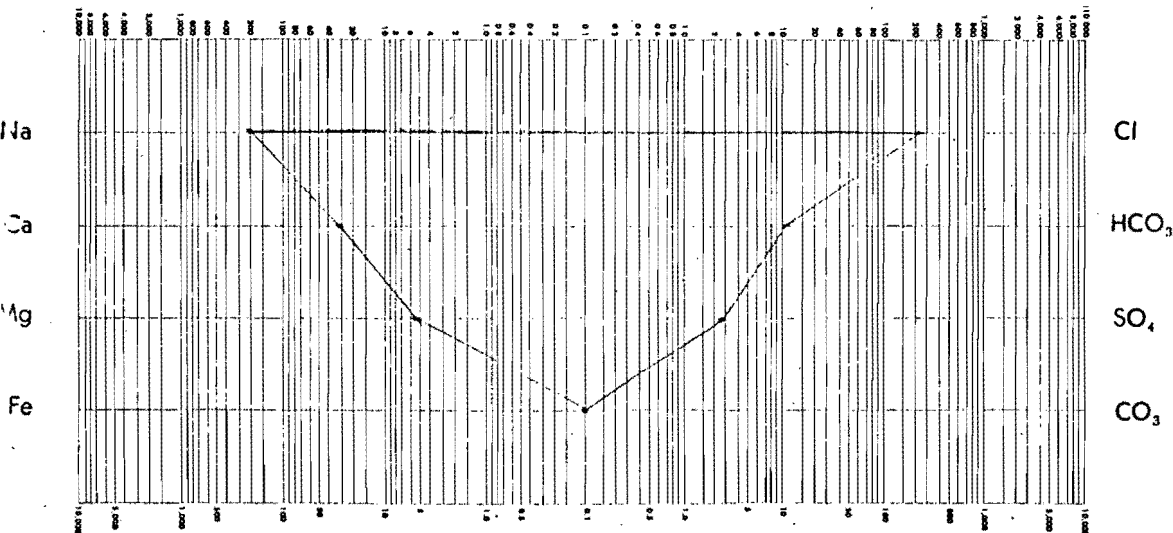
OTHER PERTINENT DATA "Whitecourt Area"

(Signed)

	Na	K	Ca	Mg				SO ₄	Cl			CO ₃	HCO ₃		
Mg./L	5057		639	68				140	8660				630		
eq./L	219.97		31.89	5.59				2.91	244.21				10.33		
eq. %	42.72		6.19	1.09				0.57	47.43				2.01		

Total Solids Mg/L: By Evaporation 16,360 Fe Present Specific Gravity 1.012 @60°F Observed pH 6.7 @ 74 °F
 Calculated 15,194 After Ignition 14,332 H₂S Nil Refractive Index 1.3360 @25°C Resistivity 0.508 ohm meters @68 °F

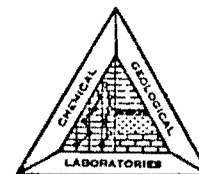
Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on light greenish coloured water filtered from muddy water.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.



OPERATOR: PAN AMERICAN PETROLEUM CORPORATION

REPORT NUMBER: E69-9471

DATE SAMPLED: March 2, 1969

DATE RECEIVED March 13, 1969

DATE REPORTED March 18, 1969

Pan Am Shell Merrill YF-L-60
 WELL: (Pan Am. Shell Merrill A-1)
 YF L-60 60° 19' 30" 124° 26' 00"

LOCATION: 60° 19' 30" 124° 26' 00'

FORMATION: Nahanni

FIELD: Yukon

METHOD OF PRODUCTION: D.S.T. #1

INTERVAL: 4989' - 5362'

"Whitecourt Area"

<u>LABORATORY NUMBER</u>	<u>IDENTIFICATION</u>	<u>RESISTIVITY (OHM-METERS @ 68°F.)</u>	<u>REMARKS & CONCLUSIONS</u>
E69-9471-1:	Drill fluid	1.74	Water filtered from mud.
E69-9471-2:	Top sample	0.896	Water filtered from watery mud.
E69-9471-3:	Middle sample	0.515	Water with some black sediment present.

PAN AM SHELL MERRILL YF-L-60
(Pan Am Shell Merrill A-1)

UNIT L SECT. 60, GRID 60°20'N, 124°15'W

YUKON TERRITORIES

SAMPLE DESCRIPTIONS

- 0 - 30' No samples.
- 30' - 50' Shale, medium dark grey, micro-micaceous, soft, platy to blocky, slightly calcareous; trace of silt, with interbeds of quartz sandstone, very fine to fine grained, dirty brown - grey, calcareous; trace of limestone, medium brown - grey, argillaceous.
- 50' - 100' Dark grey Shale, micro-micaceous, soft, platy, bituminous; trace of ironstone, pyrite and silt.
- 100' - 190' Dark grey Shale with abundant pyrite, very slightly calcareous, trace of ironstone and anhydrite stringers.
- 190' - 410' Dark grey Shale, as above, with slight traces of siltstone, pyrite and anhydrite stringers.
- 410' - 550' Dark grey Shale; abundant pyrite; anhydrite stringers; trace of clear quartz and ironstone and siltstone.
- 550' - 600' Dark grey Shale, micro-micaceous, soft; trace of silt, very slightly calcareous; trace of ironstone.
- 600' - 850' Dark grey Shale, silty and sandy, with anhydrite stringers and pyrite; trace of ironstone.
- 850' - 1060' Dark grey Shale; trace of anhydrite stringers; trace of pyrite, silt and ironstone.
- 1060' - 1100' Dark grey Shale; with traces of silt, anhydrite, pyrite and black shale.
- 1100' - 1270' Dark grey Shale; some black shale, micro-micaceous, soft, silty; trace of dolomite, pyrite and anhydrite.
- 1270' - 1290' Dark grey Shale, as above, with increase in amount of sandy siltstone; trace of pyrite and monaxon spicules; traces of dolomite and ironstone.
- 1290' - 1690' Shale, dark grey to black, micro-micaceous, soft, silty, platy to blocky, slightly calcareous; traces of anhydrite, pyrite and dolomite.
- 1690' - 1940' Dark grey Shale, as above; traces of pyrite, monaxon spicules and dolomite.

- 1940' - 2030' Dark grey Shale and Limestone, very fine crystalline, argillaceous, grey white to dark grey speckled; trace of anhydrite in fractures; trace of pyrite and trace of crinoids.
- 2030' TOP OF MISSISSIPPIAN LIMESTONE AND SHALE UNIT
- 2030' - 2120' Limestone, fine crystalline, white - brown/dark grey; pyritic shale interbeds, very dark grey to black; trace of chert and anhydrite.
- 2120' - 2210' Shale, as above; with interbedded limestone, very argillaceous; trace of pyrite and anhydrite.
- 2210' - 2260' Limestone and Shale, as above, interbedded; trace of anhydrite and pyrite.
- 2260' - 2410' Shale, dark grey to black, as above; and Limestone, as above; shale is slightly silty; slight trace of pyrite.
- 2410' - 2590' Shale, dark grey and black; some limestone and siltstone; trace of pyrite and crinoid fragments; some monaxon spicules at base.
- 2590' - 2660' Shale, dark grey, some black, silty and limy; monaxon spicules. More crinoids than in interval above.
- 2660' - 2800' Shale, dark grey, black, micro-micaceous, silty; trace of limestone; abundant monaxon spicules; one crinoid fragment at 2770'.
- 2800' - 3395' Shale, dark grey to black, interbedded, soft, micro-micaceous and hard, slightly silty; trace of pyrite, limestone and monaxon spicules.
- 3395' TOP FIRST BLACK SHALE
- 3395' - 3740' Shale, dark grey, very dark grey and black, silty; trace of pyrite and limestone.
- 3740' - 3920' Shale, dark grey, silty and pyritic; trace of limestone in fractures and monaxon spicules.
- 3920' - 4440' Shale, very dark grey to black, micro-micaceous, flaky to platy and silty, pyritic, with scattered crinoid fragments; traces of dolomite and limestone.
- 4440' - 4480' Shale, as above; with traces of dolomite and pyrite; monaxon spicules and tasmanites.
- 4458' TOP SECOND BLACK SHALE
- 4480' - 4750' Shale, black, slightly bituminous, pyritic, slightly silty; trace of dolomite; trace of slickensides.

- 4750' - 4850' Shale, dark grey and black, pyritic, some calcite in fractures and abundant monaxon spicules; trace of dolomite and trace of limestone.
- 4850' - 4990' Shale, dark grey to black, slightly calcareous to very calcareous near base. Shale is pyritic; scattered calcite in fractures and scattered monaxon spicules; traces of chalky limestone.
- 4990' TOP OF MIDDLE DEVONIAN CARBONATE
- 4990' - 5010' Black Shale, as above; very calcareous limestone and dolomite in fractures; trace of pyrite; dolomite and limestone content increasing at base.
- 5010' - 5090' Limestone, medium grey, medium crystalline, slightly argillaceous, mainly white, some fine fractures filled with calcite, some brachiopod shell fragments and shale as above; trace of dolomite; porosity - negative.
- 5090' - 5230' Dolomite, white, slightly limy, coarse crystalline; minor pyrobitumen; grey shale; maximum porosity 3%.
- 5230' - 5362' Limestone and dolomite, as above, with trace of grey shale
T.D. and pyrite; average porosity 3%.

PAN AM SHELL MERRILL YT-L-60
(Pan Am Shell Merrill A-1)

UNIT L SECT. 60, GRID 60°20'N, 124°15'W

CORE DESCRIPTIONS

- Core No. 1 5240' - 5261.3' Full Recovery 21.3'
- Limestone, white, trace of corals, brachiopods and stromatoporphoids, especially in top 5' and last 3'.
Porosity poor throughout. Fossils and fractures completely replaced with Limestone and Dolomite.
- Core No. 2 5261.3' - 5295.7' Full Recovery 34.4'
- Top 13' secondary white Dolomite, coarse crystalline, very fossiliferous, vertical fractures scattered; porosity to 4%.
- Middle 19' dolomitic Limestone; few fossils; open vugs and fractures; shale breaks; porosity 1 - 2%.
- Bottom 2.4' 100% Dolomite, white, coarse crystalline, very vuggy, brecciated and recemented; porosity 6 - 8%.
- Core No. 3 5295.7' - 5326.2' Full Recovery 29.5'
- First 4.3' Limestone, tight, no vugs; next 3' Dolomite, coarse to fine crystalline, vugs pinpoint to 1" in diameter; trace of stylolites; porosity 6%; next 4' tight Limestone with fossil traces; last 19.2' Dolomite with some Limestone, many fossils, vugs to 1", stylolites; average porosity 3 - 4%.
- Core No. 4 5326.2' - 5362.0' Full Recovery 35.8'
- 2.5' tight Limestone; 2.3' tight Dolomite with vague fossils; 3.5' Dolomite, white, coarse crystalline and fossiliferous; vugs to $\frac{1}{2}$ " in diameter; porosity 4 - 5%; 2' tight grey Dolomite; 6.5' tight grey Limestone with shale breaks; last 19' is $\frac{2}{3}$ secondary coarse crystalline Dolomite, some medium crystalline - $\frac{1}{3}$ is dolomitic Limestone and limy Dolomite, often fossiliferous (stroms?), occasional stylolites, fractures; average porosity 4%.

WELL HISTORY REPORT

PAN AM SHELL MERRILL YT-L-60
(PAN AM SHELL A-1 MERRILL)

UNIT L SECT. 60, GRID 60°20'N, 124°15'W
YUKON TERRITORIES

WELL HISTORY REPORT

PAN AM SHELL MERRILL YT-L-60

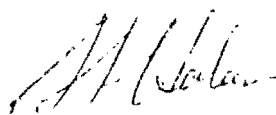
UNIT L SECT. 60, GRID 60°20'N, 124°15'W

YUKON TERRITORIES

CONFIDENTIAL

By:
W.M. Liesemer
S.G. Professional Assn

Approved By:


A.F. Holan
Area Foreman

PAN AMERICAN PETROLEUM CORPORATION
444 - 7th Ave. S.W.
Calgary 2, Alberta

March 31, 1969

I N D E X

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A T T A C H M E N T S

GEOLOGICAL SUMMARY
CORE ANALYSIS
WATER ANALYSIS

(n) Well Status
Well Abandoned

(o) Rig Released
3-6-69

(p) Hole Size
24" 0 - 55'
17½" 55 - 516'
12¼" 516 - 3831.5'
8½" 3831.5 - 5362

(q) Casing
Casing Size: 20" Conductor
Grade : N/A
Weight : N/A
Amount : N/A
Set At : 55' with 90 sacks cement + 3% CaCl₂

Casing Size: 13-3/8"
Grade : J-55
Weight : 54.5#
Amount : 16 Jts.
Set At. : 516' with 525 sacks cement + 3% CaCl₂

Casing Size: 9-5/8"
Grade : K-55
Weight : 40
Amount : 121 Jts.
Set At : 3831.5' with 400 sacks neat + 200 sacks + 6% gel tailed
by 400 sacks neat.

SECTION II

GEOLOGICAL SUMMARY

See Attachment

SECTION III

ENGINEERING SUMMARY

(a) Drill Stem Tests
D.S.T. #1 3-2-69 (4989' - 5362')
Mid-Devonian Carbonate
Prewflow 5 min. I.S.I. - 60 min. T.O. - 120 min., F.S.I. - 60 mins.
GIP, dec. to weak. Good steady air blow for 120 mins.
Rec. 4960' fluid - 120' mud, 4840' brackish sulphurous water.
I.S.I.P. - 2446, F.S.I.P. - 2413, F.F.P. - 2226.
I.H.P. - 2419, F.H.P., 2405.

SECTION I

SUMMARY OF WELL DATA

- (a) Well Name and Number
Pan Am Shell Merrill YT-L-60
- (b) Permittee
Shell Canada Limited
- (c) Operator
Pan American Petroleum Corporation, 444 - 7th Avenue S.W.,
Calgary 2, Alberta.
- (d) Location
L-60 Grid Area 60°20'N, 124°15'W.
Lat. 60°19'30" Long. 124°26'00"
Universal Well Location Reference
Lat. 60.32500°N. Long. 124.43333°W.
Unique Well Location
300 L 60 60 20 124 15 0
- (e) Co-ordinates
NIL
- (f) Permit No.
2722
- (g) Drilling Contractor
Name: Brinkerhoff Bros. Ltd.
RIG#: 42H
TYPE: Rotary
- (h) Drilling Authority
#348
1-21-69
- (i) Classification
Exploratory Outpost
- (j) Elevations
Ground: 1937.5'
K.B. : 1950'
- (k) Spudded
1-24-69
- (l) Completed Drilling
3-1-69
- (m) Depths
Total Depth - 5362'
Plug Back Depth - No production casing run.

(b) Casing Record

Conductor Pipe

Hole Size - 24"
Conductor Size - 20"
Weight - N/A
Grade - N/A
Joints Run - N/A
KB Setting Depth - 55'
Cement & Additives - 90 Sk. +3% Cacl₂
Date Run - 1-25-69
Date Cemented - 1-25-69

Surface Casing

Hole Size - 17-1/2"
Casing Size - 13-3/8"
Weight - 54.5
Grade - J-55
Joints Run - 16 Jts.
KB Setting Depth - 516.3'
Cement & Additives - 525 Sk. plus 3% Cacl₂
Date Run - 1-29-69
Date Cemented - 1-29-69

Intermediate Casing

Hole Size - 12-1/4"
Casing Size - 9-5/8"
Weight - 40
Grade - K-55
Joints Run - 121
KB Setting Depth - 3331.5
Cement & Additives - 400 Sk. neat +200 Sk. 6% gel. Tailed
by 400 Sk. neat.
Date Run - 2-20-69
Date Cemented - 2-20-69

Production Casing

NIL

(c) Bit Record

<u>BIT #</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MAKE</u>	<u>IN</u>	<u>OUT</u>	<u>FT.</u>	<u>HOURS</u>
1	12-1/4	YTL	Reed		Drlg.	Rathole	
2	24	OSCQ2	H.W.	0	55	55	24
3	17-1/2	YSI	Reed	55	516	466	27-1/4
4	12-1/4	YMGJ	Reed	516	1296	780	35-1/4
5	12-1/4	DMNJ	Sec.	1296	1606	310	22-1/4
6	12-1/4	M4LG	Sec.	1606	1831	275	25-3/4

<u>BIT #</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MAKE</u>	<u>IN</u>	<u>OUT</u>	<u>FT.</u>	<u>HOURS</u>
7	12-1/4	YTL-J	Reed	1881	1946	65	9-3/4
8	12-1/4	VHGJ	Reed	1946	2011	65	11-3/4
9	12-1/4	5JS	Smith	2011	2607	596	55
10	12-1/4	SC5G-J	Reed	2607	2608	4	1
11	12-1/4	DMNJ	Sec.	2608	2827	219	29
12	12-1/4	YHG-J	Reed	2827	2957	130	16
13	12-1/4	YMG-J	Reed	2957	3258	301	39-3/4
14	12-1/4	M4NG-J	Sec.	3258	3706	445	36
15	12-1/4	H7G-J	Sec.	3706	3833	127	11-1/4
16	8-1/2	YMG-J	Reed	3833	3893	60	3
17	8-1/2	YMG-J	Reed	3893	4112	219	11-3/4
18	8-1/2	YMG-J	Reed	4112	4860	748	35-3/4
19	8-1/2	SCM-J	Reed	4860	5229	379	27-3/4
20	8-1/2	SCM-J	Reed	5229	5240	11	3/4
1	8-1/2	Christensen		5240	5261	21	2-3/4
2	8-1/2	Christensen		5261	5295	34	6
3A	8-1/2	Christensen		5295	5326	31	5-3/4
4	8-1/2	Christensen		5326	5362	36	6

(d) Mud Report
 (Milgel - Benex) gel - 69,900 Lbs. Benex - 265 Lbs.

(e) Deviation Record

<u>Depth</u>	<u>Deviation (Degrees)</u>
172	1/4
200	1/8
231	1/4
262	1/4
324	3/8
380	7/8
413	3/4
473	7/8
504	7/8
572	7/8
662	1-1/8

<u>DEPTH</u>	<u>DEVIATION(Degrees)</u>
722	7/8
813	1-1/2
873	1-1/8
1085	1-1/4
1145	1-1/4
1236	2-1/2
1266	2-1/4
1420	3
1480	3-1/2
1541	4
1600	5
1625	5-1/8
1685	4-7/8
1690	4-7/8
1723	4-5/8
1753	4-7/8
1783	4-3/4
1814	4-5/8
1844	4-7/8
1904	4-5/8
1934	4-5/8
1972	Misrun
2002	4-1/2
2011	4-5/8
2030	4-1/2
2063	4-1/2
2093	4-1/4
2153	4-1/4
2240	3-1/2
2334	4
2425	4
2516	4-7/8
2577	5-7/8
2607	7-1/4
2637	7-1/4
2667	7-1/2
2697	7-3/4
2725	7-3/4
2756	7-3/4
2785	8-1/4
2814	9-1/2
2830	9-1/2
2874	8-1/2
2904	8-3/4
2934	8-3/4
2962	8-3/4
2992	8
3022	7-7/8
3053	7-7/8
3083	7-7/8
3115	7-5/8
3142	8
3203	8
3233	8
3295	3-1/8

<u>Depth</u>	<u>Deviation(Degrees)</u>
3356	7-3/4
3415	8
3446	7-3/4
3476	7-3/4
3535	7
3595	7
3687	7
3706	6-3/4
3833	6
3772	5-3/4
3893	5
3978	4-1/4
4068	4-1/2
4158	4
4949	4-1/2
5071	4-1/2
5192	6
4706	5
4828	5-1/2
4310	4-1/2
4374	4-3/4
4462	4-3/4
4583	5
5229	5-3/4

(f) Abandonment Plugs

Plug #1 3-5-69 (5362 - 4940) 215 Sx, No Feel.
 Plug #2 3-5-69 (3893 - 3770) 100 Sx, +2.5% Cacl₂ felt @ 3670'
 Plug #3 3-5-69 Pump 135 Sx. down 9-5/8 - 13-3/8 annulus.(300-600')
 Spot 5 Sx. surface plug. Weld 1/4" plate
 on csg.

(g) Lost Circulation Zones

NIL

(h) Report of Blowouts

NIL

SECTION IV

LOGS

<u>DATE</u>	<u>RUN NO.</u>	<u>TYPE</u>	<u>INTERVAL</u>
2-17-69	1	DIL.S.	3829 - 516
2-17-69	1	BHC-SCR Caliper	3829 - 516
2-18-69	1	Cont. Dipmeter	3826 - 550
3-3-69	2	DIL.S.	5362 - 3834
3-3-69	2	BHC-SCR Caliper	5365 - 3834
3-3-69	1	Sidewall Neutron Porosity	5364 - 3834
3-3-69	1	Formation Density	5364 - 3834
3-3-69	2	Cont. Dipmeter	5362 - 3840
3-3-69	1	Porosity Lith- ology	5362 - 3834

SECTION V

ANALYSIS

- (a) Core analysis - See Attachment Lab Report #CNP-1-9544
- (b) Water Analysis - See Attachment # E69-9401-4, E69-9471-1-2-3-4
- (c) Gas Analysis - NIL
- (d) Oil Analysis - NIL

SECTION VI

COMPLETION SUMMARY

NIL - Well Was Abandoned

CORE LABORATORIES— CANADA, LTD.
CALGARY, ALBERTA

COMPANY PAN AMERICAN PETROLEUM CORPORATION
WELL PAN AM SHELL MERRILL YT-L-60
FIELD WILDCAT, YUKON TERRITORY
LOCATION 60° 19' 30.00 NL
124° 26' 00.00 WL

FORMATION DRILLING FLUID WATER BASE
ELEVATION -
ANALYSIS FULL DIAMETER
REMARKS Glazed surface on all samples removed prior
to permeability measurements

PAGE 1 of 5
FILE CNP-1-9544
DATE REPORT APRIL 2/69
ANALYSTS

AST - APPEARS SIMILAR TO * - BROKEN CORE IK90 - USED FOR SUMMARY PURPOSES ** - PERMEABILITY > 30000 MD FS - FINE SAND	MS - MEDIUM SAND CS - COURSE SAND CONG - CONGLOMERATE DOL - DOLOMITE SH - SHALE	LMY - LIMY SHY - SHALY /BK - BREAK BIT - PYROBITUMEN CARB - CARBONACEOUS	A - ANHYDRITE FOSS - FOSSILIFEROUS XLN - CRYSTALLINE LAM - LAMINATIONS V - VUGULAR	LV - LARGE VUGS SV - SMALL VUGS PPV - PIN POINT VUGS I - INTERGRANULAR STY - STYOLITIC	HF - HORIZONTAL FRACTURE VF - VERTICAL FRACTURE SS - SMALL SAMPLE SL - SLIGHTLY V - VERY WI - WITH
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SAMPLE NUMBER	INTERVAL REPRESENTED FEET		PERMEABILITY TO AIR MILLIDARCYS			PERMEABILITY FEET	POROSITY %	POROSITY FEET	DENSITY		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
CORED INTERVAL 5240.0' - 5362.0'											
CORE No. 1 5240.0' - 5261.4' (Rec. 21.4') (5 BOXES)											
1	5240.0-5241.4	1.4	<0.01	<0.01	<0.01	-	0.6	0.84	2.70	2.72	l, Sty.
2	5241.4-5242.8	1.4	<0.01	<0.01	<0.01	-	0.3	0.42	2.70	2.71	l, Sty.
3	5242.8-5244.0	1.2	*	0.25	*	0.30	2.6	3.12	2.69	2.76	l, Sty. VF
4	5244.0-5245.5	1.5	*	2.85	<0.01	4.28	1.2	1.80	2.73	2.76	l, Sty. HF
5	5245.5-5246.5	1.0	1.39	0.53	<0.01	1.39	0.9	0.90	2.71	2.74	l, Sty. HF
6	5246.5-5247.3	0.8	0.53	0.33	<0.01	0.42	2.7	2.16	2.74	2.82	l, Sty. HF Calcite
7	5247.3-5248.4	1.1	*	1.42	*	1.56	4.2	4.62	2.68	2.79	l, Sty. HF VF
8	5248.4-5249.7	1.3	<0.01	<0.01	<0.01	-	0.8	1.04	2.71	2.73	l, Sty.
9	5249.7-5251.2	1.5	4.25	3.82	<0.01	6.38	1.1	1.65	2.68	2.70	l, HF Sty.
10	5251.2-5253.0	1.8	3.18	2.58	<0.01	5.72	0.9	1.62	2.68	2.71	l, Sty. HF
11	5253.0-5254.5	1.5	7.01	3.71	<0.01	10.52	0.9	1.35	2.68	2.70	l, Sty. HF
12	5254.5-5256.2	1.7	0.91	0.46	<0.01	1.55	0.8	1.36	2.73	2.75	l, Sty. HF
13	5256.2-5258.0	1.8	0.73	0.16	<0.01	1.31	0.9	1.62	2.70	2.72	l, Sty. HF
14	5258.0-5259.0	1.0	4.52	3.18	<0.01	4.52	1.7	1.70	2.76	2.81	PPV l, Sty. HF
15	5259.0-5260.0	1.0	*	9.81	<0.01	9.81	2.1	2.10	2.74	2.80	l, Sty. HF
16	5260.0-5261.4	1.4	<0.01	<0.01	<0.01	-	1.1	1.54	2.70	2.73	l, Sty.
CORE No. 2 5261.4' - 5295.7' (Rec. 34.3') (8 BOXES)											
17	5261.4-5262.2	0.8	* *	7.39	<0.01	5.91	8.5	6.80	2.59	2.83	LV SV Calcite
18	5262.2-5263.0	0.8	34.44	24.48	<0.01	27.55	2.2	1.76	2.77	2.83	LV SV Sty. HF
19	5263.0-5264.0	1.0	32.10	28.00	<0.01	32.10	3.7	3.70	2.72	2.83	LV SV Sty. HF Calcite
20	5264.0-5264.8	0.8	141.20	47.52	0.09	112.96	3.3	2.64	2.75	2.84	LV SV Sty. HF
AST											
# 19	5264.8-5265.8	1.0	32.10	28.00	<0.01	32.10	3.7	3.70	-	-	AST # 19, Broken Core
21	5265.8-5267.8	2.0	*	13.53	*	27.06	3.5	7.00	2.74	2.83	SV HF VF
AST											
# 21	5267.8-5272.5	4.7	*	13.53	*	63.59	3.5	16.45	-	-	AST # 21, Broken Core

CORE LABORATORIES - CANADA, LTD.
CALGARY, ALBERTA

COMPANY PAN AMERICAN PETROLEUM CORPORATION
WELL PAN AM SHELL MERRILL YT-L-60

PAGE 2 of 5
FILE CNP-1-9544

SAMPLE NUMBER	INTERVAL REPRESENTED FEET		PERMEABILITY TO AIR MILLIDARCYS			PERMEABILITY FEET	POROSITY %	POROSITY FEET	DENSITY		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
Core No.2 Cont'd											
22	5272.5-5273.8	1.3	1.30	0.94	<0.01	1.69	2.2	2.86	2.75	2.81	SV Sty.
23	5273.8-5275.8	2.0	10.96	7.51	<0.01	21.92	1.8	3.60	2.78	2.83	I, Sty. HF
24	5275.8-5277.8	2.0	6.87	1.13	<0.01	13.74	1.9	3.80	2.67	2.72	I, Sty. HF
25	5277.8-5279.8	2.0	11.13	0.41	0.95	22.26	1.1	2.20	2.70	2.72	I, Sty. HF
26	5279.8-5281.8	2.0	21.41	3.79	0.08	42.82	1.4	2.80	2.70	2.74	I, Sty. HF
27	5281.8-5283.8	2.0	0.36	0.17	<0.01	0.72	0.6	1.20	2.69	2.70	I, Sty. HF
	5283.8-5285.7	1.9	*	54.93	0.92	104.37	1.1	2.09	2.75	2.78	I, HF VF
29	5285.7-5287.6	1.9	4.88	0.93	<0.01	9.27	0.9	1.71	2.69	2.71	I, HF
30	5287.6-5289.6	2.0	0.78	0.39	<0.01	1.56	0.8	1.60	2.71	2.73	I, Sty. HF
31	5289.6-5291.6	2.0	8.34	6.22	0.22	16.68	0.9	1.80	2.69	2.71	I, Sty. HF
32	5291.6-5293.4	1.8	*	15.89	<0.01	28.60	2.4	4.32	2.76	2.83	I, Sty. HF
33	5293.4-5294.0	0.6	28.51	13.24	0.13	17.14	4.0	2.40	2.72	2.83	LV SV Sty. HF
34	5294.0-5295.7	1.7	23.59	16.48	<0.01	40.10	6.5	11.05	2.66	2.84	LV SV
CORE No.3 5295.7' - 5326.2' (Rec. 29.5') (7 BOXES)											
35	5295.7-5297.7	2.0	11.92	2.65	1.40	23.84	1.1	2.20	2.68	2.71	I, Sty. HF
36	5297.7-5299.7	2.0	13.76	12.30	<0.01	27.52	1.2	2.40	2.71	2.74	I, Sty. HF
37	5299.7-5300.6	0.9	0.98	0.33	0.05	0.88	2.4	2.16	2.77	2.84	SV
38	5300.6-5301.6	1.0	47.97	37.76	0.10	47.97	7.3	7.30	2.64	2.85	LV SV
39	5301.6-5302.1	0.5	17.14	16.33	0.49	8.57	5.2	2.60	2.69	2.84	LV SV Sty.
40	5302.1-5303.0	0.9	53.41	26.75	0.43	48.07	7.9	7.11	2.62	2.85	LV SV Sty.
	5303.0-5303.4	0.4	617.00	27.99	<0.01	246.80	3.2	1.28	2.71	2.80	LV SV Sty. HF
42	5303.4-5305.4	2.0	4.85	3.14	<0.01	9.70	0.5	1.00	2.71	2.72	I, Sty. HF
43	5305.4-5307.4	2.0	6.83	5.01	0.05	13.66	0.9	1.80	2.70	2.73	I, Sty. HF
44	5307.4-5308.5	1.1	16.06	15.62	1.26	17.67	4.0	4.40	2.73	2.84	LV SV Sty.
45	5308.5-5309.0	0.5	19.69	11.25	0.35	9.85	3.1	1.55	2.75	2.83	LV SV Sty.
46	5309.0-5309.6	0.6	23.94	8.19	0.03	14.36	6.9	4.14	2.64	2.83	LV SV
47	5309.6-5310.6	1.0	* *	12.63	0.39	12.63	6.0	6.00	2.67	2.84	LV SV Sty.
48	5310.6-5311.5	0.9	93.70	50.65	0.02	84.33	2.1	1.89	2.77	2.83	LV SV Sty.
49	5311.5-5312.2	0.7	10.60	6.89	0.04	7.42	2.2	1.54	2.80	2.86	SV Sty. HF
50	5312.2-5312.6	0.4	207.00	94.38	0.04	82.80	5.4	2.16	2.69	2.81	LV SV Sty.
51	5312.6-5313.4	0.8	10.69	5.60	0.56	8.55	3.6	2.88	2.74	2.84	LV SV Sty.

CORE LABORATORIES - CANADA, LTD.
CALGARY, ALBERTA

COMPANY PAN AMERICAN PETROLEUM CORPORATION
WELL PAN AM SHELL MERRILL YT-L-60

PAGE 3 of 5
FILE CNP-1-9544

SAMPLE NUMBER	INTERVAL REPRESENTED FEET		PERMEABILITY TO AIR MILLIDARCY			PERMEABILITY FEET	POROSITY %	POROSITY FEET	DENSITY		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90P	KV				BULK	GRAIN	
Core No.3 Cont'd											
52	5313.4-5314.2	0.8	54.04	10.29	0.41	43.23	2.8	2.24	2.77	2.85	SV PPV Sty.
53	5314.2-5315.0	0.8	*	297.00	*	237.60	4.3	3.44	2.72	2.84	SV PPV HF VF
54	5315.0-5315.8	0.8	23.68	15.44	0.45	18.94	2.3	1.84	2.77	2.84	SV PPV Sty.
55	5315.8-5316.5	0.7	18.41	10.29	0.41	12.89	2.2	1.54	2.78	2.84	LV SV Sty. HF
56	5316.5-5317.3	0.8	21.84	14.14	0.06	17.47	1.3	1.04	2.81	2.84	Few SV Sty. HF
	5317.3-5318.5	1.2	18.91	5.84	12.84	22.69	1.7	2.04	2.81	2.85	Few SV HF VF
	5318.5-5319.6	1.1	418.00	31.86	0.45	459.80	3.8	4.18	2.74	2.84	LV SV HF
59	5319.6-5321.2	1.6	27.69	8.99	3.17	44.30	3.3	5.28	2.75	2.84	SV PPV Sty.
60	5321.2-5321.7	0.5	2.96	1.94	0.62	1.48	2.7	1.35	2.76	2.84	LV SV Sty.
61	5321.7-5322.3	0.6	19.44	1.18	0.03	11.66	3.0	1.80	2.75	2.84	LV SV Sty.
62	5322.3-5323.2	0.9	4.92	4.67	0.67	4.43	2.7	2.43	2.76	2.83	LV SV
63	5323.2-5324.2	1.0	*	9.27	*	9.27	2.5	2.50	2.75	2.83	SV Sty. VF HF
64	5324.2-5325.2	1.0	23.60	<0.01	<0.01	23.60	0.4	0.40	2.71	2.72	I, HF
-	5325.2-5326.2	1.0	-	-	-	-	-	-	-	-	Lost Core
CORE No.4 5326.2' - 5362.0' (Rec. 35.8') (8 BOXES)											
65	5326.2-5328.2	2.0	16.69	3.32	0.03	33.38	1.1	2.20	2.71	2.74	I, Sty. HF
66	5328.2-5330.1	1.9	20.54	17.18	<0.01	39.03	2.5	4.75	2.78	2.85	I, Sty. HF
67	5330.1-5330.8	0.7	8.75	3.30	<0.01	6.13	0.7	0.49	2.73	2.75	I, Sty. HF
68	5330.8-5331.4	0.6	98.91	15.60	0.77	59.35	7.7	4.62	2.63	2.85	LV SV
	5331.4-5332.3	0.9	36.94	10.96	0.13	33.25	4.7	4.23	2.70	2.83	LV SV Sty.
	5332.3-5333.3	1.0	27.45	11.30	0.10	27.45	6.6	6.60	2.65	2.84	LV SV
71	5333.3-5334.2	0.9	34.17	27.40	2.47	30.75	3.8	3.42	2.72	2.83	LV SV HF VF
72	5334.2-5335.2	1.0	14.66	12.49	<0.01	14.66	0.6	0.60	2.73	2.74	I, Sty. HF
73	5335.2-5336.7	1.5	16.62	0.83	0.04	24.93	1.5	2.25	2.80	2.84	I, Sty. HF
74	5336.7-5338.4	1.7	<0.01	<0.01	<0.01	-	0.5	0.85	2.82	2.83	I, Sty.
75	5338.4-5340.4	2.0	2.04	2.04	0.04	4.08	0.3	0.60	2.72	2.73	I, Sty. HF
76	5340.4-5342.0	1.6	0.32	0.06	<0.01	0.51	0.3	0.48	2.72	2.73	I, Sty.
77	5342.0-5343.2	1.2	0.16	0.16	0.04	0.19	0.9	1.08	2.74	2.74	I, Sty.
78	5343.2-5344.1	0.9	71.32	26.12	0.21	64.19	2.0	1.80	2.77	2.83	LV SV Sty. HF
AST											
#79	5344.1-5345.1	1.0	**	103.00	1.21	103.00	7.3	7.30	-	-	AST # 79
79	5345.1-5346.1	1.0	**	103.00	1.21	103.00	7.3	7.30	2.65	2.86	LV SV Sty. HF