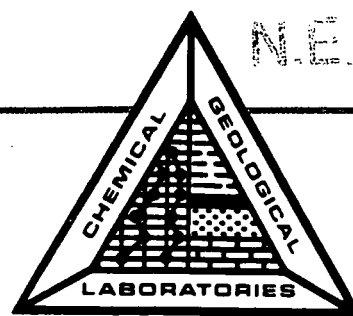


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**CHEMICAL &
GEOLOGICAL
LABORATORIES
INC.**

CORE ANALYSIS REPORT

PARAMOUNT RESOURCES LTD.

PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

C94-9076

1994-03-14
/

CORE ANALYSIS REPORT

PARAMOUNT RESOURCES LTD.

PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

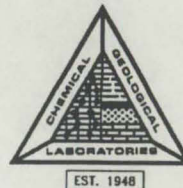
C94-9076

1994-03-14

9211-P33-7-1

CHEMICAL & GEOLOGICAL LABORATORIES INC.

Reservoir Studies Division



NATIONAL ENERGY BOARD
ENGINEERING BRANCH
MAR 23 1994

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Figure 1 - 4 plotted for each formation.

CHEMICAL & GEOLOGICAL LABORATORIES INC.

Company: PARAMOUNT RESOURCES LTD.
Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15
Formation: SULPHUR POINT

Lab No: C94-9076
Page: 1
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GENERAL INFORMATION

Location: I-74-6-10; 117-15
Field: CAMERON
Elevation: KB: m GRD: m
Coring Fluid: CHEMICAL GEL
Coring Equipment: DIAMOND
Core Diameter: 0.101 m
Number of Cores: 2
Total Cored: 34.00 m
Recovered: 34.00 m
Percent Recovered: 100.00 %
Total Tested: 13.80 m
Percent Tested: 40.59 %

CORE HANDLING AND ANALYSIS METHODS

Core transported in boxes.
Tap water used to drill and cut the samples.
Toluene used as solvent for cleaning the cores.
Samples cleaned in CO2-Toluene pressure extractor.
Samples cleaned in vapour phase extractor.
Cleaning time 456 hours.
Samples dried in conventional oven at 120C.
Drying time 36 hours.
Full diameter samples sandblasted before KH measurements.
Permeability measured on 0.025 m drilled plugs.
Permeability measured on 0.101 m full diameter samples.
Nitrogen permeability not corrected for Klinkenberg effect.
Pore volume measured by Boyle's Law in a Hassler type core holder using helium.
Grain volume measured by Boyle's Law in a matrix cup using helium.
Bulk volume measured by calipering for regular cylindrical samples.
Bulk volume determined by adding pore volume and grain volume for small plug samples.
Fluid saturation by Retort.
Samples previously issued on preliminary report are identified with "P" directly following sample number.
These samples received additional cleaning and drying before re-analysis for the final report.

REMARKS: Preliminary data reported on sample #27, plug was sent to Hycal requested by client.

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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 Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15
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GEOLOGICAL DESCRIPTION

Interval (metres)

	Core #1	1407.00 - 1422.80 m	(15.80 m)	Rec: 15.80 m
1407.00-1410.00 m (3.00 m)	Dolostone, very finely crystalline, massive to brecciated. Green-grey, shale partings frequent. Fractured, fractures dolomite or anhydrite filled.			
1410.00-1411.35 m (1.35 m)	Dolomite, fine to medium crystalline, laminated to mottled. Light to medium tan color. Composed predominantly of dolomitized stromatoporoids is planar to slightly irregular growth form, interlaminated with dolomitized mudstone which gives the sediment a laminated to mottled appearance. Probably a dolomitized bindstone to framestone. Porosity is confined to the stromatoporoids where the dolomite is coarser and remnant porosity remains. Dolomite, more rarely anhydrite; filled fractures are common.			
1411.35-1412.30 m (0.95 m)	Dolomite, brecciated, possibly collapse breccia. Dolomitized clasts massive, fine to medium crystalline, in crystalline dolomite and more rarely anhydrite or calcite cement, or dolomitized fine matrix. Shale clasts present. Pyrite common. Low visible porosity, primarily intercrystalline in the dolomite clasts.			
1412.30-1413.70 m (1.40 m)	Dolomitized bindstone as described between 1410.00-1411.35 m			
1413.70-1414.20 m (0.50 m)	Collapse breccia, similar to 1411.35-1412.30 m			
1414.20-1421.20 m (7.00 m)	Dolomite, massive to finely laminated. Fine to medium crystalline, medium tan to darker grey-tan color. Crystals anhedral to subhedral interlocking. Some intercrystalline porosity visible. Fractures very common, range from microfractures to macrofractures, up to 0.5 cm wide. The smaller fractures are frequently open. Larger fractures are partially to completely filled with coarsely crystalline, subhedral to enehedral, dolomite, calcite or anhydrite. Shale partings frequent, pyrite also common. Bitumen staining throughout. This interval has an irregular contact with the overlying unit.			
1421.20-1421.40 m (0.20 m)	Dolomitized floatstone containing branching ?stachyoides. Matrix very finely crystalline, massive, dark tan-grey color. Bioclasts lighter tan color, more coarsely crystalline, dolomite, remnant porosity visible.			

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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GEOLOGICAL DESCRIPTION

Interval (metres)

1421.40-1422.80 m (1.40 m)	Dolomite, medium to coarsely crystalline, anhedral interlocking crystals, light tan color, vuggy, size ranges from pinpoint to 0.4 cm. Vugs commonly bitumen lined. Many of the vugs may be biomoldic in origin (after stromatoporoids). Possible carbonaceous debris.
Core #2 1422.80 - 1441.00 m (18.20 m) Rec: 18.20 m	
1422.80-1424.65 m (1.85 m)	Poorly preserved laminated ?bindstone. Completely dolomitized with medium (to coarsely) crystalline dolomite. Porosity confined to fossiliferous parts of sediment. Bitumen staining and pyrite common.
1424.65-1424.85 m (0.20 m)	Dolomitized clasts (up to 6 cm diameter) is green-grey shale matrix. Dolomite fine to medium crystalline, massive. Anhydrite, pyrite present.
1424.85-1432.35 m (7.50 m)	Dolostone, very finely crystalline. Massive to faintly laminated. Pyrite common. Poorly preserved dolomitized fossils visible at base of interval.
1432.35-1433.30 m (0.95 m)	Dolomite, medium to coarsely crystalline. Laminated to mottled. Dolomite crystals anhedral, interlocking. Little macroporosity visible. Possibly extensively dolomitized, poorly preserved bindstone or framestone. Coarsely crystalline dolomite and anhydrite common. Rare calcite and pyrite. Bitumen present.
1433.30-1441.00 m (7.70 m)	Dolomite, very finely crystalline, massive to mottled. Fractures common, often dolomite or anhydrite filled. Anhydrite clasts present. Shale partings common.

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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SUMMARY OF CORE DATA REPORT

Summary Interval: 1407.00 - 1441.00 (34.00)

Thickness Not Analyzed: Rubble 0.00 Dense 0.00 Lost 0.00 Drilled 0.00 Not Tested 20.20 Total: 20.20

PERMEABILITY RANGES, MILLIDARCIES

	Total All Samples	Greater Than 99.	10. - 99.	1.0 - 9.9	.50 - .99	.10 - .49	.01 - .09	Less Than .01
Thickness, m	13.800	0.600	1.100	7.500	0.850	2.450	1.300	0.000
Fraction of Analyzed Core	1.000	0.043	0.080	0.543	0.062	0.178	0.094	0.000
Porosity Thickness, porosity-m	0.990	0.124	0.064	0.541	0.055	0.162	0.044	0.000
Permeability Thickness, mD-m	291.067	224.200	34.000	31.465	0.633	0.685	0.084	0.000
Weighted Averages (Arithmetic):								
Porosity	0.072	0.206	0.059	0.072	0.065	0.066	0.034	0.000
KMAX, mD	21.092	373.667	30.909	4.195	0.745	0.280	0.064	0.000
Residual Oil	0.065	0.137	0.138	0.046	0.068	0.057	0.013	0.000
Residual Water	0.145	0.157	0.115	0.117	0.212	0.212	0.179	0.000

Weighted Average (Geometric) KMAX, mD, for all samples = 1.915

Weighted Average (Harmonic) KMAX, mD, for all samples = 0.318

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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 Formation: SULPHUR POINT
 Cored Interval: 1407.00 - 1441.00

Lab No: C94-9076
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CORE ANALYSIS DATA REPORT

Sample Number	Interval, m		Rep Thick	Sample Length	Gas Permeability, mD			Porosity	Density, kg/m3		Residual Saturation Frac of Pore Volume		Visual Examination
	Top	Base			Kmax	K90*	KV		Bulk	Grain	Oil	Water	

CORE NO. 1 1407.00 - 1422.80 RECEIVED IN LAB 15.80/15.80 METRES 17 BOXES

NA	1407.00	1410.05	3.05	-	-	-	-	-	-	-	-	-	DOLST, SH LAM, FRAC, PYR
1	1410.05	1410.40	0.35	0.20	0.09	0.08	<0.01	0.031	2750	2840	0.000	0.072	DOL, MXL, LAM-MOT, PYR, CALC
2	1410.40	1410.70	0.30	0.18	2.30	1.80	1.70	0.144	2450	2850	0.000	0.077	DOL, F-MXL, MOT, FRAC, PYR
NA	1410.70	1411.30	0.60	-	-	-	-	-	-	-	-	-	DOL, MXL, LAM-MOT, FRAC
3	1411.30	1411.75	0.45	0.19	0.29	0.16	0.04	0.080	2600	2830	0.000	0.208	DOL, BREC, FRAC, PYR, BIT, CALC
4	1411.75	1412.10	0.35	0.15	3.20	1.90	0.21	0.121	2490	2840	0.000	0.046	A/A
5	1412.10	1412.50	0.40	0.18	3.70	3.20	1.00	0.043	2710	2830	0.000	0.155	DOL, MXL, MOT, PP VUG
6	1412.50	1412.75	0.25	0.19	1.20	0.74	0.11	0.044	2700	2820	0.197	0.303	DOL, MXL, LAM, BIT
7	1412.75	1413.10	0.35	0.19	0.17	0.13	0.02	0.055	2680	2820	0.000	0.133	DOL, MXL, LAM-MOT, BIT, ANHY
8	1413.10	1413.30	0.20	0.13	2.30	1.20	0.53	0.065	2640	2820	0.111	0.034	A/A
SP 9 P	1413.30	1413.40	0.10	-	0.22	-	-	0.080	-	2850	0.054	0.056	DOL, MXL, MOT, BIT
10	1413.40	1413.60	0.20	0.19	0.22	0.22	0.11	0.049	2690	2830	0.184	0.815	DOL, MXL, LAM-MOT, BIT
11	1413.60	1413.80	0.20	0.16	0.78	0.50	0.25	0.101	2520	2810	0.000	0.220	DOL, BREC, FRAC, PYR, BIT, CALC
12	1413.80	1414.10	0.30	0.19	0.09	0.08	0.02	0.052	2680	2830	0.000	0.256	A/A
13	1414.10	1414.50	0.40	0.11	1.20	1.20	0.57	0.062	2660	2830	Trace	0.179	DOL, LAM-MOT, VUG, ANHY, CALC, FRAC
14	1414.50	1414.75	0.25	0.13	3.50	1.80	1.80	0.065	2640	2830	0.000	0.274	DOL, LAM-MOT, FRAC, BIT, SH LAM
NA	1414.75	1414.90	0.15	-	-	-	-	-	-	-	-	-	A/A
SP 15 P	1414.90	1415.10	0.20	-	2.30	-	-	0.057	-	2850	Trace	0.117	DOL, MOT, ANHY, PYR, CALC
16	1415.10	1415.30	0.20	0.16	2.00	1.30	0.53	0.040	2710	2830	Trace	0.694	DOLST, VFXL, MOT, CALC, DOL CMT
17	1415.30	1415.50	0.20	0.16	17.00	15.00	0.56	0.038	2720	2830	0.000	0.175	DOLST, VFXL, MAS-MOT, FRAC
18	1415.50	1415.85	0.35	0.13	35.00	0.09	0.04	0.035	2730	2830	0.000	0.190	A/A
NA	1415.85	1416.30	0.45	-	-	-	-	-	-	-	-	-	DOLST/SH LAM
SP 19 P	1416.30	1416.60	0.30	-	1.60	-	-	0.093	-	2890	0.062	0.072	DOL, M-CXL, MOT, BIT
20	1416.60	1416.95	0.35	0.05	6.40	2.70	2.60	0.074	2620	2830	0.098	0.060	DOL, MXL, MOT, FRAC, BIT, CALC, VF
21	1416.95	1417.20	0.25	0.19	3.50	2.80	2.10	0.062	2650	2830	0.000	0.018	A/A
SP 22 P	1417.20	1417.45	0.25	-	2.60	-	-	0.100	-	2880	0.029	0.022	A/A

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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 Cored Interval: 1407.00 - 1441.00

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CORE ANALYSIS DATA REPORT

Sample Number	Interval, m		Rep Thick	Sample Length	Gas Permeability, mD			Porosity	Density, kg/m3		Residual Saturation Frac of Pore Volume		Visual Examination
	Top	Base			Kmax	K90°	KV		Bulk	Grain	Oil	Water	
23	1417.45	1417.70	0.25	0.09	5.70	4.90	1.80	0.087	2590	2840	0.033	0.038	A/A
24	1417.70	1418.00	0.30	0.11	0.29	0.12	0.43	0.018	2770	2820	0.000	0.185	A/A
SP 25 P	1418.00	1418.20	0.20	-	0.61	-	-	0.065	-	2830	0.200	0.137	DOL,FXL,FRAC/DOL CMT,PYR
26	1418.20	1418.50	0.30	0.14	3.30	2.40	0.79	0.039	2710	2810	Trace	0.114	DOL,FXL,MOT,FRAC/CALC DOL
SP 27 P	1418.50	1418.85	0.35	-	0.02	-	-	0.031	-	2870	Trace	0.215	DOL,MXL,RR PP VUG,DOL CMT
28	1418.85	1419.00	0.15	0.11	0.43	0.38	0.30	0.055	2700	2850	Trace	0.040	DOL,MXL,LAM,FRAC,BIT
29	1419.00	1419.20	0.20	0.12	1.10	0.48	0.69	0.059	2680	2850	0.049	0.075	DOL,MXL,MOT,FRAC,DOL CMT,BIT
SP 30 P	1419.20	1419.30	0.10	-	2.10	-	-	0.057	-	2860	0.000	0.078	A/A
31	1419.30	1419.50	0.20	0.15	1.50	1.20	1.20	0.048	2720	2850	Trace	0.023	A/A
32	1419.50	1419.70	0.20	0.17	2.30	1.00	0.99	0.044	2720	2850	0.000	0.051	A/A
SP 33 P	1419.70	1419.85	0.15	-	0.29	-	-	0.039	-	2860	Trace	0.057	A/A
34	1419.85	1420.05	0.20	0.17	7.20	6.20	3.20	0.067	2670	2860	0.000	0.050	A/A
SP 35 P	1420.05	1420.25	0.20	-	1.30	-	-	0.076	-	2840	Trace	0.088	DOL,MXL,FRAC,CALC,DOL CMT,BIT
SP 36 P	1420.25	1420.80	0.55	-	0.28	-	-	0.116	-	2830	0.075	0.192	DOL,FXL,BIT,CARB
37	1420.80	1421.30	0.50	0.09	8.60	7.10	3.60	0.061	2660	2830	0.095	0.073	DOLST,FOS,MLD POR
38	1421.30	1421.55	0.25	0.10	57.00	34.00	0.07	0.051	2690	2830	0.368	0.153	DOL,MXL,FRAC/DOL CMT,BIT
SP 39 P	1421.55	1421.80	0.25	-	243.00	-	-	0.192	-	2830	0.120	0.162	DOL,M-CXL,VUG & MLD POR,BIT
SP 40 P	1421.80	1422.15	0.35	-	467.00	-	-	0.216	-	2830	0.147	0.154	A/A
41	1422.15	1422.80	0.65	0.20	8.70	4.20	0.51	0.074	2610	2820	0.156	0.090	DOL,MXL,PP VUG,BIT,SH LAM
CORE NO. 2 1422.80 - 1441.00 RECEIVED IN LAB 18.20/18.20 METRES 20 BOXES													
42	1422.80	1423.00	0.20	0.17	7.50	7.20	0.98	0.076	2630	2850	0.114	0.029	DOL,MXL,MOT,PP VUG,BIT
SP 43 P	1423.00	1423.10	0.10	-	15.00	-	-	0.108	-	2850	0.120	0.041	A/A
44	1423.10	1423.30	0.20	0.17	13.00	12.00	7.50	0.105	2560	2860	0.138	0.063	A/A
45	1423.30	1423.50	0.20	0.19	9.40	7.70	1.10	0.084	2610	2850	0.120	0.079	A/A
SP 46 P	1423.50	1423.60	0.10	-	1.80	-	-	0.078	-	2860	0.111	0.456	A/A
47	1423.60	1423.80	0.20	0.15	0.40	0.27	0.03	0.030	2740	2830	0.385	0.333	DOL,MXL,LAM,ANHY,BIT
SP 48 P	1423.80	1424.00	0.20	-	0.59	-	-	0.075	-	2850	0.077	0.296	A/A

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CORE ANALYSIS DATA REPORT

Sample Number	Interval, m		Rep Thick	Sample Length	Gas Permeability, mD			Porosity	Density, kg/m3		Residual Saturation Frac of Pore Volume		Visual Examination
	Top	Base			Kmax	K90°	KV		Bulk	Grain	Oil	Water	
49	1424.00	1424.25	0.25	0.16	5.84	5.00	1.30	0.116	2500	2830	Trace	0.230	A/A
50	1424.25	1424.50	0.25	0.11	2.70	2.50	0.91	0.055	2660	2820	Trace	0.485	DOL,MXL,MOT,BIT,PYR,FRAC
NA	1424.50	1432.35	7.85	-	-	-	-	-	-	-	-	-	DOLST,MAS-LAM,FOS,PYR,ANHY
51	1432.35	1432.60	0.25	0.19	0.95	0.61	0.09	0.029	2770	2850	Trace	0.153	DOL,MXL,IAM,BIT
SP 52 P	1432.60	1432.70	0.10	-	0.08	-	-	0.034	-	2860	0.000	0.033	DOL,M-CXL,ANHY,BIT
53	1432.70	1432.90	0.20	0.19	0.05	0.04	0.02	0.017	2820	2870	0.170	0.196	A/A
NA	1432.90	1441.00	8.10	-	-	-	-	-	-	-	-	-	DOLST,MAS-LAM-MOT,ANHY,PYR

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CALCULATED DATA REPORT

Sample Number	Interval, m		Thickness, m		Porosity * Thickness		Weighted Average Porosity (Arith)	Kmax * Thickness		Weighted Average Kmax (Arith)
	Top	Base	Rep	Cum	Rep	Cum		Rep	Cum	
CORE NO. 1 1407.00 - 1422.80 RECEIVED IN LAB 15.80/15.80 METRES										
NA	1407.00	1410.05	3.05	-	-	-	-	-	-	-
1	1410.05	1410.40	0.35	0.35	0.011	0.011	0.031	0.031	0.031	0.090
2	1410.40	1410.70	0.30	0.65	0.043	0.054	0.083	0.690	0.722	1.110
NA	1410.70	1411.30	0.60	-	-	-	-	-	-	-
3	1411.30	1411.75	0.45	0.45	0.036	0.036	0.080	0.131	0.131	0.290
4	1411.75	1412.10	0.35	0.80	0.042	0.078	0.098	1.120	1.250	1.563
5	1412.10	1412.50	0.40	1.20	0.017	0.096	0.080	1.480	2.730	2.275
6	1412.50	1412.75	0.25	1.45	0.011	0.107	0.073	0.300	3.030	2.090
7	1412.75	1413.10	0.35	1.80	0.019	0.126	0.070	0.060	3.090	1.717
8	1413.10	1413.30	0.20	2.00	0.013	0.139	0.069	0.460	3.550	1.775
SP 9 P	1413.30	1413.40	0.10	2.10	0.008	0.147	0.070	0.022	3.572	1.701
10	1413.40	1413.60	0.20	2.30	0.010	0.157	0.068	0.044	3.616	1.572
11	1413.60	1413.80	0.20	2.50	0.020	0.177	0.071	0.156	3.772	1.509
12	1413.80	1414.10	0.30	2.80	0.016	0.192	0.069	0.027	3.799	1.357
13	1414.10	1414.50	0.40	3.20	0.025	0.217	0.068	0.480	4.279	1.337
14	1414.50	1414.75	0.25	3.45	0.016	0.233	0.068	0.875	5.154	1.494
NA	1414.75	1414.90	0.15	-	-	-	-	-	-	-
SP 15 P	1414.90	1415.10	0.20	0.20	0.011	0.011	0.057	0.460	0.460	2.300
16	1415.10	1415.30	0.20	0.40	0.008	0.019	0.048	0.400	0.860	2.150
17	1415.30	1415.50	0.20	0.60	0.008	0.027	0.045	3.400	4.260	7.100
18	1415.50	1415.85	0.35	0.95	0.012	0.039	0.041	12.250	16.510	17.379
NA	1415.85	1416.30	0.45	-	-	-	-	-	-	-
SP 19 P	1416.30	1416.60	0.30	0.30	0.028	0.028	0.093	0.480	0.480	1.600
20	1416.60	1416.95	0.35	0.65	0.026	0.054	0.083	2.240	2.720	4.185
21	1416.95	1417.20	0.25	0.90	0.016	0.069	0.077	0.875	3.595	3.994
SP 22 P	1417.20	1417.45	0.25	1.15	0.025	0.094	0.082	0.650	4.245	3.691

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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CALCULATED DATA REPORT

Sample Number	Interval, m		Thickness, m		Porosity * Thickness		Weighted Average Porosity (Arith)	Kmax * Thickness		Weighted Average Kmax (Arith)	
	Top	Base	Rep	Cum	Rep	Cum		Rep	Cum		
	23	1417.45	1417.70	0.25	1.40	0.022	0.116	0.083	1.425	5.670	4.050
	24	1417.70	1418.00	0.30	1.70	0.005	0.121	0.071	0.087	5.757	3.386
SP	25 P	1418.00	1418.20	0.20	1.90	0.013	0.134	0.071	0.122	5.879	3.094
	26	1418.20	1418.50	0.30	2.20	0.012	0.146	0.066	0.990	6.869	3.122
SP	27 P	1418.50	1418.85	0.35	2.55	0.011	0.157	0.062	0.007	6.876	2.696
	28	1418.85	1419.00	0.15	2.70	0.008	0.165	0.061	0.064	6.941	2.571
	29	1419.00	1419.20	0.20	2.90	0.012	0.177	0.061	0.220	7.161	2.469
SP	30 P	1419.20	1419.30	0.10	3.00	0.006	0.183	0.061	0.210	7.371	2.457
	31	1419.30	1419.50	0.20	3.20	0.010	0.192	0.060	0.300	7.671	2.397
	32	1419.50	1419.70	0.20	3.40	0.009	0.201	0.059	0.460	8.131	2.391
SP	33 P	1419.70	1419.85	0.15	3.55	0.006	0.207	0.058	0.043	8.174	2.303
	34	1419.85	1420.05	0.20	3.75	0.013	0.220	0.059	1.440	9.614	2.564
SP	35 P	1420.05	1420.25	0.20	3.95	0.015	0.236	0.060	0.260	9.874	2.500
SP	36 P	1420.25	1420.80	0.55	4.50	0.064	0.299	0.067	0.154	10.028	2.228
	37	1420.80	1421.30	0.50	5.00	0.031	0.330	0.066	4.300	14.328	2.866
	38	1421.30	1421.55	0.25	5.25	0.013	0.343	0.065	14.250	28.578	5.443
SP	39 P	1421.55	1421.80	0.25	5.50	0.048	0.391	0.071	60.750	89.328	16.241
SP	40 P	1421.80	1422.15	0.35	5.85	0.076	0.466	0.080	163.450	252.778	43.210
	41	1422.15	1422.80	0.65	6.50	0.048	0.514	0.079	5.655	258.433	39.759
CORE NO. 2 1422.80 - 1441.00 RECEIVED IN LAB 18.20/18.20 METRES											
	42	1422.80	1423.00	0.20	6.70	0.015	0.530	0.079	1.500	259.933	38.796
SP	43 P	1423.00	1423.10	0.10	6.80	0.011	0.540	0.079	1.500	261.433	38.446
	44	1423.10	1423.30	0.20	7.00	0.021	0.561	0.080	2.600	264.033	37.719
	45	1423.30	1423.50	0.20	7.20	0.017	0.578	0.080	1.880	265.913	36.932
SP	46 P	1423.50	1423.60	0.10	7.30	0.008	0.586	0.080	0.180	266.093	36.451
	47	1423.60	1423.80	0.20	7.50	0.006	0.592	0.079	0.080	266.173	35.490
SP	48 P	1423.80	1424.00	0.20	7.70	0.015	0.607	0.079	0.118	266.291	34.583

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CALCULATED DATA REPORT

Sample Number	Interval, m		Thickness, m		Porosity * Thickness		Weighted Average Porosity (Arith)	Kmax * Thickness		Weighted Average Kmax (Arith)
	Top	Base	Rep	Cum	Rep	Cum		Rep	Cum	
49	1424.00	1424.25	0.25	7.95	0.029	0.636	0.080	1.460	267.751	33.679
50	1424.25	1424.50	0.25	8.20	0.014	0.650	0.079	0.675	268.426	32.735
NA	1424.50	1432.35	7.85	-	-	-	-	-	-	-
51	1432.35	1432.60	0.25	0.25	0.007	0.007	0.029	0.238	0.238	0.950
SP 52 P	1432.60	1432.70	0.10	0.35	0.003	0.011	0.030	0.008	0.246	0.701
53	1432.70	1432.90	0.20	0.55	0.003	0.014	0.026	0.010	0.256	0.465
NA	1432.90	1441.00	8.10	-	-	-	-	-	-	-

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

GROUPING BY POROSITY RANGES

Porosity Range	Samples		Thickness		Wt Avg Porosity	Wt Avg KMAX		Frequency	
	Number	Cum	n	Cum	Arith	Arith	Geom	%	Cum
0.000 - 0.020	2	2	0.50	0.50	0.018	0.194	0.144	3.62	3.62
0.020 - 0.040	9	11	2.25	2.75	0.034	7.577	0.740	16.30	19.93
0.040 - 0.060	14	25	3.25	6.00	0.050	5.831	1.241	23.55	43.48
0.060 - 0.080	13	38	3.70	9.70	0.069	5.001	3.564	26.81	70.29
0.080 - 0.100	5	43	1.30	11.00	0.085	3.029	1.275	9.42	79.71
0.100 - 0.120	6	49	1.55	12.55	0.110	4.206	1.585	11.23	90.94
0.120 - 0.140	1	50	0.35	12.90	0.121	3.200	3.200	2.54	93.48
0.140 - 0.160	1	51	0.30	13.20	0.144	2.300	2.300	2.17	95.65
0.180 - 0.200	1	52	0.25	13.45	0.192	243.000	243.000	1.81	97.46
0.200 - 0.220	1	53	0.35	13.80	0.216	467.000	467.000	2.54	100.00

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

GROUPING BY PERMEABILITY RANGES

Permeability Range	Samples		Thickness		Wt Avg KMAX		Wt Avg Porosity	Frequency	
	Number	Cum	n	Cum	Arith	Geom		%	Cum
0.020 - 0.040	1	1	0.35	0.35	0.020	0.020	0.031	2.54	2.54
0.040 - 0.080	1	2	0.20	0.55	0.050	0.050	0.017	1.45	3.99
0.080 - 0.160	3	5	0.75	1.30	0.089	0.089	0.040	5.43	9.42
0.160 - 0.320	7	12	2.10	3.40	0.257	0.253	0.071	15.22	24.64
0.320 - 0.640	4	16	0.75	4.15	0.513	0.504	0.056	5.43	30.07
0.640 - 1.250	5	21	1.30	5.45	1.072	1.059	0.058	9.42	39.49
1.250 - 2.500	10	31	2.00	7.45	1.950	1.912	0.075	14.49	53.99
2.500 - 5.000	7	38	2.05	9.50	3.251	3.228	0.069	14.86	68.84
5.000 - 10.000	8	46	2.60	12.10	7.654	7.544	0.077	18.84	87.68
10.000 - 20.000	3	49	0.50	12.60	15.000	14.893	0.079	3.62	91.30
20.000 - 40.000	1	50	0.35	12.95	35.000	35.000	0.035	2.54	93.84
40.000 - 80.000	1	51	0.25	13.20	57.000	57.000	0.051	1.81	95.65
160.000 - 320.000	1	52	0.25	13.45	243.000	243.000	0.192	1.81	97.46
320.000 - 640.000	1	53	0.35	13.80	467.000	467.000	0.216	2.54	100.00

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

POROSITY-METRES OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

Porosity Cut Off	Thickness, m		Capacity Lost		Capacity Remaining		Wt Avg Arith	
	Lost	Remaining	porosity-m	%	porosity-m	%	Mean	Median
0.000	0.00	13.80	0.000	0.00	0.991	100.00	0.072	0.065
0.020	0.50	13.30	0.009	0.89	0.982	99.11	0.074	0.066
0.040	2.75	11.05	0.085	8.54	0.906	91.46	0.082	0.072
0.060	6.00	7.80	0.247	24.98	0.743	75.02	0.095	0.083
0.080	9.70	4.10	0.501	50.59	0.489	49.41	0.119	0.110
0.100	11.00	2.80	0.612	61.74	0.379	38.26	0.135	
0.120	12.55	1.25	0.781	78.88	0.209	21.12	0.167	0.158
0.140	12.90	0.90	0.824	83.16	0.167	16.84	0.185	0.192
0.160	13.20	0.60	0.867	87.52	0.124	12.48	0.206	
0.180	13.20	0.60	0.867	87.52	0.124	12.48	0.206	
0.200	13.45	0.35	0.915	92.37	0.076	7.63	0.216	
0.220	13.80	0.00	0.991	100.00	0.000	0.00	0.000	

Total Storage Capacity in Porosity-Metres = 0.991

CHEMICAL & GEOLOGICAL LABORATORIES INC.

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

MILLIDARCY-METRES OF STORAGE CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

Permeability Cut Off	Thickness, m		Capacity Lost		Capacity Remaining		Wt Avg Arith	
	Lost	Remaining	mD-m	%	mD-m	%	Mean	Median
0.000	0.00	13.80	0.000	0.00	291.067	100.00	1.915	2.066
0.005	0.00	13.80	0.000	0.00	291.067	100.00	1.915	2.066
0.010	0.00	13.80	0.000	0.00	291.067	100.00	1.915	2.066
0.020	0.00	13.80	0.000	0.00	291.067	100.00	1.915	2.066
0.040	0.35	13.45	0.007	0.00	291.060	100.00	2.157	2.195
0.080	0.55	13.25	0.017	0.01	291.050	99.99	2.283	2.273
0.160	1.30	12.50	0.083	0.03	290.984	99.97	2.774	2.586
0.320	3.40	10.40	0.624	0.21	290.443	99.79	4.500	3.688
0.640	4.15	9.65	1.009	0.35	290.059	99.65	5.335	4.187
1.250	5.45	8.35	2.402	0.83	288.665	99.17	6.862	5.169
2.500	7.45	6.35	6.302	2.17	284.765	97.83	10.263	6.749
5.000	9.50	4.30	12.967	4.45	278.100	95.55	17.814	
10.000	12.10	1.70	32.867	11.29	258.200	88.71	66.297	40.000
20.000	12.60	1.20	40.367	13.87	250.700	86.13	123.513	160.000
40.000	12.95	0.85	52.617	18.08	238.450	81.92	207.593	259.921
80.000	13.20	0.60	66.867	22.97	224.200	77.03	355.717	353.309
160.000	13.20	0.60	66.867	22.97	224.200	77.03	355.717	
320.000	13.45	0.35	127.617	43.84	163.450	56.16	467.000	
640.000	13.80	0.00	291.067	100.00	0.000	0.00	0.000	

Total Flow Capacity in Millidarcy-Metres (Arithmetic) = 291.067

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ARITHMETIC AVERAGE PERMEABILITY WITHIN POROSITY RANGES

Porosity Range	Samples		Arithmetic Average	
	Number	Thickness, m	Porosity	Permeability, mD
0.000 - 0.010	0	0.00	0.000	0.00
0.010 - 0.020	2	0.50	0.018	0.17
0.020 - 0.030	1	0.25	0.029	0.95
0.030 - 0.040	8	2.00	0.035	7.02
0.040 - 0.050	6	1.45	0.045	1.82
0.050 - 0.060	8	1.80	0.055	8.24
0.060 - 0.070	7	2.00	0.064	3.84
0.070 - 0.080	6	1.70	0.076	4.38
0.080 - 0.090	4	1.00	0.083	3.90
0.090 - 0.100	1	0.30	0.093	1.60
0.100 - 0.110	4	0.75	0.104	7.85
0.110 - 0.120	2	0.80	0.116	3.06
0.120 - 0.130	1	0.35	0.121	3.20
0.130 - 0.140	0	0.00	0.000	0.00
0.140 - 0.150	1	0.30	0.144	2.30
0.150 - 0.160	0	0.00	0.000	0.00
0.160 - 0.170	0	0.00	0.000	0.00
0.170 - 0.180	0	0.00	0.000	0.00
0.180 - 0.190	0	0.00	0.000	0.00
0.190 - 0.200	1	0.25	0.192	243.00

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ARITHMETIC AVERAGE PERMEABILITY WITHIN POROSITY RANGES

Porosity Range	Samples		Arithmetic Average	
	Number	Thickness, m	Porosity	Permeability, mD
0.200 - 0.210	0	0.00	0.000	0.00
0.210 - 0.220	1	0.35	0.216	467.00



CHEMICAL & GEOLOGICAL LABORATORIES INC.

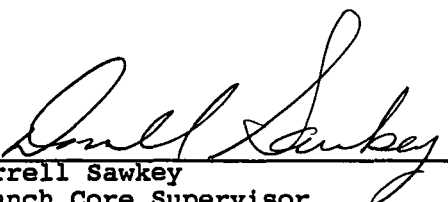


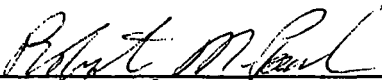
Paramount et al Cameron
I-74-60-10; 117-15

Lab Report No: C94-9076

All analytical work performed under the direct supervision of the Branch
Core Supervisor.

Final reports are issued under direction of the Core Division Manager.


Darrell Sawkey
Branch Core Supervisor


Robert M. Paul
Core Division Manager

CHEMICAL & GEOLOGICAL LABORATORIES INC.

ABBREVIATIONS AND SYMBOLS

a/a	As Above	fri	Friable	o	Open	suc	Sucrosic
abnt	Abundant			occ	Occasional	sz	Size
Amph	Amphipora	g	Good	ool	Oolite (ic)		
ang	Angular	Gast	Gastropod	org	Organic	tex	Texture
anhly	Anhydrite (ic)	glau	Glauconite (ic)			Tham	Thamnopora
ank	Ankerite/Ankeritic	gn	Green	p	Poor (ly)	thk	Thick
aren	Arenaceous	gr	Grain (ed)	pbl	Pebble (6-64 mm)	thn	Thin
arg	Argillaceous	gran	Granular	phos	Phosphate (ic)	thru	Throughout
		grdg	Grading	piso	Pisolite (ic)	tr	Trace
bd	Bed	grnl	Granule (2-4 mm)	pk	Pink	tt	Tight (ly)
bdd	Bedded	grnt	Granite	pl	Plant		
bdg	Bedding	gs	Grainstone	plnr	Planar	uncons	Unconsolidated
bf	buff	gy	Grey	por	Porous (sity)	unident	Unidentifiable
biot	Biotite	gyp	Gypsum (iferous)	pp	Pin Point	up	Upper
bioturb	Bioturbated			ppt	Precipitate		
bit	Bitumen (inous)	hd	Hard	pred	Predominant (ly)	v	Very
blk	Black	HF	Horizontal Fracture	pt	Part (ly)	var	Variable
blkly	Blocky	hi	High (ly)	ptch	Patch (y) (es)	vcol	Varicolored
Brac	Brachiopod	hrtl	Horizontal	ptsl	Paper-Thin Shale Lamination	VF	Vertical Fracture
brec	Breccia	hvy	Heavy	purp	Purple	vertl	Vertical
brn	Brown			pyr	Pyrite (ic) (ized)	vug	Vug (gy) (ular)
bur	Burrow	incr	Increase (ing)	pyrb	Pyrobitumen		
		intbd	Interbedded			/	With
c	Coarse (ly)	intgran	Intergranular	qtz	Quartz	w	Well
calc	Calcite (areous)	intlaml	Interlaminated			wh	White
carb	Carbonaceous	intv	Interval	ran	Random	wvy	Wavy
cbl	Cobble (64-256 mm)	intxl	Intercrystalline	rd	Round (ed)	wxy	Waxy
cgl	Conglomerate	ireg	Irregular	repl	Replaced (ing) (ment)		
chk	Chalk (y)			rex1	Recrystallize (ation)	x	Extra
cht	Chert	kao	Kaolin	RF	Random Fracture	xbd	Cross-bedded (ing)
cl	Clast			rip	Ripple	xl	Crystal (line)
cln	Clean	lam	Laminated	rr	Rare	xlam	Cross-laminated
cly	Clay (ey)	len	Lentil (cular)	rthy	Earthy		
cmt	Cement (ed)	lms	Lense			*	Broken Core (K90 used for summary purpose)
com	Common	lign	Lignite (ic)	s	Small		
coq	Coquina	lrg	Large (er)	sa	Salt		
Cor	Coral	ls	Limestone	sap	Salt & Pepper	**	Permeability >10,240 mD
crbnt	Carbonate	lse	Loose	sb	Sub		
Crin	Crinoid (al)	lt	Light (er)	scat	Scattered	<.01	Permeability less than 0.01
crpxl	Cryptocrystalline			sd	Sand (1/16-2 mm)		
		m	Medium	sdv	Sandy		
decr	Decrease (ing)	mar	Maroon	sec	Secondary		
dism	Disseminated	mrlst	Marlstone	sed	Sediment (ary)	DE	Dense
dk	Dark (er)	mas	Massive	sft	Soft	DR	Drilled
dns	Dense (er)	mat	Material, Matter	sh	Shale	LC	Lost Core
dol	Dolomite (ic)	md	Mud	shy	Shaly	NA	Not Analyzed
dolst	Dolostone	mdst	Mudstone	sid	Siderite (ic)	RU	Rubble
		mic	Micro	sil	Silica (eous)	SP	Small Plug
elg	Elongate	mica	Mica (eous)	skel	Skeletal		
		mnr	Minor	sl	Slight (ly)		
f	Fine (ly)	mnl	Mineral (ized)	slt	Silt (y)	Cum	Cumulative
Fe-st	Ironstone	mld	Moldic	sltst	Siltstone	Frac	Fraction
fis	Fiissile	mod	Moderate	sm	Smooth	KV	Vertical Permeability
fl	Fill (ed)	mot	Mottled	sp	Spot (ted) (ty)	mD-m	Millidarcy-Metre
fld	Feldspar (thic)	mtx	Matrix	ssd	Soft Sediment Deformation	Por-m	Porosity-Metre
fltg	Floating	musc	Muscovite	srt	Sort (ed) (ing)	Resid	Residual
fnt	Faint (ly)			ss	Sandstone	Rng	Range
fos	Fossil (iferous)	n	No, none, not	stn	Stain (ed) (ing)	Smpl	Sample
fr	Fair	nod	Nodule	strom	Stromatoporoid	Thickness	Representative Thickness
frac	Fracture (ed)	num	Numerous	stromlt	Stromatolite	Wt. Avg.	Weighted Average
frag	Fragment (al)			styl	Stylolite (ic)		

KMAX and K90 are transverse permeability measurements on full diameter samples

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Company : PARAMOUNT RESOURCES LTD.

Lab No: C94-9076

Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

Fig No: 1

Formation: SULPHUR POINT

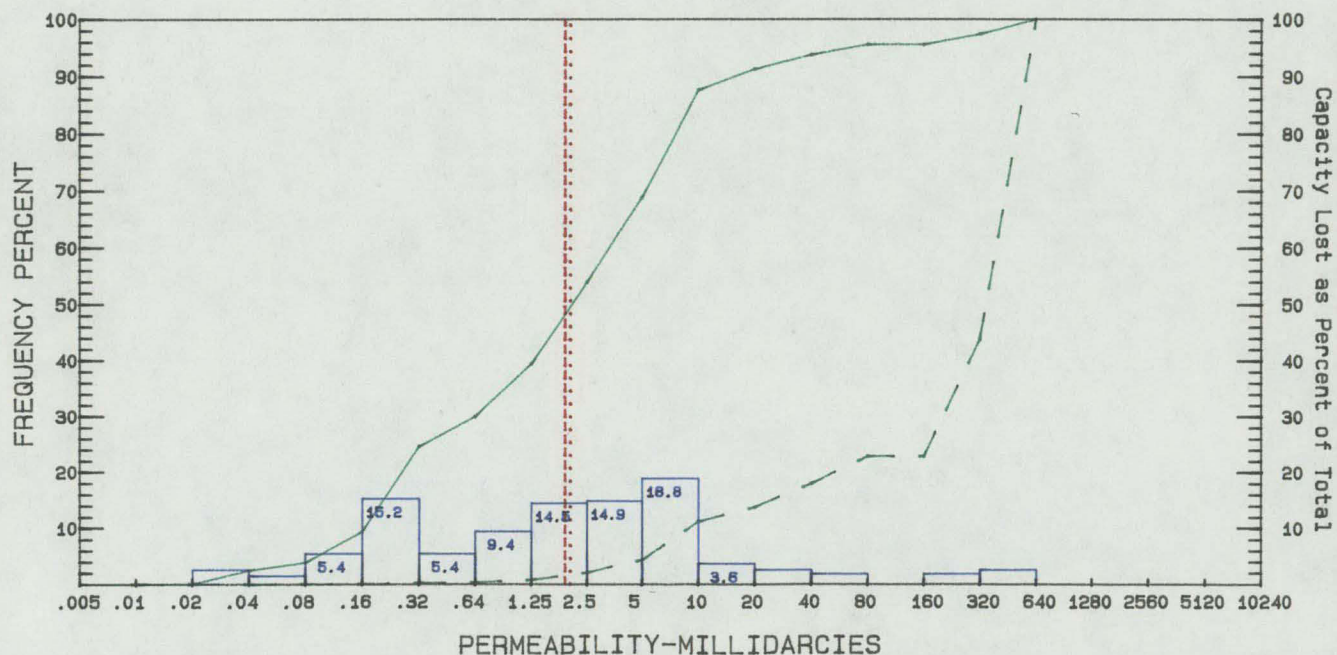
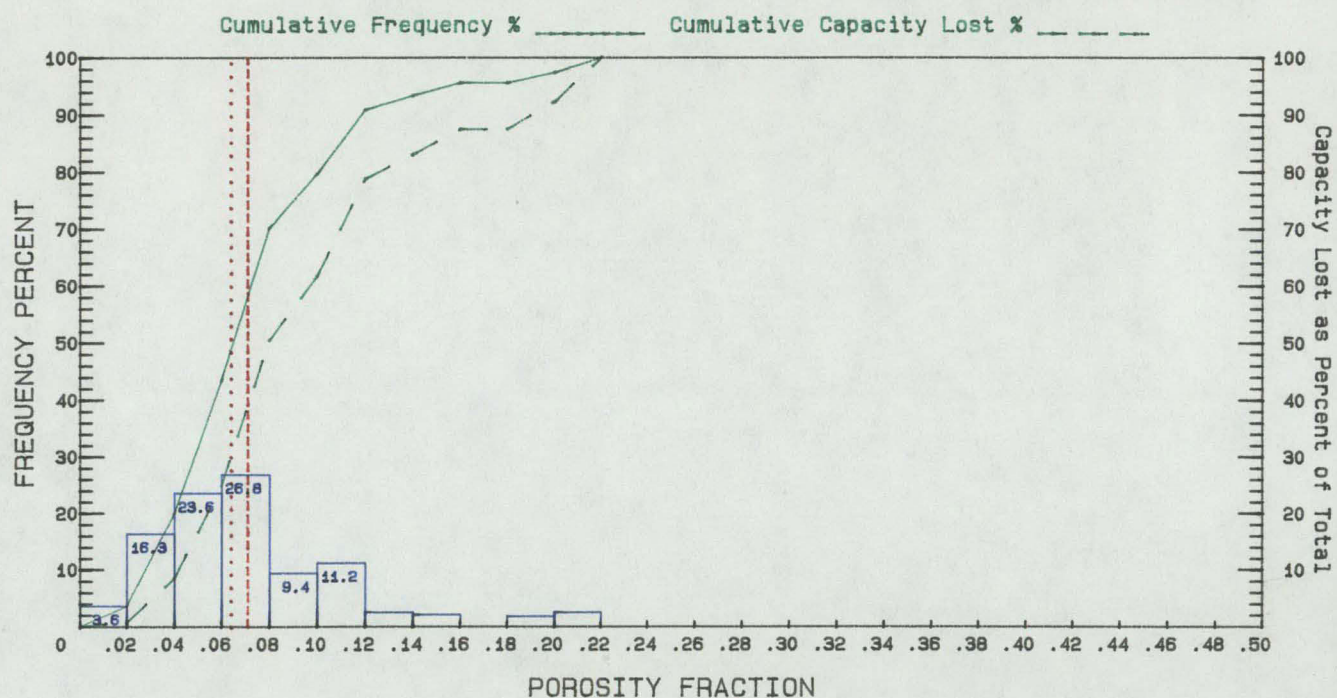
Date : 1994-03-14

Interval : 1407.00 - 1441.00

Arithmetic Mean Porosity: 0.072
Median Porosity: 0.065

Geometric Mean KMAX: 1.915
Median KMAX: 2.066

POROSITY AND PERMEABILITY HISTOGRAMS



CHEMICAL & GEOLOGICAL LABORATORIES INC.

Company : PARAMOUNT RESOURCES LTD.

Lab No: C94-9076

Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

Fig No: 2

Formation: SULPHUR POINT

Date : 1994-03-14

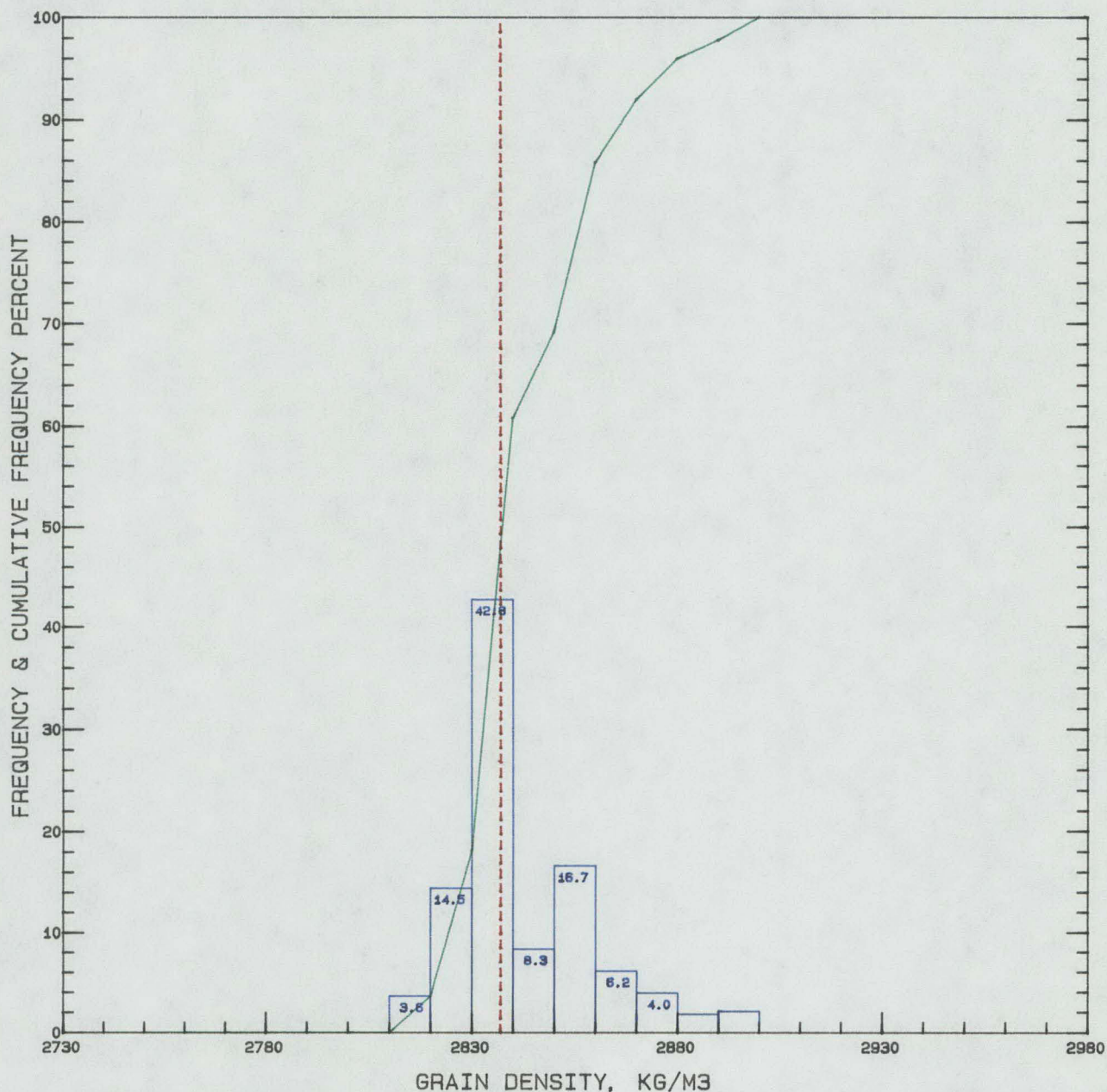
Interval : 1407.00 - 1441.00

Arithmetic Mean Grain Density: 2838.

Median Grain Density: 2837.

GRAIN DENSITY HISTOGRAM

Cumulative Frequency ———



CHEMICAL & GEOLOGICAL LABORATORIES INC.

Company : PARAMOUNT RESOURCES LTD.

Lab No: C94-9076

Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

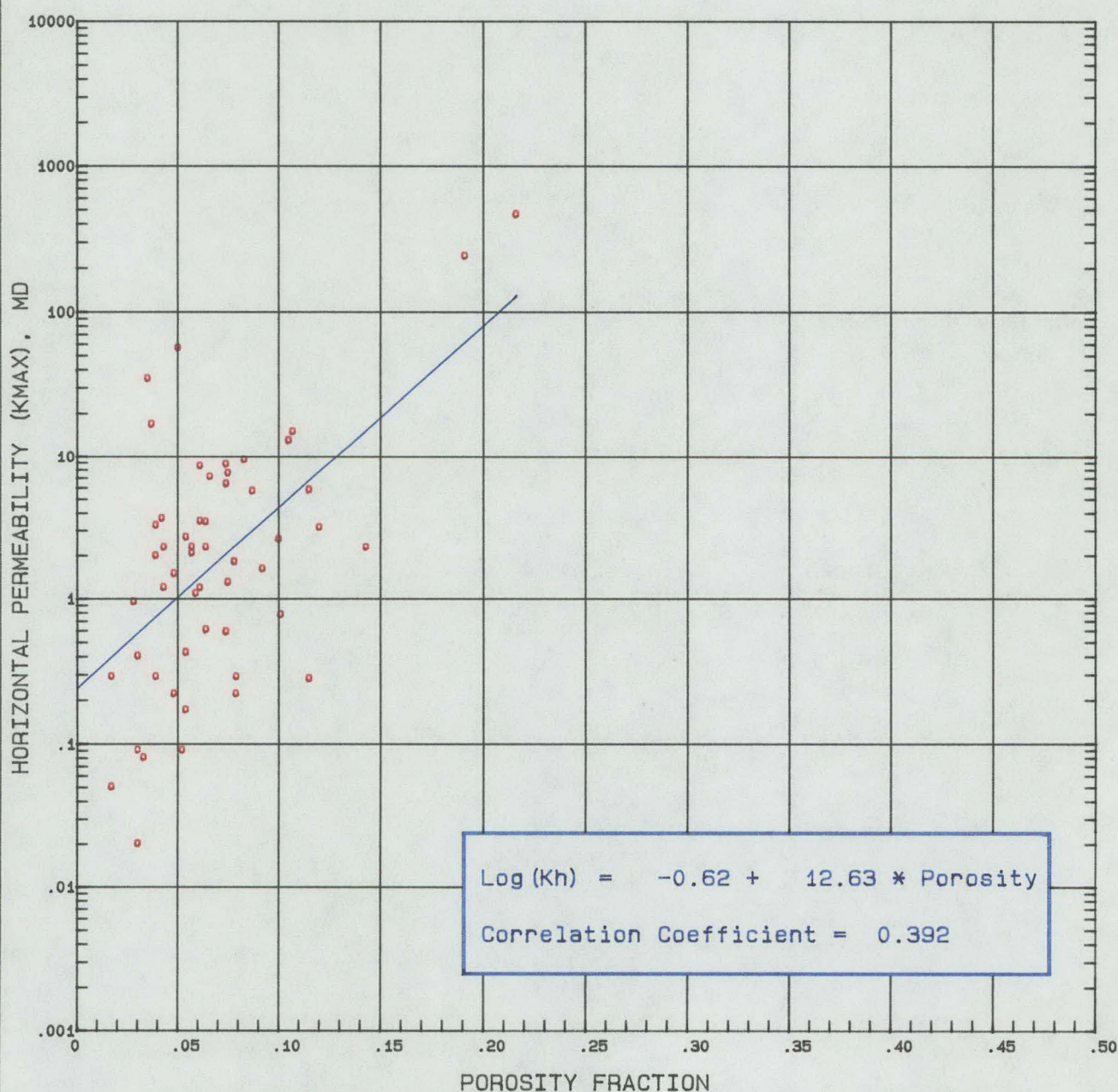
Fig No: 3

Formation: SULPHUR POINT

Date : 1994-03-14

Interval : 1407.00 - 1441.00

HORIZONTAL PERMEABILITY (KMAX) VS POROSITY



CHEMICAL & GEOLOGICAL LABORATORIES INC.

Company : PARAMOUNT RESOURCES LTD.

Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

Formation: SULPHUR POINT

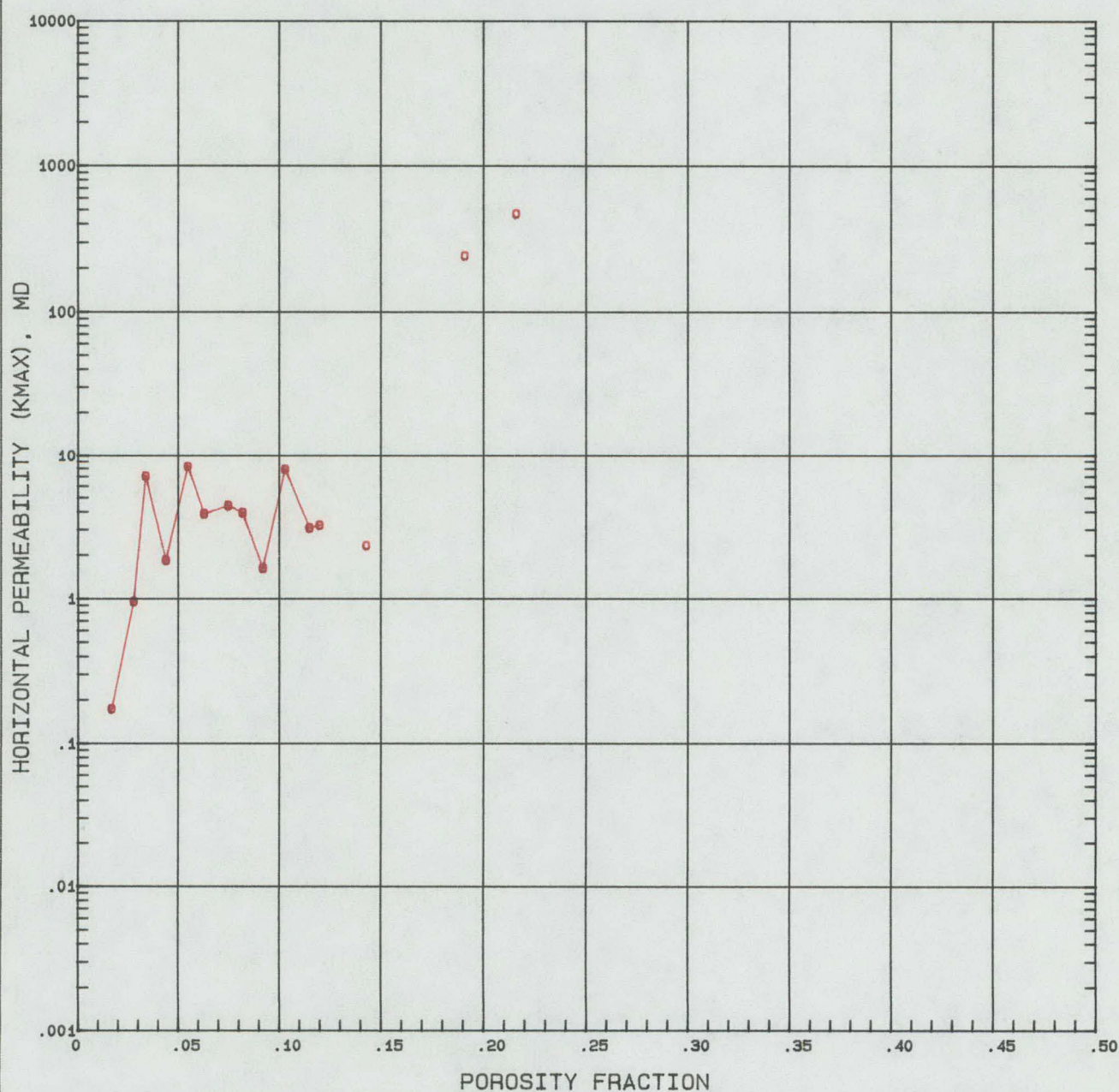
Interval : 1407.00 - 1441.00

Lab No: C94-9076

Fig No: 4

Date : 1994-03-14

ARITHMETIC AVG KMAX WITHIN POROSITY RANGES



CHEMICAL & GEOLOGICAL LABORATORIES INC.

Company : PARAMOUNT RESOURCES LTD.

Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

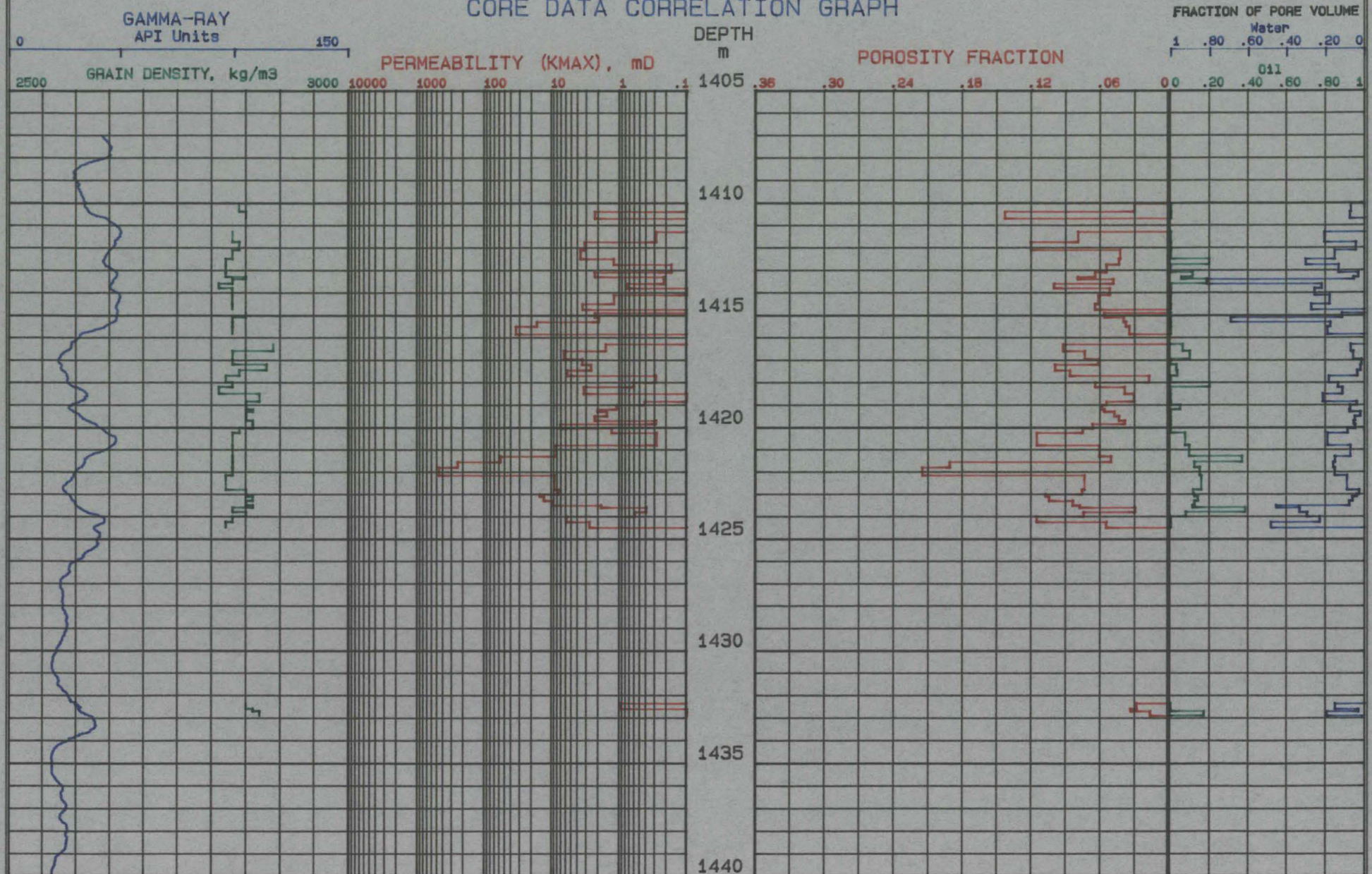
Cored Interval : 1407.00 -1441.00

Lab No: C94-9076

Fig No: 5

Date : 1994-03-14

CORE DATA CORRELATION GRAPH



CHEMICAL & GEOLOGICAL LABORATORIES INC.

Company : PARAMOUNT RESOURCES LTD.

Lab No: C94-9076

Well Name: PARAMOUNT ET AL CAMERON I-74-60-10; 117-15

Fig No: 6

Formation: SULPHUR POINT

Date : 1994-03-14

Core No : 1 - 2

TOTAL GAMMA LOG

