

**SIDEWALL ANALYSIS REPORT**

**PARA et al MOUNT COTY I-02  
I-02-060-20-123-30**

**N.E.B. COPY**

**AGAT**<sup>®</sup> Laboratories



**CORE SERVICES DIVISION**

**AGAT**<sup>®</sup> Laboratories



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Prepared for:

**PARAMOUNT RESOURCES LTD.**

**RC9102**

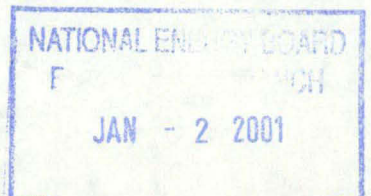
December, 2000

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**TABLE OF CONTENTS**

PAGE

Final Core Analysis Data ..... 1

Porosity – Permeability (Kmax) Correlation ..... Figure 1

**General Information**

Sample Handling and Analysis Information

Abbreviations

**CORE ANALYSIS DATA**

**PARA et al MOUNT COTY I-02  
I-02-060-20-123-30**

COMPANY : PARAMOUNT RESOURCES LTD.  
 WELL NAME : PARA et al MOUNT COTY I-02  
 LOCATION : I-02-060-20-123-30  
 FORMATION :  
 DRILLING FLUID : WATER BASE MUD

PAGE : 1  
 DATE : 12-13-2000  
 W/O No : RC9102

## CORE ANALYSIS - SIDEWALL REPORT

Sample	interval (m)		Rep Thick (m)	Sample Length (m)	Gas Permeability			Capacity Kmax mD-m	Porosity	Capacity Ø m	Density (Kg/m <sup>3</sup> )		Residual Saturation		Remarks
	Top	Base			Kmax (mD)	K90 (mD)	Kv (mD)				Bulk	Grain	Oil	Water	
SP001	721.00	-	-	-	0.10	-	-	-	0.073	-	2390	2590	-	-	ss vf-fgr carblam.pyr.fracs
SP002	715.00	-	-	-	0.07	-	-	-	0.096	-	2750	3040	-	-	ss vf-fgr dol:sid
SP003	712.00	-	-	-	0.08	-	-	-	0.106	-	2380	2660	-	-	ss vf-fgr carbptg
SP004	1720.10	-	-	-	0.03	-	-	-	0.019	-	2760	2820	-	-	dol.vf-fxln.calc
SP005	1714.00	-	-	-	0.02	-	-	-	0.027	-	2740	2820	-	-	dol.vf-fxln.carblam.calc.pyr
SP006	1235.00	-	-	-	-	-	-	-	-	-	-	-	-	-	insufficient sample
SP014	1082.00	-	-	-	2.28	-	-	-	0.097	-	2390	2650	-	-	ss vf-fgr
SP015	1080.00	-	-	-	6.40	-	-	-	0.114	-	2340	2640	-	-	ss vf-fgr
SP016	1064.50	-	-	-	7.05	-	-	-	0.112	-	2360	2650	-	-	ss vf-fgr
SP017	1062.50	-	-	-	14.2	-	-	-	0.110	-	2340	2630	-	-	ss vf-fgr
SP018	1060.00	-	-	-	-	-	-	-	-	-	-	-	-	-	insufficient sample

Company : PARAMOUNT RESOURCES LTD.

Location : I-02-060-20-123-30

Interval : SIDEWALLS

Formation :

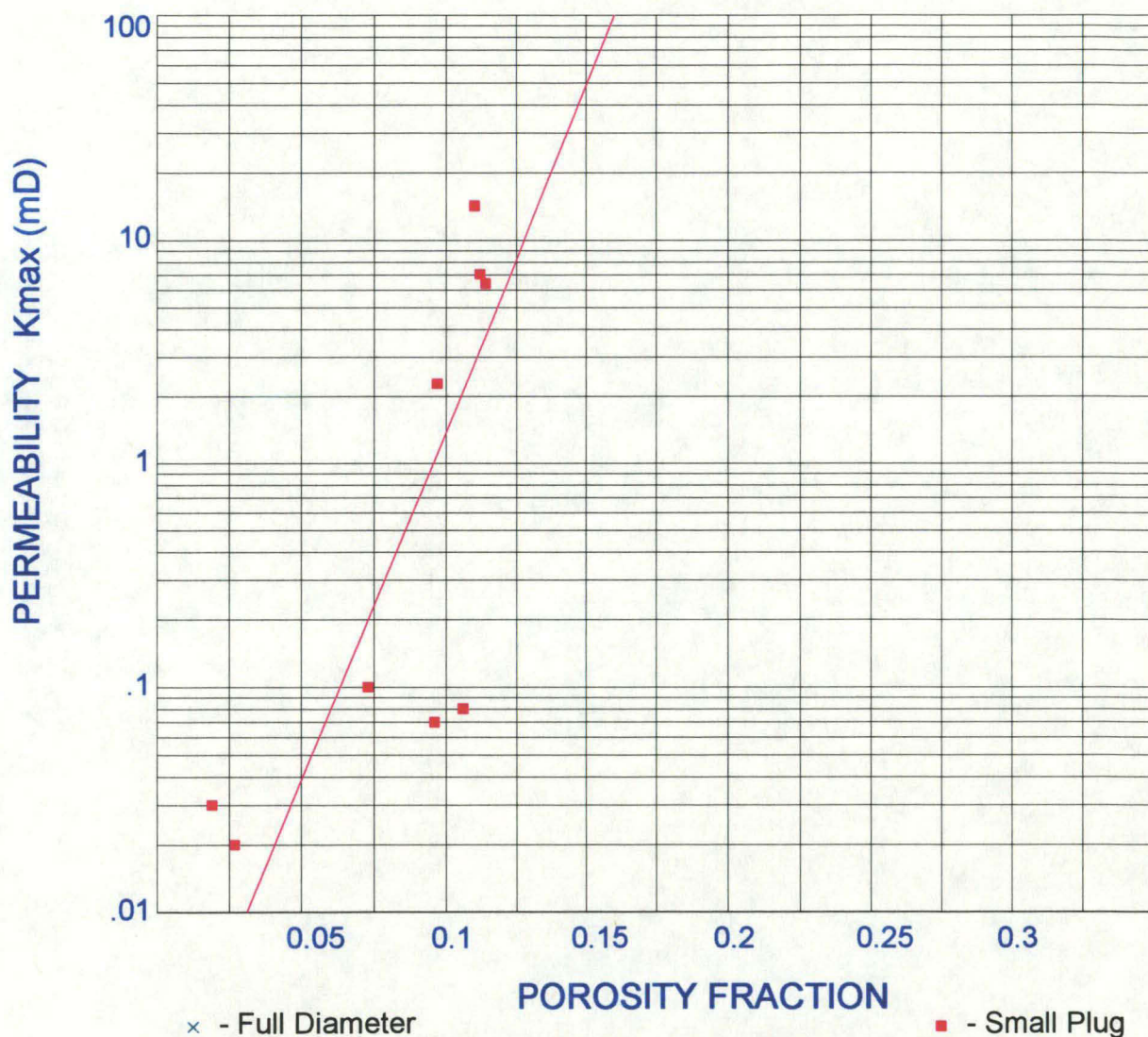
FIGURE : 1

W/O : RC9102

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## POROSITY-PERMEABILITY CORRELATION



Equation of Line :  $\text{Log}(K_{\text{max}}) = -2.97 + 31.02 * \text{Porosity}$

Correlation Coefficient  $r = 0.75$

**SAMPLE HANDLING**

## AGAT LABORATORIES CORE SERVICES

### SAMPLE HANDLING AND ANALYSIS INFORMATION

Company : PARAMOUNT RESOURCES LTD.  
Well : PARA et al MOUNT COTY I-02  
Location : I-02-060-20-123-30

Coring Equipment : Diamond  
Coring Fluid : Water Base Mud

W/O Number : RC9102  
Date : 12-13-2000

#### HANDLING

Core Transported in : Boxes  
Cutting Solution : Water  
Cleaning Solvent : Toluene  
Extraction : Vapour Phase  
Cleaning Time : 144 hours  
Drying Equipment : Convection oven  
Drying Time/Temp : 48 hours @ 108°C

#### ANALYSIS

Grain volume measured by Boyle's Law using helium  
Bulk volume measured by caliper on right-cylindrical samples  
Permeability measured on 25.4mm diameter drilled plugs

#### REMARKS

SIDEWALL PLUG SAMPLES  
FIVE (5) SETS OF COLOR PHOTOS

## ABBREVIATIONS

## COMMON ABBREVIATIONS

abnt	Abundant	C	Coarse (ly)	f	Fine (ly)
abv	Above	calc	Calcite (areous)	fau	Fauna
Alg	Algae (al)	carb	Carbonaceous	Fe	Iron-Ferruginous
alt	Altered (ing)	cbl	Cobble (64-256 mm)	Fe-mag	Feromagnesian
amor	Amorphous	Ceph	Cephalopod	fenst	Fenestral
Amph	Amphipora	cgl	Conglomerate	fis	Fissile
ang	Angular	chk	Chalk (y)	fl	Fill (ed)
anhy	Anhydrite (ic)	chlor	Chlorite	fld	Feldspar (thic)
app	Appear	cht	Chert	flk	Flake
apr	Apparent	chty	Cherty	flky	Flaky
aprox	Approximate (ly)	cl	Clastic	flor	Fluorescence
arg	Argillaceous	cln	Clean	flt	Fault (ed)
ark	Arkose (ic)	clr	Clear	fltg	Floating
asph	Asphalt (ic)	cly	Clay (ey)	foram	Foraminifera
AST	Assigned similar to (no actual sample taken)	com	Common	fos	Fossil (iferous)
apha	Aphanitic	coq	Coquina	fr	Fair
		Cor	Coral	frac	Fracture (ed)
bcm	Become (ing)	crbnt	Carbonate	frag	Fragment (al)
bd	Bed	Crin	Crinoid (al)	fri	Friable
bdd	Bedded	crm	Cream	frmwk	Framework
bdg	Bedding	crpxl	Cryptocrystalline	fros	Frosted
Belm	Belemnites	ctc	Contact		
bent	Bentonite (ic)			g	Good
bf	Buff	deb	Debris	Gast	Gastropod
biocl	Bioclastic	decr	Decrease (ing)	gl	Glass (y)
bioturb	Bioturbated	desi	Desiccation	glau	Glauconite (ic)
bit	Bitumen (inous)	dism	Disseminated	gn	Green
bl	Blue (ish)	dk	Dark (er)	gr	Grain (ed)
blk	Black	dns	Dense (er)	gran	Granular
blky	Blocky	dol	Dolomite (ic)	grd	Grade (ed)
bnd	Band (ed)	drsy	Drusy	grnl	Granule (2-4 mm)
Brac	Brachiopod	dtrl	Detrital (us)	gy	Grey
brec	Breccia (ted)			gyp	Gypsum (iferous)
bri	Bright	elg	Elongate		
brit	Brittle	euhed	Euhedral		
brn	Brown				
Bry	Bryozoa				
bulb	Bulbous				
bur	Burrowed				

## COMMON ABBREVIATIONS (CONTINUED)

hd	Hard	m	Medium	pk	Pink
hfrac	Horizontal Fracture	mar	Maroon	plag	Plagioclase
hi	High	mas	Massive	plcy	Pelecypod
hrtl	Horizontal	mat	Material, matter	pl	Plant
hvy	Heavy	mica	Mica (ceous)	plty	Platy
hydc	Hydrocarbon	mic	Micro	por	Porous (sity)
		mky	Milky	pos	Possible (ility)
ig	Igneous	mnr	Minor	p-p	Pin-Point
imbed	Imbedded	mnrl	Mineral (ized)	pred	Predominant (ly)
imp	Impression	mnut	Minute	prim	Primary
incl	Included (sion)	Mol	Mollusca	prob	Probable (ly)
incr	Increase	mot	Mottled	prom	Prominent (ly)
indst	Indistinct	mrly	Marly	pt	Part (ly)
intbd	Interbedded	mtx	Matrix	ptch	Patch (es)
intcl	Intraclast (s)			ptg	Parting
intfrag	Interfragmental	n	No, none, non	purp	Purple
intgran	Intergranular	nod	Nodule	pyr	Pyrite (ic) (ized)
intlam	Interlaminated	num	Numerous	pyrbit	Pyrobitumen
intr	Intrusion (ive)				
intv	Interval	o	Oil	qtz	Quartz
intxl	Intercrystalline	occ	Occasional	qtzc	Quartzitic
ireg	Irregular	od	Odor	qtzs	Quartzose
ird	Iridescent	ool	Oolite (ic)		
intrsk	Intraskeletal	op	Opaque	rd	Round (ed)
		org	Organic	repl	Replaced (ing) (ment)
kao	Kaolin	orng	Orange	rexl	Recrystallized
		orth	Orthoclase	rmn	Remains (nant)
lam	Laminated	Ost	Ostracod	rr	Rare
lchd	Leached	ovgth	Overgrowth	rsns	Resinous
len	Lentil (cular)	ox	Oxidized	rthy	Earthy
lith	Lithographic				
lmy	Limy	p	Preliminary (as suffix)	s	Small
lrg	Large (er)	pbl	Pebble (4-64 mm)	sa	Salt (y)
ls	Limestone	pel	Pellet	S	Sulphur
lse	Loose	perm	permeability	s&p	Salt & Pepper
lstr	Lustre	pet	Petroleum (iferous)	sat	Saturated
lt	Light (er)	phos	Phosphate (ic)	sb	Sub

## COMMON ABBREVIATIONS (CONTINUED)

sc	Scales	tab	Tabular	xbd	Cross-bedded
scat	Scattered	tex	Texture	xbdg	Cross-bedding
sd	Sand (1/16 - 2mm)	Tham	Thamnopora	xl	Crystal (line)
sdv	Sandy	thk	Thick	xlam	Cross-laminated
sec	Secondary	thn	Thin		
sed	Sediment (ary)	thru	Throughout	yel	Yellow
sft	Soft	tr	Trace		
sh	Shale	trnsl	Translucent	zn	Zone
shad	Shadow	trnsp	Transparent		
shy	Shaly	tt	Tight	*	Broken core
sid	Siderite (ic)	tub	Tubular	/	With
sil	Silica			> 10000	Permeability over 10000 mD
sks	Slickensided	uncons	Unconsolidated	< 0.01	Permeability less than 0.01 mD
sl	Slight (ly)	unident	Unidentifiable	CC	Cracked Core
sln	Solution	up	Upper	DR	Drilled
slt	Silt			LC	Lost Core
sltst	Siltstone	v	Very	RU	Rubble
slty	Silty	var	Variable	mD	milliDarcy
sm	Smooth	vcol	Varicolored		
SP	Small Plug (as prefix)	vfrac	Vertical Fracture		
sp	Spot (ted) (ty)	vgt	Varigated		
spec	Speck (led)	vn	Vein		
spl	Sample	vrtl	Vertical		
srt	Sort (ed) (ing)	vug	Vug (gy) (ular)		
strg	Stringer				
Strom	Stromatoporoid	w	Well		
stromlt	Stromatolite	wh	White		
struc	Structure	wk	Weak		
styl	Stylolite (ic)	wthrd	Weathered		
suc	Sucrosic	wtr	Water		
sug	Sugary	wvy	Wavy		
sup	Supported	wxy	Waxy		
surf	Surface	wsrt	Well sorted		
sz	Size				