

December 19, 2006



PATTERSON PETROLEUM LP
P.O. Drawer 1416
Snyder, TX 79550

Attn: NOLAN VON ROEDER

RE: PADDY '18' STATE # 1
Rotary Sidewall Core Analysis

Mr. VON ROEDER :

The core analysis data from the above referenced well is enclosed in the following pages.
All quality control data is enclosed in a separate section of the report. The data, results,
and photographic negatives will be maintained in our files for your future reference.
If you have any questions regarding our results or procedures, please do not hesitate
to contact us. We appreciate the opportunity to analyze the core from the above referenced
well and look forward to working with you again in the future.

PATTERSON PETROLEUM LP
P.O. Drawer 1416
Snyder, TX 79550
Attn: NOLAN VON ROEDER
2 Copies of the report (1 with photographs and 1 CD-ROM)

Distribution:

Enclosed on following page

Sincerely,

Wayne Helms, President
Rotary Laboratories, Inc.



CORE ANALYSIS PROCEDURES
FOR
PATTERSON PETROLEUM LP
PADDY '18' STATE # 1
LEA COUNTY, NEW MEXICO

The Rotary Sidewalls were delivered to Rotary Laboratories, Inc.

Gases from the Sidewalls were measured by Hot Wire Chromatography and reported in Gas Units.

A brief Lithological Description of the Sidewalls was recorded.

A description of the Fluorescence of the Sidewalls was recorded.

Ultraviolet Light Photographs were taken of the Sidewalls for a permanent record.

Natural Light Photographs were taken of the Sidewalls for a permanent record.

Composite Photographs of the Sidewall End Trims were taken under Natural and Ultraviolet Light.

The Sidewalls were extracted utilizing the Dean Stark method.

The fluids were measured by the Dean Stark method.

Porosities were measured in a Boyle's Law Porosimeter utilizing Helium.

Permeabilities were measured in a Hassler Sleeve Permeameter utilizing Nitrogen at 300 psi confining pressure.

Test samples of a known permeability were measured before and after the Sidewall permeabilities were measured.

ROTARY SIDEWALL CORE ANALYSIS

PATTERSON PETROLEUM LP
PADDY '18' STATE # 1
LEA COUNTY, NEW MEXICO

A.P.I. NUMBER : 30-025-37944
FIELD : Paddock East
LOCATION: 330' FSL, 990' FWL,
Section 18, T-17-S, R-33-E

FILE NO. : 061215-1
DATE : December 18, 2006
ANALYSTS : WH, SB, PK, JR

DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POROSITY %	PERM mD	SATURATIONS Sw	So	GAS UNITS	FLUORESCENCE %	LITHOLOGY
1	5,894.0	2.83	15.4	403.411	11.4	13.2	83	100	Br t yl-bl Dol crm-tn mod-sslt y ssdy suc abd ppp m/c
2	5,895.0	2.85	6.3	0.757	44.9	9.2	141	40	Br t yl-bl Dol tn-brn mod-sslt y ssdy tr ppp foss m/c
3	5,896.0	2.81	4.1	0.052	88.6	Tr	14	Tr	Br t yl-bl frac Dol tn-brn ssly tr ppp frac
4	5,897.0	2.84	6.9	0.051	61.0	Tr	6	Tr	Br t yl-bl Dol tn-brn ssly sc ppp
5	5,898.0	2.83	12.0	25.936	15.9	23.4	291	100	Br t yl-bl Dol crm-tn mod-sslt y ssdy suc i/p sc ppp m/c
6	5,899.0	2.89	15.1	8.351	20.5	21.4	159	90	Br t yl-bl Dol tn-brn mod slty ssdy suc i/p anhyd abd ppp sty m/c
7	5,900.0	2.83	6.8	0.196	45.0	4.9	39	30	Br t yl-bl Dol tn-brn ssly tr ppp
8	5,901.0	2.83	17.4	19.102	11.8	18.5	50	100	Br t yl-bl Dol tn-brn mod-sslt y sdy suc i/p sc ppp m/c
9	5,908.0	2.85	10.2	1.096	19.6	7.6	239	80	Br t yl-bl Dol tn-brn mod-sslt y ssdy sc ppp
10	5,909.0	2.85	9.9	tbfa	23.5	15.2	163	90	Br t yl-bl Dol tn-brn mod-sslt y ssdy sc ppp frac
11	5,910.0	2.85	6.0	0.136	56.9	11.0	40	10	Br t yl-bl Dol tn-brn ssly ssdy tr ppp
12	5,911.0	2.86	8.4	0.837	31.4	17.0	167	90	Br t yl-bl Dol tn-brn ssly ssdy sc ppp
13	5,912.0	2.85	5.5	tbfa	53.9	11.4	89	20	Br t yl-bl Dol tn-brn ssly ssdy sc ppp
14	5,913.0	2.83	1.2	0.032	73.9	Tr	11	Tr	Br t yl-bl Dol tn-brn dns ssly tr ppp frac
15	5,914.0	2.83	5.6	0.237	20.9	15.0	280	60	Br t yl-bl Dol tn-brn ssly sc ppp frac m/c
16	5,924.0	2.82	3.6	0.044	62.8	Tr	42	10	Br t yl-bl Dol tn-brn ssly sc ppp
17	5,934.0	2.82	9.1	12.426	15.8	18.3	40	60	Br t gld Dol tn-brn mod-sslt y ssdy suc i/p sc ppp m/c
18	5,935.0	2.83	10.3	17.901	20.1	4.1	0	10	Br t gld Dol tn-brn mod-sslt y ssdy suc i/p sc ppp m/c



ROTARY SIDEWALL CORE ANALYSIS

PATTERSON PETROLEUM LP
PADDY '18' STATE # 1
LEA COUNTY, NEW MEXICO

A.P.I. NUMBER : 30-025-37944
FIELD : Paddock East
LOCATION: 330' FSL, 990' FWL,
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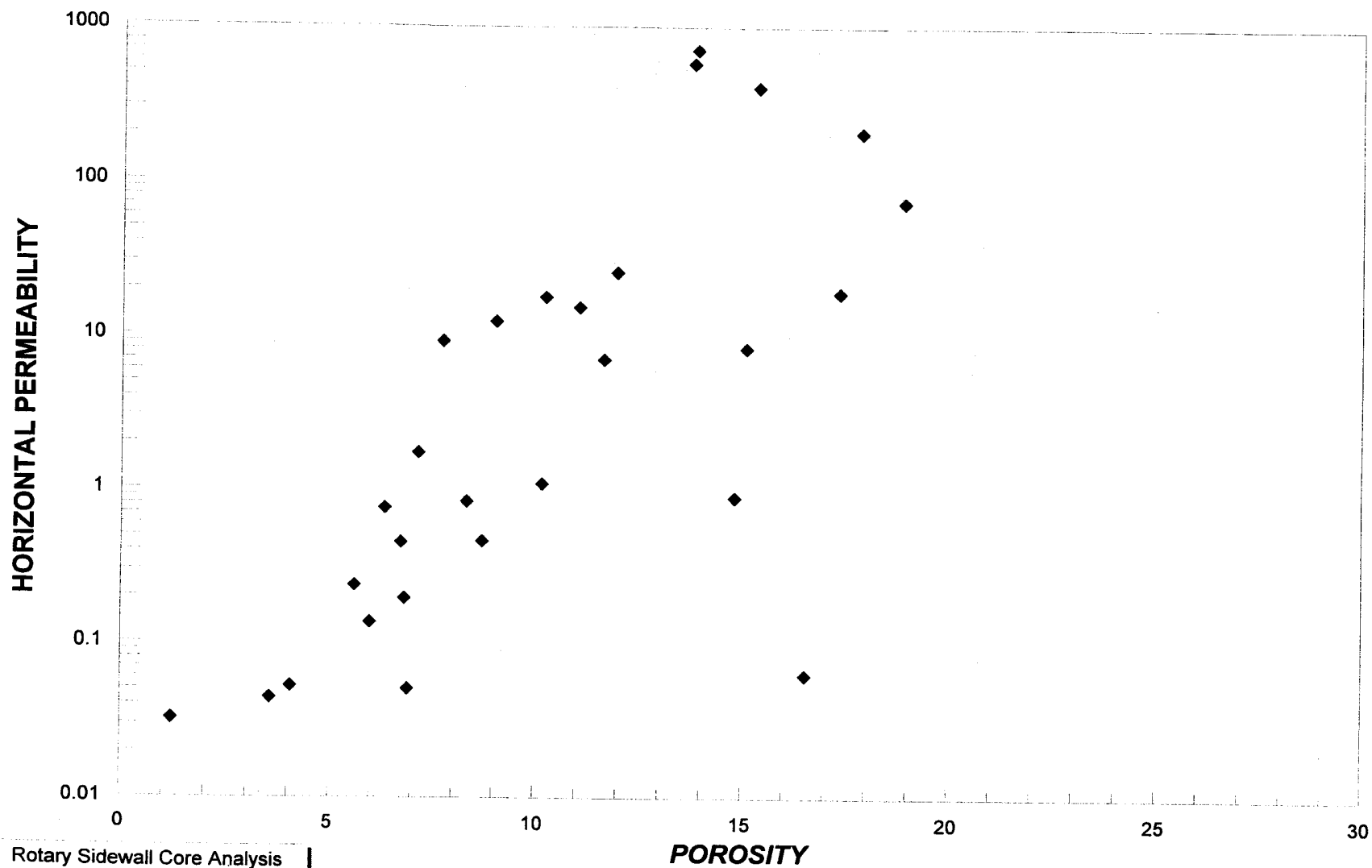
FILE NO. : 061215-1
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ANALYSTS : WH, SB, PK, JR

DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POROSITY %	PERM mD	SATURATIONS Sw	So	GAS UNITS	FLUORESCENCE %	LITHOLOGY
19	5,936.0	2.84	16.6	0.063	15.0	0.0	0	0	DI mf Dol tn-brn mod-ssltly sdy suc sc ppp m/c
20	6,014.0	2.76	7.4	tbfa	36.9	10.0	225	40	Yl-bl-wht Dol tn-brn sslty sdy tr pyr sty
21	6,032.0	2.84	7.7	9.247	15.7	15.4	228	90	Brt yl-gld Dol tn-brn mod-ssltly sdy suc i/p sc ppp m/c
22	6,033.0	2.81	11.7	11.109	11.3	17.1	275	100	Brt yl-gld Dol tn-brn mod-ssltly sdy abd ppp-sml vug m/c
23	6,034.0	2.86	11.1	15.360	12.5	19.4	322	90	Brt yl-gld Dol tn-brn mod-ssltly sdy suc i/p sc ppp tr anhy m/c
24	6,036.0	2.84	8.7	0.464	17.3	8.6	299	50	Brt yl-gld Dol tn-brn sslty sdy sc ppp-sml vug
25	6,037.0	2.85	17.9	206.183	17.4	10.8	297	90	Brt yl-gld Dol tn-brn mod-ssltly sdy suc i/p sc ppp tr anhy m/c
26	6,038.0	2.84	18.9	73.595	16.0	13.8	313	100	Brt yl-gld Dol tn-brn mod-ssltly sdy suc sc ppp tr anhy m/c
27	6,066.0	2.90	14.8	0.895	36.4	8.1	159	40	Brt gld-yl Dol tn-brn sslty sdy anhyd sc ppp m/c
28	6,067.0	2.83	13.8	572.522	26.6	13.9	226	80	Brt gld-yl Dol tn-brn sslty sdy suc i/p sc ppp m/c
29	6,068.0	2.86	13.9	703.475	21.7	13.4	265	90	Brt gld-yl Dol tn-brn sslty sdy suc i/p sc ppp m/c
30	6,086.0	2.86	7.1	1.732	22.1	11.8	165	70	Brt gld-yl Dol tn-brn mod-ssltly ssdy tr ppp
31	6,091.0	2.85	6.7	0.453	20.2	12.5	230	80	Gld-yl Dol tn-brn mod-ssltly ssdy sc ppp



PATTERSON PETROLEUM LP
PADDY '18' STATE # 1



P.O. Box 3501 • Midland, Texas 79702-3501 • 432-684-8800 • Fax 432-684-8821 • E-mail rotarylab@prodigy.net



PATTERSON PETROLEUM LP
PADDY '18' STATE # 1
12/19/2006

QUALITY CONTROL RERUN DATA

Sample No.	GRAIN DENSITY		POROSITY		<i>k</i> standard Test Sample	PERMEABILITY	
	original	reruns	original	reruns		original	reruns
1	2.830	2.829	15.37	15.35			
4	2.840	2.840	6.90	6.92	2.614	0.051	0.049
6	2.895	2.896	15.10	15.13			
8	2.826	2.825	17.37	17.34		19.102	19.021
11	2.848	2.849	5.99	6.03			
14	2.831	2.832	1.22	1.26		0.032	0.032
18	2.834	2.834	10.25	10.26			
21	2.843	2.844	7.75	7.76		9.247	9.209
26	2.836	2.837	18.92	18.97			
28	2.833	2.831	13.80	13.75	2.617	572.522	561.880
31	2.852	2.849	6.73	6.65			

LITHOLOGICAL ABBREVIATIONS

Anhydrite (-ic)	anhy, anhyd	Filled	fd	Poor	pr
Anhydrite inclusion	AI	Fine (-ly)	f, fnly	Pyrite	pyr
Bentonite (-ic)	bent	Fluorescence	flu	Quartz (-itic)	qtz
Black (-ish)	blk, blksh	Fossil (-iferous)	foss	Red (ish)	rd, rdsh
Bleeding Oil	B/O	Fracture	frac	Round	rnd
Brecciated	brec	Fragments	frag	Residual Oil	So
Bright	brt	Friable	fri	Residual Water	Sw
Brittle	brit	Fusulinid	fus	Sample	Spl
Broken	brkn	Gilsonite	gil	Sandstone	Ss
Brown	brn	Gold	gld	Sandy	sdv
Buff	bf	Good	gd	Scattered	sc
Calcite (-ic)	calc, calctc	Grain (-s)	gr	Shaley	shy
Calcareous	calc	Granular	gran	Shale	sh
Carbonaceous	carb	Gray	gy	Shale parting	s/p
Cement	cmt	Green	grn	Silt (-y)	slt, slty
Chalk (-y)	chk, chky	Gypsum	gyp	Siliceous	sil
Chert	cht	Hair line(frac)	hl	Slight (-ly)	sli, s
Clay	cl	Halite	hal	Small	sml
Clear	clr	Inclusion	incl	Spotted (-y)	sp
Coal	c	Laminations (ated)	lam	Stringer	strgr
Coarse	crs	Large	lrg	Stylolite (-itic)	sty, styl
Conglomerate	cgl	Light	lt	Sucrosic	suc
Consolidated	consol	Limestone	ls	Sulphur	su
Contaminated	contam	Limey	lmy	Tan	tn
Crinoid (-al)	crin, crinal	Lithology	lith	Too broken	tbfa
Cross-bedded	x-bd	Medium	m	(for Analysis)	
Crystal (-line)	Xl, xln	Mineral Fluorescence	mf	Thin	thn
Dark	dk	Moderate	mod	Trace	Tr
Dense	dns	Mudcake	m/c	Very	v
Diameter	dia	No Show	N/S	Vertical	vert, vt
Dolomite (ic)	dol, dolm	Oolite (-itic)	ool	Vug (-gy)	vug
Dull	dl	Pale	pl	Well	wl
Faint	fnt	Permeability	Perm, K	White	wht
Fair	fr	Pin-Point Porosity	ppp	Yellow	yl

