

HALLWOOD PETROLEUM, INC.

BASS # 4

LEA COUNTY, NEW MEXICO

ROTARY SIDEWALL CORE ANALYSIS

G-30-20s-33e 1700/N 9 1815/E

30-025-34383



CONVENTIONAL AND SPECIAL CORE ANALYSIS
GAS & LIQUID ANALYSIS • OIL FINGERPRINTING
GEOLOGICAL ANALYSIS • CLASTICS/CARBONATES
SINGLE WELL/FIELD/REGIONAL STUDIES
WELL COMPLETION/STIMULATION STUDIES
ENVIRONMENTAL SERVICES

2057 COMMERCE DRIVE

MIDLAND, TEXAS 79703

(915) 699-2468

FAX (915) 699-2464

June 25, 1998

Mr. Kevin E. O'Connell
Hallwood Petroleum, Inc.
4582 South Ulster Street Parkway
Suite 1700
Denver, Colorado 80237

Re: Bass # 4
Lea County, New Mexico

Dear Mr. O'Connell:

Our data for the above referenced well are enclosed on the following pages in tabular and graphical form for correlation convenience.

We will retain our data and results in our files for future reference. We hope these results will be useful in evaluating your property. If you have any questions regarding our data or procedures, please do not hesitate to contact us.

We appreciate the opportunity of serving your core analysis needs and look forward to working with you and Hallwood Petroleum, Inc. again.

Thank you.

Sincerely,

David K. Floyd
Core Analysis Manager
Geologist

PROCEDURES

PROCEDURES

Re: Bass # 4
Lea County, New Mexico

- * The rotary sidewall cores were transported to Midland, Texas from the wellsite.
- * A gas sample was injected into a Total Hydrocarbon Analyzer from each Rotary Sidewall Core container for hydrocarbon detection.
- * Ultraviolet and natural light photographs were taken for a permanent record.
- * Water and oil saturations were determined by the Dean Stark method.
- * Porosities were determined using Boyle's Law Principle.
- * Permeability to air was measured using the Hassler Sleeve Permeameter.

- 2 cc Hallwood Petroleum, Inc.
4582 South Ulster Street Parkway
Suite 1700
Denver, Colorado 80237
Attn: Mr. Kevin E. O'Connell
- 2 cc Bass Enterprises Production Company
P. O. Box 2760
Midland, Texas 79702
Attn: Mr. John Smitherman
- 1 cc Bass Enterprises Production Company
201 Main Street
Suite 3100
Fort Worth, Texas 76102
Attn: Mr. Mike Stephenson
- 2 cc Texaco E & P, Inc.
P. O. Box 2100
Denver, Colorado 80201
Attn: Mr. Charles Bahr
- 2 cc Southwest Royalties, Inc.
P. O. Box 11390
Midland, Texas 79702
Attn: Marty Bloodworth
- 1 cc Beren Corporation
970 Fourth Financial Center
Wichita, Kansas 67202
- 1 cc Elliott-Hall Company
P. O. Box 1231
Ogden, Utah 88402-1231
- 1 cc Fina Oil & Chemical Co.
Development Division
14950 Heathrow Forest Parkway
Suite 300
Houston, Texas 77032
Attn: Dung Vu

HALLWOOD PETROLEUM, INC.

Well: BASS # 4

County: LEA COUNTY, NEW MEXICO
ROTARY SIDEWALL CORE ANALYSIS

Date: 06-06-98

Job No.: RMC593

Analyst: DAVID FLOYD

SAMPLE NO.	DEPTH	Kplug (mD)	POR %	GRAIN DENS	% FLUIDS		GAS (units)	OIL		LITHOLOGY
					H2O	OIL		FLOR		
1	6481	0.25	10.2	2.68	76.4	0.0	0	0		Ss ltgy vfgr sl slity intgr por
2	6499	2.43	14.4	2.66	83.5	0.0	2	0		Ss ltgy vfgr sl slity intgr por
3	6511	0.05	7.3	2.70	81.5	0.0	2	0		Ss ltgy vfgr sl slity tr intgr por
4	6597	0.17	14.1	2.68	53.4	12.2	220	50		Ss tangy—ltgy vfgr sl slity intgr por
5	6621	0.31	16.4	2.67	33.8	31.1	320	100		Ss tangy—ltgy vfgr sl slity intgr por
6	6687	0.02	9.7	2.65	78.4	0.0	12	0		Ss gy—dk gy vfgr slity lam sl shly intgr por
7	6709	0.11	10.3	2.69	63.1	12.3	4	50D		Ss ltgy—gytan vfgr sl slity intgr por
8	6727	6.63	16.5	2.65	59.4	13.5	200	100		Ss ltgy—gytan vfgr sl slity intgr por
9	6920	0.58	14.2	2.66	59.4	18.7	88	100D		Ss ltgy vfgr sl slity intgr por
10	6933	1.69	15.0	2.66	59.7	14.3	35	100D		Ss ltgy—gytan vfgr sl slity intgr por
11	6944	1.07	15.2	2.66	63.2	12.1	45	100D		Ss ltgy vfgr sl slity intgr por
12	6963	0.01	9.3	2.68	75.1	1.8	8	TR		Ss ltgy vfgr slity/shly lam tr intgr por
13	6967	5.08	18.8	2.64	51.1	11.0	270	100D		Ss tangy—ltgy vfgr sl slity intgr por
14	6974	0.02	10.5	2.65	80.6	0.0	7	0		Ss gy—dk gy vfgr slity/shly lam intgr por
15	7376	0.90	15.7	2.66	88.3	0.0	1	0		Ss ltgy—gytan vfgr sl slity intgr por
16	7400	0.36	15.5	2.66	90.7	0.0	1	0		Ss ltgy vfgr sl slity intgr por
17	7625	4.66	14.0	2.66	86.2	0.0	4	0		Ss ltgy—gytan vfgr sl slity intgr por
18	7637	1.08	13.9	2.66	85.2	0.0	4	0		Ss ltgy—gytan vfgr sl slity intgr por
19	7673	4.77	18.0	2.65	45.7	12.7	340	100		Ss ltgy vfgr sl slity intgr por
20	7685	0.04	10.8	2.68	73.2	0.0	14	0		Ss ltgy vfgr slity lam intgr por
21	7909	0.21	13.2	2.68	74.3	2.1	7	TR		Ss tan—gytan vfgr slity lam intgr por

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Well: BASS # 4

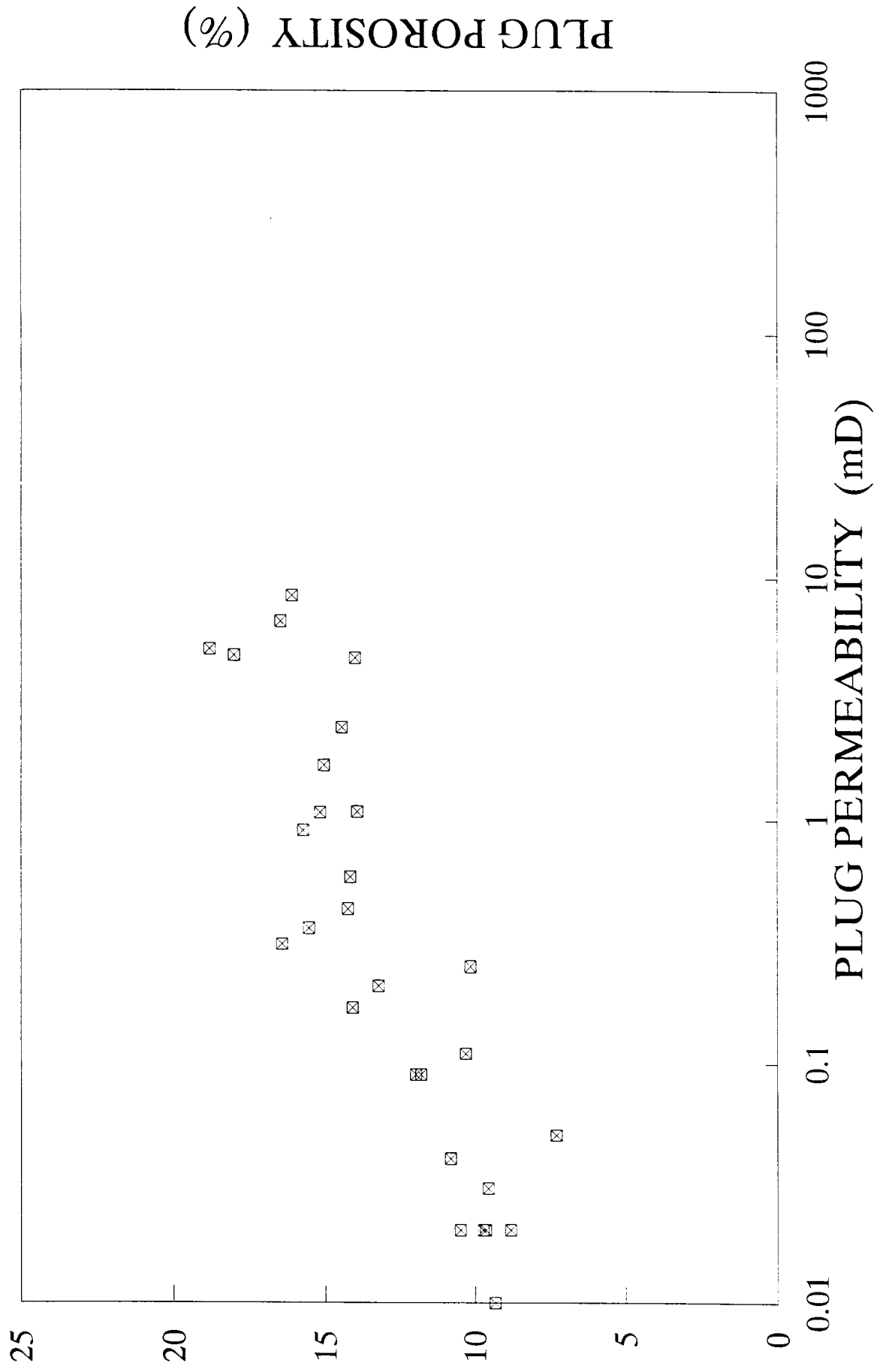
County: LEA COUNTY, NEW MEXICO
ROTARY SIDEWALL CORE ANALYSIS

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SAMPLE NO.	DEPTH	Kplug (mD)	POR %	GRAIN DENS	% FLUIDS		GAS (units)	OIL FLOR	LITHOLOGY
					H2O	OIL			
22	7919	0.43	14.2	2.66	47.7	12.3	370	90	Ss ltgy-tangy vfgr slty lam intgr por
23	7975	8.45	16.1	2.67	82.8	0.0	2	0	Ss ltgy-gytan vfgr sl slty intgr por
24	7979	0.09	11.8	2.67	65.5	2.0	85	TR	Ss ltgy vfgr slty lam intgr por
25	8073	0.03	9.5	2.68	39.5	22.8	340	70	Ss ltgy vfgr slty lam tr intgr por
26	8087	0.09	12.0	2.67	31.4	15.0	250	80D	Ss ltgy vfgr slty lam intgr por
27	8100	0.02	9.6	2.66	32.2	18.4	300	60D	Ss gy-ltgy vfgr slty lam tr intgr por
28	8107	0.02	8.8	2.66	32.5	19.1	295	60D	Ss gy-dk gy vfgr slty lam tr intgr por

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BASS # 4



NOMENCLATURE

a/a	As Above	fos	Fossil(iferous)
abnt	Abundant	frac	Fracture
ang	Angular	fri	Friable
anhy	Anhydrite(ic)		
aren	Arenaceous	glau	Glaucanite
arg	Argillaceous	g	Good
		grdg	Grading
bcm	Becoming	gr	Grain
bit	Bitumenious	gy	Gray(ish)
blk	Black	gn	Green
blky	Blocky	gyp	Gypsum
bn	Brown	gld	Gold
bl	Blue		
bri	Bright	hal	Halite
buf	Buff	hd	Hard
bur	Burrowed	hvy	Heavy
		hz	Horizontal
calc	Calcareous		
carb	Carbonaceous	ip	In Part
cmt	Cement	incl	Inclusion
chlky	Chalky	incr	Increasing
cht	Chert(y)	intbd	Interbedded
cly	Clay(ey)	intxl	Intercrystalline
cln	Clean	intgr	Intergranular
clr	Clear		
c	coarse	lam	Laminated
conch	Chonchoidal	lg	Large
cons	Consolidated	lt	Light(er)
crp	Crypto	lig	Lignite
xl(n)	Crystal(line)	ls	Limestone
		lse	Loose
dk	Dark		
dd	Dead	m	Medium
dns	Dense	mic	Mica
dia	Diameter	micxl	Microcrystalline
dism	Disseminated	mlky	Milky
dol	Dolomite(ic)	mnr	Mineral
		mod	Moderate
erthy	Earthy	mott	Mottled
embd	Embedded	mdst	Mudstone
evap	Evaporite		
		n/s	No Show
fnt	Faint	nvp	No Visible Porosity
fr	Fair	nod	Nodules
f	Fine		
fis	Fissile	occ	Occasional
flu	Fluorescence	od	Odor

o	Oil	tex	Texture
ool	Oolitic	tr	Trace
opq	Opaque	transl	Translucent
orng	Orange	Transp	Transparent
		trip	Tripolitic
ptg	Parting		
ply	Platey	uncons	Unconsolidated
p	Poor	up	Upper
por	Porosity		
pos	Possible	vert	Vertical
ppp	Pin Point Porosity	vis	Visible
pred	Predominant(ly)	v	Very
pyr	Pyrite	vit	Vitreous
		vug	Vug(gy)
qtz	Quartz		
		wxy	Waxy
rr	Rare(ly)	w/	With
rex1	Recrystallized	w/o	With Out
rd	Red	wh	White
res	Residual	wk	Weak
rnd	Round(ed)		
ROP	Rate of Penetration	yel	Yellow
sdv	Sand(y)	zn	Zone
ss	Sandstone		
sat	Saturated		
sct	Scattered		
sh	Shale		
shly	Shaley		
sil	Silica(iceous)		
slty	Silty		
sltst	Siltstone		
sl	Slight(ly)		
srt	Sorted(ing)		
sb	Sub		
suc	Sucrosic		
S	Sulfur(ous)		