

DRILL STEM TEST REPORT

Prepared For: **Anadarko Petro Corp**

1201 Lake Robbins Drive The Woodlands TX
77360

ATTN: Kenny Parks

4-31-39

Blakwell A#1

Start Date: 2004.03.27 @ 02:00:19

End Date: 2004.03.27 @ 13:04:49

Job Ticket #: 18287 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Anadarko Petro Corp

Blakwell A#1

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DST#: 1

Test Start: 2004.03.27 @ 02:00:19

GENERAL INFORMATION:

Formation: **Lwr Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:07:49

Time Test Ended: 13:04:49

Test Type: Conventional Straddle

Tester: Blake Wallace

Unit No: 20

Interval: **5728.00 ft (KB) To 5766.00 ft (KB) (TVD)**

Total Depth: 6175.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Good

Reference Elevations: 3197.00 ft (KB)

3188.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 6667 Outside

Press@RunDepth: 667.04 psig @ 5731.00 ft (KB)

Start Date: 2004.03.27

End Date: 2004.03.27

Start Time: 02:00:20

End Time: 13:04:49

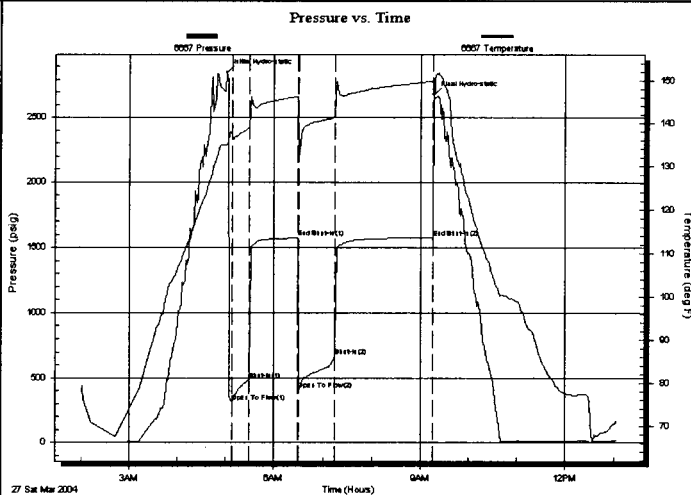
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2004.03.27 @ 05:01:19

Time Off Btm: 2004.03.27 @ 09:15:49

TEST COMMENT: IF-strong blow BOB 10 sec GTS 5 min
ISI-blew thru out
FF-strong blow BOB as soon as open fluid to surface 37 min
FSI-surface blow back for 23 min



PRESSURE SUMMARY

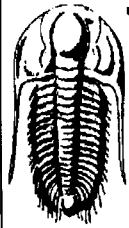
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2849.74	134.87	Initial Hydro-static
7	314.89	136.80	Open To Flow (1)
28	484.78	138.94	Shut-In(1)
87	1573.91	146.26	End Shut-In(1)
89	405.87	131.19	Open To Flow (2)
133	667.04	141.68	Shut-In(2)
254	1577.17	149.76	End Shut-In(2)
255	2680.80	144.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
465.00	30% G 70% condensate	2.29
93.00	20% G 40% cond 40% W	0.46
565.00	10% G 80% water	7.90

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	48.00	974.68
Last Gas Rate	0.75	126.00	2193.03
Max. Gas Rate	0.75	126.00	2193.03



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Anadarko Petro Corp

Blakwell A#1

1201 Lake Robbins Drive The Woodlands TX
77360

4-31-39

Job Ticket: 18287

DST#: 1

ATTN: Kenny Parks

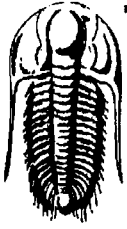
Test Start: 2004.03.27 @ 02:00:19

Tool Information

Drill Pipe:	Length: 5141.00 ft	Diameter: 3.80 inches	Volume: 72.11 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 561.00 ft	Diameter: 2.25 inches	Volume: 2.76 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 74.87 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 90000.00 lb
Depth to Top Packer:	5728.00 ft			Final 95000.00 lb
Depth to Bottom Packer:	5762.00 ft			
Interval between Packers:	34.00 ft			
Tool Length:	477.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments: Straddle packer held				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			5703.00	
Sampler	3.00			5706.00	
HMV	5.00			5711.00	
Jars	5.00			5716.00	
Safety Joint	3.00			5719.00	
Packer	5.00			5724.00	30.00 Bottom Of Top Packer
Packer	4.00			5728.00	
Stubb	1.00			5729.00	
Perforations	2.00			5731.00	
Recorder	0.00	6667	Outside	5731.00	
Perforations	30.00			5761.00	
Recorder	0.00	11019		5761.00	
Blank Off Sub	1.00			5762.00	34.00 Tool Interval
Packer	4.00			5766.00	
Stubb	1.00			5767.00	
Change Over Sub	1.00			5768.00	
Recorder	0.00	13255	Below	5768.00	
Blank Spacing	403.00			6171.00	
Change Over Sub	1.00			6172.00	
Bullnose	3.00			6175.00	413.00 Bottom Packers & Anchor

Total Tool Length: 477.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Anadarko Petro Corp
1201 Lake Robbins Drive The Woodlands TX
77360
ATTN: Kenny Parks

Blakwell A#1
4-31-39
Job Ticket: 18287 **DST#: 1**
Test Start: 2004.03.27 @ 02:00:19

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	80000 ppm
Viscosity: 6.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1100.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

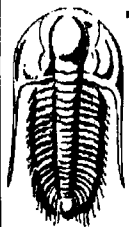
Length ft	Description	Volume bbl
465.00	30% G 70% condensate	2.287
93.00	20% G 40% cond 40% W	0.457
565.00	10% G 80% water	7.898

Total Length: 1123.00 ft Total Volume: 10.642 bbl

Num Fluid Samples: 1 Num Gas Bombs: 0 Serial #:

Laboratory Name: Caraway Laboratory Location: Liberal, KS

Recovery Comments: .091 @ 76 deg chlorides = 80000
4000 ML gas @ 1350 PSI



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GAS RATES

Anadarko Petro Corp

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77360

4-31-39

Job Ticket: 18287

DST#: 1

ATTN: Kenny Parks

Test Start: 2004.03.27 @ 02:00:19

Gas Rates Information

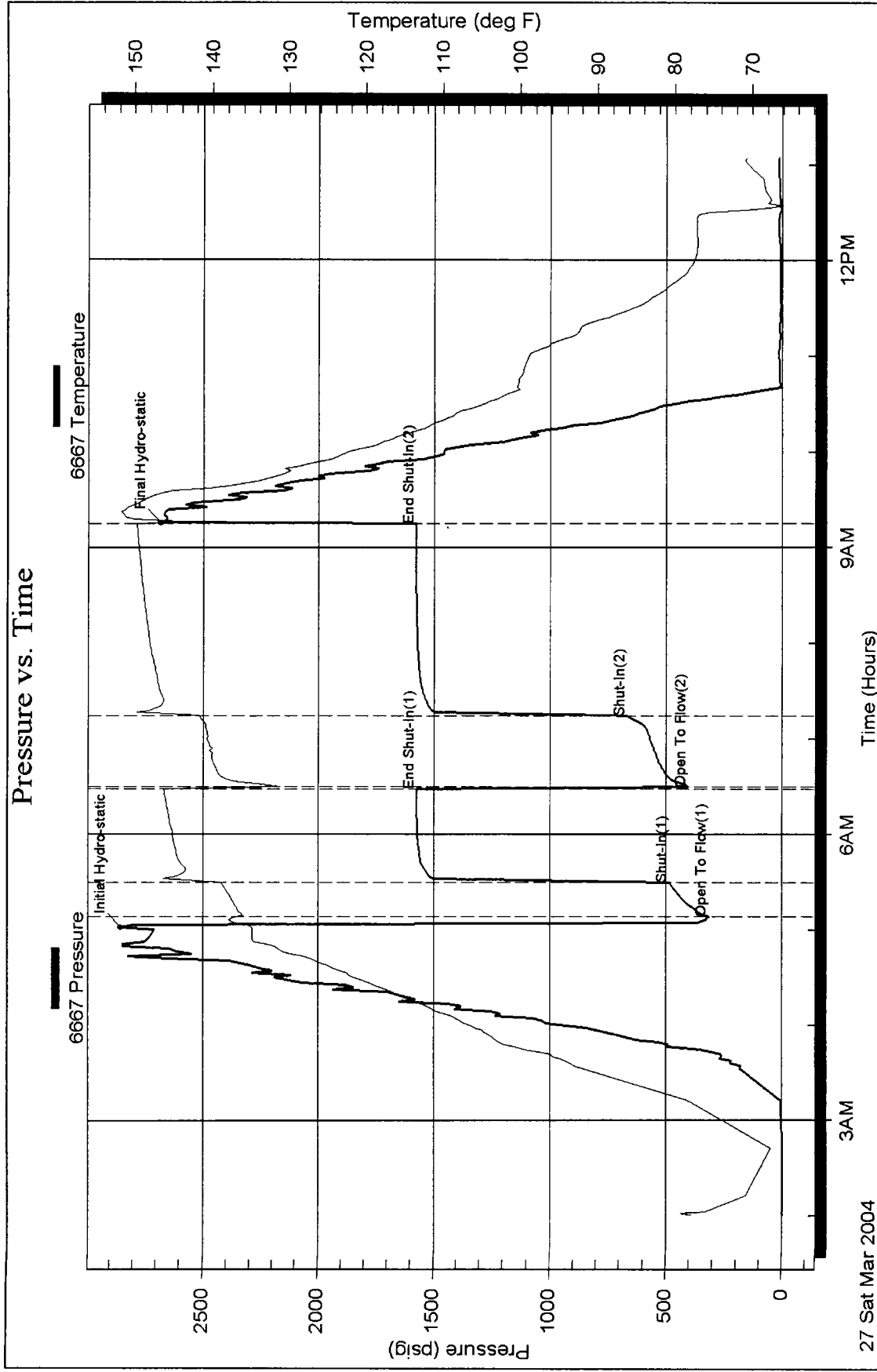
Temperature: 59 deg C

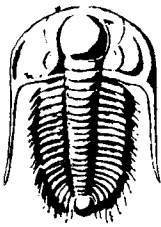
Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	10	0.75	48.00	974.68
1	20	0.75	89.00	1615.09
1	30	0.75	106.00	1880.63
2	10	0.75	108.00	1911.87
2	20	0.75	120.00	2099.31
2	30	0.75	124.00	2161.79
2	45	0.75	126.00	2193.03





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV
6311

No 18287

05/03

Test Ticket

Well Name & No. Blackwell "A" #1 Test No. 1 Date 3-27-04
 Company Anadarko Petroleum Corp. Zone Tested Low Morrow
 Address 1201 Lake Robbins Dr The Woodlands TX 77360 Elevation 3197' KB 3188' GL
 Co. Rep / Geo. Kenny Parks Cont. Murfin #25 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 4 Twp. 31 Rge. 39 Co. Morton State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 5728'-5766'-6175' Initial Str Wt./Lbs. 90000 Unseated Str Wt./Lbs. 95000
 Anchor Length 38' Anchor 409' Tail pipe Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 100000
 Top Packer Depth 5723' Tool Weight 1800
 Bottom Packer Depth 5766' Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 6175' Wt. Pipe Run N/A Drill Collar Run 561'
 Mud Wt. 9.1 LCM 6 Vis. 6H WL 8.6 Drill Pipe Size 4.5 XH Ft. Run 5141'

Blow Description Strong blow BOB 10 sec GTS 5 min
ISI - blew thru out
7.7 Strong blow BOB as soon as open water to surface 37 min
ISI - further blow back for 25 min Straddle Packer held

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>465'</u>	Feet of <u>CONDENSATE & GAS</u>	<u>30%</u> gas <u>70%</u> oil	%water %mud
Rec. <u>93'</u>	Feet of <u>" WATER & GAS</u>	<u>20%</u> gas <u>40%</u> oil	<u>40%</u> water %mud
Rec. <u>565'</u>	Feet of <u>WATER & GAS</u>	<u>10%</u> gas <u>0%</u> oil	<u>80%</u> water %mud
Rec. _____	Feet of _____	%gas %oil	%water %mud
Rec. _____	Feet of _____	%gas %oil	%water %mud

BHT 149 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .091 @ 76 °F Chlorides 80000 ppm Recovery _____ Chlorides 1100 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2849</u> PSI	<u>6067</u>	<u>6067</u>	✓ <u>STRADDLE 1000</u>
(B) First Initial Flow Pressure	<u>314</u> PSI	(depth) <u>5731'</u>	<u>5731'</u>	Elec. Rec. ✓ <u>150</u>
(C) First Final Flow Pressure	<u>484</u> PSI	Recorder No. <u>13855</u>	<u>13855</u>	Jars ✓ <u>200</u>
(D) Initial Shut-In Pressure	<u>1573</u> PSI	(depth) <u>5761'</u>	<u>5761'</u>	Safety Jt. ✓ <u>50</u>
(E) Second Initial Flow Pressure	<u>405</u> PSI	Recorder No. <u>11019</u>	<u>11019</u>	Circ Sub _____
(F) Second Final Flow Pressure	<u>667</u> PSI	(depth) <u>6139'</u>	<u>6139'</u>	Sampler ✓ <u>250</u>
(G) Final Shut-In Pressure	<u>1577</u> PSI	Initial Opening <u>30</u>	<u>30</u>	Straddle ✓ <u>250</u>
(Q) Final Hydrostatic Mud	<u>2680</u> PSI	Initial Shut-In <u>60</u>	<u>60</u>	Ext. Packer _____ <u>150</u>
		Final Flow <u>45</u>	<u>45</u>	Shale Packer <u>1</u>
		Final Shut-In <u>120</u>	<u>120</u>	Mileage ✓ <u>\$35.00 59.56</u>
		T-On Location <u>0100</u>	<u>0100</u>	Sub Total: <u>\$1035.00 21091.1</u>
		T-Started <u>0245</u>	<u>0245</u>	Std. By <u>1 HR 30</u>
		T-Open <u>0500</u>	<u>0500</u>	Other _____
		T-Pulled <u>0915</u>	<u>0915</u>	Total: <u>\$2065.00 2739.56</u>
		T-Out <u>1300</u>	<u>1300</u>	

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Approved By Kenny Parks
 Our Representative Blair L. Walker



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 18287 Date 3-27-04
 Company Name ANADARKO Petroleum Corp
 Lease Blackwell A#1 Test No. DST#1
 County Morton Sec. 4 Twp. 31 Rng. 39

SAMPLER RECOVERY

Gas 4000 ML
 Oil _____ ML
 Mud _____ ML
 Water _____ ML
 Other 24.1 cubic ft gas ~~ML~~
 Pressure 1350 PSI ML
 Total _____ ML

PIT MUD ANALYSIS

Chlorides 1100 ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity 64
 Mud Weight 9.1
 Filtrate 8.6
 Other 6# LCM

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @ 60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.

MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.

BOTTOM
 Resistivity .091 ohms @ 76 F
 Chlorides 80000 ppm.

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

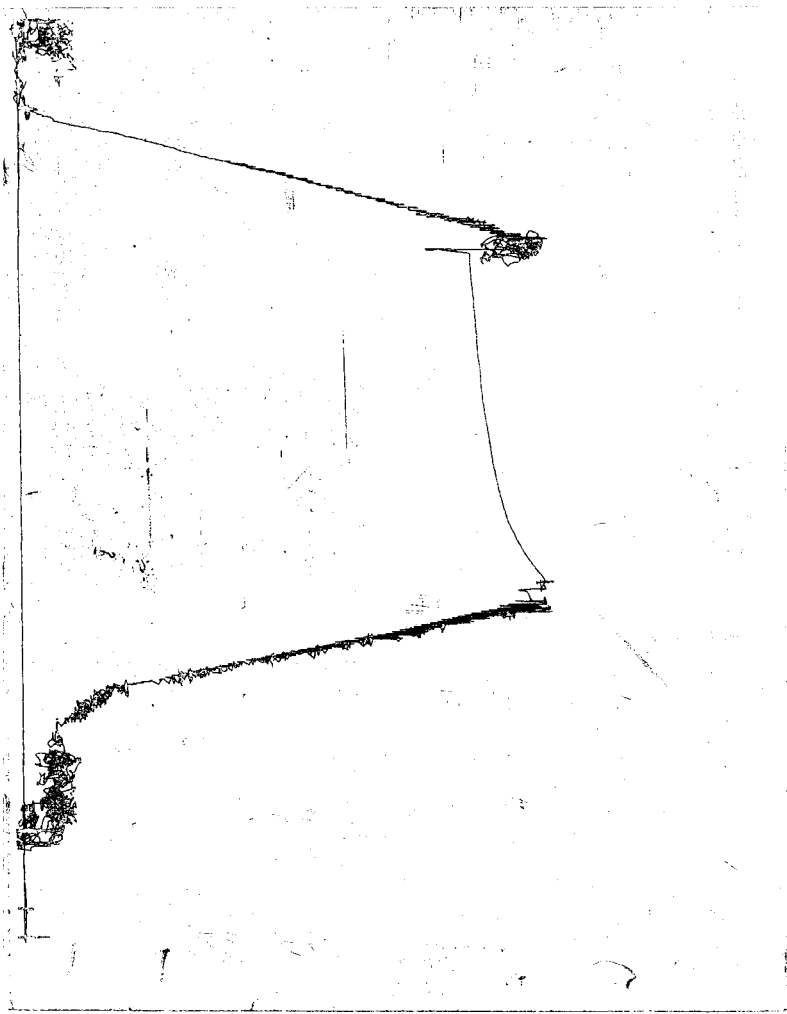


CHART PAGE

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