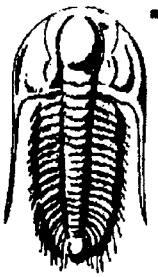


TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **ESP Development Inc**

1749 250th Ave
Hays KS 67601

ATTN: Bud Ulert

22 12 15 Russell KS

Steinert # 1

Start Date: 2006.08.10 @ 10:40:08

End Date: 2006.08.10 @ 18:08:08

Job Ticket #: 26831 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

ESP Development Inc

1749 250th Ave
Hays KS 67601

ATTN: Bud Ulert

Steinert # 1

22 12 15 Russell KS

Job Ticket: 26831 **DST#: 1**

Test Start: 2006.08.10 @ 10:40:08

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:23:48
Time Test Ended: 18:08:08

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21

Interval: 3222.00 ft (KB) To 3265.00 ft (KB) (TVD)
Total Depth: 3265.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

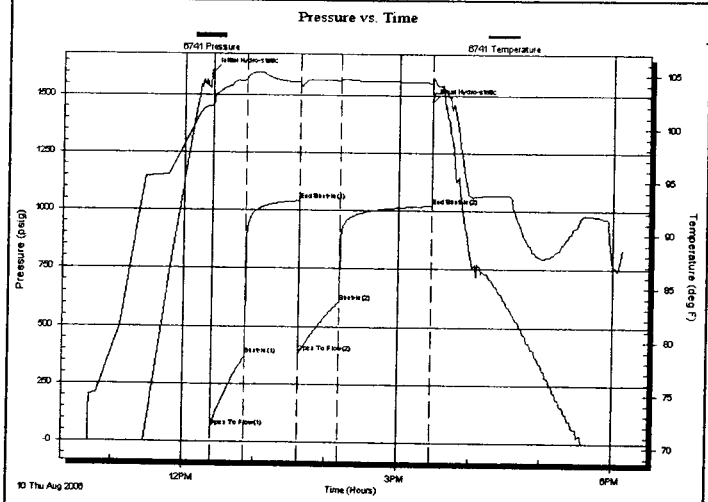
Reference Elevations: 1813.00 ft (KB)
1808.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6741 **Inside**

Press@RunDepth: 607.08 psig @ 3223.00 ft (KB)
Start Date: 2006.08.10 End Date: 2006.08.10
Start Time: 10:40:10 End Time: 18:08:08

Capacity: 7000.00 psig
Last Calib.: 2006.08.10
Time On Btm: 2006.08.10 @ 12:23:18
Time Off Btm: 2006.08.10 @ 15:28:08

TEST COMMENT: IF Strong B-B in 1.5 min
FF Strong B-B in 3 min
Times 30 45 30 75



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1599.75	102.10	Initial Hydro-static
1	60.23	101.69	Open To Flow (1)
29	372.03	104.59	Shut-In(1)
74	1041.78	104.36	End Shut-In(1)
75	385.06	104.16	Open To Flow (2)
108	607.08	104.51	Shut-In(2)
185	1021.62	104.34	End Shut-In(2)
185	1471.02	104.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	MCO 20%M 80%O	1.74
1551.00	CO	21.76

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

ESP Development Inc

1749 250th Ave
Hays KS 67601

ATTN: Bud Ulert

Steinert # 1

22 12 15 Russell KS

Job Ticket: 26831 **DST#: 1**

Test Start: 2006.08.10 @ 10:40:08

Tool Information

Drill Pipe:	Length:	3206.00 ft	Diameter:	3.80 inches	Volume:	44.97 bbl	Tool Weight:	2000.00 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	45000.00 lb
					Total Volume:	44.97 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		5.00 ft					String Weight: Initial	32000.00 lb
Depth to Top Packer:		3222.00 ft					Final	40000.00 lb
Depth to Bottom Packer:		ft						
Interval betw een Packers:		43.00 ft						
Tool Length:		64.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3202.00		
Shut In Tool	5.00			3207.00		
Hydraulic tool	5.00			3212.00		
Packer	5.00			3217.00	21.00	Bottom Of Top Packer
Packer	5.00			3222.00		
Stubb	1.00			3223.00		
Recorder	0.00	6741	Inside	3223.00		
Perforations	39.00			3262.00		
Recorder	0.00	13254	Outside	3262.00		
Bullnose	3.00			3265.00	43.00	Bottom Packers & Anchor
Total Tool Length:	**64.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

ESP Development Inc

1749 250th Ave
Hays KS 67601

ATTN: Bud Ulert

Steinert # 1

22 12 15 Russell KS

Job Ticket: 26831 **DST#: 1**

Test Start: 2006.08.10 @ 10:40:08

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	30 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	45.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.59 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

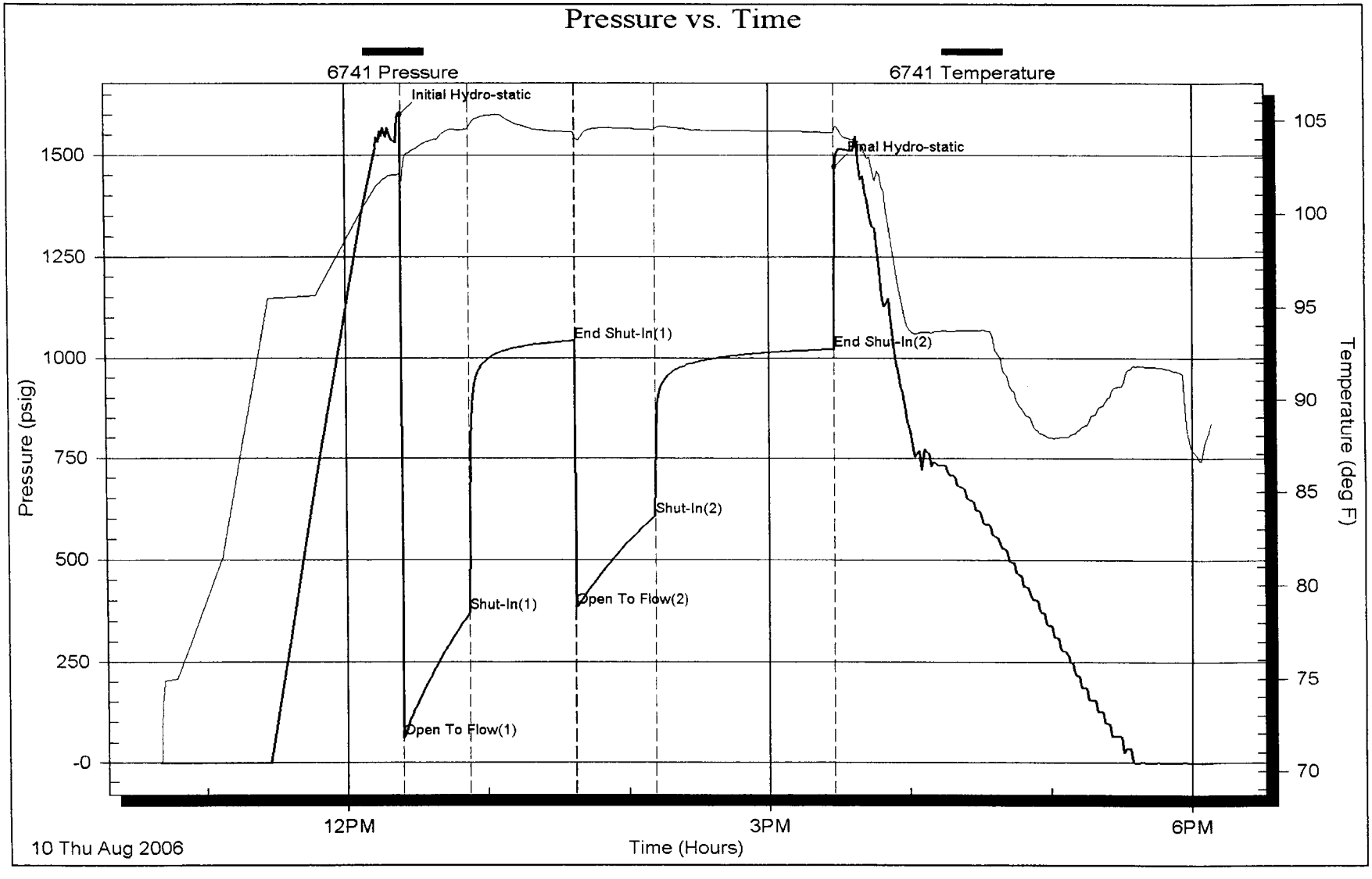
Length ft	Description	Volume bbl
124.00	MCO 20%M 80%O	1.739
1551.00	CO	21.756

Total Length: 1675.00 ft Total Volume: 23.495 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6741 Pressure
6741 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
1500
1250
1000
750
500
250
-0
105
100
95
90
85
80
75
70
12PM
3PM
6PM
10 Thu Aug 2006
Time (Hours)

TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

10/05

9101   26831

Test Ticket

Well Name & No.	STeinerT #1	Test No.	1	Date	8-10-06
Company	ESP Development, Inc.	Zone Tested	Arbuckle		
Address	1749 250th Ave. Hays Ks 67601	Elevation	1813 KB	1808 GL	
Co. Rep / Geo.	Randy Kilian	Rig	Vonfeldt		
Location: Sec.	12	Twp. 12	Rge. 15	Co. Russell	State Ks
Comment:		Release date / time:			

Interval Tested	3222 — 3265	Initial Str Wt./Lbs.	32,000	Unseated Str Wt/Lbs.	49000
Anchor Length	43	Wt. Set Lbs.	20,000	Wt. Pulled Loose/Lbs.	45000
Top Packer Depth	3217	Tool Weight	2000		
Bottom Packer Depth	3222	Hole Size 7 7/8"		Rubber Size 6 3/4"	
Total Depth	3265	Wt. Pipe Run		Drill Collar Run	
Mud Wt. 9.2 LCM	Vis. 45 WL 10.6	Drill Pipe Size	4.5 XH	Ft. Run	3206

Blow Description I.F. Strong B-B in 1.5 min.

F.F. Strong B-B in 3 min.

Recovery - Total Feet 1675	GIP	Ft. in DC		Ft. in DP 1675		
Rec. 124	Feet of MCO	%gas	80 %oil	%water	20 %mud	
Rec. 1551	Feet of CO	%gas	%oil	%water	%mud	
Rec.	Feet of	%gas	%oil	%water	%mud	
Rec.	Feet of	%gas	%oil	%water	%mud	
Rec.	Feet of	%gas	%oil	%water	%mud	

BHT 104 °F Gravity ______ °API D @ ______ °F Corrected Gravity 30 °API

RW ______ @ ______ °F Chlorides ______ ppm Recovery ______ Chlorides 6,000 ppm System

AK-1	Alpine				
(A) Initital Hydrostatic Mud	1599 PSI	Recorder No.	6741	Test	1000
(B) First Initial Flow Pressure	60 PSI	(depth)	3223	Jars	
(C) First Final Flow Pressure	372 PSI	Recorder No.	13254	Safety Jt.	
(D) Initial Shut-In Pressure	1041 PSI	(depth)	3262	Circ Sub	
(E) Second Initial Flow Pressure	385 PSI	Recorder No.		Sampler	
(F) Second Final Flow Pressure	607 PSI	(depth)		Straddle	
(G) Final Shut-In Pressure	1021 PSI	**Initial Opening**	30	Ext. Packer	
(Q) Final Hydrostatic Mud	1530 PSI	Initial Shut-In	45	Shale Packer	
		Final Flow	30	Ruined Packer	
		Final Shut-In	75	Mileage 62 RT	77.50
		T-On Location	10:00	Sub Total:	1077.50
		T-Started	10:40	Std. By	
		T-Open	12:20	Acc. Chg:	
		T-Pulled	15:25	Other:	
		T-Out	18:08	Total:	

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By ______

Our Representative Dan Bangle

CHART PAGE

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