



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____-_____-_____- Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1061538

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
---	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other (Specify) _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Baird Oil Company LLC
Well Name	Merlyn Worcester 1-11
Doc ID	1061538

Tops

Name	Top	Datum
Anhydrite	1841	+356
Base Anhydrite	1873	+324
Topeka	3202	-1006
Heebner	3399	-1202
Toronto	3423	-1226
Lansing	3441	-1244
Base Kansas City	3629	-1432
Marmaton	3669	-1472
Basal Penn Sand	3696	-1499
Total Depth	3770	-1573

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

August 16, 2011

Jim R. Baird
Baird Oil Company LLC
113 W MAIN
PO BOX 428
LOGAN, KS 67646

Re: ACO1
API 15-065-23737-00-00
Merlyn Worcester 1-11
NW/4 Sec.11-07S-22W
Graham County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Jim R. Baird

SWIFT



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
8/2/2011	20982

BILL TO
Baird Oil Company LLC PO Box 428 Logan, KS 67646

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-11	Merlin Worc...	Graham	WW Drilling	Oil	Development	Cement Surface ...	Blaine

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	70	Miles	6.00	420.00
576D-S	Pump Charge - Shallow Surface (< 500 Ft.)	1	Job	1,000.00	1,000.00
325	Standard Cement	150	Sacks	13.50	2,025.00T
279	Bentonite Gel	3	Sack(s)	25.00	75.00T
278	Calcium Chloride	4	Sack(s)	40.00	160.00T
290	D-Air	2	Gallon(s)	35.00	70.00T
581D	Service Charge Cement	150	Sacks	2.00	300.00
583D	Drayage	515.2	Ton Miles	1.00	515.20
	Subtotal				4,565.20
	Sales Tax Graham County			7.55%	175.92
	<p style="text-align: center;">R 8/4/2011 P 8/4/2011</p> <p>M Worces 190402 4741.12 Merlyn Worcester 1-11 - Pump charge, Cement + other misc used to Cement surface casing</p>				

We Appreciate Your Business!	Total	\$4,741.12
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CHARGE TO: **Baired Oil**
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET **20982**
 PAGE 1 OF 1

SERVICE LOCATIONS
 1. **Avoca City KS** WEL/PROJECT NO. **1-11** LEASE **Medin Worcester** COUNTY/PARISH **Graham** STATE **KS** CITY **Hill City** DATE **2/28/11** OWNER
 2. TICKET TYPE SERVICE CONTRACTOR
 3. WELL TYPE **Oil** WELL CATEGORY **Development** RIG NAME NO. **ww** SHIPPED VIA **CS** DELIVERED TO **location** ORDER NO.
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS **Development** JOB PURPOSE **conmit surface pipe** WELL PERMIT NO. WELL LOCATION **11-75-22W**

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
575					TRK 114	70	mi				6.00	420.00
5765					Pump Charge	1	len				1000.00	1000.00
325					STANDARD cements	150	sk				13.50	2025.00
279					Bentonite gel	3	sk				25.00	75.00
278					Calcium Chloride	4	sk				40.00	160.00
290					D-AIR	2	gal				35.00	70.00
581					Service Charge Cements	150	sk				2.00	300.00
583					Drayage	14720	lb				515.2	7572.64

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY,** and **LIMITED WARRANTY** provisions.
 MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

REMIT PAYMENT TO:
SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY
 OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?
 WE UNDERSTOOD AND MET YOUR NEEDS?
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?
 ARE YOU SATISFIED WITH OUR SERVICE?
 CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL **4565.20**
 TAX **175.90**
 TOTAL **4741.10**

DATE SIGNED _____ TIME SIGNED _____
 SWIFT OPERATOR **ABLM** APPROVAL _____
CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 2 AUG 11 PAGE NO.

CUSTOMER BAIRD Oil WELL NO. 1-11 LEASE MERLIN WORCESTER JOB TYPE Cement surface pipe TICKET NO. 20982

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								150 sk STD 2 7/8 gal 3% CC 232' 8 7/8" pipe 24" 6 joints
	1900							on loc TRK 114
	2002							Run 8 7/8" casing
	2040							circulate Pump 5 bbl H ₂ O
	2050	4 3/4					200	mix 150 sks STD 2 7/8 3% @ 14.7 PPG
		4 3/4	38				200	
		4 3/4	13 1/2				200	Displace cement
	0910						200	shut in casing jet well - cement to surface
	0920							wash up truck 10 sks top it
								Rack up
	0945							job complete
								Thutz Dave Blair, David

SWIFT



Services, Inc.

P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
8/9/2011	20988

BILL TO
Baird Oil Company LLC PO Box 428 Logan, KS 67646

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-11	Merlin Worc...	Graham	WW Drilling	Oil	Development	PTA	Blaine

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	70	Miles	6.00	420.00
576D-P	Pump Charge - PTA	1	Job	1,000.00	1,000.00
328-4	60/40 Pozmix (4% Gel)	205	Sacks	11.50	2,357.50T
276	Flocele	50	Lb(s)	2.00	100.00T
410-8	8 5/8" Top Plug	1	Each	100.00	100.00T
581D	Service Charge Cement	205	Sacks	2.00	410.00
583D	Drayage	600.75	Ton Miles	1.00	600.75
	Subtotal				4,988.25
	Sales Tax Graham County			7.55%	193.09
	<p>R 8/11/2011 P 8/11/2011 m Worces 190402 5181.34 Merlyn Worcester 1-11 - Pump Charge, Cement + other misc expenses Used to plug well</p>				

We Appreciate Your Business!	Total	\$5,181.34
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CHARGE TO: **BAIRD D-1**
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET
20988

PAGE 1 OF 1

SERVICE LOCATIONS

1. WELL/PROJECT NO. **1-11** LEASE **main in westster** COUNTY/PARISH **Gratham** STATE **KS** CITY **Hill City** DATE **9 AUG** OWNER

2. TICKET TYPE SERVICE CONTRACTOR **WV** RIG NAME/NO. **Development** SHIPPED VIA **DELIVERED TO** ORDER NO.

3. WELL TYPE **D-1** WELL CATEGORY **Development** JOB PURPOSE **Play to Abandon** WELL PERMIT NO. **11-75-22W**

4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE TRR 114	70	mi			6.00	420.00
576 P		1			Pump Charge	1	ea			1000.00	1000.00
328-4		1			60/40 Brandy (48 gal)	205	sk			11.50	2357.50
276		1			Fluoro	50	lb			2.00	100.00
581		1			Services Charge	205	sk			2.00	410.00
583		1			Drayage	17158.5	lb			1.00	600.75
410		1			TDR PLU-E	88	in			1.00	100.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY**, and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X DATE SIGNED _____ TIME SIGNED _____ A.M. P.M.

REMIT PAYMENT TO:
SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

OUR SERVICE WAS PERFORMED WITHOUT DELAY?

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?

ARE YOU SATISFIED WITH OUR SERVICE? YES NO

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL **4988.25**

TOTAL **5181.34**

Graham TAX 7.55% **193.09**

SWIFT OPERATOR **McBall** APPROVAL

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 7/16/11 PAGE NO. 1

CUSTOMER DARD Oil WELL NO. 1-11 LEASE MARLIN WORCESTER JOB TYPE Plug to Abandon TICKET NO. 20988

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								205 sks 60/40 4% 1/4" Floerole plugs 255 sks @ 1865 100 @ 1040 RH 30 sk 40 @ 280 10 @ 40
	1730							on loc TRK 114
	2000							plug first plug @ 1865'
		4	6 1/2				200	255 sks
		4	18				200	H ₂ O
	2105							plug second plug @ 1040'
		4	21				200	100 sks
		4	6				200	6 H ₂ O
	2155		11					plug third plug @ 280' 40 sks
			2					2 bbls H ₂ O
	2245		7					RH 30 sks
	2305		3					Dum 8 5/8" 10 sks
								Wash truck 205 sks total
								Back up
	0000							job complete
								Flush Dave Dard Bain

APT. # 15-065-23737-00-00

GEOLOGICAL REPORT DRILLING TIME AND SAMPLE LOG

COMPANY <u>Baird Oil Company, LLC.</u> LEASE <u>Merlin Worcester #1-11</u> FIELD <u>Wildcat</u> LOCATION <u>480'FNL + 1030'FWL</u> SEC <u>11</u> TWS <u>7s</u> RGE <u>22W</u> COUNTY <u>Graham</u> STATE <u>Kansas</u>	ELEVATION KB <u>2197'</u> DF <u>2195'</u> GL <u>2192'</u> Depths Measured From Log <u>KB</u> Drilling <u>KB</u>
CONTRACTOR <u>WW Drilling Rig #8</u> SPUD <u>8-2-11</u> COMP <u>8-9-11</u> SAMPLES SAVED FROM <u>3150'</u> TO <u>R.T.D.</u>	CASING Surface <u>8 5/8" @ 231'</u> Production <u>none</u> ELECTRIC LOGS <u>Superior Well Services</u>

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM	A	B	C	D
			<i>E. log</i>	●			
<u>Anhydrite</u>	<u>1846</u>	<u>1841 +</u>	<u>356</u>				
<u>Base Anhydrite</u>	<u>1878</u>	<u>1873 +</u>	<u>324</u>				
<u>Topeka</u>	<u>3205</u>	<u>3202 -</u>	<u>1006</u>	<u>-1004</u>			
<u>Heebner</u>	<u>3401</u>	<u>3399 -</u>	<u>1202</u>	<u>-1203</u>			
<u>Toronto</u>	<u>3425</u>	<u>3423 -</u>	<u>1226</u>	<u>-1225</u>			
<u>Lansing</u>	<u>3443</u>	<u>3441 -</u>	<u>1244</u>	<u>-1242</u>			
<u>Base Kansas City</u>	<u>3631</u>	<u>3629 -</u>	<u>1432</u>	<u>-1427</u>			
<u>Marmaton</u>	<u>3670</u>	<u>3669 -</u>	<u>1472</u>	<u>-1470</u>			
<u>Basal Penn Sand</u>	<u>3697</u>	<u>3696 -</u>	<u>1499</u>	<u>-1492</u>			
<u>Total Depth</u>	<u>3770</u>	<u>3770 -</u>	<u>1573</u>	<u>-1558</u>			

REFERENCE WELLS

A	<u>Black Diamond Oil, Inc., White #1, 470'FNL + 1900'FWL Sec. 11-7S-22W</u>
B	
C	
D	

REMARKS

This well ran 2 feet lower on the Lansing top than the reference producer. The basal Penn Sandstone ran 7 feet lower on this well. After reviewing D.S.T and open hole log data it was determined no further testing was warranted, so the well was plugged and abandoned.

Richard B. Bell
8-10-11

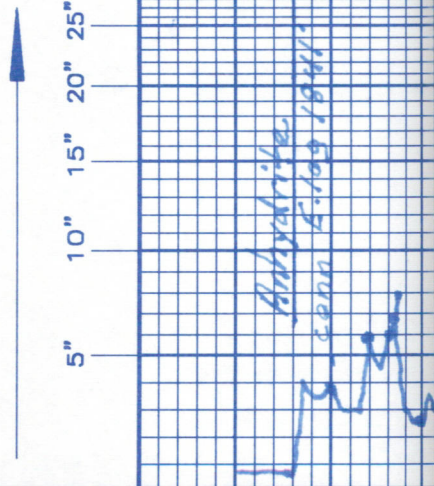
7502

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Carb sh
- Limestone
- Ool. Lime
- Chert
- Dolomite

DRILLING TIME IN MINUTES
PER FOOT

Rate of Penetration Decreases



1850

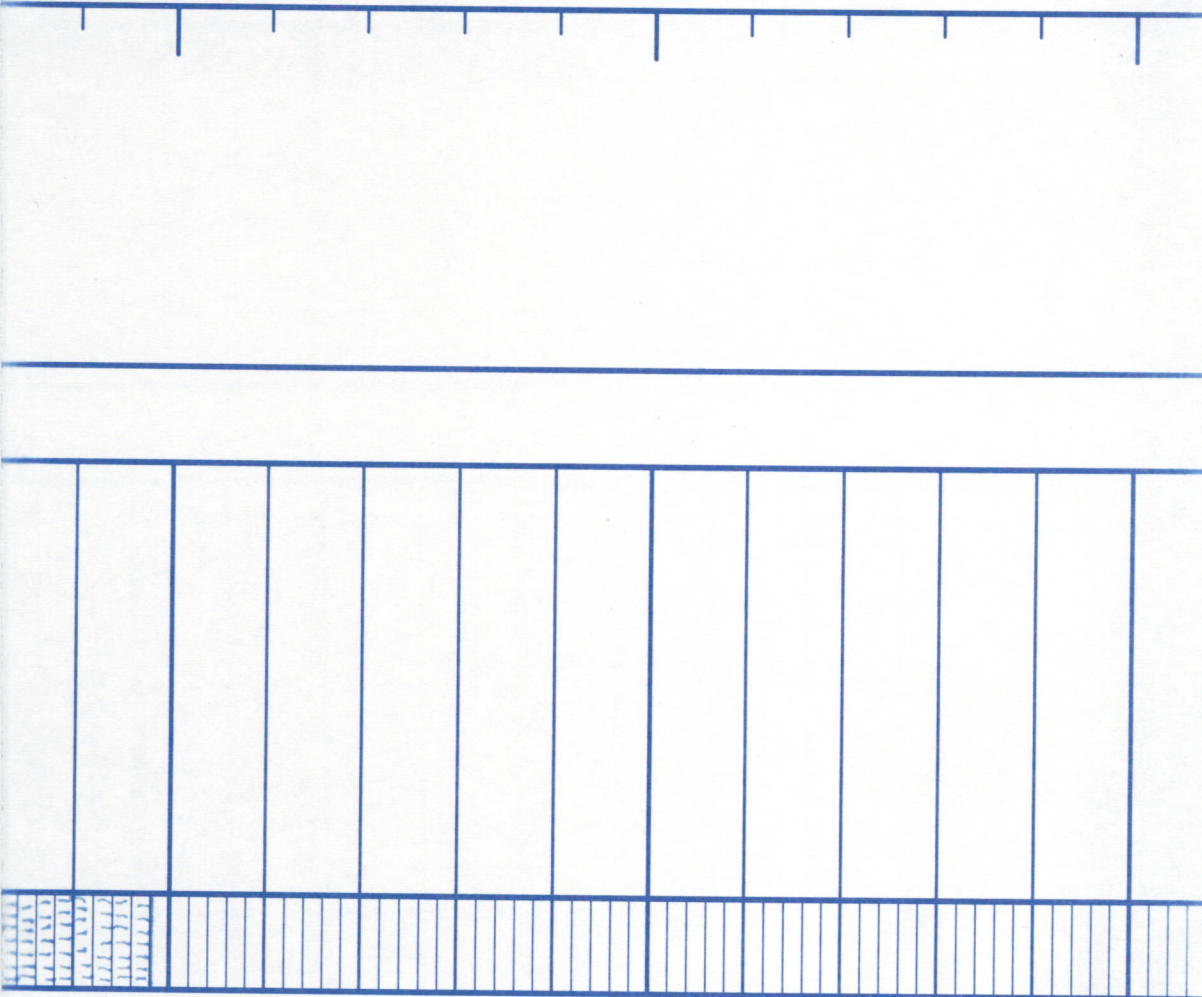
LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

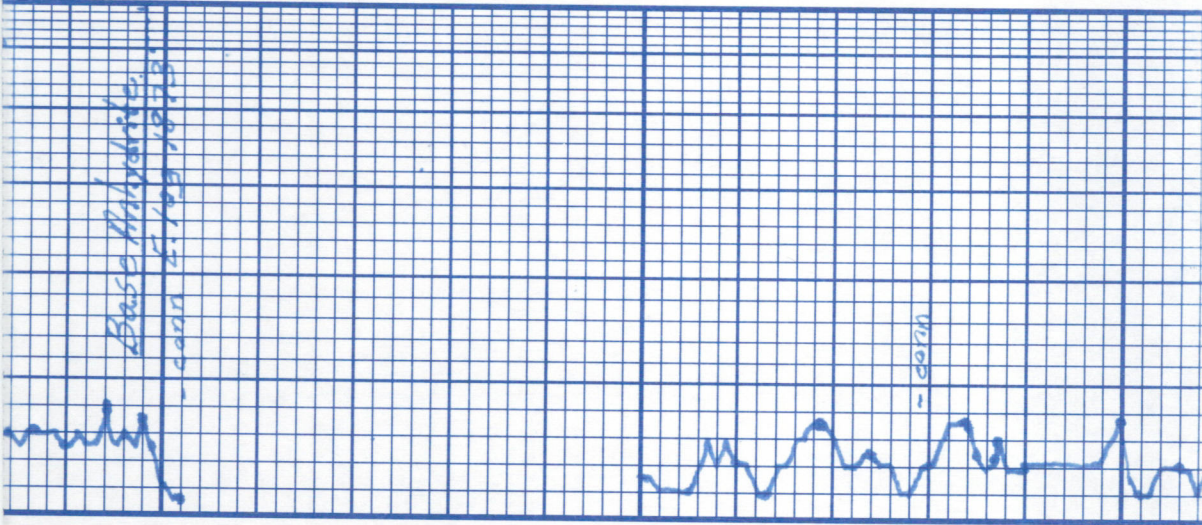
LOG 7710



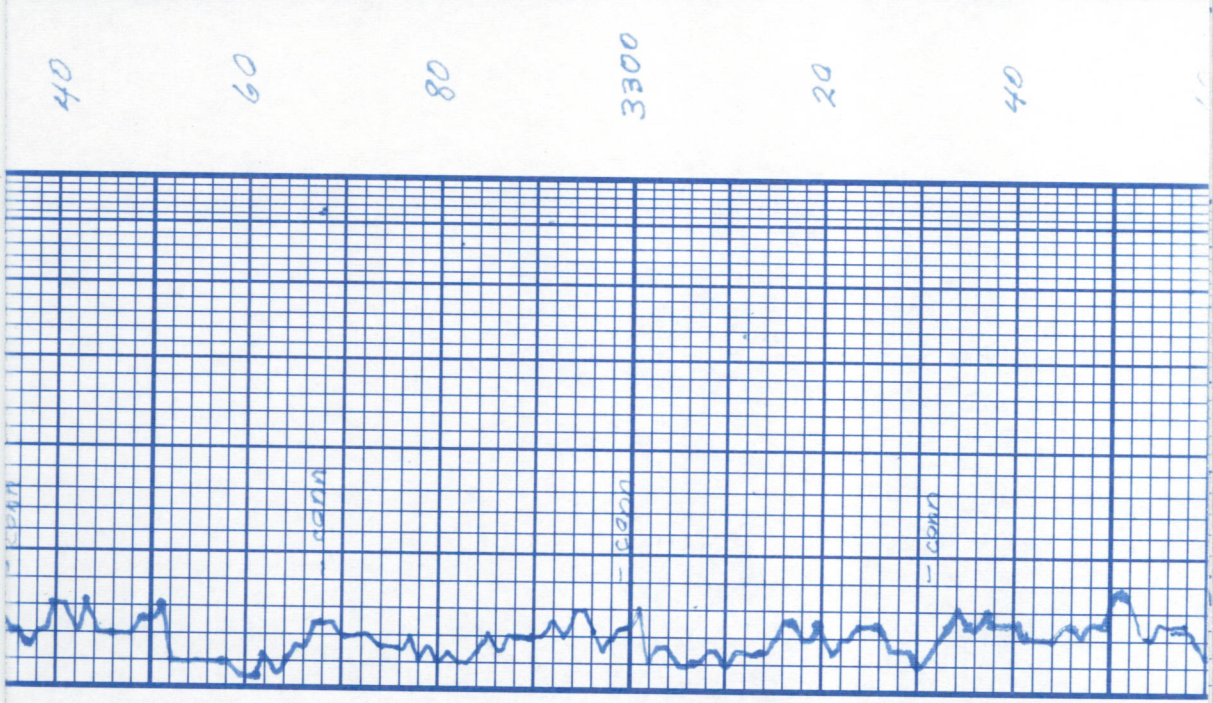
1880

3050

3100



40	<p>Pr. PP & NSD.</p> <p>LS: gry mtld fsh dns</p> <p>Sh: gry, brn</p> <p>LS: whtn cky-feln fny öl</p> <p>Sh: Pyrit. Gd PP & friable</p> <p>sub-tq-brn NSD.</p>
60	<p>LS: a a- lot fass frags.</p>
80	<p>LS: whtn cky-feln decr.</p> <p>PP & fass inclus</p> <p>decr A a.a.</p> <p>sh: brn gry</p> <p>Sh: blk carb</p> <p>LS: tr-brn mly fsh dns</p>
300	<p>siltstone: gry sh: brn, gry</p>
20	<p>LS: whtn fsh-silt fsh dns</p> <p>NSD.</p> <p>LS: whtn trcky-feln fny öl</p> <p>NSD.</p> <p>Sh: gry, brn</p>
40	<p>LS: whtn cky-feln öl pr.</p> <p>PP & NSD. sh: blk carb</p> <p>LS: tr-brn fsh dns.</p> <p>LS: whtn fsh öl-tr ööl</p>



Pr. PP & NSD.

LS: whtn cky-feln fny öl

Sh: Pyrit. Gd PP & friable

sub-tq-brn NSD.

LS: a a- lot fass frags.

LS: whtn cky-feln decr.

PP & fass inclus

decr A a.a.

sh: brn gry

Sh: blk carb

LS: tr-brn mly fsh dns

siltstone: gry sh: brn, gry

LS: whtn fsh-silt fsh dns

NSD.

LS: whtn trcky-feln fny öl

NSD.

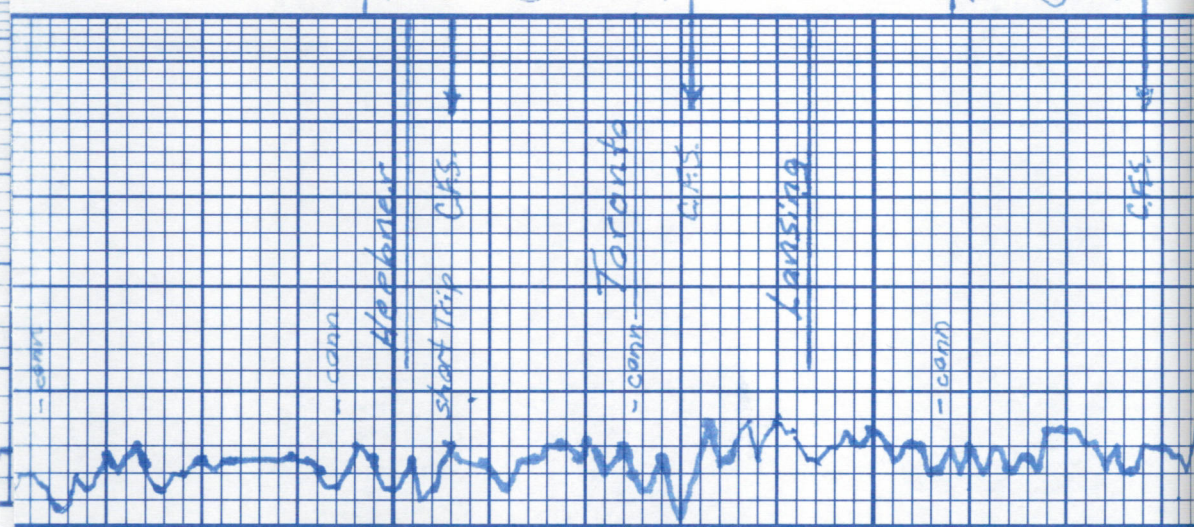
Sh: gry, brn

LS: whtn cky-feln öl pr.

PP & NSD. sh: blk carb

LS: tr-brn fsh dns.

LS: whtn fsh öl-tr ööl

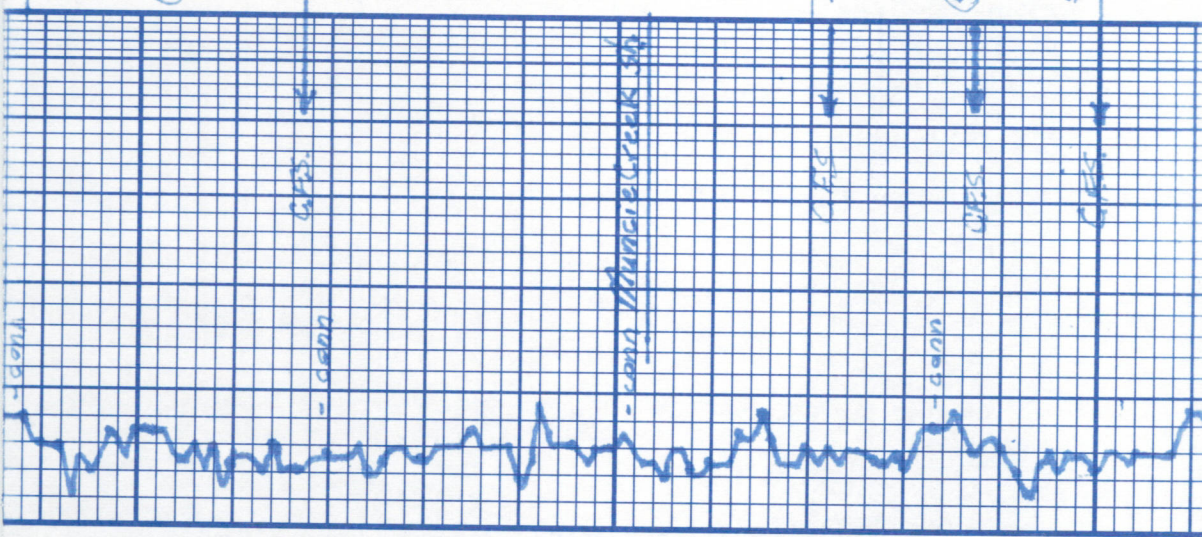


aspl. O.5th N.F.6. No odor mostly barren	LS: wh-ta. sli.cky-fxh das	LS: wh-ta-lt. gry tr.cky fxh. dms	aa	Sh: BK carb. LS: ta-lt. brn. mtd fslf das.	LS: wh-gry sly, brn Sltstona: gry	LS: wh-ta-yel Tr. suc. - fxh ool PP Pr. Lt. O. sat. in suc Tr. Lt. sptd O. stn in ool Tr. f. casting fo. A. tr. wh-ta No odor	LS: wh-ta-fxh sub ool v. pr. PP Pr. VRT pr. H. O. stn N.F.O. no odor	LS: wh-ta-fxh das d.s.o.	Sh: brn, gry	LS: wh-ta-fxh ool Tr. PP Pr. Tr. VGY Pr. Lt. O. sat. Lt. sptd O. stn PP Pr. O. tr. odor Dux-
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Incline @ 3431' 1/4
 Board 3425.92
 Strap 3425.21
 Diff .71
 Trilobite Testing
 DST#1 3397'-3431'
 30-35-15-0
 IF: 1/2" blow
 FF: No blow pulled tool
 Recovery: 5' O. sptd M
 HYD: 1694-1628#
 FP: 14-23/26#
 BHP: 1023#
 BHTemp: 114°F.

DST#2 3458'-3478'
 45-45-45-45
 IF: 1" blow
 ISI: No blow
 FF: 434" blow
 FST: No blow
 Recovery: 265' Total
 20 MCW 80% W, 20% M
 245' WTR
 HYD: 1669-1651#
 FP: 15-87/90-134#

-contd



Sh: brn, gry, grn	LS: wh-tn cky-fxln sl: ool dkk brn sptd 0.5th N.F.O. No odor Δ by wk-th-ov
LS: tn-gry fxln dns	
LS: wh-tn fxln ool qd ppt 5d in part ppt 0.5th ppt F.O. odor	
LS: wh-tn cky-fxln dns N.S.O.	
LS: wh-tn cky-fxln dns F.O. odor	
LS: wh-tn cky-fxln dns	
Sh: blk gray LS: gry-tstf dns	
LS: wh-tn cky-fxln dns also	
LS: wh-tn-ye1-gry cky-fxln dns N.S.O. Sh: brn	
LS: wh-tn-cky-fxln ool pr. ppt friable at top 0.5th Fr. at bottom 5.0	

DST # 3 3488'-3517'
30-30-30-30
IF: B.O.B. in 6 1/2 min.
ISI: No blow
FF: B.O.B. in 9 min.
FSI: No blow
Recovery: 630' Total
1' C.O.
79' 0.5% mcw
60% w, 40% m
550' wtr.
HYD: 1704-1678#
FP: 36-195/202-311#
BHP: 924-905#
BH Temp: 120°F.
Chlorides: 93,000 ppm

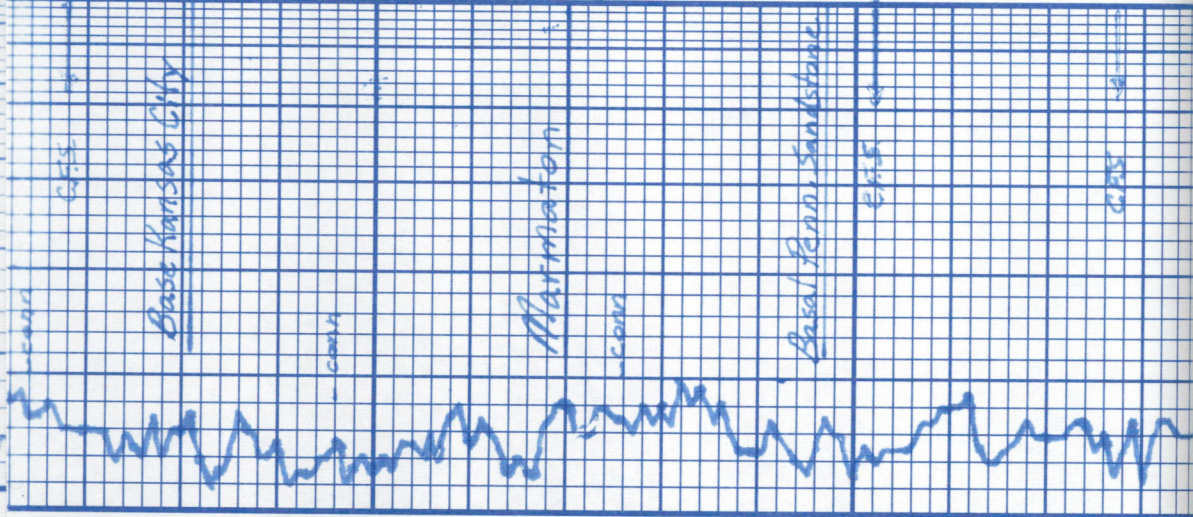
DST # 4 3570'-3600'
30-30-0-0 pulled tool
IF: 10 min. Surface blow
Recovery: 1' Mud
HYD: 1810-1896#
FP: 15-17#
BHP: 20#
BH Temp: 112°F.

BH Temp: 120°F.

✓

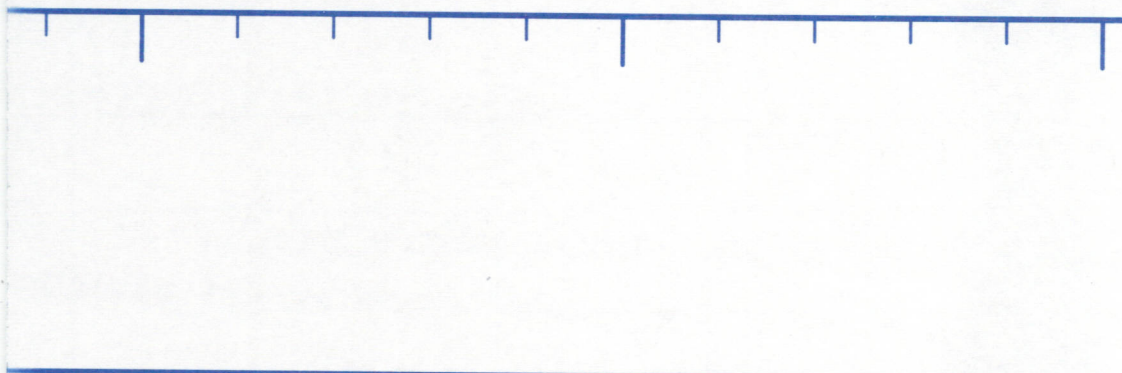
✓

✓



sh: brn, gry	LS: wh to gry cky-faln drs to ppt. 0.5%	20'	K
LS: wh to cky-faln pyritic dr. N.S.O.		40'	L
LS: a a shly: gry brn			
incr sh: gry brn			
LS: wh to gry cky-faln drs sh: brn, gry		60'	
LS: wh to cky-faln to sh. drl drs N.S.O.		80'	
shly: brn, gry			
shly: brn, gry			
LS: wh to faln sd embedded ss fr. gn fossil w/caly: to if bleedings to Ft. odor		3700'	
LS: wh to cky-faln drs to ppt. 0.5% N.S.O.			
sh: brn, gry		20'	
incr sh: brn, gry			

D.S.T. #5 3673'-3702'
 30-30-90-45
 IF: 2" blow in 5 min decr.
 to 1/8"
 ISI: No blow
 FF: B.O.B. in 39 min
 FSI: No blow
 Recovery: 460' Total
 25' Dptd WCM
 25% W, 75% M
 60' MCW 70% W, 30% M
 375' Wtr.
 HYD: 1874-1755#
 FP: 20-98/102-229#
 BHP: 1143-1129#
 BH Temp: 126°F
 Chlorides: 68000 ppm.

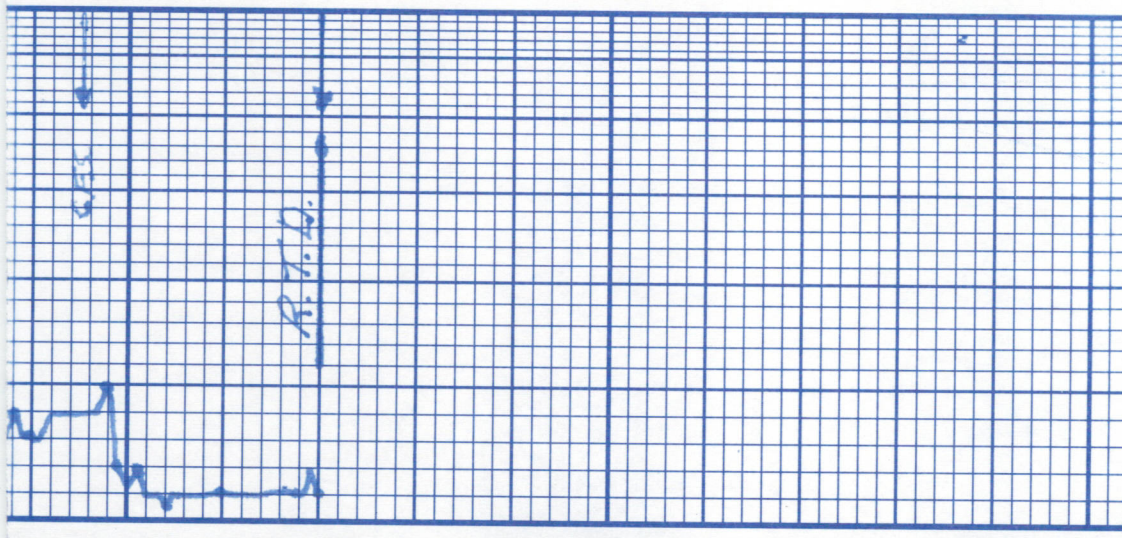


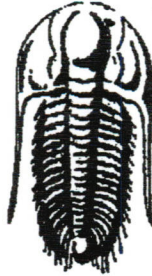
u. shly: brn, mar, vel, gry																			
Δ + uwea Δ vel ar. brn Trööls, Tröölc Δ hso. shibrn																			
Δ + Shi: a. a.																			

40

60

80





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Baird Oil Co. LLC.**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

11-7-22,Graham,KS

Merlin Worcester #1-11

Start Date: 2011.08.06 @ 03:35:51

End Date: 2011.08.06 @ 08:32:21

Job Ticket #: 44281 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Co. LLC.

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

Merlin Worcester #1-11

11-7-22, Graham, KS

Job Ticket: 44281 DST#: 1

Test Start: 2011.08.06 @ 03:35:51

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: **No** Whipstock: ft (KB)

Time Tool Opened: 05:51:51

Time Test Ended: 08:32:21

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: **3397.00 ft (KB) To 3431.00 ft (KB) (TVD)**

Total Depth: 3431.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2197.00 ft (KB)

2192.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6753

Outside

Press@RunDepth: 23.02 psig @ 3398.00 ft (KB)

Start Date: 2011.08.06

End Date:

2011.08.06

Start Time: 03:35:56

End Time:

08:32:20

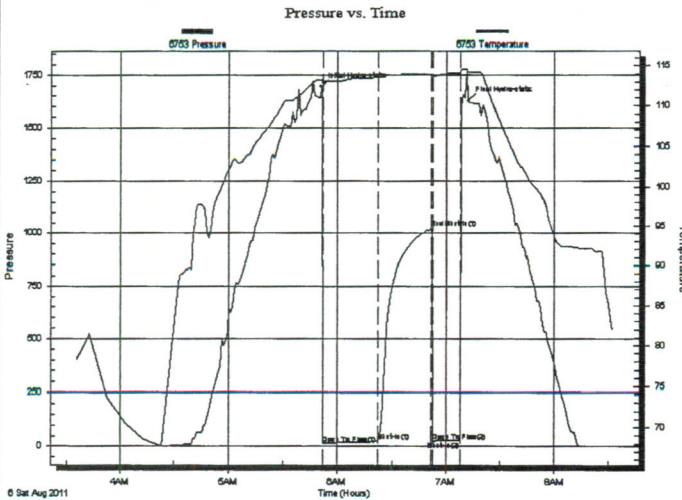
Capacity: 8000.00 psig

Last Calib.: 2011.08.06

Time On Btmr 2011.08.06 @ 05:50:51

Time Off Btmr 2011.08.06 @ 07:12:21

TEST COMMENT: IF-1/2in blow
ISI-No blow
FF-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.89	113.22	Initial Hydro-static
1	13.57	112.30	Open To Flow (1)
32	23.02	113.58	Shut-In(1)
61	1023.36	113.98	End Shut-In(1)
62	26.44	113.69	Open To Flow (2)
77	25.95	114.11	Shut-In(2)
82	1628.33	114.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil spotted mud	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44281 DST#: 1

ATTN: Richard Bell

Test Start: 2011.08.06 @ 03:35:51

Tool Information

Drill Pipe:	Length: 3395.00 ft	Diameter: 3.80 inches	Volume: 47.62 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 48.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	140.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3397.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3378.00	
Shut In Tool	5.00			3383.00	
Hydraulic tool	5.00			3388.00	
Packer	4.00			3392.00	20.00 Bottom Of Top Packer
Packer	5.00			3397.00	
Stubb	1.00			3398.00	
Recorder	0.00	8319	Inside	3398.00	
Recorder	0.00	6753	Outside	3398.00	
Perforations	30.00			3428.00	
Bullnose	3.00			3431.00	34.00 Bottom Packers & Anchor
Total Tool Length:	54.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44281 **DST#: 1**

ATTN: Richard Bell

Test Start: 2011.08.06 @ 03:35:51

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 55.00 sec/qt
Water Loss: 7.18 in³
Resistivity: ohm.m
Salinity: 1000.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Oil spotted mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

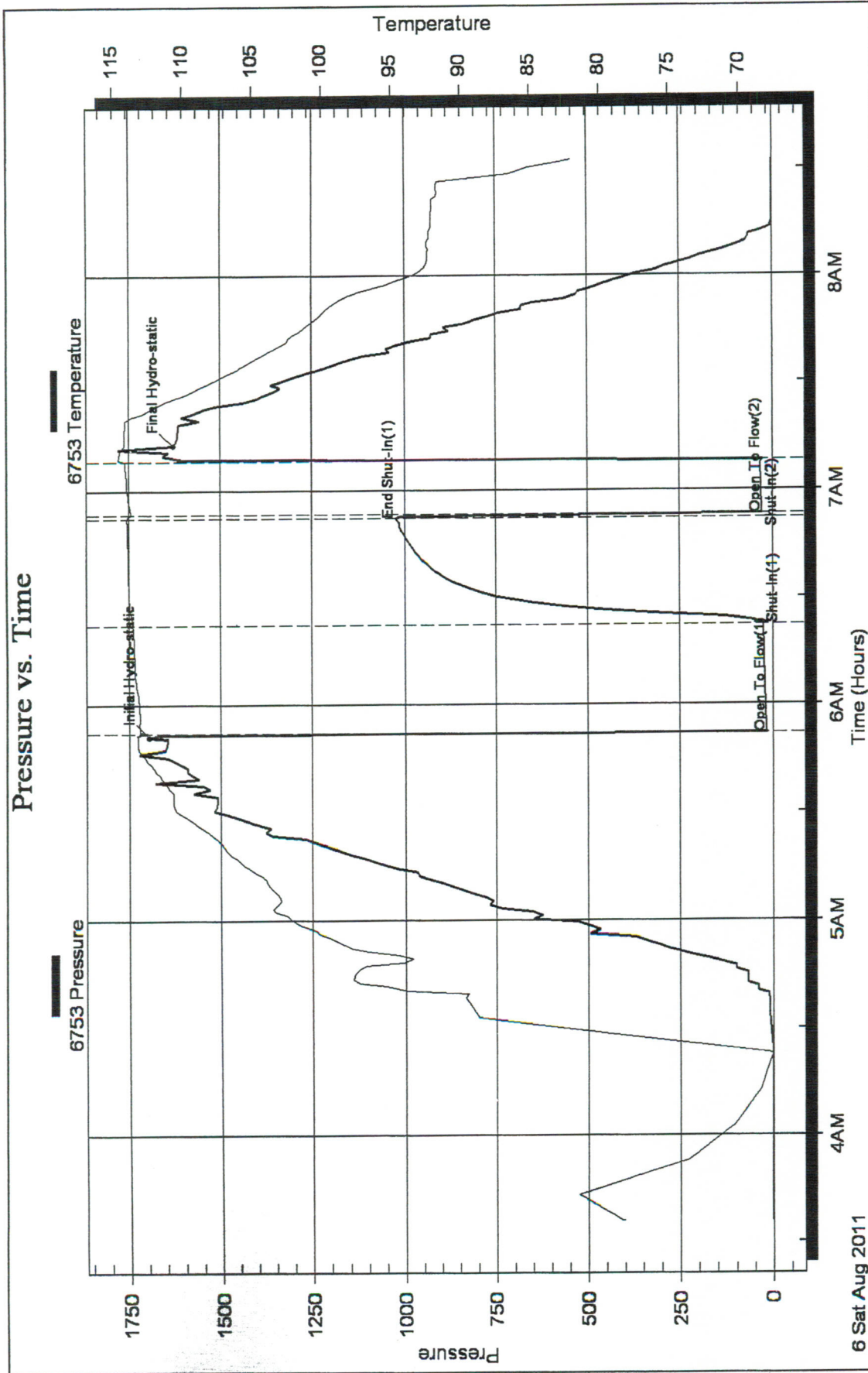
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Baird Oil Co. LLC.**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

11-7-22, Graham, KS

Merlin Worcester #1-11

Start Date: 2011.08.06 @ 15:45:42

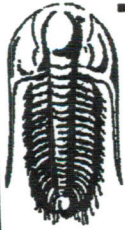
End Date: 2011.08.07 @ 00:14:42

Job Ticket #: 44282 DST #: 2

Trilobite Testing, Inc.

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Baird Oil Co. LLC.

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

Merlin Worcester #1-11

11-7-22, Graham, KS

Job Ticket: 44282

DST#: 2

Test Start: 2011.08.06 @ 15:45:42

GENERAL INFORMATION:

Formation: **KC "C"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:47:42
 Time Test Ended: 00:14:42

Test Type: Conventional Bottom Hole
 Tester: Brett Dickinson
 Unit No: 47

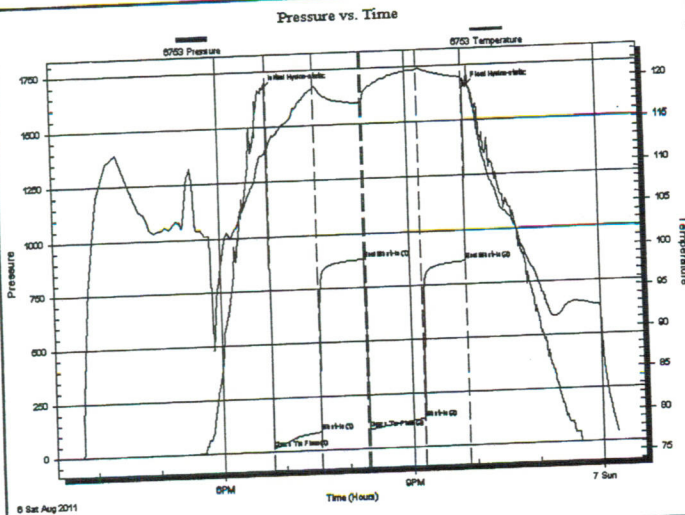
Interval: **3458.00 ft (KB) To 3478.00 ft (KB) (TVD)**
 Total Depth: 3478.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2197.00 ft (KB)
 2192.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6753 Outside
 Press@RunDepth: 134.25 psig @ 3459.00 ft (KB)
 Start Date: 2011.08.06 End Date: 2011.08.07
 Start Time: 15:45:47 End Time: 00:14:41

Capacity: 8000.00 psig
 Last Calib.: 2011.08.07
 Time On Btrm: 2011.08.06 @ 18:45:12
 Time Off Btrm: 2011.08.06 @ 21:56:42

TEST COMMENT: IF-6 in blow
 IS- No blow
 FF-4.75 in blow
 FSI- No blow



PRESSURE SUMMARY

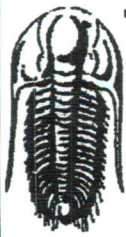
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1669.15	111.94	Initial Hydro-static
3	13.47	112.42	Open To Flow (1)
48	86.75	119.46	Shut-In(1)
92	882.06	117.46	End Shut-In(1)
93	89.65	117.50	Open To Flow (2)
146	134.25	121.22	Shut-In(2)
188	858.86	120.21	End Shut-In(2)
192	1651.82	119.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	w ater	2.33
20.00	MCW 20%M 80%W	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44282 **DST#: 2**

ATTN: Richard Bell

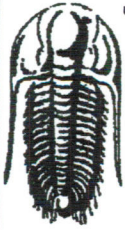
Test Start: 2011.08.06 @ 15:45:42

Tool Information

Drill Pipe:	Length: 3329.00 ft	Diameter: 3.80 inches	Volume: 46.70 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 50000.00 lb
		<u>Total Volume: 47.30 bbl</u>		Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3458.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	40.00 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			3439.00	
Shut In Tool	5.00			3444.00	
Hydraulic tool	5.00			3449.00	
Packer	4.00			3453.00	20.00 Bottom Of Top Packer
Packer	5.00			3458.00	
Stubb	1.00			3459.00	
Recorder	0.00	8319	Inside	3459.00	
Recorder	0.00	6753	Outside	3459.00	
Perforations	16.00			3475.00	
Bullnose	3.00			3478.00	20.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

ATTN: Richard Bell

Job Ticket: 44282

DST#: 2

Test Start: 2011.08.06 @ 15:45:42

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:	60000 ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.17 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
245.00	water	2.325
20.00	MCW 20%M 80%W	0.281

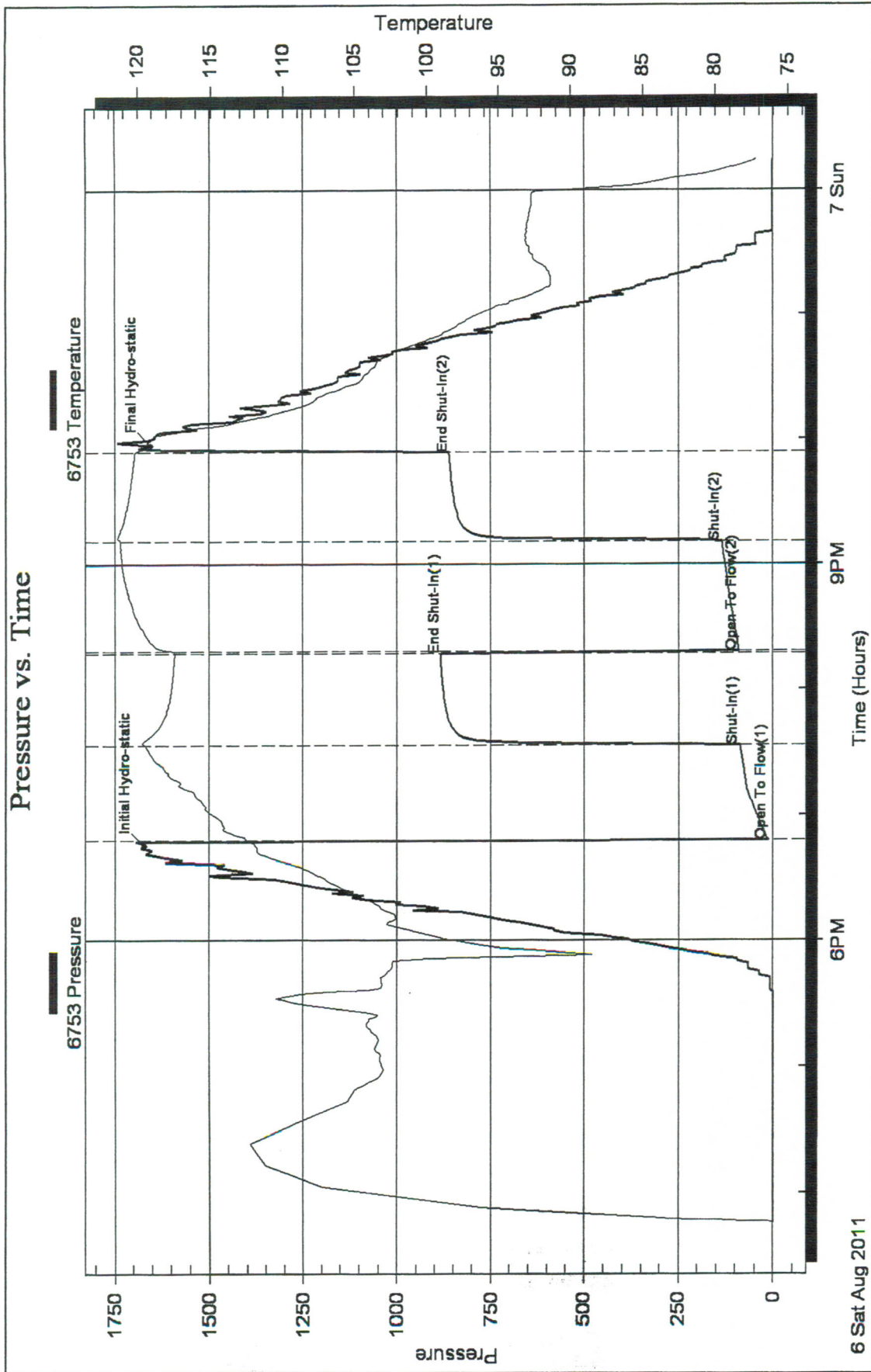
Total Length: 265.00 ft Total Volume: 2.606 bbl

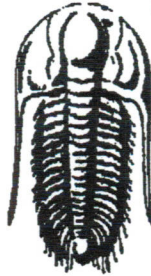
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .12

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Baird Oil Co. LLC.**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

11-7-22, Graham, KS

Merlin Worcester #1-11

Start Date: 2011.08.07 @ 08:45:38

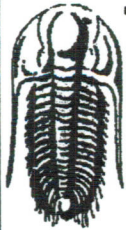
End Date: 2011.08.07 @ 15:36:38

Job Ticket #: 44283 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44283

DST#: 3

ATTN: Richard Bell

Test Start: 2011.08.07 @ 08:45:38

GENERAL INFORMATION:

Formation: **KC"EF"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:36:38

Time Test Ended: 15:36:38

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: **3488.00 ft (KB) To 3517.00 ft (KB) (TVD)**

Reference Elevations: 2197.00 ft (KB)

Total Depth: 3431.00 ft (KB) (TVD)

2192.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6753

Outside

Press@RunDepth: 311.19 psig @ 3489.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.08.07

End Date:

2011.08.07

Last Calib.:

2011.08.07

Start Time: 08:45:43

End Time:

15:36:37

Time On Btm

2011.08.07 @ 11:34:08

Time Off Btm

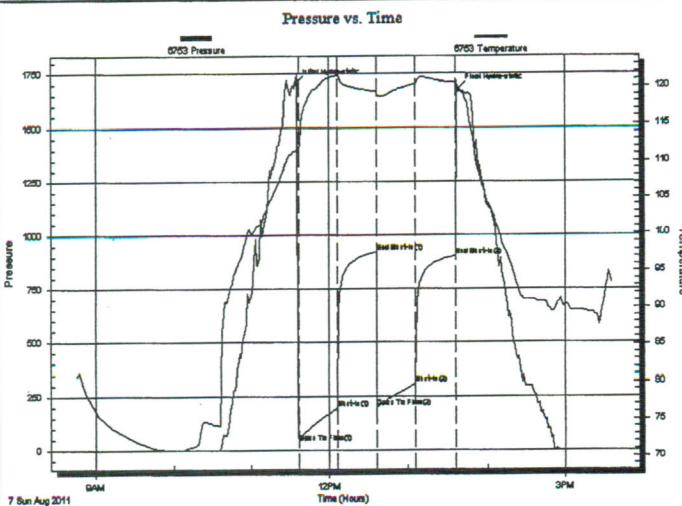
2011.08.07 @ 13:38:38

TEST COMMENT: IF-BOB in 6.5 min

IS- No blow

FF-BOB in 9 min

FSI- No blow



PRESSURE SUMMARY

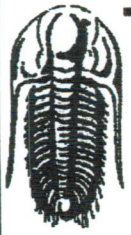
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1704.39	111.35	Initial Hydro-static
3	36.10	111.65	Open To Flow (1)
32	195.02	121.50	Shut-In(1)
63	923.77	119.30	End Shut-In(1)
63	201.63	118.97	Open To Flow (2)
92	311.19	120.30	Shut-In(2)
122	905.05	120.50	End Shut-In(2)
125	1678.47	119.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
550.00	Water	6.60
79.00	Oil spotted MCW 60%W 40%M	1.11
1.00	Free oil	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44283

DST#: 3

ATTN: Richard Bell

Test Start: 2011.08.07 @ 08:45:38

Tool Information

Drill Pipe:	Length: 3367.00 ft	Diameter: 3.80 inches	Volume: 47.23 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 47.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3488.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	49.00 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			3469.00	
Shut In Tool	5.00			3474.00	
Hydraulic tool	5.00			3479.00	
Packer	4.00			3483.00	20.00 Bottom Of Top Packer
Packer	5.00			3488.00	
Stubb	1.00			3489.00	
Recorder	0.00	8319	Inside	3489.00	
Recorder	0.00	6753	Outside	3489.00	
Perforations	25.00			3514.00	
Bullnose	3.00			3517.00	29.00 Bottom Packers & Anchor
Total Tool Length:	49.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44283

DST#: 3

ATTN: Richard Bell

Test Start: 2011.08.07 @ 08:45:38

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:

93000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
550.00	Water	6.604
79.00	Oil spotted MCW 60%W 40%M	1.108
1.00	Free oil	0.014

Total Length: 630.00 ft Total Volume: 7.726 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

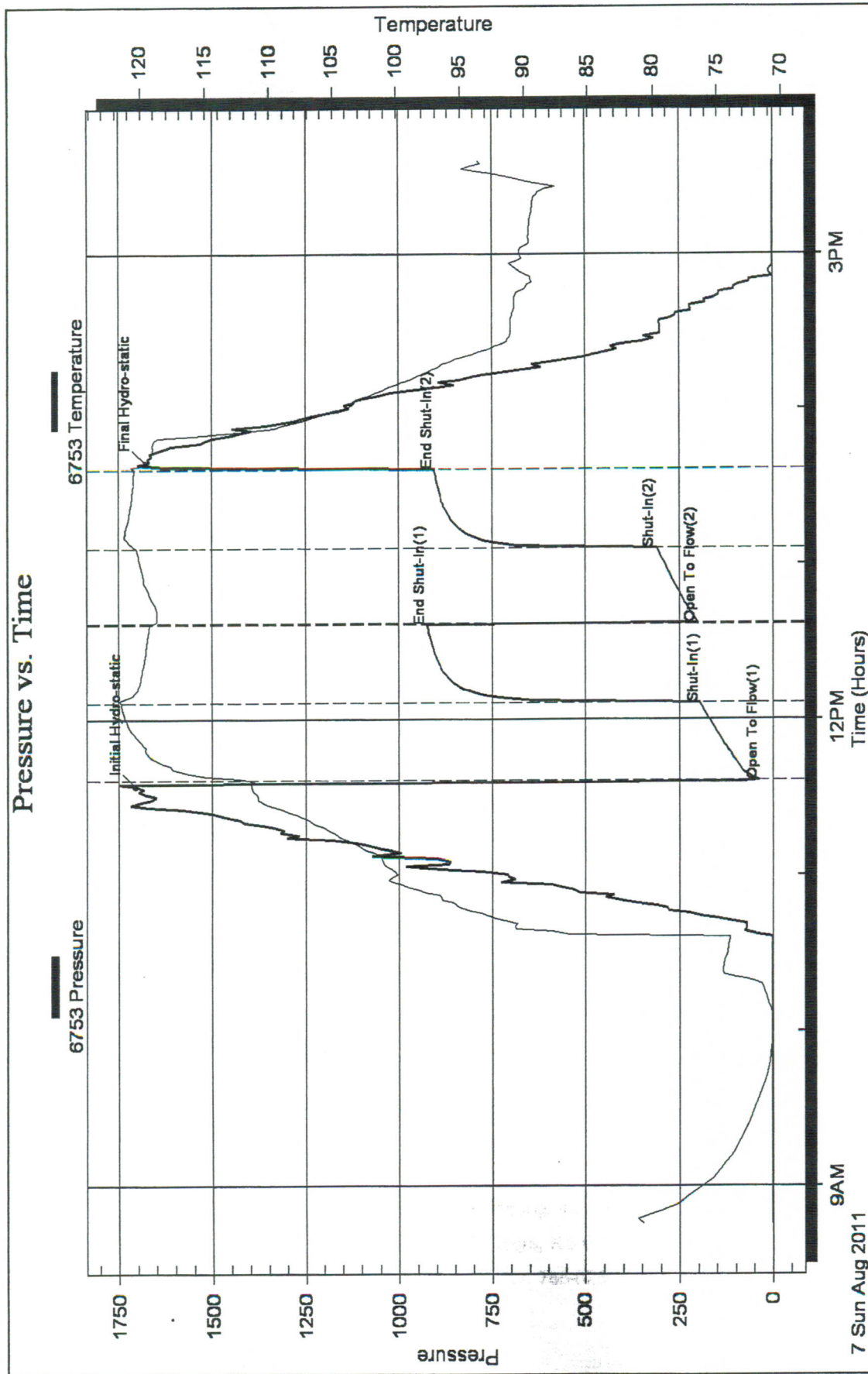
Serial #:

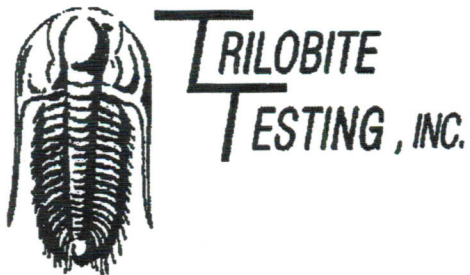
Laboratory Name:

Laboratory Location:

Recovery Comments: RW.07 @ 85 deg

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Baird Oil Co. LLC.**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

11-7-22,Graham,KS

Merlin Worcester #1-11

Start Date: 2011.08.08 @ 01:15:31

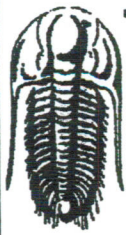
End Date: 2011.08.08 @ 05:42:31

Job Ticket #: 44284 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Co. LLC.

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

Merlin Worcester #1-11

11-7-22, Graham, KS

Job Ticket: 44284

DST#: 4

Test Start: 2011.08.08 @ 01:15:31

GENERAL INFORMATION:

Formation: **KC"1,J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:04:01

Time Test Ended: 05:42:31

Interval: **3570.00 ft (KB) To 3600.00 ft (KB) (TVD)**

Total Depth: 3600.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Reference Elevations: 2197.00 ft (KB)

2192.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6753

Outside

Press@RunDepth: 16.91 psig @ 3571.00 ft (KB)

Start Date: 2011.08.08

End Date:

2011.08.08

Start Time: 01:15:36

End Time:

05:42:30

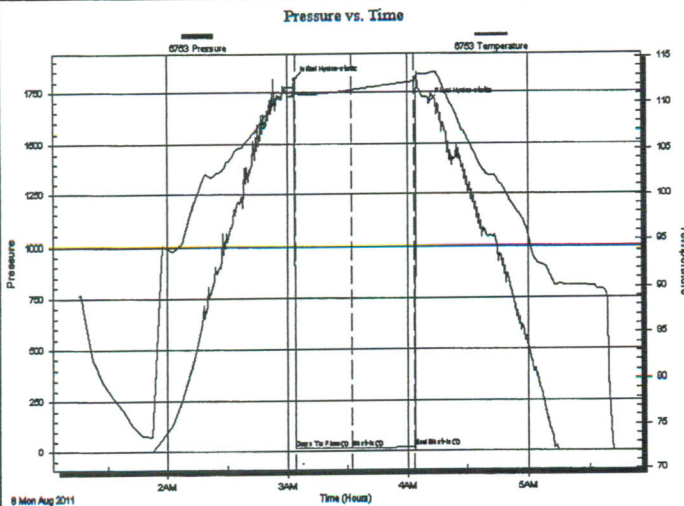
Capacity: 8000.00 psig

Last Calib.: 2011.08.08

Time On Btm: 2011.08.08 @ 03:03:31

Time Off Btm: 2011.08.08 @ 04:11:01

TEST COMMENT: IF-Very weak surface blow died in 10min
IS- No blow



PRESSURE SUMMARY

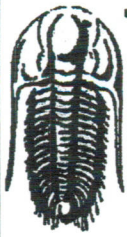
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1810.19	111.67	Initial Hydro-static
1	15.12	111.16	Open To Flow (1)
29	16.91	111.48	Shut-In(1)
60	20.47	112.41	End Shut-In(1)
68	1695.84	113.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44284

DST#: 4

ATTN: Richard Bell

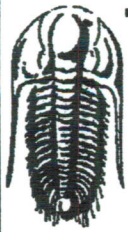
Test Start: 2011.08.08 @ 01:15:31

Tool Information

Drill Pipe:	Length: 3430.00 ft	Diameter: 3.80 inches	Volume: 48.11 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 48.71 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3570.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	50.00 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			3551.00	
Shut In Tool	5.00			3556.00	
Hydraulic tool	5.00			3561.00	
Packer	4.00			3565.00	20.00 Bottom Of Top Packer
Packer	5.00			3570.00	
Stubb	1.00			3571.00	
Recorder	0.00	8319	Inside	3571.00	
Recorder	0.00	6753	Outside	3571.00	
Perforations	26.00			3597.00	
Bullnose	3.00			3600.00	30.00 Bottom Packers & Anchor
Total Tool Length:	50.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44284

DST#: 4

ATTN: Richard Bell

Test Start: 2011.08.08 @ 01:15:31

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:

ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud	0.005

Total Length: 1.00 ft

Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

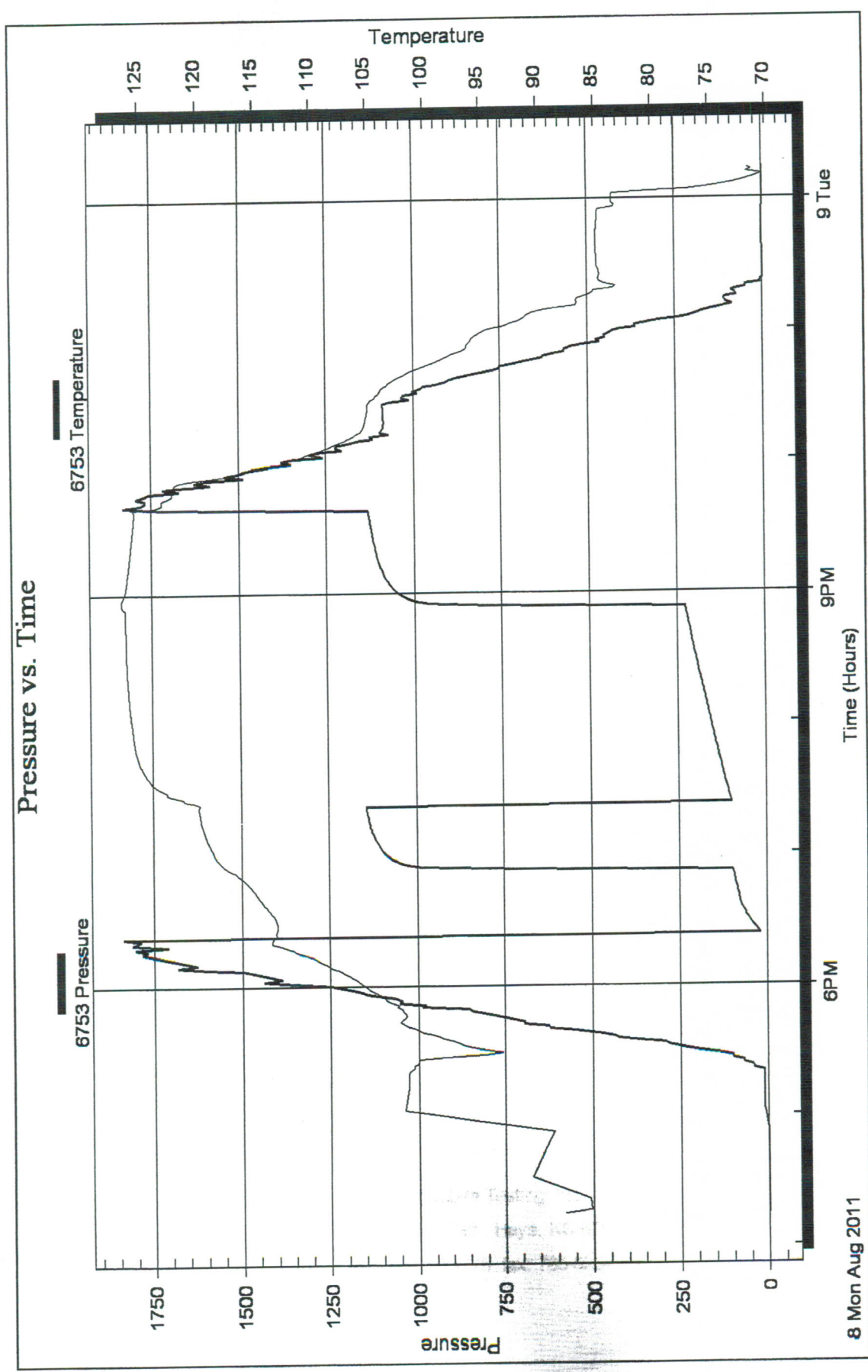
DST Test Number: 4

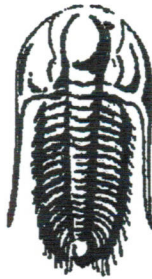
11-7-22, Graham, KS

Outside Baird Oil Co. LLC.

Serial #: 6753

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Baird Oil Co. LLC.**

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

11-7-22, Graham, KS

Merlin Worcester #1-11

Start Date: 2011.08.08 @ 16:15:05

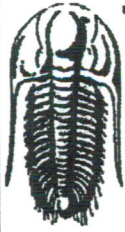
End Date: 2011.08.09 @ 00:15:05

Job Ticket #: 44285 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Baird Oil Co. LLC.

PO Box 428
Logan, KS 67646

ATTN: Richard Bell

Merlin Worcester #1-11

11-7-22, Graham, KS

Job Ticket: 44285

DST#: 5

Test Start: 2011.08.08 @ 16:15:05

GENERAL INFORMATION:

Formation: **Penn. Sand**
 Deviated: **No Whipstock** ft (KB)
 Time Tool Opened: 18:23:05
 Time Test Ended: 00:15:05

Test Type: **Conventional Bottom Hole**
 Tester: **Brett Dickinson**
 Unit No: **47**

Interval: **3673.00 ft (KB) To 3702.00 ft (KB) (TVD)**
 Total Depth: **3702.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2197.00 ft (KB)**
2192.00 ft (CF)
 KB to GR/CF: **5.00 ft**

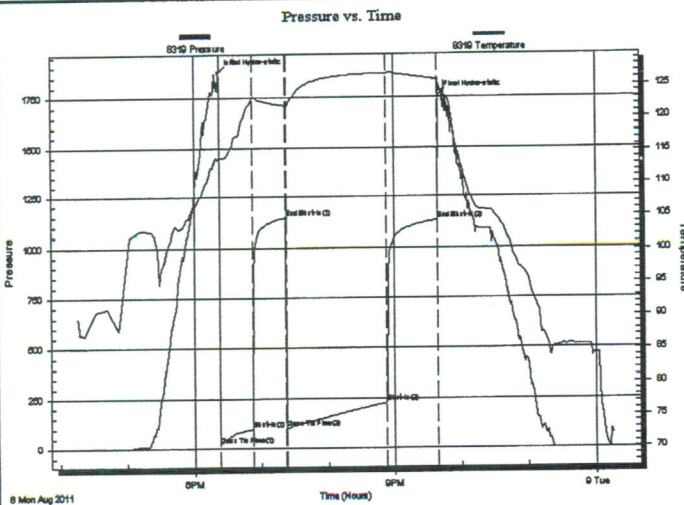
Serial #: 8319

Inside

Press@RunDepth: **228.76 psig @ 3674.00 ft (KB)**
 Start Date: **2011.08.08** End Date: **2011.08.09**
 Start Time: **16:15:10** End Time: **00:15:04**

Capacity: **8000.00 psig**
 Last Calib.: **2011.08.09**
 Time On Btm: **2011.08.08 @ 18:22:05**
 Time Off Btm: **2011.08.08 @ 21:39:35**

TEST COMMENT: IF-2in blow in 5min died back to 1/8in
 ISI-No blow
 FF-BOB in 39min
 FSI-No blow



PRESSURE SUMMARY

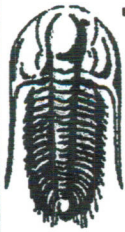
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1873.80	113.88	Initial Hydro-static
1	20.35	113.80	Open To Flow (1)
31	98.49	122.96	Shut-In(1)
61	1143.45	121.90	End Shut-In(1)
61	101.94	121.68	Open To Flow (2)
151	228.76	126.75	Shut-In(2)
197	1129.45	125.85	End Shut-In(2)
198	1754.65	125.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
375.00	Water	4.15
60.00	MOW 70%W 30%M	0.84
25.00	Oil spotted WCM 25%W 75%M	0.35

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44285

DST#: 5

ATTN: Richard Bell

Test Start: 2011.08.08 @ 16:15:05

Tool Information

Drill Pipe:	Length: 3554.00 ft	Diameter: 3.80 inches	Volume: 49.85 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 50.45 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3673.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	49.00 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			3654.00	
Shut In Tool	5.00			3659.00	
Hydraulic tool	5.00			3664.00	
Packer	4.00			3668.00	20.00 Bottom Of Top Packer
Packer	5.00			3673.00	
Stubb	1.00			3674.00	
Recorder	0.00	8319	Inside	3674.00	
Recorder	0.00	6753	Outside	3674.00	
Perforations	25.00			3699.00	
Bullnose	3.00			3702.00	29.00 Bottom Packers & Anchor
Total Tool Length:	49.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Co. LLC.

Merlin Worcester #1-11

PO Box 428
Logan, KS 67646

11-7-22, Graham, KS

Job Ticket: 44285 DST#: 5

ATTN: Richard Bell

Test Start: 2011.08.08 @ 16:15:05

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 59.00 sec/qt
Water Loss: 6.79 in³
Resistivity: ohm.m
Salinity: 1600.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: 68000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
375.00	Water	4.149
60.00	MOW 70%W 30%M	0.842
25.00	Oil spotted WCM 25%W 75%M	0.351

Total Length: 460.00 ft Total Volume: 5.342 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW.13 @ 65 deg

Serial #: 8319

Inside

Baird Oil Co. LLC

11-7-22, Graham, KS

DST Test Number: 5

Pressure vs. Time

