

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
June 2009

Form Must Be Typed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33335
Name: IA Operating, Inc
Address 1: 9915 W 21st Street, Ste B
Address 2: _____
City: Wichita State: KS Zip: 67205 + _____
Contact Person: Robert Swann
Phone: (316) 721-0036
CONTRACTOR: License # 34233
Name: Maverick Drilling, LLC
Wellsite Geologist: Randall Kilian
Purchaser: None

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 #: _____

1/24/11	1/31/11	1/31/11
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 051-26072-00-00
Spot Description: _____
NW SE NE NE Sec. 9 Twp. 14 S. R. 20 East West
960 Feet from North / South Line of Section
570 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Ellis
Lease Name: Brundgardt/Haselhorst Unit Well #: 9-1
Field Name: Ed Seibel
Producing Formation: None
Elevation: Ground: 2275 Kelly Bushing: 2283
Total Depth: 4000' Plug Back Total Depth: 4000'
Amount of Surface Pipe Set and Cemented at: 220' 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: 54,000 ppm Fluid volume: 500 bbls
Dewatering method used: Evaporation, then backfill
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License #: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Permit #: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Robert Swann
Title: Vice President Date: 3-9-2011

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: Dg Date: 3/16/11

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MAR 14 2011

KCC WICHITA
3/16/11

Operator Name: IA Operating, Inc Lease Name: Brundgardt/Haselhorst Unit Well #: 9-1
 Sec. 9 Twp. 14 S. R. 20 East West County: Ellis

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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Geologist's Well Report, Compensated Density/ Neutron Log, Dual Induction Log, Micro Log	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1576'</td> <td>+707</td> </tr> <tr> <td>Topeka</td> <td>3284'</td> <td>-1001</td> </tr> <tr> <td>Toronto</td> <td>3542'</td> <td>-1259</td> </tr> <tr> <td>Lansing</td> <td>3561'</td> <td>-1278</td> </tr> <tr> <td>Marmaton</td> <td>3859'</td> <td>-1576</td> </tr> <tr> <td>Total Depth</td> <td>4002'</td> <td>-1719</td> </tr> </table>	Name	Top	Datum	Anhydrite	1576'	+707	Topeka	3284'	-1001	Toronto	3542'	-1259	Lansing	3561'	-1278	Marmaton	3859'	-1576	Total Depth	4002'	-1719
Name	Top	Datum																				
Anhydrite	1576'	+707																				
Topeka	3284'	-1001																				
Toronto	3542'	-1259																				
Lansing	3561'	-1278																				
Marmaton	3859'	-1576																				
Total Depth	4002'	-1719																				

CASING RECORD <input checked="" 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
Surface	12 1/4"	8 5/8"	23#	220'	Common	150	3% CC, 2% gel

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 checked="" type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone		60/40 Poz	220	4% gel, 1/4 # flo-seal

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. _____		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____
Estimated Production Per 24 Hours	Oil Bbls. <u>0</u>	Gas Mcf <u>0</u>
	Water Bbls. <u>0</u>	Gas-Oil Ratio _____ Gravity _____

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) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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RECEIVED
MAR 14 2011
KCC WICHITA

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4414

Date	2-1-11	Sec.	9	Twp.	14	Range	20	County	Ellis	State	KS	On Location		Finish	12:45AM
Lease	Brungard			Well No.	9-1			Location	Ellis S to GC Rd 1 E 1/4 S 10 W 1/2						
Contractor	Maverick #108							Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job	PTA							Charge To	IA Operating						
Hole Size	7 7/8			T.D.	4000'			Street							
Csg.	4 1/2 x-hole			Depth	1610'			City							
Tbg. Size				Depth	825"			State							
Tool				Depth	275'			The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				Shoe Joint				Cement Amount Ordered	220s x 6 9/16 4 3/8 sel 1/4 lb Flo						
Meas Line				Displace											

EQUIPMENT

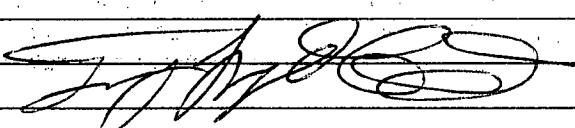
Pumptrk	1	No.	Cementer	Brandon	Common	132
			Helper			
Bulktrk	10	No.	Driver	Rick	Poz. Mix	88
			Driver			
Bulktrk	P4	No.	Driver	CISCO	Gel.	8
			Driver			

JOB SERVICES & REMARKS

Remarks:	Calcium
Rat Hole	Hulls
Mouse Hole	Salt
Centralizers	Flowseal 55#
Baskets	Kol-Seal
D/V or Port Collar	Mud CLR 48
mix 25s @ 1610'	CFL-117 or CD110 CAF 38
mix 100s @ 825'	Sand
mix 40s @ 275'	Handling 223
mix 10s @ 40'	Mileage
mix 30s RH	
mix 15s MH	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
	1 - 8 5/8 dry hole plug
Pumptrk Charge	plug
Mileage	22

Thank You


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MAR 14 2011

KCC WICHITA

Tax
Discount
Total Charge

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4719

Date	1-24-10	Sec.	9	Twp.	14	Range	20	County	Ellis	State	KS	On Location		Finish	10:30pm
Lease	Bunch #1 Bunch #1			Well No.	9-1		Location Ellis 5 Coll Case R IE 445 Wichita								
Contractor	Marwick			Owner											
Type Job	Surface			To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.											
Hole Size	12 1/8			T.D.	220										
Csg.	8 5/8			Depth	220										
Tbg. Size				Depth											
Tool				Depth											
Cement Left in Csg.	15'			Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.										
Meas Line				Displace	1330										
												Cement Amount Ordered	150 cum 3 1/2 cc 2 1/2 cc		

EQUIPMENT

Pumptrk	9	No.	Cement	150	Common	150
			Helper			
Bulktrk		No.	Driver	1	Poz. Mix	
			Driver			
Bulktrk	3	No.	Driver	3	Gel.	3
			Driver			

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
8 5/8 on bottom. Est. Circulation.	Sand
Mix 150 cc & Displace	Handling 15 B
	Mileage

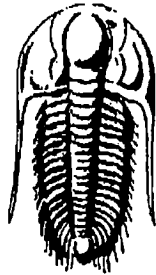
FLOAT EQUIPMENT

Cement Circulator	1	Guide Shoe	
		Centralizer	
		Baskets	
		AFU Inserts	8 5/8 Surface
		Float Shoe	
		Latch Down	
		Pumptrk Charge	Surface
		Mileage	22

X Signature

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MAR 14 2011
KCC WICHITA

Tax
Discount
Total Charge



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc.**

9915 W 21st. St. N Ste. B
Wichita, KS 67205

ATTN: Randy Kilian

8-14-20 Ellis KS

Brungardt/Hasselhorst Unit 1-9

Start Date: 2011.01.28 @ 15:42:29

End Date: 2011.01.28 @ 21:35:58

Job Ticket #: 41422 DST #: 1

RECEIVED

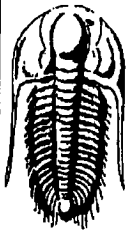
MAR 14 2011

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

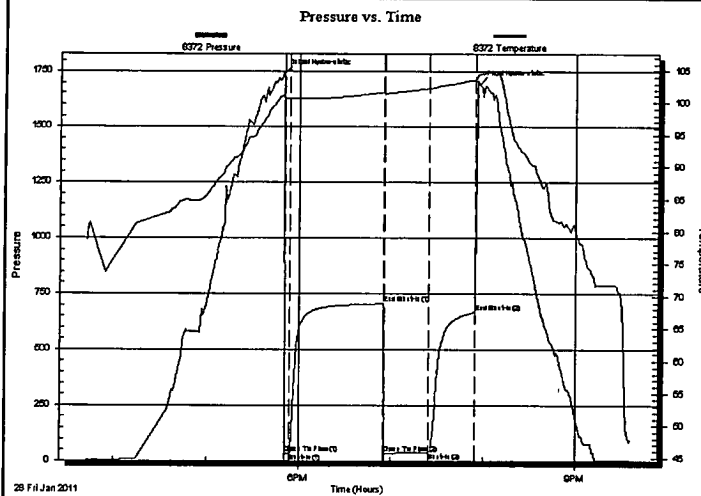
Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41422 DST#: 1
Test Start: 2011.01.28 @ 15:42:29

GENERAL INFORMATION:

Formation: LKC "A-C"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:50:58
Time Test Ended: 21:35:58
Interval: 3554.00 ft (KB) To 3610.00 ft (KB) (TVD)
Total Depth: 3610.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:
Test Type: Conventional Bottom Hole
Tester: Brian Fairbank
Unit No: 41
Reference Elevations: 2283.00 ft (KB)
2275.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8372 Inside
Press@RunDepth: 37.73 psig @ 3560.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.28 End Date: 2011.01.28 Last Calib.: 2011.01.28
Start Time: 15:42:29 End Time: 21:35:58 Time On Btm: 2011.01.28 @ 17:49:58
Time Off Btm: 2011.01.28 @ 19:56:58

TEST COMMENT: IFP - stg. sur blow throughout
ISI - no blow back
FFP - no blow
FSI - no blow back



PRESSURE SUMMARY

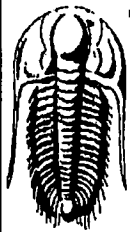
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1743.64	101.12	Initial Hydro-static
1	34.21	100.68	Open To Flow (1)
4	34.33	100.59	Shut-In(1)
65	705.43	101.57	End Shut-In(1)
66	34.77	101.23	Open To Flow (2)
95	37.73	102.22	Shut-In(2)
125	667.41	103.68	End Shut-In(2)
127	1693.25	104.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100%	0.14

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205

Brungardt/Hasselhorst Unit 1-9

8-14-20 Ellis KS

Job Ticket: 41422

DST#: 1

ATTN: Randy Kilian

Test Start: 2011.01.28 @ 15:42:29

Tool Information

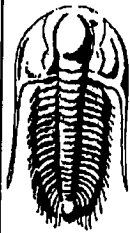
Drill Pipe:	Length: 3554.00 ft	Diameter: 3.80 inches	Volume: 49.85 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 49.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3554.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	76.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3539.00	
Hydraulic tool	5.00			3544.00	
Packer	5.00			3549.00	20.00 Bottom Of Top Packer
Packer	5.00			3554.00	
Stubb	1.00			3555.00	
Perforations	4.00			3559.00	
Change Over Sub	1.00			3560.00	
Recorder	0.00	8372	Inside	3560.00	
Recorder	0.00	8365	Outside	3560.00	
Blank Spacing	31.00			3591.00	
Change Over Sub	1.00			3592.00	
Perforations	15.00			3607.00	
Bullnose	3.00			3610.00	56.00 Bottom Packers & Anchor

Total Tool Length: 76.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41422 DST#: 1
Test Start: 2011.01.28 @ 15:42:29

Mud and Cushion Information

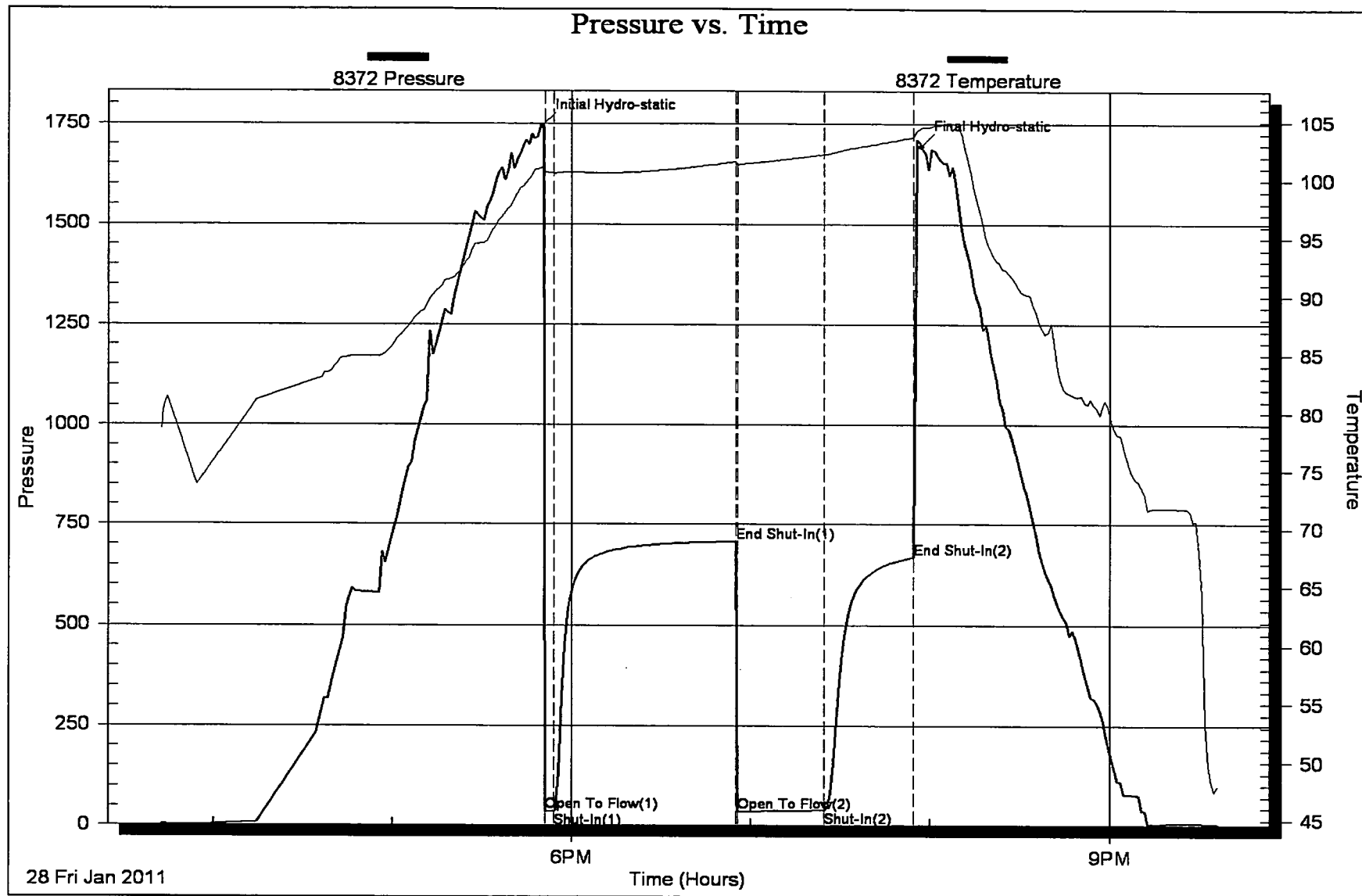
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 64.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.95 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: inches			

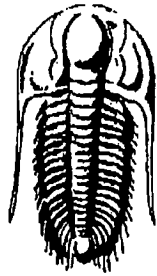
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc.**

9915 W 21st. St. N Ste. B
Wichita, KS 67205

ATTN: Randy Kilian

8-14-20 Ellis KS

Brungardt/Hasselhorst Unit 1-9

Start Date: 2011.01.29 @ 08:12:16

End Date: 2011.01.29 @ 15:11:15

Job Ticket #: 41423 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

IA Operating Inc.

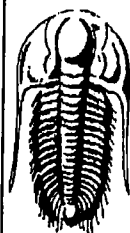
Brungardt/Hasselhorst Unit 1-9

8-14-20 Ellis KS

DST # 2

LKC "G"

2011.01.29



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

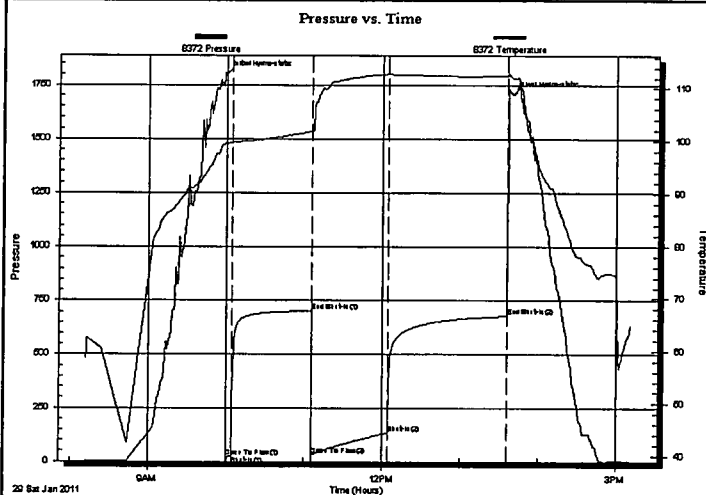
Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41423 DST#: 2
Test Start: 2011.01.29 @ 08:12:16

GENERAL INFORMATION:

Formation: **LKC "G"**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: **09:59:45**
Time Test Ended: **15:11:15**
Interval: **3649.00 ft (KB) To 3675.00 ft (KB) (TVD)**
Total Depth: **3675.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition:
Test Type: **Conventional Bottom Hole**
Tester: **Brian Fairbank**
Unit No: **41**
Reference Elevations: **2283.00 ft (KB)**
2275.00 ft (CF)
KB to GR/CF: **8.00 ft**

Serial #: 8372 **Inside**
Press@RunDepth: **134.31 psig @ 3657.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2011.01.29** End Date: **2011.01.29** Last Calib.: **2011.01.29**
Start Time: **08:12:16** End Time: **15:11:15** Time On Btm: **2011.01.29 @ 09:58:45**
Time Off Btm: **2011.01.29 @ 13:39:45**

TEST COMMENT: IFF - weak blow throughout 1/4" - 3"
ISI - no blow back
FFP - BOB 24 min
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1798.40	99.67	Initial Hydro-static
1	20.46	99.22	Open To Flow (1)
5	27.75	99.65	Shut-In(1)
67	701.72	101.87	End Shut-In(1)
68	31.48	101.64	Open To Flow (2)
126	134.31	112.76	Shut-In(2)
218	678.19	112.46	End Shut-In(2)
221	1704.08	112.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
370.00	MW 90%W, 10%M	5.19

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc.

Brungardt/Hasselhorst Unit 1-9

9915 W 21st. St. N Ste. B
Wichita, KS 67205

8-14-20 Ellis KS

Job Ticket: 41423

DST#: 2

ATTN: Randy Kilian

Test Start: 2011.01.29 @ 08:12:16

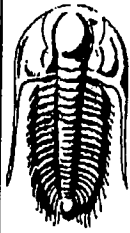
Tool Information

Drill Pipe:	Length: 3645.00 ft	Diameter: 3.80 inches	Volume: 51.13 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 51.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3649.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			3634.00	
Hydraulic tool	5.00			3639.00	
Packer	5.00			3644.00	20.00 Bottom Of Top Packer
Packer	5.00			3649.00	
Stubb	1.00			3650.00	
Perforations	7.00			3657.00	
Recorder	0.00	8372	Inside	3657.00	
Recorder	0.00	8365	Outside	3657.00	
Perforations	15.00			3672.00	
Bullnose	3.00			3675.00	26.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41423 DST#: 2
Test Start: 2011.01.29 @ 08:12:16

Mud and Cushion Information

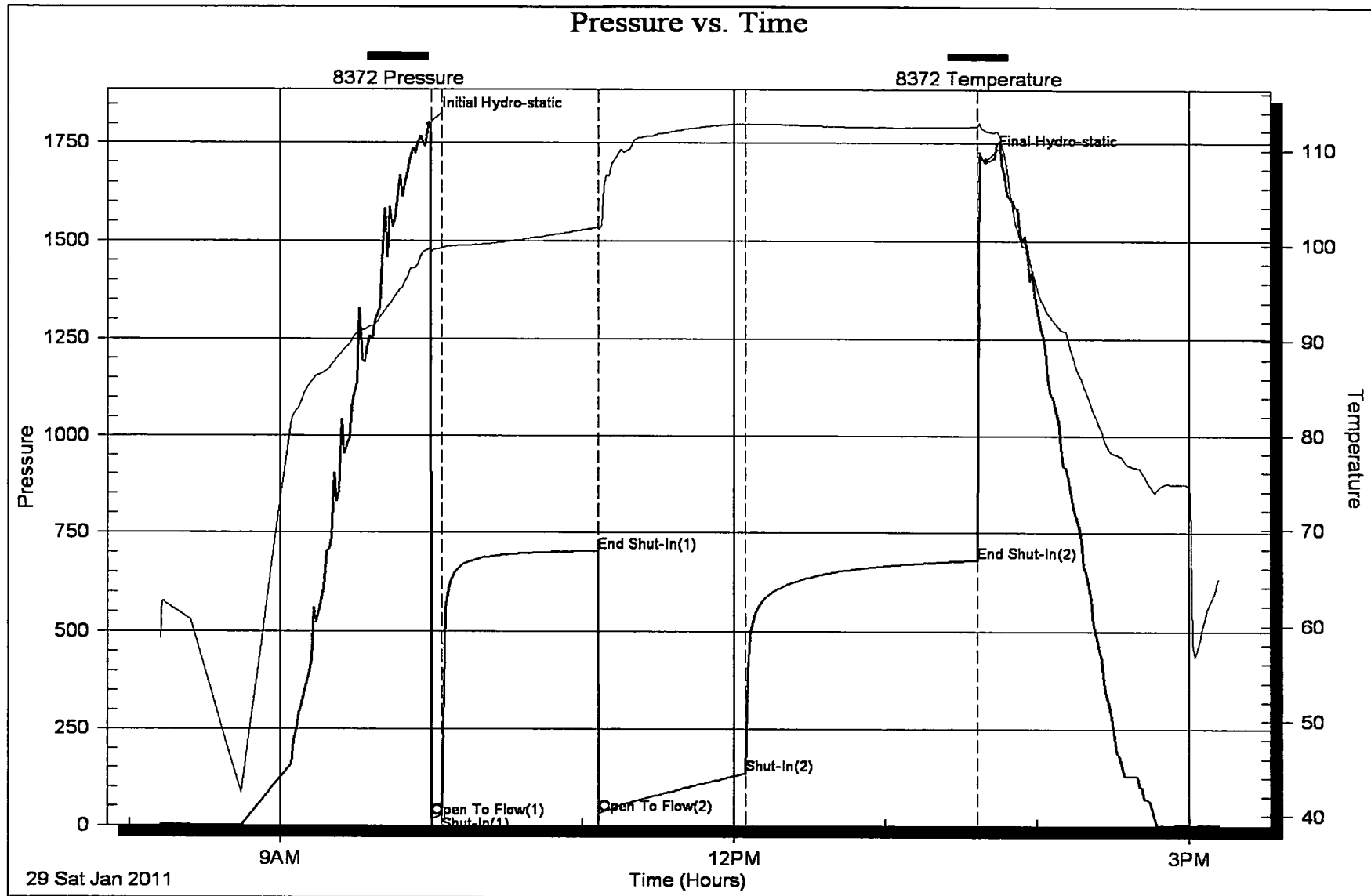
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	80000 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.76 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8000.00 ppm			
Filter Cake: inches			

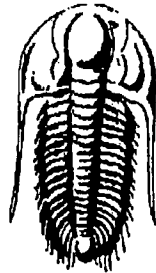
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
370.00	MW 90%W, 10%M	5.190

Total Length: 370.00 ft Total Volume: 5.190 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: RW .121 @ 62F = 80000 ppm





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc.**

9915 W 21st. St. N Ste. B
Wichita, KS 67205

ATTN: Randy Kilian

8-14-20 Ellis KS

Brungardt/Hasselhorst Unit 1-9

Start Date: 2011.01.30 @ 01:53:55

End Date: 2011.01.30 @ 07:51:54

Job Ticket #: 41424 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

IA Operating Inc.

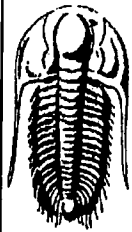
Brungardt/Hasselhorst Unit 1-9

8-14-20 Ellis KS

DST # 3

LKC "L"

2011.01.30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

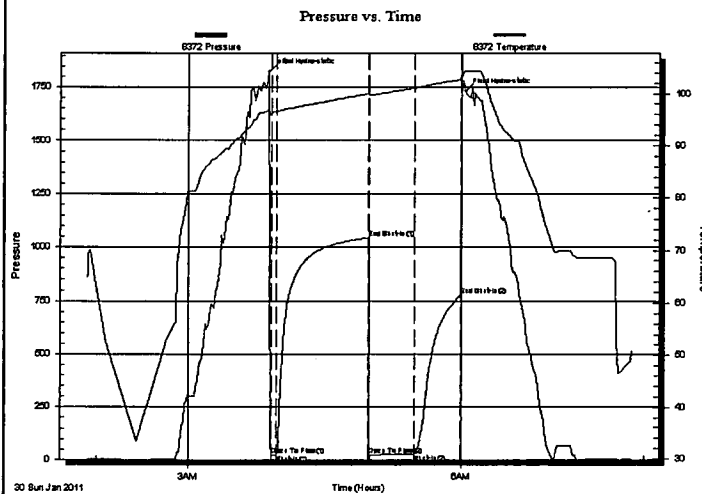
Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41424 DST#: 3
Test Start: 2011.01.30 @ 01:53:55

GENERAL INFORMATION:

Formation: **LKC "L"**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: **03:54:24**
Time Test Ended: **07:51:54**
Test Type: **Conventional Bottom Hole**
Tester: **Brian Fairbank**
Unit No: **41**
Interval: **3688.00 ft (KB) To 3763.00 ft (KB) (TVD)**
Reference Elevations: **2283.00 ft (KB)**
Total Depth: **3763.00 ft (KB) (TVD)** **2275.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **KB to GR/CF: 8.00 ft**

Serial #: 8372 **Inside**
Press@RunDepth: **27.64 psig @ 3694.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2011.01.30** End Date: **2011.01.30** Last Calib.: **2011.01.30**
Start Time: **01:53:55** End Time: **07:51:54** Time On Btm: **2011.01.30 @ 03:52:54**
Time Off Btm: **2011.01.30 @ 06:02:24**

TEST COMMENT: IFP - weak blow throughout 1/2" - 1"
ISI - no blow back
FFP - weak blow throughout sur - 1"
FSI - no blow back



PRESSURE SUMMARY

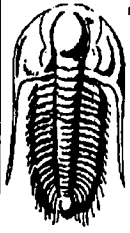
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1823.78	96.88	Initial Hydro-static
2	19.67	96.43	Open To Flow (1)
5	20.78	96.49	Shut-In(1)
66	1043.32	99.92	End Shut-In(1)
67	21.96	99.66	Open To Flow (2)
96	27.64	101.02	Shut-In(2)
127	776.32	102.66	End Shut-In(2)
130	1730.10	104.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	O sptd mud M100%	0.35

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41424 **DST#: 3**
Test Start: 2011.01.30 @ 01:53:55

Tool Information

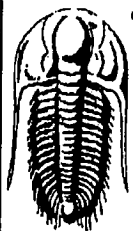
Drill Pipe:	Length: 3677.00 ft	Diameter: 3.80 inches	Volume: 51.58 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 51.58 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3688.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	95.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3673.00	
Hydraulic tool	5.00			3678.00	
Packer	5.00			3683.00	20.00 Bottom Of Top Packer
Packer	5.00			3688.00	
Stubb	1.00			3689.00	
Perforations	4.00			3693.00	
Change Over Sub	1.00			3694.00	
Recorder	0.00	8372	Inside	3694.00	
Recorder	0.00	8365	Outside	3694.00	
Blank Spacing	62.00			3756.00	
Change Over Sub	1.00			3757.00	
Perforations	3.00			3760.00	
Bullnose	3.00			3763.00	75.00 Bottom Packers & Anchor

Total Tool Length: 95.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc.

Brungardt/Hasselhorst Unit 1-9

9915 W 21st. St. N Ste. B
Wichita, KS 67205

8-14-20 Ellis KS

Job Ticket: 41424

DST#: 3

ATTN: Randy Kilian

Test Start: 2011.01.30 @ 01:53:55

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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

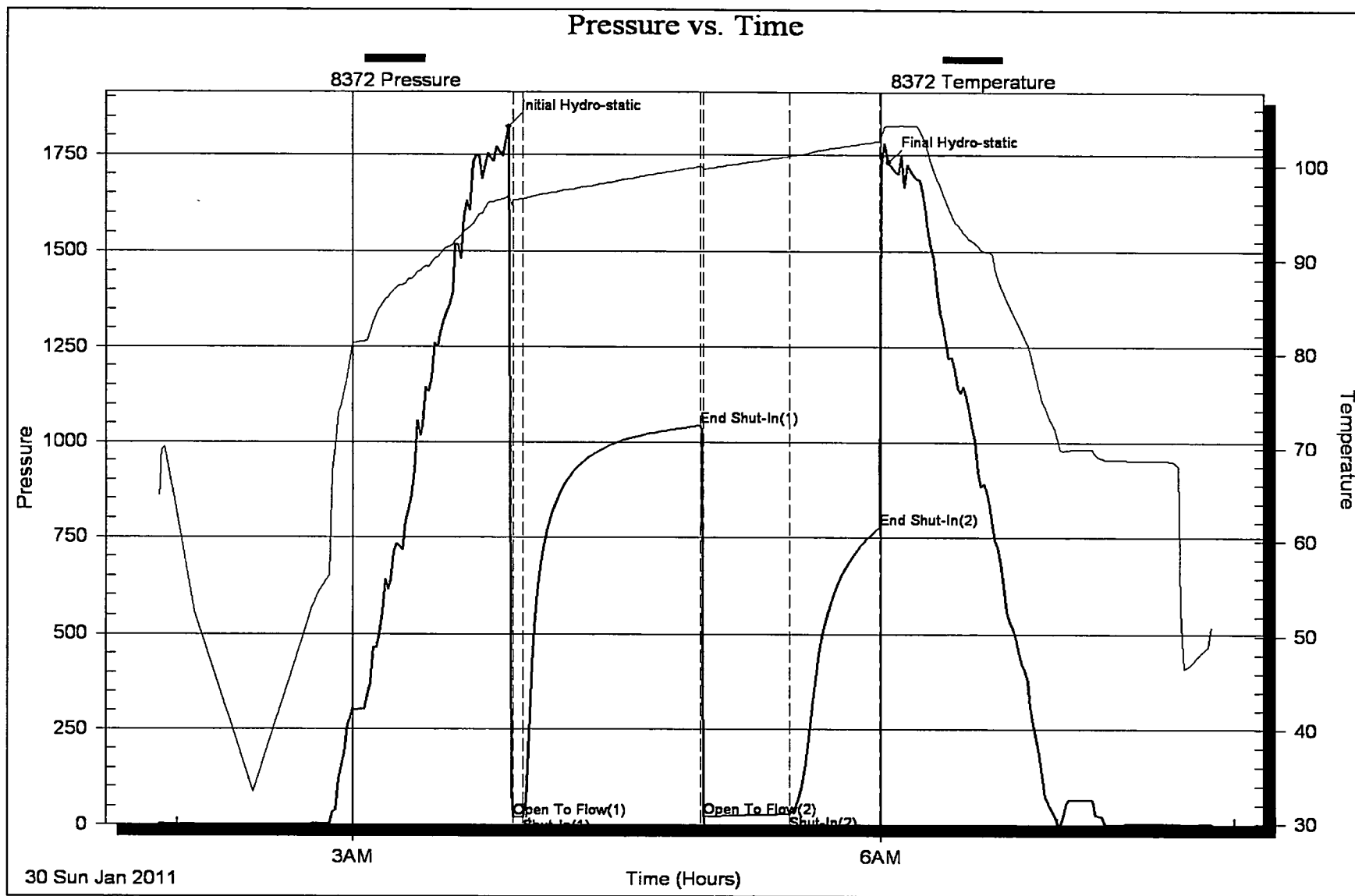
Length ft	Description	Volume bbl
25.00	O sptd mud M100%	0.351

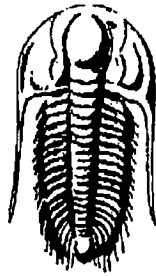
Total Length: 25.00 ft Total Volume: 0.351 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc.**

9915 W 21st. St. N Ste. B
Wichita, KS 67205

ATTN: Randy Kilian

8-14-20 Ellis KS

Brungardt/Hasselhorst Unit 1-9

Start Date: 2011.01.31 @ 06:59:46

End Date: 2011.01.31 @ 14:26:46

Job Ticket #: 41425 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

IA Operating Inc.

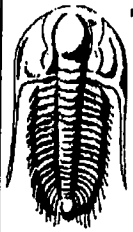
Brungardt/Hasselhorst Unit 1-9

8-14-20 Ellis KS

DST # 4

Reagan Sand

2011.01.31



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

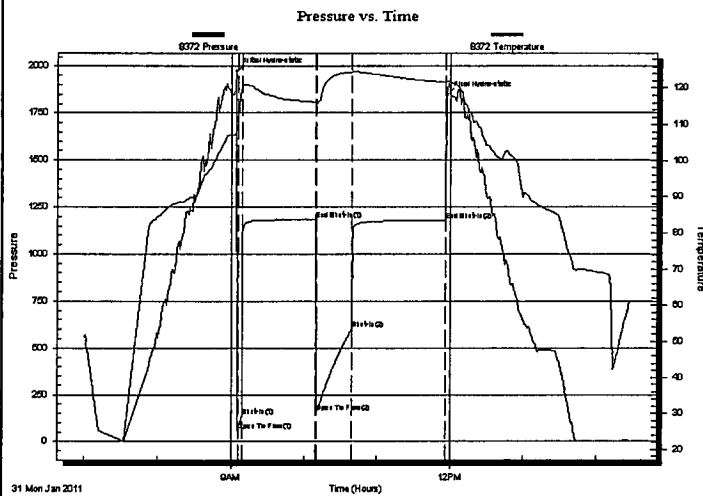
Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41425 DST#: 4
Test Start: 2011.01.31 @ 06:59:46

GENERAL INFORMATION:

Formation: **Reagan Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:04:46
Time Test Ended: 14:26:46
Interval: **3883.00 ft (KB) To 3927.00 ft (KB) (TVD)**
Total Depth: **4000.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition:
Test Type: Conventional Bottom Hole
Tester: Brian Fairbank
Unit No: 41
Reference Elevations: 2283.00 ft (KB)
2275.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8372 **Inside**
Press@RunDepth: 598.42 psig @ 3888.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.31 End Date: 2011.01.31 Last Calib.: 2011.01.31
Start Time: 06:59:47 End Time: 14:26:46 Time On Btm: 2011.01.31 @ 09:03:46
Time Off Btm: 2011.01.31 @ 11:56:46

TEST COMMENT: IFP - BOB 1 1/2 min
ISI - sur blow back - died 24 min
FFP - BOB 2 min
FSI - no blow back



PRESSURE SUMMARY

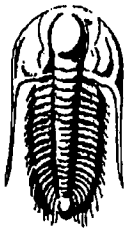
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1972.48	108.06	Initial Hydro-static
1	60.74	108.35	Open To Flow (1)
5	133.15	119.97	Shut-In(1)
66	1182.86	116.11	End Shut-In(1)
67	157.31	115.68	Open To Flow (2)
95	598.42	124.47	Shut-In(2)
172	1181.01	121.60	End Shut-In(2)
173	1843.72	121.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 95%W, 5%M	1.68
935.00	REVERSED OUT	13.12
215.00	WM 15%W, 85%M	3.02

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

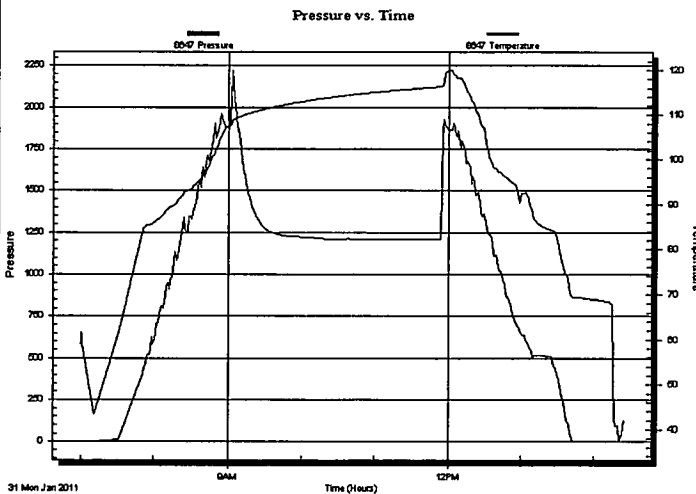
Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41425 DST#: 4
Test Start: 2011.01.31 @ 06:59:46

GENERAL INFORMATION:

Formation: **Reagan Sand**
Deviated: **No Whipstock:** ft (KB)
Time Tool Opened: 09:04:46
Time Test Ended: 14:26:46
Interval: **3883.00 ft (KB) To 3927.00 ft (KB) (TVD)**
Total Depth: **4000.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition:
Test Type: **Conventional Bottom Hole**
Tester: **Brian Fairbank**
Unit No: **41**
Reference Elevations: **2283.00 ft (KB)**
2275.00 ft (CF)
KB to GR/CF: **8.00 ft**

Serial #: 8647 **Below (Straddle)**
Press@RunDepth: psig @ 3944.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.31 End Date: 2011.01.31 Last Calib.: 2011.01.31
Start Time: 06:59:23 End Time: 14:24:52 Time On Btm:
Time Off Btm:

TEST COMMENT: IFF - BOB 1 1/2 min
ISI - sur blow back - died 24 min
FFP - BOB 2 min
FSI - no blow back



PRESSURE SUMMARY

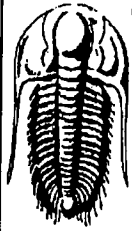
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 95%W, 5%M	1.68
935.00	REVERSED OUT	13.12
215.00	WM 15%W, 85%M	3.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc.

Brungardt/Hasselhorst Unit 1-9

9915 W 21st. St. N Ste. B
Wichita, KS 67205

8-14-20 Ellis KS

Job Ticket: 41425

DST#: 4

ATTN: Randy Kilian

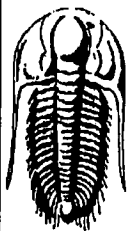
Test Start: 2011.01.31 @ 06:59:46

Tool Information

Drill Pipe:	Length: 3875.00 ft	Diameter: 3.80 inches	Volume: 54.36 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 54.36 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3883.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	124.00 ft			
Tool Length:	144.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3868.00	
Hydraulic tool	5.00			3873.00	
Packer	5.00			3878.00	20.00 Bottom Of Top Packer
Packer	5.00			3883.00	
Stubb	1.00			3884.00	
Perforations	3.00			3887.00	
Change Over Sub	1.00			3888.00	
Recorder	0.00	8372	Inside	3888.00	
Recorder	0.00	8365	Outside	3888.00	
Blank Spacing	31.00			3919.00	
Change Over Sub	1.00			3920.00	
Perforations	2.00			3922.00	
Blank Off Sub	1.00			3923.00	
Blank Spacing	4.00			3927.00	124.00 Tool Interval
Packer	5.00			3932.00	
Stubb	1.00			3933.00	
Perforations	11.00			3944.00	
Recorder	0.00	8647	Below	3944.00	
Change Over Sub	1.00			3945.00	
Blank Spacing	62.00			4007.00	1000143.00 Bottom Packers & Anchor
Total Tool Length:	144.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc.
9915 W 21st. St. N Ste. B
Wichita, KS 67205
ATTN: Randy Kilian

Brungardt/Hasselhorst Unit 1-9
8-14-20 Ellis KS
Job Ticket: 41425 **DST#: 4**
Test Start: 2011.01.31 @ 06:59:46

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:	46000 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MV 95%W, 5%M	1.683
935.00	REVERSED OUT	13.116
215.00	WM 15%W, 85%M	3.016

Total Length: 1270.00 ft Total Volume: 17.815 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .227 @ 53F = 46000 ppm

