



KANSAS CORPORATION COMMISSION 1092594
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009

Form Must Be Typed
Form must be Signed
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 ST, STE B
Address 2: _____
City: WICHITA State: KS Zip: 67205 + _____
Contact Person: Julie Burrows, Jeff Mowry
Phone: (316) 721-0036
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Randall Kilian
Purchaser: Coffeyville Resources, LLC

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 #: _____

<u>03/01/2012</u>	<u>03/08/2012</u>	<u>04/06/2012</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-051-26268-00-00

Spot Description: _____

NW SE SE NW Sec. 18 Twp. 14 S. R. 19 East West
2180 Feet from North / South Line of Section
2100 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: Ellis

Lease Name: VIRGINIA K Well #: 18-1

Field Name: Pleasant SE

Producing Formation: Topeka-KC-C-E-J

Elevation: Ground: 2222 Kelly Bushing: 2223

Total Depth: 3925 Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 221 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: 1510 Feet

If Alternate II completion, cement circulated from: 1510

feet depth to: 2215 w/ 250 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 67000 ppm Fluid volume: 400 bbls

Dewatering method used: Evaporated

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: Deanna Garrison Date: 09/18/2012



1092594

Operator Name: IA Operating, Inc. Lease Name: VIRGINIA K Well #: 18-1
 Sec. 18 Twp. 14 S. R. 19 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 Well Report, Dual Receiver Cement Bond Log, Dual Induction Log, Micro Log, Compensated Density/Neutron Log	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input checked="" type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:70%;">Name</td> <td style="width:15%;">Top</td> <td style="width:15%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1488'</td> <td>+735</td> </tr> <tr> <td>Base</td> <td>1532'</td> <td>+691</td> </tr> <tr> <td>Topeka</td> <td>3231'</td> <td>-1008</td> </tr> <tr> <td>Toronto</td> <td>3501'</td> <td>-1278</td> </tr> <tr> <td>Lansing</td> <td>3523'</td> <td>-1300</td> </tr> <tr> <td>Arbuckle</td> <td>3845'</td> <td>-1622</td> </tr> <tr> <td>Total</td> <td>3924'</td> <td>-1701</td> </tr> </table>	Name	Top	Datum	Anhydrite	1488'	+735	Base	1532'	+691	Topeka	3231'	-1008	Toronto	3501'	-1278	Lansing	3523'	-1300	Arbuckle	3845'	-1622	Total	3924'	-1701
Name	Top	Datum																							
Anhydrite	1488'	+735																							
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Toronto	3501'	-1278																							
Lansing	3523'	-1300																							
Arbuckle	3845'	-1622																							
Total	3924'	-1701																							

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	12.2500	8.5	23	221	Common	150	3%CC, 2% gel
Production	7.8750	5.5000	15.5	3925	Common	200	10%salt, 3% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input checked="" type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	2215-1510	QMDC	250	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
4	3581-84, 3552-55	1000 gal. 15% MCA	
	3581-84	retreat 250 gal. 15% MCA, 500 gal. 15% MCA	
4	3363-66	250 gal 15% MCA, 500 gal 15% MCA	
4	3709-13	250 gal 15% MCA, 500 gal. 15% MCA	

TUBING RECORD:	Size: <u>2 7/8</u>	Set At: <u>3812</u>	Packer At:	Liner Run: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR. <u>4/6/2012</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bb/s. <u>45</u>	Gas Mcf <u>0</u>	Water Bb/s. <u>49</u>	Gas-Oil Ratio	Gravity <u>41</u>

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 <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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QUALITY OILWELL CEMENTING, INC.

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

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

No. 5465

Date	3-15-12	Sec.	18	Twp.	14	Range	19	County	Ellis	State	Ks	On Location		Finish	2:00 PM	
Lease	Virginia K.			Well No.	18-1			Location	Yocemento, Ks - S to Golf Course Rd,							
Contractor	Chito's well service							Owner	W to 160 Rd, 15, 2E, 5/1 into							
Type Job	Port collar							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								T.D.								
Csg.	5 1/2"							Depth	3924'							
Tbg. Size	2 7/8"							Depth	1510'							
Tool	Port Collar							Depth	1510'							
Cement Left in Csg.								Shoe Joint								
Meas Line								Displace	7 3/4 BLS			Cement Amount Ordered	250 SX QMDL 4# F.S.			

EQUIPMENT

Pumptrk	15 No.	Cement Helper	Cisco	Common	160
Bulktrk	8 No.	Driver	Doug	Poz. Mix	
Bulktrk	p.u. No.	Driver	Rick	Gel.	

JOB SERVICES & REMARKS

Remarks:	Cement did Circulate.				
Rat Hole					
Mouse Hole					
Centralizers					
Baskets					
D/V or Port Collar					
test	1200# + held				
Open tool + established a blow					
mix	160 SX QMDL 4# F.S.				
+ Displaced with	7 3/4 BLS of				
water. Closed tool + test to					
1200# + held. Run 5 Jts tubing					
+ wash clean.					
Cement did Circulate					

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	port Collar
Mileage	9

	Tax
	Discount
	Total Charge

X Signature

QUALITY OILWELL CEMENTING, INC.

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

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

No. 252

Date	3/8/12	Sec.	18	Twp.	17	Range	19	County	EMM	State	KS	On Location		Finish	10:30 AM
Lease	Virginia K			Well No.	18-1		Location Yocemento, S to Golf Course Rd, SW, 15, 1/2 W.								
Contractor	Discovery Drilling Rig #3						Owner S into								
Type Job	Production String						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	7 7/8"		T.D.		3925'		Charge To IA Operating, Inc.								
Csg.	5 1/2" IS. 50#		Depth		3924'		Street								
Tbg. Size			Depth				City								
Tool	Port Collar		Depth		1510' Jt # 58		State								
Cement Left in Csg.	17'		Shoe Joint		17'		The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line			Displace		93 Bbls.		Cement Amount Ordered 200s x com 10% salt 5% Gilsoni								

EQUIPMENT

Pumptrk	9	No.	Cement Helper	Paul	Common	200
Bulktrk	10	No.	Driver	Matt	Poz. Mix	
Bulktrk	PJ	No.	Driver	Lonnie	Gel.	

JOB SERVICES & REMARKS

Remarks:	Calcium
Rat Hole 30 sx	Hulls
Mouse Hole 20 sx	Salt 17
Centralizers 1, 4, 7, 10, 13, 16, 59	Flowseal
Baskets 57	Kol-Seal 1600#
Port Collar - 1510' Jt # 58	Mud CLR 48 500 gal.
Est. Circ. - 30 min	CFL-117 or CD110 CAF 38
Pump 500 gal Mud Clear	Sand
Plug Rat/Mouse	Handling 227
MIX 150 sx down 5 1/2"	Mileage 5 1/2
Displace	FLOAT EQUIPMENT
Hard Plug	Guide Shoe 1
Float Hold	Centralizer 7
	Baskets 1
	AFU Inserts
	Float Shoe
	Latch Down
	Rubber Plug
	Port Collar, 27 RELIP. Sertelars
	Pumptrk Charge prod long string
	Mileage 9

x Signature <i>Mike Storton</i>	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. 466

Date	3-1-12	Sec.	18	Twp.	14	Range	19	County	Ellis	State	Kansas	On Location		Finish	7:00PM
Lease	Virginia R	Well No.	18-1	Location <u>Crumrod Rd & Golf Course Rd W 15th</u>											
Contractor	Discovery Drilling Rig 3						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 1/4		T.D.		221		Charge To <u>TA Operating</u>								
Csg.	8 3/8		Depth		221		Street								
Tbg. Size			Depth				City								
Tool			Depth				State								
Cement Left in Csg.	10-15		Shoe Joint				The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line			Displace		1381		Cement Amount Ordered <u>150 Can 20lb</u>								

EQUIPMENT

Pumptrk	5	No.	Cementers		Common	150
			Helper	2		
Bulktrk	10	No.	Driver	3	Poz. Mix	
			Driver	1		
Bulktrk		No.	Driver	2	Gel.	3
			Driver	1		

JOB SERVICES & REMARKS

Remarks:	Calcium
Rat Hole	Hulls 5
Mouse Hole	Salt
Centralizers	Flowseal
Baskets	Kol-Seal
D/V or Port Collar	Mud CLR 48
	CFL-117 or CD110 CAF 38
	Sand
	Handling 158
	Mileage

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	<u>SAGE</u>
	Pumptrk Charge <u>Surface</u>
	Mileage <u>9</u>

Tax	
Discount	
Total Charge	

X Signature [Signature]

Randall Kilian Corporation
Geologist



**Certified Petroleum
Geologist #3351
License #224**

RECEIVED
SEP 12 2012

KCC WICHITA

P.O. Box 26
Hays, Kansas 67601-0026
Phone: 785-628-6061
Cell: 785-635-1349

GEOLOGIST'S WELL REPORT

COMPANY IA OPERATING, INC. (33335)

WELL Virginia K. #18-1

FIELD Pleasant SE (Wildcat per seismic)

LOCATION (legal) Ap. SE SE NW
(2180' FNL & 2100' FWL)
Section 18 TWP 14S RGE 19W

(Map) 6½ mi W & 1½ mi S of Hays Golf
Coarse

COUNTY Ellis STATE Kansas

ELEVATION: 2223' K.B., 2215' G.L.

Depths measured from Kelly Bushing

A. P. I. NUMBER 15-051-26268

GEOLOGY BY Randall Kilian

PERTINENT WELL DATA

CONTRACTOR DISCOVERY DRILLING CO., INC. (31548)

RIG #3 HYDRAULICS D-375 6x14x60
(Galen Gaschler TP)

DRILL PIPE 4½" X-H COLLARS 6½ 17 (526')

CASING: SURFACE 8 5/8" @ 221' w/ 150 sx Common

PRODUCTION 5 ½" @ 3923' w/ 155 sx Common
PC in Anhydrite

DRILLING FLUID: COMPANY Andy's Mud & Chemical Co.
(Kirk Werth)

TYPE: Chemical & Drispac

REMARKS: Full service

DRILL STEM TESTS: COMPANY Trilobite Testing Inc.
(Ray Schwager)

NUMBER OF TESTS Four (4)

ELECTIC LOGS: COMPANY Superior Well Services

DETAIL (5") 3150' - RTD

TYPE DI, Comp N-D, Micro

DRILLING TIME FROM 3150' TO RTD

SAMPLE TIME FROM 3150' TO RTD

SUPERVISION FROM 3150' TO RTD

VERTICAL DEVIATION 3/4° @ 221', 2½° @ 3576',
2½° @ 3925'

PLUGGING REPORT 30 sx Rat, 15 sx Mouse

RESERVE PIT 400 bbls., Chl. 67,000 Ca. 2100

DRILL STEM TESTS

NO	INTERVAL	IFP/TIME	SIF/TIME	FFP/TIME	FSIF/TIME	HP/FHP	RECOVERY
1	LKc G-D 3535- 3576'	331# 329# 5"	522# 60"	374# 484# 30"	496# 90"	1686# 1631#	GTS 10" 2nd Open 1280' Oil 40° 120' Sl, O, C, M, Wtr
2	LKc F-G 3576- 3630'	54# 133# 5"	745# 60"	132# 393# 60"	659# 90"	1689# 1664#	520' GIP 75' Oil 40° 535' O&G, C, M, Wtr 190' Wtr
3	LKc H-L 3641- 3770'	27# 41# 5"	768# 60"	34# 60# 60"	904# 90"	1737# 1710#	270' GIP 92' M, G, Oil
4	Arb. 3820- 3856'	- 5"	- 60"	66# 259# 75"	1225# 105"	1853# 1851#	150' Sl, O, C, M, Wtr 490' Wtr
5							
6							
7							
8							

MUD RECORD

CHK	DEPTH	WT	VIS	FIL	CHL	YP
1	3038'					
2	3133'	8.7	46	8.0	1.8k	15
3	3170'	8.7	44			
4	3250'	8.7	53			
5	3330'	8.7	52			
6	3440'	8.7	53			
7	3576'	8.9	48	7.8	3k	14
8	3630'	9.1	56	7.8	3.2k	12
9	3730'	8.8	63			
10	3793'	9.2	60	8.8	8k	24
11	3880'	8.8	67			

Displaced

LCM 1#

LCM 1 3/4#

LCM 1#

LCM 1 1/2# \$761

LCM 3#

BIT RECORD

NO	SIZE	MAKE	TYPE	DEPTH-OUT	FEET	HOURS
1	1 1/2"	TZ	WA417GC	221'	221'	2 3/4
2	7 7/8"	HICO	GC20C	3925'	3704'	77 1/2
3						
4						
5						
6						

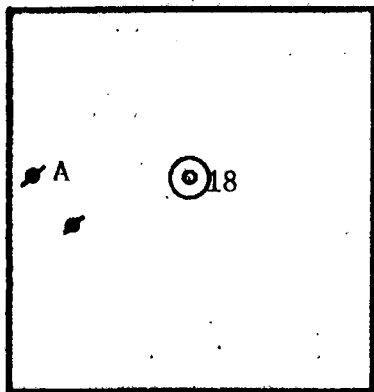
FORMATION TOPS & STRUCTURAL GEOLOGY

R 19 W

REFERRED TO:

A: RAYMOND OIL CO.
#2 W. Kraus SW SW NW 18
 B: _____
 C: _____
 D: _____
 E: _____

T
14
S



STRATIGRAPHIC MARKERS	SUBJECT WELL			STRUCTURAL POSITION				
	SAMPLE	E. LOG	DATUM	A	B	C	D	E
Anhydrite	1486'	1488'	+ 735	+ 730				
Base	1530'	1532'	+ 691	+ 693				
Topeka	3227'	3231'	-1008	-1006				
Heeb. Sh.	3474'	3480'	-1257	-1254				
Toronto	3498'	3501'	-1278	-1278				
Lansing	3520'	3523'	-1300	-1300				
BKc.	3768'	3774'	-1551	-1554				
Marmaton	3802'	3808'	-1585	-1588				
Arbuckle	3839'	3845'	-1622	-1619				
TD	3925'	3924'	-1701	-1623				

Note; The log tops were 3-6' deeper than the sample tops.
 Discovery Drilling #3 is a top quality rig and
 generally right on their measurments. Therefore, I
 question the electric log tops.

*Structural position of subject well as compared to referred well.

SUMMARY

The Virginia K. #18-1 well was drilled by Discovery Drilling tools rig #3 beginning 3-1-12 and drilling was completed 3-8-12.

The drill site was located via a 3-D seismic survey. The well ran high structurally to nearby wells.

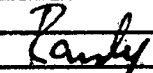
Oil shows were encountered in numerous zones. DST #1 LKc C-D was a positive test. DST #2 LKc F-G may contribute to ultimate reserves. DST #3 LKc H-I was also a positive test.

The Arbuckle was encountered a bit lower than expected therefore DST #4 was a negative test.

Based upon all data, casing was set and cemented to further test and produce the well.

Recommended perfs: LKc K 3727-32', E 3591-95' & C 3550-55'.

Respectfully,



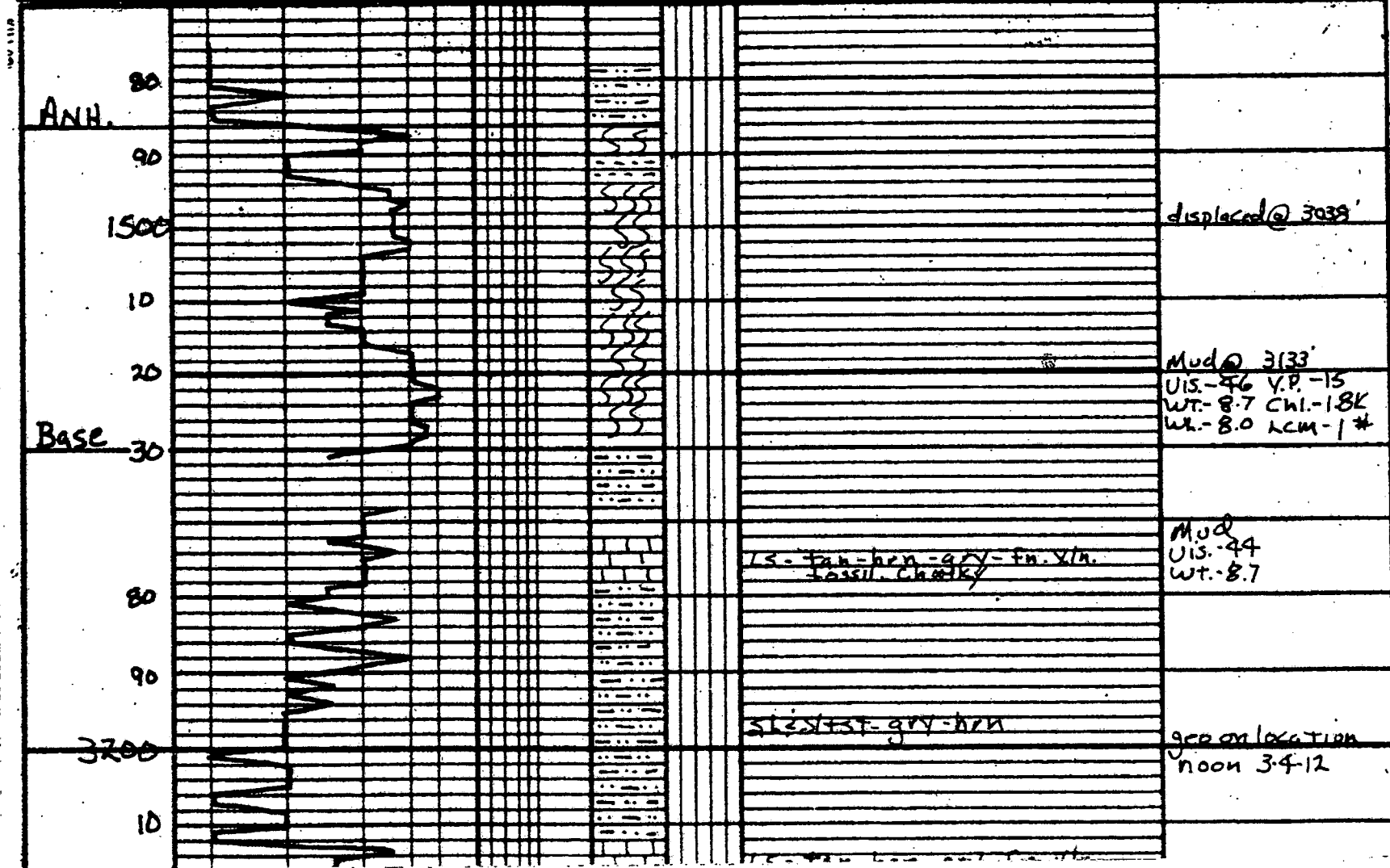
Randall Kilian

1/2 1 2 3 4 5678910

POOR
FAIR
GOOD
1.0BT

LITHOLOGY (LAGGED)

REMARKS



ANH.

80

90

1500

10

20

Base

30

80

90

3200

10

displaced @ 3038'

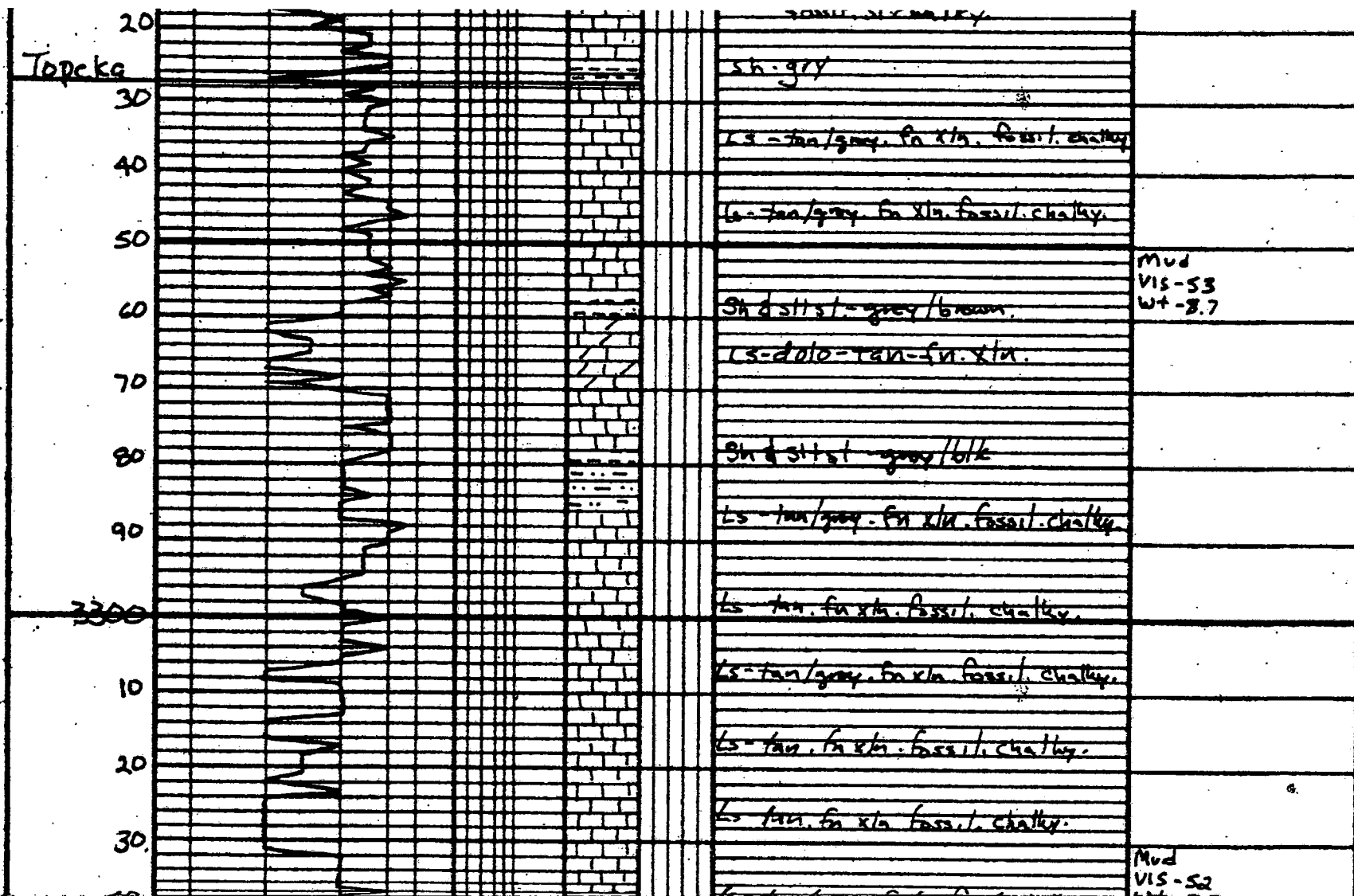
Mud @ 3133
UIS - 46 V.P. - 15
WT - 8.7 CHL - 18K
WT - 8.0 LCM - 1 #

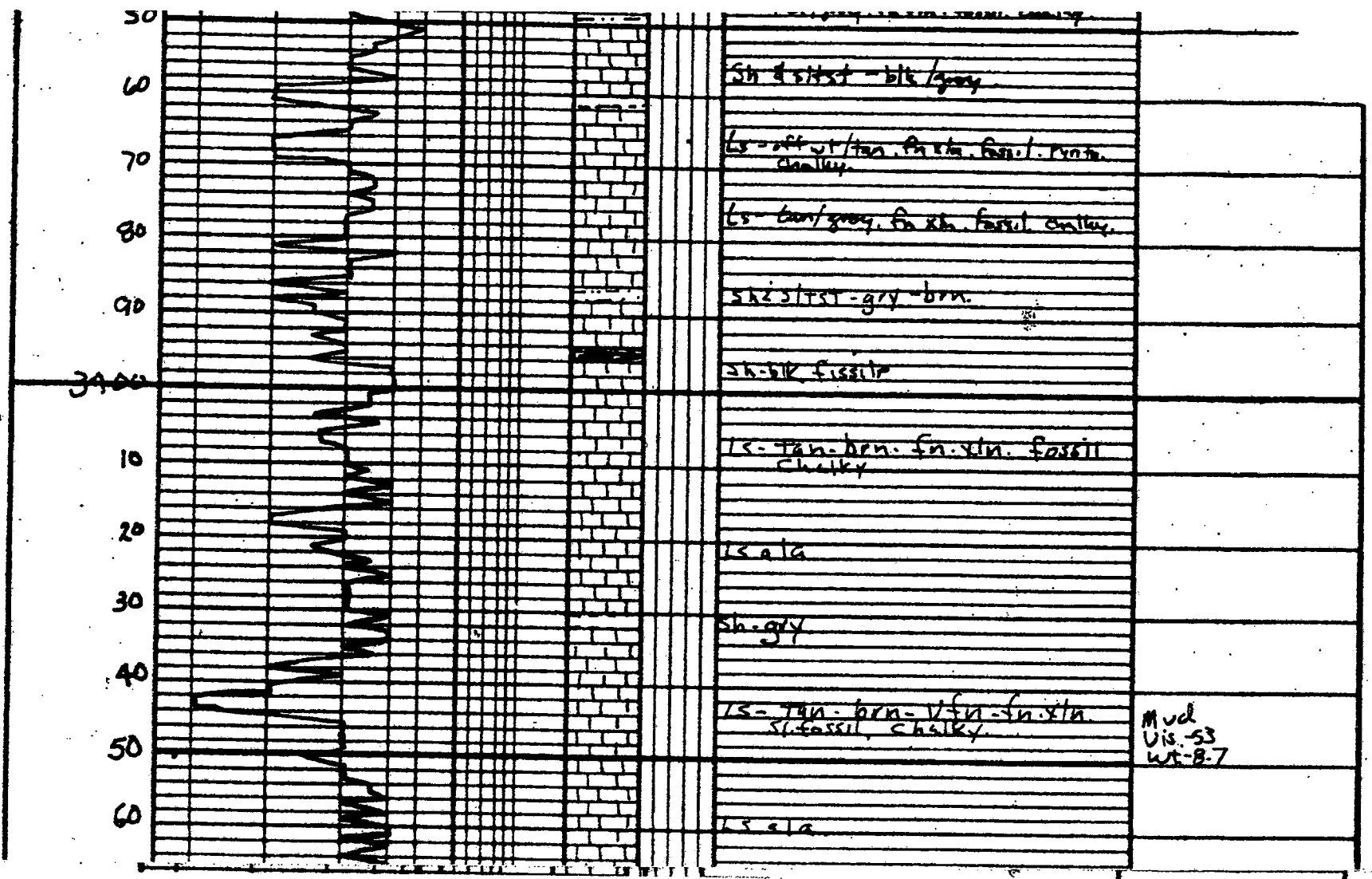
Mud @
UIS - 44
WT - 8.7

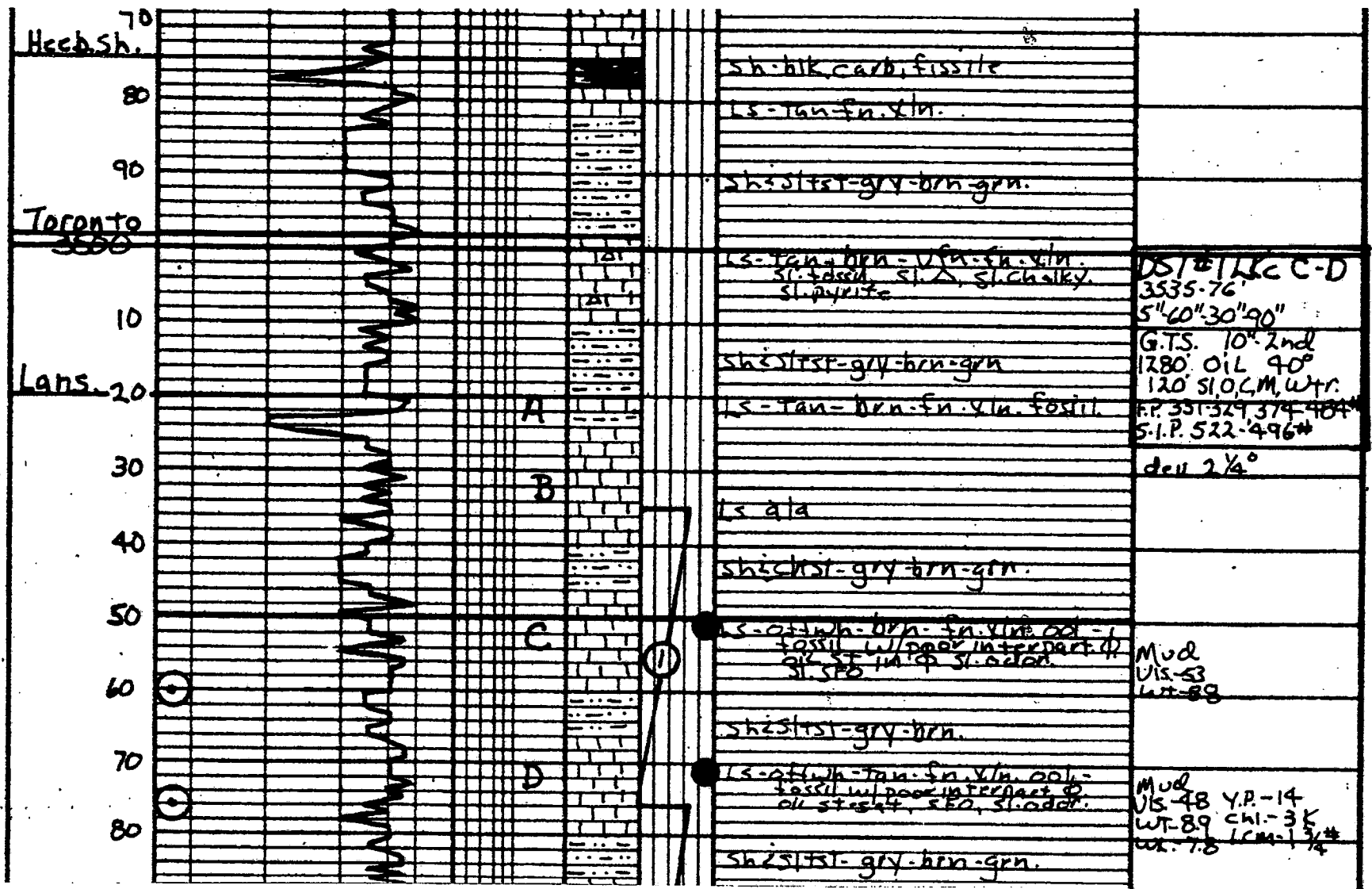
UIS - Tan-brn-gry-fn. xln.
fossil. Cherty

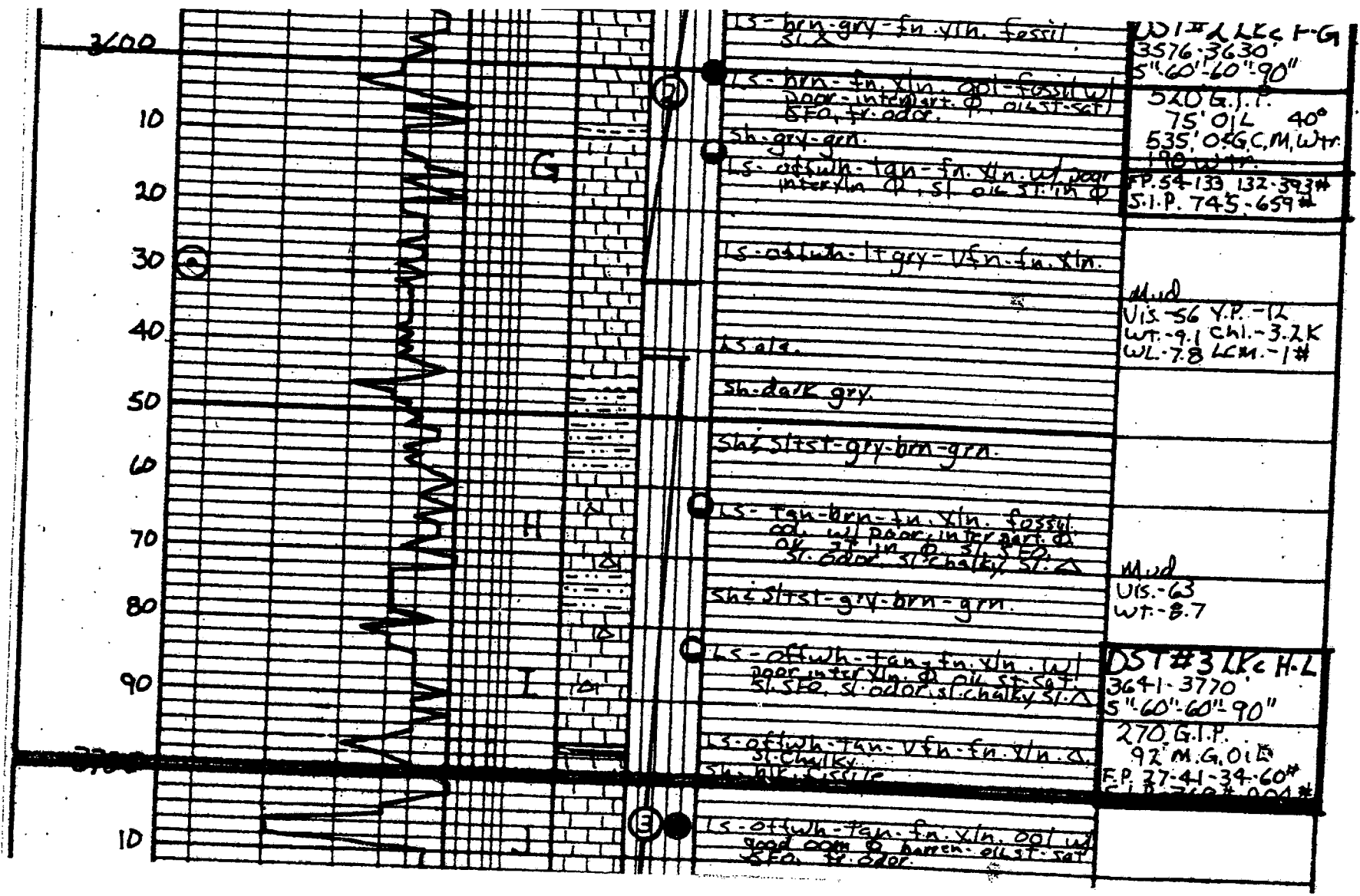
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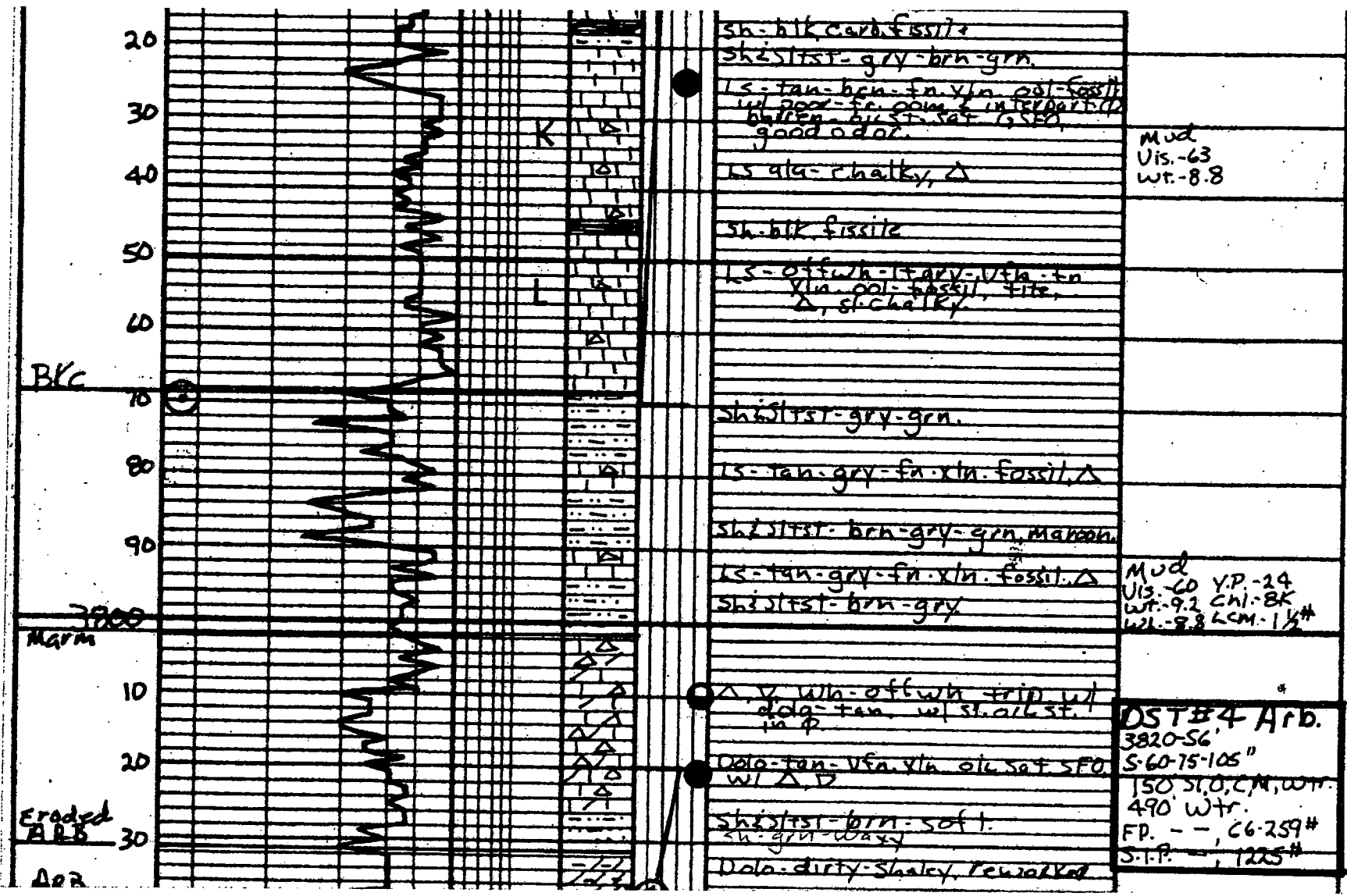
geo on location
noon 3-4-12













**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.05 @ 10:30:34

End Date: 2012.03.05 @ 18:49:28

Job Ticket #: 46260 DST #: 1

Trilobite Testing, Inc

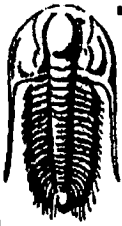
PO Box 362 Hays, KS 67601

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

ORIGINAL

Printed: 2012.03.09 @ 15:35:16

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 1
LKC C-D
2012.03.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

18-14s-19w Ellis, KS
Virginia K #18-1
Job Ticket: 46260 DST#: 1
Test Start: 2012.03.05 @ 10:30:34

Tool Information

Drill Pipe:	Length: 3515.00 ft	Diameter: 3.80 inches	Volume: 49.31 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 49.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3535.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	62.00 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			3515.00	
Shut In Tool	5.00			3520.00	
Hydraulic tool	5.00			3525.00	
Packer	5.00			3530.00	21.00 Bottom Of Top Packer
Packer	5.00			3535.00	
Stubb	1.00			3536.00	
Perforations	5.00			3541.00	
Recorder	0.00	6625	Inside	3541.00	
Recorder	0.00	8700	Outside	3541.00	
Blank Spacing	32.00			3573.00	
Bullnose	3.00			3576.00	41.00 Bottom Packers & Anchor

Total Tool Length: 62.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis, KS

9915 W 21st Street North

Virginia K #18-1

Ste B

Job Ticket: 46260

DST#: 1

Wichita KS 67205

ATTN: Jeff Mowry

Test Start: 2012.03.05 @ 10:30:34

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 7.74 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 Inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbf

psig

Oil API:

Water Salinity:

40 deg API

126000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	Gas to surface	0.000
1280.00	CO	17.534
120.00	SOCMW 4% O10% M86% W	1.683

Total Length: 1400.00 ft

Total Volume: 19.217 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .06@65F



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

IA Operating Inc
 9915 W 21st Street North
 Ste B
 Wichita KS 67205
 ATTN: Jeff Mowry

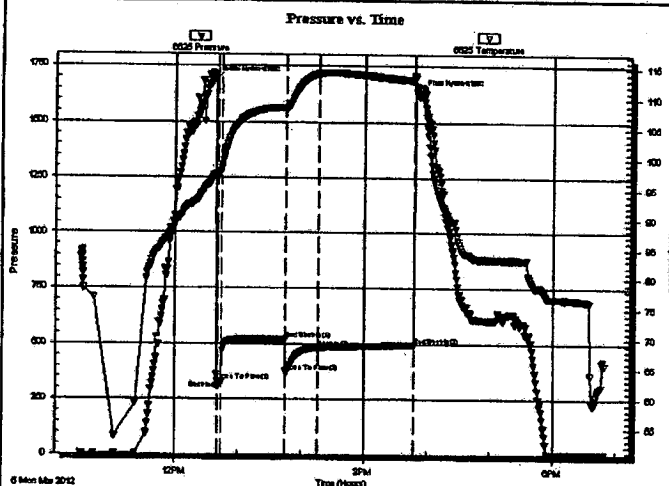
18-14s-19w Ellis,KS
Virginia K #18-1
 Job Ticket: 46260 DST#: 1
 Test Start: 2012.03.05 @ 10:30:34

GENERAL INFORMATION:

Formation: LKC C-D
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:40:29
 Time Test Ended: 18:49:28
 Interval: 3535.00 ft (KB) To 3576.00 ft (KB) (TVD)
 Total Depth: 3576.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 2223.00 ft (KB)
 2215.00 ft (CF)
 KB to GRVCF: 8.00 ft

Serial #: 6625 Inside
 Press@RunDepth: 484.25 psig @ 3541.00 ft (KB)
 Start Date: 2012.03.05 End Date: 2012.03.05
 Start Time: 10:30:34 End Time: 18:49:28
 Capacity: 8000.00 psig
 Last Calib.: 2012.03.05
 Time On Btm: 2012.03.05 @ 12:37:59
 Time Off Btm: 2012.03.05 @ 15:52:28

TEST COMMENT: 5-IFP-strg bl thru-out
 60-ISIP-strg bl bk
 30-FFP-strg bl GTS in 10 min, to w k to gauge
 90-FSIP-strg bl bk



PRESSURE SUMMARY

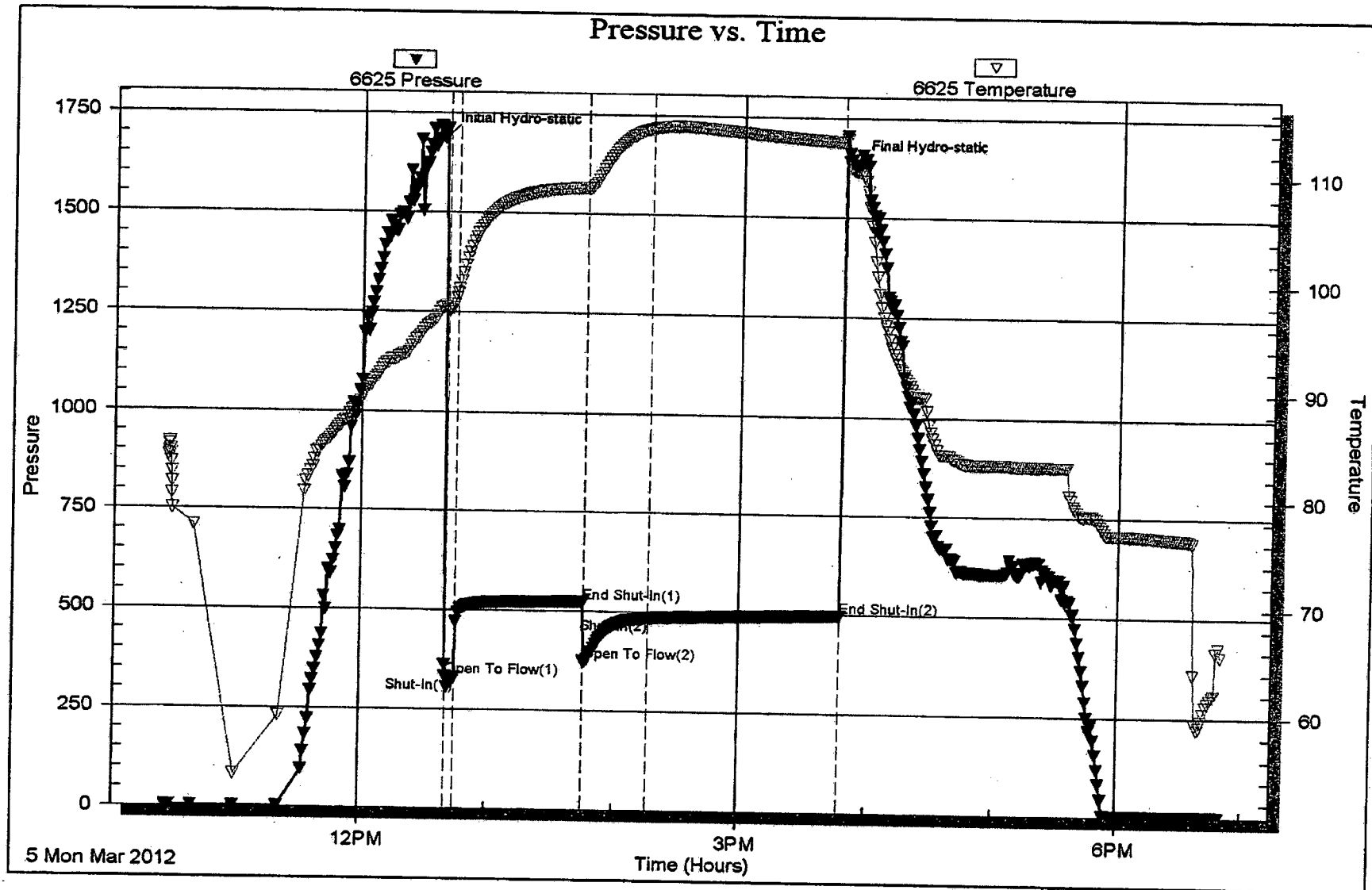
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1686.93	97.35	Initial Hydro-static
3	331.98	97.17	Open To Flow (1)
7	329.94	98.60	Shut-In(1)
67	522.86	108.49	End Shut-In(1)
68	374.91	108.46	Open To Flow (2)
98	484.25	114.07	Shut-In(2)
189	496.05	113.05	End Shut-In(2)
195	1631.13	110.38	Final Hydro-static

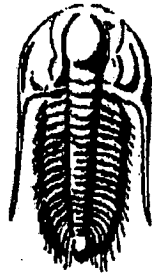
Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas to surface	0.00
1280.00	CO	17.53
120.00	SOCMV 4%O10%M86%W	1.68

Gas Rates

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





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.06 @ 02:45:37

End Date: 2012.03.06 @ 11:09:01

Job Ticket #: 46261 DST #: 2

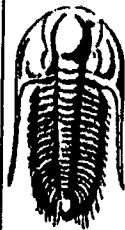
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.09 @ 15:35:44

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 2
LKC F-G
2012.03.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North

Virginia K #18-1

Ste B

Wichita KS 67205

Job Ticket: 46261

DST#: 2

ATTN: Jeff Mowry

Test Start: 2012.03.06 @ 02:45:37

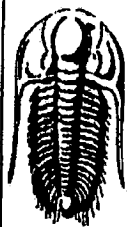
Tool Information

Drill Pipe:	Length: 3550.00 ft	Diameter: 3.80 inches	Volume: 49.80 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	49.80 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: initial 54000.00 lb
Depth to Top Packer:	3576.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	75.00 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			3556.00	
Shut In Tool	5.00			3561.00	
Hydraulic tool	5.00			3566.00	
Packer	5.00			3571.00	21.00 Bottom Of Top Packer
Packer	5.00			3576.00	
Stubb	1.00			3577.00	
Perforations	1.00			3578.00	
Recorder	0.00	6625	Inside	3578.00	
Recorder	0.00	8700	Outside	3578.00	
Blank Spacing	33.00			3611.00	
Perforations	16.00			3627.00	
Bullnose	3.00			3630.00	54.00 Bottom Packers & Anchor
Total Tool Length:	75.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North

Virginia K #18-1

Ste B

Job Ticket: 46261

DST#: 2

Wichita KS 67205

ATTN: Jeff Mowry

Test Start: 2012.03.06 @ 02:45:37

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 60.00 sec/qt

Water Loss: 7.75 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: 40 deg API

Water Salinity: 126000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	520'GP	0.000
75.00	CO	0.631
535.00	O&GCMW 10%G4%O10%M76%W	7.505
190.00	Water	2.665

Total Length: 800.00 ft

Total Volume: 10.801 bbl

Num Fluid Samples: 0

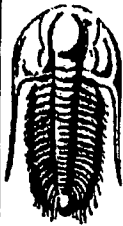
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.06@70F



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

18-14s-19w Ellis, KS

Virginia K #18-1

Job Ticket: 46261

DST#: 2

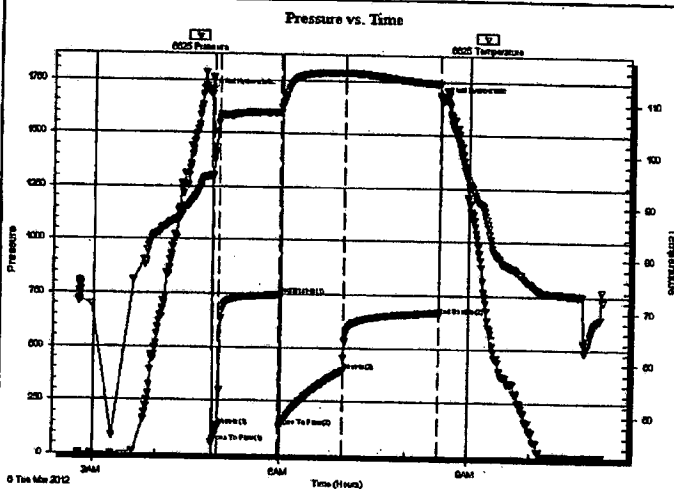
Test Start: 2012.03.06 @ 02:45:37

GENERAL INFORMATION:

Formation: LKC F-G
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:54:02
Time Test Ended: 11:09:01
Interval: 3576.00 ft (KB) To 3630.00 ft (KB) (TVD)
Total Depth: 3630.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Ray Schwager
Unit No: 42
Reference Elevations: 2223.00 ft (KB)
2215.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6625 Inside
Press@RunDepth: 393.83 psig @ 3578.00 ft (KB)
Start Date: 2012.03.06 End Date: 2012.03.06
Start Time: 02:45:37 End Time: 11:09:01
Capacity: 8000.00 psig
Last Calib.: 2012.03.06
Time On Btm: 2012.03.06 @ 04:51:02
Time Off Btm: 2012.03.06 @ 08:34:01

TEST COMMENT: 5-FFP-strg bl in 3 min
60-ISIP-no bl
60-FFP-strg bl in 7 min
90-FSIP-strg bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.74	95.68	Initial Hydro-static
3	54.83	95.71	Open To Flow (1)
9	133.75	106.81	Shut-In(1)
68	745.08	107.92	End Shut-In(1)
69	132.64	109.05	Open To Flow (2)
129	393.83	115.73	Shut-In(2)
220	659.15	113.73	End Shut-In(2)
223	1664.21	110.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	520'GIP	0.00
75.00	CO	0.63
535.00	O&GCMW 10%G4%O10%M76%W	7.50
190.00	Water	2.67

* Recovery from multiple tests

Gas Rates

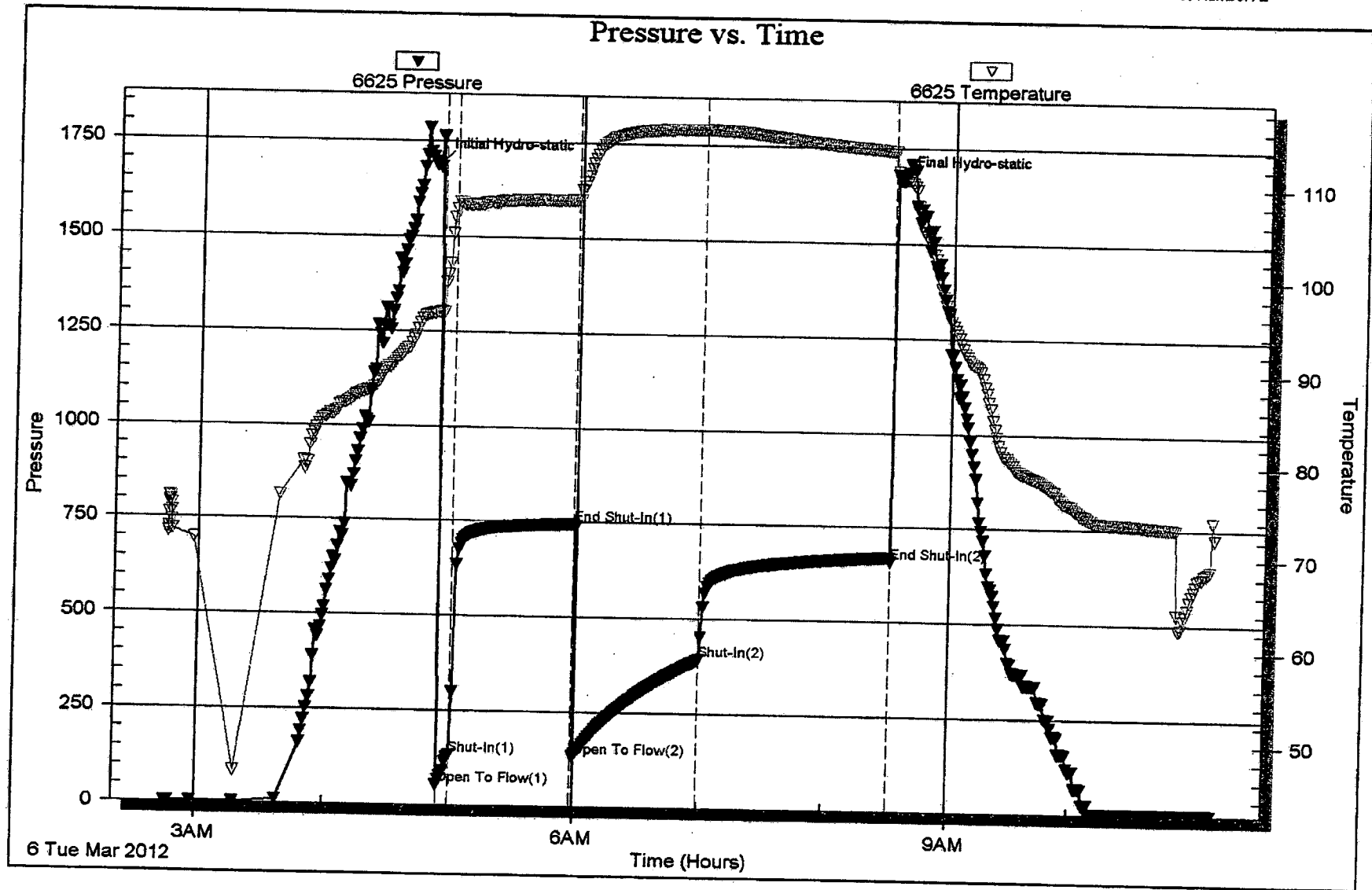
Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

Serial #: 6625

Inside IA Operating Inc

Virginia K#18-1

DST Test Number: 2

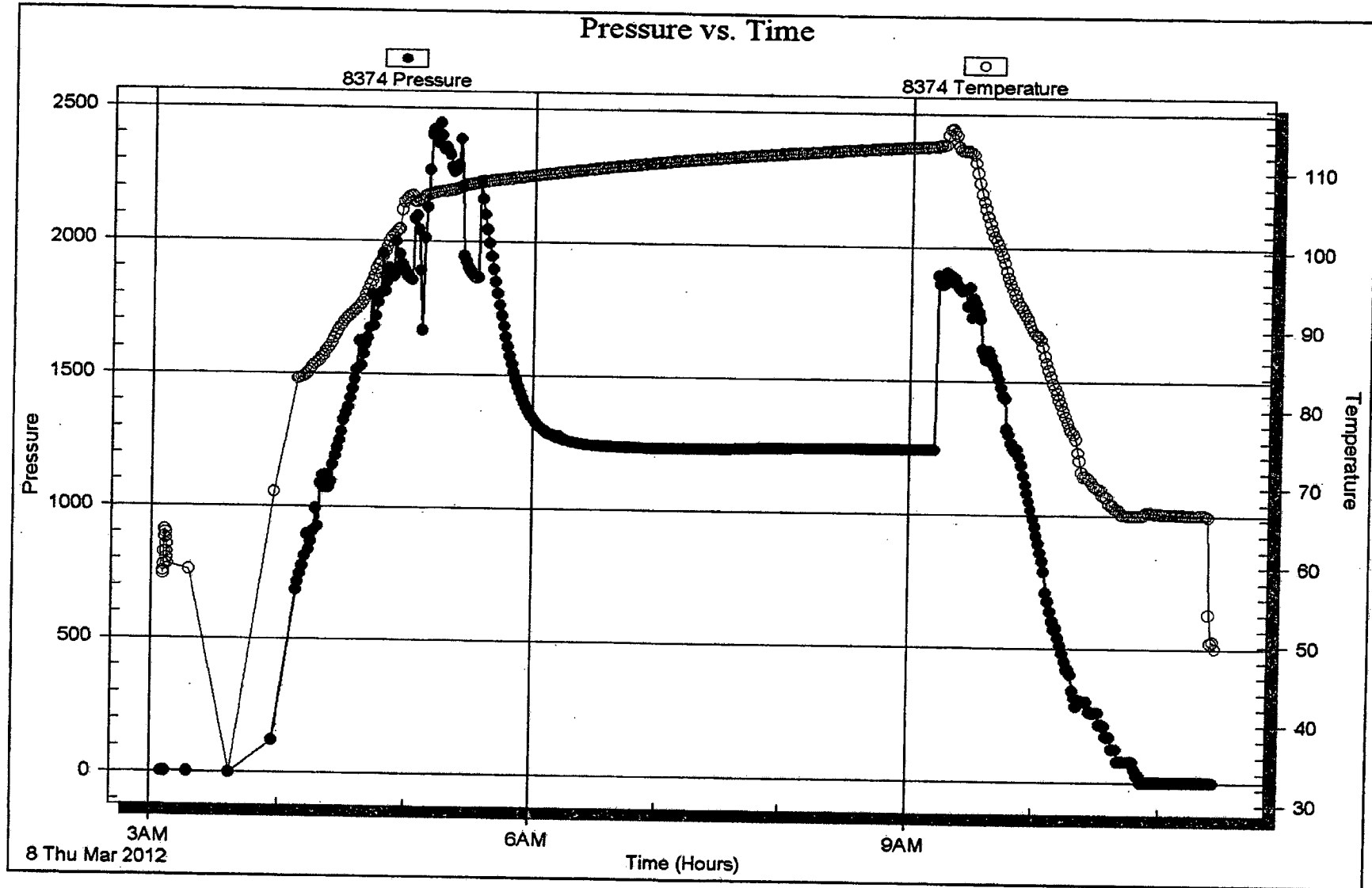


Serial #: 8374

Below (Strat) Operating Inc

Virginia K #18-1

DST Test Number: 4

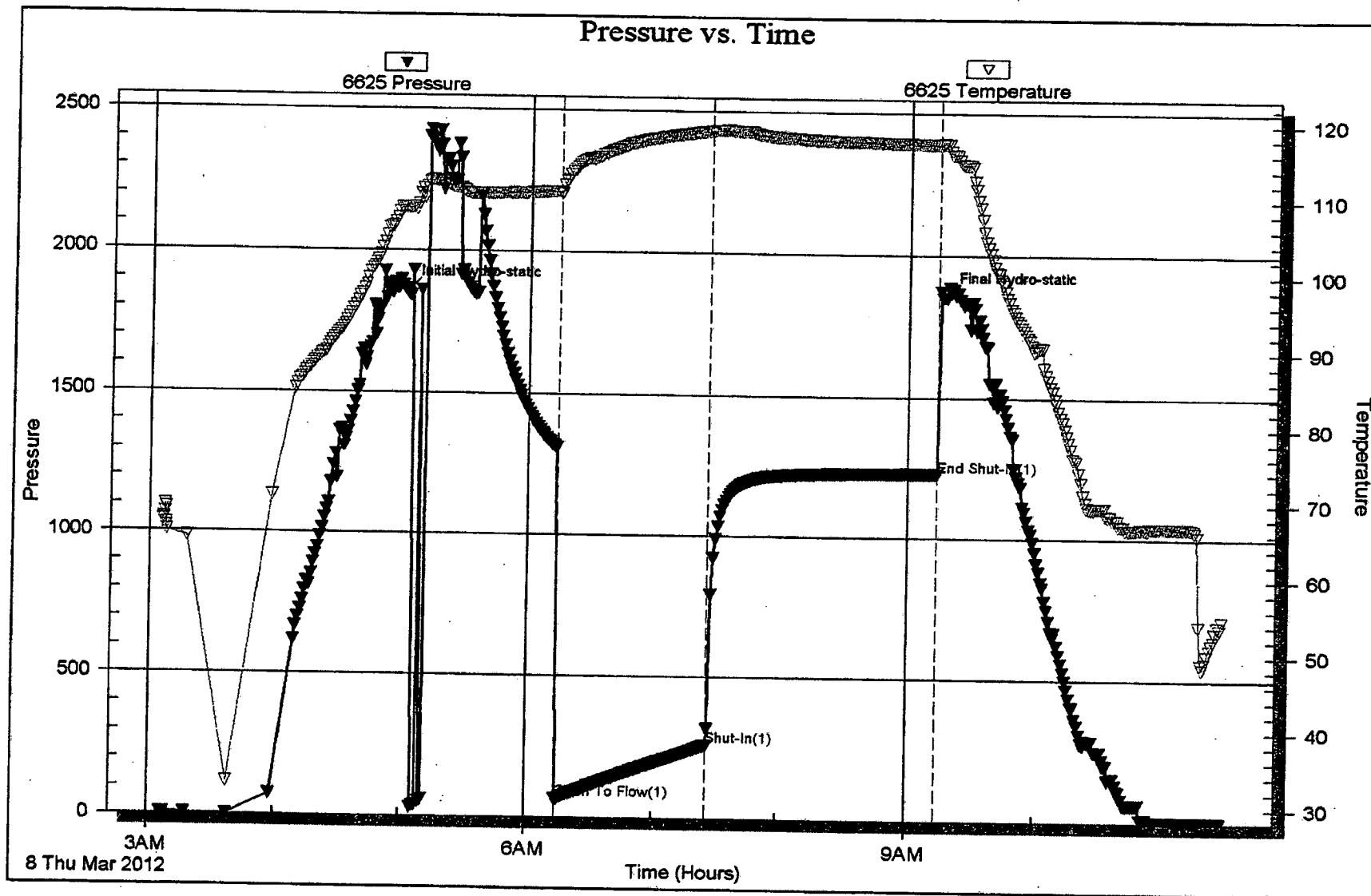


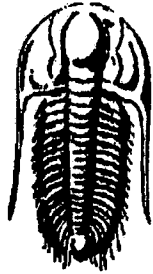
Serial #: 6625

Inside IA Operating Inc

Virginia K #18-1

DST Test Number: 4





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**
9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.07 @ 01:05:28

End Date: 2012.03.07 @ 09:12:52

Job Ticket #: 46262 DST #: 3

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

Printed: 2012.03.09 @ 15:37:15

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 3
LKC H-L
2012.03.07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

18-14s-19w Ellis,KS
Virginia K #18-1
Job Ticket: 46262 DST#: 3
Test Start: 2012.03.07 @ 01:05:28

Tool Information

Drill Pipe:	Length: 3615.00 ft	Diameter: 3.80 inches	Volume: 50.71 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume: 50.71 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3641.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	129.00 ft			
Tool Length:	150.00 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			3621.00	
Shut In Tool	5.00			3626.00	
Hydraulic tool	5.00			3631.00	
Packer	5.00			3636.00	21.00 Bottom Of Top Packer
Packer	5.00			3641.00	
Stubb	1.00			3642.00	
Perforations	5.00			3647.00	
Recorder	0.00	6625	Inside	3647.00	
Recorder	0.00	8700	Outside	3647.00	
Blank Spacing	96.00			3743.00	
Perforations	24.00			3767.00	
Bullnose	3.00			3770.00	129.00 Bottom Packers & Anchor

Total Tool Length: 150.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

Virginia K #18-1

Job Ticket: 46262

DST#: 3

Test Start: 2012.03.07 @ 01:05:28

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 60.00 sec/qt

Water Loss: 7.74 in³

Resistivity: ohm.m

Salinity: 3200.00 ppm

Filter Cake: 1.00 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
0.00	270'GP	0.000
90.00	MGO 35%G35%O30%M	0.842
2.00	CO	0.028

Total Length: 92.00 ft

Total Volume: 0.870 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

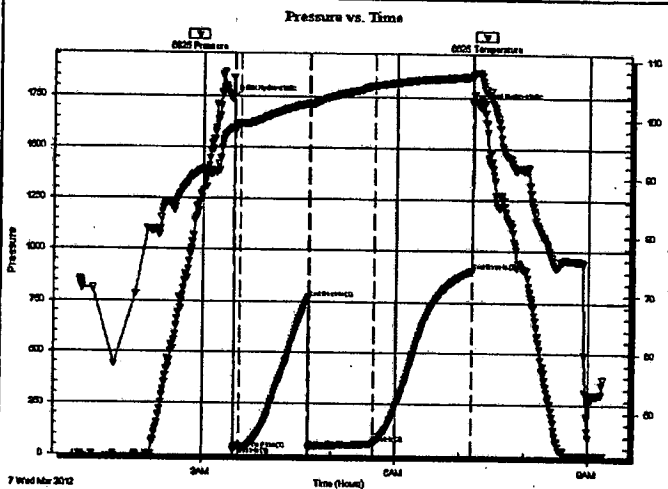
18-14s-19w Ellis, KS
Virginia K #18-1
Job Ticket: 46262 **DST#: 3**
Test Start: 2012.03.07 @ 01:05:28

GENERAL INFORMATION:

Formation: **LKC H-L**
Deviated: **No Whipstock** **ft (KB)**
Time Tool Opened: **03:28:53**
Time Test Ended: **09:12:52**
Interval: **3641.00 ft (KB) To 3770.00 ft (KB) (TVD)**
Total Depth: **3770.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole (Reset)**
Tester: **Ray Schwager**
Unit No: **42**
Reference Elevations: **2223.00 ft (KB)**
2215.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6625 **Inside**
Press@RunDepth: **60.82 psig @ 3647.00 ft (KB)**
Start Date: **2012.03.07** End Date: **2012.03.07** Capacity: **8000.00 psig**
Start Time: **01:05:28** End Time: **09:12:52** Last Calib.: **2012.03.07**
Time On Btm: **2012.03.07 @ 03:26:23**
Time Off Btm: **2012.03.07 @ 07:16:52**

TEST COMMENT: 5-IFP-w k bl 1/2" to 3" bl
60-ISIP-no bl
60-FFP-strg bl thru-out
90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1737.15	98.22	Initial Hydro-static
3	27.08	98.08	Open To Flow (1)
8	41.43	99.13	Shut-In(1)
72	768.96	102.51	End Shut-In(1)
73	34.80	102.36	Open To Flow (2)
133	60.82	105.64	Shut-In(2)
225	904.75	107.25	End Shut-In(2)
231	1710.52	107.88	Final Hydro-static

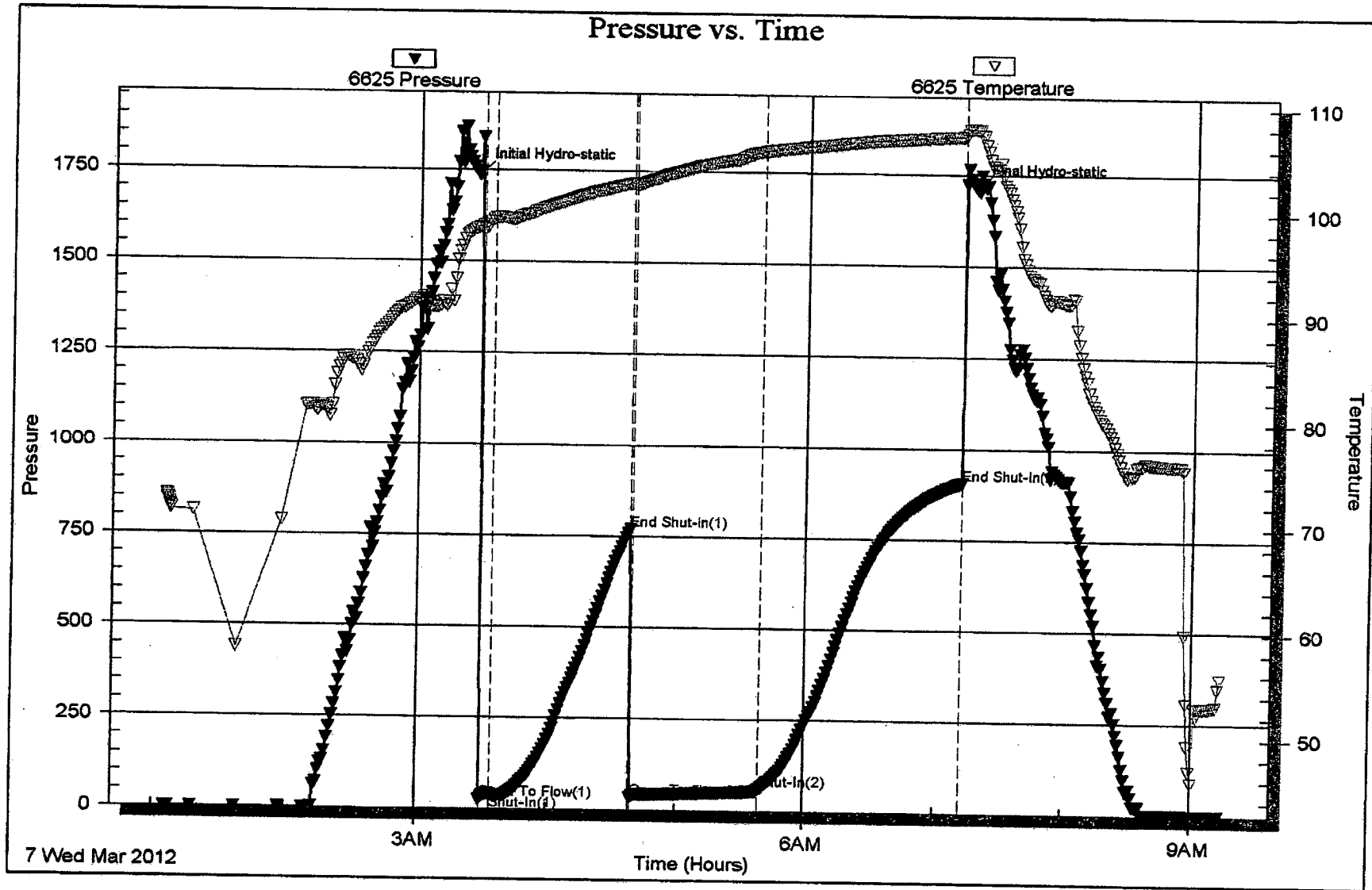
Recovery

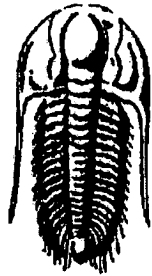
Length (ft)	Description	Volume (bbl)
0.00	270'GIP	0.00
90.00	MGO 35%G35%O30%M	0.84
2.00	CO	0.03

* Recovery from multiple tests

Gas Rates

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





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.08 @ 03:06:01

End Date: 2012.03.08 @ 11:27:25

Job Ticket #: 46263 DST #: 4

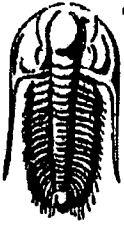
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.09 @ 15:38:14

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 4
Arbuckle
2012.03.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

Virginia K #18-1

Job Ticket: 46263

DST#: 4

Test Start: 2012.03.08 @ 03:06:01

Tool Information

Drill Pipe:	Length: 3800.00 ft	Diameter: 3.80 inches	Volume: 53.30 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			Total Volume: 53.30 bbl	Tool Chased 15.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3820.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	3856.00 ft			
Interval between Packers:	36.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3800.00	
Shut In Tool	5.00			3805.00	
Hydraulic tool	5.00			3810.00	
Packer	5.00			3815.00	21.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Stubb	1.00			3821.00	
Perforations	7.00			3828.00	
Recorder	0.00	6625	Inside	3828.00	
Recorder	0.00	8700	Outside	3828.00	
Perforations	24.00			3852.00	
Blank Spacing	3.00			3855.00	
Blank Off Sub	1.00			3856.00	36.00 Tool Interval
Packer	5.00			3861.00	
Stubb	1.00			3862.00	
Perforations	2.00			3864.00	
Recorder	0.00	8374	Below	3864.00	
Blank Spacing	64.00			3928.00	72.00 Bottom Packers & Anchor
Total Tool Length:	129.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

Virginia K #18-1

Job Ticket: 46263

DST#: 4

Test Start: 2012.03.08 @ 03:06:01

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:

33000 ppm

Viscosity: 66.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 Inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
490.00	Water RW.24@60F	6.453
150.00	SOCMW 2%O30%M68%W	2.104

Total Length: 640.00 ft Total Volume: 8.557 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: slid tool approx 15' to bottom on 1st shut-in pulled
tool loose to add Jt of pipe, reset tool



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

IA Operating Inc
 9915 W 21st Street North
 Ste B
 Wichita KS 67205
 ATTN: Jeff Mowry

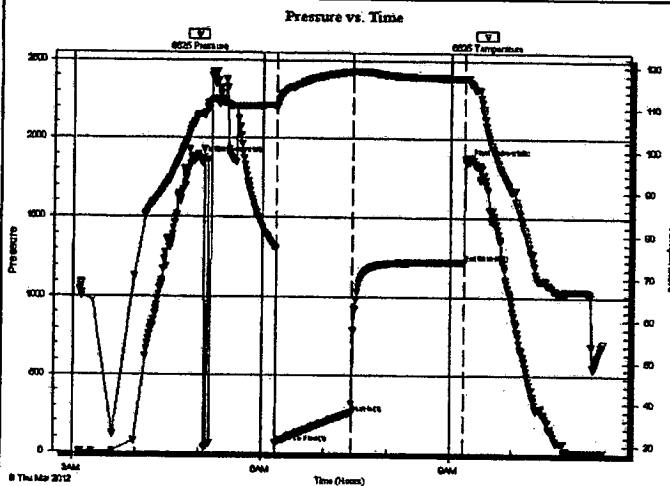
18-14s-19w Eills,KS
Virginia K #18-1
 Job Ticket: 46263 DST#: 4
 Test Start: 2012.03.08 @ 03:06:01

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: 06:13:56
 Time Test Ended: 11:27:25
 Interval: **3820.00 ft (KB) To 3856.00 ft (KB) (TVD)**
 Total Depth: **3924.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Straddle (Reset)**
 Tester: **Ray Schwager**
 Unit No: **42**
 Reference Elevations: **2223.00 ft (KB)**
 2215.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6625 **Inside**
 Press@RunDepth: **259.86 psig @ 3828.00 ft (KB)**
 Start Date: **2012.03.08** End Date: **2012.03.08**
 Start Time: **03:06:01** End Time: **11:27:25**
 Capacity: **8000.00 psig**
 Last Calib.: **2012.03.08**
 Time On Btm: **2012.03.08 @ 05:01:26**
 Time Off Btm: **2012.03.08 @ 09:16:25**

TEST COMMENT: 5-IFP-w k to a fr bl 1/2" to 5" bl
 60-ISIP-no bl
 60-FFP-w k to strg in 45 min
 90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1853.34	108.44	Initial Hydro-static
73	66.45	110.43	Open To Flow (1)
145	259.86	118.81	Shut-In(1)
252	1225.83	117.30	End Shut-In(1)
255	1851.31	117.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
490.00	Water RW .24@60F	6.45
150.00	SOCMV 2%O30%MB8%W	2.10

* Recovery from multiple tests

Gas Rates

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