



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: _____



1164458

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
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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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ 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 Bbbs.	Gas Mcf	Water Bbbs.	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 <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&D Exploration LLC

28-18s-13w Barton,KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52301

DST#: 1

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.19 @ 10:59:19

Tool Information

Drill Pipe:	Length: 3056.00 ft	Diameter: 3.80 inches	Volume: 42.87 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 42.87 bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3060.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	99.00 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			3032.00	
Shut In Tool	5.00			3037.00	
Hydraulic tool	5.00			3042.00	
Jars	5.00			3047.00	
Safety Joint	3.00			3050.00	
Packer	5.00			3055.00	29.00 Bottom Of Top Packer
Packer	5.00			3060.00	
Stubb	1.00			3061.00	
Recorder	0.00	6773	Outside	3061.00	
Recorder	0.00	6755	Inside	3061.00	
Change Over Sub	1.00			3062.00	
Drill Pipe	31.00			3093.00	
Change Over Sub	1.00			3094.00	
Perforations	33.00			3127.00	
Bullnose	3.00			3130.00	70.00 Bottom Packers & Anchor

Total Tool Length: 99.00



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TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&D Exploration LLC

28-18s-13w Barton,KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52301

DST#: 1

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.19 @ 10:59:19

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

42000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7200.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	WM 45% water 55% mud	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6755

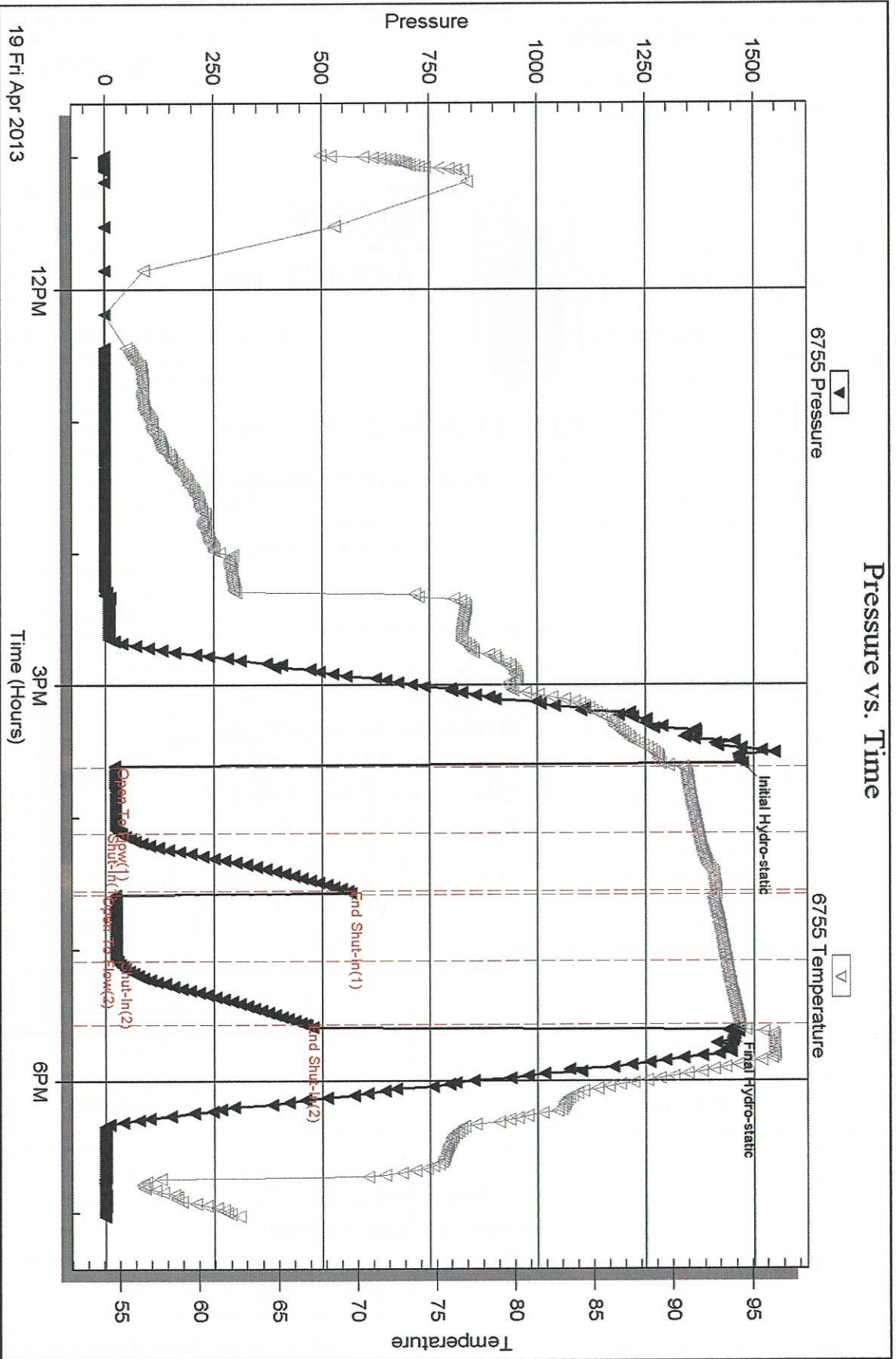
Inside

H&D Exploration LLC

Doonan A #3

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&D Exploration LLC

28-18s-13w Barton, KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52302

DST#: 2

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.20 @ 11:09:48

Tool Information

Drill Pipe:	Length: 3183.00 ft	Diameter: 3.80 inches	Volume: 44.65 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 44.65 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3195.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	95.00 ft			
Tool Length:	124.00 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			3167.00	
Shut In Tool	5.00			3172.00	
Hydraulic tool	5.00			3177.00	
Jars	5.00			3182.00	
Safety Joint	3.00			3185.00	
Packer	5.00			3190.00	29.00 Bottom Of Top Packer
Packer	5.00			3195.00	
Stubb	1.00			3196.00	
Recorder	0.00	8676	Outside	3196.00	
Recorder	0.00	6755	Inside	3196.00	
Change Over Sub	0.50			3196.50	
Drill Pipe	62.00			3258.50	
Change Over Sub	0.50			3259.00	
Perforations	28.00			3287.00	
Bullnose	3.00			3290.00	95.00 Bottom Packers & Anchor

Total Tool Length: 124.00



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TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&D Exploration LLC

28-18s-13w Barton,KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52302

DST#: 2

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.20 @ 11:09:48

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 45.00 sec/qt

Water Loss: 8.78 in³

Resistivity: 0.00 ohm.m

Salinity: 7200.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	MUD	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6755

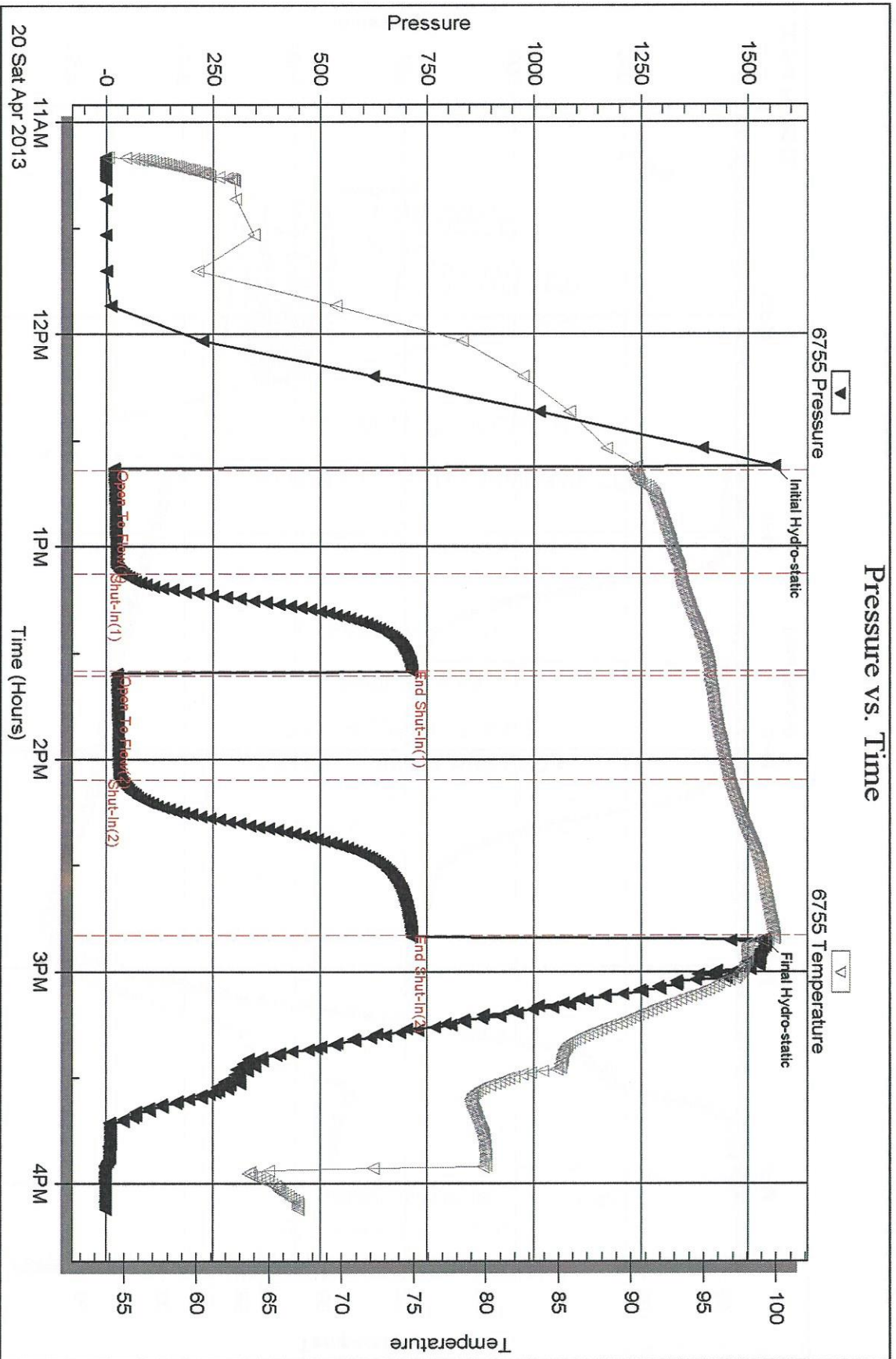
Inside

H&D Exploration LLC

Doonan A #3

DST Test Number: 2

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&D Exploration LLC

28-18s-13w Barton, KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52303

DST#: 3

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.20 @ 23:22:44

Tool Information

Drill Pipe:	Length: 3277.00 ft	Diameter: 3.80 inches	Volume: 45.97 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 54000.00 lb
		Total Volume:	45.97 bbl	Tool Chased 2.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	3280.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	68.00 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			3252.00	
Shut In Tool	5.00			3257.00	
Hydraulic tool	5.00			3262.00	
Jars	5.00			3267.00	
Safety Joint	3.00			3270.00	
Packer	5.00			3275.00	29.00 Bottom Of Top Packer
Packer	5.00			3280.00	
Stubb	1.00			3281.00	
Recorder	0.00	6773	Outside	3281.00	
Recorder	0.00	6755	Inside	3281.00	
Perforations	35.00			3316.00	
Bullnose	3.00			3319.00	39.00 Bottom Packers & Anchor

Total Tool Length: 68.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

H&D Exploration LLC

28-18s-13w Barton,KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52303

DST#: 3

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.20 @ 23:22:44

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 45.00 sec/qt

Water Loss: 10.77 in³

Resistivity: 0.00 ohm.m

Salinity: 8300.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	OIL	0.028
18.00	O,M 5%oil 95% mud	0.252

Total Length: 20.00 ft Total Volume: 0.280 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6755

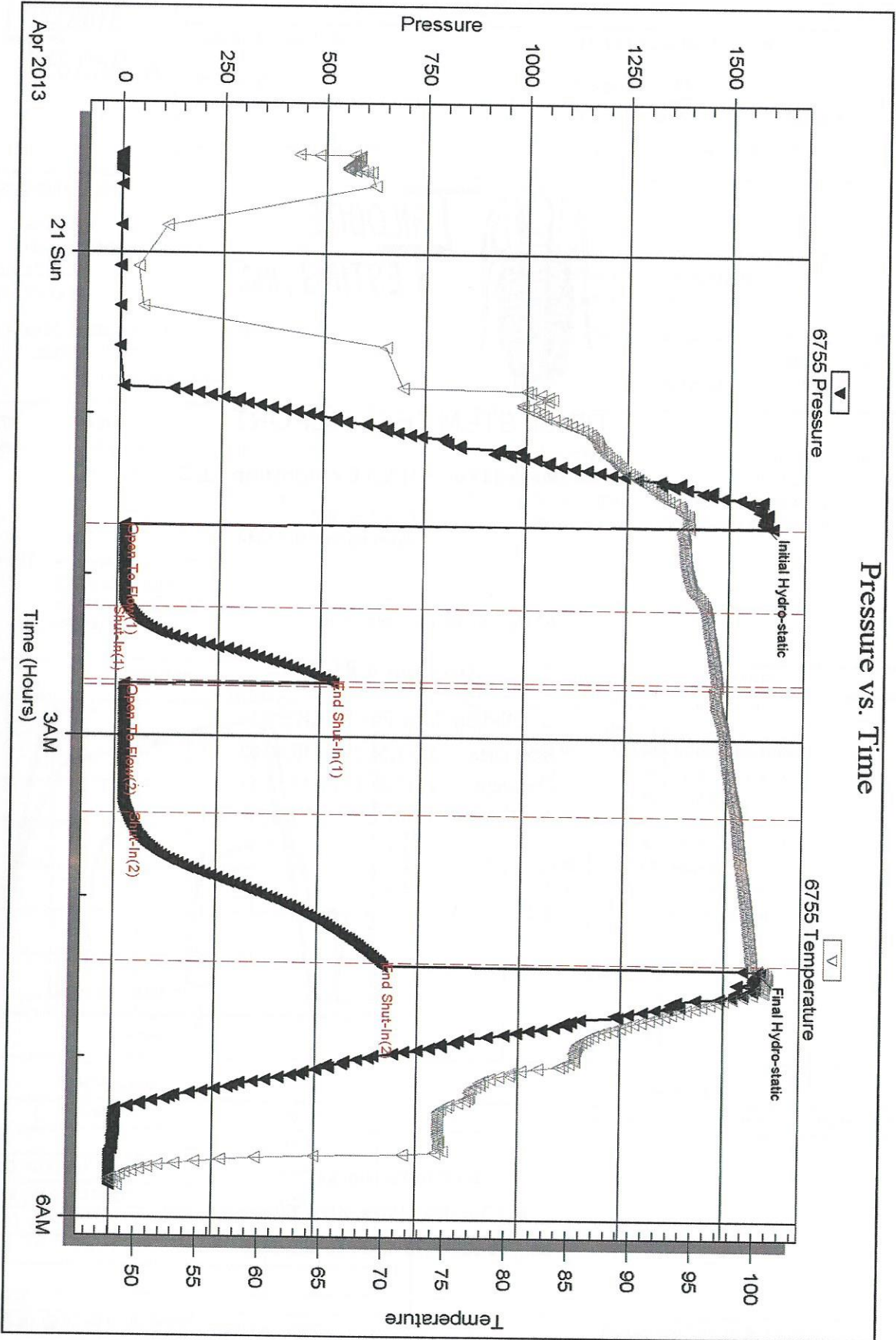
Inside

H&D Exploration LLC

Doonan A #3

DST Test Number: 3

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&D Exploration LLC

28-18s-13w Barton, KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52304

DST#: 4

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.21 @ 10:56:02

Tool Information

Drill Pipe:	Length: 3277.00 ft	Diameter: 3.80 inches	Volume: 45.97 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
		<u>Total Volume:</u>	<u>45.97 bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	3284.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	72.00 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			3256.00	
Shut In Tool	5.00			3261.00	
Hydraulic tool	5.00			3266.00	
Jars	5.00			3271.00	
Safety Joint	3.00			3274.00	
Packer	5.00			3279.00	29.00 Bottom Of Top Packer
Packer	5.00			3284.00	
Stubb	1.00			3285.00	
Recorder	0.00	6773	Outside	3285.00	
Recorder	0.00	6755	Inside	3285.00	
Change Over Sub	0.50			3285.50	
Drill Pipe	31.00			3316.50	
Change Over Sub	0.50			3317.00	
Perforations	7.00			3324.00	
Bullnose	3.00			3327.00	43.00 Bottom Packers & Anchor
Total Tool Length:	72.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&D Exploration LLC

28-18s-13w Barton, KS

PO Box 387
Hoisington KS 67544

Doonan A #3

Job Ticket: 52304

DST#: 4

ATTN: Gerald Achatz/ Kurt

Test Start: 2013.04.21 @ 10:56:02

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 11.59 in³

Resistivity: 0.00 ohm.m

Salinity: 10.50 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	OIL	0.028
3.00	M,O 40%mud 60%oil	0.042
30.00	O,M 5%oil 95%mud	0.421

Total Length: 35.00 ft Total Volume: 0.491 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6755

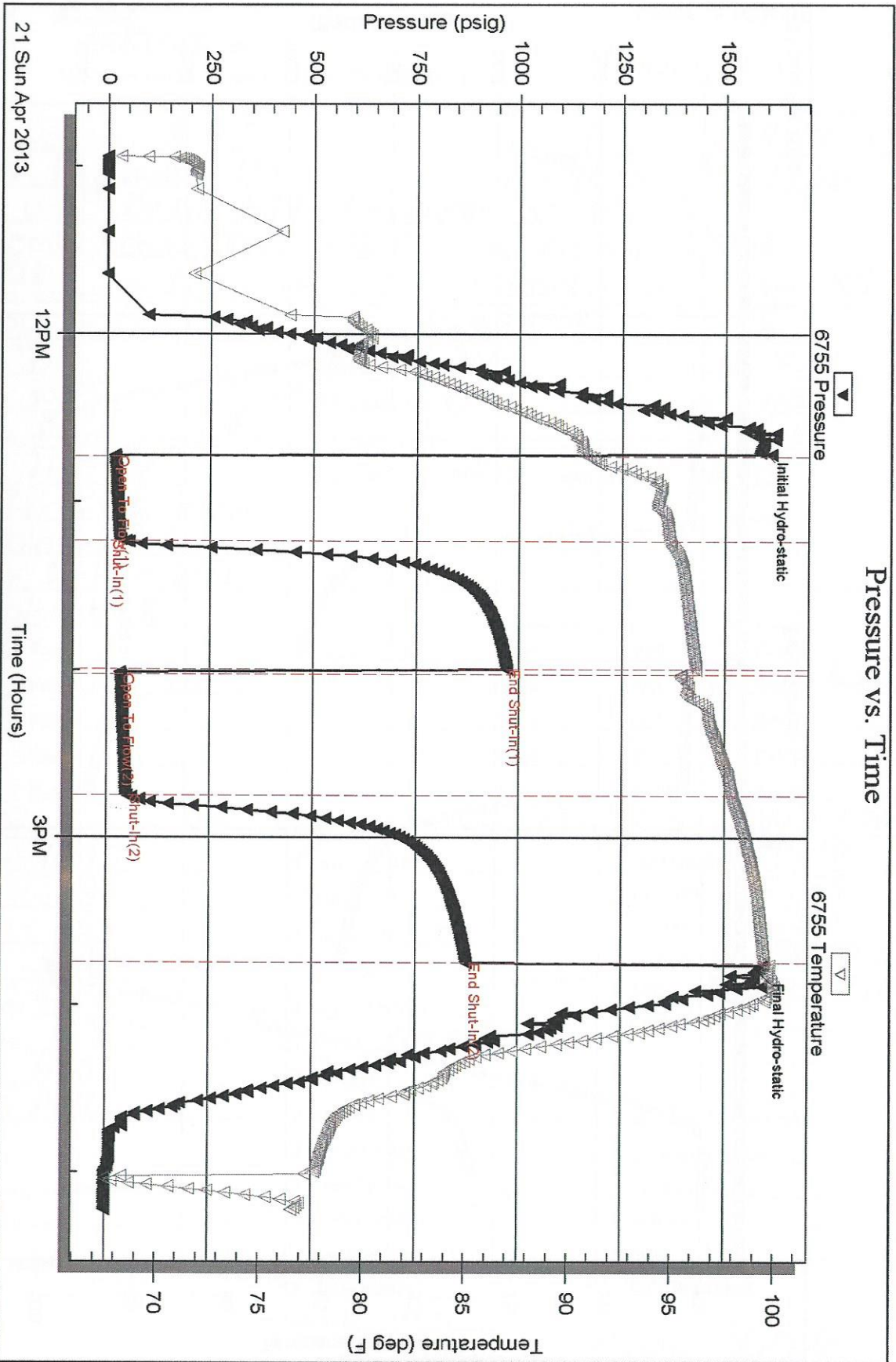
Inside

H&D Exploration LLC

Doonan A #3

DST Test Number: 4

Pressure vs. Time



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 6615

Date	4-22-13	Sec.	28	Twp.	18	Range	13	County	Barston	State	Ks	On Location		Finish	6:15 PM
Lease								Well No.		Owner					
Dugan "A"								3		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.					
Contractor		Sawwind		12		Charge To									
Type Job		Production										To		HD Exploration	
Hole Size		7 7/8"		T.D.		3500'		Street							
Csg.		58 14# New		Depth		3367'		City							
Tbg. Size				Depth				State							
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.		17'		Shoe Joint		17'		Cement Amount Ordered 180 sc Common 8% Salt S							
Meas Line				Displace		81 3/4 BLS		G... - 500 gal mud Clear 48							
EQUIPMENT								Common							
Pumptrk		15		No.		Cementer		Nick							
Bulktrk		8		No.		Driver		Heath							
Bulktrk		p.m.		No.		Driver		Rick							
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt							
Rat Hole								30.5							
Mouse Hole								15.5							
Centralizers								1, 3, 5, 7, 9, 11, 13, 15							
Baskets								3, 9							
D/V or Port Collar								pre on bottom, break							
Cementation								300 gal mud Clear 48, plug Rathok, w/ 30.5x, Hook to							
Casing								+ 0 m, 48.5x Cement, shut down							
work pump & lines,								Released plug + Displace							
with								BLS of water.							
Released + held.															
Lift pressure								700 #							
Load plug to								1500 #							
plug + mud															
w/ 15.5x															
Signature								William J. ...							
								FLOAT EQUIPMENT							
								Guide Shoe							
								Centralizer 8 turbs							
								Baskets 2							
								AFU Inserts							
								Float Shoe							
								Latch Down 1							
								1 - Triplex shoe							
								Pumptrk Charge							
								Mileage							
								Tax							
								Discount							
								Total Charge							

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 6611

Date	4-16-13	Sec.	28	Twp.	18	Range	13	County	Barton	State	Ks	On Location		Finish	4:30 AM
Lease								Doonan "A"		Well No.		3			
Contractor								Southwind		#2		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				10 1/4"		T.D.		707'				Charge To			
Csg.				8 5/8"		Depth		707'				Street			
Tbg. Size						Depth						City State			
Tool						Depth		The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				22'		Shoe Joint		22'		Cement Amount Ordered					
Meas Line				Displace		4 3/4 BLS		2K Gel				350 5x Common 3% CC			
EQUIPMENT								Common							
Pumptrk		15		No.		Cementer		Nick		Poz. Mix					
Bulktrk		4		No.		Driver		David		Gel.					
Bulktrk		p.w.		No.		Driver		Rick		Calcium					
JOB SERVICES & REMARKS								Hulls							
Remarks:								Cement did Circulate		Salt					
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling							
								Mileage							
FLOAT EQUIPMENT															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								1- Baffle plate							
								1- Rubber plug							
								Pumptrk Charge							
								Mileage							
								Tax							
								Discount							
								Total Charge							
X Signature															



Musgrove

PETROLEUM CORPORATION
Clafin, Kansas

Geologist's Report

Company: H&D Exploration

Lease: Doonan A #3

Field: Lake Barton

Location: NE-SW-SE-NE

Sec: 28 Twsp: 18S Rge: 13W

Bartm County: ~~Shawnee~~ State: Kansas

GL: 1806 KB: 1814

Contractor: Southwind Drilling Co., Rig #

Spud: 4/15/13 Comp: 4/22/13

RTD: 3500' LTD: 3502

Mud Up: 2500' Type Mud: Chemical/Displaced

Samples Saved From: 2800'to RTD

Drilling Time Kept From: 2800' To RTD

Samples Examined From: 2800' To RTD

Geological Supervision From: 3100' to RTD

Geologist on Well: K. Talbott

Surface Casing: 8 5/8" @ 450'

Production: 5 1/2" @

Logs: CNL/CDL, MEL, DIL

	H&D Exploration				H&D Exploration	
	Doonan 'A' #3				Doonan 'A' #1	
	NE-SW-SE-SE Sec28-T18S-R13W				NE-NW-SE-SE Sec.28-T18S-R13W	
KB	1814				1812	
Formation	Sample	Sub-sea	E-Log	Sub-Sea	Log	Sub-sea
Anhydrite			708	1106	705	1107
Base Anhy.			729	1085	731	1081
Heebner	2964	-1150	2966	-1152	2960	-1148
Toronto	2977	-1163	2976	-1162	2969	-1157
Brown Lime	3053	-1239	3056		3048	-1236
Lansing	3065	-1251	3068	-1254	3060	-1248

Arbuckle	3309	-1495	3313	1499	3301	-1489
TD	3500	-1686	3503	-1689	3375	-1563

ROCK TYPES

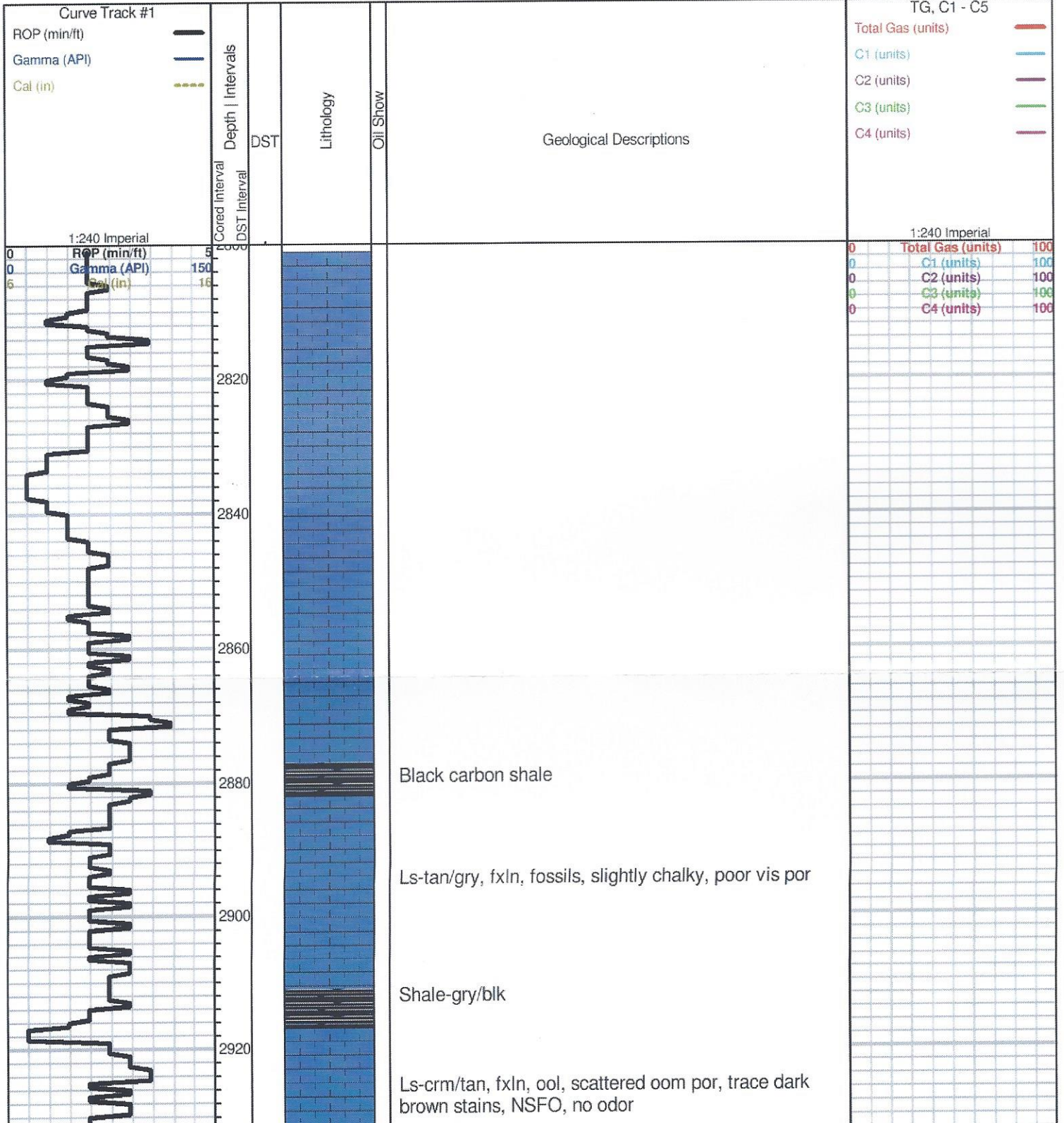
 Dolprim	 shale, gry	 Shcol
 Lmst fw<7	 Carbon Sh	 Ss

OTHER SYMBOLS

DST

 DST Int
 DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)



Brown stains, NSFO, no odor

Ls-crm/tan/lt gry, fxln, chalky, poor vi spor, Chert-gry/boney wht

Heebner 2964.0 (-1150.0) 0.0

Black carbon shale

Toronto 2977.0 (-1163.0) 0.0

Ls-gry, fxln, scatted poor por, trace brwn stains, NSFO, no odor

Douglas 2992.0 (-1178.0) 0.0

Gry/grn shale- slightly silty

A/A trace sand- vfg, sub round friable, poor iner gran por

A/A

Brown Lime 3053.0 (-1239.0) 0.0

Ls-tan/buff, fxln, dense, poor vis por

Lansing 3065.0 (-1251.0) 0.0

Ls-crm/tan, fxln, poor ppt to iner xln por, golden to dark brown stains, Faint odor, NSFO

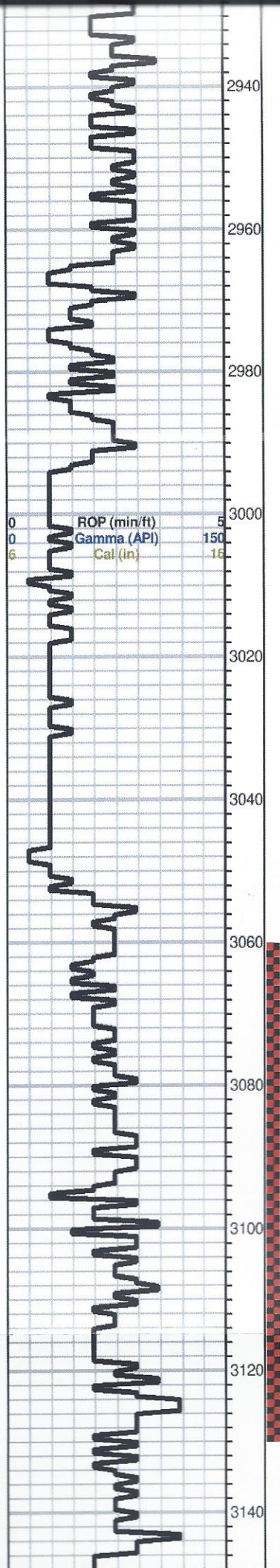
Ls-crm/tan, fxln, ool/fossils, poor ppt to iner xln pro, golden brwn stains SFO, faint odor

Ls-wht/lt gry, fxln, chalky, trace stains, NSFO, no odor
Shale-gry

Ls-gry/tan, fxln, few fossils/ool, scattered iner xln to iner ool por, golden brown stains, TrSFO, faint odor

Ls-crm/tan, flxn, ool, scattered sub oom por, trace stains, NSFO, no odor, slightly chalky

A/A



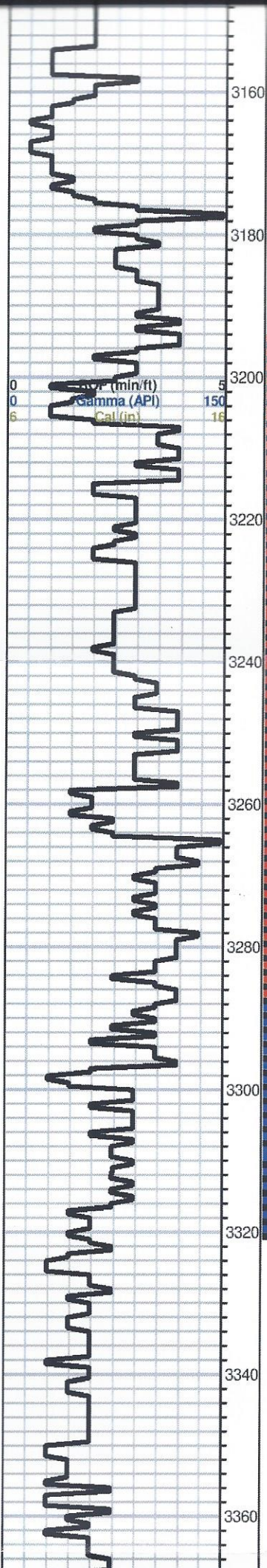
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

DST #1 3060-3130
30-30-30-30
IF: Weak 1 1/2" blow

Recovery:
20' Watery mud (45w
55m)

Pressures:

ISIP	561	psi
FSIP	461	psi
IFP	22-35	psi
FFP	24-28	psi
HSH	1476-1440	psi



Ls-crm/tan, fxln, ool, poor to fair oom por, barren, slightly chalky

Ls-crm/tan, fxln, ool, dense, poor vis por

Shale-blk/gry

Ls-crm/tan, ool, poor-fair oom por, golden brwn to dark brwn stains, TrSFO, faint odor

Ls-crm/tan.wht, fxln, ool, fair scatteredpor, brwn stains, SFO, faint odor

Ls-crm/tan/lt gry, fxln, ool, poor scattered iner xln and ppt por, dark brwn to blk stains, NSFO, faint odor

A/A

Shale-gry/grn/blk chert- crm

Ls-wht/gry, fxln, ool, scattered stains, TrSFO, no odor

A/A

Base Kansas City 3289.0 (-1475.0) 0.0

Shale-mar/grn/grn

Arbuckle 3309.0 (-1495.0) 0.0

Dol-wht/tan, f-med xln, few rhomb, poor to faint iner xln por, golden brwn stains, slightly sat, SFO, good odor

Dol-wht/crm/tan, fxln, poor to fair iner xln por with scatterd finely vug por, goldne brwn stains, SFO, odor

Dol-wht/tam. fxln, poor iner xln, por, trace brwn stains, faint odor, NSFO

Dol-wht/crm, fxln, poor iner xln por, NSFO, no odor, cherty

DST #2 3195-3290
30-30-30-30

IF: Weak 2" blow

Recovery:
30' mud

Pressures:
ISIP 715 psi
FSIP 715 psi
IFP 19-40 psi
FFP 26-36 psi
HSH 1561-1540 psi

DST #3 3290-3319
30-30-45-45

IF: Weak 1" blow

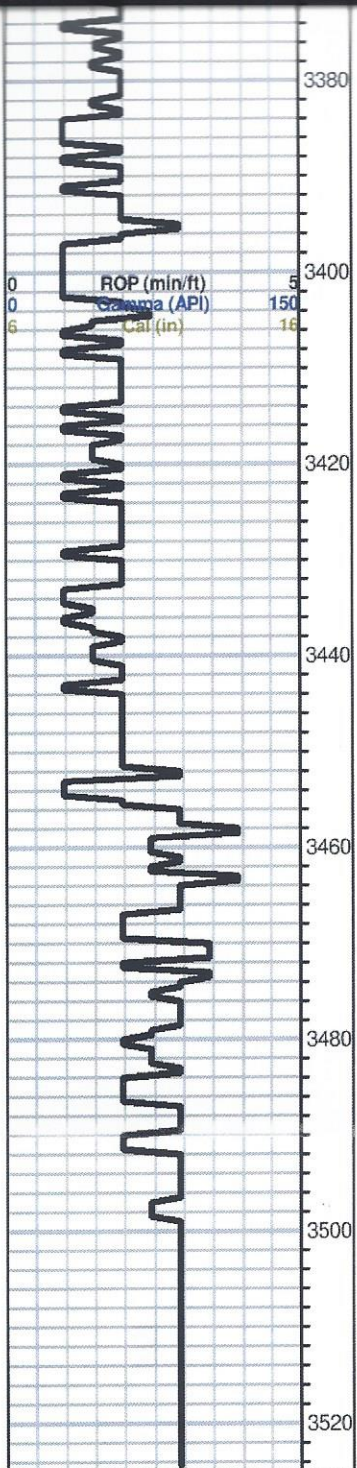
Recovery:
2' Oil
18' OCM (5%o 95%o)

Pressures:
ISIP 526 psi
FSIP 656 psi
IFP 17-26 psi
FFP 21-31 psi
HSH 1584-1584 psi

DST #4 3284-3327
30-45-45-60

IF: Built to 3 1/2"

Recovery:
2' oil
3' Muddy Oil
(40%o 60%o)
30' OCM
(5%o 95%o)



Dol-wht/crm, fxln, chery, dense, poor vis por, NSFO, no odor,

Dol-wht/crm, fxln, dense, poor iner xln, por, trace qtz grains

Dol-wht/, fxln, poor to fair iner xln, por, No visible shows, no odor, dnese

A/A

A/A Trace pyrite

Dol-wht, fxln, dense, trace qtz, poor to fair iner xln por, no vis shows

A/A

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100