



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1252291
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

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
- Plug Back Conv. to GSW Conv. to Producer
- 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

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical 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

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



1252291

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

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

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

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

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

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

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

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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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Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	POLZIN-FYLER UNIT 1-22
Doc ID	1252291

All Electric Logs Run

COMPENSATED DENSITY / NEUTRON LOG
DUAL INDUCTION LOG
MICRO LOG
SONIC LOG

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	POLZIN-FYLER UNIT 1-22
Doc ID	1252291

Tops

Name	Top	Datum
ANHYDRITE	857	+1055
BASE ANHYDRITE	885	+1027
TOPEKA	2858	-946
HEEBNER	3096	-1184
TORONTO	3108	-1196
DOUGLAS	3120	-1208
BROWN LIME	3174	-1262
LANSING	3188	-1276
BASE KANSAS CITY	3396	-1484
ARBUCKLE	3428	-1516

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	POLZIN-FYLER UNIT 1-22
Doc ID	1252291

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	854	A-CONN	200	3%CC, 1/4#Cellof lake
Surface	12.25	8.625	24	854	COMMON	200	2%CC, 1/4#CF
Production	7.875	5.5	15.5	3530	AA 2	150	10%Salt, 10% Gypsum
Production	7.875	5.5	15.5	3530	60/40 POZMIX	30	@ Rathole

BASIC

energy services, L.P.

TREATMENT REPORT

Customer LD Drilling, Inc.	Lease No.	Date 4-11-2015
Lease Polzin Flyer Unit	Well # 1-22	
Field Order # 12175	Station Pratt, KS	Casing 8 5/8 Depth 854 County Barton State KS
Type Job CNU / 8 5/8 Surface	Formation TD-854	Legal Description

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
8 5/8				Pre Pad	Max		5 Min.	
Depth 854	Depth	From	To	Pad	Min		10 Min.	
Volume 54	Volume	From	To	Frac	Avg		15 Min.	
Max Press	Max Press	From	To		HHP Used		Annulus Pressure	
Well Connection	Annulus Vol.	From	To	Flush	Gas Volume		Total Load	
Plug Depth 834	Packer Depth	From	To					

Customer Representative Devin Rosch	Station Manager Kevin Gordey	Treater Dustin Franklin
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Service Units	92911	84981	15843	19826	19918				
Driver Names	Dustin	Ed	Ed	Boschy	Boschy				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
11:00am					On location / Safety meeting
					8 5/8 - 854'
					200SK A-con Blend Common, 3% CC, 1/4# Cellulose, 12.0 pps, 2.77 gal/l, 14.45 water
					200SK Common, 2% CC, 1/4# Cellulose
					15.6 pps, 1.20 gal/l, 5.23 water
12:45pm	300		3	6	Pump 3 bbls water
	300		88	6	mix 200SK less cement
	300		43	6	mix 200SK + 9.1 cement
					Shut down
					Release Plug
	300		0	6	Start displacement
	300		43	3	slow rate
	300		53	3	Shut down
1:15pm					Shut in
					Cement bit circulate 10 bbls
					Job complete / Dustin & crew
					Thank you !!

Customer <i>L.D. DeWitt Inc.</i>	Lease No.	Date <i>4-17-2015</i>
Lease <i>Polz. n- Flyer Unit</i>	Well # <i>1-22</i>	
Field Order # <i>12254</i>	Station <i>P1984, 105</i>	Casing <i>5 1/2</i>
Type Job <i>CNWL 5 1/2 Lens strings</i>	Formation <i>TD-3530</i>	Depth <i>3530</i>
		County <i>Bernon</i>
		State <i>KS</i>
		Legal Description <i>22-18-14</i>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
<i>3 1/2</i>				Pre Pad			5 Min.	
Depth <i>3530</i>	Depth	From	To	Pad	Max		10 Min.	
Volume <i>84</i>	Volume	From	To	Frac	Min		15 Min.	
Max Press	Max Press	From	To		Avg		Annulus Pressure	
Well Connection	Annulus Vol.	From	To	Flush	HHP Used		Total Load	
Plug Depth <i>3530</i>	Packer Depth	From	To		Gas Volume			

Customer Representative <i>L D DSW.S</i>	Station Manager <i>Kevin Goidley</i>	Treater <i>Darin Francis</i>
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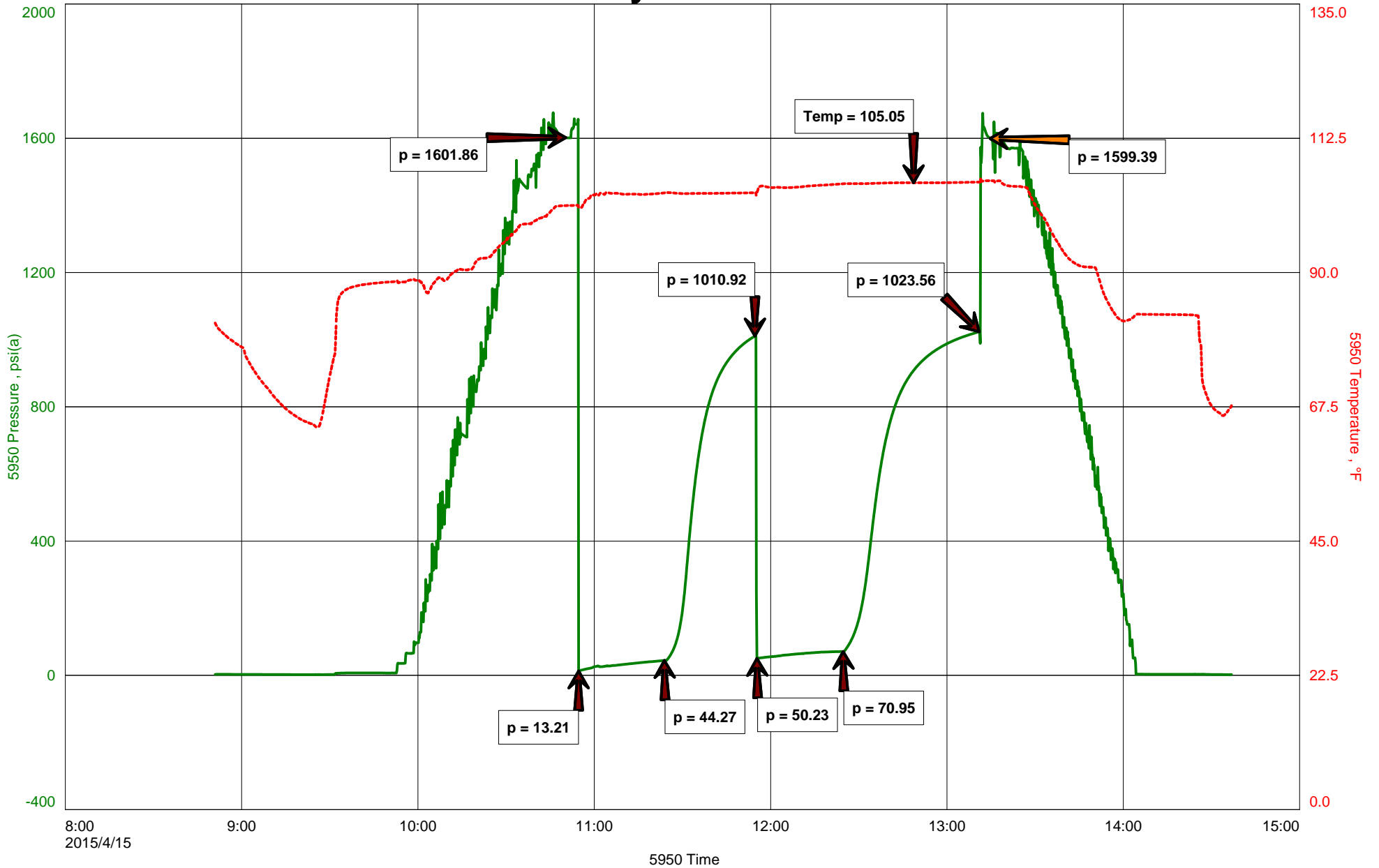
Service Units	<i>92511</i>	<i>84981</i>	<i>19843</i>	<i>19960</i>	<i>19862</i>				
Driver Names	<i>Darin</i>	<i>Ed</i>	<i>Fa</i>	<i>EJ</i>	<i>EJ</i>				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>6:00 am</i>					<i>on location / safety meeting</i>
					<i>C. 2, 4, 6, 8, 10, 12</i>
					<i>150SK AA2 cement - 10% SSIT, 10% Gyp</i>
					<i>.8% Fluid Loss, .25 lb/sk cell 13K, 6 lb/sk Gilsco</i>
					<i>14.8 ppv, 1.54 vail, 6.2 water</i>
<i>8:30</i>	<i>500</i>		<i>24</i>	<i>5</i>	<i>Pump 24 bbls Mud Flush</i>
	<i>500</i>		<i>5</i>	<i>5</i>	<i>pump 5 bbls water</i>
	<i>500</i>		<i>41</i>	<i>5</i>	<i>mix 150SK cement</i>
					<i>Shut down</i>
					<i>Wash pump lines</i>
					<i>Release plug</i>
	<i>300</i>		<i>0</i>	<i>6</i>	<i>Start displacement</i>
	<i>500</i>		<i>53</i>	<i>6</i>	<i>lift pressure</i>
	<i>600</i>		<i>73</i>	<i>3</i>	<i>slow rate</i>
<i>9:00</i>	<i>1100</i>		<i>83</i>	<i>3</i>	<i>Bump plug</i>
					<i>Release</i>
					<i>plug Rgt here</i>
<i>9:45 pm</i>					<i>Job complete / Darin & crew</i>
					<i>Thank you!!!</i>

L.D. Drilling Inc
Dst #1 L/KC 'H' 3302-3325'
Start Test Date: 2015/04/15
Final Test Date: 2015/04/15

Polzin-Fyler Unit #1-22
Formation: Dst #1 L/KC 'H' 3302-3325'
Pool: Infield
Job Number: P0069

Polzin-Fyler Unit #1-22





Hoisington, Kansas

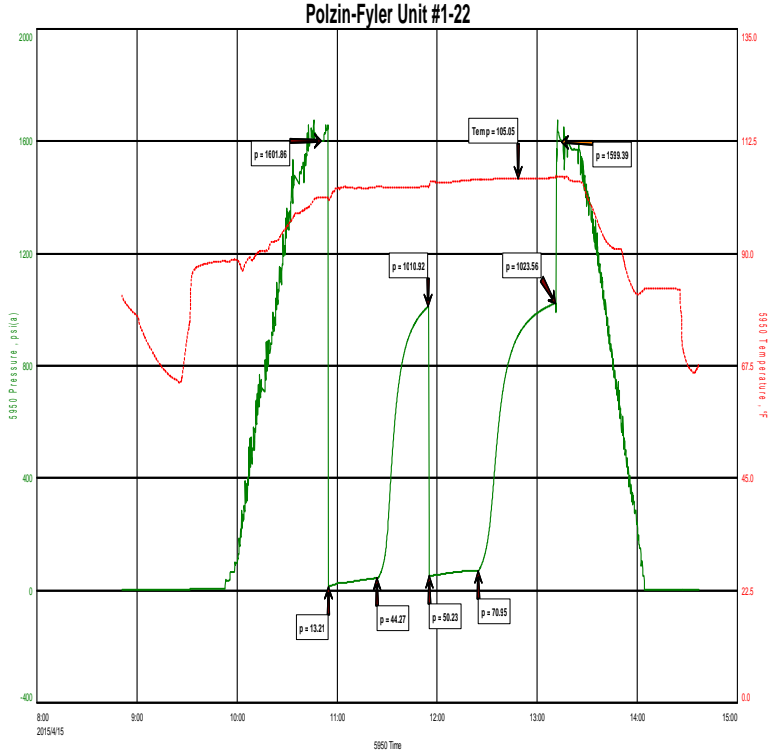
Michael Carroll
620-617-0368
carroll.dtlc@gmail.com

General Information

Company Name L.D. Drilling Inc

Contact L.D. Davis
Well Name Polzin-Fyler Unit #1-22
Unique Well ID Dst #1 L/KC 'H' 3302-3325'
Surface Location Sec22-18s-14w Barton County
Field Laud Southwest
Well Type Vertical
Test Type Drill Stem Test
Well Operator L.D. Drilling Inc

Formation Dst #1 L/KC 'H' 3302-3325'
Well Fluid Type 01 Oil
Test Purpose Initial Test
Start Test Date 2015/04/15
Start Test Time 08:51:00
Final Test Time 14:37:00
Job Number P0069
Report Date 2015/04/15
Prepared By Michael Carroll



TEST RECOVERY

Remarks	Recovery:	63'	Gas In Pipe			
		1'	Clean Oil			
		62'	OCMW 2%O	63%W	35%M	
		61'	VSLOCMW	1%O	86%W	13%M
	Total Fluid:	124'				
	Tool Sample:	4%O	81%W	15%M		
	Chlorides	82000 PPM				
	RW	.14 @ 60 Degrees				
	PH	7				



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: PolzinFylerUnit1-22Dst1

TIME ON: 0851
 TIME OFF: 1437

Company L.D. Drilling Inc Lease & Well No. Polzin-Fyler Unit #1-22
 Contractor Petromark Rig 2 Charge to L.D. Drilling Inc
 Elevation 1912KB Formation L/KC 'H' Effective Pay _____ Ft. Ticket No. P0069
 Date 4-15-15 Sec. 22 Twp. 18 S Range 14 W County Barton State KANSAS
 Test Approved By Kurt Talbott Diamond Representative Michael Carroll

Formation Test No. 1 Interval Tested from 3302 ft. to 3325 ft. Total Depth 3325 ft.
 Packer Depth 3297 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 3302 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
 Top Recorder Depth (Inside) 3290 ft. Recorder Number 5950 Cap. 5000 P.S.I.
 Bottom Recorder Depth (Outside) 3306 ft. Recorder Number 0230 Cap. 5000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 72 Drill Collar Length 123 ft. I.D. 2 1/4 in.
 Weight 8.4 Water Loss 7.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 4700 P.P.M. Drill Pipe Length 3152 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number NA Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 23 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB-BUILT TO 1 1/2" IN 30 MINUTES **NOBB**
 2nd Open: WSB-BUILT TO 2" IN 30 MINUTES **NOBB**

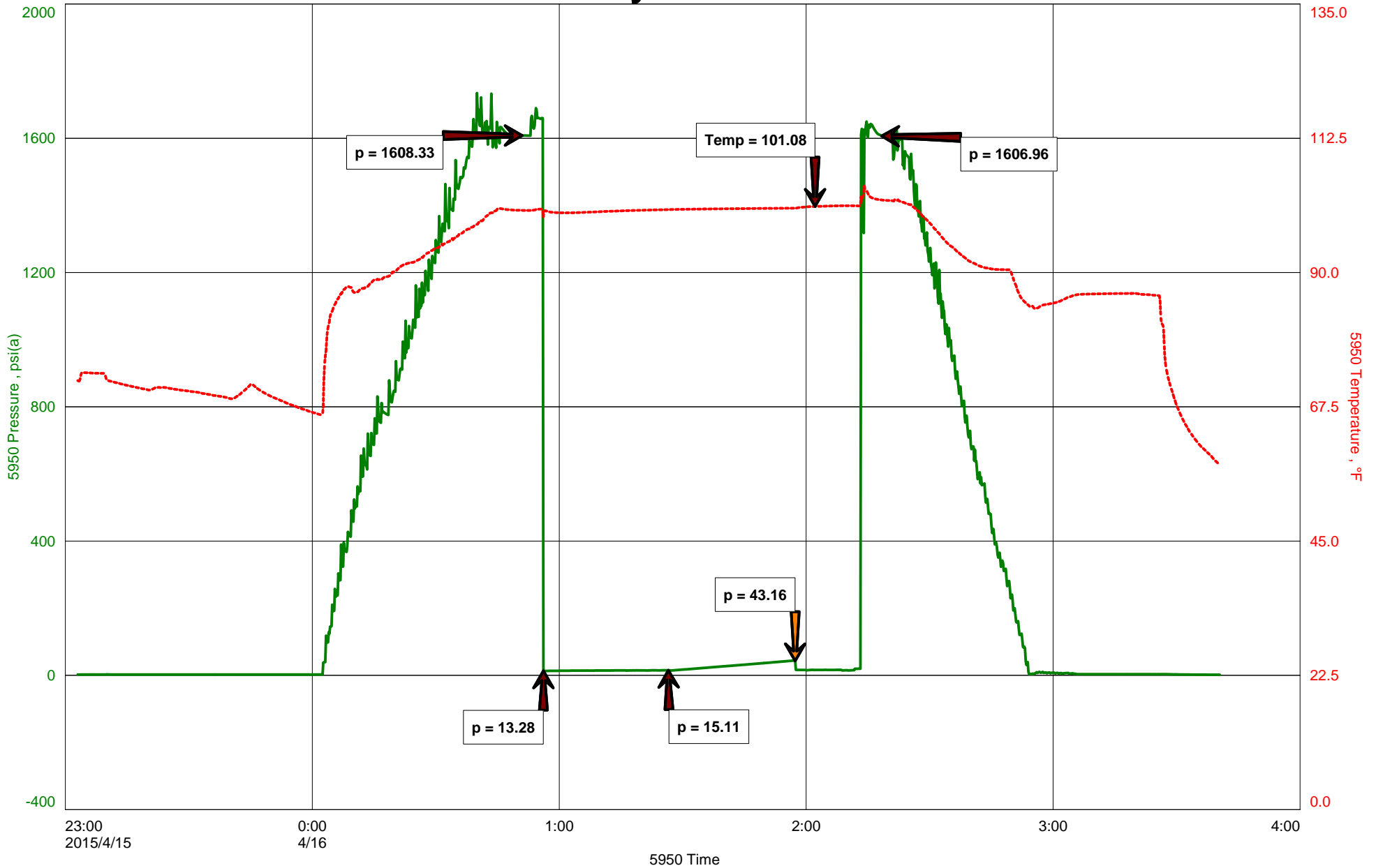
Recovered 63 ft. of GAS IN PIPE CHLORIDES 82000 PPM
 Recovered 1 ft. of CLEAN OIL RW .14 @ 60 DEGREES
 Recovered 62 ft. of OCMW 2%O 63%W 35%M PH 7
 Recovered 61 ft. of VSLOCMW 1%O 86%W 13%M

Recovered <u>124</u> ft. of <u>TOTAL FLUID</u>	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u>4%O 81%W 15%M</u>	Total

Time Set Packer(s) 10:52A.M. A.M. Time Started Off Bottom 1:07P.M. P.M. Maximum Temperature 105
 Initial Hydrostatic Pressure..... (A) 1602 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 13 P.S.I. to (C) 44 P.S.I.
 Initial Closed In Period..... Minutes 30 (D) 1011 P.S.I.
 Final Flow Period..... Minutes 30 (E) 50 P.S.I. to (F) 71 P.S.I.
 Final Closed In Period..... Minutes 45 (G) 1024 P.S.I.
 Final Hydrostatic Pressure..... (H) 1599 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Polzin-Fyler Unit #1-22





Hoisington, Kansas

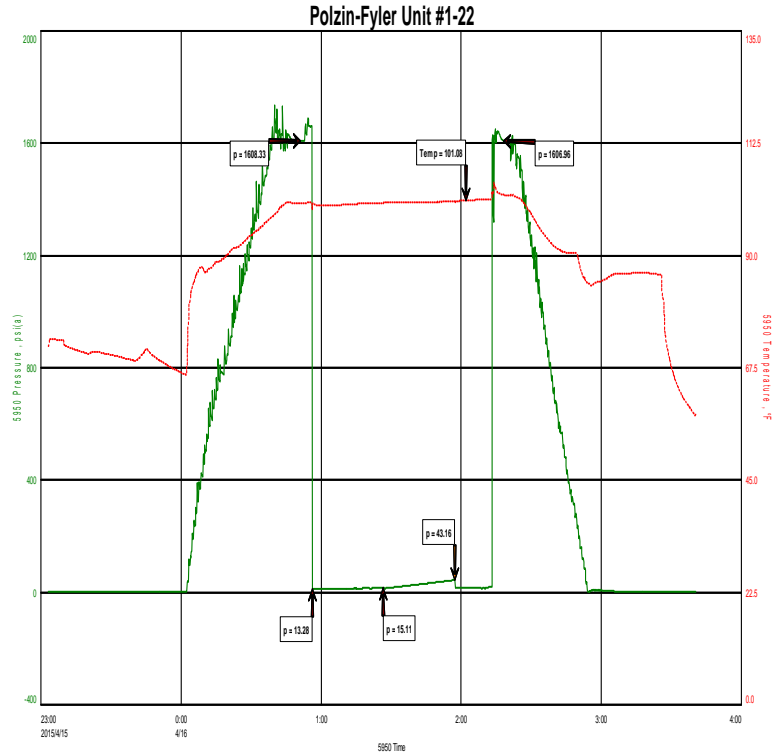
Michael Carroll
620-617-0368
carroll.dtlc@gmail.com

General Information

Company Name L.D. Drilling Inc

Contact L.D. Davis
Well Name Polzin-Fyler Unit #1-22
Unique Well ID Dst #2 Lower L/KC 3323-3380'
Surface Location Sec22-18s-14w Barton County
Field Laud Southwest
Well Type Vertical
Test Type Drill Stem Test
Well Operator L.D. Drilling Inc

Formation Dst #2 Lower L/KC 3323-3380'
Well Fluid Type 01 Oil
Test Purpose Initial Test
Start Test Date 2015/04/16
Start Test Time 23:03:00
Final Test Time 03:41:00
Job Number P0070
Report Date 2015/04/16
Prepared By Michael Carroll



TEST RECOVERY

Remarks Recovery: 183' Mud 100%M

Total Fluid: 183'

Tool Sample: 100%M With A Few Oil Specks



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: PolzinFylerUnit1-22Dst2

TIME ON: 2303 4-15
TIME OFF: 0341 4-16

Company L.D. Drilling Inc Lease & Well No. Polzin-Fyler Unit #1-22
Contractor Petromark Rig 2 Charge to L.D. Drilling Inc
Elevation 1912KB Formation _____ Lower L/KC Effective Pay _____ Ft. Ticket No. P0070
Date 4-16-15 Sec. 22 Twp. _____ 18 S Range _____ 14 W County _____ Barton State KANSAS
Test Approved By Kurt Talbott Diamond Representative _____ Michael Carroll

Formation Test No. 2 Interval Tested from 3323 ft. to 3380 ft. Total Depth 3380 ft.
Packer Depth 3318 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3323 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3311 ft. Recorder Number 5950 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3360 ft. Recorder Number 0230 Cap. 5000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 53 Drill Collar Length 123 ft. I.D. 2 1/4 in.
Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 6100 P.P.M. Drill Pipe Length 3173 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number NA Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 57(25.5a) ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB-DIED IN 7 MINUTES **NOBB**
2nd Open: NO BLOW-ATTEMPTED TO FLUSH TOOL AND UNSEATED PACKERS

Recovered <u>183</u> ft. of <u>MUD 100%M</u>	
Recovered <u>183</u> ft. of <u>TOTAL FLUID</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	Price Job
_____	Other Charges
_____	Insurance
TOOL SAMPLE: <u>100%M WITH A FEW OIL SPECKS</u>	Total

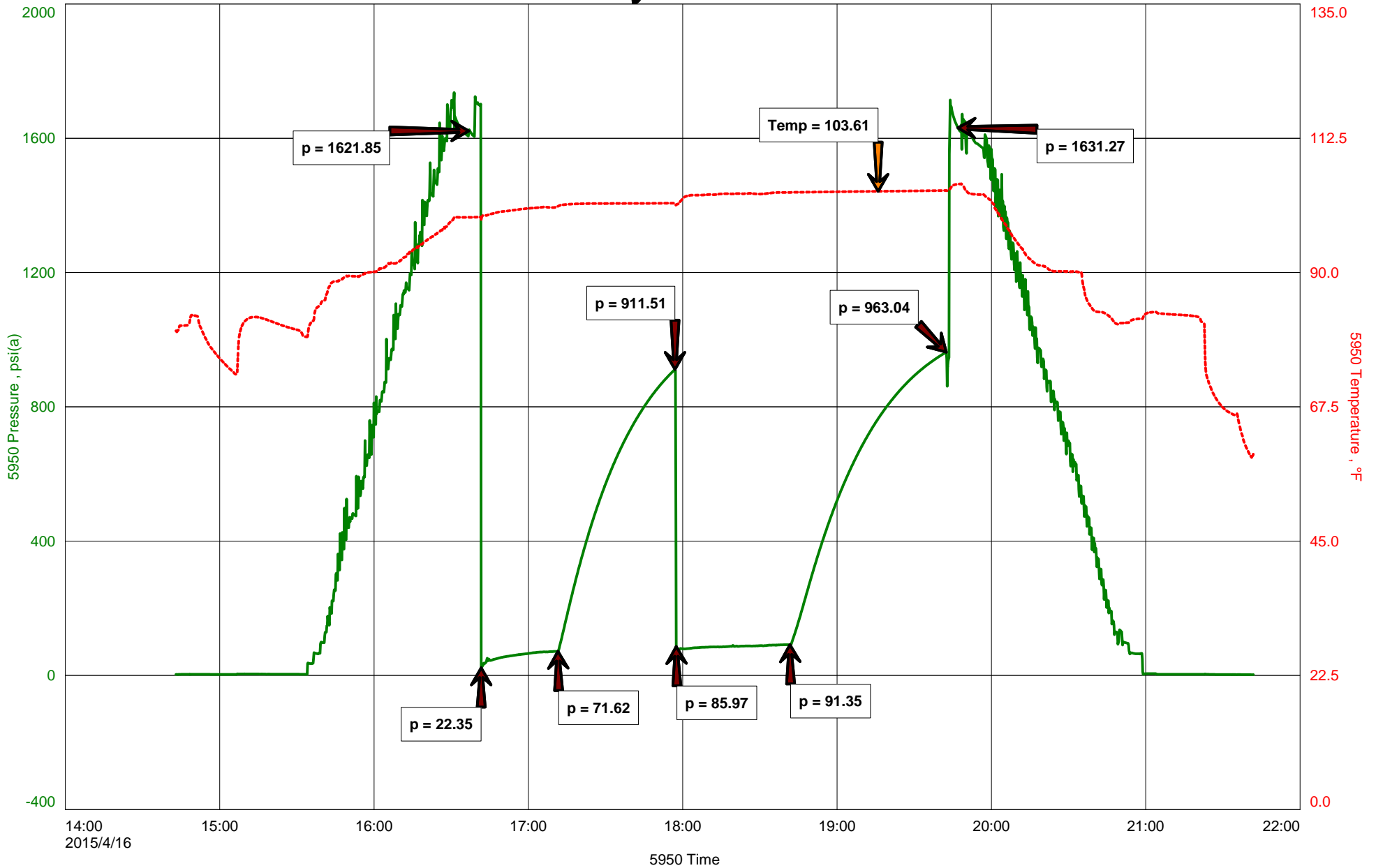
Time Set Packer(s) 12:54A.M. ^{A.M.}/_{P.M.} Time Started Off Bottom 1:54A.M. ^{A.M.}/_{P.M.} Maximum Temperature 101
Initial Hydrostatic Pressure..... (A) 1608 P.S.I.
Initial Flow Period..... Minutes 30 (B) 13 P.S.I. to (C) 15 P.S.I.
Initial Closed In Period..... Minutes 30 (D) 43 P.S.I.
Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
Final Closed In Period..... Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure..... (H) 1607 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

L.D. Drilling Inc
Dst #3 Arbuckle 3360-3431'
Start Test Date: 2015/04/16
Final Test Date: 2015/04/16

Polzin-Fyler Unit #1-22
Formation: Dst #3 Arbuckle 3360-3431'
Pool: Infield
Job Number: P0071

Polzin-Fyler Unit #1-22





Hoisington, Kansas

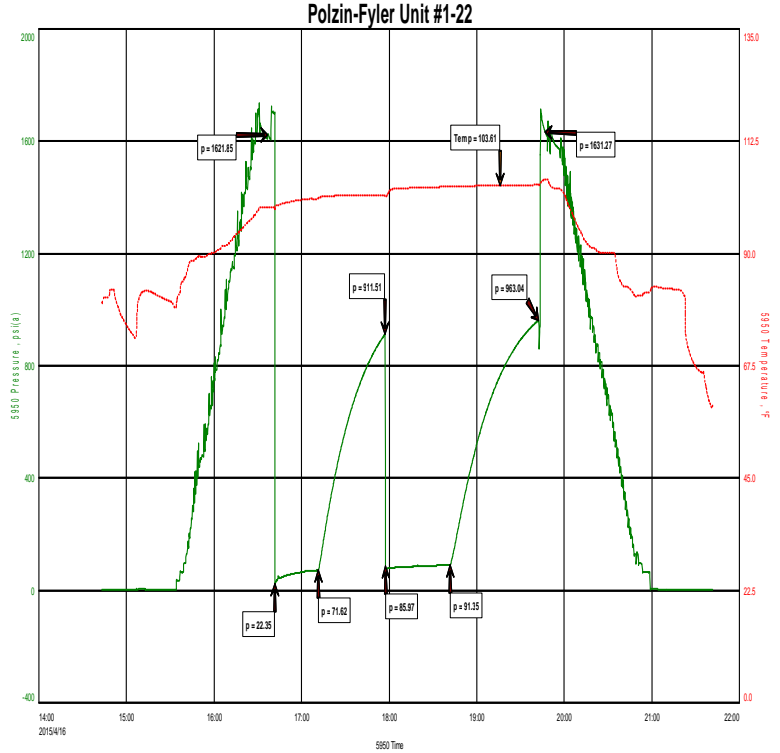
Michael Carroll
620-617-0368
carroll.dtlc@gmail.com

General Information

Company Name L.D. Drilling Inc

Contact L.D. Davis
Well Name Polzin-Fyler Unit #1-22
Unique Well ID Dst #3 Arbuckle 3360-3431'
Surface Location Sec22-18s-14w Barton County
Field Laud Southwest
Well Type Vertical
Test Type Drill Stem Test
Well Operator L.D. Drilling Inc

Formation Dst #3 Arbuckle 3360-3431'
Well Fluid Type 01 Oil
Test Purpose Initial Test
Start Test Date 2015/04/16
Start Test Time 14:43:00
Final Test Time 21:42:00
Job Number P0071
Report Date 2015/04/16
Prepared By Michael Carroll



TEST RECOVERY

Remarks	Recovery:	118'	Gas In Pipe	
		22'	Clean Oil	Gravity 36.5 @ 60 Degrees
		49'	HOCM 52%O	48%M
		123'	GOCM 10%G	38%O 52%M
	Total Fluid:	194'		
	Tool Sample:	56%O	4%W	40%M



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: PolzinFylerUnit1-22Dst3

TIME ON: 1443
 TIME OFF: 2142

Company L.D. Drilling Inc Lease & Well No. Polzin-Fyler Unit #1-22
 Contractor Petromark Rig 2 Charge to L.D. Drilling Inc
 Elevation 1912KB Formation Arbuckle Effective Pay _____ Ft. Ticket No. P0071
 Date 4-16-15 Sec. 22 Twp. 18 S Range 14 W County Barton State KANSAS
 Test Approved By Kurt Talbott Diamond Representative Michael Carroll

Formation Test No. 3 Interval Tested from 3360 ft. to 3431 ft. Total Depth 3431 ft.

Packer Depth 3355 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 3360 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3348 ft. Recorder Number 5950 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 3397 ft. Recorder Number 0230 Cap. 5000 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 53 Drill Collar Length 123 ft. I.D. 2 1/4 in.

Weight 9.35 Water Loss 10.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 8500 P.P.M. Drill Pipe Length 3210 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number NA Test Tool Length 27 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 71(39.5a) ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: 1"BLOW-BUILT TO 9" IN 30 MINUTES WSBB

2nd Open: WSB-BUILT TO 8" IN 45 MINUTES WSBB

Recovered 118 ft. of GAS IN PIPE

Recovered 22 ft. of CLEAN OIL GRAVITY 36.5 @ 60 DEGREES

Recovered 49 ft. of HOCM 52%O 48%M

Recovered 123 ft. of GOCM 10%G 38%O 52%M

Recovered 194 ft. of TOTAL FLUID

Recovered _____ ft. of _____

Remarks: _____

TOOL SAMPLE: 56%O 4%W 40%M

Time Set Packer(s) 4:40P.M. A.M. Time Started Off Bottom 7:40P.M. P.M. Maximum Temperature 104

Initial Hydrostatic Pressure..... (A) 1622 P.S.I.

Initial Flow Period..... Minutes 30 (B) 22 P.S.I. to (C) 72 P.S.I.

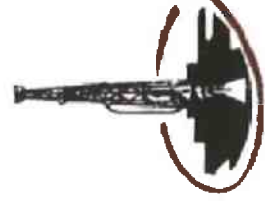
Initial Closed In Period..... Minutes 45 (D) 912 P.S.I.

Final Flow Period..... Minutes 45 (E) 86 P.S.I. to (F) 91 P.S.I.

Final Closed In Period..... Minutes 60 (G) 963 P.S.I.

Final Hydrostatic Pressure..... (H) 1631 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



Musgrove
 Petroleum Geology
 212 Main Street, Claflin KS

Geologist's Report

Company: L.D. Drilling, Inc
 Lease: Polzin-Fyler Unit #1-22
 Field: Laud Southwest
 Surface Location: SE-SW-SE-SW (127' FSL & 1713' FWL)
 Sec: 22 Twp: 18S Rge: 14W
 County: Barton State: Kansas
 GL: 1907' KB: 1912'
 Contractor: Petromark Drilling Rig #2
 Spud: 4/10/15 Comp: 4/17/15
 RTD: 3535' LTD: 3538'
 Mud Up: +/- 2700' Mud Type: Chemical Displaced

Drilling Time Kept From: 3000' to RTD
 Samples Saved From: 3000' to RTD
 Samples Examined: 3000' to RTD
 Geological Supervision: 3175' to RTD
 Geologist on Well: Kurt Talbott

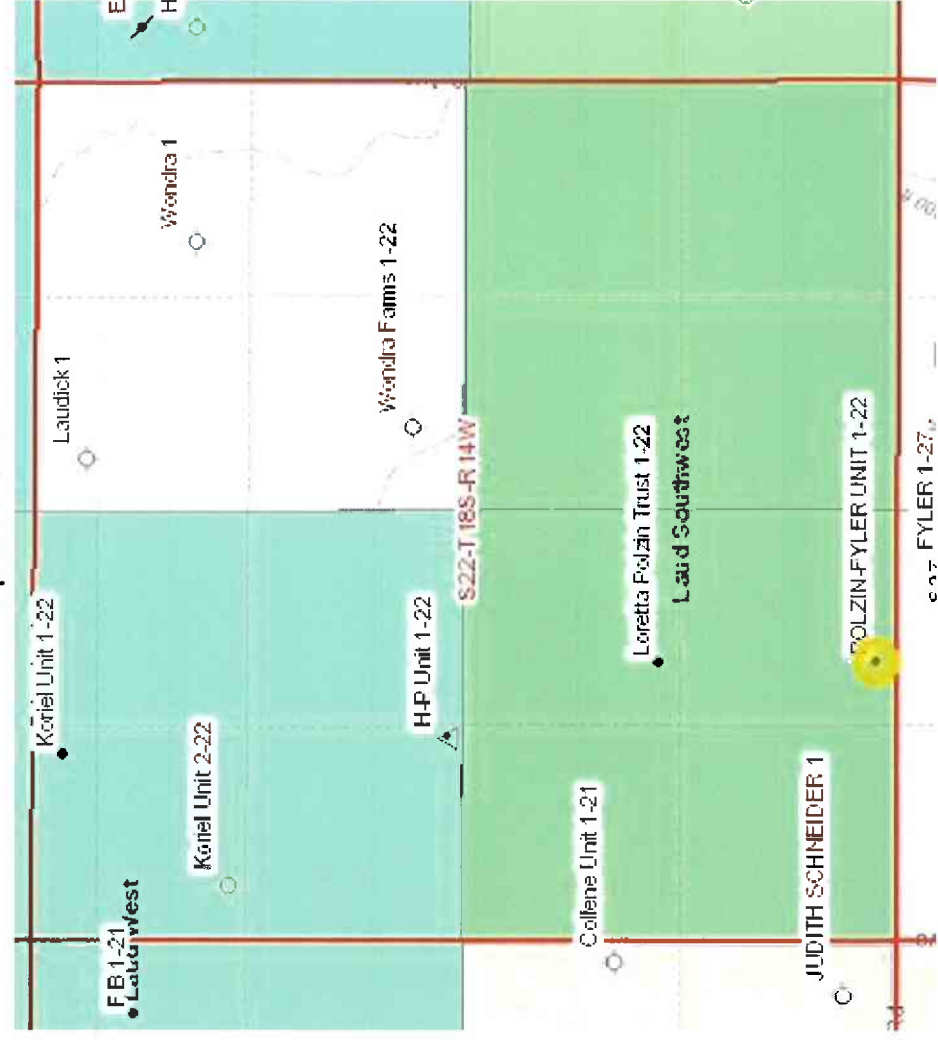
Surface Casing: 8 5/8" @ 854'
 Production Casing: 5 1/2" @

Wireline Logs: By Nabors: CDL/CNL, DIL, MEL, BHCS

Well Comparison

FORMATION	WELL BEING DRILLED		OFFSET	
	LD	LD SS	LD DRILLING	LD SS
ANHYDRITE	857	1055	856	1060
BASE ANHYDRITE	885	1027	882	1034
TOPEKA	2856	946	2856	940
HEBNER	3096	-1184	3092	-1176
TORONTO	3108	-1196	3105	-1189
DOUGLAS	3120	-1208	3167	-1251
BROWN LIME	3174	-1262	3176	-1260
LANSING	3188	-1276	3390	-1474
BASE KC	3396	-1484	3425	-1509
ARBUCKLE	3428	-1516	3525	-1609
TOTAL DEPTH	3538	-1625	3549	1633

Spot Location



ROCK TYPES

shale, gry shale, red shale, red
Carbon Sh Silst

Lmst fw<7 shale, gm

Cht Dolprim

OTHER SYMBOLS

EVENTS

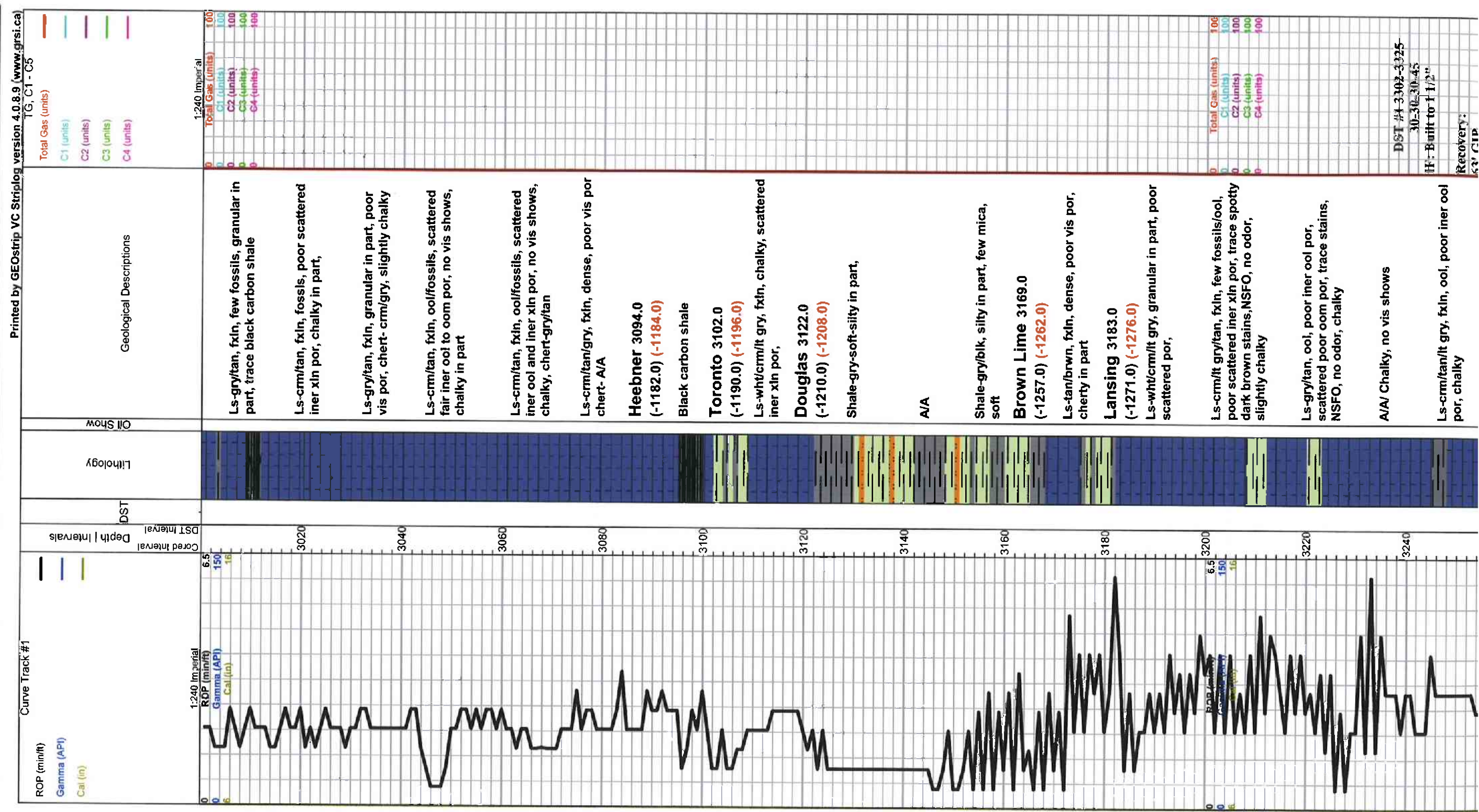
- ▲ Casing Shoe
- ▲ RTF
- ▲ Sidewall
- ▲ Left Casing Shoe
- ▲ Right Casing Shoe

INTERVALS

- Core
- DST

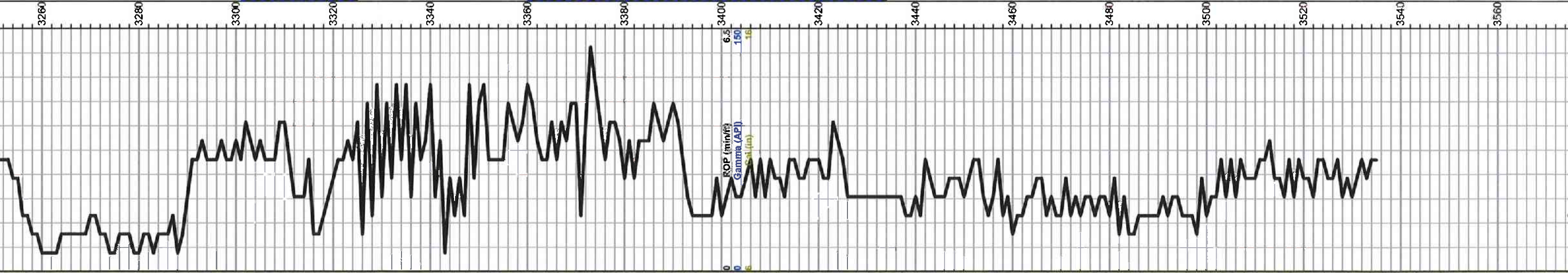
DST

- DST Int
- DST alt



Pressure

Recovery:



Ls-gry/wht, fxln, ool, good oom por, chalky in part, no vis shows,

Ls-tan/crm, fxln, ool, fair to good oom por, chert-crm/tan,

Ls-tan/crm, fxln, ool, poor vis por, chalky in part, cherty in part,

A/A Shale-gry/bik

Ls-tan/gry, fxln, ool, inner ool to oom por, golden to dark brown stains, slightly saturated, SFO, fair odor

Ls-tan/gry, fxln, ool, poor vis por, cherty in part, slightly chalky

A/A Shale-gry/gm, Chert-tan/crm

Ls-crm/tan, fxln, ool, poor inner xln por, dark brown stains, TrSFO, faint odor

Ls-crm/tan, fxln, ool/few fossils, poor inner xln por, dark brwn stains, TrSFO, faint odor

Ls-crm/tan/gry, fxln, poor scattered inner xln por, cherty in part, slightly chalky,

Base KC 3390.0 (-1478.0) (-1484.0)

Chert-orange/wht/boney wht Shale-red/brwn

Shale and Chert- A/A

Ls-crm/tan, granular, poor vis por, cherty in part

Arbuckle 3425.0 (-1513.0) (-1516.0)

Dol-wht/crm, fine to med rhomb xln, fair inner xln por, dark brown stains, SFO, good odor

Dol-wht/lt gry, fine to med rhomb xln, fair inner xln por, dark brown stains, SFO, fair odor, chert- boney wht/crm

Dol-wht/lt gry/crm, fxln, dense, poor to fair inner xln por, dark brown to black stains, TrSFO, faint odor, chalky in part

Dol-wht/lt gry, f-med xln, few rhomb xln, fair to good inner xln to vug por, dark brown to black stains, Weak SFO, faint odor, chalky in part

Dol-wht/lt gry, f-med rhomb xln, fair inner xln to vug por, cherty in part, chalky

A/A

Dol-wht/lt gry/crm, fxln, dense, poor scattered inner xln por, chert-boney wht/crm

Total Depth 3535.0 (-1623.0) (-1626.0)

63' GIP
1" Clean Oil
62' OCMW
2% O 63% W 35% M
61' VSOCMW
(1% O 86% W 13% M)

Pressures:
ISIP 1011 psi
FSIP 1024 psi
IFP 13-44 psi
FFP 50-71 psi
HSH 1602-1599 psi

DST #2-3323-3380
30-30-X-X
IF: Blow Dried in 7 min
Tool Flush and packers unscated.

Recovery:
143' Mud

Pressures:
ISIP 43 psi
FSIP X
IFP 13-15 psi
FFP X
HSH 1608-1607 psi

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

DST #3 3360-3431
30-45-45-60
IF: Built to 9"
ISI: Weak Surface Blow

Recovery:
118' GIP
22' Clean Oil
49' HOCM
(52% Oil 48% Mud)
123' GOCM
(10% Gas 38% Oil 52% Mud)

Pressures:
ISIP 912 psi
FSIP 963 psi
IFP 22-72 psi
FFP 86-91 psi
HSH 1622-1631 psi