



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1220944
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
-----------------------------------	-----------------	---

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: _____

1220944

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 <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 List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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

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

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: _____ _____
--	---	---

Customer <i>L.R. Drilling Inc</i>	Lease No.	Date <i>7-9-14</i>	
Lease <i>Betty</i>	Well # <i>2-12</i>	County <i>Boone</i>	
Field Order # <i>10770 A</i>	Station <i>Dirt</i>	Casing <i>8 5/8</i>	Depth
Type Job <i>8 5/8 Surface CNW</i>	Formation	Legal Description <i>17 6 18</i>	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
<i>8 5/8</i>				Pre Pad	Max		5 Min.
Depth <i>365</i>	Depth	From	To	Pad	Min		10 Min.
Volume <i>27.73</i>	Volume	From	To	Frac	Avg		15 Min.
Max Press	Max Press	From	To		HHP Used		Annulus Pressure
Well Connection <i>2 1/2</i>	Annulus Vol.	From	To	Flush	Gas Volume		Total Load
Plug Depth	Packer Depth	From	To				

Customer Representative <i>Taylor</i>	Station Manager <i>Kevin Gaudin</i>	Treater <i>Scott Grimes</i>
Service Units <i>28413</i>	<i>14905</i>	<i>10431</i>
Driver Names <i>Scott</i>	<i>M.R.C</i>	<i>Jale</i>

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>6:00</i>					<i>On location Safety Meeting Rig up</i>
<i>7:15</i>					<i>circulate well for 10 minutes</i>
<i>7:30</i>	<i>100</i>		<i>53.56</i>	<i>5</i>	<i>Dump 250 lbs 60/100 POT at 14:30</i>
<i>7:40</i>	<i>0</i>			<i>5</i>	<i>start Pump</i>
<i>7:48</i>	<i>200</i>		<i>21</i>		<i>stop pumping 12:00</i>
<i>7:50</i>	<i>200</i>				<i>start in well</i>
<i>7:50</i>					<i>Job Complete</i>
					<i>circulate cement to bit</i>



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET
1718 10788 A

DATE _____ TICKET NO. _____

DATE OF JOB 7-18-14 DISTRICT Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:				
CUSTOMER LD Drilling inc		LEASE Betty		WELL NO. 2-22		
ADDRESS		COUNTY ROOKS		STATE KY		
CITY STATE		SERVICE CREW MATTAT, Mcgraw, Gibson, Hanson, Scott				
AUTHORIZED BY		JOB TYPE: cnw Longterm 2 stage				
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED 7-17-14 DATE 7-17-14 AM <input checked="" type="checkbox"/> PM <input type="checkbox"/> TIME 4:00
37580	3.5					ARRIVED AT JOB AM 11:50
		19826/19860	3.5			START OPERATION 7-18-14 PM 3:55
33708/19905	3.5					FINISH OPERATION PM 7:20
19831/19862	3.5					RELEASED PM 7:45
						MILES FROM STATION TO WELL 175

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED **X L.D. Davis By D Scott**
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP100C	common cmt	SK	200		3,200 00
CP101	A-con Blend	SK	330		5,940 00
CC102	Calofix	lb	87		307 10
CC109	Calcium Chloride	lb	933		979 65
CC111	SALT	lb	823		411 50
CC130	C-51	lb	38		950 00
CC201	Silsolite	lb	1000		670 00
CF400	TWO STAGE cmt collar 4 1/2	ea	1		4,500 00
CF600	LATCH DOWN PUMP + BATTERY 4 1/2	ea	1		720 00
CF1250	AUTO FILL FLUAT SHIP 4 1/2	ea	1		330 00
CF1650	TRISOLIZER 4 1/2	ea	8		680 00
CF1900	BATTERY 4 1/2	ea	1		270 00
CF2000	CMT SCRATCHES CABLETYPE 4 1/2	ea	8		660 00
CC151	M40 CRUSH	gal	1000		1,500 00

SUB TOTAL **101**

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$
MATERIALS	%TAX ON \$

TOTAL

SERVICE REPRESENTATIVE **Mike MATTAT**

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: **X L.D. Davis By D Scott**
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

~~1718-10789~~ A

CONTINUATION OF 1718-10788

DATE _____ TICKET NO. _____

DATE OF JOB 7-18-14 DISTRICT Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:	
CUSTOMER LD Drilling inc		LEASE Betty WELL NO. 2-16	
ADDRESS		COUNTY ROCKS STATE KS	
CITY STATE		SERVICE CREW	
AUTHORIZED BY		JOB TYPE: CWU - LONG STRAKE	

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
						ARRIVED AT JOB				
						START OPERATION				
						FINISH OPERATION				
						RELEASED				
						MILES FROM STATION TO WELL				

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: **X L.D. Davis By D Scott**
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
E 100	P.u. mils	ml	175		743 75
E 101	Heavy eq - miles	ml	525		3,675 00
E 113	PROP + Bulk Del	FM	4366		9,605 75
Ce 204	DEPM charge 3001-4000'	4hr	1		2,160 00
Ce 240	Blend + mix charge	SK	530		742 00
Ce 202	DEPM charge 1001-2000'	4hr	1		1,500 00
Ce 504	PIVg CONT	JOB	1		250 00
S 003	SURV V.S.V	ea	1		175 00

CHEMICAL / ACID DATA:			

SUB TOTAL		27,626 22
SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

SERVICE REPRESENTATIVE Mike Mattac	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: X L.D. Davis By D Scott (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
---	---

FIELD SERVICE ORDER NO. _____

Customer LD Drilling	Lease No.	Date 7-18-14
Lease Betty	Well # 2-12	
Field Order # 10788	Station Pratt	Casing 5 1/2
		Depth 3360
Type Job CNW long string 2 stage	Formation	County ROOKS
		State KS
		Legal Description 12-6-18

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size 5 1/2	Tubing Size	Shots/Ft		Acid CENT 200	Common 10%	RATE 10%	PRESS salt 5#
Depth 3357	Depth	From	To	Pre Pad 330	Sus 5%	A-CON 3%	ISIP silicone .2%
Volume	Volume	From	To	Pad			Min. 5
Max Press 1500	Max Press	From	To	Frac			10 Min.
Well Connection PC	Annulus Vol.	From	To				15 Min.
Plug Depth 3345	Packer Depth	From	To	Flush 30/22	22	Gas Volume	Annulus Pressure
							Total Load

Customer Representative **LD** Station Manager **Kevin Gorday** Treater **Mike MATTIA**

Service Units 37586	Acg raw	9 ib son	442607
Driver Names MATTIA	33708 19905	19831 19862	19826 19860

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1:50					ON LOCATION / SAFETY MEETINGS
—					Run 4 1/2 casing BASKET on #50
—					cents on 1,3,5,7,9,11,13,51
—					SCRATCHES 80# on 4,5,8,9
2:40					O.V. TOOL ON TOP OF JT 50 1415.17'
2:45					CSNG ON BOTTOM
3:55	200		24	5	HOOK TO CSNG / BREAK CIRC W ROG
3:59	200		3		PUMP 3 BBLS H2O
4:00	200		44		MIX 200 SUS COMMON @ 15.6#
4:08	—		4	3	WASH PUMP + LINE
4:08	—		—	—	DROP 1 ST STAGE PLUG
4:10	100		—	6	START DISP W. WATER
4:15	100		30	6	START MUD DISP.
4:16	200		32	5.5	LIFT PRESSURE
4:26	300		32	2	SLOW RATE
4:20	1500		52		PLUG DOWN, RELEASED + HELP
4:35	800		—	—	DROP OPENING TOOL, OPEN TOOL W TRUCK
6:35	200		145		MIX 330 SUS A-CON @ 12#
6:55	—		4	3	WASH PUMP + LINES, RELEASE PLUG
7:00	350		—	4	START DISPLACEMENT
7:05	300		17	2	SLOW RATE

Customer LD Drilling	Lease No.	Date 7-18-14
Lease Betty	Well # 2-12	
Field Order # 10788	Station	Casing
Type Job CN W Long string 2 stage	Formation	Legal Description 12-6-18
	Depth	County Roos State WV

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

Customer Representative	Station Manager	Treater
-------------------------	-----------------	---------

Service Units									
Driver Names									

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
7:10	1500	}	22	-	Plug Down, release + hold CNT TO SH
7:15			7		Plug 1A hole
					Circulation thru job
					JOB COMPLETE
					THANK YOU!
					MIKE MARTIN
					Circulation 22 Bbls cnt to air
					50 psi cnt Good Circ Thru Job



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: BTTY2-12DST1

TIME ON: 2340 (7/13)
 TIME OFF: 0745 (7/14)

Company L.D. DRILLING, INC. Lease & Well No. BETTY #2-12
 Contractor SKYTOP DRILLING, LLC. RIG 1 Charge to L.D. DRILLING, INC.
 Elevation 1894 GL EST. Formation LOWER TOPEKA Effective Pay _____ Ft. Ticket No. M673
 Date 7/13/2014 Sec. 12 Twp. _____ 6 S Range _____ 18 W County ROOKS State KANSAS
 Test Approved By LOGAN WALKER Diamond Representative MIKE COCHRAN

Formation Test No. 1 Interval Tested from 2955 ft. to 2996 ft. Total Depth 2996 ft.
 Packer Depth 2950 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.
 Packer Depth 2955 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 2942 ft. Recorder Number 0063 Cap. 6,000 P.S.I.
 Bottom Recorder Depth (Outside) 2957 ft. Recorder Number E1150 Cap. 5,000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEM Viscosity _____ Drill Collar Length 143 ft. I.D. 2 1/4 in.
 Weight _____ Water Loss 7.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 600 P.P.M. Drill Pipe Length 2785 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number SAFTEY JT Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 41 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, INCREASED TO 1" (NO BB)
 2nd Open: VWSB THAT DIED AFTER 20 MIN. (NO BB)

Recovered 30 ft. of VSOSDM 100% DRLG MUD W/ A VERY THIN SCUM OF OIL
 Recovered 30 ft. of TOTAL FLUID
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks: _____	Price Job
TOOL SAMPLE: 1% OIL, 99% MUD	Other Charges
_____	Insurance
_____	Total

Time Set Packer(s) 3:45 A.M. ^{A.M.}/_{P.M.} Time Started Off Bottom 5:45 A.M. ^{A.M.}/_{P.M.} Maximum Temperature 95°F

Initial Hydrostatic Pressure..... (A) 1397 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 7 P.S.I. to (C) 17 P.S.I.
 Initial Closed In Period..... Minutes 30 (D) 993 P.S.I.
 Final Flow Period..... Minutes 30 (E) 18 P.S.I. to (F) 27 P.S.I.
 Final Closed In Period..... Minutes 30 (G) 965 P.S.I.
 Final Hydrostatic Pressure..... (H) 1389 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.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	L.D. DRILLING, INC.	Job Number	M673
Well Name	BETTY #2-12	Representative	MIKE COCHRAN
Unique Well ID	DST#1 2955-2996 LOWER TOPEKA	Well Operator	L.D. DRILLING, INC.
Surface Location	SEC.12-6S-18W ROOKS CO.KS.	Report Date	2014/07/14
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	LOGAN WALKER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST#1 2955-2996 LOWER TOPEKA		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/07/13	Start Test Time	23:40:00
Final Test Date	2014/07/14	Final Test Time	07:45:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

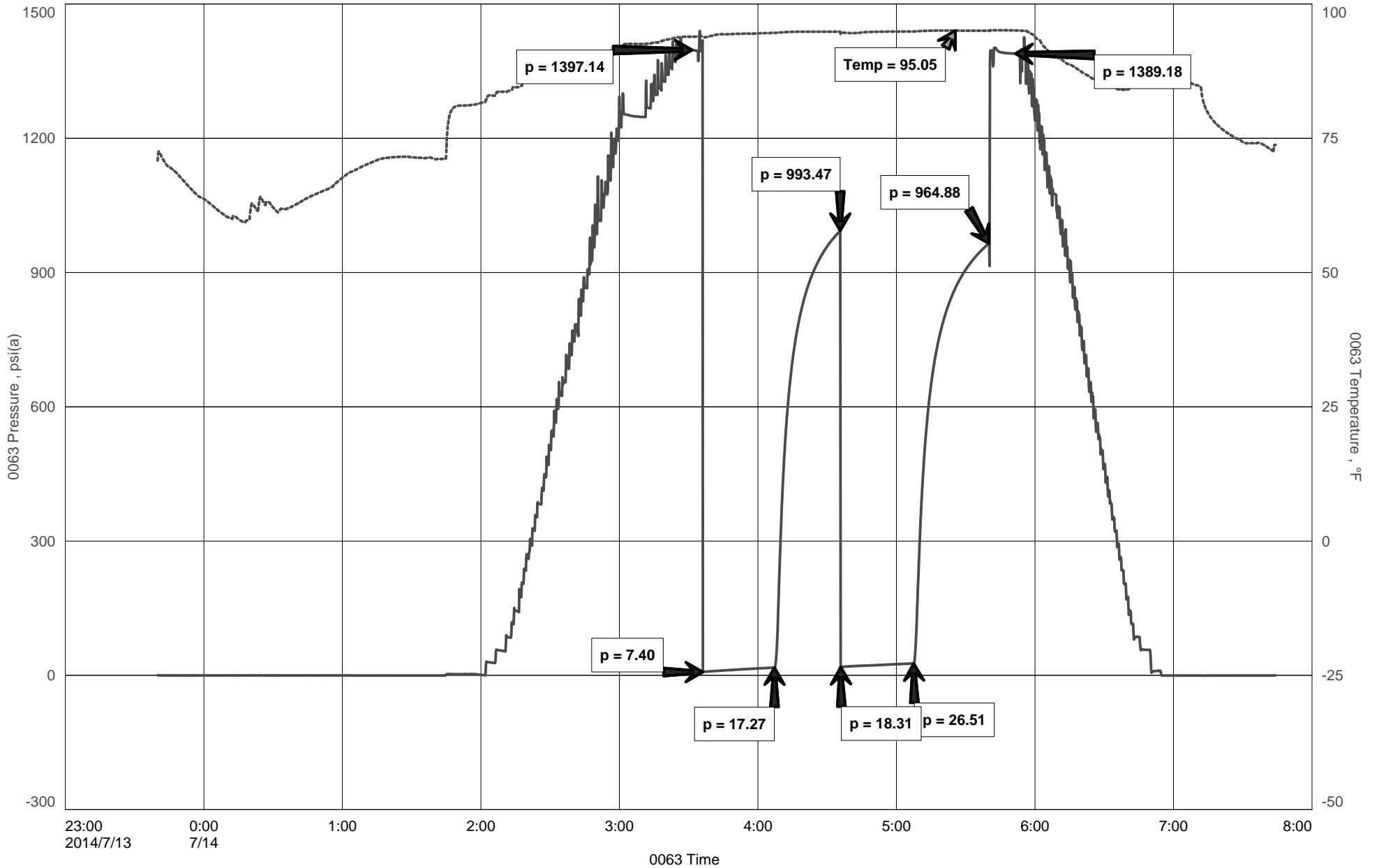
Remarks **RECOVERED:**
30' VSOSDM 100% DRLG MUD W/ A VERY THIN SCUM OF OIL
30' TOTAL FLUID

TOOL SAMPLE: 1% OIL, 99% MUD

L.D. DRILLING, INC.
DST#1 2955-2996 LOWER TOPEKA
Start Test Date: 2014/07/13
Final Test Date: 2014/07/14

BETTY #2-12
Formation: DST#1 2955-2996 LOWER TOPEKA
Pool: WILDCAT
Job Number: M673

BETTY #2-12





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: BTTY2-12DST2

TIME ON: 2350 (7/14)
TIME OFF: 0700 (7/15)

Company L.D. DRILLING, INC. Lease & Well No. BETTY #2-12
Contractor SKYTOP DRILLING,LLC. RIG 1 Charge to L.D. DRILLING, INC.
Elevation 1894 GL EST. Formation TORONTO LANSING A,B,D Effective Pay _____ Ft. Ticket No. M674
Date 7/15/2014 Sec. 12 Twp. _____ 6 S Range _____ 18 W County ROOKS State KANSAS
Test Approved By LOGAN WALKER Diamond Representative MIKE COCHRAN

Formation Test No. 2 Interval Tested from 3034 ft. to 3130 ft. Total Depth 3130 ft.
Packer Depth 3029 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.
Packer Depth 3034 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3021 ft. Recorder Number 0063 Cap. 6,000 P.S.I.
Bottom Recorder Depth (Outside) 3036 ft. Recorder Number E1150 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEM Viscosity 60 Drill Collar Length 143 ft. I.D. 2 1/4 in.
Weight 9.1 Water Loss 6.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 600 P.P.M. Drill Pipe Length 2864 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number SAFTEY JT Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 96 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. (60' DP) Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: SSB, BUILT TO 11 1/2" (NO BB)
2nd Open: GSB, BOB 33 MIN (1" BB)

Recovered 275 ft. of GIP GRAVITY:37.3 @ 60°
Recovered 66 ft. of CO 100% OIL
Recovered 114 ft. of GOCM 12% GAS, 32% OIL, 56% MUD
Recovered 180 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: 4% GAS, 81% OIL, 15% MUD	Total

Time Set Packer(s) 1:30 A.M. A.M. P.M. Time Started Off Bottom 4:30 A.M. A.M. P.M. Maximum Temperature 96°F
Initial Hydrostatic Pressure..... (A) 1440 P.S.I.
Initial Flow Period..... Minutes 30 (B) 11 P.S.I. to (C) 57 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1051 P.S.I.
Final Flow Period..... Minutes 45 (E) 63 P.S.I. to (F) 80 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1032 P.S.I.
Final Hydrostatic Pressure..... (H) 1436 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.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	L.D. DRILLING, INC.	Job Number	M674
Well Name	BETTY #2-12	Representative	MIKE COCHRAN
Unique Well ID	DST#2 3034-3130 TORONTO LANSING A,B,D	Well Operator	L.D. DRILLING, INC.
Surface Location	SEC.12-6S-18W ROOKS CO.KS.	Report Date	2014/07/15
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	LOGAN WALKER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST#2 3034-3130 TORONTO LANSING A,B,D		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/07/14	Start Test Time	23:50:00
Final Test Date	2014/07/15	Final Test Time	07:00:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

Remarks RECOVERED:
275' GIP
66' CO 100% OIL
114' GOCM 12% GAS, 32% OIL, 56% MUD
180' TOTAL FLUID

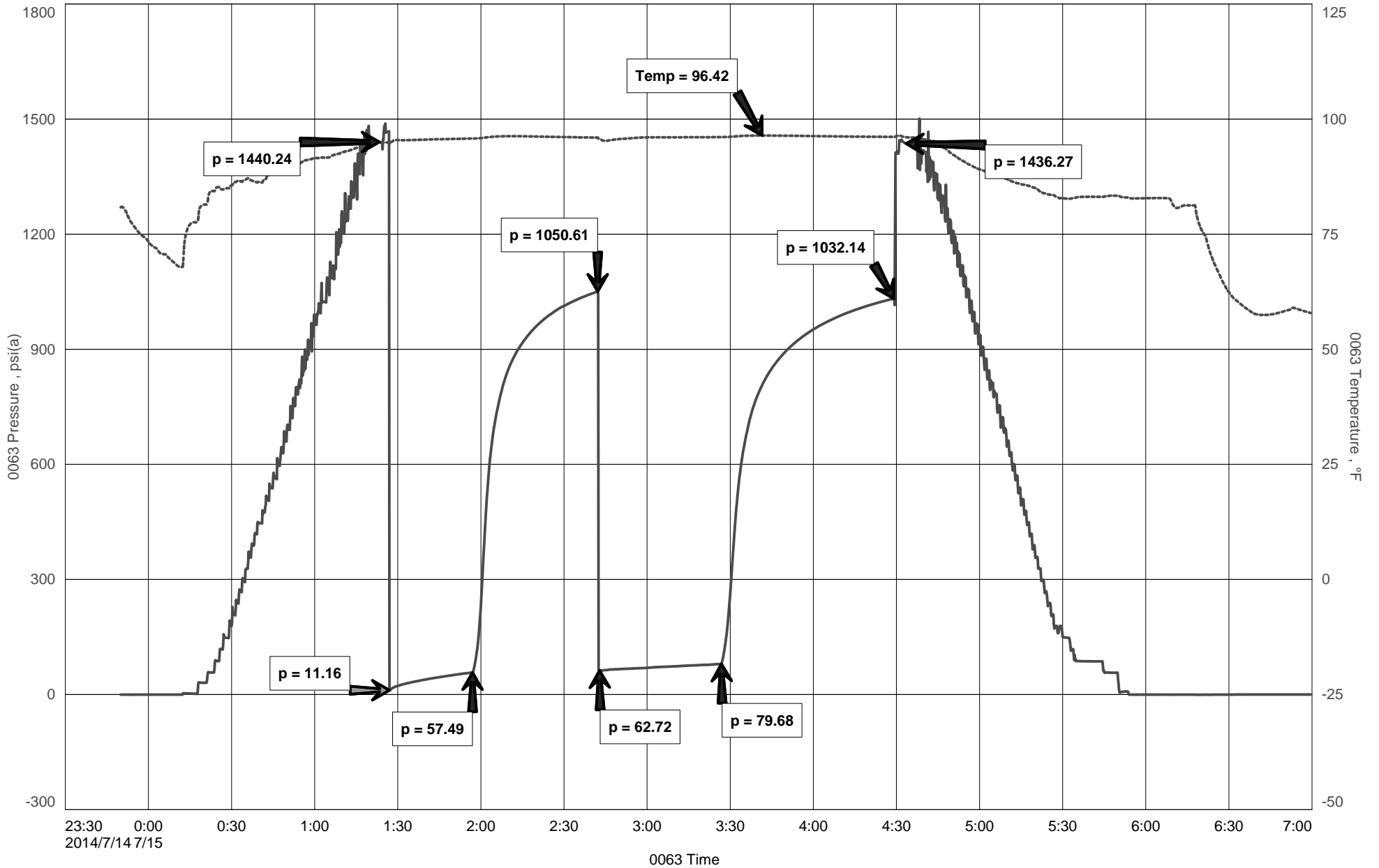
GRAVITY: 37.3 @ 60 DEG

TOOL SAMPLE: 4% GAS, 81% OIL, 15% MUD

L.D. DRILLING, INC.
DST#2 3034-3130 TORONTO LANSING A,B,D
Start Test Date: 2014/07/14
Final Test Date: 2014/07/15

BETTY #2-12
Formation: DST#2 3034-3130 TORONTO LANSING A,B,D
Pool: WILDCAT
Job Number: M674

BETTY #2-12





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: BTTY2-12DST3

TIME ON: 1925 (7/15)
TIME OFF: 0305 (7/16)

Company L.D. DRILLING, INC. Lease & Well No. BETTY #2-12
Contractor SKYTOP DRILLING, LLC. RIG 1 Charge to L.D. DRILLING, INC.
Elevation 1894 GL EST. Formation LANSING F/G Effective Pay _____ Ft. Ticket No. M675
Date 7/15/2014 Sec. 12 Twp. _____ 6 S Range _____ 18 W County ROOKS State KANSAS
Test Approved By LOGAN WALKER Diamond Representative MIKE COCHRAN

Formation Test No. 3 Interval Tested from 3130 ft. to 3200 ft. Total Depth 3200 ft.
Packer Depth 3125 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.
Packer Depth 3130 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3117 ft. Recorder Number 0063 Cap. 6,000 P.S.I.
Bottom Recorder Depth (Outside) 3132 ft. Recorder Number E1150 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEM Viscosity 55 Drill Collar Length 143 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 6.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 1,000 P.P.M. Drill Pipe Length 2960 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number SAFTEY JT Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 70 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, INC. TO 2" (NO BB)
2nd Open: VWSB, INC. TO 3" (NO BB)

Recovered 30 ft. of GIP GRAVITY: 33.4 @ 60°
Recovered 33 ft. of CO 100% OIL
Recovered 77 ft. of GOCM 10% GAS, 33% OIL, 57% MUD
Recovered 110 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u>2% GAS, 26% OIL, 72% MUD</u>	Total

Time Set Packer(s) 10:00 P.M. A.M. P.M. Time Started Off Bottom 1:00 A.M. A.M. P.M. Maximum Temperature 96°F
Initial Hydrostatic Pressure..... (A) 1484 P.S.I.
Initial Flow Period..... Minutes 30 (B) 9 P.S.I. to (C) 32 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 912 P.S.I.
Final Flow Period..... Minutes 45 (E) 36 P.S.I. to (F) 56 P.S.I.
Final Closed In Period..... Minutes 60 (G) 885 P.S.I.
Final Hydrostatic Pressure..... (H) 1484 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.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	L.D. DRILLING, INC.	Job Number	M675
Well Name	BETTY #2-12	Representative	MIKE COCHRAN
Unique Well ID	DST#3 3130-3200 LANSING F/G	Well Operator	L.D. DRILLING, INC.
Surface Location	SEC.12-6S-18W ROOKS CO.KS.	Report Date	2014/07/16
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	LOGAN WALKER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST#3 3130-3200 LANSING F/G		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/07/15	Start Test Time	19:25:00
Final Test Date	2014/07/16	Final Test Time	03:05:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

Remarks RECOVERED:

30' GIP
33' CO 100% OIL
77' GOCM 10% GAS, 33% OIL, 57% MUD
110' TOTAL FLUID

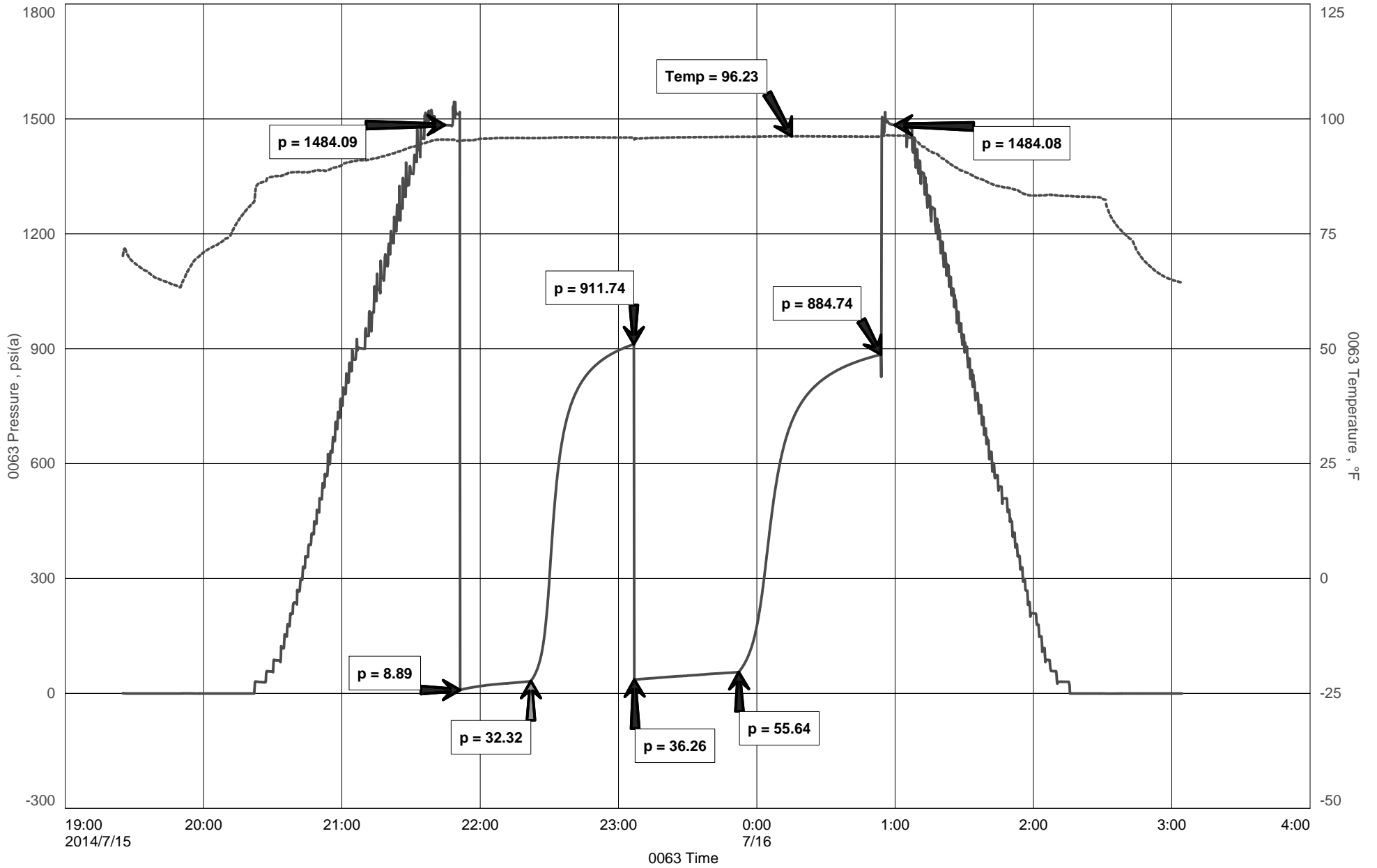
GRAVITY: 33.4 @ 60 DEG

TOOL SAMPLE: 2% GAS, 26% OIL, 72% MUD

L.D. DRILLING, INC.
DST#3 3130-3200 LANSING F/G
Start Test Date: 2014/07/15
Final Test Date: 2014/07/16

BETTY #2-12
Formation: DST#3 3130-3200 LANSING F/G
Pool: WILDCAT
Job Number: M675

BETTY #2-12





DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: BTTY2-12DST4

TIME ON: 1925 (7/16)
 TIME OFF: 0415 (7/17)

Company L.D. DRILLING, INC. Lease & Well No. BETTY #2-12
 Contractor SKYTOP DRILLING, LLC. RIG 1 Charge to L.D. DRILLING, INC.
 Elevation 1894 GL EST. Formation LANSING H,I,J,K,L Effective Pay _____ Ft. Ticket No. M676
 Date 7/16/2014 Sec. 12 Twp. _____ 6 S Range _____ 18 W County ROOKS State KANSAS
 Test Approved By LOGAN WALKER Diamond Representative MIKE COCHRAN

Formation Test No. 4 Interval Tested from 3194 ft. to 3304 ft. Total Depth 3304 ft.
 Packer Depth 3189 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.
 Packer Depth 3194 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3181 ft. Recorder Number 0063 Cap. 6,000 P.S.I.
 Bottom Recorder Depth (Outside) 3196 ft. Recorder Number E1150 Cap. 5,000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEM Viscosity _____ Drill Collar Length 143 ft. I.D. 2 1/4 in.
 Weight _____ Water Loss 7.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 1,000 P.P.M. Drill Pipe Length 3024 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number SAFTEY JT Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 110 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. (91' DP) Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB, INCREASE TO 1 1/4" (NO BB)
 2nd Open: VWSB, INCREASE TO 1/4" (NO BB)

Recovered 25 ft. of VSOSDM 100% MUD W/ A THIN SCUM OF OIL, SLIGHT ODOR
 Recovered 25 ft. of TOTAL FLUID
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks:	Price Job
	Other Charges
	Insurance
	Total

TOOL SAMPLE: 100% MUD W/ A VERY THIN SCUM OF OIL

Time Set Packer(s) 9:45 P.M. A.M. P.M. Time Started Off Bottom 11:45 P.M. A.M. P.M. Maximum Temperature 94°F
 Initial Hydrostatic Pressure..... (A) 1532 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 11 P.S.I. to (C) 21 P.S.I.
 Initial Closed In Period..... Minutes 30 (D) 770 P.S.I.
 Final Flow Period..... Minutes 30 (E) 22 P.S.I. to (F) 29 P.S.I.
 Final Closed In Period..... Minutes 30 (G) 761 P.S.I.
 Final Hydrostatic Pressure..... (H) 1522 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.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	L.D. DRILLING, INC.	Job Number	M676
Well Name	BETTY #2-12	Representative	MIKE COCHRAN
Unique Well ID	DST#4 3194-3304 LANSING H,I,J,K,L	Well Operator	L.D. DRILLING, INC.
Surface Location	SEC.12-6S-18W ROOKS CO.KS.	Report Date	2014/07/17
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	LOGAN WALKER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST#4 3194-3304 LANSING H,I,J,K,L		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/07/16	Start Test Time	19:25:00
Final Test Date	2014/07/17	Final Test Time	04:15:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

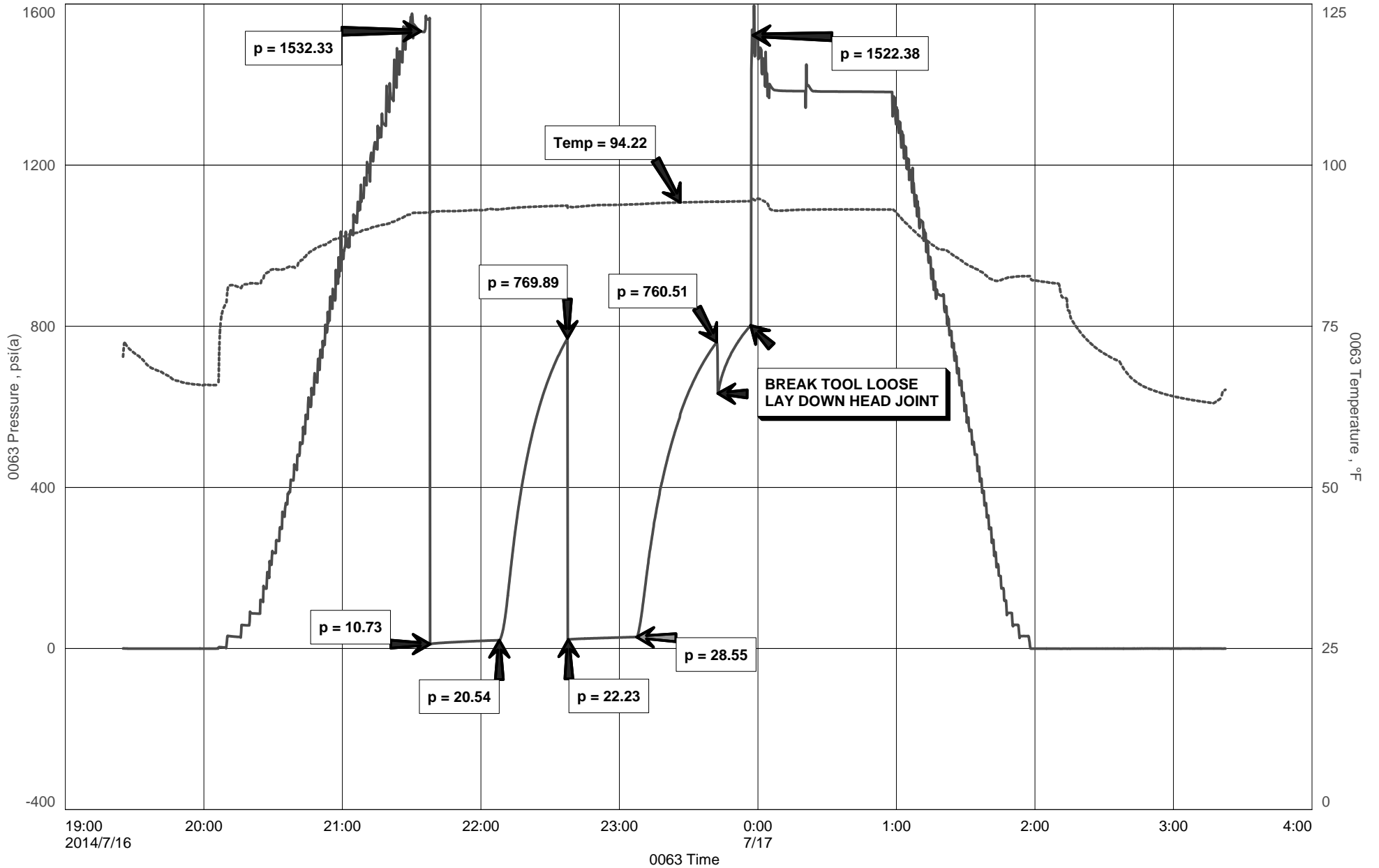
Remarks **RECOVERED:**
25' VSOSDM 100% MUD W/ A THIN SCUM OF OIL, SLIGHT ODOR
25' TOTAL FLUID

TOOL SAMPLE: 100% MUD W/ A VERY THIN SCUM OF OIL

L.D. DRILLING, INC.
DST#4 3194-3304 LANSING H,I,J,K,L
Start Test Date: 2014/07/16
Final Test Date: 2014/07/17

BETTY #2-12
Formation: DST#4 3194-3304 LANSING H,I,J,K,L
Pool: WILDCAT
Job Number: M676

BETTY #2-12



OPERATOR

Company: L. D. Drilling, Inc.
Address: 7 SW 26th Ave.
Great Bend, KS 67530

Contact Geologist: Kim Shoemaker
Contact Phone Nbr: 316-772-2939
Well Name: Betty #2-12
Location: Sec. 12 - T6S - R18W
API: 15-163-24207-0000
Pool: Kansas
State: Kansas
Field: Faubion
Country: USA

Scale 1:240 Imperial

Well Name: Betty #2-12
Surface Location: Sec. 12 - T6S - R18W
Bottom Location: API: 15-163-24207-0000
License Number: 6039
Spud Date: 7/9/2014
Region: Rooks County
Drilling Completed: 7/17/2014
Surface Coordinates: 390' FNL & 330' FWL
Bottom Hole Coordinates:
Ground Elevation: 1890.00ft
K.B. Elevation: 1897.00ft
Logged Interval: 2700.00ft
Total Depth: 3360.00ft
Formation: Lansing/Kansas City
Drilling Fluid Type: Chemical/Fresh Water Gel
Time: 7:30 AM
Time: 12:00 AM
To: 3360.00ft

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude:
Latitude:
N/S Co-ord: 390' FNL
E/W Co-ord: 330' FWL

LOGGED BY

Keith Reavis
Consulting Geologist

Company: Keith Reavis, Inc.
Address: 3420 22nd Street
Great Bend, KS 67530

Phone Nbr: 620-617-4091
Logged By: Logan Walker
Name:

CONTRACTOR

Contractor: Skytop Drilling
Rig #: 1
Rig Type: mud rotary
Spud Date: 7/9/2014
TD Date: 7/17/2014
Rig Release:
Time: 7:30 AM
Time: 12:00 AM
Time:

ELEVATIONS

K.B. Elevation: 1897.00ft
K.B. to Ground: 7.00ft
Ground Elevation: 1890.00ft

NOTES

Due to positive results of DST #2 and DST #3, it was determined that 5 1/2" production casing be set and cemented and that the Betty #2-12 be further tested through perforations and stimulation.

The gamma ray and caliper curves from the electrical log suite were imported into this mudlog. The samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully submitted,
Logan Walker and Keith Reavis

L.D. Drilling
daily drilling report

DATE	7:00 AM DEPTH	REMARKS
07/12/2014		Geologist Logan Walker on location @ 1902 hrs, 2657 ft, drilling ahead
07/13/2014	2873	drilling ahead, shows in the lower Topeka warrants test, mud problems, TOH w/bit
07/14/2014	2996	TIH w/tool, conduct and complete DST #1, successful test, TOH w/tool, TIH w/bit resumed drilling Heebner, Lansing A - D, show warrants test, TOH w/bit for DST #2
07/15/2014	3130	TIH w/tool, conduct and complete DST #2, successful test, TIH w/bit resumed drilling F - G, show warrants test, TOH w/bit for DST #3 TIH w/tool, conducting DST #3
07/16/2014	3216	conduct and complete DST #3, successful test, TOH w/tool, TIH w/bit, resume drilling H - L, TOH w/bit, TIH w/tool, conduct and complete DST #4 successful test
07/17/2014	3330	TOH w/tool, TIH W/ Bit, resume drilling, TD @3360' 0817hrs off location @ 1745hrs

L.D. Drilling
well comparison sheet

DRILLING WELL					COMPARISON WELL			
Betty #2-12					Betty #1-12			
390' FNL & 330' FWL					919 FNL & 1408' FWL			
Sec 12-T6S-R18W					Sec 12-T6S-R18W			
1897 KB					1912 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Topeka	2833	-936	2833	-936	2846	-934	-2	-934
Heebner	3037	-1140	3034	-1137	3047	-1135	-5	-1132
Lansing	3078	-1181	3075	-1178	3088	-1176	-5	-1173
Muncie Creek	3198	-1301	3199	-1302	3213	-1301		-1302
Base KC	3303	-1406	3303	-1406	3320	-1408	2	-1408
Arbuckle	Not Reached				3440	-1528		
Total Depth	3360	-1463	3358	-1461	3483	-1571	108	-1569

DST #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: BTY2-12DST1

TIME ON: 2340 (7/13)
TIME OFF: 0745 (7/14)

Company L.D. DRILLING, INC. Lease & Well No. BETTY #2-12
Contractor SKYTOP DRILLING, LLC. RIG 1 Charge to L.D. DRILLING, INC.
Elevation 1894 GL EST. Formation LOWER TOPEKA Effective Pay Ft. Ticket No. M673
Date 7/13/2014 Sec. 12 Twp. 6 S Range 18 W County. ROOKS State KANSAS
Test Approved By LOGAN WALKER Diamond Representative MIKE COCHRAN

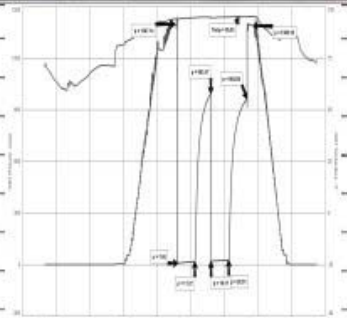
Formation Test No. 1 Interval Tested from 2955 ft. to 2996 ft. Total Depth 2996 ft.
Packer Depth 2950 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.
Packer Depth 2955 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set
Top Recorder Depth (Inside) 2942 ft. Recorder Number 0063 Cap. 6,000 P.S.I.
Bottom Recorder Depth (Outside) 2957 ft. Recorder Number E1150 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEM Viscosity Drill Collar Length 143 ft. I.D. 2 1/4 in.
Weight Water Loss 7.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 600 P.P.M. Drill Pipe Length 2785 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number SAFTEY JT Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 41 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, INCREASED TO 1" (NO BB)
2nd Open: VWSB THAT DIED AFTER 20 MIN. (NO BB)

Recovered 30 ft. of VSOSDM 100% DRLG MUD W/ A VERY THIN SCUM OF OIL
Recovered 30 ft. of TOTAL FLUID
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks:



TOOL SAMPLE: 1% OIL, 99% MUD
Time Set Packer(s) 3:45 A.M. A.M. P.M. Time Started Off Bottom 5:45 A.M. A.M. P.M. Maximum Temperature 95°F
Initial Hydrostatic Pressure (A) 1397 P.S.I.
Initial Flow Period Minutes 30 (B) 7 P.S.I. to (C) 17 P.S.I.
Initial Closed In Period Minutes 30 (D) 993 P.S.I.
Final Flow Period Minutes 30 (E) 18 P.S.I. to (F) 27 P.S.I.
Final Closed In Period Minutes 30 (G) 965 P.S.I.
Final Hydrostatic Pressure (H) 1389 P.S.I.

DST #2



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544

TIME ON: 2350 (7/14)

Company **L.D. DRILLING, INC.** Lease & Well No. **BETTY #2-12**
 Contractor **SKYTOP DRILLING, LLC. RIG 1** Charge to **L.D. DRILLING, INC.**
 Elevation **1894 GL EST.** Formation **TORONTO LANSING A,B,D** Effective Pay _____ Ft. Ticket No. **M674**
 Date **7/15/2014** Sec. **12** Twp. _____ 6 S Range _____ 18 W County **ROOKS** State **KANSAS**
 Test Approved By **LOGAN WALKER** Diamond Representative **MIKE COCHRAN**

Formation Test No. **2** Interval Tested from **3034 ft.** to **3130 ft.** Total Depth **3130 ft.**
 Packer Depth **3029 ft.** Size **6 3/4 in.** Packer depth **NA ft.** Size **6 3/4 in.**
 Packer Depth **3034 ft.** Size **6 3/4 in.** Packer depth **NA ft.** Size **6 3/4 in.**

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ 3021 ft. Recorder Number **0063** Cap. **6,000 P.S.I.**
 Bottom Recorder Depth (Outside) _____ 3036 ft. Recorder Number **E1150** Cap. **5,000 P.S.I.**
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type **CHEM** Viscosity **60** Drill Collar Length **143 ft.** I.D. **2 1/4 in.**
 Weight **9.1** Water Loss **6.2 cc.** Weight Pipe Length **0 ft.** I.D. **2 7/8 in.**
 Chlorides **600 P.P.M.** Drill Pipe Length **2864 ft.** I.D. **3 1/2 in.**
 Jars: Make **STERLING** Serial Number **SAFTEY JT** Test Tool Length **27 ft.** Tool Size **3 1/2-IF in.**
 Did Well Flow? **NO** Reversed Out **NO** Anchor Length **96 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.**

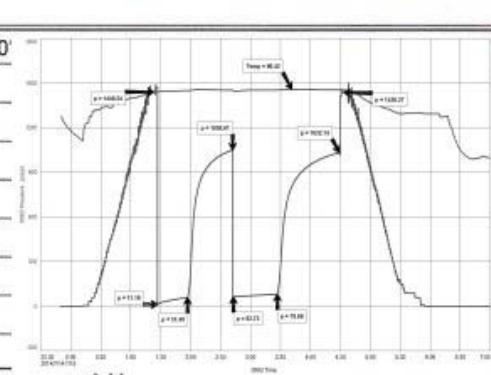
Blow: 1st Open: **SSB, BUILT TO 11 1/2"** (NO BB)
 2nd Open: **GSB, BOB 33 MIN** (1" BB)

Recovered **275 ft.** of GIP GRAVITY: 37.3 @ 60"
 Recovered **66 ft.** of CO 100% OIL
 Recovered **114 ft.** of GOCM 12% GAS, 32% OIL, 56% MUD
 Recovered **180 ft.** of TOTAL FLUID
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: _____

TOOL SAMPLE: 4% GAS, 81% OIL, 15% MUD

Time Set Packer(s) **1:30 A.M.** A.M. P.M. Time Started Off Bottom **4:30 A.M.** A.M. P.M. Maximum Temperature **96°F**

Initial Hydrostatic Pressure _____ (A) **1440 P.S.I.**
 Initial Flow Period _____ Minutes **30** (B) **11 P.S.I. to (C)** **57 P.S.I.**
 Initial Closed In Period _____ Minutes **45** (D) **1051 P.S.I.**
 Final Flow Period _____ Minutes **45** (E) **63 P.S.I. to (F)** **80 P.S.I.**
 Final Closed In Period _____ Minutes **60** (G) **1032 P.S.I.**
 Final Hydrostatic Pressure _____ (H) **1436 P.S.I.**



DST #3



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: BTTY2-12DST3

TIME ON: **1925 (7/15)**
 TIME OFF: **0305 (7/16)**

Company **L.D. DRILLING, INC.** Lease & Well No. **BETTY #2-12**
 Contractor **SKYTOP DRILLING, LLC. RIG 1** Charge to **L.D. DRILLING, INC.**
 Elevation **1894 GL EST.** Formation **LANSING F/G** Effective Pay _____ Ft. Ticket No. **M675**
 Date **7/15/2014** Sec. **12** Twp. _____ 6 S Range _____ 18 W County **ROOKS** State **KANSAS**
 Test Approved By **LOGAN WALKER** Diamond Representative **MIKE COCHRAN**

Formation Test No. **3** Interval Tested from **3130 ft.** to **3200 ft.** Total Depth **3200 ft.**
 Packer Depth **3125 ft.** Size **6 3/4 in.** Packer depth **NA ft.** Size **6 3/4 in.**
 Packer Depth **3130 ft.** Size **6 3/4 in.** Packer depth **NA ft.** Size **6 3/4 in.**

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ 3117 ft. Recorder Number **0063** Cap. **6,000 P.S.I.**
 Bottom Recorder Depth (Outside) _____ 3132 ft. Recorder Number **E1150** Cap. **5,000 P.S.I.**
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type **CHEM** Viscosity **55** Drill Collar Length **143 ft.** I.D. **2 1/4 in.**
 Weight **9.2** Water Loss **6.0 cc.** Weight Pipe Length **0 ft.** I.D. **2 7/8 in.**
 Chlorides **1,000 P.P.M.** Drill Pipe Length **2960 ft.** I.D. **3 1/2 in.**
 Jars: Make **STERLING** Serial Number **SAFTEY JT** Test Tool Length **27 ft.** Tool Size **3 1/2-IF in.**
 Did Well Flow? **NO** Reversed Out **NO** Anchor Length **70 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.**

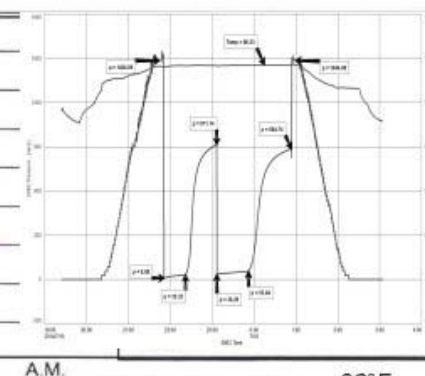
Blow: 1st Open: **WSB, INC. TO 2"** (NO BB)
 2nd Open: **VWSB, INC. TO 3"** (NO BB)

Recovered **30 ft.** of GIP GRAVITY: 33.4 @ 60"
 Recovered **33 ft.** of CO 100% OIL
 Recovered **77 ft.** of GOCM 10% GAS, 33% OIL, 57% MUD
 Recovered **110 ft.** of TOTAL FLUID
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: _____

TOOL SAMPLE: 2% GAS, 26% OIL, 72% MUD

Time Set Packer(s) **10:00 P.M.** A.M. P.M. Time Started Off Bottom **1:00 A.M.** A.M. P.M. Maximum Temperature **96°F**

Initial Hydrostatic Pressure _____ (A) **1484 P.S.I.**
 Initial Flow Period _____ Minutes **30** (B) **9 P.S.I. to (C)** **32 P.S.I.**
 Initial Closed In Period _____ Minutes **45** (D) **912 P.S.I.**
 Final Flow Period _____ Minutes **45** (E) **36 P.S.I. to (F)** **56 P.S.I.**
 Final Closed In Period _____ Minutes **60** (G) **885 P.S.I.**
 Final Hydrostatic Pressure _____ (H) **1484 P.S.I.**



DST #4



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: BTTY2-12DST4

TIME ON: **1925 (7/16)**
 TIME OFF: **0415 (7/17)**

Company **L.D. DRILLING, INC.** Lease & Well No. **BETTY #2-12**
 Contractor **SKYTOP DRILLING, LLC. RIG 1** Charge to **L.D. DRILLING, INC.**
 Elevation **1894 GL EST.** Formation **LANSING H,I,J,K,L** Effective Pay _____ Ft. Ticket No. **M676**
 Date **7/16/2014** Sec. **12** Twp. _____ 6 S Range _____ 18 W County **ROOKS** State **KANSAS**
 Test Approved By **LOGAN WALKER** Diamond Representative **MIKE COCHRAN**

Formation Test No. **4** Interval Tested from **3194 ft.** to **3304 ft.** Total Depth **3304 ft.**
 Packer Depth **3189 ft.** Size **6 3/4 in.** Packer depth **NA ft.** Size **6 3/4 in.**
 Packer Depth **3194 ft.** Size **6 3/4 in.** Packer depth **NA ft.** Size **6 3/4 in.**

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ 3181 ft. Recorder Number **0063** Cap. **6,000 P.S.I.**
 Bottom Recorder Depth (Outside) _____ 3196 ft. Recorder Number **E1150** Cap. **5,000 P.S.I.**
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type **CHEM** Viscosity _____ Drill Collar Length **143 ft.** I.D. **2 1/4 in.**
 Weight _____ Water Loss **7.6 cc.** Weight Pipe Length **0 ft.** I.D. **2 7/8 in.**
 Chlorides **1,000 P.P.M.** Drill Pipe Length **3024 ft.** I.D. **3 1/2 in.**
 Jars: Make **STERLING** Serial Number **SAFTEY JT** Test Tool Length **27 ft.** Tool Size **3 1/2-IF in.**
 Did Well Flow? **NO** Reversed Out **NO** Anchor Length **110 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.**

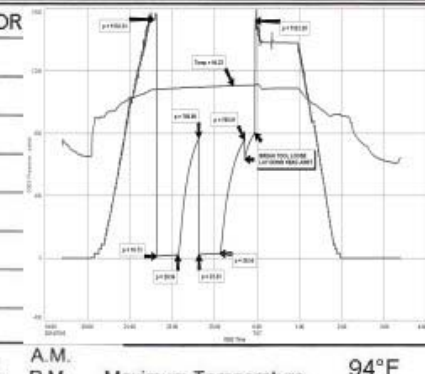
Blow: 1st Open: **WSB, INCREASE TO 1 1/4"** (NO BB)
 2nd Open: **VWSB, INCREASE TO 1/4"** (NO BB)

Recovered **25 ft.** of VSOSDM 100% MUD W/ A THIN SCUM OF OIL, SLIGHT ODOR
 Recovered **25 ft.** of TOTAL FLUID
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: _____

TOOL SAMPLE: 100% MUD W/ A VERY THIN SCUM OF OIL

Time Set Packer(s) **9:45 P.M.** A.M. P.M. Time Started Off Bottom **11:45 P.M.** A.M. P.M. Maximum Temperature **94°F**

Initial Hydrostatic Pressure _____ (A) **1532 P.S.I.**
 Initial Flow Period _____ Minutes **30** (B) **11 P.S.I. to (C)** **21 P.S.I.**
 Initial Closed In Period _____ Minutes **30** (D) **770 P.S.I.**
 Final Flow Period _____ Minutes **30** (E) **22 P.S.I. to (F)** **29 P.S.I.**
 Final Closed In Period _____ Minutes **30** (G) **761 P.S.I.**
 Final Hydrostatic Pressure _____ (H) **1522 P.S.I.**



ROCK TYPES

- Lmst fw<7
- shale, grn
- Carbon Sh
- Ss
- Lmst fw>7
- shale, gry
- shale, red

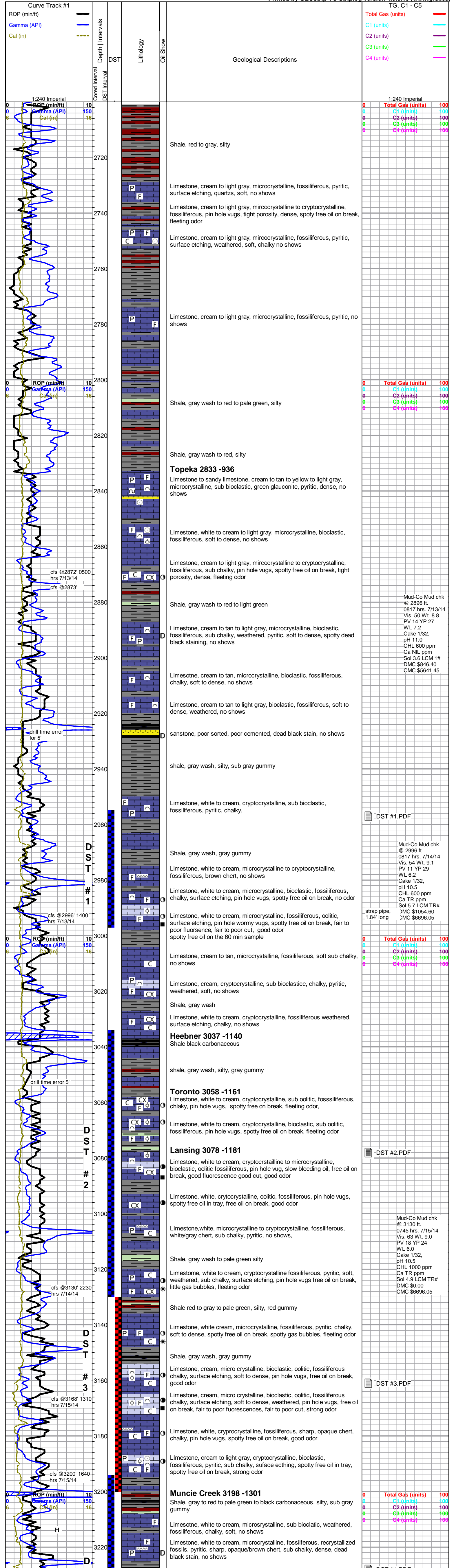
ACCESSORIES

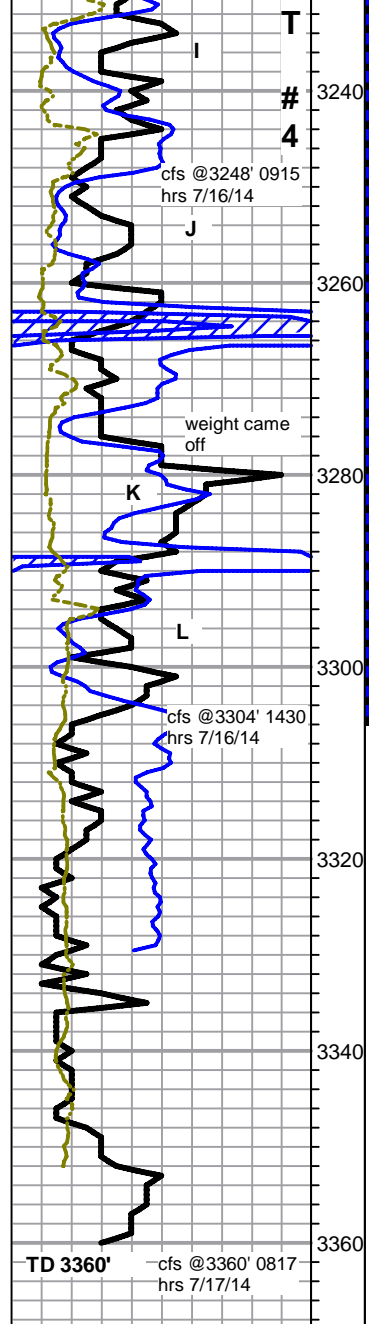
- MINERAL**
 n Glauconite
 P Pyrite
- FOSSIL**
 ^ Bioclastic or Fragmental
 Δ Brachiopod
 ○ Crinoids
 F Fossils < 20%
 φ Oolite
- STRINGER**
 ~~~ Chert
- TEXTURE**  
 C Chalky  
 CX Cryptocrystalline

**OTHER SYMBOLS**

- EVENTS**  
 J L Casing Shoe  
 ▽ RTF  
 ▴ Sidewall  
 ▲ Left Casing Shoe  
 ▼ Right Casing Shoe
- INTERVALS**  
 ■ Core  
 · DST
- MISC**  
 DR Daily Report  
 📷 Digital Photo  
 📄 Document
- Oil Show**  
 ● Good Show  
 ○ Fair Show  
 ○ Poor Show  
 ○ Spotted or Trace  
 ○ Questionable Stn  
 D Dead Oil Stn
- DST**  
 ■ DST Int  
 ● DST alt  
 ■ Core  
 ▮ tail pipe

Folder  
 Link  
 Vertical Log File  
 Horizontal Log File  
 Core Log File  
 Drill Cuttings Rpt  
 Fluorescence  
 Gas





Shale, gray wash, silty

Limestone, white, cryptocrystalline, sub bioclastic, fossiliferous, chalky, soft to dense, surface etching, pyritic, pin hole vugs, free oil on break, fair to poor fluorescence, fair to poor cut, good odor

Shale, gray wash to red to pale green, silty,

Limestone, cream, cryptocrystalline, fossiliferous, chalky, surface etching, pyritic, soft, sharp, pin hole wormy vugs, dead black stain, trace free oil on break, fleeting odor

**STARK 3264 -1367**

Shale, gray wash, black carbonaceous

Limestone, cream to light gray to gray, microcrystalline to cryptocrystalline, bioclastic, fossiliferous, pin hole vugs, pyritic, sub chalky, dense, spotty free oil on break, fleeting odor,

Limestone, white to cream to light gray, microcrystalline, sub bioclastic fossiliferous, pyritic, soft, glauconite, sub oolitic, no shows

**BKC 3303 -1406**

Shale, gray wash to red to pale green to black carbonaceous, silty gray gummy

Limestone, cream to light gray, microcrystalline, fossiliferous, pyritic, dense, pyritic, glauconite, no shows

Shale, red wash to gray to pale green, silty, red gummy

Limestone, tan to light gray to gray, microcrystalline, fossiliferous, dense, sub chalky sharp no shows

Shale, red wash to gray to pale green, silty, red gummy

Limestone, white to cream, microcrystalline, sub bioclastic, fossiliferous, chalky, weathered, soft, no shows

**TD 3360' -1463**

|                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mud-Co Mud chk @ 3244 ft.<br>0850 hrs. 7/16/14<br>Vis. 47 Wt. 9.1<br>PV 16 YP 28<br>WL 7.6<br>Cake 1/32,<br>pH 10.5<br>CHL 1000 ppm<br>Ca TR ppm<br>Sol 5.7 LCM TR#<br>DMC \$276.00<br>CMC \$6972.05 |
| Mud-Co Mud chk @ 3360 ft.<br>0930 hrs. 7/17/14<br>Vis. 53 Wt. 9.2<br>PV 14 YP 27<br>WL 7.8<br>Cake 1/32,<br>pH 10.0<br>CHL 1100 ppm<br>Ca 20 ppm<br>Sol 6.4 LCM TR#<br>DMC \$164.25<br>CMC \$7136.30 |