



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1295063  
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: \_\_\_\_\_

1295063

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	DOWD 1-15
Doc ID	1295063

Tops

Name	Top	Datum
ANHYDRITE	2052	+632
BASE ANHYDRITE	2081	+603
STOTLER	3522	-838
HEEBNER	3947	-1263
LANSING	3990	-1306
HUSH PUCKNEY	4286	-1602
MARMATON	4353	-1669
FORT SCOTT	4504	-1820
CHEROKEE	4526	-1842
MISSISSIPPI	4616	-1932





# BASIC

energy services, L.P.

## TREATMENT REPORT

Customer <i>L.O. Drilling</i>	Lease No.	Date <i>01-31-16</i>
Lease <i>DOWN</i>	Well # <i>1-15</i>	
Field Order # <i>12927</i>	Station <i>PRA-H</i>	Casing <i>8 5/8</i>
		Depth <i>305'</i>
Type Job <i>CNW 8 5/8 surface</i>	Formation	Legal Description <i>15-18-27</i>
		County <i>LANE</i>
		State <i>KS</i>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <i>8 5/8</i>	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
Depth <i>305</i>	Depth	From	To	Pre Pad	Max		5 Min.	
Volume <i>17 1/2</i>	Volume	From	To	Pad	Min		10 Min.	
Max Press <i>300</i>	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth <i>279</i>	Packer Depth	From	To	Flush	Gas Volume		Total Load	

Customer Representative	Station Manager <i>DAVE SCOTT</i>	Treater <i>Robert Jullian</i>
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Service Units	<i>37900</i>	<i>84981</i>	<i>19843</i>	<i>18826</i>	<i>19918</i>				
Driver Names	<i>Sullivan</i>	<i>Metcalf</i>	<i>BARBER</i>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>7:00 pm</i>					<i>on loc</i>
					<i>Run 8 5/8 csg.</i>
<i>11:45</i>					<i>CRIND on Bottom</i>
<i>11:50</i>					<i>Hook by circ csg.</i>
<i>12:00</i>			<i>3</i>	<i>4.5</i>	<i>ST SPACER</i>
			<i>64</i>		<i>mix cmt 300 sk Com. 2% gel 3% cc</i>
					<i>cmt mix-e</i>
					<i>ST Disp</i>
<i>12:30</i>			<i>17<sup>kg</sup></i>		<i>plug down</i>
					<i>1 circ. 10 BOC cmt Pit</i>
					<i>JOB Complete</i>
					<i>Thank you</i>



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET  
1718 13278 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB: <u>2/9/16</u>	DISTRICT	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: <u>LD Drilling, Inc</u>	LEASE: <u>Dowd</u>	1-15		WELL NO.						
ADDRESS	COUNTY: <u>Lane</u>	STATE: <u>KS</u>								
CITY	STATE	SERVICE CREW: <u>Scott, Bailey, Adams, Daryl</u>								
AUTHORIZED BY: <u>L.D. Davis</u>	JOB TYPE: <u>2 stage 5 1/2 long string cnc</u>									
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
<u>20920</u>	<u>2</u>					ARRIVED AT JOB	<u>2/9/16</u>			<u>11:45</u>
<u>21010</u>	<u>5</u>					START OPERATION	<u>2/9/16</u>			<u>3:40</u>
<u>19862</u>	<u>.25</u>					FINISH OPERATION	<u>2/9/16</u>			<u>5:30</u>
						RELEASED	<u>2/9/16</u>			<u>6:30</u>
						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 LD DAVIS BY: KEVIN GORDLEY  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP105	AA2 Cement	SK	150		2550.00
CP101	A-con Blend Common	SK	300		5400.00
CP103	60/40 POZ	SK	30		360.00
CC102	Celloflabe	lb	115		418.10
CC109	Calcium chloride	lb	846		888.30
CC111	Salt	lb	816		408.00
CC113	Gypsum	lb	705		528.75
CC129	FIA-322	lb	113		847.50
CC201	Gilsonite	lb	900		603.00
CF451	Two stage cement collar 5 1/2	Ea	1		4500.00
CF1251	Auto fill float sleeve 5 1/2	Ea	1		360.00
CF1651	Turbolizers 5 1/2	Ea	7		770.00
LF1901	5 1/2 Bucket	Ea	2		580.00
CC151	Mud flush	Gal	1000		1500.00
E100	Unit Mileage Pickup	Mi	100		450.00
E101	Heavy equipment Mileage	Mi	300		2250.00
E113	Prop + Bulk Delivery	TM	2245		5612.50
CE205	Depth Charge 4000-5000'	4'	1		2520.00
CE246	Blending + Mixing Charge	SK	480		672.00
SUB TOTAL					

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		<u>169</u>

SERVICE REPRESENTATIVE: [Signature] THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: LD DAVIS BY: KEVIN GORDLEY  
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO. \_\_\_\_\_





Customer <i>L.D. Davis</i>	Lease No.	Date <i>2/9/16</i>	
Lease <i>Dowd #1</i>	Well # <i>1-15</i>		
Field Order # <i>13728</i>	Station <i>Pratt, KS</i>	Casing <i>5 1/2</i>	Depth <i>4690</i>
Type Job <i>7 stage 5 1/2 Long String CNA</i>	Formation	County <i>Lane</i>	State <i>KS</i>
		Legal Description <i>15-18-27</i>	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
<i>5 1/2</i>							
Depth <i>4690</i>	Depth	From	To	Pre Pad	Max		5 Min.
Volume <i>174</i>	Volume	From	To	Pad	Min		10 Min.
Max Press <i>2000</i>	Max Press	From	To	Frac	Avg		15 Min.
Well Connection <i>5 1/2</i>	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative	Station Manager <i>Kevin Goodley</i>	Treater <i>Scott Graves</i>
Service Units <i>20757</i>	<i>33105</i>	<i>14959</i>
Driver Names <i>Scott Bailey</i>	<i>20920</i>	<i>21010</i>
	<i>19460</i>	<i>19867</i>
	<i>Daryl Adam</i>	

Time	Casing Pressure	Tubing Pressure	Bbbs. Pumped	Rate	Service Log
<i>11:45</i>					<i>On location Safety Meeting Rig up</i>
					<i>Tools on - 4, 5, 5, 7, 9, 11, 13</i>
					<i>Baskets - 1, 62 DV Tool - 62</i>
<i>1:30</i>					<i>Break Circulation</i>
<i>3:40</i>	<i>100</i>			<i>4</i>	<i>Pump H<sub>2</sub>O Spacer</i>
<i>3:41</i>	<i>250</i>		<i>5</i>	<i>4.4</i>	<i>Pump mud Flush</i>
<i>3:47</i>	<i>300</i>		<i>24</i>	<i>5.5</i>	<i>Pump H<sub>2</sub>O Spacer</i>
<i>3:48</i>	<i>350</i>		<i>5</i>	<i>5.6</i>	<i>Mix. 150 gals AAZ at 14.8 ppq</i>
<i>3:56</i>	<i>0</i>		<i>41.25</i>		<i>shut down</i>
					<i>wash pump + lines clean</i>
<i>4:00</i>	<i>0</i>			<i>5.7</i>	<i>Release plug start Displacement</i>
<i>4:13</i>	<i>350</i>		<i>70</i>	<i>5.6</i>	<i>start Displacement w/ mud</i>
<i>4:19</i>	<i>400</i>		<i>34</i>	<i>3.2</i>	<i>Reduce Rate</i>
<i>4:23</i>	<i>600</i>		<i>10.4</i>	<i>3.1</i>	<i>Plug landed</i>
<i>4:24</i>	<i>1200</i>				<i>Increase pressure</i>
<i>4:24</i>					<i>shut down</i>
<i>4:25</i>					<i>Release pressure NO Returns</i>
<i>4:30</i>					<i>Drop Part</i>
<i>4:45</i>	<i>1500</i>				<i>pressure up open DV Tool</i>

Customer <i>L.D. Dooling Inc</i>	Lease No.	Date <i>2/19/16</i>
Lease <i>Dowd</i>	Well # <i>1-15</i>	
Field Order # <i>13278</i>	Station <i>Pratt, KS</i>	Casing <i>5/2</i>
Type Job <i>2 stage long string CNW</i>	Depth <i>4690</i>	County <i>Lane</i>
	Formation	State <i>KS</i>
		Legal Description <i>15-18-27</i>

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 <i>Kevin Gordley</i>	Treater <i>Scott Growes</i>
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Service Units	<i>20752</i>	<i>23706</i>	<i>14959</i>	<i>14960</i>					
Driver Names	<i>Scott</i>	<i>Berley</i>	<i>Daryl</i>	<i>Adam</i>					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>4:45</i>					<i>Break Circulation Top Stage</i>
<i>4:50</i>	<i>100</i>			<i>4.5</i>	<i>Pump H<sub>2</sub>O space</i>
<i>4:52</i>	<i>100</i>			<i>5.6</i>	<i>Mix 300 SKS A-Con at 11.6</i>
<i>5:14</i>	<i>0</i>		<i>124</i>		<i>Shut down</i>
<i>5:15</i>					<i>Wash pump &amp; lines clean</i>
<i>5:16</i>					<i>Release D.V. Close plug</i>
<i>5:16</i>	<i>50</i>			<i>5.7</i>	<i>Start Displacement</i>
<i>5:23</i>	<i>300</i>		<i>41</i>	<i>3.5</i>	<i>Reduce Rate</i>
<i>5:26</i>	<i>350</i>		<i>10</i>	<i>3.5</i>	<i>Plug landed</i>
<i>5:27</i>	<i>1200</i>				<i>Tool Closed</i>
<i>5:27</i>					<i>Release Pressure NO Returns</i>
<i>5:30</i>					<i>Plug Rod Hole 30 SKS 60/40 for</i>
					<i>Job Complete</i>
					<i>Trace of Cement at</i>
					<i>Surface. Jetted Cellar</i>
					<i>Cement in cellar.</i>

# L. D. DRILLING, INC.

7 SW 26th Avenue

GREAT BEND, KS 67530

Customer L.D. Dr/g INC Order \_\_\_\_\_

Lease DOWD # 1-15 Date \_\_\_\_\_

Description of Pipe New 5 1/2"

Tally on Back →

Amount \_\_\_\_\_

Jts.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.
1	12	30	43	21	42	65	43	25		
2	42	97	43	22	41	45	42	84		
3	41	11	41	54	40	44	42	93		
4	43	22	43	21	40	42	42	90		
5	43	19	43	30	42	91	43	22		
6	43	22	42	74	42	92	41	75		
7	42	58	41	10	35	79	37	33	out	
8	43	19	43	20	32	21	43	97		
9	43	23	38	03	43	22	42	82		
10	43	20	42	68	43	19	42	58		
11	43	21	41	52	42	85	43	00		
12	43	19	43	21	42	84	41	27		
13	43	39	43	18	43	20	39	24	out	
14	43	22	43	19	41	73	43	20		
15	38	46	41	09	42	41	42	62		
16	43	20	42	70	42	33	43	33		
17	43	19	36	44	43	21	40	43		
18	43	16	43	22	42	90	42	62		
19	43	21	43	16	41	62	40	03		
20	42	75	42	68	42	64	42	88		
21	43	17	43	21	41	80	41	66		
22	43	21	43	20	42	27	42	88		
23	43	12	42	93	39	61	42	88		
24	40	59	42	67	43	18	43	22	out	
25	43	16	42	93	42	98	12	15		
26	43	20	42	92	41	34				
27	42	86	42	94	41	79				
28	42	71	42	90	42	90				
29	43	16	42	96	41	81				
30	43	17	42	95	42	85				
Total	1253	54	1272	23	1251	46	1025	-		

TOTAL PIECES 115 LENGTH \_\_\_\_\_ FEET 4802 INCHES 23

RECEIVED BY \_\_\_\_\_ TALLIED BY \_\_\_\_\_

T.D 4704

4802.23  
- 43.22 1 out Jt 114  
4759.01  
- 39.24 2 out Jt 103  
4719.77  
- 37.33 3 out Jt 97  
4682.44  
+ 3.00 D.V. Tool  
4685.44  
+ 5. - landing Jt  
set asj @ 4690.44

D.V. Tool @ 2080.57 Top Jt 62#

# KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 \* WICHITA, KS

## GEOLOGIST'S REPORT

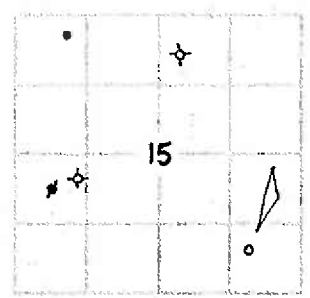
DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.  
 LEASE # 1-16 DOWD  
 FIELD WILDCAT  
 LOCATION 795' FSL.  $\frac{1}{2}$  1050' FEL  
 SEC 15 TWP 18S RGE 27W  
 COUNTY LANE STATE KANSAS  
 CONTRACTOR L. D. DRILLING, INC.  
 SPUD 1-30-16 COMP 2-9-16  
 RTD 4704 LTD 4706  
 MUD UP 3342 TYPE MUD CHEMICAL

ELEVATIONS  
 KB 2684  
 DF \_\_\_\_\_  
 GL 2679  
 Measurements Are All  
 From 2684 KB  
 CASING  
 SURFACE 8 5/8" @ 305'  
 PRODUCTION 5 1/2" @  
 ELECTRICAL SURVEYS  
 DUAL IND, DEN-S, MICRO

SAMPLES SAVED FROM \_\_\_\_\_ 3500 TO 4704  
 DRILLING TIME KEPT FROM \_\_\_\_\_ 3400 TO 4704  
 SAMPLES EXAMINED FROM \_\_\_\_\_ 3500 TO 4704  
 GEOLOGICAL SUPERVISION FROM \_\_\_\_\_ 3900 TO 4704  
 GEOLOGIST ON WELL KIM B. SHOEMAKER

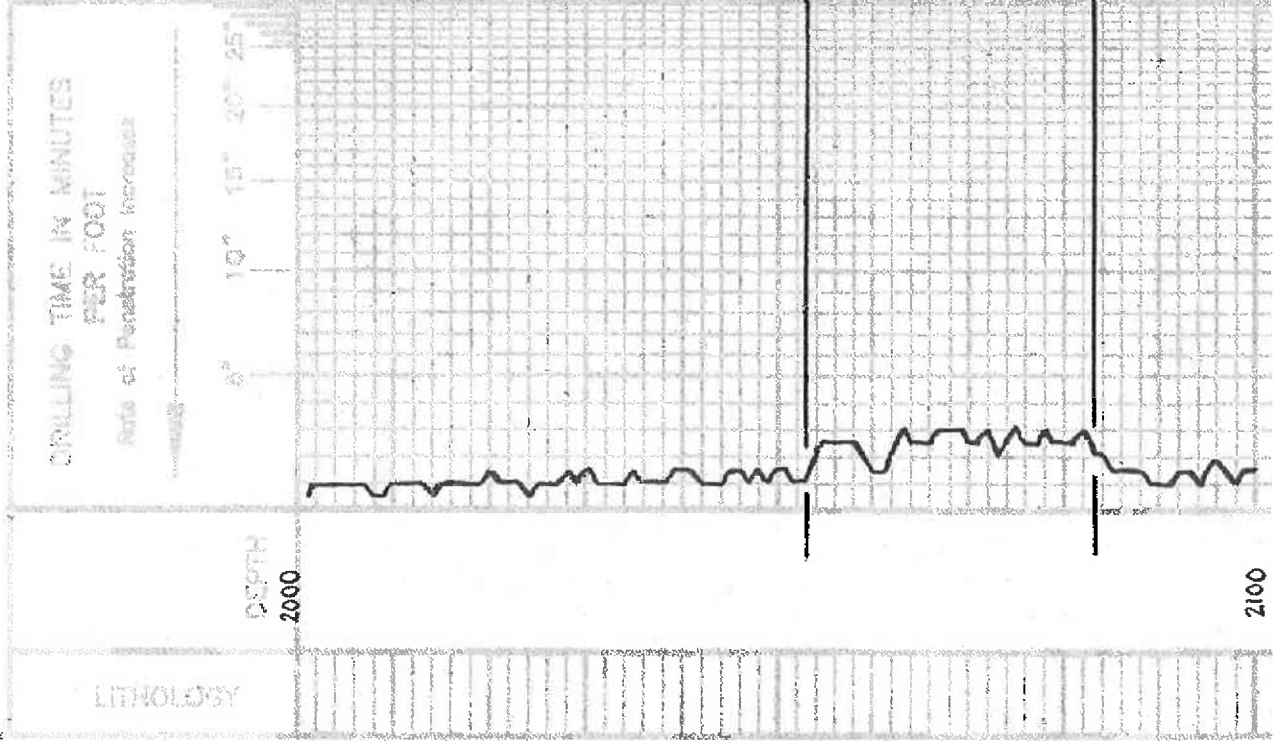
FORMATION TOPS	LOG	SAMPLES
ANNYDRITE	2052+632	2053+631
BI ANN.	2081+603	2083+601
STOTLER	3522-838	3526-842
HEEBNER	3947-1263	3947-1263
LANGING	3990-1306	3985-1301
HUSH PUCKNEY	4286-1602	4285-1601
MARMADON	4353-1669	4351-1667
FORT SCOT	4504-1820	4502-1818
CHEROKEE	4526-1842	4527-1843
MISSISSIPPI	4616-1932	4617-1933



REMARKS  
 API: 15-101-22578  
 1-30-16 SPUD  
 1-31 @ 308'  
 2-1 @ 1628'  
 2-2 @ 2675'  
 2-3 @ 3183'  
 2-4 @ 3670'  
 2-5 @ 4175'  
 2-6 @ 4305'  
 2-7 @ 4490'  
 2-8 @ 4585'  
 2-9 @ 4704'

### LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Sand sh
- Limestone
- Cell Lime
- Chert
- Dolomite



SAMPLE DESCRIPTIONS

REMARKS

ANNYDRITE 2053+631

BI ANN. 2083+601



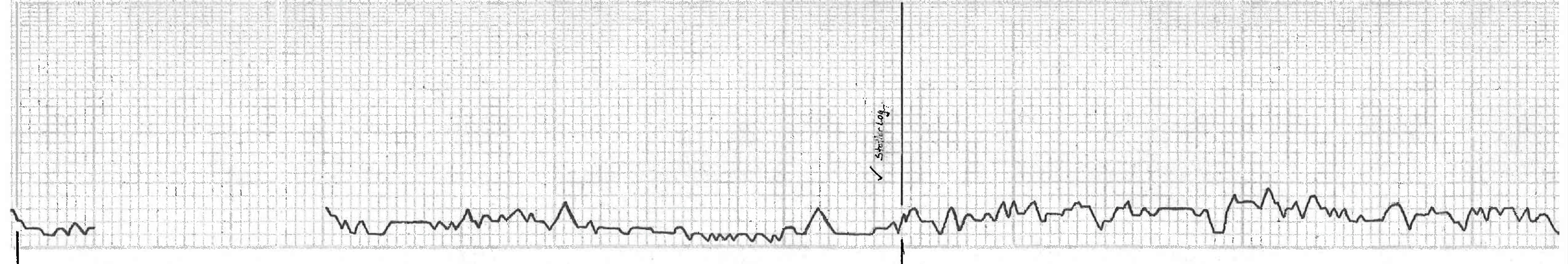
BLANK 2083+001

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3600



Samples are logged

shy sd. sh. sh  
sd. Mica Elsie Bl.

STOTLER 3526-842

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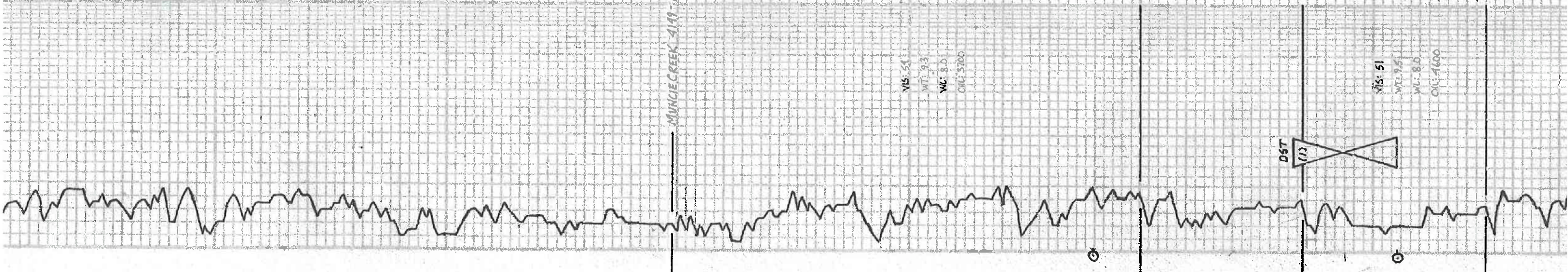




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DST (1) 4283-4305  
 150 DEN: Blow built to 6"  
 200 DEN: " " " 8"  
 30. 15-45-60  
 Rec. 370. SLP.  
 1. CO 370.600 @ 60°  
 139' SMW w/ oil spks  
 TP: 140' (88' w/ 12' MM)  
 CR: 46,000  
 DR: 70  
 RW: 20 @ 55°  
 Temp. 119° F  
 Total Sample: 99' w/ 17' Metal Forward spks

4285-1601  
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ON - HAVE TO ONLY

**MARMATON 4357-1627**

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Sh. G. Silty

Sh. R. Silty

LS. Tan. Silty. MS. Foss.

Sh. G. Blue

LS. Tan. Silty. Silty

Sh. G. Silty

LS. Tan. Silty

LS. Tan. Silty. Calcitic

Sh. G.

LS. Tan. Silty. Foss. Silty. Silty. Foss. No. 066

LS. Tan. Silty. Silty

Sh. G. Blue

DKG

LS. Tan. Silty. Silty

LS. G. Silty

Sh. G. Blue

Sh. Blue calc.

**FORT SCOT 4502-1818**

LS. Tan. Silty. Silty

Sh. DKG

LS. Tan. Silty. Silty. Silty. Foss. No. 066

Sh. G. Blue

Sh. Blue calc.

LS. Tan. Silty

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**MISSISSIPPI 4617-1933**

LS. Tan. Silty. Silty

No. 066. Silty. Silty

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DST (2)



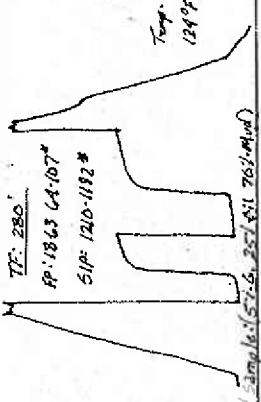
Vis: 5.3  
WT: 9.4  
WL: 10.4  
CML: 3900

BIT TRIP  
@ 4590  
Vis: 4.6  
WT: 9.5  
WL: 8.0  
CML: 3900

DST (2) 4923-4547  
1500ft. Bottom bucket 3 1/2 min. 88.1"  
2400ft. " " 2 1/2 " 88.8"  
30.45-45-60

Rec. 3220' G.I.P.  
185' G.O. (216.98707) 39 Sample 009  
28' 50624 (227.641016414)

TF: 280  
RP: 1863 64-107  
SP: 120-1182 \*



Tool Sample: 57-5, 257, 511, 703, 1100



25. B.G. Base Calcutta

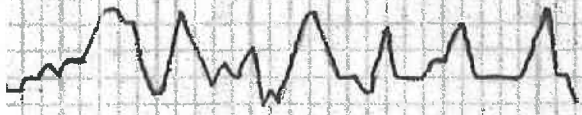
Dol. G. V. Fach. Sit. Fass. w. DE G. Fach.

Dol. G. V. Fach. Sit. Fass. w. DE G. Fach.

Dol. G. V. Fach. Sit. Fass. w. DE G. Fach.

4700

RTD 9704-2020





**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: 1-15DWDDST2

TIME ON: 1525  
TIME OFF: 2350

Company L.D. DRILLING, INC. Lease & Well No. #1-15 DOWD  
Contractor L.D.DRILLING,INC.RIG 1 Charge to L.D. DRILLING, INC.  
Elevation 2684 KB Formation ALTAMONT/FT.SCOTT/CHEROKEE Effective Pay \_\_\_\_\_ Ft. Ticket No. M817  
Date 2/7/2016 Sec. 15 Twp. \_\_\_\_\_ 18 S Range \_\_\_\_\_ 27 W County LANE State KANSAS  
Test Approved By KIM SHOEMAKER Diamond Representative MIKE COCHRAN

Formation Test No. 2 Interval Tested from 4423 ft. to 4547 ft. Total Depth 4547 ft.

Packer Depth 4418 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4423 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4405 ft. Recorder Number 5448 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4425 ft. Recorder Number 0063 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth 4544 ft. Recorder Number 6884 Cap. 6,275 P.S.I.

Mud Type CHEM Viscosity 53 Drill Collar Length 0 ft. I.D. 2 1/4 in.

Weight 9.4 Water Loss 10.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3,900 P.P.M. Drill Pipe Length 4391 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 124 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. (95'DP) Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: SSB 1" RIGHT AWAY, BOB 3 1/2 MIN (1"BB)

2nd Open: SSB 3" RIGHT AWAY, BOB 2 1/2 MIN (4"BB)

Recovered 3220 ft. of GIP

Recovered 185 ft. of GO 2% GAS, 98% OIL GRAVITY: 39.0 @ 60°

Recovered 95 ft. of OSGM 32% GAS, 4% OIL, 64% MUD

Recovered 280 ft. of TOTAL FLUID

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_ Price Job

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_ Other Charges

Remarks: \_\_\_\_\_ Insurance

TOOL SAMPLE: 5% GAS, 25% OIL, 70% MUD Total

Time Set Packer(s) 6:00 P.M. A.M. P.M. Time Started Off Bottom 9:00 P.M. A.M. P.M. Maximum Temperature 124°F

Initial Hydrostatic Pressure..... (A) 2185 P.S.I.

Initial Flow Period..... Minutes 30 (B) 18 P.S.I. to (C) 63 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 1210 P.S.I.

Final Flow Period..... Minutes 45 (E) 64 P.S.I. to (F) 107 P.S.I.

Final Closed In Period..... Minutes 60 (G) 1192 P.S.I.

Final Hydrostatic Pressure..... (H) 2158 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	M817
Well Name	#1-15 DOWD	Representative	MIKE COCHRAN
Unique Well ID	DST#2 4423-4547 ALTAMONT/FT.SCOTT/CHEROKEE	Well Operator	RAYMOND OIL COMPANY, INC.
Surface Location	SEC.15-18S-27W LANE CO.KS.	Report Date	2016/02/07
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	KIM SHOEMAKER
		Test Unit	NO. 3

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#2 4423-4547 ALTAMONT/FT.SCOTT/CHEROKEE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2016/02/07	Start Test Time	15:25:00
Final Test Date	2016/02/07	Final Test Time	23:50:00
		Well Fluid Type	01 Oil
Gauge Name	5448		
Gauge Serial Number			

### Test Results

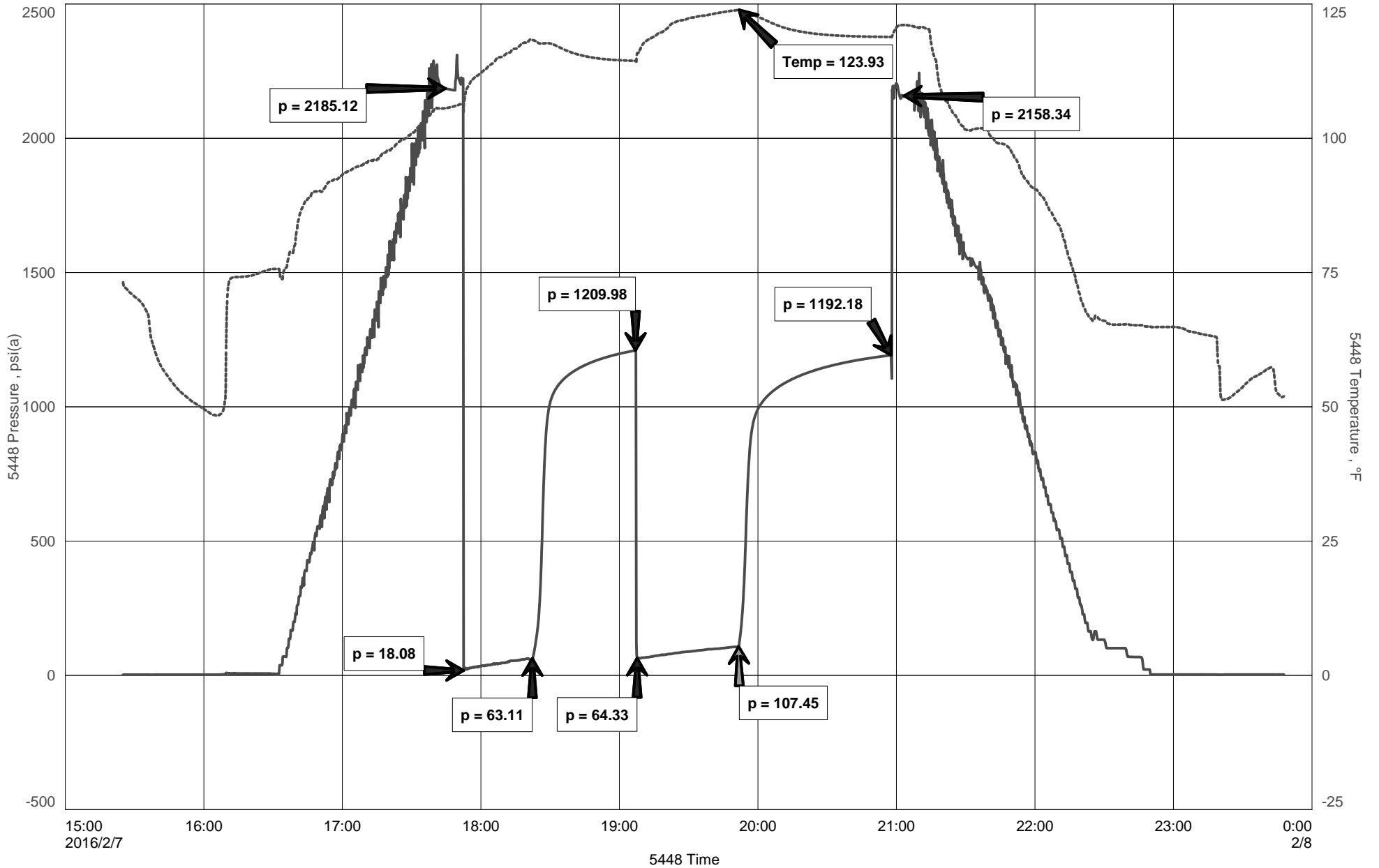
Remarks RECOVERED:

3220' GIP  
185' GO 2% GAS, 98% OIL  
95' OSGM 32% GAS, 4% OIL, 64% MUD  
280' TOTAL FLUID

GRAVITY: 39.0 @ 60 DEG

TOOL SAMPLE: 5% GAS, 25% OIL, 70% MUD

# #1-15 DOWD







**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: 1-15DWDDST1

TIME ON: 0605  
TIME OFF: 1515

Company L.D. DRILLING, INC. Lease & Well No. #1-15 DOWD  
Contractor L.D.DRILLING,INC.RIG 1 Charge to L.D. DRILLING, INC.  
Elevation 2684 KB Formation L/KC 220' ZONE Effective Pay \_\_\_\_\_ Ft. Ticket No. M816  
Date 2/6/2016 Sec. 15 Twp. \_\_\_\_\_ 18 S Range \_\_\_\_\_ 27 W County LANE State KANSAS  
Test Approved By KIM SHOEMAKER Diamond Representative MIKE COCHRAN

Formation Test No. 1 Interval Tested from 4283 ft. to 4305 ft. Total Depth 4305 ft.  
Packer Depth 4278 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
Packer Depth 4283 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 4265 ft. Recorder Number 5448 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 4285 ft. Recorder Number 0063 Cap. 5,000 P.S.I.  
Below Straddle Recorder Depth 4302 ft. Recorder Number 6884 Cap. 6,275 P.S.I.

Mud Type CHEM Viscosity 53 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
Weight 9.3 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 3,700 P.P.M. Drill Pipe Length 4251 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number 3 Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? NO Reversed Out NO Anchor Length 22 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 6" (NO BB)  
2nd Open: VWSB, INCREASE TO 8 (NO BB)

Recovered <u>370</u> ft. of <u>GIP</u>	
Recovered <u>~1</u> ft. of <u>CO 100% OIL</u>	GRAVITY: 37.9 @ 60°
Recovered <u>139</u> ft. of <u>VSOSMW 88% WTR, 12% MUD W/ A FEW SPECKS OF OIL</u>	
Recovered <u>140</u> ft. of <u>TOTAL FLUID</u>	
Recovered _____ ft. of <u>CHLOR: 46,000 PPM</u>	Price Job
Recovered _____ ft. of <u>RW: .29 @ 59 DEG</u>	Other Charges
Remarks: <u>PH: 7.0</u>	Insurance
<u>TOOL SAMPLE: 99% WTR, 1% MUD W/ A FEW SPECKS OF OIL</u>	Total

Time Set Packer(s) 10:00 A.M. A.M. P.M. Time Started Off Bottom 1:00 P.M. A.M. P.M. Maximum Temperature 119°F  
Initial Hydrostatic Pressure..... (A) 2102 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 13 P.S.I. to (C) 42 P.S.I.  
Initial Closed In Period..... Minutes 45 (D) 1012 P.S.I.  
Final Flow Period..... Minutes 45 (E) 43 P.S.I. to (F) 80 P.S.I.  
Final Closed In Period..... Minutes 60 (G) 997 P.S.I.  
Final Hydrostatic Pressure..... (H) 2054 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	M816
Well Name	#1-15 DOWD	Representative	MIKE COCHRAN
Unique Well ID	DST#1 4283-4305 L/KC 220' ZONE	Well Operator	RAYMOND OIL COMPANY, INC.
Surface Location	SEC.15-18S-27W LANE CO.KS.	Report Date	2016/02/06
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	KIM SHOEMAKER
		Test Unit	NO. 3

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#1 4283-4305 L/KC 220' ZONE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2016/02/06	Start Test Time	06:05:00
Final Test Date	2016/02/06	Final Test Time	15:15:00
		Well Fluid Type	01 Oil
Gauge Name	5448		
Gauge Serial Number			

### Test Results

Remarks RECOVERED:  
370' GIP  
~1' CO 100% OIL  
139' VSOSMW 88% WTR, 12% MUD W/ A FEW SPECKS OF OIL  
140' TOTAL FLUID

GRAVITY: 37.9 @ 60 DEG

CHLOR: 46,000 PPM  
PH:7.0  
RW: .29 @ 59 DEG

TOOL SAMPLE: 99% WTR, 1% MUD W/ A FEW SPECKS OF OIL

# #1-15 DOWD

