



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1172287  
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: \_\_\_\_\_



1172287

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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<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> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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A.P.I. # 15-065-23968-00-00

**GEOLOGICAL REPORT**  
 DRILLING TIME AND SAMPLE LOG

COMPANY R.L. Investment, L.L.C.  
 LEASE Hanna #1-18  
 FIELD Gurk  
 LOCATION 653' ENL + 335' EFL  
 SEC 18 TWSP 10S RGE 25W  
 COUNTY Graham STATE Kansas

ELEVATION  
 KB 2532'  
 DF 2530'  
 GL 2524'  
 Depths Measured From  
 Log KB Drilling KB

CONTRACTOR W.W. Drilling Rig #12  
 SPUD 8-20-13 COMP 8-27-13  
 SAMPLES SAVED FROM 3500' TO R.T.D.

CASING  
 Surface 8 5/8" @ 219'  
 Production 5 1/2"

ELECTRIC LOGS  
Nabors

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM	A	B	C	D
			<u>E. log</u>				
<u>Anhydrite</u>	<u>2152</u>	<u>2152</u>	<u>+ 380</u>	<u>+ 382</u>	<u>+ 391</u>		
<u>Base Anhydrite</u>	<u>2184</u>	<u>2184</u>	<u>+ 348</u>	<u>+ 345</u>	<u>+ 352</u>		
<u>Topeka</u>	<u>3537</u>	<u>3537</u>	<u>-1005</u>	<u>-1004</u>	<u>-1002</u>		
<u>Heebner</u>	<u>3753</u>	<u>3753</u>	<u>-1221</u>	<u>-1218</u>	<u>-1217</u>		
<u>Toronto</u>	<u>3775</u>	<u>3775</u>	<u>-1243</u>	<u>-1239</u>	<u>-1240</u>		
<u>Lansing</u>	<u>3791</u>	<u>3791</u>	<u>-1259</u>	<u>-1256</u>	<u>-1256</u>		
<u>Base Kansas City</u>	<u>4026</u>	<u>4026</u>	<u>-1494</u>	<u>-1493</u>	<u>-1492</u>		
<u>Total Depth</u>	<u>4075</u>	<u>4075</u>	<u>-1543</u>	<u>-1547</u>	<u>-1823</u>		

REFERENCE WELLS

- A R.L. Investment, LLC, Bollig 'A' #1, 1304' ENL + 1000' EWL Sec. 17-10S-25W
- B American Eneriges Corp; Bollig #1, NW-SW-NW Sec. 17-10S-25W
- C
- D



REMARKS

This well ran 3 feet lower on the casing top than the reference wells. After evaluating pertinent information it was decided production casing would be cemented to further test the well. The zones from 3869'-3872', 3829'-3831' and 3820'-3823' should be tested.

Richard B. Bell  
8-27-13

7502

LEGEND

- 

Anhydrite
- 

Salt
- 

Sandstone
- 

Shale
- 


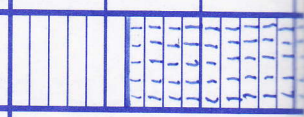
Carb sh
- 

Limestone
- 

Ool. Lime
- 

Chert
- 

Dolomite

DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases	DEPTH	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
	<p>2140</p> <p>60</p>			

LOG 7710

# SCHIPPER'S OIL FIELD SERVICES, L.L.C.

1000

REMIT TO 18048 170RD  
RUSSELL, KS 67665

SERVICE POINT:  
Russell MS - 1000

DATE <u>8-20-13</u>	SEC. <u>10</u>	TWP. <u>10N</u>	RANGE <u>25E</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>1000</u>	WELL #. <u>118</u>	LOCATION <u>St Peter MS SW S 20</u>			COUNTY	STATE	
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR W.D. King

TYPE OF JOB Cementing

HOLE SIZE 11 7/8" T.D.

CASING SIZE 9 5/8" DEPTH 10.33

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX 2000 MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 200

PERFS

DISPLACEMENT

OWNER

CEMENT AMOUNT ORDERED 1753 cu ft 3/4" @ 2.49 gal

EQUIPMENT

PUMP TRUCK CEMENTER 11 7/8"

# 11 HELPER 11 7/8"

BULK TRUCK DRIVER 11 7/8"

# 11 DRIVER

COMMON @

POZMIX @

GEL @

CHLORIDE @

ASC @

HANDLING @

MILEAGE @

TOTAL

REMARKS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CHARGE TO: \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

DEPTH OF JOB \_\_\_\_\_

PUMP TRUCK CHARGE \_\_\_\_\_

EXTRA FOOTAGE @ \_\_\_\_\_

MILEAGE @ \_\_\_\_\_

MANIFOLD @ \_\_\_\_\_

TOTAL \_\_\_\_\_

Schippers Oil Field Services, L.L.C.,  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT

@ \_\_\_\_\_

@ \_\_\_\_\_

@ \_\_\_\_\_

@ \_\_\_\_\_

TOTAL \_\_\_\_\_

PRINTED NAME \_\_\_\_\_

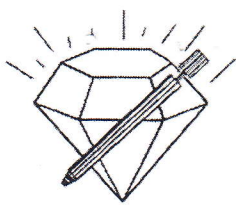
SIGNATURE \_\_\_\_\_

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
HANNA1-18DST1

Company R. L. Investment, LLC Lease & Well No. Hanna No. 1-18  
Elevation 2532 KB Formation Lansing/Kansas City "C" Effective Pay \_\_\_\_\_ Ft. Ticket No. T249  
Date 8-24-13 Sec. 18 Twp. 10S Range 25W County Graham State Kansas  
Test Approved By Richard B. Bell Diamond Representative Tim Venters

Formation Test No. 1 Interval Tested from 3,810 ft. to 3,826 ft. Total Depth 3,826 ft.  
Packer Depth 3,805 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,810 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,798 ft. Recorder Number 8457 Cap. 10,000 psi.  
Bottom Recorder Depth (Outside) 3,823 ft. Recorder Number 11030 Cap. 5,025 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor WW Drilling, LLC - Rig 12 Drill Collar Length 120 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 54 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.2 Water Loss 7.6 cc. Drill Pipe Length 3,664 ft I.D. 3 1/2 in.  
Chlorides 2,300 P.P.M. Test Tool Length 26 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 16 ft. Size 4 1/2-FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Weak, surface blow increasing to 2 ins. No blow back during shut-in.  
2nd Open: Very weak, surface blow increasing to 1 3/4 ins. No blow back during shut-in.

Recovered 165 ft. of gas in pipe  
Recovered 1 ft. of clean oil = .004920 bbls (Grind out: 100%-oil)  
Recovered 20 ft. of heavy mud cut oil = .098400 bbls. (Grind out: 56%-oil; 44%-mud)  
Recovered 21 ft. of TOTAL FLUID = .103320 bbls.  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Remarks Tool Sample Grind Out: 47%-oil; 53%-mud

Time Set Packer(s) 9:32 P.M. Time Started off Bottom 12:32 A.M. Maximum Temperature 120°  
Initial Hydrostatic Pressure.....(A) 1857 P.S.I.  
Initial Flow Period.....Minutes 45 (B) 5 P.S.I. to (C) 15 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 592 P.S.I.  
Final Flow Period.....Minutes 45 (E) 15 P.S.I. to (F) 22 P.S.I.  
Final Closed In Period.....Minutes 45 (G) 534 P.S.I.  
Final Hydrostatic Pressure.....(H) 1856 P.S.I.

# DIAMOND TESTING

## General Information Report

### General Information

Company Name           RL INVESTMENT, LLC  
 Contact                 RANDALL PFEIFFER  
 Well Name               HANNA #1-18  
 Unique Well ID         DST #1, LKC "C", 3810-3826  
 Surface Location       SEC 18-10S-25W, GRAHAM CO. KS.  
 Field                    GURK  
 Well Type               Vertical  
 Test Type               CONVENTIONAL  
 Formation               DST #1, LKC "C", 3810-3826  
 Well Fluid Type         01 Oil

Representative         TIM VENTERS  
 Well Operator         RL INVESTMENT, LLC  
 Report Date            2013/08/25  
 Prepared By            TIM VENTERS  
 Qualified By            RICHARD BELL

Start Test Date         2013/08/24  
 Final Test Date         2013/08/25

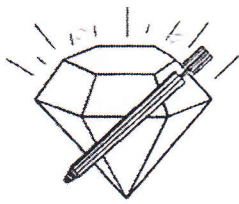
Start Test Time         19:44:00  
 Final Test Time         02:40:00

### Test Recovery:

RECOVERED: 165' GAS IN PIPE  
               1' CO, 100% OIL  
               20' HMCO, 56% OIL, 44% MUD

TOOL SAMPLE: 47% OIL, 53% MUD





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
HANNA1-18DST2

Company R. L. Investment, LLC Lease & Well No. Hanna No. 1-18  
Elevation 2532 KB Formation Lansing/Kansas City "D" Effective Pay          Ft. Ticket No. T250  
Date 8-25-13 Sec. 18 Twp. 10S Range 25W County Graham State Kansas  
Test Approved By Richard B. Bell Diamond Representative Tim Venters

Formation Test No. 2 Interval Tested from 3,826 ft. to 3,845 ft. Total Depth 3,845 ft.  
Packer Depth 3,821 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Packer Depth 3,826 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Depth of Selective Zone Set          ft.

Top Recorder Depth (Inside) 3,814 ft. Recorder Number 8457 Cap. 10,000 psi.  
Bottom Recorder Depth (Outside) 3,842 ft. Recorder Number 11030 Cap. 5,025 psi.  
Below Straddle Recorder Depth          ft. Recorder Number          Cap.          psi.

Drilling Contractor WW Drilling, LLC - Rig 12 Drill Collar Length 120 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 64 Weight Pipe Length          ft I.D.          in.  
Weight 9.3 Water Loss 8.0 cc. Drill Pipe Length 3,680 ft I.D. 3 1/2 in.  
Chlorides 2,400 P.P.M. Test Tool Length 26 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 19 ft. Size 4 1/2-FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Weak, surface blow increasing. Off bottom of bucket in 24 1/2 mins. No blow back during shut-in.  
2nd Open: Very weak, surface blow increasing. Off bottom of bucket in 14 mins. No blow back during shut-in.

Recovered 485 ft. of gas in pipe  
Recovered 80 ft. of gassy oil = .579800 bbls. (Grind out: 12%-gas; 88%-oil) Gravity: 39  
Recovered 60 ft. of gas & mud cut oil = .295200 bbls. (Grind out: 4%-gas; 59%-oil; 37%-mud)  
Recovered 140 ft. of TOTAL FLUID = .875000 bbls.  
Recovered          ft. of           
Recovered          ft. of           
Remarks Tool Sample Grind Out: 8%-gas; 54%-oil; 38%-mud

Time Set Packer(s) 12:20 P.M. Time Started off Bottom 3:20 P.M. Maximum Temperature 120°  
Initial Hydrostatic Pressure.....(A) 1845 P.S.I.  
Initial Flow Period.....Minutes 45 (B) 6 P.S.I. to (C) 40 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 527 P.S.I.  
Final Flow Period.....Minutes 45 (E) 48 P.S.I. to (F) 57 P.S.I.  
Final Closed In Period.....Minutes 45 (G) 500 P.S.I.  
Final Hydrostatic Pressure.....(H) 1843 P.S.I.



# DIAMOND TESTING

## General Information Report

### General Information

Company Name RL INVESTMENT, LLC  
 Contact RANDALL PFEIFFER  
 Well Name HANNA #1-18  
 Unique Well ID DST #2, LKC "D", 3826-3845  
 Surface Location SEC 18-10S-25W, GRAHAM CO. KS.  
 Field GURK  
 Well Type Vertical  
 Test Type CONVENTIONAL  
 Formation DST #2, LKC "D", 3826-3845  
 Well Fluid Type 01 Oil

Representative TIM VENTERS  
 Well Operator RL INVESTMENT, LLC  
 Report Date 2013/08/25  
 Prepared By TIM VENTERS  
 Qualified By RICHARD BELL

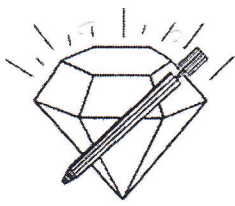
Start Test Date 2013/08/25  
 Final Test Date 2013/08/25

Start Test Time 10:18:00  
 Final Test Time 17:07:00

### Test Recovery:

RECOVERED: 485' GAS IN PIPE  
 80' GO, 12% GAS, 88% OIL, GRAVITY: 39  
 60' G,MCO, 4% GAS, 59% OIL, 37% MUD  
 140' TOTAL FLUID

TOOL SAMPLE: 8% GAS, 54% OIL, 38% MUD



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P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
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HANNA1-18DST3

Company R. L. Investment, LLC Lease & Well No. Hanna No. 1-18  
Elevation 2532 KB Formation Lansing/Kansas City "J" Effective Pay \_\_\_\_\_ Ft. Ticket No. T251  
Date 8-26-13 Sec. 18 Twp. 10S Range 25W County Graham State Kansas  
Test Approved By Richard B. Bell Diamond Representative Tim Venters

Formation Test No. 3 Interval Tested from 3,958 ft. to 3,984 ft. Total Depth 3,984 ft.  
Packer Depth 3,953 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,958 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,946 ft. Recorder Number 8457 Cap. 10,000 psi.  
Bottom Recorder Depth (Outside) 3,981 ft. Recorder Number 11030 Cap. 5,025 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor VW Drilling, LLC - Rig 12 Drill Collar Length 120 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 48 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.2 Water Loss 8.4 cc. Drill Pipe Length 3,812 ft I.D. 3 1/2 in.  
Chlorides 2,300 P.P.M. Test Tool Length 26 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 26 ft. Size 4 1/2-FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: No blow throughout. No blow back during shut-in.

2nd Open: N/A

Recovered 5 ft. of very slightly oil cut mud = .024600 bbls. (Grind out: 1%-oil; 99%-mud)  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 1%-oil; 99%-mud  
Flushed tool 12 mins. into initial flow period & just got the surge blow.

Time Set Packer(s) 2:05 P.M. Time Started off Bottom 3:05 P.M. Maximum Temperature 117°  
Initial Hydrostatic Pressure.....(A) 1901 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 5 P.S.I. to (C) 11 P.S.I.  
Initial Closed In Period.....Minutes 30 (D) 973 P.S.I.  
Final Flow Period.....Minutes 0 (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.  
Final Closed In Period.....Minutes 0 (G) \_\_\_\_\_ P.S.I.  
Final Hydrostatic Pressure.....(H) 1900 P.S.I.



# DIAMOND TESTING

## General Information Report

### General Information

Company Name RL INVESTMENT, LLC  
Contact RANDALL PFEIFFER  
Well Name HANNA #1-18  
Unique Well ID DST #3, LKC "J", 3958-3984  
Surface Location SEC 18-10S-25W, GRAHAM CO. KS.  
Field GURK  
Well Type Vertical  
Test Type CONVENTIONAL  
Formation DST #3, LKC "J", 3958-3984  
Well Fluid Type 01 Oil

Representative TIM VENTERS  
Well Operator RL INVESTMENT, LLC  
Report Date 2013/08/26  
Prepared By TIM VENTERS  
Qualified By RICHARD BELL

Start Test Date 2013/08/26  
Final Test Date 2013/08/26

Start Test Time 12:05:00  
Final Test Time 16:38:00

### Test Recovery:

RECOVERED: 5' SOCM, 1% OIL, 99% MUD

TOOL SAMPLE: 1% OIL, 99% MUD

# SCHIPPER'S OIL FIELD SERVICES, L.L.C.

1090

REMIT TO 18048 170RD  
RUSSELL, KS 67665

SERVICE POINT:  
Russell KS - Hoya 115

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
8-27-13						7:30 pm	10:00 pm
LEASE <u>Hanna</u>	WELL #. <u>1-18</u>	LOCATION <u>St Peter KS 2 3/4 W</u>		COUNTY <u>Graham</u>	STATE <u>KS</u>		
OLD OR NEW (CIRCLE ONE) <u>(N)</u>			<u>1/4 S Winto</u>				

CONTRACTOR <u>Ww Drilling</u>	OWNER _____
TYPE OF JOB <u>Log string</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>4675</u>
CASING SIZE <u>5 1/2</u>	DEPTH <u>4663</u>
TUBING SIZE _____	DEPTH _____
DRILL PIPE _____	DEPTH _____
TOOL <u>DV Tool @</u>	DEPTH <u>2157</u>
PRES. MAX _____	MINIMUM _____
MEAS. LINE _____	SHOE JOINT _____
CEMENT LEFT IN CSG. _____	
PERFS _____	
DISPLACEMENT _____	
EQUIPMENT _____	

PUMP TRUCK # <u>P1</u>	CEMENTER <u>Heath</u>
	HELPER <u>Cody</u>
BULK TRUCK # <u>B1</u>	DRIVER <u>Jay</u>
BULK TRUCK # _____	DRIVER _____

CEMENT AMOUNT ORDERED <u>175 sr com 2% plaster</u>		
<u>2% plaster gel</u>		
COMMON _____	@ _____	
POZMIX _____	@ _____	
GEL _____	@ _____	
CHLORIDE _____	@ _____	
ASC _____	@ _____	
_____	@ _____	
_____	@ _____	
_____	@ _____	
_____	@ _____	
_____	@ _____	
_____	@ _____	
HANDLING _____	@ _____	
MILEAGE _____	@ _____	
TOTAL _____		

REMARKS:  
Run 115 of 5 1/2 15' casing and landing  
It circulated for 1 hr - hooked up and  
run 175 sr - shut down released plug  
and washed pump and hole (lead also  
50 bbl H<sub>2</sub>O then 46 bbl mud - plug landed  
@ 1500 psi - released and float held - dropped  
lost and opened DV tool @ 10:25 am  
hooked up and circulated for 3 hrs

CHARGE TO: RL Investments  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Schippers Oil Field Services, L.L.C.,  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME \_\_\_\_\_  
 SIGNATURE [Signature]

SERVICE		
DEPTH OF JOB _____		
PUMP TRUCK CHARGE _____		
EXTRA FOOTAGE _____	@ _____	
MILEAGE _____	@ _____	
MANIFOLD _____	@ _____	
_____	@ _____	
_____	@ _____	
TOTAL _____		

PLUG & FLOAT EQUIPMENT		
<u>500 gal mud flush</u>		
<u>10 bbl KCC</u>		
<u>DV Tool w/ latch down</u>	@ _____	
<u>4-cent</u>	@ _____	
<u>2-packets</u>	@ _____	
<u>1-Hole shoe</u>	@ _____	
<u>40-scrappers</u>	@ _____	
TOTAL _____		

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS



# SCHIPPER'S OIL FIELD SERVICES, L.L.C.

1091  
2nd stage

REMIT TO 18048 170RD  
RUSSELL, KS 67665

SERVICE POINT:  
Russell, KS - Home, KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
8-28-13						1:30pm	3:00am
LEASE <u>Hanna</u>	WELL# <u>1-18</u>	LOCATION			COUNTY <u>Graham</u>	STATE <u>KS</u>	
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR www Drilling  
 TYPE OF JOB \_\_\_\_\_  
 HOLE SIZE \_\_\_\_\_ T.D. \_\_\_\_\_  
 CASING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. \_\_\_\_\_  
 PERFS \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_

EQUIPMENT  
 PUMP TRUCK CEMENTER Hank  
 # 01 HELPER Coody  
 BULK TRUCK  
 # 01 DRIVER Jay  
 BULK TRUCK  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:  
Run 500gal mud flush and 10 bbl KCL  
Hooked up and mixed 420sx down  
5 1/2 casing - shut down and plug  
RH with 30 sx and wash pump and  
lines clean - release plug and 8:50  
51 3/4 bbl at 420 - plug landed @  
1500 psi - released and dried up

Cement did circulate  
 CHARGE TO: RL Investments  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Schippers Oil Field Services, L.L.C.,  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.  
Thank you  
 PRINTED NAME \_\_\_\_\_  
 SIGNATURE \_\_\_\_\_

OWNER \_\_\_\_\_  
 CEMENT AMOUNT ORDERED 450 x 160/40 6% gel

COMMON \_\_\_\_\_ @ \_\_\_\_\_  
 POZMIX \_\_\_\_\_ @ \_\_\_\_\_  
 GEL \_\_\_\_\_ @ \_\_\_\_\_  
 CHLORIDE \_\_\_\_\_ @ \_\_\_\_\_  
 ASC \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 HANDLING \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

SERVICE  
 DEPTH OF JOB \_\_\_\_\_  
 PUMP TRUCK CHARGE \_\_\_\_\_  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MANIFOLD \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

PLUG & FLOAT EQUIPMENT  
500 gal mud @ \_\_\_\_\_  
10 bbl KCL @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS