

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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](mailto: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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top _____ Bottom _____
---	---	--

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	RL Investment, LLC
Well Name	SCHWARTZ A 2
Doc ID	1362731

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4188-4192	shot	4188-4192
4	4023-4027	shot	4023-4027



Schippers Oilfield Services LLC

RR 1 Box 90D  
Hoxie, KS 67740

Phone # 785-675-8974      sosllc@ruraltel.net  
Fax # 785-675-9938

# Invoice

Date 4/18/2017  
Invoice # 602

Bill To
R.L. Investment, LLC 2698 J O Terrace Hill City, Ks 67650-5101

Ship To

P.O. # SCHWARTZ A #2  
Terms Net 30

Ship Date 4/18/2017  
Due Date 5/18/2017  
Other

Item	Description	Qty	Price	Amount
Cement	Common	185	14.00	2,590.00T
Gel		3	22.50	67.50T
chloride	calcium chloride	10	52.50	525.00T
Handling of mater...	per sack	198	1.50	297.00
Mileage and labor		22	15.84	348.48
Pump truck charge	Tri- plex pump charge		950.00	950.00
Pumptruck mileage	One way to Location	22	6.00	132.00

TAKE 10% DISCOUNT IF PAID WITHIN 20 DAYS. DEDUCT FROM TOTAL.

<b>Subtotal</b>	\$4,909.98
<b>Sales Tax (8.0%)</b>	\$254.60
<b>Total</b>	\$5,164.58
<b>Payments/Credits</b>	\$0.00
<b>Balance Due</b>	\$5,164.58

Schippers Oilfield Services LLC

REMIT TO  
RR 1 BOX 90 D  
HOXIE, KS 67740

**SCHIPPERS OIL FIELD SERVICE L.L.C.**

NR 802

DATE <i>4/10/7</i>	SEC. <i>1</i>	RANGE/TWP. <i>9-31</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <i>Sub Lease A</i>			WELL # <i>12</i>			
			COUNTY <i>74</i> STATE <i>KS</i>			

CONTRACTOR <i>STP Drilling</i>	OWNER <i>R-</i>				
TYPE OF JOB <i>Surface</i>					
HOLE SIZE <i>1 1/4</i>	T.D. <i>1231</i>	CEMENT			
CASING SIZE <i>2 3/8</i>	DEPTH	AMONT ORDERED			
TUBING SIZE	DEPTH				
DRILL PIPE <i>4 1/2</i>	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON	<i>120</i>	@ <i>14<sup>00</sup></i>	<i>2590</i>
DISPLACEMENT <i>13500</i>	SHOE JOINT	POZMIX		@	
CEMENT LEFT IN CSG.		GEL	<i>3</i>	@ <i>22<sup>00</sup></i>	<i>67<sup>00</sup></i>
PERFS		CHLORIDE	<i>10</i>	@ <i>52<sup>00</sup></i>	<i>525<sup>00</sup></i>
		ASC		@	
EQUIPMENT				@	
				@	
PUMP TRUCK				@	
# <i>5000</i>				@	
BULK TRUCK				@	
# <i>2000</i>				@	
BULK TRUCK				@	
#				@	
		HANDLING	<i>170</i>	@ <i>150</i>	<i>297<sup>00</sup></i>
		MILEAGE	<i>22</i>	@ <i>150</i>	<i>3300</i>
				TOTAL	

REMARKS	SERVICE <i>Surf</i>		
<i>Cement did circulate</i>	DEPT OF JOB <i>234'</i>	@	
	PUMP TRUCK CHARGE	@	<i>700</i>
	EXTRA FOOTAGE	@	
<i>Play Down @ 11:30</i>	MILEAGE <i>22</i>	@ <i>60</i>	<i>1320</i>
	MANIFOLD	@	
		@	
		TOTAL	

CHARGES TO: <i>R-L Investor</i>	
STREET	STATE
CITY	ZIP

PLUG & FLOAT EQUIPMENT	
	@

To: Schippers Oil Field Services L.L.C.  
You are hereby requested to rent cementing equipment



P. O. Box 466  
 Ness City, KS 67560  
 Off: 785-798-2300

S-31-17  
 #7124

# Invoice

DATE	INVOICE #
5/4/2017	30273

BILL TO
R.L. Investment HC-1, Box 63 Morland, KS 67650-9718

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#2	Schwartz A	Thomas	STP Drilling Rig #1	Oil	Development	Cement 2 stage l...	Blaine
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				100	Miles	5.00	500.00
579D	Pump Charge - Two-Stage & Top To Bottom LongString				1	Job	1,700.00	1,700.00
402-5	5 1/2" Centralizer				8	Each	60.00	480.00T
403-5	5 1/2" Cement Basket				3	Each	250.00	750.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	300.00	300.00T
408-5	5 1/2" D.V. Tool & Plug Set				1	Each	3,250.00	3,250.00T
411-5	5 1/2" Recipo Scratcher				36	Each	45.00	1,620.00T
414-5	5 1/2" Limit Clamp				1	Each	25.00	25.00T
417-5	5 1/2" D.V. Latch Down Plug & Baffle				1	Each	200.00	200.00T
325	Standard Cement				175	Sacks	12.25	2,143.75T
330	Swift Multi-Density Standard (MIDCON II)				350	Sacks	15.75	5,512.50T
284	Calseal				8	Sack(s)	30.00	240.00T
283	Salt				900	Lb(s)	0.20	180.00T
292	Halad 322				100	Lb(s)	8.00	800.00T
276	Flocele				125	Lb(s)	2.25	281.25T
281	Mud Flush				1,000	Gallon(s)	1.25	1,250.00T
221	Liquid KCL (Clayfix)				2	Gallon(s)	25.00	50.00T
290	D-Air				5	Gallon(s)	42.00	210.00T
580	Additional Hours (If Circulate More Than 1 Hour)				3	Hours	200.00	600.00T
581D	Service Charge Cement				525	Sacks	1.50	787.50
583D	Drayage				2,652.7	Ton Miles	0.75	1,989.53
	Subtotal							22,869.53
	Sales Tax Thomas County						7.50%	1,341.94

**We Appreciate Your Business!**

**Total** \$24,211.47



TICKET 30273

CHARGE TO: Real Investment  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE, ZIP CODE: \_\_\_\_\_

SERVICE LOCATIONS: Heto Gty KS  
 1. WELL/PROJECT NO. #2 LEASE Schwartz A COUNTY/PARISH Thomas STATE KS CITY Campus DATE 4 MAY 17 OWNER \_\_\_\_\_  
 2. TICKET TYPE:  SERVICE  SALES CONTRACTOR \_\_\_\_\_ RIG NAME/NO. \_\_\_\_\_ DELIVERED TO \_\_\_\_\_ ORDER NO. \_\_\_\_\_  
 3. WELL TYPE: oil WELL CATEGORY: Development JOB PURPOSE: coment log string 2-stage VIA: GT LOCATION: \_\_\_\_\_  
 4. REFERRAL LOCATION: \_\_\_\_\_ WELL PERMIT NO. \_\_\_\_\_ WELL LOCATION: 1-9-31

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT							
575		1			100	mi			5.00	500.00
579		1		MILEAGE	1	ea	5 1/2	mi	1700.00	1700.00
402		1		Pump Charge	8	ea			60.00	480.00
403		1		Centralizer	5 1/2	in	3	ea	250.00	750.00
407		1		Cement Basher	5 1/2	in	1	ea	300.00	300.00
408		1		Inset float shoe w/ AUTO FILL	5 1/2	in	1	ea	3250.00	3250.00
411		1		DV tool	5 1/2	in	36	ea	45.00	1620.00
414		1		Recipo Scratcher	5 1/2	in	1	ea	25.00	25.00
417		1		lim. t clamp	5 1/2	in	1	ea	200.00	200.00
				DV latch down plug & baffle						

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.  
 MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS  
 X [Signature] TIME SIGNED \_\_\_\_\_  
 DATE SIGNED \_\_\_\_\_  
 A.M.  P.M.  
 REMIT PAYMENT TO:  
**SWIFT SERVICES, INC.**  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300  
 SURVEY  
 OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?  YES  NO  
 WE UNDERSTOOD AND MET YOUR NEEDS?  YES  NO  
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?  YES  NO  
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?  YES  NO  
 ARE YOU SATISFIED WITH OUR SERVICE?  YES  NO  
 CUSTOMER DID NOT WISH TO RESPOND  
 PAGE TOTAL: \$12,140.44 53  
 TOTAL: \$2,421.47





PO Box 466  
 Ness City, KS 67560  
 Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 30273

DATE 4 MAY 17 PAGE 2 OF 2

CUSTOMER R & L Investments  
 WKS Schwartz A #2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		TIME	DESCRIPTION	QTY		U/M		QTY	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT			DF	QTY	U/M	QTY				
325		1			Standard cement (for EA-2)	175	sk			175	sk	1.43	251.25
330		1			5M cement	350	00			350	00	0.75	262.50
284		1			cutseal	8	bk			8	bk	30.00	240.00
283		1			salt	900	lb			900	lb	0.20	180.00
292		1			hulad-322	100	lb			100	lb	8.00	800.00
276		1			flake	125	lb			125	lb	2.25	281.25
281		1			midflsh	1000	gal			1000	gal	1.25	1250.00
221		1			RCL liquid	2	gal			2	gal	26.00	52.00
290		1			D-AIR	5	gal			5	gal	42.00	210.00
580		1			Extra hours	3	hr			3	hr	200.00	600.00
581		1			SERVICE CHARGE							1.00	787.50
582		1			MILEAGE CHARGE							0.75	1989.53
						5.3054	LOADING MILES	700		2652.7			
						525	CUBIC FEET						
													CONTINUATION TOTAL

1404453  
~~1404453~~

JOB LOG

SWIFT Services, Inc.

DATE 5 MAY 17 PAGE NO. 1

CUSTOMER *R&L Investments* WELL NO. *#2* LEASE *Schwartz A* JOB TYPE *cementing string* TICKET NO. *30273*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								175sk SA-2 cement w/ 1/4" floccle 300 sk SMD cement w/ 1/4" floccle 5 1/2 x 5.5" casing 10zts - 4378' TD = 4620' shoejt 40' DV tool "42 2559' Centralizers 1, 3, 5, 7, 9, 11, 13, 41 Bnsht 2, 14, 42 Recip scratches 2, 3, 4, 5, 6, 7, 8, 9, 10
	<i>2130</i>							on loc TRK 114 - pot on scratches
	<i>2210</i>							start 5 1/2 x 5.5 casing in well
<i>5 MAY</i>	<i>0030</i>							Drop ball - circulate - reciprocate
	<i>0200</i>	<i>4 1/2</i>	<i>43</i>			<i>250</i>		Mix SA-2 cement 175sk @ 15:30ppg
	<i>0214</i>							Drop 1st stage plug - wash out P&G
	<i>0220</i>	<i>5 3/4</i>				<i>250</i>		Displace plug w/ H2O
		<i>5 3/4</i>	<i>50</i>			<i>300</i>		Switch to drilling mud
	<i>0245</i>	<i>5 3/4</i>				<i>1000</i>		
		<i>5 3/4</i>	<i>103</i>			<i>1950</i>		Land plug - Release pressure to truck - dried up wash truck - Drop Bomb
	<i>0300</i>					<i>1300</i>		open DV tool circulate well
	<i>0554</i>							dump 500gal mud flush Plug RH 30sk
	<i>0603</i>	<i>4 1/2</i>	<i>180</i>			<i>200</i>		Mix SMD cement 320sk @ 11.2ppg
	<i>0653</i>		<i>61</i>					Drop 2nd stage plug Displace w/ H2O → cement to surface ←
	<i>0700</i>					<i>1500</i>		Land Plug - close DV wash truck Rack up
	<i>0750</i>							job complete - trucks Flint, Blaine, ISAAC & KRSB

*320sk mixed  
25 to pit*



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
SCHWARTZ"A"#2DST1

Company R. L. Investment, LLC Lease & Well No. Schwartz "A" No. 2  
Elevation 2951 KB Formation Toronto Effective Pay \_\_\_\_\_ Ft. Ticket No. RR275  
Date 4-23-17 Sec. 1 Twp. 9S Range 31W County Thomas State Kansas  
Test Approved By Patrick J. Deenihan Diamond Representative Ricky Ray

Formation Test No. 1 Interval Tested from 3,943 ft. to 3,980 ft. Total Depth 3,980 ft.  
Packer Depth 3,938 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,943 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,933 ft. Recorder Number 0062 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 3,947 ft. Recorder Number 8471 Cap. 5,000 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 119 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 48 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.1 Water Loss 7.2 cc. Drill Pipe Length 3,799 ft I.D. 3 1/2 in.  
Chlorides 1,000 P.P.M. Test Tool Length 25 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 37 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 3/4 ins. in 30 mins. Weak blow back during shut-in.  
2nd Open: Weak, surface blow increasing to 3 1/4 ins. in 45 mins. No blow back during shut-in.

Recovered 129 ft. of mud = .727780 bbls. (Grind out: 100%-mud)

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 3%-oil; 97%-mud

Time Set Packer(s) 4:06 P.M. Time Started off Bottom 7:06 P.M. Maximum Temperature 122°  
Initial Hydrostatic Pressure.....(A) 1893 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 42 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 1235 P.S.I.  
Final Flow Period.....Minutes 45 (E) 45 P.S.I. to (F) 73 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 1227 P.S.I.  
Final Hydrostatic Pressure.....(H) 1890 P.S.I.

# Diamond Testing LLC

P.O. Box 157  
Hoisington KS 67544



Ricky Ray - Tester  
(620) 617-7261

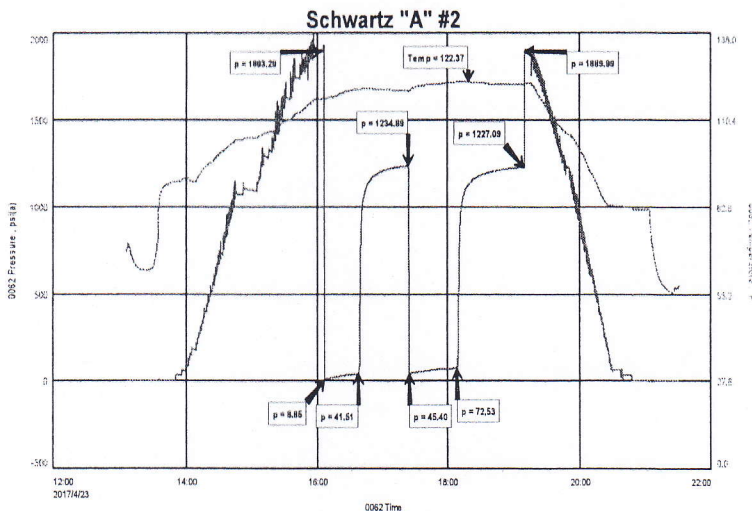
## Wellsite Report

### General Information

Company Name	R. L. Investment, LLC
Contact	Randall Pfeifer
Well Operator	R. L. Investment, LLC
Well Name	Schwartz "A" #2
Surface Location	Sec: 1-9s-31w (Thomas County)
Field	Schwartz
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Patrick Deenihan
Gauge Name	0062

### Test Information

Job Number	RR275
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 1 Toronto (3943-3980)
Start Test Date	2017/04/23
Start Test Time	13:06:00
Final Test Date	2017/04/23
Final Test Time	21:31:00



### Test Results

Recovery:

129' M 100% M

Tool Sample: 3% O 97% M



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
SCHWARTZ"A"#2DST2

Company R. L. Investment, LLC Lease & Well No. Schwartz "A" No. 2  
Elevation 2951 KB Formation Lansing "B" Effective Pay      Ft. Ticket No. RR276  
Date 4-24-17 Sec. 1 Twp. 9S Range 31W County Thomas State Kansas  
Test Approved By Patrick J. Deenihan Diamond Representative Ricky Ray

Formation Test No. 2 Interval Tested from 4,010 ft. to 4,034 ft. Total Depth 4,052 ft.  
Packer Depth 4,005 ft. Size 6 3/4 in. Packer Depth 4,034 ft. Size 6 3/4 in.  
Packer Depth 4,010 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set 4,034 ft.

Top Recorder Depth (Inside) 4,000 ft. Recorder Number 0062 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside)      ft. Recorder Number      Cap.      psi.  
Below Straddle Recorder Depth 4,038 ft. Recorder Number 8471 Cap. 5,000 psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 119 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 48 Weight Pipe Length      ft I.D.      in.  
Weight 9.2 Water Loss 7.6 cc. Drill Pipe Length 3,866 ft I.D. 3 1/2 in.  
Chlorides 1,200 P.P.M. Test Tool Length 25 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 24' perf. w/18' tail pipe 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 1 in. in 30 mins. No blow back during shut-in.  
2nd Open: Weak, surface blow increasing to 1/2 in. in 45 mins. No blow back during shut-in.

Recovered 58 ft. of slightly oil specked mud = .285360 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: 8%-oil; 92%-mud  
Below Straddle Recorder: 1292 psi  
Packer held.

Time Set Packer(s) 11:11 A.M. Time Started off Bottom 2:11 P.M. Maximum Temperature 121°  
Initial Hydrostatic Pressure.....(A) 1952 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 23 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 920 P.S.I.  
Final Flow Period.....Minutes 45 (E) 25 P.S.I. to (F) 38 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 905 P.S.I.  
Final Hydrostatic Pressure.....(H) 1892 P.S.I.

# Diamond Testing LLC

P.O. Box 157  
Hoisington KS 67544



Ricky Ray - Tester  
(620) 617-7261

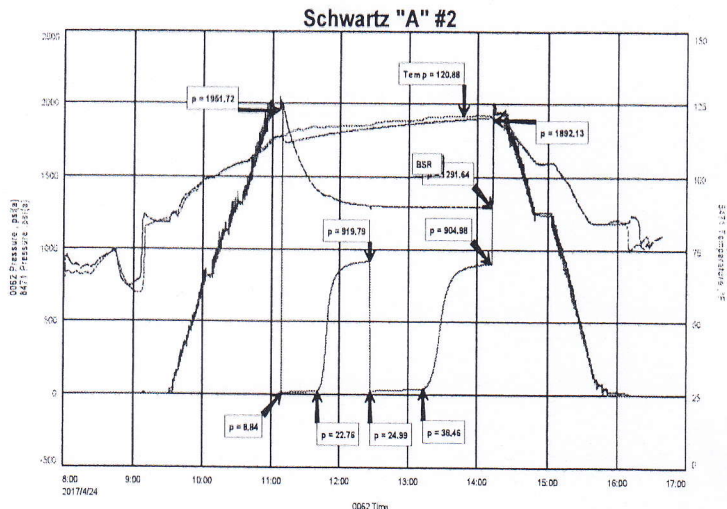
## Wellsite Report

### General Information

Company Name	R. L. Investment, LLC
Contact	Randall Pfeifer
Well Operator	R. L. Investment, LLC
Well Name	Schwartz "A" #2
Surface Location	Sec: 1-9s-31w (Thomas County)
Field	Schwartz
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Patric Deenihan
Gauge Name	0062

### Test Information

Job Number	RR276
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 2 Lans "B" (4010-4034-4052)
Start Test Date	2017/04/24
Start Test Time	08:01:00
Final Test Date	2017/04/24
Final Test Time	16:40:00



### Test Results

#### Recovery:

58' SLOSM 1% O 99% M

Tool Sample: 8% O 92% M

Below Straddle Recorder: 1292 PSI Packer Held



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 SCHWARTZ"A"#2DST3

Company R. L. Investment, LLC Lease & Well No. Schwartz "A" No. 2  
 Elevation 2951 KB Formation Lansing "H" Effective Pay      Ft. Ticket No. RR277  
 Date 4-25-17 Sec. 1 Twp. 9S Range 31W County Thomas State Kansas  
 Test Approved By Patrick J. Deenihan Diamond Representative Ricky Ray

Formation Test No. 3 Interval Tested from 4,110 ft. to 4,142 ft. Total Depth 4,142 ft.  
 Packer Depth 4,105 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Packer Depth 4,110 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 4,100 ft. Recorder Number 0062 Cap. 5,000 psi.  
 Bottom Recorder Depth (Outside) 4,114 ft. Recorder Number 8471 Cap. 5,000 psi.  
 Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 119 ft I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 52 Weight Pipe Length      ft I.D.      in.  
 Weight 9.4 Water Loss 7.6 cc. Drill Pipe Length 3,966 ft I.D. 3 1/2 in.  
 Chlorides 1,400 P.P.M. Test Tool Length 25 ft Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number Not Run Anchor Length 32 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 3/4 in. in 30 mins. No blow back during shut-in.  
 2nd Open: Weak, surface blow increasing to 1/4 in. Blow died in 28 mins. No blow back during shut-in.

Recovered 8 ft. of mud w/a few oil specks = .039360 bbls. (Grind out: 100%-mud)  
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 8:23 A.M. Time Started off Bottom 10:53 A.M. Maximum Temperature 122°  
 Initial Hydrostatic Pressure.....(A) 2047 P.S.I.  
 Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 20 P.S.I.  
 Initial Closed In Period.....Minutes 45 (D) 1195 P.S.I.  
 Final Flow Period.....Minutes 30 (E) 16 P.S.I. to (F) 23 P.S.I.  
 Final Closed In Period.....Minutes 45 (G) 1170 P.S.I.  
 Final Hydrostatic Pressure.....(H) 1947 P.S.I.

**Diamond Testing LLC****P.O. Box 157****Hoisington KS 67544****Ricky Ray - Tester****(620) 617-7261****Wellsite Report****General Information**

Company Name	R. L. Investment, LLC
Contact	Randall Pfeifer
Well Operator	R. L. Investment, LLC
Well Name	Schwartz "A" #2
Surface Location	Sec: 1-9s-31w (Thomas County)
Field	Schwartz
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Patrick Deenihan
Gauge Name	0062

**Test Information**

Job Number	RR277
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 3 Lans "H" (4110-4142)
Start Test Date	2017/04/25
Start Test Time	05:16:00
Final Test Date	2017/04/25
Final Test Time	13:08:00

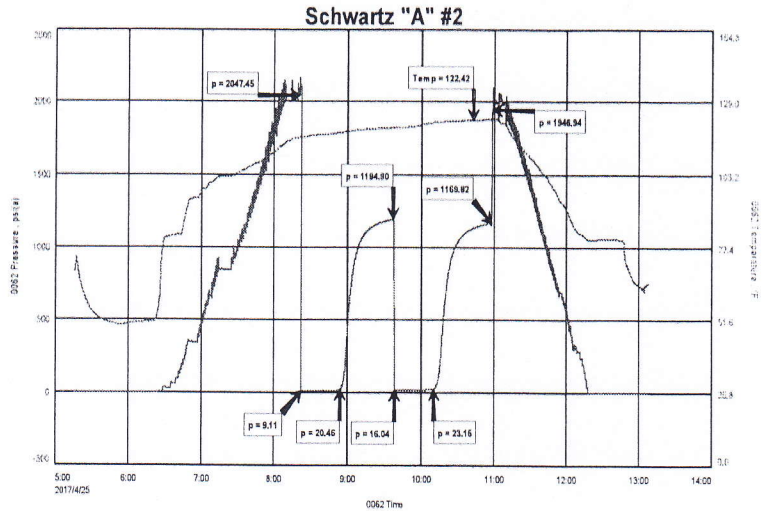
**Test Results**

Recovery:

8' M with few oil specks 100% M

Tool Sample:

100% M







**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 SCHWARTZ"A"#2DST4

Company R. L. Investment, LLC Lease & Well No. Schwartz "A" No. 2  
 Elevation 2951 KB Formation Lansing "I" & "J" Effective Pay      Ft. Ticket No. RR278  
 Date 4-26-17 Sec. 1 Twp. 9S Range 31W County Thomas State Kansas  
 Test Approved By Patrick J. Deenihan Diamond Representative Ricky Ray

Formation Test No. 4 Interval Tested from 4,141 ft. to 4,196 ft. Total Depth 4,196 ft.  
 Packer Depth 4,136 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Packer Depth 4,141 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 4,131 ft. Recorder Number 0062 Cap. 5,000 psi.  
 Bottom Recorder Depth (Outside) 4,177 ft. Recorder Number 8471 Cap. 5,000 psi.  
 Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 119 ft I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 52 Weight Pipe Length      ft I.D.      in.  
 Weight 9.4 Water Loss 7.6 cc. Drill Pipe Length 3,997 ft I.D. 3 1/2 in.  
 Chlorides 1,400 P.P.M. Test Tool Length 25 ft Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number Not Run Anchor Length 24' perf. w/31' drill pipe 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 1 in. in 30 mins. No blow back during shut-in.  
 2nd Open: No blow. No blow back during shut-in.

Recovered 3 ft. of mud = .014760 bbls. (Grind out: 100%-mud)  
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of     

Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 2:54 A.M. Time Started off Bottom 5:24 A.M. Maximum Temperature 119°  
 Initial Hydrostatic Pressure.....(A) 2039 P.S.I.  
 Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 11 P.S.I.  
 Initial Closed In Period.....Minutes 45 (D) 549 P.S.I.  
 Final Flow Period.....Minutes 30 (E) 12 P.S.I. to (F) 20 P.S.I.  
 Final Closed In Period.....Minutes 45 (G) 432 P.S.I.  
 Final Hydrostatic Pressure.....(H) 2008 P.S.I.

# Diamond Testing LLC

P.O. Box 157

Hoisington KS 67544

Ricky Ray - Tester  
(620) 617-7261

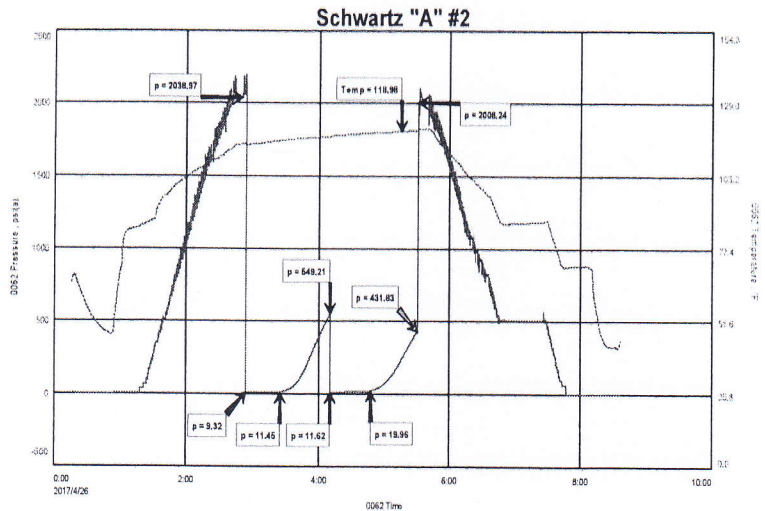
## Wellsite Report

### General Information

Company Name	R. L. Investment, LLC
Contact	Randall Pfeifer
Well Operator	R. L. Investment, LLC
Well Name	Schwartz "A" #2
Surface Location	Sec: 1-9s-31w (Thomas County)
Field	Schwartz
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Patrick Deenihan
Gauge Name	0062

### Test Information

Job Number	RR278
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 4 Lans "I&J" (4141-4196)
Start Test Date	2017/04/26
Start Test Time	00:16:00
Final Test Date	2017/04/26
Final Test Time	08:36:00



### Test Results

Recovery:

3' M 100% M

Tool Sample: 100% M



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 SCHWARTZ"A"#2DST5

Company R. L. Investment, LLC Lease & Well No. Schwartz "A" No. 2  
 Elevation 2951 KB Formation Pawnee/Myrick Station Effective Pay      Ft. Ticket No. RR279  
 Date 4-27-17 Sec. 1 Twp. 9S Range 31W County Thomas State Kansas  
 Test Approved By Patrick J. Deenihan Diamond Representative Ricky Ray

Formation Test No. 5 Interval Tested from 4,370 ft. to 4,439 ft. Total Depth 4,439 ft.  
 Packer Depth 4,365 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Packer Depth 4,370 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
 Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 4,360 ft. Recorder Number 0062 Cap. 5,000 psi.  
 Bottom Recorder Depth (Outside) 4,406 ft. Recorder Number 8471 Cap. 5,000 psi.  
 Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 119 ft I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 69 Weight Pipe Length      ft I.D.      in.  
 Weight 9.3 Water Loss 7.2 cc. Drill Pipe Length 4,226 ft I.D. 3 1/2 in.  
 Chlorides 1,500 P.P.M. Test Tool Length 25 ft Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number Not Run Anchor Length 38' perf. w/31' drill pipe 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 1 in. in 4 mins. Lost packer seat 5 mins. into 1st open. MISRUN!

2nd Open: N/A

Recovered 253 ft. of mud = 2.492300 bbls. (Grind out: 100%-mud)

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 4:46 P.M. Time Started off Bottom 4:53 P.M. Maximum Temperature 118°

Initial Hydrostatic Pressure.....(A) 2149 P.S.I.

Initial Flow Period.....Minutes 7 (B) 12 P.S.I. to (C) 26 P.S.I.

Initial Closed In Period.....Minutes 0 (D)      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) 2234 P.S.I.

# Diamond Testing LLC

P.O. Box 157  
Hoisington KS 67544



## Wellsite Report

Ricky Ray - Tester  
(620) 617-7261

### General Information

Company Name	R. L. Investment, LLC
Contact	Randall Pfeifer
Well Operator	R. L. Investment, LLC
Well Name	Schwartz "A" #2
Surface Location	Sec 1-9s-31w (Thomas County)
Field	Schwartz
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Patrick Deenihan
Gauge Name	0062

### Test Information

Job Number	RR279
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 5 Pawnee/Myrick Station (4370-4439)
Start Test Date	2017/04/27
Start Test Time	14:36:00
Final Test Date	2017/04/27
Final Test Time	18:59:00

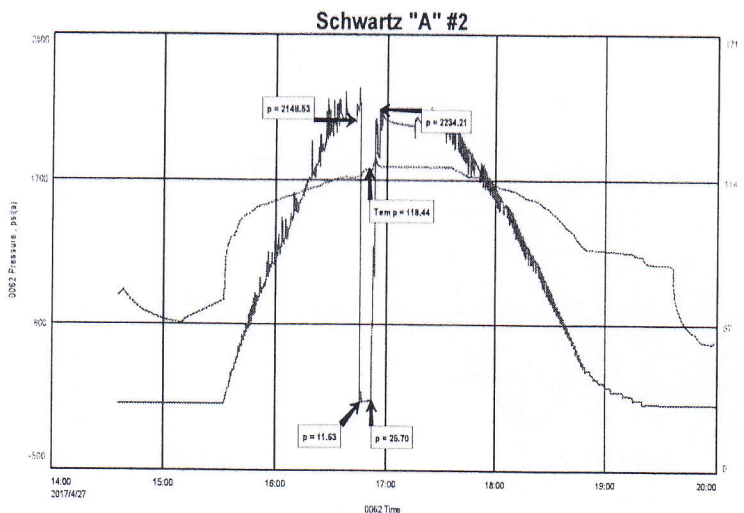
### Test Results

Recovery:

253' M 100% M

Tool Sample: 100% M

Lost packer seat 5 minutes into first opening.  
MISRUN!





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
SCHWARTZ"A"#2DST6

Company R. L. Investment, LLC Lease & Well No. Schwartz "A" No. 2  
Elevation 2951 KB Formation Pawnee/Myrick Station Effective Pay      Ft. Ticket No. RR280  
Date 4-27-17 Sec. 1 Twp. 9S Range 31W County Thomas State Kansas  
Test Approved By Patrick J. Deenihan Diamond Representative Ricky Ray

Formation Test No. 6 Interval Tested from 4,390 ft. to 4,439 ft. Total Depth 4,439 ft  
Packer Depth 4,385 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Packer Depth 4,390 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 4,380 ft. Recorder Number 0062 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 4,425 ft. Recorder Number 8471 Cap. 5,000 psi.  
Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor STP Drilling, LLC - Rig 1 Drill Collar Length 119 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 69 Weight Pipe Length      ft I.D.      in.  
Weight 9.3 Water Loss 7.2 cc. Drill Pipe Length 4,246 ft I.D. 3 1/2 in.  
Chlorides 1,500 P.P.M. Test Tool Length 25 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 49 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 1 in. in 30 mins. No blow back during shut-in.

2nd Open: Weak, surface blow. No build. No blow back during shut-in.

Recovered 10 ft. of mud = .049200 bbls. (Grind out: 100%-mud)

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 10:36 P.M. Time Started off Bottom 1:36 A.M. Maximum Temperature 128°  
Initial Hydrostatic Pressure.....(A) 2316 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 11 P.S.I. to (C) 16 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 1139 P.S.I.  
Final Flow Period.....Minutes 45 (E) 16 P.S.I. to (F) 26 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 1157 P.S.I.  
Final Hydrostatic Pressure.....(H) 2225 P.S.I.

# Diamond Testing LLC

P.O. Box 157

Hoisington KS 67544

Ricky Ray - Tester  
(620) 617-7261



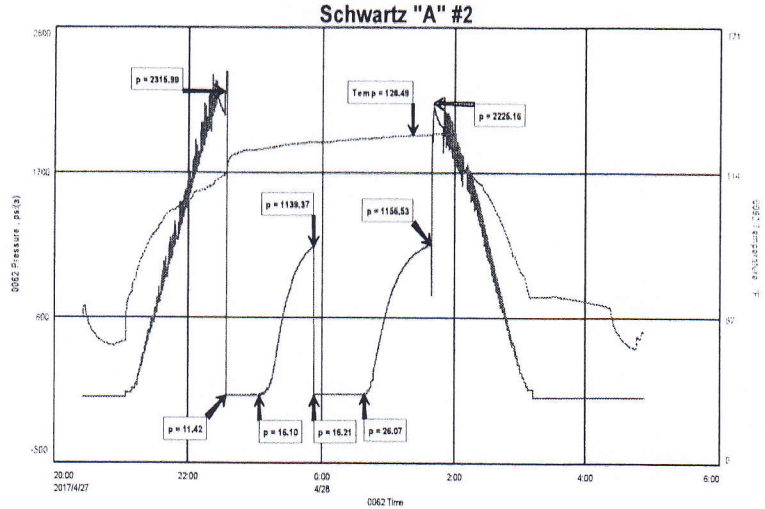
## Wellsite Report

### General Information

Company Name	R. L. Investment, LLC
Contact	Randall Pfeifer
Well Operator	R. L. Investment, LLC
Well Name	Schwartz "A" #2
Surface Location	Sec: 1-9s-31w (Thomas County)
Field	Schwartz
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Patrick Deenihan
Gauge Name	0062

### Test Information

Job Number	RR280
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 6 Pawnee/Myrick Station (4390-4439)
Start Test Date	2017/04/27
Start Test Time	20:26:00
Final Test Date	2017/04/28
Final Test Time	04:53:00



### Test Results

Recovery:

10' M 100% M

Tool Sample: 100% M

**Geo Log Header**  
**WellSight Systems**

Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Schwartz "A" #2  
API: 15-193-20993-00-00  
Location: Sec: 1-T9S- R31W  
License Number: 33268  
Spud Date: 04-18-17  
Surface Coordinates: 535' FSL & 882' FWL  
NW-SE-SW-SW

Region: Thomas Co., KS.  
Drilling Completed: 04-29-17

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 2944'      K.B. Elevation (ft): 2951'  
Logged Interval (ft): 3500'      To: 4618'      Total Depth (ft): 4620' RTD  
Formation: Mississippi  
Type of Drilling Fluid: Chemical/Polymer/Gel

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

Company: RL Investment, LLC  
Address: 217 Saint Peter  
Morland, KS 67650-5101

**GEOLOGIST**

Name: Patrick J. Deenihan  
Company:  
Address: P.O. Box 781929  
Wichita, KS 67278

## REMARKS

The well cuttings were saved, submitted and will be available for review at the Kansas Well Sample Library located in Wichita, KS.

## DSTs

DST # 1 ( 3943' - 3980' )      30"-45"-45"-60"  
 1st Open: Built to 2 3/4" in 30"      Weak Blow Back  
 2nd Open: Built to 3 1/4" in 45"      No Blow Back

REC: 129' Mud. (100% Mud)

IFP: 9#/ 42#                      FFP: 45#/ 73#                      BHT: 122 deg  
 ISIP: 1235#                      FSIP: 1227#  
 IHP: 1893#                      IHP: 1890#

DST # 2 ( 4010' - 4034' )      30"-45"-45"-60"  
 1st Open : Built to 1" in 30"      No B.B.  
 2nd Open : Built to 1/2" in 45"      No B.B.

REC : 58' of SLOM (1% Oil; 99% Mud)

IFP : 9#/ 23#                      FFP : 25#/ 38#                      BHT: 121 deg  
 ISIP: 920#                      FSIP: 905#  
 IHP : 1952#                      FHP : 1892#

DST #3 ( 4110' - 4142' )      30"-45"-45"-60"  
 1st Open : 3/4" in 30"              No Blow Back  
 2nd Open : 1/2" died in 28"      No Blow Back

REC : 8' Mud (100% Mud)

IFP: 9#/ 20#                      FFP: 16#/ 23#                      BHT: 122 deg  
 ISIP: 1195#                      FSIP: 1170#  
 IHP: 2047#                      FHP: 1947#

DST # 4 ( 4141' - 4196' )      30"-45"-30"-45"  
 1st Open : 1" in 30"              No Blow Back  
 2nd Open : No Blow              No Blow Back

REC: 3' Mud (100% Mud)

IFP: 9#/ 11#                      FFP: 12#/ 20#                      BHT: 119#  
 ISIP: 549#                      FSIP: 432#  
 IHP: 2038#                      FHP: 2008#

DST # 5 ( 4370" - 4439' ) Packer Failure      30"-45"-45"-60"  
 REC: 253' Mud.

DST # 6 ( 4390' - 4439' )      30"-45"-45"-60"  
 IFP: 1" in 30"                      1" Blow Back ( Tool Leak ??)  
 FFP: No Blow                      No Blow Back

REC: 10' Mud (100% Mud)

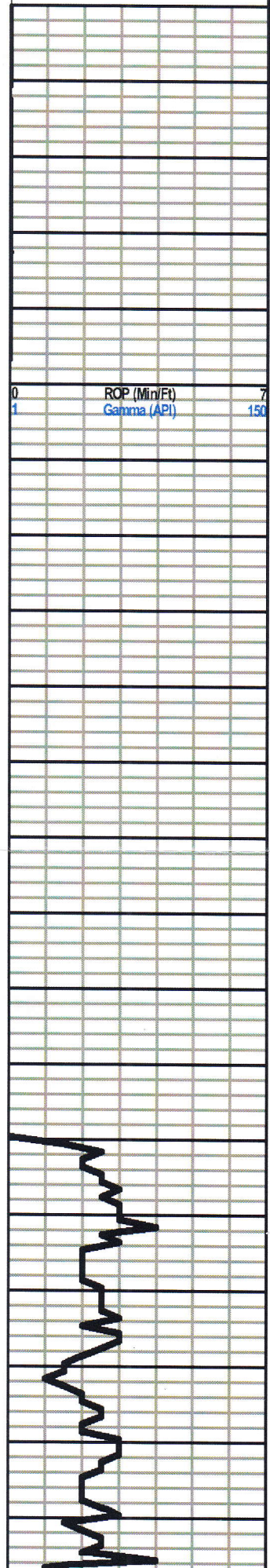
IFP: 11#/ 16#                      FFP: 16#/ 26#                      BHT: 128 deg  
 ISIP: 1139#                      FSIP: 1157#  
 IHP: 2316#                      FHP: 2225#



Dept

Litho

Oil Show



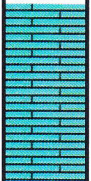
2500

2600

3450

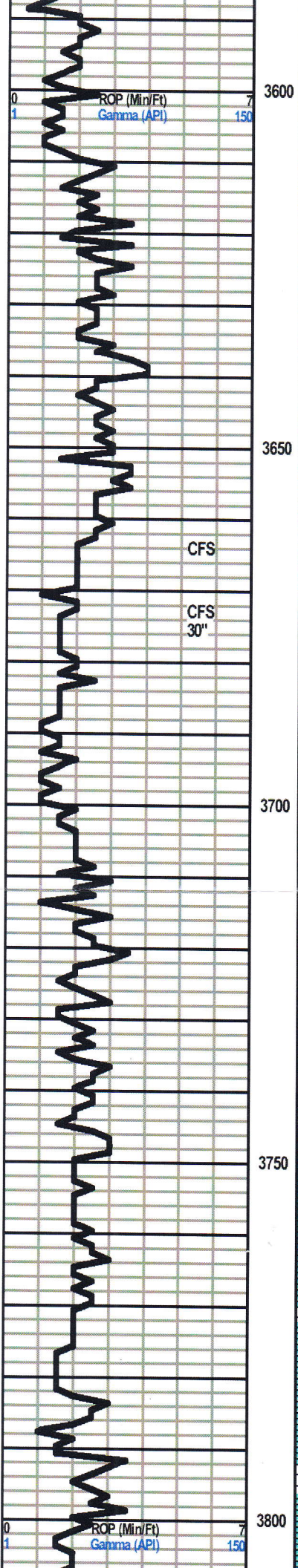
3500

3550



Anhydrite 2557 (+394)

Base/Anhy. 2589 (+362)



Sh., Dk-Gry Gry

Sh., Black Carb.

**Tarkio 3607 (-656)**

Ls., Lt-to Dk-Gry. Mott/Sing. Dense Fn-xln to Very-Fssl, Ooc., Ool., Frag., Crinoidal. Trcof F-G Inter-xln Por. No show.

LsCrm., Tan., Lt-Gry. Fn & Inter-xln., Abund.- Fssl., Dolo. In Part. Scat. Dead Oil Stn. No LFO. No Odor, no Fluor.

Sh., Gry., Brn., Red. Argil.

Ls., Crm., Tan, Gry., Mott/Sing Fssl to P-Fn-xln. Trc. of Blk spotty oil stn. NLFO., No odor. No Fluor.

Sh., Gry., Brn.Argil. to Silty

**Howard 3668 (-717)**

Crm., Tan, Gry., Mott/Sing.. P- Fn-xln., VFssl., Pred. Ool. P+ Inter-xln., Sub-Cherty. Tr of Brn to Blk. Oil stn., No LFO. No odor. No Fluor.

Ls., Wht., Tan, Gry., Very Chalky. V-PFn-xln to P-Ool. No show.

Ls., Wht., Crm., Tan, Gry., Dk-Gry., Chalky Dense Fn- xln. to small Ool., No Show.

Sh., Brn., Silty to Burnt Orange Argil.

Sh., Gry., Brn., Grn., Black

**Topeka 3741(-790)**

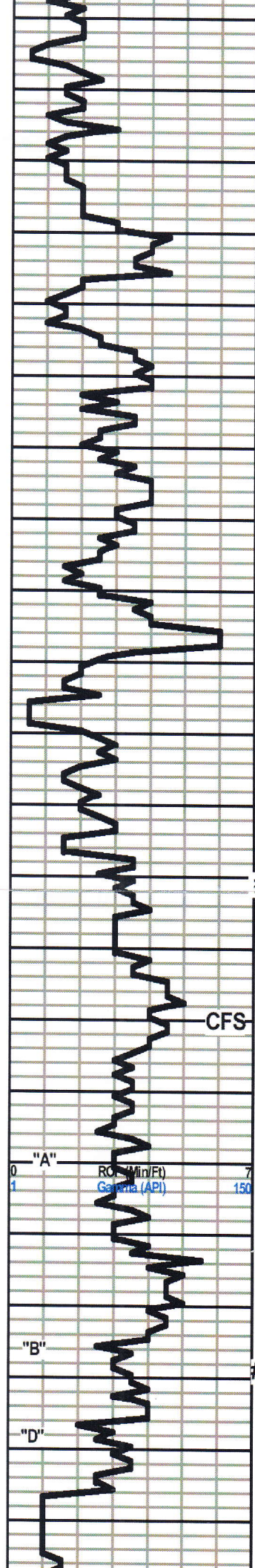
Ls., Wht., Crm Tan, Lt-Gry., Dense Fn-xln. to F-Inter-xln (sli Dolo.) Ool., Chalky in part. No show

Sh., Gry., Grn., Brn., Argil. to Silty

Ls., Gry., Crm., Tan., Fn-xln to sli-Fssl. Sub-Chalky. No show

Sh., Brn., Gry., Gummy to Argil.

Ls., Wht., Lt-Gry to Gry., Fn-xln to sub-Chalky. No show.



**King Hill 3843 (-892)**

Sh., Black Carb.  
 Ls., Wht., Crm., Gry., Sing. Fn-xln. Chalky anf Fssl. Bo Show

Sh., Dk-Dry, Gry., Black, Brn. Argil., Silty  
 Ls., Gry., Tan Fssl., Fn-xln. with Good Fn-Suc., Dolo and xln. Porosity  
 Sh., Gry., Brn., Grn., Argil.

**Queen Hill 3906 (-955)**

Sh., Black Carb.  
 Ls., Crm., Tan, Brn., Fn-xln. to inter xln. Por., Sub-chalky sli Fssl., No how

Sh., Gry. and Brn. - Argil.

**Heebner 3952 (-1001)**

Sh., Black Carb.  
 Sh., Vari Color.

**Toronto 3974 (- 1023)**

Ls., Lt-Gry, Crm., Fn-xln., to V-Fssl., Frag. & Col. f-g scat. brn to blk. oil stn.  
 (Spotty to Saturated. Sli-SLFO. F-Odor.

**Lansing 3992 (-1041)**

Ls., Wht., Brn., Sing. Fn-xln., sli- Ool Scat Dead spotty edge Stn No LFO No Odor  
 or Fluor.

Ls., Wht., to Lt-Gry. Dense Micro-xln., sli-Cherty to Chalky. Barren.

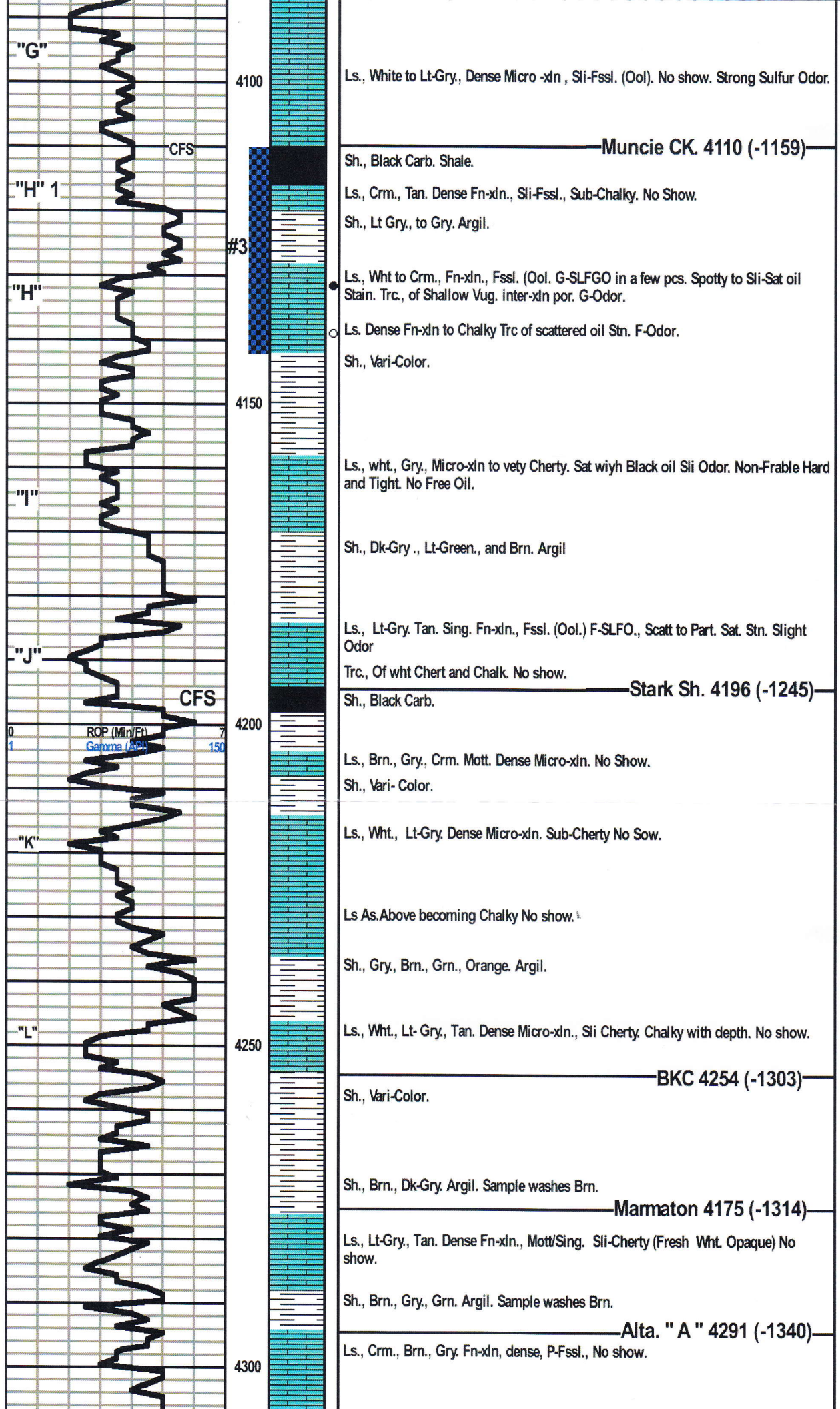
Sh., Gry., Brn. Argil.

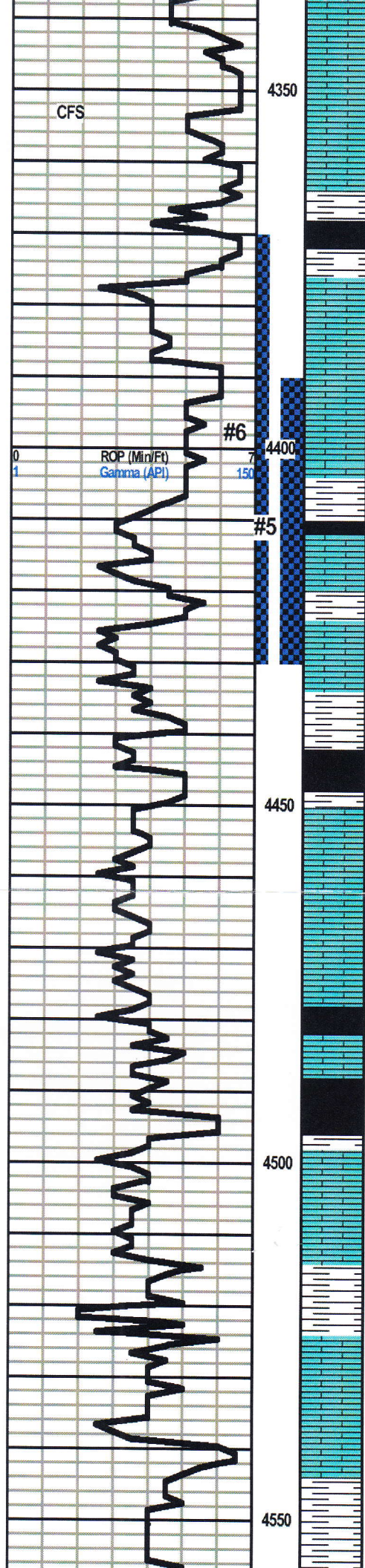
Ls., Wht., Crm., Tan. Sing. Dense Micro-xln to Oolitic, Trc. of shallow Inter-Ool. Vug  
 porosity with occasional Drk-Brn., to Black Oil stn. Faint to Fair Odor, No Fluor

Sh., Gry, Dk-Gry. Argil.  
 Ls., Crm., Wht., Lt-Gry. Sing. Fn-xln., Ool., with scattered Inter-xln., with F-show of  
 Brn. to Blk. Oil stn. Trc. of LFO. Fair Odor scattered Fluor.

Ls., Wht. to Lt- Gry, Sing Fn-xln to Good Intr-xln. Por. fssl. in Part. No show Very  
 strong Salt water odor.

Sh., Gry, Dk-Gry., Brn., and Lt-Grn. Argil.





Ls., Lt-Gry, Tan, Brn. F-Fn-xln., Densified in Part. No show

Ls., Gry, Brn., Mott. P-Fn-xln., Trc Of Fssl. No show

Sh., Gry to Dk-Gry.

Sh., Black Carb.

S., Vari-Color. Argil. to Silty.

**Pawnee 4376 (-1425)**

Ls., Crm., Brn., Mott/Sing VP-Fn-xln. Chert, Gry., Tan, Fresh to sli Weathered., P=Shallow PP-Porosity No show.

Ls., As/above., Sub Chalky with depth., No show.

Sh., Dk-Gry, Gry., Brn., Black

Sh., Black Carb.

**Myrick St. 4412 (-1461)**

Ls., Tan., Gry., Brn., Fn-xln., to P-Fssl. Trc. of Brn to Black edge str., Sli-Odor., No LFO.

Sh., Gry, Grn. Argil.

Ls., Crm., Brn., Gry., Mott. F-Fn-xln., and Fssl. Porosity. Sli-Show of LFO., F-Odor. Scattered Bright Gold Fluor.

Sh., DK-Gry, Blach.

Sh., Black Carb.

**Fort Scott 4450 (-1499)**

Ls., Gry to Lt-Brn., Fn-xln., Off White transl. chert. trc of shallow PP-Inter-xln. porosity. Pyrite attached to Sub-Chalky Lime. No show.

Ls., As/ Above with noted increase in Chalk.

Ls., Brn., White. Mott/Sing. Dense Micro-xln., Ool., Chalky. No show.

Sh., black Carb.

Ls., Lt-Gry/. Gry., Brn. Dense Micro-xln. No show.

**Cher. Shale 4488 (-1537)**

Sh., Black Carb.

Sh., Gry, Grn., Brn.

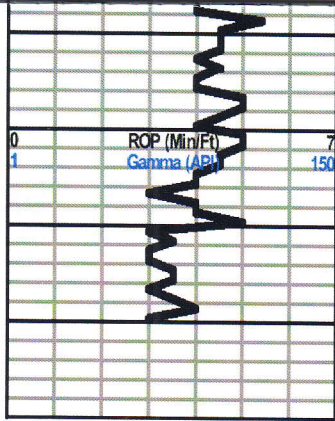
Ls., Lt-Gry, Gry., Brn., Mott. Dense Micro-xln., sub -chalky . No show

Sh., Black and Gry,

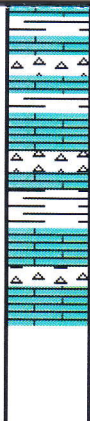
Sh., Brn Gry, Grn. Gummy to Argil.

Ls., Lt-Gry, Fssl., Dense Micro-xln., Sub-Chalky to Chalky. Trc of Fresh Opaque Chert. No show.

Sh., Abund. Vari-Color. Samples wash Brn.



4600



Ls., Wht., Lt-Gry with Fresh Wht., Opaque and Gry, Translucent.Frsh to sli-Weathered., Fssl., in part. No Show

Sh., Gry. & Grn., trc of Btn

RTD= 4620' (-1669) Reached @ 9:49 P.M. On 4-28-17.

LTD= 4618' (-1667) Reached @ 2.15 A.M. On 4-29-17.