



1075592

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
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<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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

March 02, 2012

Ted McHenery  
Raymond Oil Company, Inc.  
PO BOX 48788  
WICHITA, KS 67202-1822

Re: ACO1  
API 15-109-21052-00-00  
Rose A 2  
SE/4 Sec.02-14S-32W  
Logan County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Ted McHenery



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

TIME ON: \_\_\_\_\_  
TIME OFF: \_\_\_\_\_

Company \_\_\_\_\_ Lease & Well No. \_\_\_\_\_  
Contractor \_\_\_\_\_ Charge to \_\_\_\_\_  
Elevation \_\_\_\_\_ Formation \_\_\_\_\_ Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
Date \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Range \_\_\_\_\_ W County \_\_\_\_\_ State **KANSAS**  
Test Approved By \_\_\_\_\_ Diamond Representative \_\_\_\_\_

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

Top Recorder Depth (Inside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Bottom Recorder Depth (Outside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type \_\_\_\_\_ Viscosity \_\_\_\_\_ Drill Collar Length \_\_\_\_\_ ft. I.D. **2 1/4** in.  
Weight \_\_\_\_\_ Water Loss \_\_\_\_\_ cc. Weight Pipe Length \_\_\_\_\_ ft. I.D. **2 7/8** in.  
Chlorides \_\_\_\_\_ P.P.M. Drill Pipe Length \_\_\_\_\_ ft. I.D. **3 1/2** in.  
Jars: Make **STERLING** Serial Number \_\_\_\_\_ Test Tool Length \_\_\_\_\_ ft. Tool Size **3 1/2-IF** in.  
Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_ Anchor Length \_\_\_\_\_ ft. Size **4 1/2-FH** in.  
Main Hole Size **7 7/8** Tool Joint Size **4 1/2** in. Surface Choke Size **1** in. Bottom Choke Size **5/8** in.

Blow: 1st Open: \_\_\_\_\_  
2nd Open: \_\_\_\_\_

Recovered _____ ft. of _____	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	

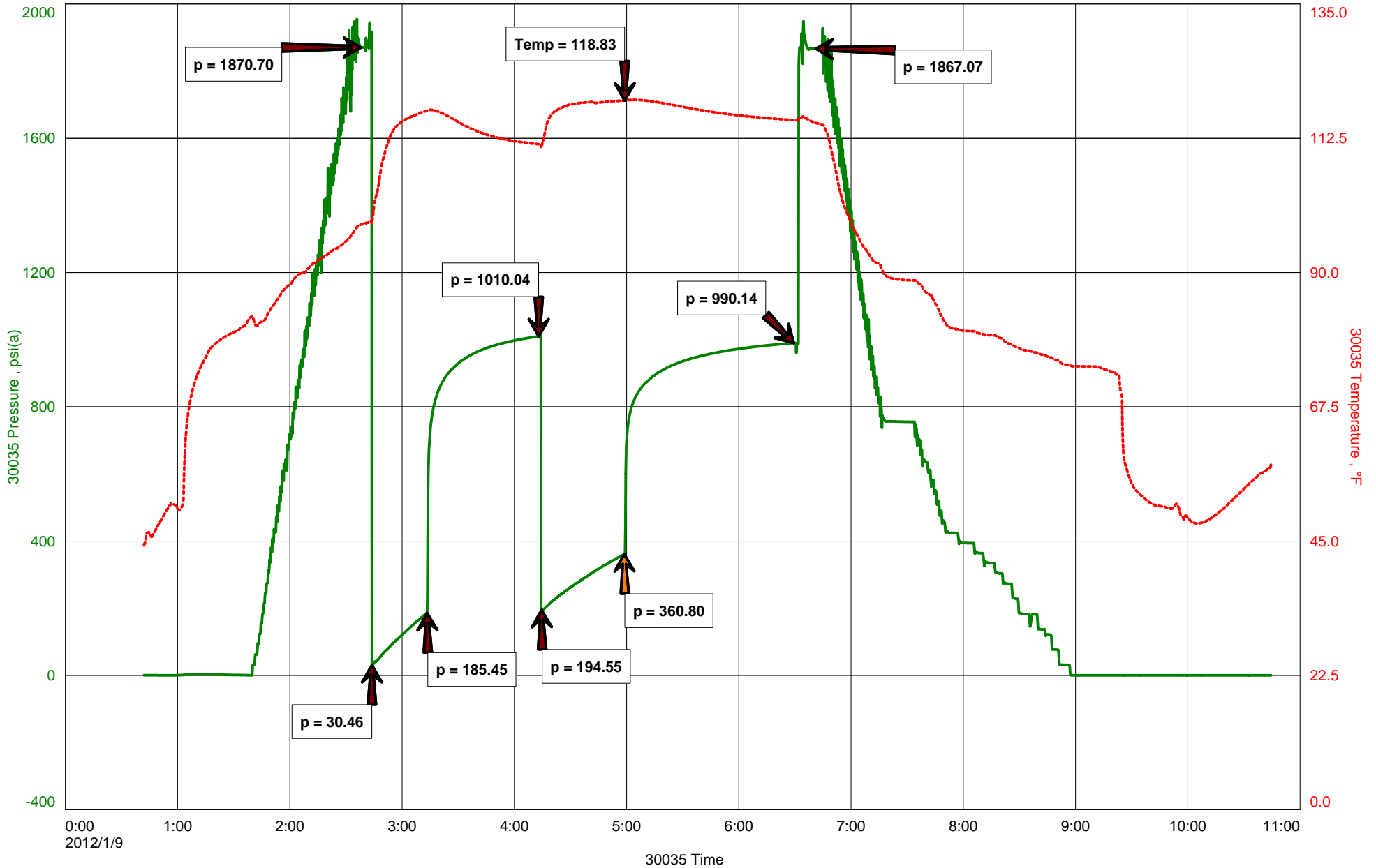
Time Set Packer(s) \_\_\_\_\_ A.M. P.M. Time Started Off Bottom \_\_\_\_\_ A.M. P.M. Maximum Temperature \_\_\_\_\_  
Initial Hydrostatic Pressure..... (A) \_\_\_\_\_ P.S.I.  
Initial Flow Period..... Minutes \_\_\_\_\_ (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.  
Initial Closed In Period..... Minutes \_\_\_\_\_ (D) \_\_\_\_\_ P.S.I.  
Final Flow Period..... Minutes \_\_\_\_\_ (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.  
Final Closed In Period..... Minutes \_\_\_\_\_ (G) \_\_\_\_\_ P.S.I.  
Final Hydrostatic Pressure..... (H) \_\_\_\_\_ 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.

Raymond Oil Company Inc.  
DST # 2 3970-3995' Lansing 70' Zone  
Start Test Date: 2012/01/09  
Final Test Date: 2012/01/09

Rose A # 2  
Formation: DST # 2 3970-3995' Lansing 70' Zone  
Pool: Wildcat  
Job Number: S0073

# Rose A # 2



# Diamond Testing

## General information Report

### General Information

**Company Name** Raymond Oil Company Inc.

<b>Contact</b>	Ted McHenry	<b>Job Number</b>	S0073
<b>Well Name</b>	Rose A # 2	<b>Representative</b>	Jacob McCallie
<b>Unique Well ID</b>	DST # 2 3970-3995' Lansing 70' Zone	<b>Well Operator</b>	Raymond Oil Company Inc.
<b>Surface Location</b>	Sec. 2-14S-32W Logan County	<b>Report Date</b>	2012/01/09
<b>Well License Number</b>		<b>Prepared By</b>	Jacob McCallie
<b>Field</b>	WC		
<b>Well Type</b>	Vertical		

<b>Test Type</b>	Drill Stem Test		
<b>Formation</b>	DST # 2 3970-3995' Lansing 70' Zone		
<b>Well Fluid Type</b>	01 Oil	<b>Start Test Time</b>	00:42:00
		<b>Final Test Time</b>	10:45:00
<b>Start Test Date</b>	2012/01/09		
<b>Final Test Date</b>	2012/01/09		
<b>Gauge Name</b>	30035		
<b>Gauge Serial Number</b>			

### Test Results

#### RECOVERED:

189	GIP	100% CO	GRAVITY: 38 @ 60 degrees F
753	CO	20% GAS 33% OIL 19% WTR 28% MUD	
62	WGM Oil	84% WTR 16% MUD	
126	Muddy Wtr		
941	TOTAL FLUID		

Chlorides: 51,000 ppm  
Ph: 7  
RW: .17 @ 60 degrees F

#### TOOL SAMPLE:

10% GAS 87% OIL 3% MUD



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: RoseA2DST3

TIME ON: 04:16:00  
 TIME OFF: 13:09:00

Company Raymond Oil Company Inc Lease & Well No. Rose A # 2  
 Contractor L.D. Drilling Inc. Charge to Raymond Oil Company Inc  
 Elevation 2873 KB Formation Lansing 120 / 180' Zone Effective Pay \_\_\_\_\_ Ft. Ticket No. S0074  
 Date 1-10-12 Sec. 2 Twp. \_\_\_\_\_ 14 S Range \_\_\_\_\_ 32 W County Logan State KANSAS  
 Test Approved By Kim Shoemaker Diamond Representative Jacob McCallie

Formation Test No. 3 Interval Tested from 4060 ft. to 4140 ft. Total Depth 4140 ft.  
 Packer Depth 4055 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
 Packer Depth 4060 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

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

Top Recorder Depth (Inside) 4041 ft. Recorder Number 30035 Cap. 10000 P.S.I.  
 Bottom Recorder Depth (Outside) 4137 ft. Recorder Number 3851 Cap. 5700 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type Chem Viscosity 52 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
 Weight 8.9 Water Loss 6.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 3,000 P.P.M. Drill Pipe Length 4027 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number 3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 80 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1" Blow- Built to BB in 8 min 3/4" BB  
 2nd Open: 1" Blow- Built to BB in 6 1/2 min BBBB

Recovered <u>567</u> ft. of <u>GIP</u>	
Recovered <u>141</u> ft. of <u>CO</u>	100% CO GRAVITY: 34.5 @ 60 degrees F
Recovered <u>252</u> ft. of <u>WC Gassy/Oil Mud</u>	10% GAS 21% OIL 6% WTR 63% MUD
Recovered <u>126</u> ft. of <u>OC Gassy/Muddy WTR</u>	13% GAS 5% OIL 47% WTR 35% MUD
Recovered <u>519</u> ft. of <u>TOTAL FLUID</u>	Price Job
Recovered _____ ft. of <u>Ph: 7 RW: .28 @ 65 degrees F CHLOR: 34,000 ppm</u>	Other Charges
Remarks: <u>Diesel Fuel In Bucket</u>	Insurance
<u>TOOL SAMPLE: 12% OIL 75% WTR 13% MUD</u>	Total

Time Set Packer(s) 6:19 AM A.M. P.M. Time Started Off Bottom 10:04 AM A.M. P.M. Maximum Temperature 114

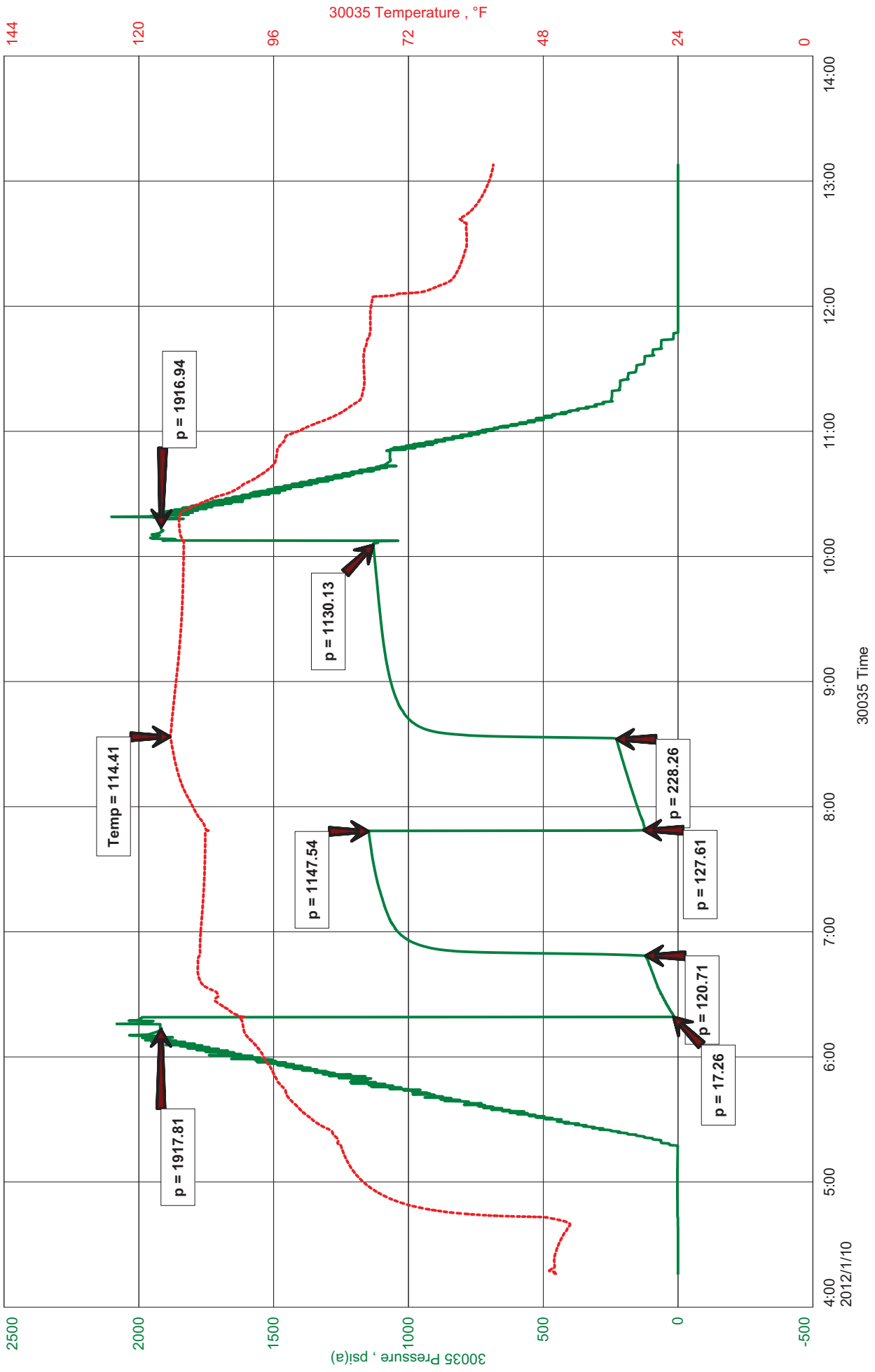
Initial Hydrostatic Pressure..... (A) 1918 P.S.I.  
 Initial Flow Period..... Minutes 30 (B) 17 P.S.I. to (C) 121 P.S.I.  
 Initial Closed In Period..... Minutes 60 (D) 1148 P.S.I.  
 Final Flow Period..... Minutes 45 (E) 128 P.S.I. to (F) 228 P.S.I.  
 Final Closed In Period..... Minutes 90 (G) 1130 P.S.I.  
 Final Hydrostatic Pressure..... (H) 1917 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.

Raymond Oil Company INC.  
DST #3 4060-4140' Lansing 120 / 180' Zone  
Start Test Date: 2012/01/10  
Final Test Date: 2012/01/10

Rose A #2  
Formation: DST #3 4060-4140' Lansing 120 / 180' Zone  
Pool: Wildcat  
Job Number: S0074

# Rose A #2





# Diamond Testing

## General information Report

### General Information

**Company Name** Raymond Oil Company INC.

<b>Contact</b>	Ted McHenry	<b>Job Number</b>	S0074
<b>Well Name</b>	Rose A #2	<b>Representative</b>	Jacob McCallie
<b>Unique Well ID</b>	DST #3 4060-4140' Lansing 120 / 180' Zone	<b>Well Operator</b>	Raymond Oil Company INC.
<b>Surface Location</b>	SEC 2-14S-32W Logan County	<b>Report Date</b>	2012/01/10
<b>Well License Number</b>		<b>Prepared By</b>	Jacob McCallie
<b>Field</b>	WC		
<b>Well Type</b>	Vertical		

<b>Test Type</b>	Drill Stem Test	<b>Start Test Time</b>	04:16:00
<b>Formation</b>	DST #3 4060-4140' Lansing 120 / 180' Zone	<b>Final Test Time</b>	13:06:00
<b>Well Fluid Type</b>	01 Oil		
<b>Start Test Date</b>	2012/01/10		
<b>Final Test Date</b>	2012/01/10		
<b>Gauge Name</b>	30035		
<b>Gauge Serial Number</b>			

### Test Results

#### RECOVERED:

567	GIP								
141	CO	100% CO							GRAVITY: 34.5 @ 60 degrees F
252	WC GASSY/OILY MUD	10% GAS	21% OIL	6% WTR	63% MUD				
126	OC GASSY/MUDDY WTR	13% GAS	5% OIL	47% WTR	35% MUD				
519	TOTAL FLUID								

Ph: 7  
RW: .28 @ 65 degrees F  
Chlor: 34,000 ppm

#### TOOL SAMPLE:

12% OIL 75% WTR 13% MUD



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

TIME ON: \_\_\_\_\_  
TIME OFF: \_\_\_\_\_

Company \_\_\_\_\_ Lease & Well No. \_\_\_\_\_  
Contractor \_\_\_\_\_ Charge to \_\_\_\_\_  
Elevation \_\_\_\_\_ Formation \_\_\_\_\_ Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
Date \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Range \_\_\_\_\_ W County \_\_\_\_\_ State **KANSAS**  
Test Approved By \_\_\_\_\_ Diamond Representative \_\_\_\_\_

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

Top Recorder Depth (Inside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Bottom Recorder Depth (Outside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type \_\_\_\_\_ Viscosity \_\_\_\_\_ Drill Collar Length \_\_\_\_\_ ft. I.D. 2 1/4 in.  
Weight \_\_\_\_\_ Water Loss \_\_\_\_\_ cc. Weight Pipe Length \_\_\_\_\_ ft. I.D. 2 7/8 in.  
Chlorides \_\_\_\_\_ P.P.M. Drill Pipe Length \_\_\_\_\_ ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number \_\_\_\_\_ Test Tool Length \_\_\_\_\_ ft. Tool Size 3 1/2-IF in.  
Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_ Anchor Length \_\_\_\_\_ ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

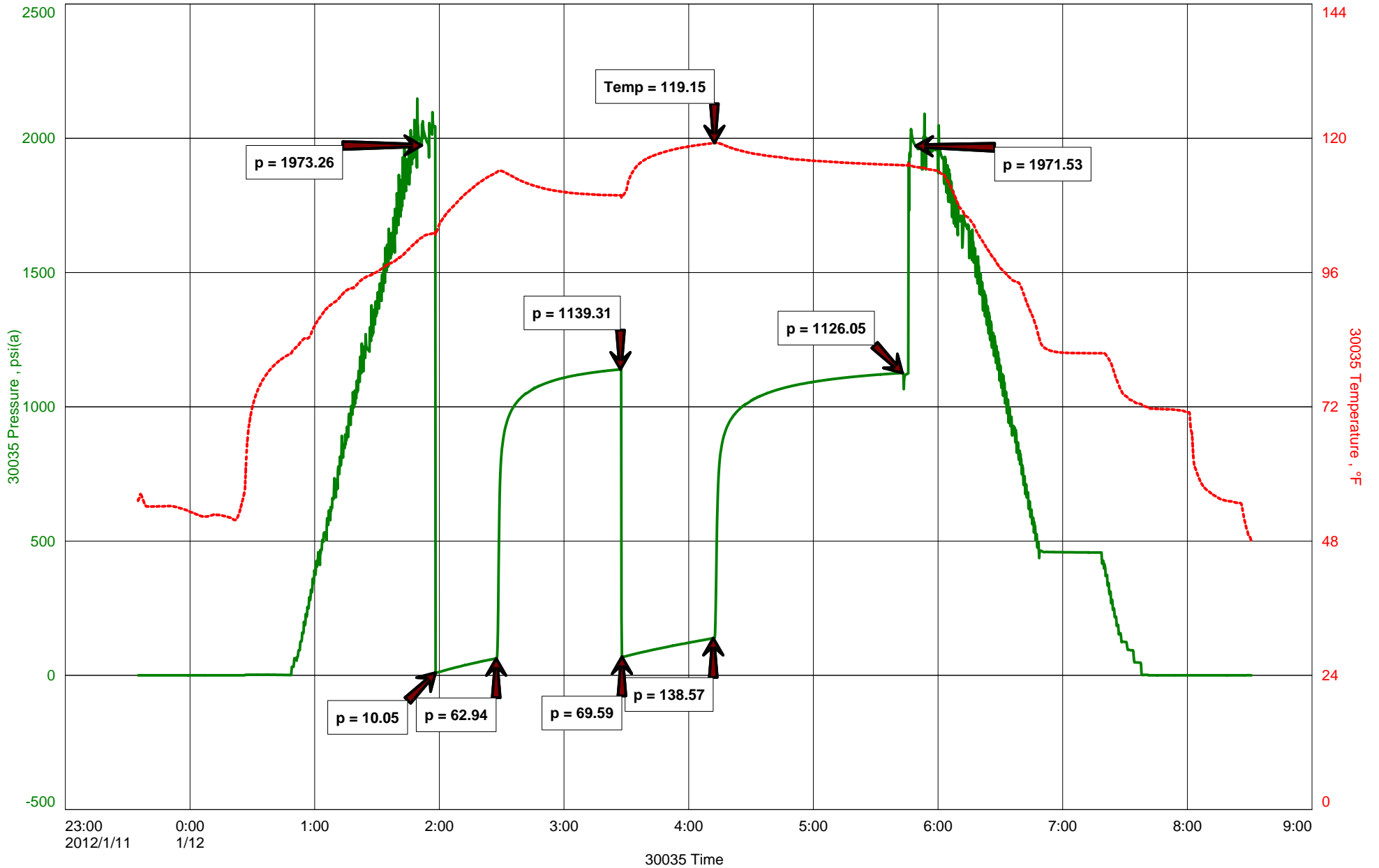
Blow: 1st Open: \_\_\_\_\_  
2nd Open: \_\_\_\_\_

Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
	Total

Time Set Packer(s) \_\_\_\_\_ A.M. P.M. Time Started Off Bottom \_\_\_\_\_ A.M. P.M. Maximum Temperature \_\_\_\_\_  
Initial Hydrostatic Pressure..... (A) \_\_\_\_\_ P.S.I.  
Initial Flow Period..... Minutes \_\_\_\_\_ (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.  
Initial Closed In Period..... Minutes \_\_\_\_\_ (D) \_\_\_\_\_ P.S.I.  
Final Flow Period..... Minutes \_\_\_\_\_ (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.  
Final Closed In Period..... Minutes \_\_\_\_\_ (G) \_\_\_\_\_ P.S.I.  
Final Hydrostatic Pressure..... (H) \_\_\_\_\_ P.S.I.

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# Rose A #2



# Diamond Testing

## General information Report

### General Information

**Company Name** Raymond Oil Company Inc

<b>Contact</b>	Ted McHenry	<b>Job Number</b>	S0075
<b>Well Name</b>	Rose A #2	<b>Representative</b>	Jacob McCallie
<b>Unique Well ID</b>	DST# 4 4143-4205' Lansing 200-230'	<b>Well Operator</b>	Raymond Oil Company Inc
<b>Surface Location</b>	SEC 2-14S-32W Logan County	<b>Report Date</b>	2012/01/11
<b>Well License Number</b>		<b>Prepared By</b>	Jacob McCallie
<b>Field</b>	WC		
<b>Well Type</b>	Vertical		

<b>Test Type</b>	Drill Stem Test	<b>Start Test Time</b>	23:35:00
<b>Formation</b>	DST# 4 4143-4205' Lansing 200-230'	<b>Final Test Time</b>	08:32:00
<b>Well Fluid Type</b>	06 Water		
<b>Start Test Date</b>	2012/01/10		
<b>Final Test Date</b>	2012/01/11		
<b>Gauge Name</b>	30035		
<b>Gauge Serial Number</b>			

### Test Results

**RECOVERED:**  
282 Muddy WTR 79% WTR 21% MUD  
282 TOTAL FLUID

Chlorides: 33,000  
Ph: 8  
RW: .32 @ 55 degrees

**TOOL SAMPLE:**  
1% OIL 94% WTR 5% MUD



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: RoseA2DST5

TIME ON: 20:27:00 1-12  
TIME OFF: 04:47:00 1-13

Company Raymond Oil Company Inc Lease & Well No. Rose A # 2  
Contractor L.D. Drilling Inc. Charge to Raymond Oil Company Inc  
Elevation 2873 KB Formation Myrick St/Ft Scott/Cherokee Effective Pay \_\_\_\_\_ Ft. Ticket No. S0076  
Date 1-13-12 Sec. 2 Twp. \_\_\_\_\_ 14 S Range \_\_\_\_\_ 32 W County \_\_\_\_\_ Logan State KANSAS  
Test Approved By Kim Shoemaker Diamond Representative Jacob McCallie

Formation Test No. 5 Interval Tested from 4380 ft. to 4471 ft. Total Depth 4471 ft.  
Packer Depth 4375 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth 4380 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 4361 ft. Recorder Number 30035 Cap. 10000 P.S.I.  
Bottom Recorder Depth (Outside) 4468 ft. Recorder Number 3851 Cap. 5700 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type Chem Viscosity 51 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
Weight 8.9 Water Loss 6.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 3,500 P.P.M. Drill Pipe Length 4347 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number 3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? NO Reversed Out NO Anchor Length 91 ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 1/2" Blow- Built to 1 1/4" in 30 min **WSBB**  
2nd Open: WSB- Built to 1/4" in 45 min **NOBB**

Recovered 5 ft. of DM 100% DM  
Recovered 5 ft. of TOTAL FLUID  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Remarks: Diesel Fuel In Bucket  
**TOOL SAMPLE: 100% DM**

	Price Job
	Other Charges
	Insurance
	Total

Time Set Packer(s) 11:00 PM <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 2:45 AM <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 109

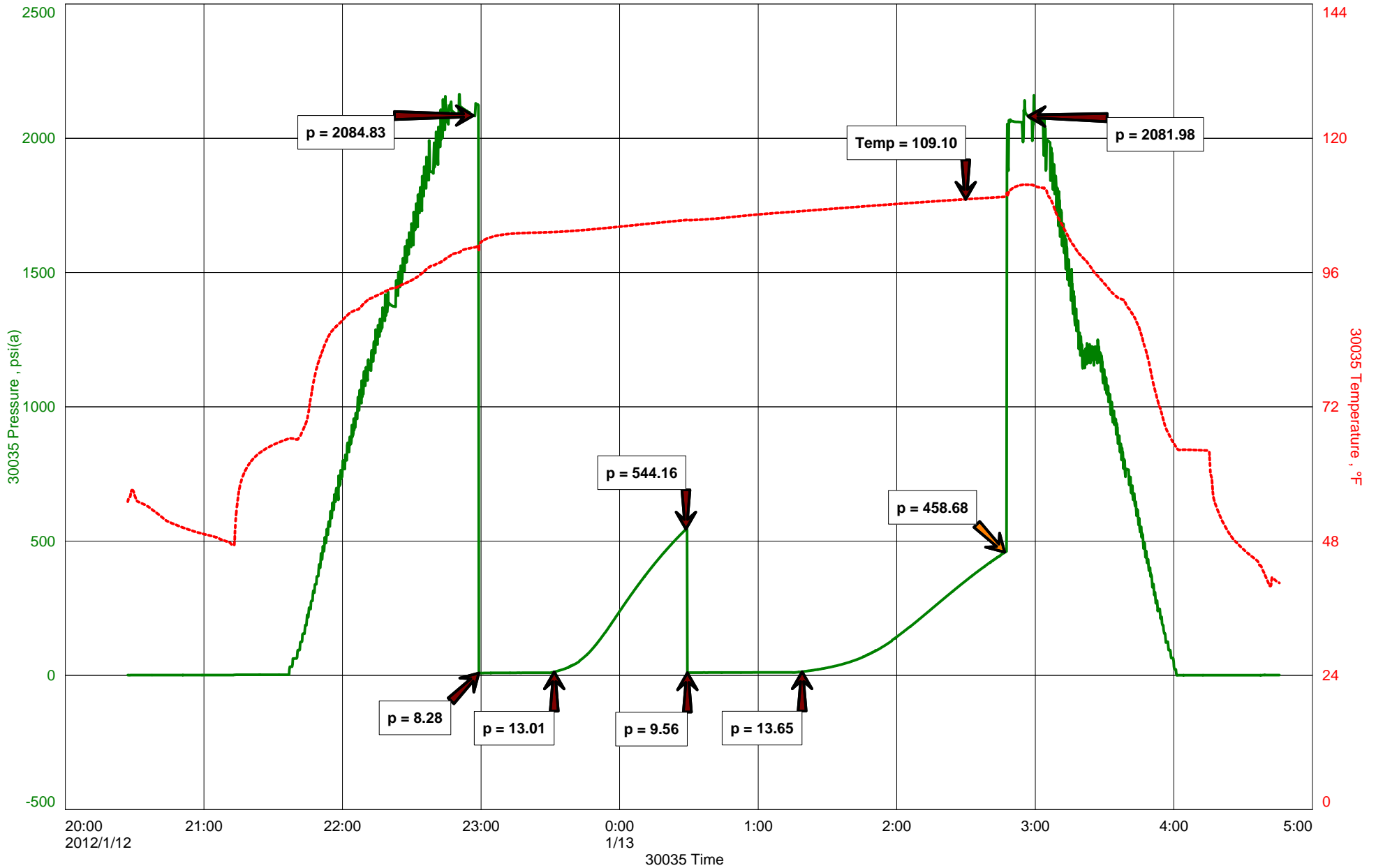
Initial Hydrostatic Pressure..... (A) 2085 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 8 P.S.I. to (C) 13 P.S.I.  
Initial Closed In Period..... Minutes 60 (D) 544 P.S.I.  
Final Flow Period..... Minutes 45 (E) 10 P.S.I. to (F) 14 P.S.I.  
Final Closed In Period..... Minutes 90 (G) 459 P.S.I.  
Final Hydrostatic Pressure..... (H) 2082 P.S.I.

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Raymond Oil Company Inc.  
DST #5 4380-4471' Myrick St. / Ft. Scott / Chero  
Start Test Date: 2012/01/12  
Final Test Date: 2012/01/13

Rose A # 2  
Formation: DST #5 4380-4471' Myrick St. / Ft. Scott / Chero  
Pool: Wildcat  
Job Number: S0076

# Rose A # 2



# Diamond Testing

## General information Report

### General Information

**Company Name** Raymond Oil Company Inc.

<b>Contact</b>	Ted McHenry	<b>Job Number</b>	S0076
<b>Well Name</b>	Rose A # 2	<b>Representative</b>	Jacob McCallie
<b>Unique Well ID</b>	DST #5 4380-4471' Myrick St. / Ft. Scott / Chero	<b>Well Operator</b>	Raymond Oil Company Inc.
<b>Surface Location</b>	SEC 2-14S-32W Logan County	<b>Report Date</b>	2012/01/13
<b>Well License Number</b>		<b>Prepared By</b>	Jacob McCallie
<b>Field</b>	WC		
<b>Well Type</b>	Vertical		

<b>Test Type</b>	Drill Stem Test	<b>Start Test Time</b>	20:27:00
<b>Formation</b>	DST #5 4380-4471' Myrick St. / Ft. Scott / Chero	<b>Final Test Time</b>	04:47:00
<b>Well Fluid Type</b>	01 Oil		
<b>Start Test Date</b>	2012/01/12		
<b>Final Test Date</b>	2012/01/13		
<b>Gauge Name</b>	30035		
<b>Gauge Serial Number</b>			

### Test Results

**RECOVERED:**  
5' DM 100% DM  
5' TOTAL FLUID

**TOOL SAMPLE:**  
100% DM



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

TIME ON: \_\_\_\_\_  
TIME OFF: \_\_\_\_\_

Company \_\_\_\_\_ Lease & Well No. \_\_\_\_\_  
Contractor \_\_\_\_\_ Charge to \_\_\_\_\_  
Elevation \_\_\_\_\_ Formation \_\_\_\_\_ Effective Pay \_\_\_\_\_ Ft. Ticket No. \_\_\_\_\_  
Date \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Range \_\_\_\_\_ W County \_\_\_\_\_ State **KANSAS**  
Test Approved By \_\_\_\_\_ Diamond Representative \_\_\_\_\_

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

Top Recorder Depth (Inside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Bottom Recorder Depth (Outside) \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type \_\_\_\_\_ Viscosity \_\_\_\_\_ Drill Collar Length \_\_\_\_\_ ft. I.D. 2 1/4 in.  
Weight \_\_\_\_\_ Water Loss \_\_\_\_\_ cc. Weight Pipe Length \_\_\_\_\_ ft. I.D. 2 7/8 in.  
Chlorides \_\_\_\_\_ P.P.M. Drill Pipe Length \_\_\_\_\_ ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number \_\_\_\_\_ Test Tool Length \_\_\_\_\_ ft. Tool Size 3 1/2-IF in.  
Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_ Anchor Length \_\_\_\_\_ ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: \_\_\_\_\_  
2nd Open: \_\_\_\_\_

Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
	Total

Time Set Packer(s) \_\_\_\_\_ A.M. P.M. Time Started Off Bottom \_\_\_\_\_ A.M. P.M. Maximum Temperature \_\_\_\_\_  
Initial Hydrostatic Pressure..... (A) \_\_\_\_\_ P.S.I.  
Initial Flow Period..... Minutes \_\_\_\_\_ (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.  
Initial Closed In Period..... Minutes \_\_\_\_\_ (D) \_\_\_\_\_ P.S.I.  
Final Flow Period..... Minutes \_\_\_\_\_ (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.  
Final Closed In Period..... Minutes \_\_\_\_\_ (G) \_\_\_\_\_ P.S.I.  
Final Hydrostatic Pressure..... (H) \_\_\_\_\_ P.S.I.

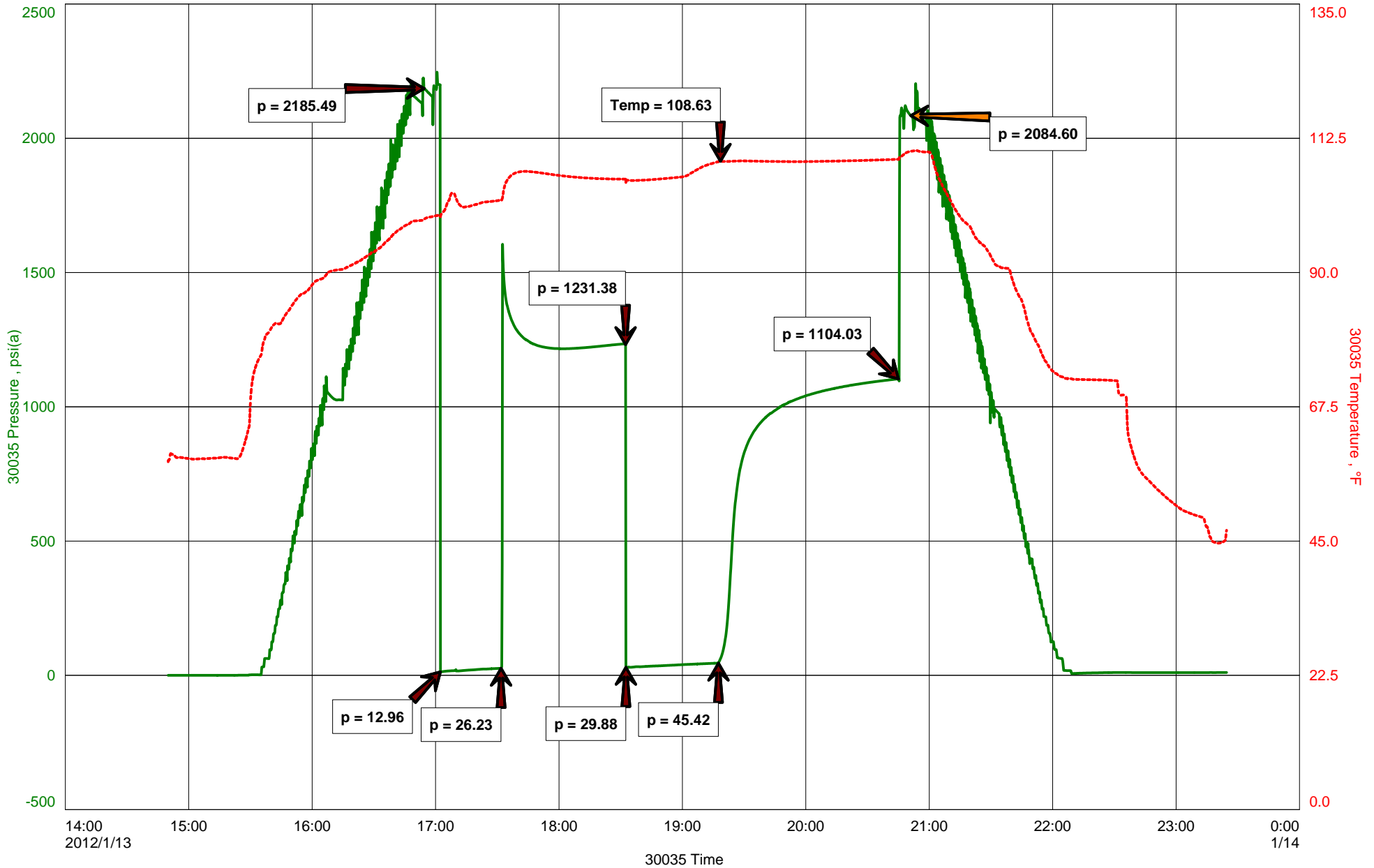
Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged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



Raymond Oil Company Inc  
DST# 6 4456-4510' Johnson  
Start Test Date: 2012/01/13  
Final Test Date: 2012/01/13

Rose A #2  
Formation: DST# 6 4456-4510' Johnson  
Pool: Wildcat  
Job Number: S0077

# Rose A #2



# Diamond Testing

## General information Report

### General Information

**Company Name** Raymond Oil Company Inc

<b>Contact</b>	Ted McHenry	<b>Job Number</b>	S0077
<b>Well Name</b>	Rose A #2	<b>Representative</b>	Jacob McCallie
<b>Unique Well ID</b>	DST# 6 4456-4510' Johnson	<b>Well Operator</b>	Raymond Oil Company Inc.
<b>Surface Location</b>	SEC 2-14S-32W Logan County	<b>Report Date</b>	2012/01/13
<b>Well License Number</b>		<b>Prepared By</b>	Jacob McCallie
<b>Field</b>	WC		
<b>Well Type</b>	Vertical		

<b>Test Type</b>	Drill Stem Test	<b>Start Test Time</b>	14:50:00
<b>Formation</b>	DST# 6 4456-4510' Johnson	<b>Final Test Time</b>	23:25:00
<b>Well Fluid Type</b>	01 Oil		
<b>Start Test Date</b>	2012/01/13		
<b>Final Test Date</b>	2012/01/13		
<b>Gauge Name</b>	30035		
<b>Gauge Serial Number</b>			

### Test Results

#### RECOVERED:

78'	OC/WTRC Mud	12% OIL 14% WTR 74% MUD
78'	TOTAL FLUID	

#### TOOL SAMPLE:

10% OIL 22% WTR 68% MUD



**CONSOLIDATED**  
Oil Well Services, LLC

TICKET NUMBER 33815

LOCATION Oakley

FOREMAN Fuzz

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**ENTER**  
**FIELD TICKET & TREATMENT REPORT**

**CEMENT**

KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1.15.12	7158	Rose A-2	2	145	32W	LOGAN
CUSTOMER Raymond Oil Co			CARRY 175 CS			
MAILING ADDRESS			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY			463	Josh G		
STATE			460	cedar		
ZIP CODE			466	Wes F		

JOB TYPE 2-stage HOLE SIZE 7 7/8 HOLE DEPTH 4722' CASING SIZE & WEIGHT 4 1/2 10.5  
 CASING DEPTH \_\_\_\_\_ DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER DU @ 2319'  
 SLURRY WEIGHT 14.2-12.5 SLURRY VOL. .27 - 1.9 WATER gal/sk 5.8 - 10.8 CEMENT LEFT in CASING 47.91  
 DISPLACEMENT 79.4 BBL DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting on h D #1 float equip Cent 1, 3, 5, 7, 13, 56, 58  
 Basket #56 DU Tool #57 Rig up and circulate. Pump 5 BBL water mix 300#  
 60/40 pos 29ozal 7 1/2 90 salt. Wash pump lines. Drop plug and displace  
 37 1/2 BBL water, 37 BBL mud. 500# lift, 1500# land. Floatheld. Drop DU  
 Bomb with 15min open DU Tool @ 1100#. Circulate till water tank fills.  
 Pump 5 BBL water mix 300# in RH. mix 420# 60/40 89ozal 14#  
 flo-seal down 4 1/2 csg. Wash pump lines. Drop plug and displace  
 37 1/2 BBL water 600# lift land plug and close tool @ 1700# Cement  
 did circulate approx 5 BBL to pit.

Thanks Fuzz & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401P	1	PUMP CHARGE	2950.00	2950.00
5406	20	MILEAGE	5.00	100.00
5407A	32.3400	Tow mileage Delivery	1.67	1078.82
1131	300 SKS	60/40 pos (Bottom stage)	15.10	4530.00
1131	450 SKS	60/40 pos (Top stage)	15.10	6795.00
1111	1200 #	SALT	.45	540.00
1118B	3612 #	Bradenite	.25	903.00
1107	113 #	Flo-seal	2.82	318.66
4156	1	AFU Floath shoe 4 1/2	287.00	287.00
4129	7	Centralizers 4 1/2	46.00	322.00
4103	1	Basket 4 1/2	261.00	261.00
4283	1	DU Tool w/latchdown	3850.00	3850.00
		subtotal		21935.48
		less 10% disc		2193.55
				19741.93
		SALES TAX		1250.04
		ESTIMATED TOTAL		20991.97

Ravin 3737

AUTHORIZATION \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



**CONSOLIDATED**  
Oil Well Services, LLC



TICKET NUMBER 33767  
LOCATION Oakley  
FOREMAN Kelly Gabel

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**

**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-3-12	7158	Rose A #2	2	14	32	Logan

CUSTOMER	TRUCK #	DRIVER	TRUCK #	DRIVER
Raymond Oil	399	Damon M Miles S		
	566	Wes F		

CITY	STATE	ZIP CODE
Oakley	KS	66720

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 264 CASING SIZE & WEIGHT 8 5/8 24#  
 CASING DEPTH 261 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 148 SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 20'  
 DISPLACEMENT 15 1/4 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting. Rigged up on 60 Drilling. Hooked up to circulate, mixed 180 SKS com 3% CC 2% gel & displaced with 15 1/4 bbl Hz. Shut in. Washed out pumps & lines. Rigged down & left location.

Cement did circulate

circulated approx. 4 bbl to pit.

*Thank you  
Kelly & crew*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	1085.00	1085.00
5406	20	MILEAGE	5.00	100.00
5407	8.5	Ton Mileage delivery (min)	410.00	410.00
11045	180 SKS	Class A cement	17.65	3177.00
1102	508 #	Calcium chloride	.89	452.12
11188	339 #	Bentonite	.25	84.75
				5308.87
			Loss 10% disc	530.89
				4777.98
			SALES TAX	260.72
			ESTIMATED TOTAL	5038.70

Ravin 3737

7:15 AM AUTHORIZATION RH Wh

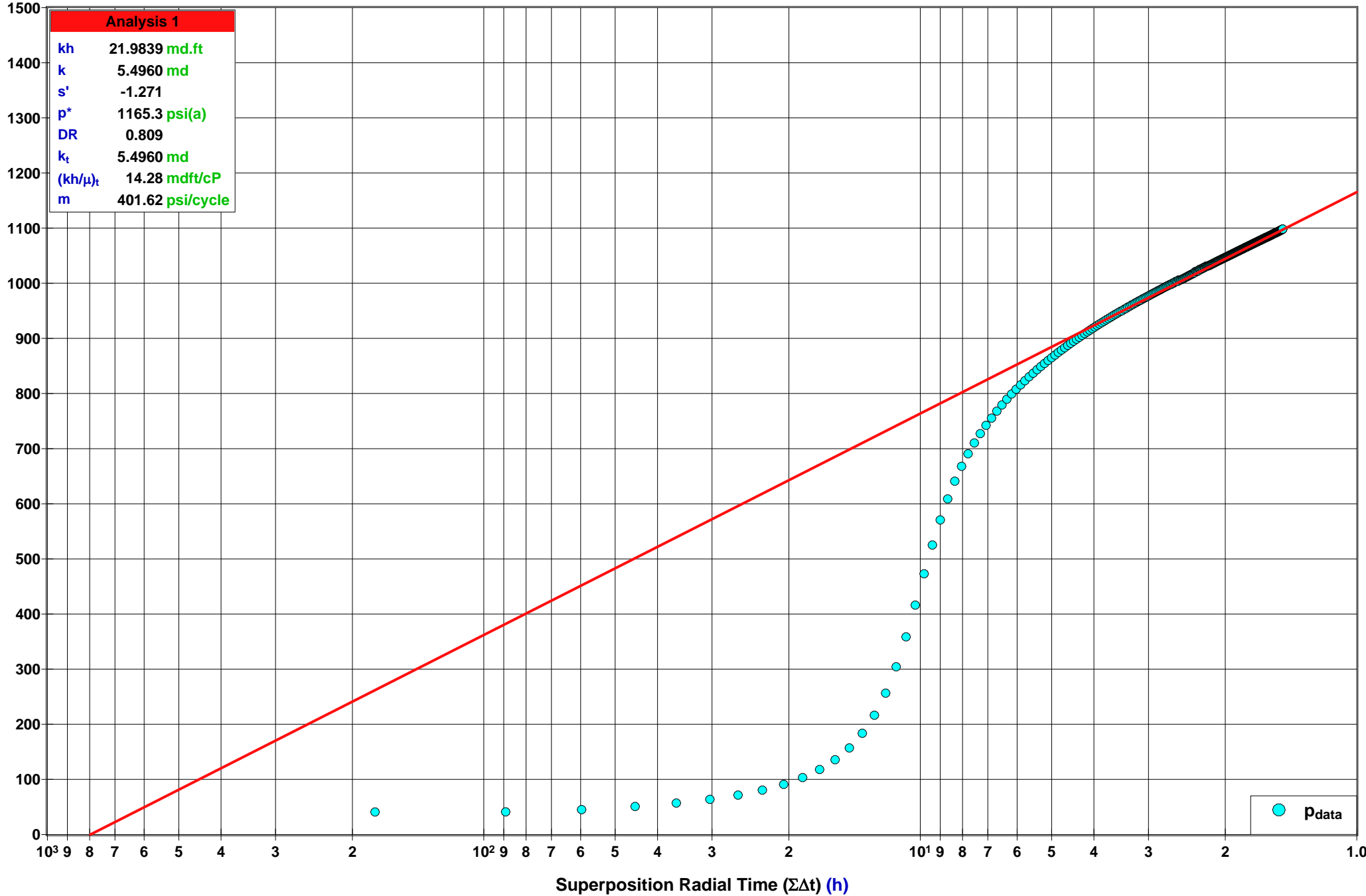
TITLE \_\_\_\_\_

DATE 1-3-12

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

RAYMOND OIL COMPANY, INC.  
 ROSE A #2  
 DST #1 LANSING 35' 3,920' - 3,942'

### INITIAL SHUT-IN HORNER



# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	22 md.ft	Total Skin (s')	-1.271
Effective Permeability (k)	5.4960 md	Skin Due to Damage (s <sub>d</sub> )	-1.271
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (S <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	5.4960 md	Skin Due To Partial Penetration (S <sub>pp</sub> )	
Effective Water Permeability (k <sub>w</sub> )	md	Pressure Drop Due to Total Skin (Δp <sub>skin</sub> )	psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>i</sub> )	35.3 rbbl/d	Damage Ratio (DR)	0.809
Total Mobility ((k/μ) <sub>i</sub> )	3.57 md/cP	Flow Efficiency (FE)	1.236
Total Transmissivity ((kh/μ) <sub>i</sub> )	14.28 mdft/cP		
Semi-Log Slope (m)	401.62 psi/cycle		

### Reservoir Parameters

Net Pay (h)	4.000 ft
Total Porosity (φ <sub>t</sub> )	10.00 %
Gas Saturation (S <sub>g</sub> )	0.00 %
Oil Saturation (S <sub>o</sub> )	80.00 %
Water Saturation (S <sub>w</sub> )	20.00 %
Formation Compressibility (c <sub>f</sub> )	4.8623e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.4244e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	1165.3 psi(a)
Final Flowing Pressure (p <sub>wfo</sub> )	40.9 psi(a)
Final Measured Pressure (p <sub>last</sub> )	0.1 psi(a)

### Fluid Properties

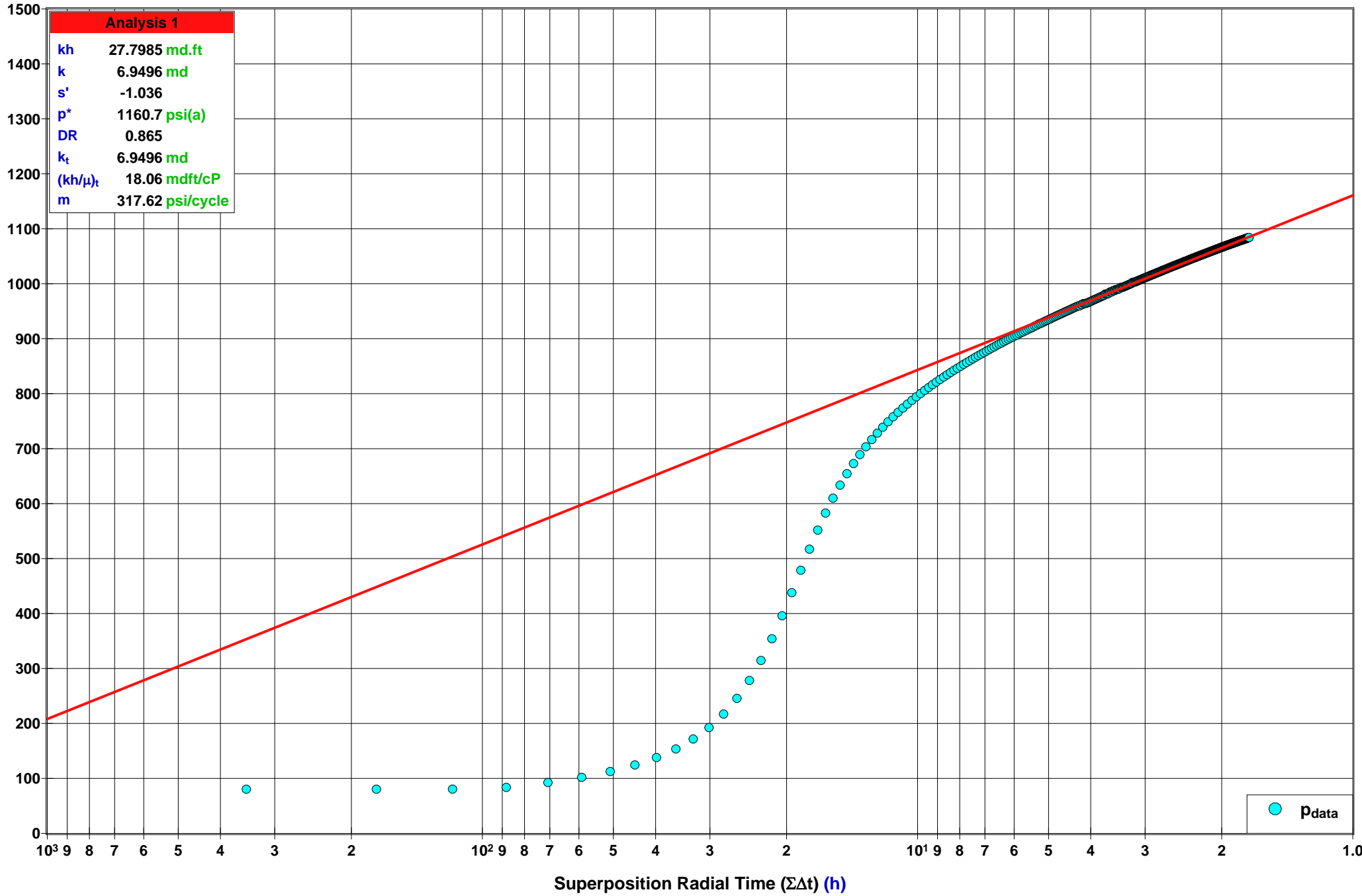
Reservoir Temperature (T <sub>resv</sub> )	109.0 °F
Reservoir Pressure (p <sub>resv</sub> )	1918.7 psi(a)
Oil Gravity (γ <sub>o</sub> )	35.0 °API
Oil Viscosity (μ <sub>o</sub> )	1.5394 cP
Oil Compressibility (c <sub>o</sub> )	1.0978e-05 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.216
Solution Gas Ratio (R <sub>s</sub> )	398.0 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	0.49 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbl
Final Oil Rate (q <sub>o final</sub> )	29.0 bbl/d

RAYMOND OIL COMPANY, INC.  
ROSE A #2  
DST #1 LANSING 35' 3,920' - 3,942'

### FINAL SHUT-IN HORNER



# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	22 md.ft	Total Skin (s')	-1.271
Effective Permeability (k)	5.4960 md	Skin Due to Damage (s <sub>d</sub> )	-1.271
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (S <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	5.4960 md	Skin Due To Partial Penetration (S <sub>pp</sub> )	
Effective Water Permeability (k <sub>w</sub> )	md	Pressure Drop Due to Total Skin (Δp <sub>skin</sub> )	psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>i</sub> )	35.3 rbbl/d	Damage Ratio (DR)	0.809
Total Mobility ((k/μ) <sub>i</sub> )	3.57 md/cP	Flow Efficiency (FE)	1.236
Total Transmissivity ((kh/μ) <sub>i</sub> )	14.28 mdft/cP		
Semi-Log Slope (m)	401.62 psi/cycle		

### Reservoir Parameters

Net Pay (h)	4.000 ft
Total Porosity (φ <sub>t</sub> )	10.00 %
Gas Saturation (S <sub>g</sub> )	0.00 %
Oil Saturation (S <sub>o</sub> )	80.00 %
Water Saturation (S <sub>w</sub> )	20.00 %
Formation Compressibility (c <sub>f</sub> )	4.8623e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.4244e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	1165.3 psi(a)
Final Flowing Pressure (p <sub>wfo</sub> )	40.9 psi(a)
Final Measured Pressure (p <sub>last</sub> )	0.1 psi(a)

### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	109.0 °F
Reservoir Pressure (p <sub>resv</sub> )	1918.7 psi(a)
Oil Gravity (γ <sub>o</sub> )	35.0 °API
Oil Viscosity (μ <sub>o</sub> )	1.5394 cP
Oil Compressibility (c <sub>o</sub> )	1.0978e-05 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.216
Solution Gas Ratio (R <sub>s</sub> )	398.0 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	0.49 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbl
Final Oil Rate (q <sub>o final</sub> )	29.0 bbl/d



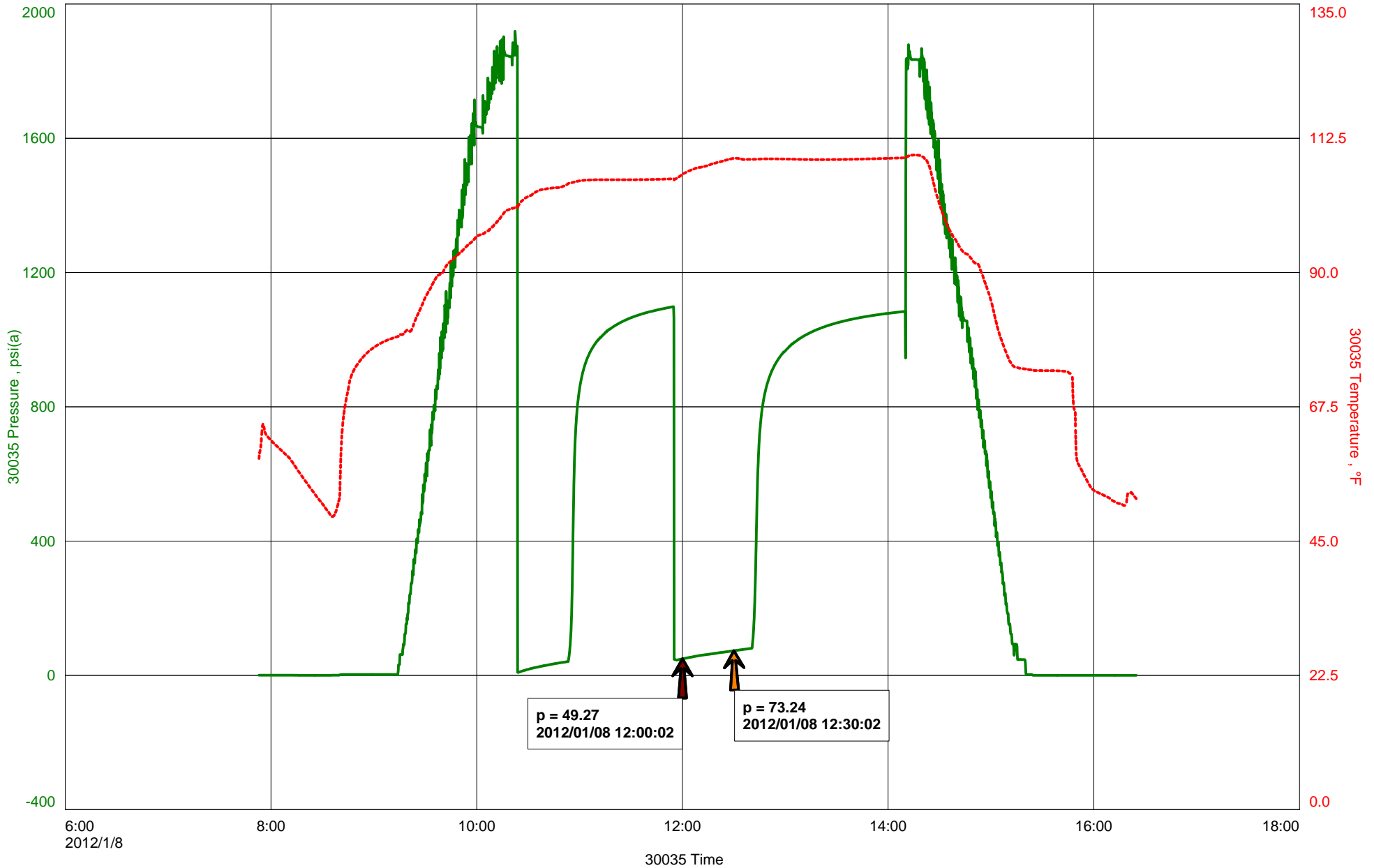
RAYMOND OIL COMPANY, INC  
ROSE A #2  
DST #1 LANSING 35' 3,920' - 3,942'

<u>DESCRIPTION</u>	<u>SECOND READING</u>	<u>FIRST READING</u>	<u>PRESSURE CHANGE</u>	<u>DRILL-PIPE SIZE-ID</u>	<u>FLUID GRADIENT</u>	<u>TIME CHANGE</u>	<u>TOTAL TIME</u>	<u>DAILY PRODUCTION</u>	<u>AVERAGE PERCENTAGE OIL</u>	<u>ESTIMATED DAILY PRODUCTION</u>
FINAL FLOW	73	49	24	0.0142	0.368	30	1440	44	66.00%	29

Raymond Oil Company Inc.  
DST # 1 3920-3942' Lansing 35' Zone  
Start Test Date: 2012/01/08  
Final Test Date: 2012/01/08

Rose A # 2  
Formation: DST # 1 3920-3942' Lansing 35' Zone  
Pool: Wildcat  
Job Number: S0072

# DST #1 ESTIMATED PRODUCTION



CONSULTING GEOLOGIST

318-684-9708 \* WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

CLIENT: **RAYMOND OIL COMPANY, INC.**

WELL: **# 2 ROSE 'A'**

FIELD: **WILDCAT**

LOCATION: **1387' FSL & 433' FEL**

SECTION: **2 TWP 14s R02 32W**

COUNTY: **LOGAN STATE KANSAS**

OPERATOR: **L.D. DRILLING, INC.**

DATE: **1-2-12 COMP 1-15-12**

WELL NO: **4722 LTD 4724**

WELL DEPTH: **3453 PIPE MUD CHEMICAL**

ELEVATIONS

KB **2873**

DT

DI **2868**

Measurements Are All From **2873 KB**

CASING  
 Gauge **8 5/8" @ 261'**  
 Production **4 1/2" @**

ELECTRICAL SURVEYS  
 DUALIND, PENS-N., MICRO

SAMPLES SAVED FROM **3450 TO 4722**

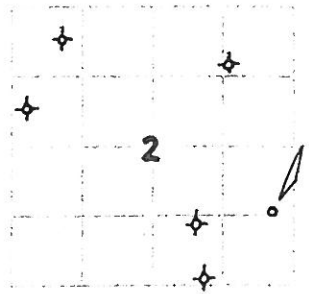
DRILLING TIME DATA FROM **3450 TO 4722**

SAMPLES EXAMINED FROM **3450 TO 4722**

GEOLOGICAL CORE LOG FROM **3500 TO 4722**

GEOLOGIST ON WELL: **TED MCHENRY / KIM SHOEMAKER**

FORMATION	LOG	SAMPLES
ANHYDRITE	2352+521	2352+521
B/ANH.	2374+499	2374+499
STOTLER	3504-631	3504-631
HEEBNER	3859-986	3857-984
LANSING	3900-1027	3898-1025
STARK	4148-1275	4146-1273
MARMATON	4260-1387	4258-1385
FORT SCOTT	4412-1539	4410-1537
CHEROKEE	4440-1567	4437-1564
MISSISSIPPI	4558-1685	4555-1682



NEARBY WELLS  
 1-2-12 SR200  
 1-3 @ 261'  
 1-4 @ 1070'  
 1-5 @ 2206'  
 1-6 @ 3005'  
 1-7 @ 3520'  
 1-8 @ 3942'  
 1-9 @ 3975'  
 1-10 @ 4140'  
 1-11 @ 4205'  
 1-12 @ 4385'  
 1-13 @ 4471'  
 1-14 @ 4570'  
 APL: 15-109-21062  
 1-15 @ 4722

LEGEND

- Sandstone
- Shale
- Carb. sh.
- Limestone
- Dol. Lime
- Gneiss
- Granite
- Basalt
- Conglomerate
- Unconsolidated
- Drift
- Alluvium
- Sand and Gravel
- Clay
- Silt
- Silty Sand
- Silty Clay
- Silty Shale
- Silty Limestone
- Silty Dolomite
- Silty Gneiss
- Silty Granite
- Silty Basalt
- Silty Conglomerate
- Silty Unconsolidated
- Silty Drift
- Silty Alluvium
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- Silty Silt
- Silty Sand
- Silty Sandstone
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- Silty Unconsolidated
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- Silty Limestone
- Silty Dolomite
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- Silty Conglomerate
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- Silty Carbonate
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ANHYDRITE 2352 + 521

81 ANK 2371 + 499

2400

3450

3500

STOTLER 3504-631

Ted McHenry - ex. loc. to

Sh. Gummy, Pd. & Gy

Silt & Paper Siltstone, G. Gummy Sh.

ls. Ta. Foss.

ls. Ta. Foss. cherty.

ls. wt. Stool. Foss.

ls. Bone wt. Sl. G. L. sh.

VIS: 51  
WT: 8.9  
WL: 6.8

VIS: 51.  
WT: 8.9  
WL: 6-B  
CNC: 2000

HOWARD

TOPEKA

3600

3700

3800

ls. Bone with sh. calcare  
sh. calc.  
ls. G. Crm. sh. Foss.  
sh. clay  
ls. Crm. ool. sh. cherty  
ls. Crm. Dns.  
ls. Crm. sh. Foss.  
ls. Crm. brn  
ls. with Crm. Very Foss.  
sh. dr. ly.  
ls. Crm. Foss.  
ls. Crm. Dns.  
ls. Lt. Br. Foss.  
A. wt.  
ls. Crm. Foss.  
ls. Brn. ls. Crm. sh. Foss.  
ls. Lt. Br. Crm. sh. Foss. Fe A  
ls. Lt. Br. Foss. cherty.

HEEBNER 3857-984

Sh. Blk. Carb.

TORONTO

15. Crm. Br. Fog. T. P. P. R. A. d. w/ Blk. P. lky del. sh. No. Flow No. odor (3840)

15. Crm. Sh. Fog. Sh. Chilly. mostly Del. (Sh. odor under Heat)

LANSGING 3897-1024

15. Crm. ool.

15. Baren. 12.1.14 Bl. Sh. ?

AA.

AA. G. sh.

16. Bu. Crm. Sh. Fog. Irregular. T. P. P. R. A. d. Fog. V. L. Br. Sh. F. P. S. D. ... bright Yellow Flare. Few g. bubbles. - good amount. Fairly heavy. No odor.

(35') 15. Crm. g. l. n. Fog. F. P. S. D. ... dull. Floor. F. odor. 2.4.18. 5.1/2"

VIS: 49

WT: 89

WL: 6.4

CNL: 2400

KANSAS CITY

VIS: 49

WT: 89

WL: 6.4

CNL: 2400

15. Tan. Sh. ool. Fog. Sh. A. Some weathered - G. l. n. ... F. odor. 1.1.18. 5.1/2"

15. W. l. G. w. l. Sh. Chilly

16. W. l. Chilly

16. Tan. w. Sh. Fog. V. S. Chilly

15. W. l. G. ... No V. S. Chilly

15. L. G. V. S. Chilly

MUNCIE CREEK 4062-1189

Sh. Blk. Carb. (4070)

15. L. G. V. S. Fog. V. S. Chilly

Sh. L. G.

15. W. l. G. Sh. ool. Fog. Sh. A. ... F. odor. 1.1.18. 5.1/2"

15. Tan. Sh. Fog. Sh. Chilly

Sh. Ool.

15. Tan. L. Br. ... No. Sh. A

Sh. L. G.

15. Tan. w. Sh. Fog. Sh. Chilly

Sh. L. G.

15. Tan. Sh. Fog. V. S. Chilly ... F. odor. 1.1.18. 5.1/2"

DST (1) 3920-3942

1st OPEN: Bottom bucket 2 1/2 min. 26 1/2"

2nd OPEN:

30.60.45.90

Rec. 62' G.I.P.

183' SMGO

(572.647.04) 212

PP: 9.41

47.81"

SIP: 1098

1084"

DST (2) 3970-3995

1st OPEN: Bottom bucket 2 1/2 min. 5 1/2"

2nd OPEN:

30.60.45.90

Rec. 189' G.I.P.

783' CO

62' GMWD

126' MW

TF: 911"

PP: 30.185

185-361"

SIP: 1010.99

DST (3) 4060-4140

1st OPEN: Bottom bucket 8 min. 31"

2nd OPEN: 6 1/2"

30.60.45.90

Rec. 562' G.I.P.

141' CO

245' G

252' HDSVM (0.76.2)

126' 50.6CMW (18)

TF: 519"

PP: 17.121

128-228"

SIP: 1148

1130"



MYRICK STATION 4397-1571

LS. To wt. 41g. 50 Foss. Sl. Chalky. S. A. P. 1/4. Dk. Bl. Sl. 20 Sp. H. Sl. F. Sp. No Flour. F. D. 200 (4410)

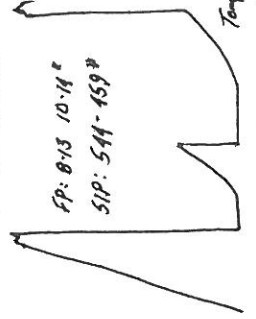
DST (5) 4980-4471

1st OPEN: Blow built to 1 1/4"

2nd OPEN: " " 1 1/4"

FP: 8-13 10-14"

SIP: 5-11-159"



SA 816/64 FORT SCOT 4410-1537

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. not. Chalky.

LS. W. L. 1/4. 50 Foss. Sl. A

CHEROKEE 4497-1564

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

JOHNSON 4482-1609

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

MORROW 4511-1638

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

MISSISSIPPI 4555-1682

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

4400

4500

4600

DST (6)

DST (6) 4456-4510

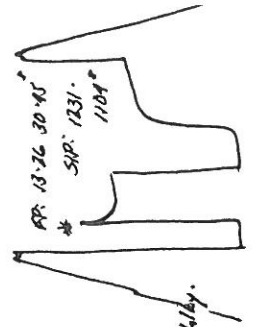
1st OPEN: Blow built to 1 1/4"

2nd OPEN: " " 5"

FP: 13-26 30-45"

SIP: 1231-1104"

Re. 78' 02MM (REV. 01.14)



LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

LS. To wt. 41g. 50 Foss. Sl. A

VIS: 53

WT: 91

WE: 80

CHL: 4400

VIS: 58

WT: 92

WE: 85

CHL: 4400



SPERGEN 4671-1798

Dd. Th. Li. B. V. Fench. Sur.

Dd. Th. Li. B. V. Fench. St. Foch. Küppig.

Dd. B. V. Fench. St. Foch. w/ D. K. G. Incl.

Dd. B. G. V. Fench. St. Foch. w/ D. K. G. Incl.

RTD 4722-1849

4700

