



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1172129  
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: \_\_\_\_\_

1172129

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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

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

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing     Pumping     Gas Lift     Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Vess Oil Corporation
Well Name	Bass 10
Doc ID	1172129

All Electric Logs Run

Dual Induction
Micro Log
Dual Compensated Porosity Log
Borehole Compensated Sonic Log
Gamma Ray

# ALLIED OIL & GAS SERVICES, LLC 054724

Federal Tax I.D.# 20-5975804

BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:

Russell, KS  
8-11-13

DATE 8-10-13	SEC. 12	TWP. 10	RANGE 21	CALLED OUT	ON LOCATION	JOB START 4:00 AM	JOB FINISH 4:30 AM
LEASE BASS	WELL# 10	LOCATION Pulco ls 3w 22s			COUNTY GRANT	STATE KS	

CONTRACTOR L-D DRLG Rig #

TYPE OF JOB Cement Surface

HOLE SIZE 12 1/4 T.D. 235'

CASING SIZE 8 5/8 New DEPTH 232'

TUBING SIZE 2 3/8 CSG DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX 250 # MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15 FL

PERFS.

DISPLACEMENT 13 3/4 BBL

EQUIPMENT

PUMP TRUCK CEMENTER Robert Y.

# 417 HELPER Woody O.

BULK TRUCK DRIVER Joe G.

# 378

BULK TRUCK DRIVER

OWNER

CEMENT AMOUNT ORDERED 16.5 SX Comm 3%cc

COMMON <u>16.5</u>	@ <u>17.90</u>	<u>295.35</u>
POZMIX	@	
GEL	@	
CHLORIDE <u>5 SX</u>	@ <u>64.00</u>	<u>320.00</u>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING <u>183.51</u>	@ <u>2.48</u>	<u>455.11</u>
MILEAGE <u>354.15</u>	@ <u>2.60</u>	<u>920.79</u>
		TOTAL <u>4649.40</u>

REMARKS:

RAN 5 NEW JOINTS OF # 8 5/8 CSG,  
SET @ 232' REVIEWED CIRC. &  
Cement w/ 16.5 SX Comm 3%cc  
& displaced 13 3/4 & SHUT IN  
@ 250 #

Cement Did Circulate  
TO SURFACE

THANKS

SERVICE

DEPTH OF JOB		
PUMP TRUCK CHARGE		<u>1512.25</u>
EXTRA FOOTAGE	@	
MILEAGE	@	
MANIFOLD	@	
HV ME <u>45</u>	@ <u>7.70</u>	<u>346.50</u>
LX MT <u>45</u>	@ <u>4.40</u>	<u>198.00</u>

CHARGE TO: Vess Oil Corp.

STREET \_\_\_\_\_

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

TOTAL 2056.75

PLUG & FLOAT EQUIPMENT

_____	@	
_____	@	
_____	@	
_____	@	
_____	@	

TOTAL \_\_\_\_\_

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

TOTAL CHARGES 6706.15

DISCOUNT 1341.23 IF PAID IN 30 DAYS

Net \$5364.92

PRINTED NAME David Baese

SIGNATURE David Baese

To: Allied Oil & Gas Services, LLC.  
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.

# ALLIED OIL & GAS SERVICES, LLC 056994

Federal Tax I.D.# 20-5975804

BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Russell, KS

DATE <u>8.20.13</u>	SEC. <u>12</u>	TWP. <u>10</u>	RANGE <u>21</u>	CALLED OUT	ON LOCATION	JOB START <u>7:00</u>	JOB FINISH <u>7:50</u>
LEASE <u>BASS</u>	WELL # <u>10</u>	LOCATION <u>Palco, KS</u>	COUNTY <u>Graham</u>	STATE <u>KS</u>			
OLD OR NEW (Circle one) <u>Redline &amp; Elshardt 3 W 2 1/2 5 c into</u>							

CONTRACTOR <u>LD Drilling #1</u>	OWNER
TYPE OF JOB <u>LS</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>3910'</u>
CASING SIZE <u>5 1/2</u>	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT <u>3867.91</u>
CEMENT LEFT IN CSG. <u>45.30'</u>	
PERFS.	
DISPLACEMENT <u>92.05 bbl / 420</u>	
EQUIPMENT	
PUMP TRUCK CEMENTER <u>Tony P.</u>	
# <u>409</u> HELPER <u>Nathan D.</u>	
BULK TRUCK	
# <u>407/410</u> DRIVER <u>Glenn B.</u>	
BULK TRUCK	
# DRIVER	
CEMENT	
AMOUNT ORDERED <u>180 sk ASC</u>	
<u>5# Gilsonite / per cell</u>	
<u>+ 30sk RATHOLE</u>	
COMMON @	
POZMIX @	
GEL @	
CHLORIDE @	
ASC <u>Blond - 180sk</u> @ <u>20.9</u> \$ <u>3,762.00</u>	
Cyp asc - 12 sk @ <u>37.6</u> \$ <u>-0-</u>	
Salt asc - 11 sk @ <u>26.35</u> \$ <u>-0-</u>	
Gilsonite - 10 sk @ <u>49.00</u> \$ <u>490.00</u>	
Flo-Seal - #50 lb @ <u>2.97</u> \$ <u>148.50</u>	
Defoamer - #25 lb @ <u>9.80</u> \$ <u>245.00</u>	
Fluid Loss FL-10 #50 lb @ <u>18.25</u> \$ <u>912.50</u>	
Mud Flush 12 gal @ <u>58.7</u> \$ <u>704.40</u>	
HANDLING <u>235.74</u> @ <u>2.42</u> \$ <u>584.64</u>	
MILEAGE <u>400.0125</u> @ <u>2.60</u> \$ <u>1,194.03</u>	
TOTAL \$ <u>8,043.07</u>	

REMARKS:

\* Ran Float Equip "See Float Eqpt."  
 \* Circulated Aule For Lhd  
 \* Ran 12' Mud - Mudd Flush  
 \* Plugged RATHOLE @ 80sk = 5.16'  
 \* Ran 185sk @ 32.02' mix  
 \* Displaced 5 1/2 Latch Down Plug = 92.05  
 \* 10 # 140 psi.

SERVICE

DEPTH OF JOB	<u>3910'</u>
PUMP TRUCK CHARGE	<u>92,443.75</u>
EXTRA FOOTAGE @	
MILEAGE <u>Heavy 45m</u> @ <u>7.70</u> \$ <u>346.50</u>	
MANIFOLD <u>Light 45m</u> @ <u>4.40</u> \$ <u>198.00</u>	
TOTAL \$ <u>2,988.25</u>	

Port collar @ #763' Manitex  
 CHARGE TO: Vess Oil Corp.  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PLUG & FLOAT EQUIPMENT

1x 5 1/2 Float Shoe	\$ <u>339.30</u>
1x 5 1/2 Port collar @	\$ <u>1,831.25</u>
8x 5 1/2 Centralizers @	\$ <u>227.20</u>
2x 5 1/2 BASKETS @	\$ <u>318.80</u>
1x 5 1/2 Latch + Plug @	\$ <u>398.75</u>
6x Weld on Scratchers @	\$ <u>900.00</u>
TOTAL \$ <u>4,015.30</u>	

To: Allied Oil & Gas Services, LLC.

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 Roger Martin  
 SIGNATURE RM

SALES TAX (if Any) \_\_\_\_\_  
 TOTAL CHARGES \$ 15,046.102  
 DISCOUNT \$ 2,206.27 IF PAID IN 30 DAYS  
 Net 12,840.35

# ALLIED OIL & GAS SERVICES, LLC 056999

Federal Tax I.D.# 20-5975804

PO. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:

Russell, Ks

DATE <u>8.29.13</u>	SEC. <u>12</u>	TWP. <u>10</u>	RANGE <u>21</u>	CALLED OUT	ON LOCATION	JOB START <u>12:30 pm</u>	JOB FINISH <u>1:00 pm</u>
LEASE <u>Pass</u>	WELL # <u>10</u>	LOCATION <u>Palco Ks</u>				COUNTY <u>Osage</u>	STATE <u>Ks</u>
OLD OR NEW (Circle one)		South to Redlin & Ellis Black Top 3 w					

CONTRACTOR Blackhawk OWNER \_\_\_\_\_  
TYPE OF JOB Port Collar

HOLE SIZE _____	T.D. _____	CEMENT _____
CASING SIZE <u>5 1/2</u>	DEPTH _____	AMOUNT ORDERED <u>450SK 60/40</u>
TUBING SIZE <u>2 3/8</u>	DEPTH <u>1762'</u>	<u>1 1/2 gal 1/4" F10-seal</u>
DRILL PIPE _____	DEPTH _____	
TOOL _____	DEPTH _____	
PRES. MAX _____	MINIMUM _____	COMMON <u>100SK @ 17.70 \$ 2685.00</u>
MEAS. LINE _____	SHOE JOINT _____	POZMIX <u>100SK @ 9.35 \$ 935.00</u>
CEMENT LEFT IN CSG. _____		GEL <u>10SK @ 23.4 \$ 234.00</u>
PERFS. _____		CHLORIDE _____ @ _____
DISPLACEMENT <u>10.21 60/40</u>		ASC _____ @ _____

EQUIPMENT		
PUMP TRUCK	CEMENTER <u>Tom McNamee</u>	<u>2 SK F10-Seal @ 2.97 \$ 148.50</u>
# <u>409</u>	HELPER <u>Natman D</u>	
BULK TRUCK		
# <u>431</u>	DRIVER <u>Dgray S</u>	
BULK TRUCK		
# _____	DRIVER _____	
		HANDLING <u>482.47 1/2 @ 2.48 \$ 1,196.52</u>
		MILEAGE <u>907.83 1/2 @ 2.60 \$ 2,360.36</u>

TOTAL \$ 7559.38

REMARKS:

\* Pressured Backside to 4120 psi.  
\* Circulated Hole @ 4 3/8" to 4310 psi -  
\* Ran 250SK cont @ 4107 psi - cement to  
\* Displaced 10.21 60/40  
\* Washed cement @ 28 3/4" psi

SERVICE

DEPTH OF JOB	<u>1762'</u>	
PUMP TRUCK CHARGE		<u>\$ 2,249.84</u>
EXTRA FOOTAGE	@	
MILEAGE <u>Heavy 45m</u>	@ <u>7.7</u>	<u>\$ 346.5</u>
MANIFOLD: <u>light 45m</u>	@ <u>4.9</u>	<u>\$ 178.00</u>

CHARGE TO: Vess Oil Corp

TOTAL \$ 2774.34

STREET \_\_\_\_\_

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

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	@	

TOTAL - 0 -

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

TOTAL CHARGES \$ 10,353.72

DISCOUNT \$ 3,106.11 IF PAID IN 30 DAYS

Net 7247.61

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

SIGNATURE Andrew S. Williams

To: Allied Oil & Gas Services, LLC.  
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.

RCC - Richard Williams on location

## ATTACHMENT TO ACO-1

API #15-065-23954  
 Bass #10  
 SE NE NW SW  
 Sec. 12-10S-21W  
 Graham Co., KS

SAMPLE TOPS	<u>BASS #10</u>	
	SAMPLES	LOG TOPS
	<b>KB2277</b>	<b>KB2277</b>
ANHYDRITE	1752 (525)	1751 +526
B/ANH	1788 (489)	1786 +491
TOPEKA	3284 (-1007)	3283 -1006
HEEBNER	3486 (-1209)	3483 -1206
TORONTO	3509 (-1232)	3507 -1230
LANSING	3526 (-1249)	3524 -1247
MUNCIE CRK	3645 (-1368)	3646 -1369
STARK	3709 (-1432)	3707 -1430
SWOPE	3715 (-1438)	3714 -1437
HUSHPUCKNEY	3731 (-1454)	3730 -1453
BKC	3747 (-1470)	3745 -1468
ARBUCKLE	3809 (-1532)	3809 -1532
RTD	3910 (-1633)	3910 -1633
LTD	3910 (-1633)	3910 -1633

**DST #1** 3481-3615

**Zone:** Toronto - LKC F zones

**Times:** 30-45-45-60

**1st open:** WSB, inc to 1.5", No BB

**2nd open:** VWSB, inc to 1.25", No BB

**Rec:** 62' DM (100% mud w/some gassy bubbles.

Tool sample – aa w/few spots of oil and slight sulfur odor

**IFP:** 10-25

**FFP:** 27-45

**ISIP:** 609

**FSIP:** 564

**HYD:** 1663-1640

**TEMP:** 107F

**DST #2** 3640-3767

**Zone:** LKC H to L zones

**Times:** 30-45-45-60

**1st open:** WSB, inc to 1.25", No BB

**2nd open:** WSB, inc to 2.5", No BB

**Rec:** 31' SOCM (8& Oil, 92% mud)

Tool Sample – 3% gas, 20% oil, 2% wtr, 75% mud

**IFP:** 9-16

**FFP:** 17-23

**ISIP:** 427

**FSIP:** 298

**HYD:** 1756-1756

**TEMP:** 107F

Took 80,000# and jars to free up (str wt – 56,000)

**DST #3** 3743-3814

**Zone:** Arb – 5'p

**Times:** 30-45-45-60  
**1st open:** GSB, inc to 3", No BB  
**2nd open:** VWSB, inc to 1.25", No BB  
**Rec:** <1' CO; 44'SOCWM (5% Oil, 11% Wtr, 84% Mud) Cl - 8000 ppm  
Tool Sample – 10% oil, 20% wtr, 70% mud  
**IFP:** 10-22 **FFP:** 23-32  
**ISIP:** 239 **FSIP:** 230  
**HYD:** 1826-1818 **TEMP:** 106F

**DST #4** 3814-24 **Zone:** Arb 15'p  
**Times:** 30-45-45-60  
**1st open:** GSB, BOB 23 min, No BB  
**2nd open:** WSB, inc to 11", No BB  
**Rec:** 25' CO; 275' OSMW (3& Oil, 84% Wtr; 13% mud); 300' TF. Cl -22,000 ppm  
Tool Sample – 2% oil, 97% wtr, 1% mud  
**IFP:** 11-73 **FFP:** 74-138  
**ISIP:** 320 **FSIP:** 320  
**HYD:** 1849-1800 **TEMP:** 112F

**DST #5** 3824-34 **Zone:** Arb 25'p  
**Times:** 30-45-45-60  
**1st open:** WSB, inc to 9", No BB  
**2nd open:** VWSB, inc to 8", No BB  
**Rec:** 48' CO; 127' OSMW (2% oil, 85% wtr, 13% mud); 175' TF. Cl - 30,000 ppm  
Tool Sample – 4% oil, 94% wtr, 2% mud  
**IFP:** 9-48 **FFP:** 46-84  
**ISIP:** 423 **FSIP:** 423  
**HYD:** 1887-1885 **TEMP:** 110F

**DST #6** 3834-45 **Zone:** Arb 36'p  
**Times:** 30-45-45-60  
**1st open:** GSB, BOB 3 min, ¼" BB  
**2nd open:** GSB, BOB 5 min, 1.5" BB  
**Rec:** 350' GIP; 115' CO; 170' GHOCMW (12% gas, 27% oil, 53% wtr, 8% mud); 510' GOSMW (2% gas, 2% oil, 95% wtr, 1% mud); 570' VSOSGW (2% gas, 98% wtr w/some oil specks). 1365' TF. Cl – 26,000 ppm. Tool Sample – 1% gas, 98% wtr, 1% mud w/some oil spots.  
**IFP:** 29-314 **FFP:** 321-603  
**ISIP:** 1037 **FSIP:** 1038  
**HYD:** 1829-1801 **TEMP:** 115F



# ROGER L. MARTIN

INDEPENDENT PETROLEUM GEOLOGIST 316-250-6970

## GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY VESS OIL CORPORATION  
LEASE BASS #10  
FIELD COOPER  
LOCATION 2150' FSL & 1180' FWL  
SECTION 12 TOWNSHIP 10S RANGE 21W  
COUNTY GRAHAM STATE KANSAS

ELEVATIONS  
KB 2277' GL 2272'  
Measurements Are All  
From KB  
API 15-065-23954-00-00

CONTRACTOR L.D. DRILLING, Rig #1  
SPUD 08/10/2013 COMP 08/21/2013  
RTD 3910' (-1633) LTD 3910' (-1633)  
ELECTRICAL SURVEYS  
Pioneer Energy Services: DIL,  
CNL/CDL, MEL, BHCS

CASING  
SURFACE 8&5/8" set @ 232' KB  
w/165 sx Class A, 3% CC  
PRODUCTION 5&1/2" J-55 (Tenaris &  
used T&D) set @ 3808' KB w/185 sx ASC.

### FORMATION TOPS

### LOG

### SAMPLES

### CHRONOLOGY

FORMATION TOPS	LOG	SAMPLES	CHRONOLOGY
ANHYDRITE	1751' (+526)	1752' (+525)	08/10/2013- MIRU, SPUD 6:00 PM.
BASE ANHYDRITE	1786' (+491)	1788' (+489)	08/11/2013- Ran 5 jts 8 5/8" 23# used tested surface casing. Set @ 232' w/165 sx common w/3% CC. Circulated by Allied. Plug down 1:00 AM. D/O 9:00 AM.
TOPEKA	3283' (-1006)	3284' (-1007)	
HEEBNER	3483' (-1206)	3486' (-1209)	08/12/2013- Drilling @ 1746'
TORONTO	3507' (-1230)	3509' (-1232)	08/13/2013- Drilling @ 2660'.
LANSING	3524' (-1247)	3526' (-1249)	08/14/2013- Drilling @ 3275'. Displaced mud @ 2879'. Lost circulation @ 2849', ~ 100 bbl.
MUNCIE CREEK	3646' (-1369)	3645' (-1368)	08/15/2013- CFS @ 3615'. Ran DST #1.
STARK	3707' (-1430)	3709' (-1432)	08/16/2013- Drilling @ 3730'. Ran DST #2.
SWOPE	3714' (-1437)	3715' (-1438)	08/17/2013- Drilling @ 3810'. Ran DST #3.
HUSHPUCKNEY	3730' (-1453)	3731' (-1454)	08/18/2013- DTD 3824'. Pulling DST #4. TIH w/bit.
BASE KANSAS CITY	3745' (-1468)	3747' (-1470)	
ARBUCKLE	3809' (-1532)	3809' (-1532)	08/19/2013- DTD 3834'. Ran DST #5.
RTD/LTD	3910' (-1633)	3910' (-1633)	08/20/2013- RTD 3910' Ran DST #6. Prep to log & run casing.
			08/21/2013- TIH. Drill rat hole to RTD 3910'. Circ clean, TOH, Ran Dual Induction, Dual Compensated Porosity, Micro & Sonic logs. LTD 3910'. Ran bit to condition hole. Lay down drill pipe.

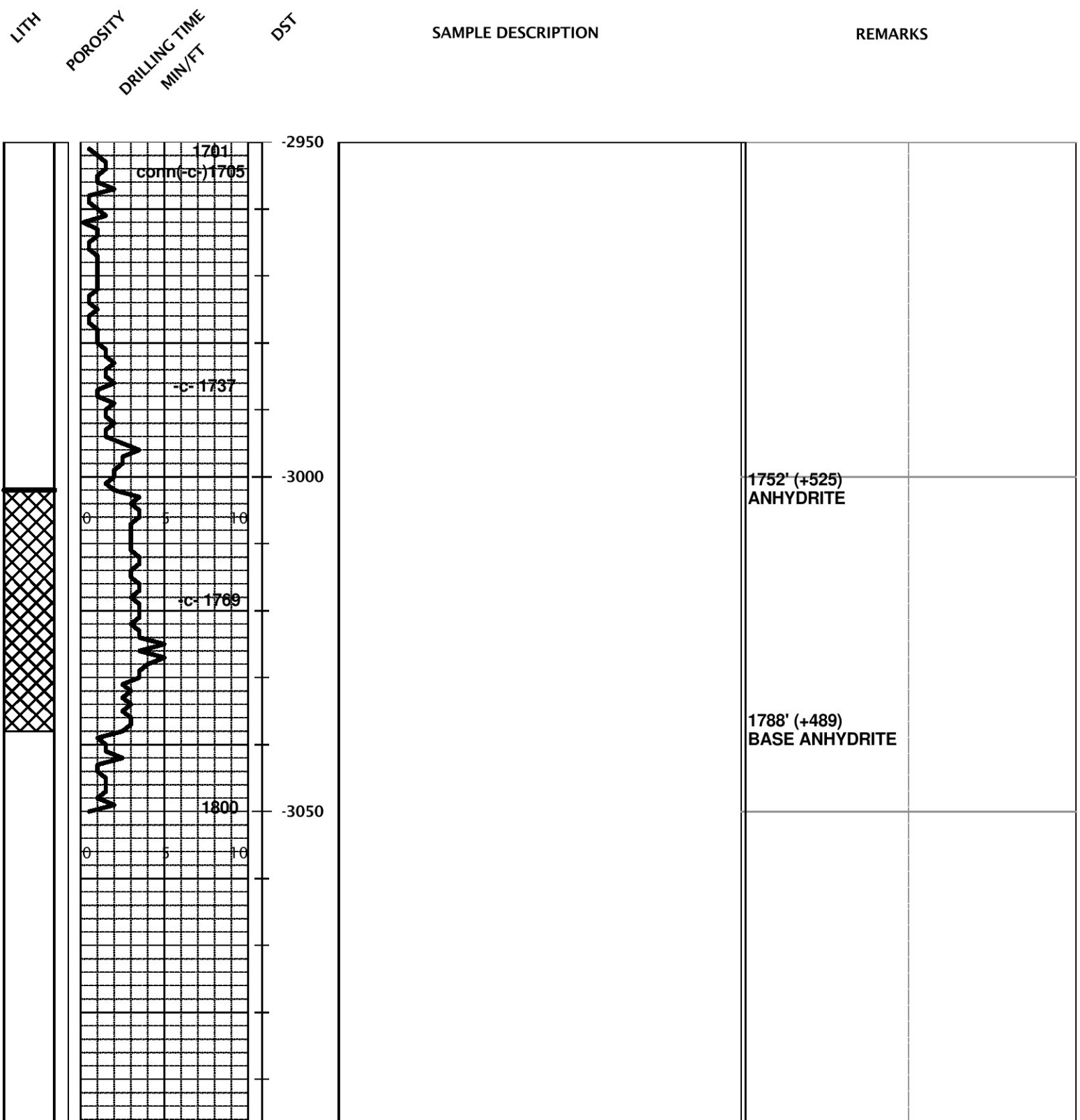
### REMARKS:

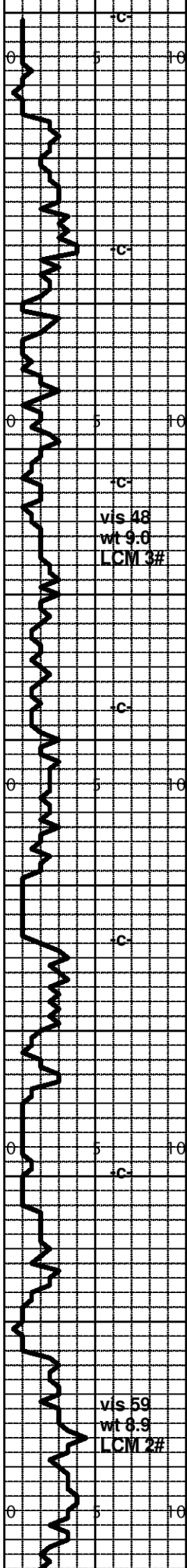
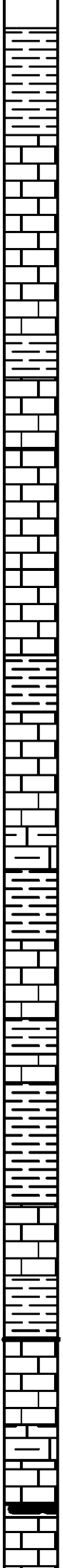
Casing Job: Ran float shoe on insert, new 5 1/3"- 15.5# J55 API Tenaris csg & used T&D 15.5# J55 csg. Tagged bottom @ 3914'. Set casing 2' off bottom (using RTD depth) @ 3808'. Waited on Allied's rotating head. Circulated 1 hour. unable to

depth) @ 3000 : waited on Ahmed's rotating head. Circulated 1 hour, unable to rotate. Cemented w/500 gal mud flush, 185 sx ASC w/10% salt, 2% gel, 1/4#/sk flo-cele, 5#/sk gilsonite. Plug down @ 6:45 AM w/1400#, held. Had good circulation throughout and cellar stayed full. Good lift pressure throughout and cellar stayed full. Rat hole plugged with 30 sx.

\*\* E-Log tops by P. Ramondetta, Geologist, VOC

Respectfully submitted,  
Roger L. Martin, Geologist (Wellsite)





-3100

-3150

-3200

-3250

-3300

SH: gy-blk & gn-gy, sm pyrct, sm calc & lmy.

LS: gy-bf-cm, ms mot Pkst w/VPr- Pr Por, NS. Pred dn & argil Mdst & Wkst w/VPr- NVP. NS.

SH: AA, Pred blk carb & gy.

LS: gy-tn-cm, Pred dn Mdst & Wkst, Rr Pkst, VPr- NVP w/ NS. sm argil- shly.

LS: cm-tn, mx- fnxln, sm fos Pkst, Pr- Fr Por, NS. sm wh- chlky.

LS: bf-gy-wh, sm grnlr Pkst & sm mx- Vfnxln, dolomc, Pred dn Mdst- Wkst, Pred Pr- NVP, Rr Fr- Gd Por, NS.

SH: gy- blk, sm calc & lmy.

LS: Pred gy, dn & argil Mdst w/VPr- NVP & NS.

SH: (Incrs in 3240' spl) gy-blk, sm calc & lmy, Rr carb.

LS: gy-tn-wh, sm mot Pkst- fos w/sm 2nd ReX, Pred Pr- NVP, NS.

SH: lt- dk gn-gy & blk, sm carb.

SH: Abndt gy-blk, calc & lmy, Rr pyrct.

LS: gy-cm-bf, sm argil Mdst, sm grnlr fos Pkst, Pr- NVP, NS.

SH: AA.

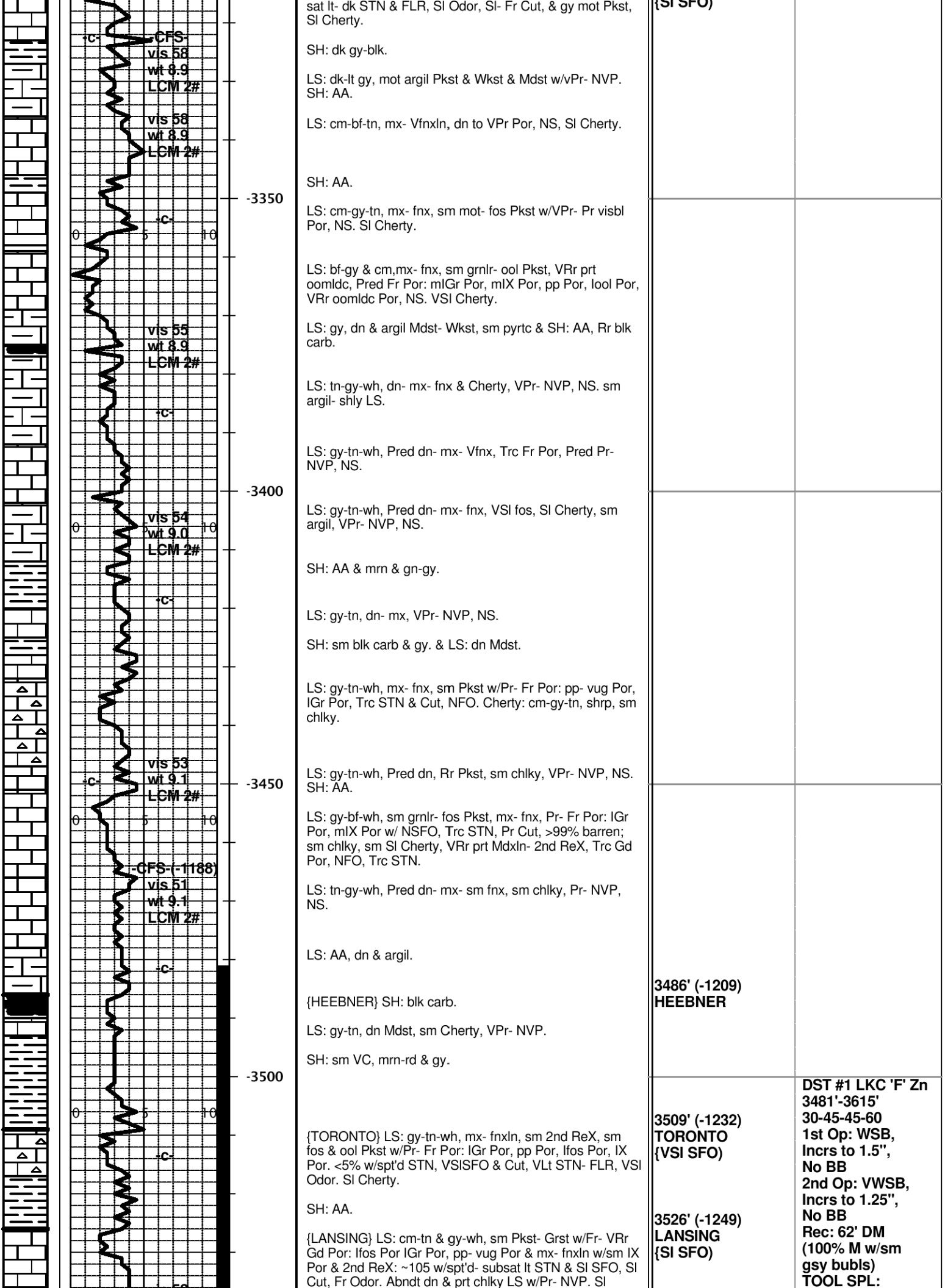
{TOPEKA} LS: tn-gy-wh, Pred dn Mdst & sm chlky, VPr- NVP, NS.

sm argil LS.

LS: AA & mot Pkst- Wkst, Pred VPr- NVP w/ NS. & SH: blk carb & gy.

LS: cm-tn- STN & gy, mx- Vfnxln, sm msucro, SI doloc, sm grnlr, Rr Fr Por: IX Por, IGr Por, pp- vug Por w/spt'd-

	<b>*ADD MUD*</b>
<b>3284' (-1007) TOPEKA</b>	
	<b>MUD CHECKS by MUD-CO: WT 8.9, VIS 59 PV 15, YP 25, WL 7.4, pH 11.5 CI 1700, LCM 2# @ 3292'</b>
<b>{CL 50}</b>	



CFS-  
vis 58  
wt 8.9  
LCM 2#

vis 58  
wt 8.9  
LCM 2#

vis 55  
wt 8.9  
LCM 2#

vis 54  
wt 9.0  
LCM 2#

vis 53  
wt 9.1  
LCM 2#

CFS (-1188)  
vis 51  
wt 9.1  
LCM 2#

sat lt- dk STN & FLR, SI Odor, SI- Fr Cut, & gy mot Pkst, SI Cherty.

SH: dk gy-blk.

LS: dk-lt gy, mot argil Pkst & Wkst & Mdst w/vPr- NVP. SH: AA.

LS: cm-bf-tn, mx- Vfnxln, dn to VPr Por, NS, SI Cherty.

SH: AA.

LS: cm-gy-tn, mx- fnx, sm mot- fos Pkst w/VPr- Pr visbl Por, NS, SI Cherty.

LS: bf-gy & cm,mx- fnx, sm grnlr- ool Pkst, VRr prt oomldc, Pred Fr Por: mlGr Por, mIX Por, pp Por, lool Por, VRr oomldc Por, NS. VSI Cherty.

LS: gy, dn & argil Mdst- Wkst, sm pyrct & SH: AA, Rr blk carb.

LS: tn-gy-wh, dn- mx- fnx & Cherty, VPr- NVP, NS. sm argil- shly LS.

LS: gy-tn-wh, Pred dn- mx- Vfnx, Trc Fr Por, Pred Pr- NVP, NS.

LS: gy-tn-wh, Pred dn- mx- fnx, VSI fos, SI Cherty, sm argil, VPr- NVP, NS.

SH: AA & mrn & gn-gy.

LS: gy-tn, dn- mx, VPr- NVP, NS.

SH: sm blk carb & gy. & LS: dn Mdst.

LS: gy-tn-wh, mx- fnx, sm Pkst w/Pr- Fr Por: pp- vug Por, IGr Por, Trc STN & Cut, NFO. Cherty: cm-gy-tn, shrp, sm chlky.

LS: gy-tn-wh, Pred dn, Rr Pkst, sm chlky, VPr- NVP, NS. SH: AA.

LS: gy-bf-wh, sm grnlr- fos Pkst, mx- fnx, Pr- Fr Por: IGr Por, mIX Por w/ NSFO, Trc STN, Pr Cut, >99% barren; sm chlky, sm SI Cherty, VRr prt Mdxln- 2nd ReX, Trc Gd Por, NFO, Trc STN.

LS: tn-gy-wh, Pred dn- mx- sm fnx, sm chlky, Pr- NVP, NS.

LS: AA, dn & argil.

{HEEBNER} SH: blk carb.

LS: gy-tn, dn Mdst, sm Cherty, VPr- NVP.

SH: sm VC, mrn-rd & gy.

{TORONTO} LS: gy-tn-wh, mx- fnxln, sm 2nd ReX, sm fos & ool Pkst w/Pr- Fr Por: IGr Por, pp Por, lfos Por, IX Por. <5% w/spt'd STN, VSISFO & Cut, VLT STN- FLR, VSI Odor. SI Cherty.

SH: AA.

{LANSING} LS: cm-tn & gy-wh, sm Pkst- Grst w/Fr- VRr Gd Por: lfos Por IGr Por, pp- vug Por & mx- fnxln w/sm IX Por & 2nd ReX: ~105 w/spt'd- subsat lt STN & SI SFO, SI Cut, Fr Odor. Abndt dn & prt chlky LS w/Pr- NVP. SI

{SI SFO}

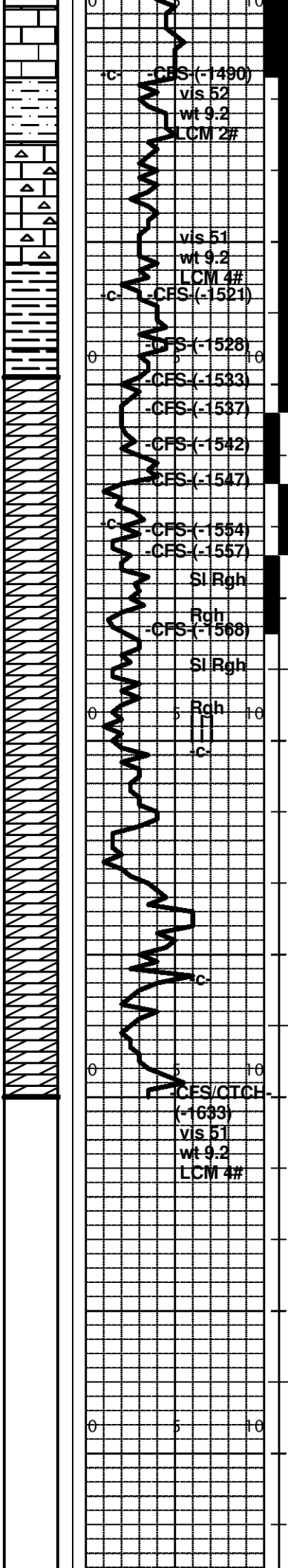
3486' (-1209)  
HEEBNER

3509' (-1232)  
TORONTO  
{VSI SFO}

3526' (-1249)  
LANSING  
{SI SFO}

DST #1 LKC 'F' Zn  
3481'-3615'  
30-45-45-60  
1st Op: WSB,  
Incrs to 1.5",  
No BB  
2nd Op: VWSB,  
Incrs to 1.25",  
No BB  
Rec: 62' DM  
(100% M w/sm  
gsy bubls)  
TOOL SPL:

	<p>Cherty.</p> <p>LS: tn-wh, dn &amp; mx- fnx- sm 2nd ReX, VRr Md- CrsX's, &lt;5% w/vug Por &amp; STN- SFO- Cut, SI Odor.</p> <p>SH: blk carb &amp; pyrtc.</p> <p>LS: dk gy, argil- dn Mdst. SH: AA, gn-gy &amp; mrn-rd.</p> <p>LS: tn-gy-wh, sm mot Pkst- fos &amp; ool, sm fnxln- VRr MdX's, sm 2nd ReX, sm chlky, Pr- Fr Por: pp Por, IGr Por, IX Por, vug Por w/spt'd- subsat STN- &amp; FLR in &gt;5% &lt;10% &amp; SI SFO &amp; Fr Odor, SI- Fr Cut.</p> <p>SH: AA, gy- blk.</p> <p>LS: gy-tn-wh, Pred dn, sm chlky, mx- fnxln, sm mot Pkst, fos, Cherty: VC &amp; fos, sm Pr- VRr Fr Por: pp- vug Por, IGr Por, IX Por, lfos Por, &gt;5% &lt;10% w/spt'd- sat STN &amp; SI SFO- Cut, Fr Odor, Trc dd STN.</p> <p>LS: gy-tn-wh, Pred dn, sm chlky, VPr- Pr Por, Trc STN- SFO- Cut.</p> <p>LS: tn-wh, mot Pkst, ool &amp; sm fos &gt;10% &lt;20% w/Pr- Fr Por: pp- vug Por, lool Por, lfos Por, IGr Por, VRr Gd Por, spt'd- sat STN, SI- Fr SFO, Trc dd STN, Fr Odor</p> <p>SH: VC, AA.</p> <p>LS: tn-wh, prt chlky &amp; mx- fnxln, sm ool Pkst, VRr prt oomldc w/Fr Por, VRr dd STN w/ NFO.</p> <p>LS: wh-gy, prt chlky &amp; mx- fnx, VPr- NVP w/NS.</p> <p>LS: wh-tn-gy, prt chlky &amp; mx- fnx &amp; dn, VPr- NVP.</p> <p>{MUNCIE CREEK} SH: blk carb- Vcarb.</p> <p>LS: gy-bn, dn- mx- fnx, VPr- NVP, NS. SH: VC, AA &amp; LS: gy- blk.</p> <p>LS: tn-gy-wh, Pred dn Mdst &amp; Wkst, sm mx- fnxln &amp; sm Pkst, sm VPr- Pr Por: pp- vug Por, IX Por, Trc dd STN, NFO. Cherty: Trc Tn STN w/VPr- Pr Cut, NFO.</p> <p>LS: tn-gy-wh, sm dn, sm mx- fnxln &amp; Pkst, VPr- NVP.</p> <p>LS: tn-gy-wh, Pred dn Mdst- Wkst, sm mx- fnx- 2nd ReX, VRr Pkst, ool, &gt;5% &lt;10% w/spt'd- subsat STN, VSI SFO, VSI Odor, VSI- SI Cut, Trc Gd Por w/Trc sat STN.</p> <p>LS: tn-gy-wh, Pred dn Mdst- Wkst, sm mx- fnx- 2nd ReX, ~5% Pr- Fr mIX Por &amp; pp Por. &lt;5% Pkst: ool w/Pr- Fr lool &amp; IGr Por w/spt'd- sat STN, SI SFO, SI Odor, SI- Fr Cut.</p> <p>{STARK} SH: VRr blk carb, sm VC- gn-gy &amp; mrn-rd-viol.</p> <p>{SWOPE} LS: wh-tn-gy, prt chlky, sm mx- Vfnxln w/fn- crs 2nd ReX, sm grnlr Pkst, VRr Grst, &gt;10% &lt;20% w/Fr Por: IGr Por, pp- vug Por, IX Por w/spt'd- sat Tn OSTN, SI- Fr SFO- Cut, Fr Odor, sm Gsy.</p> <p>{HUSHPUCKNEY} SH: blk carb. LS: AA &amp; ool Pkst, Rr Pr- Fr Por w/STN- SFO.</p> <p>LS: gy-tn-wh, mot Pkst, fn ool &amp; grnlr &amp; mx- fnx, Pred VPr- Pr visbl Por: IGr Por, lool Por, pp- vug Por, ~5% w/STN &amp; SI SFO, SI Odor.</p> <p>{BASE KANSAS CITY} SH- SILTS: mrn-rd-pnk, sm micac, calc Silts- SH: VC.</p>	<p>{VSI SFO}</p> <p>{SI SFO}</p> <p>{SI SFO}</p> <p>{Trc SFO}</p> <p>{SI- Fr SFO}</p> <p>3645' (-1368) MUNCIE CREEK SH</p> <p>{VSI SFO}</p> <p>{SI SFO}</p> <p>3709' (-1432) STARK SH 3715' (-1438) SWOPE {SI- Fr SFO}</p> <p>3731' (-1454) HUSHPUCKNEY SH {VSI SFO} {SI SFO}</p> <p>3747' (-1470) BASE KANSAS CITY</p>	<p>AA w/few Ospts &amp; SI sulfur Odr IHP: 1663 IFP: 10-25 ISIP: 609</p> <p>FFP: 27-45 FSIP: 654 FHP: 1640 BHT: 107 F</p> <p>WT 9.2, VIS 57 PV 15, YP 27 WL 7.4, pH 10.5 CI 1700, LCM 2# @ 3615'</p> <p>DST #2 LKC 'H'-L' Zns 3640-3767' 30-45-45-60 1st Op: WSB, Incrs to 1.25", No BB 2nd Op: WSB, Incrs to 2.25", No BB Rec: 31' SIOCM (8%O,92%M) TOOL SPL: 3%G,20%O, 2%W,75%M IHP: 1756 IFP: 9-16 ISIP: 427</p> <p>FFP: 17-23 FSIP: 298 FHP: 1756 BHT: 107 F (Took 80K# &amp; jars to free up, strt wt 56K#)</p> <p>DST #3 ARB (5'p) 3743'-3814'</p>
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LS: cm-bf-gy, ambr, mot, mx- Mdx, sm Pkst- grnlr- ool, Pred VPr- NVP w/NS.

SH- SILTS: VC, mrn-rd & violt & lt-dk gn-gy, sm pyrct, sm calc & lmy.

LS: tn-gy-wh, VC- ambr & violt, dn- cryptox- fnx, Cherty: VC, shrp, ambr, orng-rd.

LS: AA.

Incrs SH: VC, Abndt mrn-rd & ambr- gn & turq-gn.

Abndt SH: AA- VC. Rr Chert, VC- shrp, AA. sm LS: AA, NS.

Incrs Turq-gn-aqua SH: sm argil- shly DLS. (ARBUCKLE) DOLO: (3810' 60 min spl) 20-255 ARB DOLO: bf Tn- dk- rich Brn, fnxln sucro- prt Mdxln- sm 2nd ReX, Pred Fr- Gd IX Por w/subsat- sat STN & dull FLR, Fr- Gd SFO & Cut, Fr Odor. (3814' 60 min spl) ~905 ARB DOLO: bf-Tn-bn- STN, ~70% prt dn- mx- fnx w/Pr visbl Por, sm spt'd STN & dull FLR, SI SFO & Cut; ~30% mx-Mdxln w/Rr CrsX's- 2nd ReX w/Fr- Gd Por: IX Por & vug Por & 2nd ReX w/subsat- sat STN & dull FLR, Fr- Gd SFO & Cut & Frly Strng Odor, VRr rhmbc- Mdxln- CrsX w/Gd- VGd Por w/sat STN- Gd SFO. (3819' 40 min spl) ~40% ARB DOLO: cm-tn, sm Tn-bn- STN, mx- Mdxln, ~70% prt dn w/Pr visbl Por, sm spt'd STN- SFL- Cut & dull FLR; ~30% prt fnxln- Mdxln- sm 2nd ReX w/Fr- Gd Por: IX Por & vug Por w/subsat- sat Tn-bn OSTN & Fr- Gd SFO & STN- Cut, dull FLR wet & dry, Frly Strng Odor, SI Cherty- Trc STN. (3824') DOLO: cm-tn, mx- Mdxln, ~35% Fr Por: IX Por, subsat STN, Fr- Gd SFO- Cut. ~5% w/Gd Por, sat STN, Gd SFO. (3829') DOLO: 40% Vfn-fnxln, VRr Mdxln w/Fr- Gd IX Por & vug Por w/STN, Fr- Gd SFO & Cut. (3834') DOLO: ~60% prt dn- mx- fnxln w/Pr visbl Por, spt'd STN & SFO. ~40% mx- Mdxln, VRr Crs- VCrsX's- 2nd ReX, Fr- Gd Por, subsat- sat STN, Gd SFO- Cut. (3845') DOLO: ~30% fnxln- Mdxln, bf- tn, Fr- Gd Por: IX Por & vug Por, spt'd- sat STN, Tn-bn & blk STN, sm dd STN, sm SI- Fr SFO. ~70% dn- Pr Por. (3862') DOLO: bf-tn, mx- Mdxln, ~80% dn- Pr Por & barren. ~20% w/ Fr- Gd Por, spt'd- subsat STN, SI- Fr SFO & Cut & Odor. (3871') DOLO: gy-tn-bn, Abndt fnxln, sucro & Rr mdxln rhmbc w/Fr- Gd IX Por & vug Por, subsat- sat STN, sm dd STN, SI SFO. Abndt dn- Pr Por & barren.

DOLO: bf-tn, mx- Mdxln, ~25% w/Fr- Gd vug Por & IX Por, Pred dd STN w/NFO. VRr SI SFO AA.

DOLO: bf-tn, Mdxln- CrsXln, ~40% w/Fr- VGd Por: vug Por, IX Por, sm spt'd dd- asphaltic STN w/NFO.

DOLO: AA, sm dn- Pr Por, SI Cherty, Trc ool Chert.

WT 9.2, VIS 52  
PV 18, YP 16  
WL 9.2, pH 8.5  
CI 3000, LCM 2#  
@ 3766'

3809' (-1532)  
**ARBUCKLE**  
{Fr- Gd SFO}  
{Fr- Gd SFO}

{Fr- Gd SFO}

{Fr- Gd SFO}

{Fr SFO}

{SI- Fr SFO}

{SI- Fr SFO}

[SI SFO]

3910' (-1633)  
RTD/LTD

WT 9.4, VIS 48  
PV 12, YP 16  
WL 10.0, pH 8.0  
CI 3400, LCM 2#  
@ 3814'

WT 9.5, VIS 47  
PV 12, YP 15  
WL 10.2, pH 8.0  
CI 3400, LCM 3#  
@ 3824'

WT 9.2, VIS 50  
PV 12, YP 15  
WL 12.0, pH 8.0  
CI 4000, LCM 2#  
@ 3834'

WT 9.2, VIS 51  
PV 14, YP 23

30-45-45-60  
1st Op: GSB,  
Incrs to 3",  
No BB  
2nd Op: VWSB,  
Incrs to 1.25",  
No BB  
Rec: <1' CO,  
44' SI OCWM  
(5%O,11%W,  
84%M)  
CI 8000 ppm  
TOOL SPL:  
10%O,20%W,  
70%M  
IHP: 1826

IFP: 10-22  
ISIP: 239  
FFP: 23-32  
FSIP: 230  
FHP: 1818  
BHT: 106 F

DST #4 ARB (15'p)  
3814'-3824'  
30-45-45-60  
1st Op: GSB,  
BOB 23 min,  
No BB  
2nd Op: WSB,  
Incrs to 11",  
No BB  
Rec: 300' TF:  
25' CO

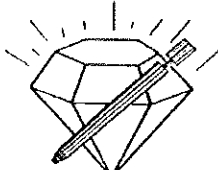
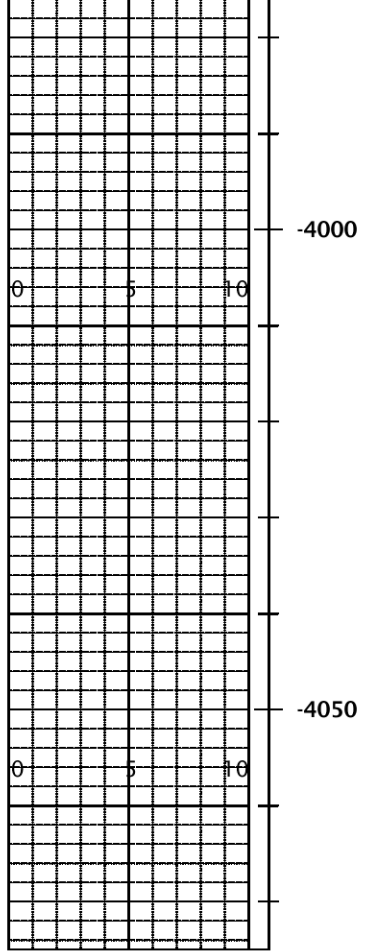
275' OSMW  
(3%O,84%W,  
13%M)  
CI 22,000 ppm  
TOOL SPL:  
2%O,97%W,  
1%M  
IHP: 1849  
IFP: 11-73  
ISIP: 320  
FFP: 74-138  
FSIP: 320  
FHP: 1800  
BHT: 112 F

DST #5 ARB (25'p)  
3824'-3834'  
30-45-45-60  
1st Op: WSB,  
Incrs to 9",  
No BB  
2nd Op: VWSB,  
Incrs to 8",  
No BB  
Rec: 175' TF:  
48' CO,  
127' OSMW  
(2%O,85%W,  
13%M)  
CI: 30,000 ppm  
TOOL SPL:  
4%O,94%W,  
2%M  
IHP: 1887  
IFP: 9-48  
ISIP: 423  
FFP: 46-84  
FSIP: 423  
FHP: 1885  
BHT: 110 F

WL 11.2, pH 10.0  
 CI 4000, LCM 4#  
 @ 3875'

DST#6 ARB (36'p)  
 3834'-3845'  
 30-45-45-60  
 1st Op: GSB,  
 BOB 3 min,  
 1/4" BB  
 2nd Op: GSB,  
 BOB 5 min,  
 1.5" BB  
 Rec: 1365' TF:  
 350' GIP,  
 115' CO,  
 170' GHOCMW  
 (12%G,27%O,  
 53%W,8%M)  
 510' GOSMW  
 (2%G,2%O,  
 95%W,1%M)  
 570' VSIOGW  
 (2%G,98%W  
 w/sm Ospks)  
 CI 26,000 ppm  
 TOOL SPL:  
 1%G,98%W,  
 1%M w/sm Ospts  
 IHP: 1829  
 IFP: 29-314  
 ISIP: 1037  
 FFP: 321-603  
 FSIP: 1038  
 FHP: 1801  
 BHT: 115

VESS OIL CORP  
 BASS #10  
 2150'FSL&1180'FWL  
 Sec 12-10S-21W  
 GRAHAM CO., KS  
 API# 15-065-23954



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: BSS10DST1

TIME ON: 1320  
 TIME OFF: 2130

Company VESS OIL CORPORATION Lease & Well No. BASS #10  
 Contractor L.D. DRLG RIG 1 Charge to VESS OIL CORPORATION  
 Elevation 2272 KB Formation TORONTO-LKC-F ZN Effective Pay \_\_\_\_\_ Ft. Ticket No. M528  
 Date 8/15/2013 Sec. 12 Twp. \_\_\_\_\_ 10 S Range \_\_\_\_\_ 21 W County GRAHAM State KANSAS  
 Test Approved By KIM SHOEMAKER Diamond Representative MIKE COCHRAN

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Formation Test No. 1 Interval Tested from 3481 ft. to 3615 ft. Total Depth 3615 ft.  
 Packer Depth 3476 ft. Size 6 3/4 in. Packer depth N/A ft. Size 6 3/4 in.  
 Packer Depth 3481 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
 Depth of Selective Zone Set \_\_\_\_\_

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Top Recorder Depth (Inside) 3463 ft. Recorder Number 0063 Cap. 3603 P.S.I.  
 Bottom Recorder Depth (Outside) 3612 ft. Recorder Number 6884 Cap. 6,275 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

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Mud Type CHEM Viscosity 57 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
 Weight 9.2 Water Loss 7.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 1,700 P.P.M. Drill Pipe Length 3449 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number 1 Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 134 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB, INC. TO 1 1/2" (NO BB)

2nd Open: **VWSB INCREASED TO 1 1/4" (NO BB)**

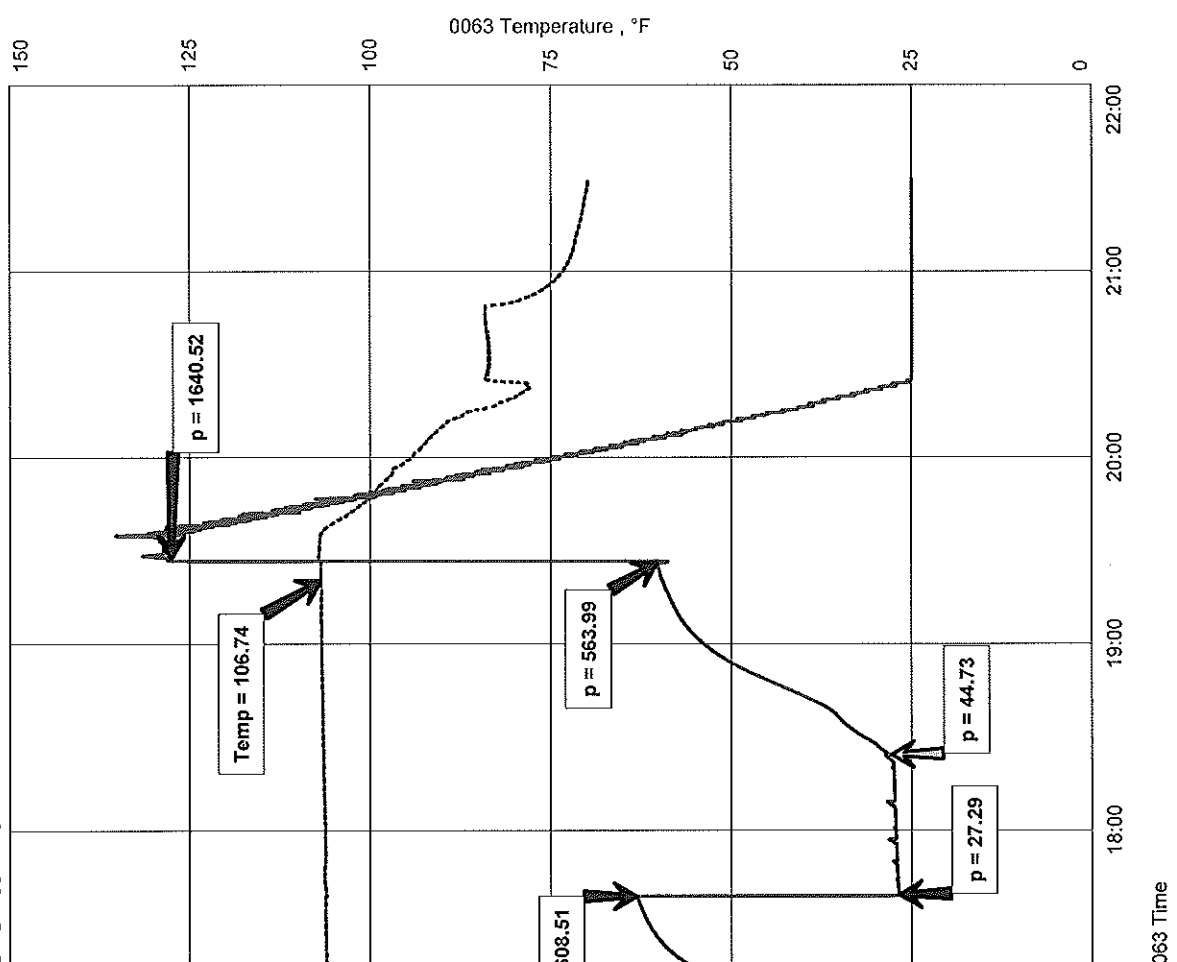
Recovered	62 ft. of	DM 100% MUD W/SOME GASSY BUBBLES
Recovered	62 ft. of	TOTAL FLUID
Recovered	ft. of	
Recovered	ft. of	
Recovered	ft. of	
Recovered	ft. of	
Remarks:		
TOOL SAMPLE: 100% DM W/ SOME GASSY BUBBLES AND A FEW SPOTS OF OIL & A SLIGHT SULPHUR ODOR		Total

Time Set Packer(s)	4:30 P.M.	A.M. P.M.	Time Started Off Bottom	7:30 P.M.	A.M. P.M.	Maximum Temperature	107
Initial Hydrostatic Pressure.....	(A)					1663 P.S.I.	
Initial Flow Period.....	Minutes	30	(B)	10 P.S.I. to (C)		25 P.S.I.	
Initial Closed In Period.....	Minutes	45	(D)	609 P.S.I.			
Final Flow Period.....	Minutes	45	(E)	27 P.S.I. to (F)		45 P.S.I.	
Final Closed In Period.....	Minutes	60	(G)	564 P.S.I.			
Final Hydrostatic Pressure.....	(H)					1640 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.

BASS #10  
 Formation: DST#1 3481-3615 TORONTO-LKC-F ZN  
 Pool: WILDCAT  
 Job Number: M528

**BASS #10**

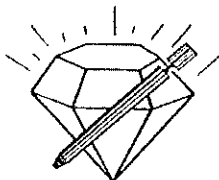
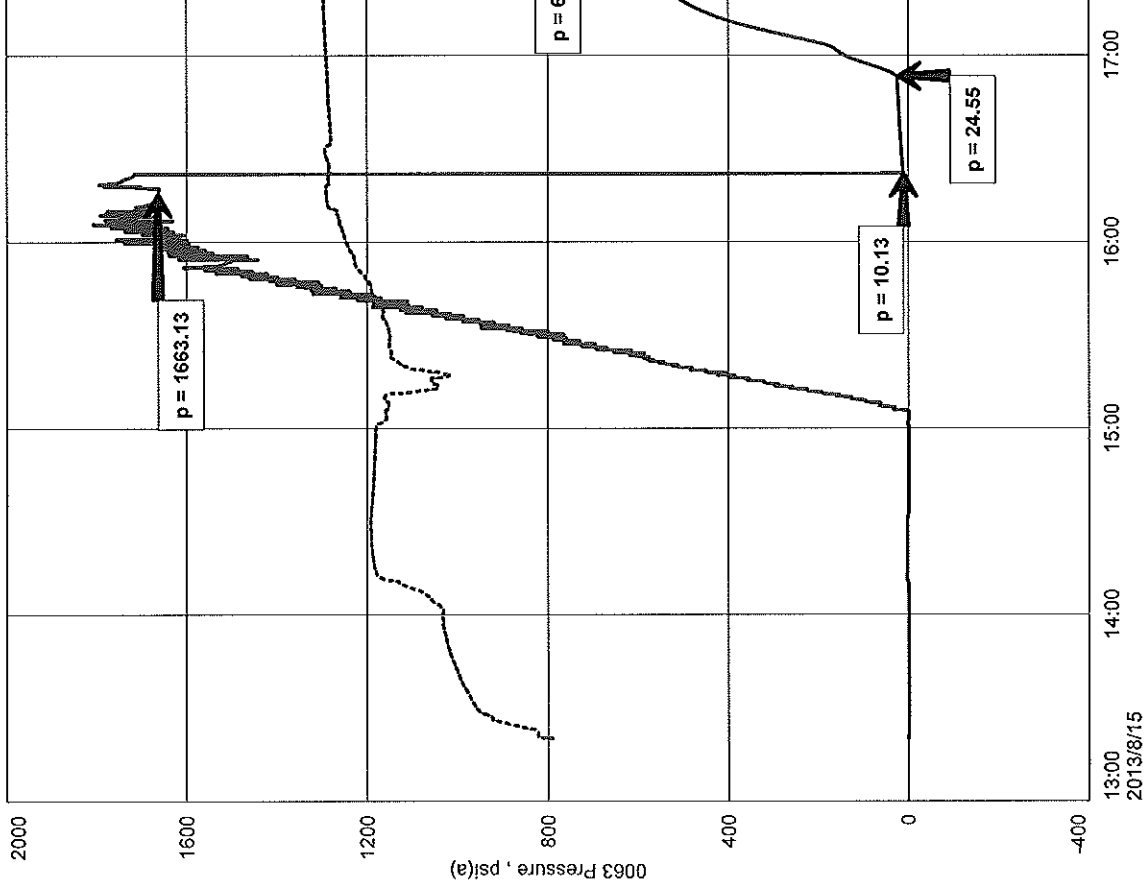


Fast



VESS OIL CORPORATION  
 DST #1 3481-3615 TORONTO-LKC-F ZN  
 Start Test Date: 2013/08/15  
 Final Test Date: 2013/08/15

BASS



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: BSS10DST2

TIME ON: 1500  
 TIME OFF: 2010

Company VESS OIL CORPORATION Lease & Well No. BASS #10  
 Contractor L.D. DRLG RIG 1 Charge to VESS OIL CORPORATION  
 Elevation 2277 KB Formation KC: H-L ZNS Effective Pay \_\_\_\_\_ Ft. Ticket No. M529  
 Date 8/16/2013 Sec. 12 Twp. 10 S Range 21 W County GRAHAM State KANSAS  
 Test Approved By ROGER MARTIN Diamond Representative MIKE COCHRAN

Formation Test No. 2 Interval Tested from 3640 ft. to 3767 ft. Total Depth 3767 ft.  
 Packer Depth 3635 ft. Size 6 3/4 in. Packer depth N/A ft. Size 6 3/4 in.  
 Packer Depth 3640 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
 Top Recorder Depth (Inside) 3622 ft. Recorder Number 0063 Cap. 3603 P.S.I.  
 Bottom Recorder Depth (Outside) 3764 ft. Recorder Number 6884 Cap. 6,275 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 9.2 Water Loss 9.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 3,000 P.P.M. Drill Pipe Length 3608 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number 1 Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 127 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow 1st Open: WSB, BUILT TO 1 1/4" (NO BB)

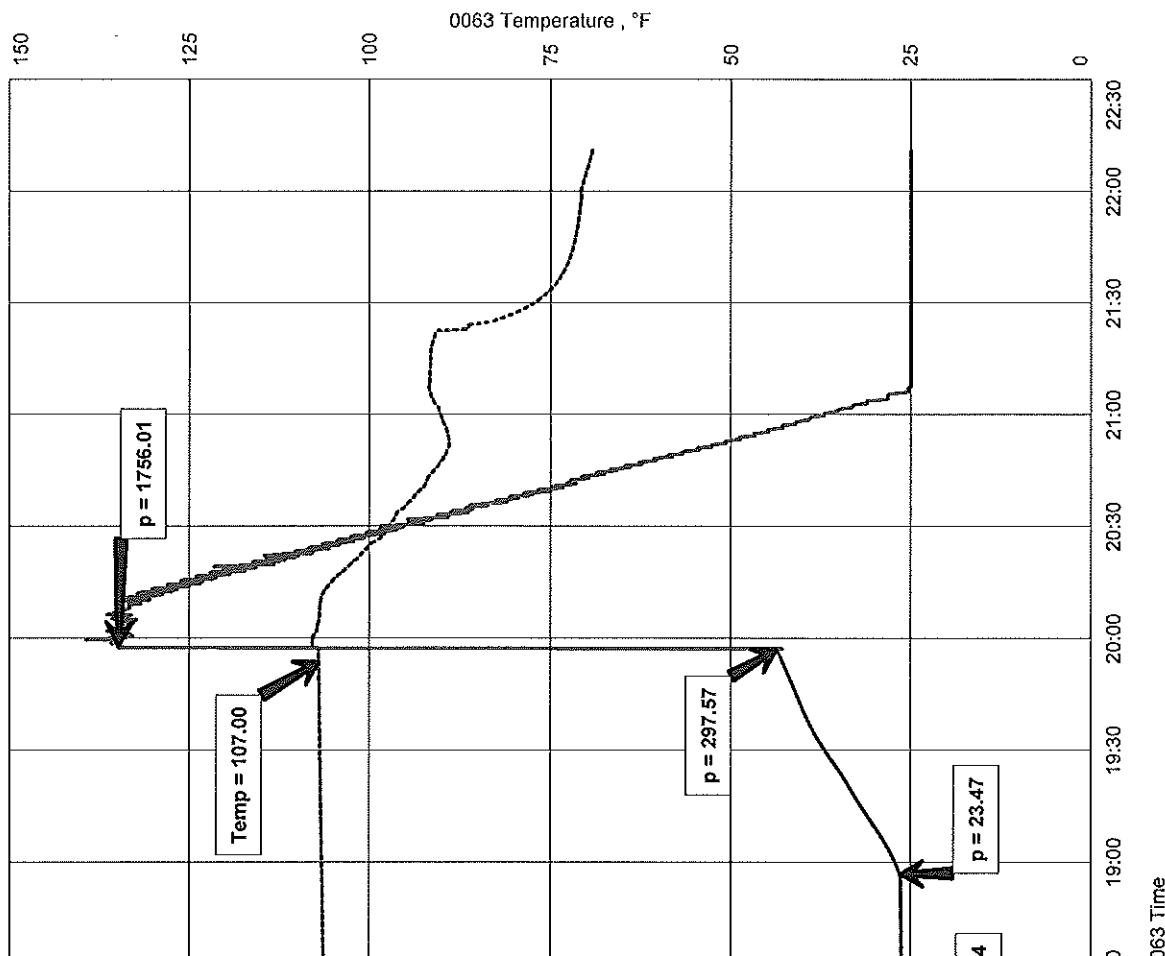
Recovered	31 ft. of	SOCM 8% OIL, 92% MUD	
Recovered	31 ft. of	TOTAL FLUID	
Recovered	ft. of		
Recovered	ft. of		
Recovered	ft. of		Price Job
Recovered	ft. of		Other Charges
Remarks:	80,000 LBS & JARS TO FREE UP (STR.WT.56,000)		Insurance
TOOL SAMPLE: 3% GAS, 20% OIL, 2% WTR, 75% MUD			Total

Time Set Packer(s)	5:00 P.M.	A.M. P.M.	Time Started Off Bottom	8:00 P.M.	A.M. P.M.	Maximum Temperature	107
Initial Hydrostatic Pressure.....	(A)					1756 P.S.I.	
Initial Flow Period.....	Minutes	30	(B)			9 P.S.I. to (C)	16 P.S.I.
Initial Closed In Period.....	Minutes	45	(D)			427 P.S.I.	
Final Flow Period.....	Minutes	45	(E)			17 P.S.I. to (F)	23 P.S.I.
Final Closed In Period.....	Minutes	60	(G)			298 P.S.I.	
Final Hydrostatic Pressure.....	(H)					1756 P.S.I.	

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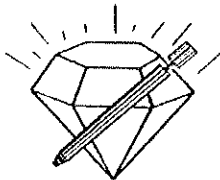
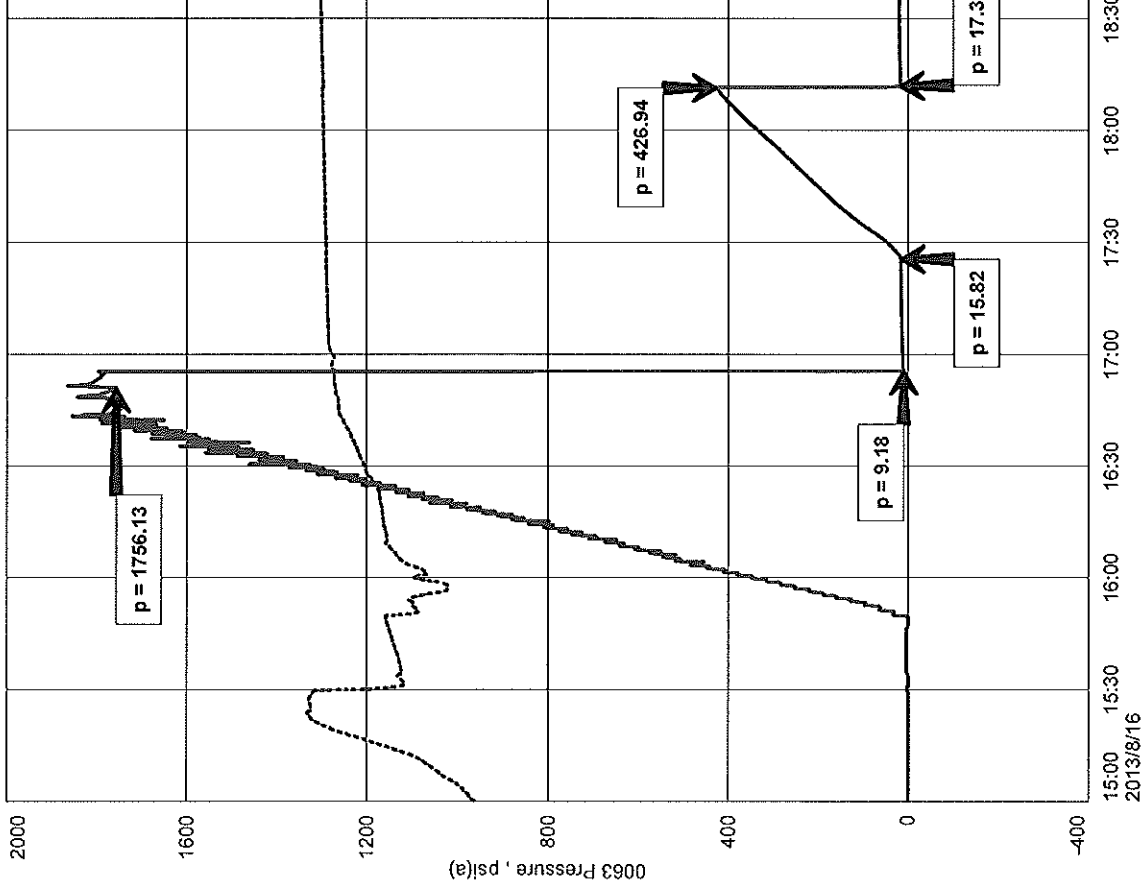
BASS #10  
 Formation: DST#2 3640-3767 KC: H-L ZNS  
 Pool: WILDCAT  
 Job Number: M529

BASS #10



VESS OIL CORPORATION  
 DST#2 3640-3767 KC: H-L ZNS  
 Start Test Date: 2013/08/16  
 Final Test Date: 2013/08/16

BASS



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: BSS10DST3

TIME ON: 1015  
 TIME OFF: 1755

Company VESS OIL CORPORATION Lease & Well No. BASS #10  
 Contractor L.D. DRLG RIG 1 Charge to VESS OIL CORPORATION  
 Elevation 2277 KB Formation ARBUCKLE Effective Pay \_\_\_\_\_ Ft. Ticket No. M530  
 Date 8/17/2013 Sec. 12 Twp. 10 S Range 21 W County GRAHAM State KANSAS  
 Test Approved By ROGER MARTIN Diamond Representative MIKE COCHRAN

Formation Test No. 3 Interval Tested from 3743 ft. to 3814 ft. Total Depth 3814 ft.  
 Packer Depth 3738 ft. Size 6 3/4 in. Packer depth N/A ft. Size 6 3/4 in.  
 Packer Depth 3743 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

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

Top Recorder Depth (Inside)	<u>3725</u> ft.	Recorder Number	<u>0063</u> Cap.	<u>3603</u> P.S.I.
Bottom Recorder Depth (Outside)	<u>3811</u> ft.	Recorder Number	<u>6884</u> Cap.	<u>6,275</u> P.S.I.
Below Straddle Recorder Depth	_____ ft.	Recorder Number	_____ Cap.	_____ P.S.I.

Mud Type	<u>CHEM</u>	Viscosity	<u>52</u>	Drill Collar Length	<u>0</u> ft.	I.D.	<u>2 1/4</u> in.
Weight	<u>9.2</u>	Water Loss	<u>9.2</u> cc.	Weight Pipe Length	<u>0</u> ft.	I.D.	<u>2 7/8</u> in.
Chlorides	<u>3,000</u> P.P.M.	Drill Pipe Length	<u>3711</u> ft.	I.D.	<u>3 1/2</u> in.		
Jars: Make	<u>STERLING</u>	Serial Number	<u>1</u>	Test Tool Length	<u>32</u> ft.	Tool Size	<u>3 1/2-IF</u> in.
Did Well Flow?	<u>NO</u>	Reversed Out	<u>NO</u>	Anchor Length	<u>71</u> ft.	Size	<u>4 1/2-FH</u> in.
Main Hole Size	<u>7 7/8</u>	Tool Joint Size	<u>4 1/2 XH</u> in.	(31'DP) Surface Choke Size	<u>1</u> in.	Bottom Choke Size	<u>5/8</u> in.

Blow: 1st Open: GSB, BUILT TO 3" NO BB

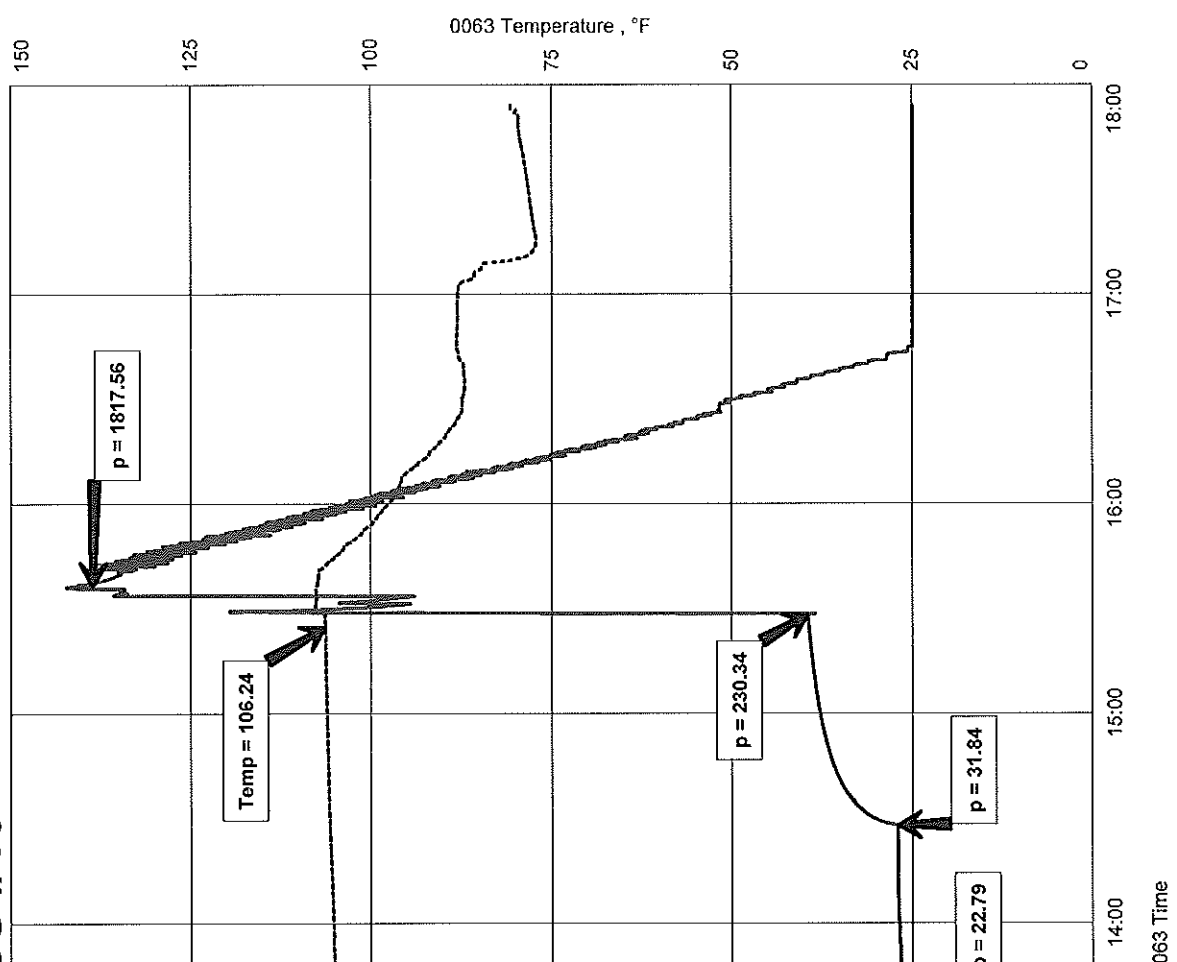
Recovered	<1 ft. of	CO 100% OIL	GRAVITY: 31.4 @ 60°
Recovered	~44 ft. of	SOCWM 5% OIL, 11% WTR, 84% MUD	
Recovered	45 ft. of	TOTAL FLUID	
Recovered	ft. of		
Recovered	ft. of	CHLOR: 8,000 PPM	Price Job
Recovered	ft. of	RW: .70 @ 76 DEG	Other Charges
Remarks:		PH: 7.0	Insurance
TOOL SAMPLE: 10% OIL, 20% WTR, 70% MUD			Total

Time Set Packer(s)	12:30 P.M.	A.M. P.M.	Time Started Off Bottom	3:30 P.M.	A.M. P.M.	Maximum Temperature	106
Initial Hydrostatic Pressure.....	(A)					1826 P.S.I.	
Initial Flow Period.....	Minutes	30	(B)			10 P.S.I. to (C)	22 P.S.I.
Initial Closed In Period.....	Minutes	45	(D)			239 P.S.I.	
Final Flow Period.....	Minutes	45	(E)			23 P.S.I. to (F)	32 P.S.I.
Final Closed In Period.....	Minutes	60	(G)			230 P.S.I.	
Final Hydrostatic Pressure.....	(H)					1818 P.S.I.	

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BASS #10  
 Formation: DST#3 3743-3814 ARBUCKLE  
 Pool: WILDCAT  
 Job Number: M530

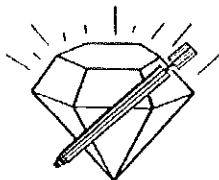
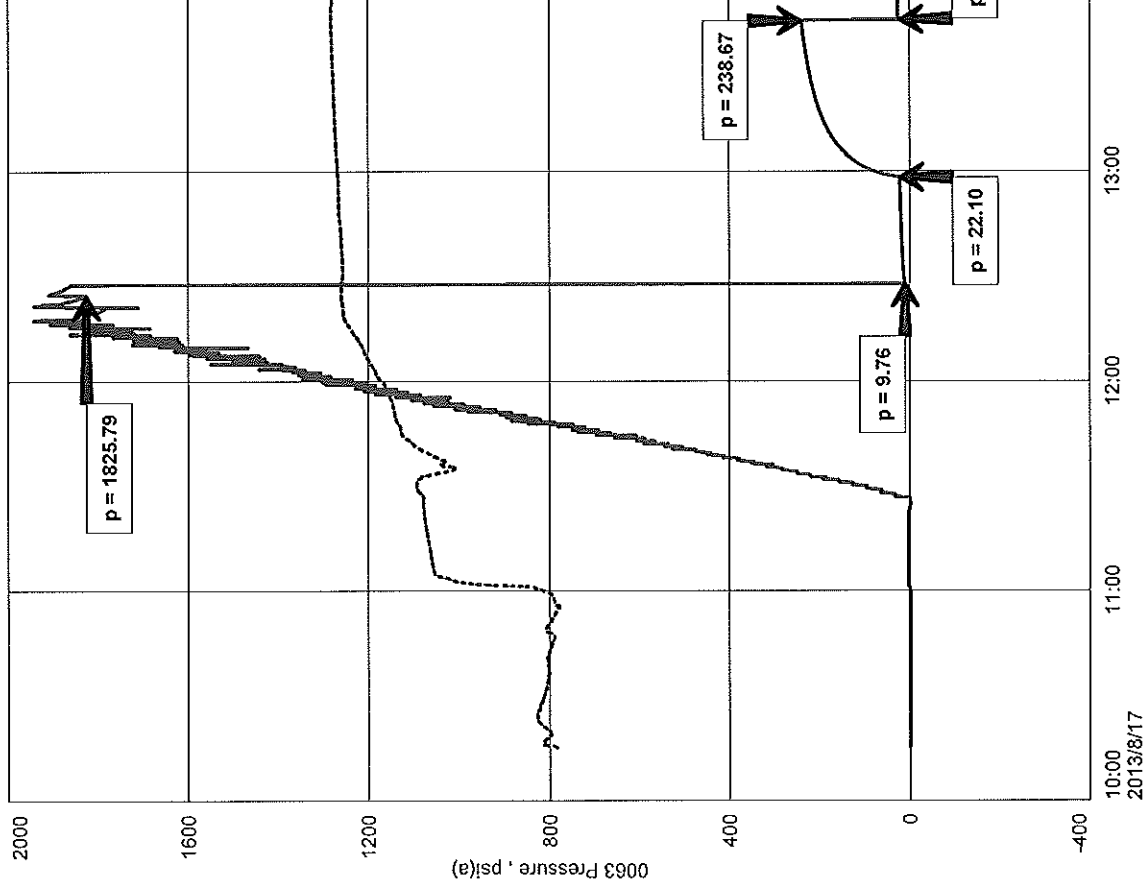
BASS #10



Fast

VESS OIL CORPORATION  
 DST#3 3743-3814 ARBUCKLE  
 Start Test Date: 2013/08/17  
 Final Test Date: 2013/08/17

BASS



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: BSS10DST4

TIME ON: 0130  
 TIME OFF: 0925

Company VESS OIL CORPORATION Lease & Well No. BASS #10  
 Contractor L.D. DRLG RIG 1 Charge to VESS OIL CORPORATION  
 Elevation 2277 KB Formation ARBUCKLE Effective Pay \_\_\_\_\_ Ft. Ticket No. M531  
 Date 8/18/2013 Sec. 12 Twp. 10 S Range 21 W County GRAHAM State KANSAS  
 Test Approved By ROGER MARTIN Diamond Representative MIKE COCHRAN

Formation Test No. 4 Interval Tested from 3814 ft. to 3824 ft. Total Depth 3824 ft.  
 Packer Depth 3809 ft. Size 6 3/4 in. Packer depth N/A ft. Size 6 3/4 in.  
 Packer Depth 3814 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

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

Top Recorder Depth (Inside)	<u>3796</u> ft.	Recorder Number	<u>0063</u> Cap.	<u>3603</u> P.S.I.
Bottom Recorder Depth (Outside)	<u>3821</u> ft.	Recorder Number	<u>6884</u> Cap.	<u>6,275</u> P.S.I.
Below Straddle Recorder Depth	_____ ft.	Recorder Number	_____ Cap.	_____ P.S.I.

Mud Type	<u>CHEM</u>	Viscosity	<u>58</u>	Drill Collar Length	<u>0</u> ft.	I.D.	<u>2 1/4</u> in.
Weight	<u>9.3</u>	Water Loss	<u>10.0</u> cc.	Weight Pipe Length	<u>0</u> ft.	I.D.	<u>2 7/8</u> in.
Chlorides	<u>3,400</u> P.P.M.	Drill Pipe Length	<u>3782</u> ft.	I.D.	<u>3 1/2</u> in.		

Jars: Make	<u>STERLING</u>	Serial Number	<u>1</u>	Test Tool Length	<u>32</u> ft.	Tool Size	<u>3 1/2-IF</u> in.
Did Well Flow?	<u>NO</u>	Reversed Out	<u>NO</u>	Anchor Length	<u>10</u> ft.	Size	<u>4 1/2-FH</u> in.
Main Hole Size	<u>7 7/8</u>	Tool Joint Size	<u>4 1/2 XH</u> in.	Surface Choke Size	<u>1</u> in.	Bottom Choke Size	<u>5/8</u> in.

Blow 1st Open: GSB, BOB 23 MIN (NO BB)

2nd Open: WSB, BUILT TO 11"

(NO BB)

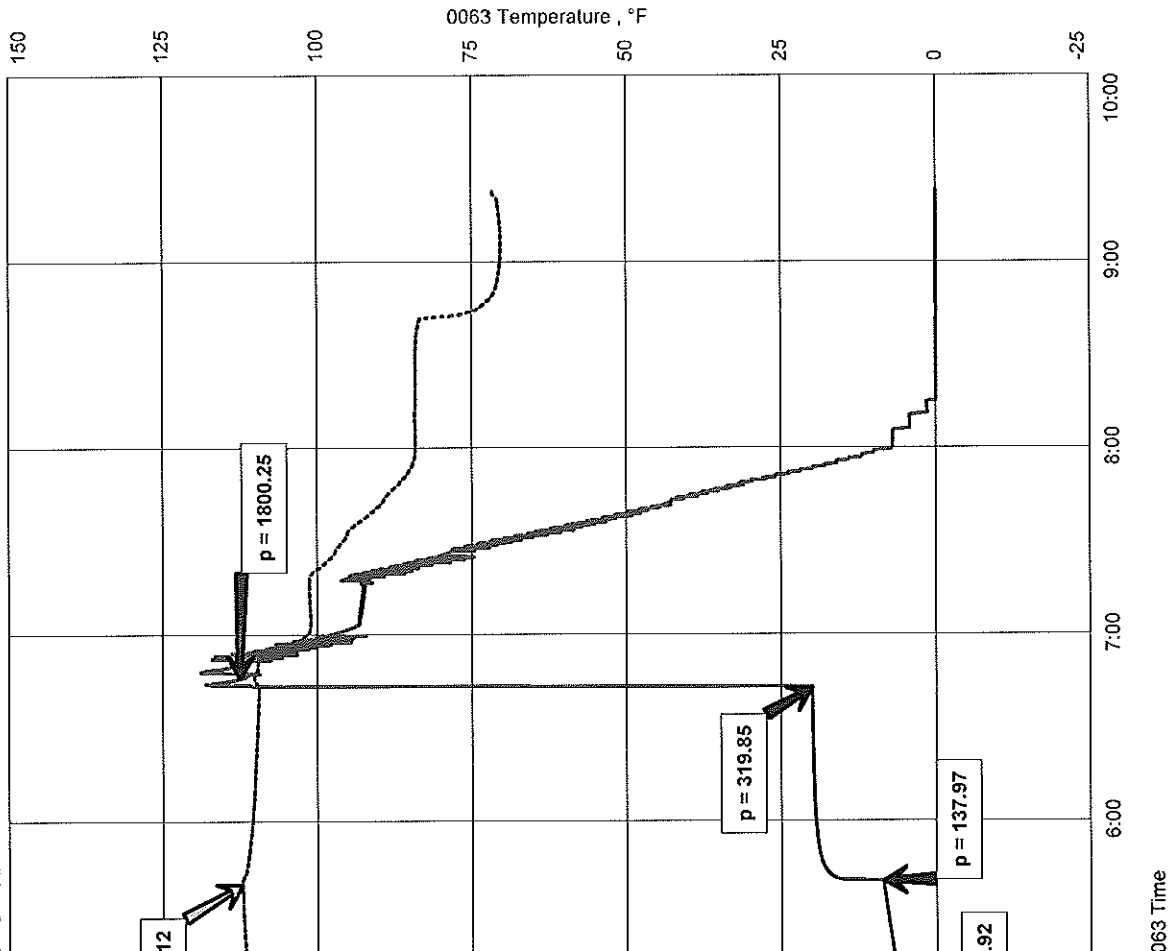
Recovered	25 ft. of	CO 100% OIL	GRAVITY: 31.4 @ 60°
Recovered	275 ft. of	OSMW 3% OIL, 84% WTR, 13% MUD	
Recovered	300 ft. of	TOTAL FLUID	
Recovered	ft. of		
Recovered	ft. of	CHLOR: 22,000 PPM	Price Job
Recovered	ft. of	RW: .42 @ 75 DEG	Other Charges
Remarks:		PH: 7.0	Insurance
TOOL SAMPLE: 2% OIL, 97% WTR, 1% MUD			Total

Time Set Packer(s)	3:45 A.M.	A.M. P.M.	Time Started Off Bottom	6:45 A.M.	A.M. P.M.	Maximum Temperature	112
Initial Hydrostatic Pressure.....	(A)					1849 P.S.I.	
Initial Flow Period.....	Minutes	30	(B)			11 P.S.I. to (C)	73 P.S.I.
Initial Closed In Period.....	Minutes	45	(D)			320 P.S.I.	
Final Flow Period.....	Minutes	45	(E)			74 P.S.I. to (F)	138 P.S.I.
Final Closed In Period.....	Minutes	60	(G)			320 P.S.I.	
Final Hydrostatic Pressure.....	(H)					1800 P.S.I.	

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BASS #10  
 Formation: DST#4 3814-3824 ARBUCKLE  
 Pool: WILDCAT  
 Job Number: M531

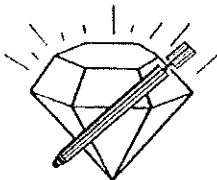
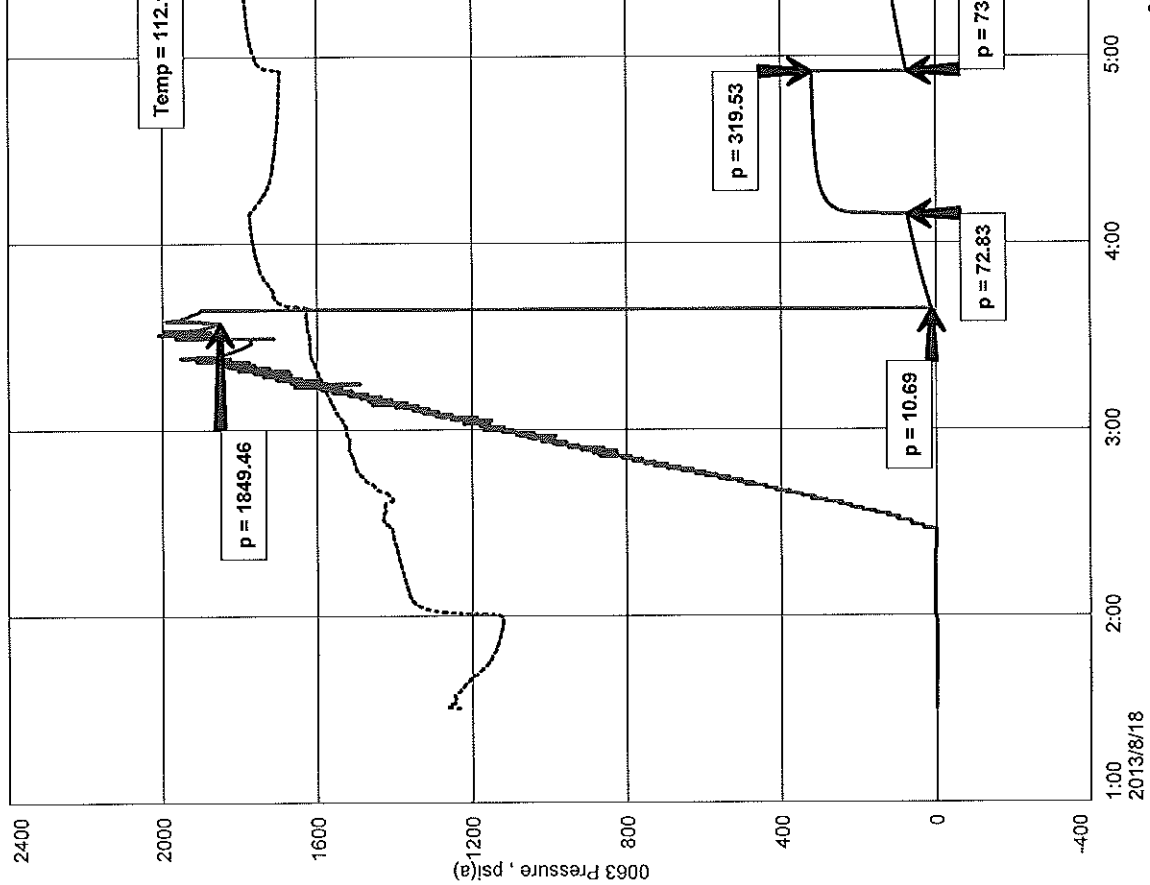
BASS #10



Fast

VESS OIL CORPORATION  
 DST#4 3814-3824 ARBUCKLE  
 Start Test Date: 2013/08/18  
 Final Test Date: 2013/08/18

BASS



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: BSS10DST5

TIME ON: 0000  
 TIME OFF: 0720

Company VESS OIL CORPORATION Lease & Well No. BASS #10  
 Contractor L.D. DRLG RIG 1 Charge to VESS OIL CORPORATION  
 Elevation 2277 KB Formation ARBUCKLE Effective Pay \_\_\_\_\_ Ft. Ticket No. M532  
 Date 8/19/2013 Sec. 12 Twp. 10 S Range 21 W County GRAHAM State KANSAS  
 Test Approved By ROGER MARTIN Diamond Representative MIKE COCHRAN

Formation Test No. 5 Interval Tested from 3824 ft. to 3834 ft. Total Depth 3834 ft.  
 Packer Depth 3819 ft. Size 6 3/4 in. Packer depth N/A ft. Size 6 3/4 in.  
 Packer Depth 3824 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Sel \_\_\_\_\_  
 Top Recorder Depth (Inside) 3806 ft. Recorder Number 0063 Cap. 3603 P.S.I.  
 Bottom Recorder Depth (Outside) 3831 ft. Recorder Number 6884 Cap. 6,275 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.  
 Mud Type CHEM Viscosity 58 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
 Weight 9.3 Water Loss 10.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 3,400 P.P.M. Drill Pipe Length 3792 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number 1 Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 10 ft. Size 4 1/2-FH in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow 1st Open: WSB, BUILDING TO 9" (NO BB)

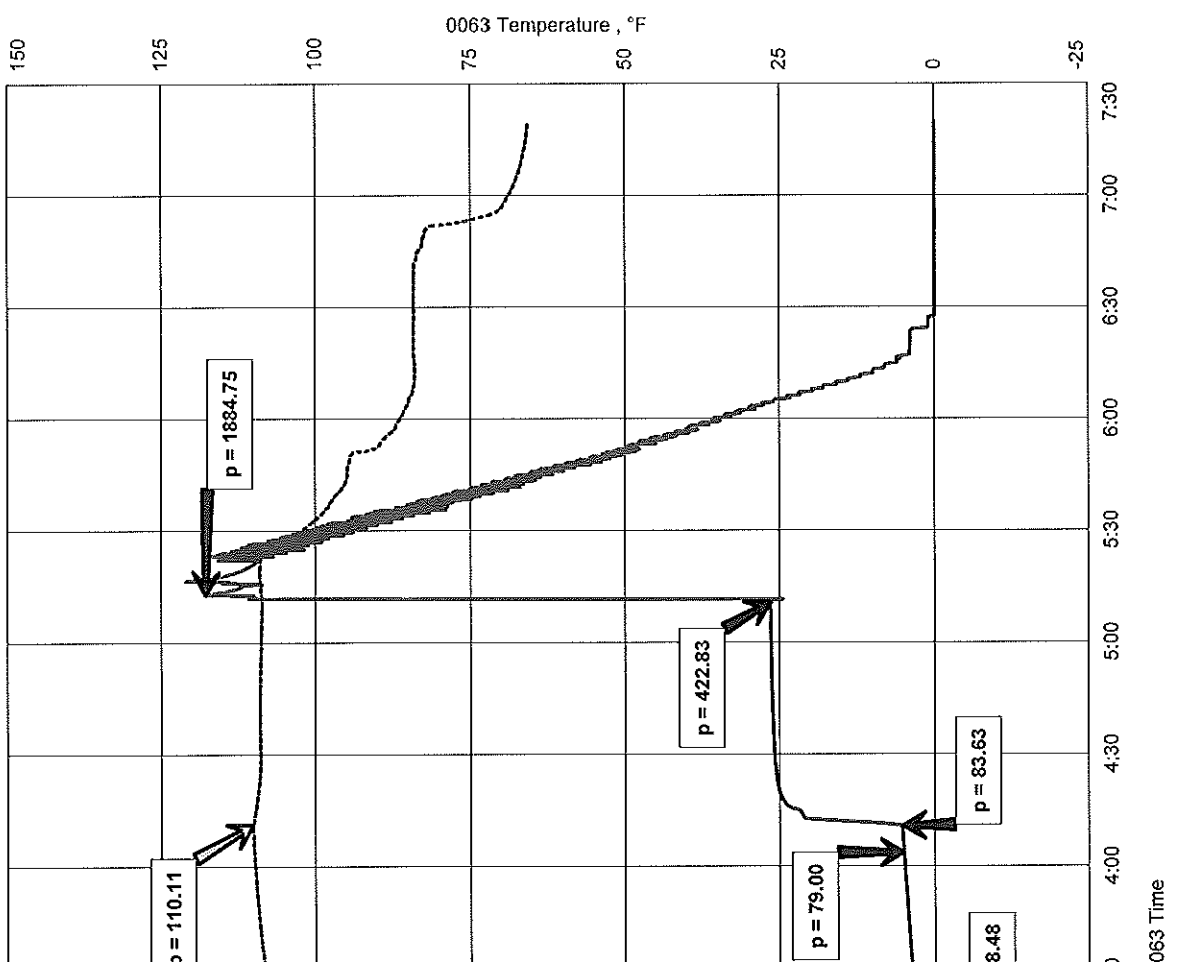
Recovered	~48 ft. of	CO 100% OIL	GRAVITY: 31.2 @ 60°
Recovered	127 ft. of	OSMW 2% OIL, 85% WTR, 13% MUD	
Recovered	175 ft. of	TOTAL FLUID	
Recovered	ft. of		
Recovered	ft. of	CHLOR: 30,000 PPM	Price Job
Recovered	ft. of	RW: .30 @ 68 DEG	Other Charges
Remarks:		PH: 7.0	Insurance
TOOL SAMPLE: 4% OIL, 94% WTR, 2% MUD			Total

Time Set Packer(s)	2:00 A.M.	A.M. P.M.	Time Started Off Bottom	5:07 A.M.	A.M. P.M.	Maximum Temperature	110
Initial Hydrostatic Pressure.....	(A)					1887 P.S.I.	
Initial Flow Period.....	Minutes	30	(B)			9 P.S.I. to (C)	48 P.S.I.
Initial Closed In Period.....	Minutes	45	(D)			423 P.S.I.	
Final Flow Period.....	Minutes	52	(E)			48 P.S.I. to (F)	84 P.S.I.
Final Closed In Period.....	Minutes	60	(G)			423 P.S.I.	
Final Hydrostatic Pressure.....	(H)					1885 P.S.I.	

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BASS #10  
 Formation: DST#5 3824-3834 ARBUCKLE  
 Pool: WILDCAT  
 Job Number: M532

BASS #10

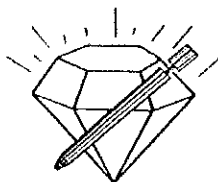
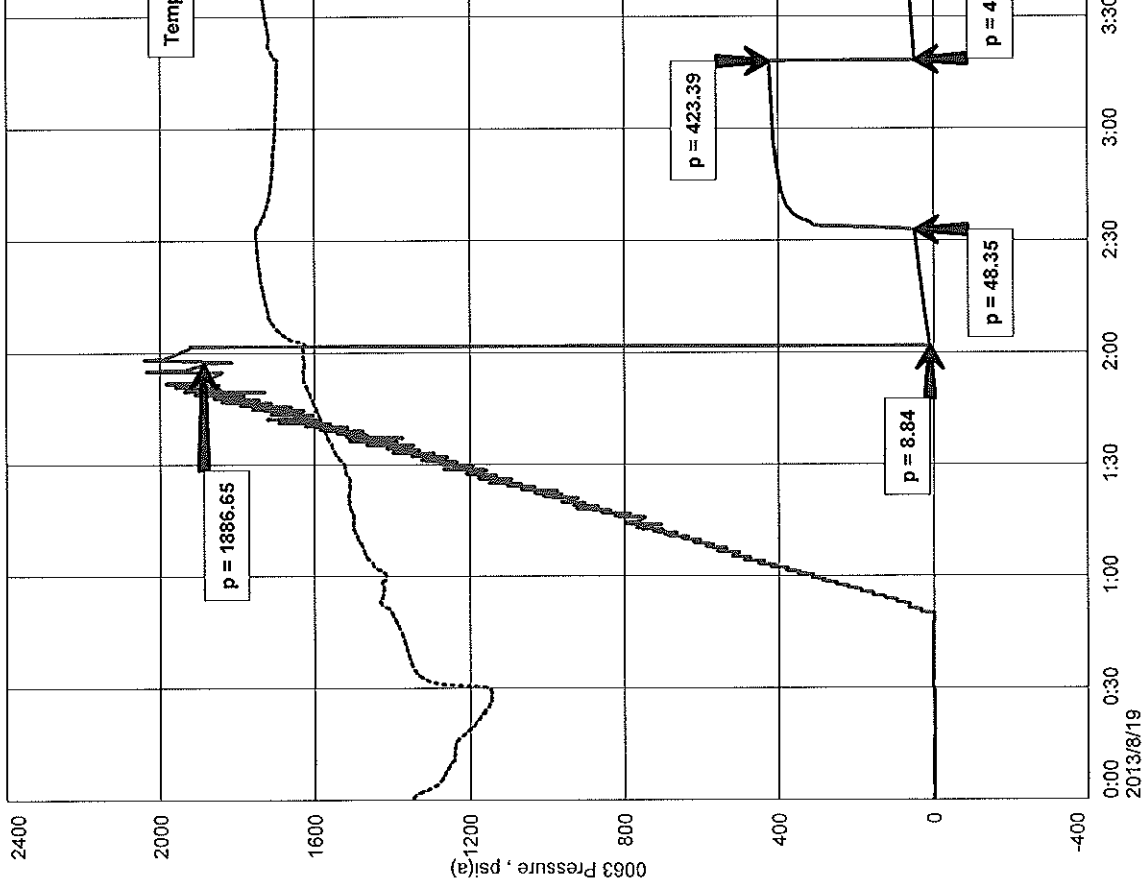


Fast



VESS OIL CORPORATION  
 DST#5 3824-3834 ARBUCKLE  
 Start Test Date: 2013/08/19  
 Final Test Date: 2013/08/19

BASS



**DIAMOND TESTING**  
 P.O. Box 157  
 HOISINGTON, KANSAS 67544  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: BSS10DST6

TIME ON: 1600 (8/19)  
 TIME OFF: 0120 (8/20)

Company VESS OIL CORPORATION Lease & Well No. BASS #10  
 Contractor L.D. DRLG RIG 1 Charge to VESS OIL CORPORATION  
 Elevation 2277 KB Formation ARBUCKLE Effective Pay \_\_\_\_\_ Ft. Ticket No. M533  
 Date 8/120/2013 Sec. 12 Twp. 10 S Range 21 W County GRAHAM State KANSAS  
 Test Approved By ROGER MARTIN Diamond Representative MIKE COCHRAN

Formation Test No. 6 Interval Tested from 3834 ft. to 3845 ft. Total Depth 3845 ft.  
 Packer Depth 3829 ft. Size 6 3/4 in. Packer depth N/A ft. Size 6 3/4 in.  
 Packer Depth 3834 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3816 ft. Recorder Number 0063 Cap. 3603 P.S.I.  
 Bottom Recorder Depth (Outside) 3842 ft. Recorder Number 6884 Cap. 6,275 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 55 Drill Collar Length 0 ft. I.D. 2 1/4 in.  
 Weight 9.1 Water Loss 12.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
 Chlorides 4,000 P.P.M. Drill Pipe Length 3802 ft. I.D. 3 1/2 in.  
 Jars: Make STERLING Serial Number 1 Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
 Did Well Flow? NO Reversed Out NO Anchor Length 11 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: GSB, BOB 3 MIN (1/4"BB)

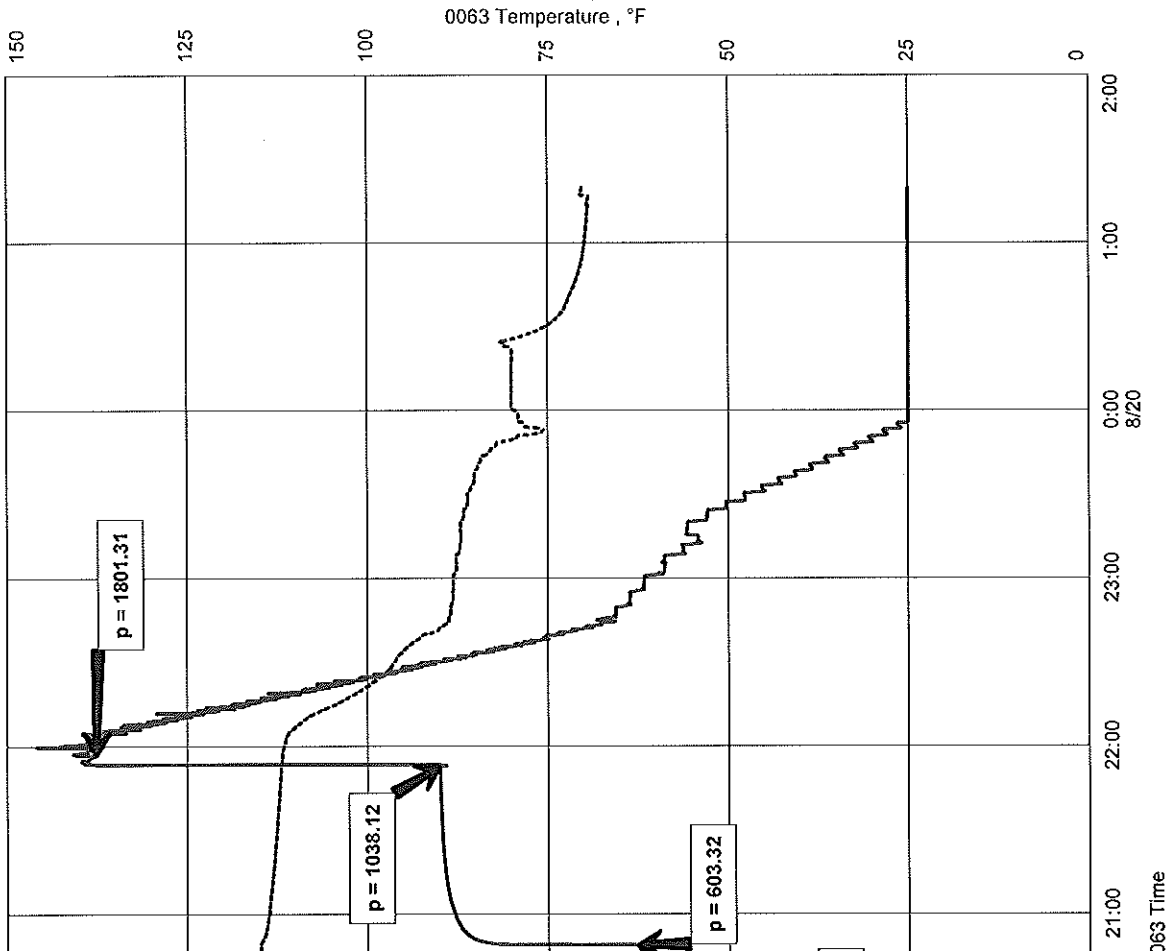
Recovered	350 ft. of	GIP	
Recovered	115 ft. of	CO 100% OIL	GRAVITY: 30.4 @ 60°
Recovered	170 ft. of	GHOCMW 12% GAS, 27% OIL, 53% WTR, 8% MUD	
Recovered	510 ft. of	GOSMW 2% GAS, 2% OIL, 95% WTR, 1% MUD	
Recovered	570 ft. of	VSOSGW 2% GAS, 98% WTR W/SOME SPECKS OF OIL	Price Job
Recovered	1365 ft. of	TOTAL FLUID	Other Charges
Remarks:			Insurance
RW: .28 @ 70 DEG CHLOR: 26,000 PPM PH: 7.0			
TOOL SAMPLE: 1% GAS, 98% WTR, 1% MUD W/ SOME SPOTS OF OIL			Total

Time Set Packer(s) 7:00 P.M. <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 10:00 P.M. <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 115

Initial Hydrostatic Pressure.....	(A)	1829 P.S.I.
Initial Flow Period..... Minutes	30 (B)	29 P.S.I. to (C) 314 P.S.I.
Initial Closed In Period..... Minutes	45 (D)	1037 P.S.I.
Final Flow Period..... Minutes	45 (E)	321 P.S.I. to (F) 603 P.S.I.
Final Closed In Period..... Minutes	60 (G)	1038 P.S.I.
Final Hydrostatic Pressure.....	(H)	1801 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.

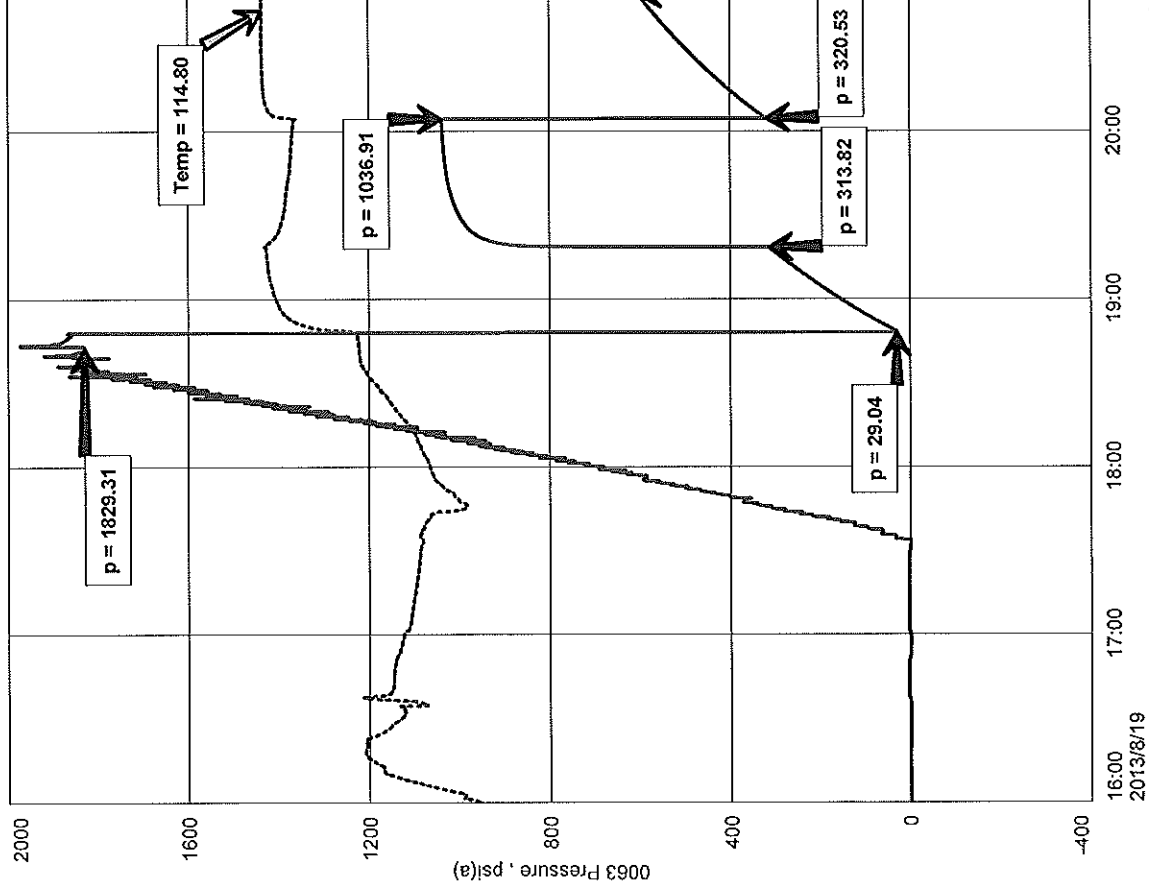
BASS #10  
 Formation: DST#6 3834-3845 ARBUCKLE  
 Pool: WILDCAT  
 Job Number: M533

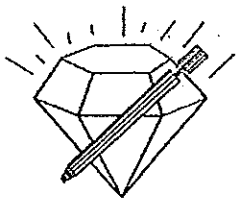


Fast

VESS OIL CORPORATION  
DST#6 3834-3845 ARBUCKLE  
Start Test Date: 2013/08/19  
Final Test Date: 2013/08/20

BASS





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
BSS10DST1

Company Vess Oil Corporation Lease & Well No. Bass No. 10  
Elevation 2277 KB Formation Toronto-Lansing/Kansas City "F" Effective Pay \_\_\_\_\_ Ft. Ticket No. M528  
Date 8-15-13 Sec. 12 Twp. 10S Range 21W County Graham State Kansas  
Test Approved By Roger L. Martin Diamond Representative Mike Cochran

Formation Test No. 1 Interval Tested from 3,481 ft. to 3,615 ft. Total Depth 3,615 ft.  
Packer Depth 3,476 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,481 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,463 ft. Recorder Number 0063 Cap. 6,000 psi.  
Bottom Recorder Depth (Outside) 3,612 ft. Recorder Number 6884 Cap. 6,275 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Mud Type Chemical Viscosity 57 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.2 Water Loss 7.4 cc. Drill Pipe Length 3,449 ft I.D. 3 1/4 in.  
Chlorides 1,700 P.P.M. Test Tool Length 32 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 1 Anchor Length 39' perf. w/95' 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 1/2 ins. No blow back during shut-in.  
2nd Open: Very weak, surface blow increasing to 1 1/4 ins. No blow back during shut-in.

Recovered 62 ft. of drilling mud w/some gassy bubbles = .636120 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%-drilling mud w/some gassy bubbles & a few spots of oil & a slight sulphur odor

Time Set Packer(s) 4:30 P.M. Time Started off Bottom 7:30 P.M. Maximum Temperature 107°  
Initial Hydrostatic Pressure.....(A) 1663 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 10 P.S.I. to (C) 25 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 609 P.S.I.  
Final Flow Period.....Minutes 45 (E) 27 P.S.I. to (F) 45 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 564 P.S.I.  
Final Hydrostatic Pressure.....(H) 1641 P.S.I.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	VESS OIL CORPORATION	Job Number	M528
Well Name	BASS #10	Representative	MIKE COCHRAN
Unique Well ID	DST#1 3481-3615 TORONTO-LKC-F ZN	Well Operator	VESS OIL CORPORATION
Surface Location	SEC.12-10S-21W GRAHAM CO.KS.	Report Date	2013/08/15
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	ROGER MARTIN
		Test Unit	NO. 1

### Test Information

Test Type	CONVENTIONAL
Formation	DST#1 3481-3615 TORONTO-LKC-F ZN
Test Purpose (AEUB)	Initial Test

Start Test Date	2013/08/15	Start Test Time	13:20:00
Final Test Date	2013/08/15	Final Test Time	21:30:00
		Well Fluid Type	01 Oil

Gauge Name	0063
Gauge Serial Number	

### Test Results

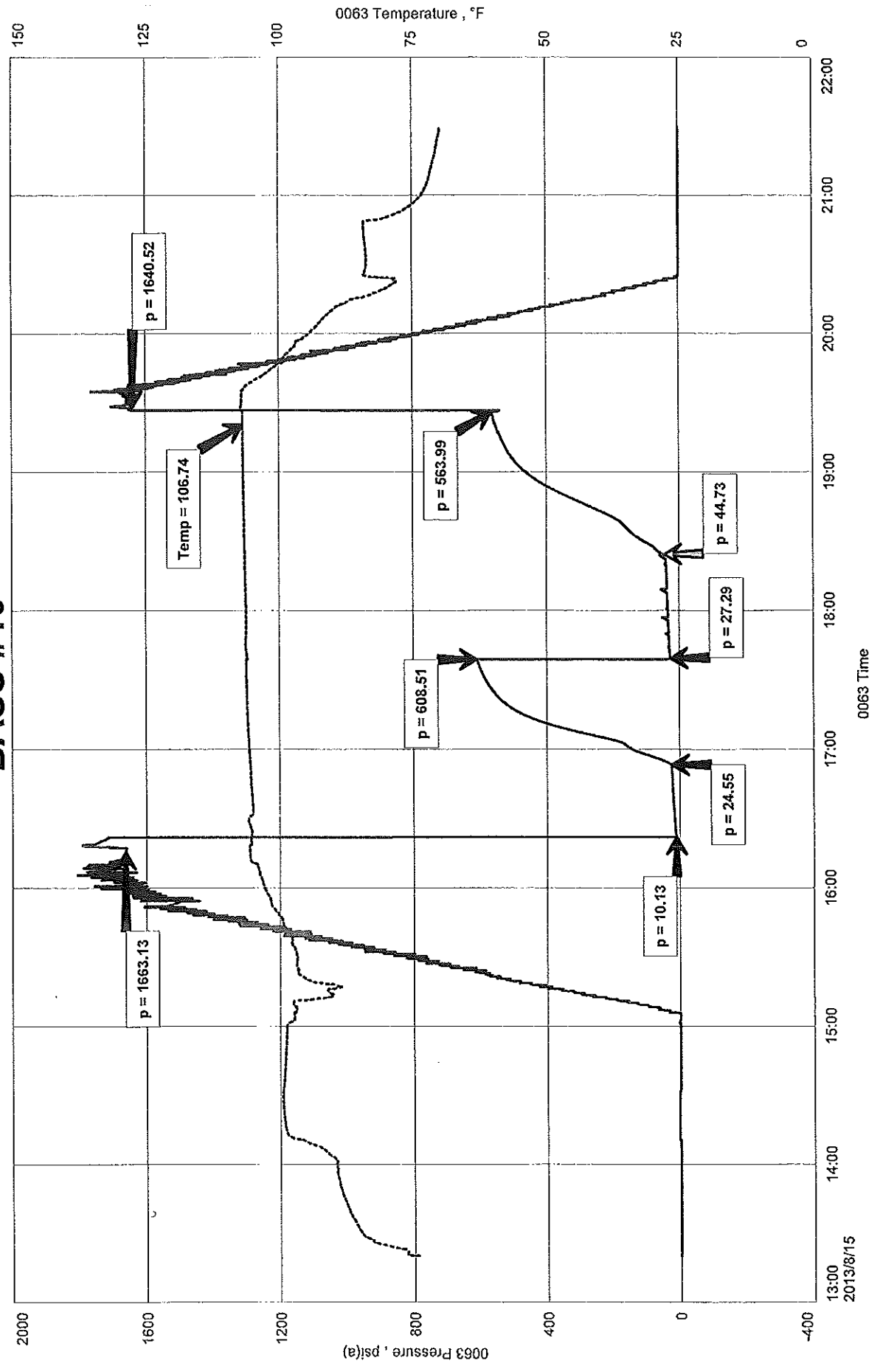
Remarks RECOVERED:  
62' DM 100% MUD WSOME GASSY BUBBLES  
62' TOTAL FLUID

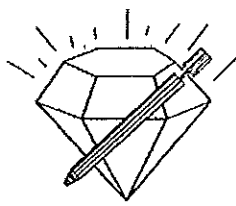
TOOL SAMPLE: 100% DM W/ SOME GASSY BUBBLES AND A FEW SPOTS OF OIL & A SLIGHT SULPHUR ODOR

VESS OIL CORPORATION  
DST#1 3481-3615 TORONTO-LKC-F ZN  
Start Test Date: 2013/08/15  
Final Test Date: 2013/08/15

BASS #10  
Formation: DST#1 3481-3615 TORONTO-LKC-F ZN  
Pool: WILDCAT  
Job Number: M528

# BASS #10





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
BSS10DST2

Company Vess Oil Corporation Lease & Well No. Bass No. 10  
Elevation 2277 KB Formation Kansas City "H-L" Effective Pay \_\_\_\_\_ Ft. Ticket No. M529  
Date 8-16-13 Sec. 12 Twp. 10S Range 21W County Graham State Kansas  
Test Approved By Roger L. Martin Diamond Representative Mike Cochran

Formation Test No. 2 Interval Tested from 3,640 ft. to 3,767 ft. Total Depth 3,767 ft.  
Packer Depth 3,635 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,640 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,622 ft. Recorder Number 0063 Cap. 6,000 psi.  
Bottom Recorder Depth (Outside) 3,764 ft. Recorder Number 6884 Cap. 6,275 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Mud Type Chemical Viscosity 52 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.2 Water Loss 9.2 cc. Drill Pipe Length 3,608 ft I.D. 3 1/4 in.  
Chlorides 3,000 P.P.M. Test Tool Length 32 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 1 Anchor Length 32' perf. w/95' 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 1/4 ins. No blow back during shut-in.

2nd Open: Weak, surface blow increasing to 2 1/2 ins. No blow back during shut-in.

Recovered 31 ft. of slightly oil cut mud = .318060 bbls. (Grind out: 8%-oil; 92%-mud)

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

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

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

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

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

Remarks Tool Sample Grind Out: 3%-gas; 20%-oil; 2%-water; 75%-mud

80,000 lbs. & jars to free up (string wt. 56,000)

Time Set Packer(s) 5:00 P.M. Time Started off Bottom 8:00 P.M. Maximum Temperature 107°  
Initial Hydrostatic Pressure.....(A) 1756 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 16 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 427 P.S.I.  
Final Flow Period.....Minutes 45 (E) 17 P.S.I. to (F) 23 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 298 P.S.I.  
Final Hydrostatic Pressure.....(H) 1756 P.S.I.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	VESS OIL CORPORATION	Job Number	M529
Well Name	BASS #10	Representative	MIKE COCHRAN
Unique Well ID	DST#2 3640-3767 KC: H-L ZNS	Well Operator	VESS OIL CORPORATION
Surface Location	SEC.12-10S-21W GRAHAM CO.KS.	Report Date	2013/08/16
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	ROGER MARTIN
		Test Unit	NO. 1

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#2 3640-3767 KC: H-L ZNS		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2013/08/16	Start Test Time	15:00:00
Final Test Date	2013/08/16	Final Test Time	20:10:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

### Test Results

Remarks RECOVERED:  
31' SOCM 8% OIL, 92% MUD  
31' TOTAL FLUID

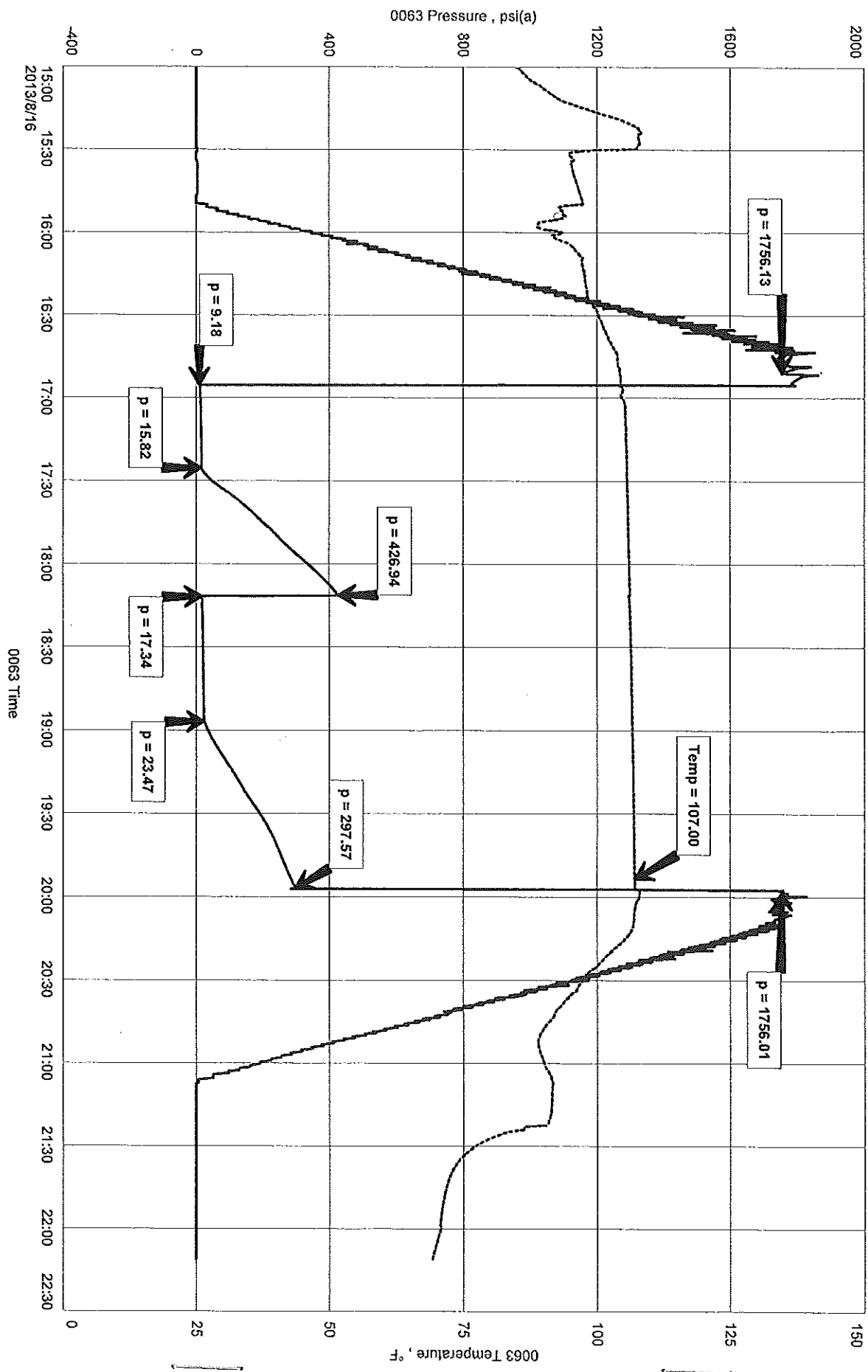
TOOL SAMPLE: 3% GAS, 20% OIL, 2% WTR, 75% MUD

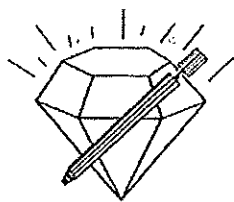


VESS OIL CORPORATION  
 DST#2 3640-3767 KC: H-L ZNS  
 Start Test Date: 2013/08/16  
 Final Test Date: 2013/08/16

# BASS #10

BASS #10  
 Formation: DST#2 3640-3767 KC: H-L ZNS  
 Pool: WILDCAT  
 Job Number: M529





**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 BSS10DST3

Company Vess Oil Corporation Lease & Well No. Bass No. 10  
 Elevation 2277 KB Formation Arbuckle Effective Pay \_\_\_\_\_ Ft. Ticket No. M530  
 Date 8-17-13 Sec. 12 Twp. 10S Range 21W County Graham State Kansas  
 Test Approved By Roger L. Martin Diamond Representative Mike Cochran

Formation Test No. 3 Interval Tested from 3,743 ft. to 3,814 ft. Total Depth 3,814 ft.  
 Packer Depth 3,738 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Packer Depth 3,743 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,725 ft. Recorder Number 0063 Cap. 6,000 psi.  
 Bottom Recorder Depth (Outside) 3,811 ft. Recorder Number 6884 Cap. 6,275 psi.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length \_\_\_\_\_ ft. I.D. \_\_\_\_\_ in.  
 Mud Type Chemical Viscosity 52 Weight Pipe Length \_\_\_\_\_ ft. I.D. \_\_\_\_\_ in.  
 Weight 9.2 Water Loss 9.2 cc. Drill Pipe Length 3,711 ft. I.D. 3 1/4 in.  
 Chlorides 3,000 P.P.M. Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number 1 Anchor Length 40' 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: Good, surface blow increasing to 3 ins. No blow back during shut-in.

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

Recovered 1 ft. of clean oil = .010260 bbls. (Grind out: 100%-oil) Gravity: 31.4 @ 60°  
 Recovered 44 ft. of slightly oil cut watery mud = .451440 bbls. (Grind out: 5%-oil; 11%-water; 84%-mud) Chlorides: 8,000 Ppm PH: 7.0 RW: .70 @ 76°  
 Recovered 45 ft. of TOTAL FLUID = .461700 bbls.  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Remarks Tool Sample Grind Out: 10%-oil; 20%-water; 70%-mud

Time Set Packer(s) 12:30 P.M. Time Started off Bottom 3:30 P.M. Maximum Temperature 106°  
 Initial Hydrostatic Pressure.....(A) 1826 P.S.I.  
 Initial Flow Period.....Minutes 30 (B) 10 P.S.I. to (C) 22 P.S.I.  
 Initial Closed In Period.....Minutes 45 (D) 239 P.S.I.  
 Initial Flow Period.....Minutes 45 (E) 23 P.S.I. to (F) 32 P.S.I.  
 Initial Closed In Period.....Minutes 60 (G) 230 P.S.I.  
 Initial Hydrostatic Pressure.....(H) 1818 P.S.I.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	VESS OIL CORPORATION	Job Number	M530
Well Name	BASS #10	Representative	MIKE COCHRAN
Unique Well ID	DST#3 3743-3814 ARBUCKLE	Well Operator	VESS OIL CORPORATION
Surface Location	SEC.12-10S-21W GRAHAM CO.KS.	Report Date	2013/08/17
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	ROGER MARTIN
	Test Unit		NO. 1

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#3 3743-3814 ARBUCKLE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2013/08/17	Start Test Time	10:15:00
Final Test Date	2013/08/17	Final Test Time	17:55:00
		Well Fluid Type	01 OIL
Gauge Name	0063		
Gauge Serial Number			

### Test Results

Remarks RECOVERED:

<1 CO 100% OIL  
~44' SOCWM 5% OIL, 11% WTR, 84% MUD  
45' TOTAL FLUID

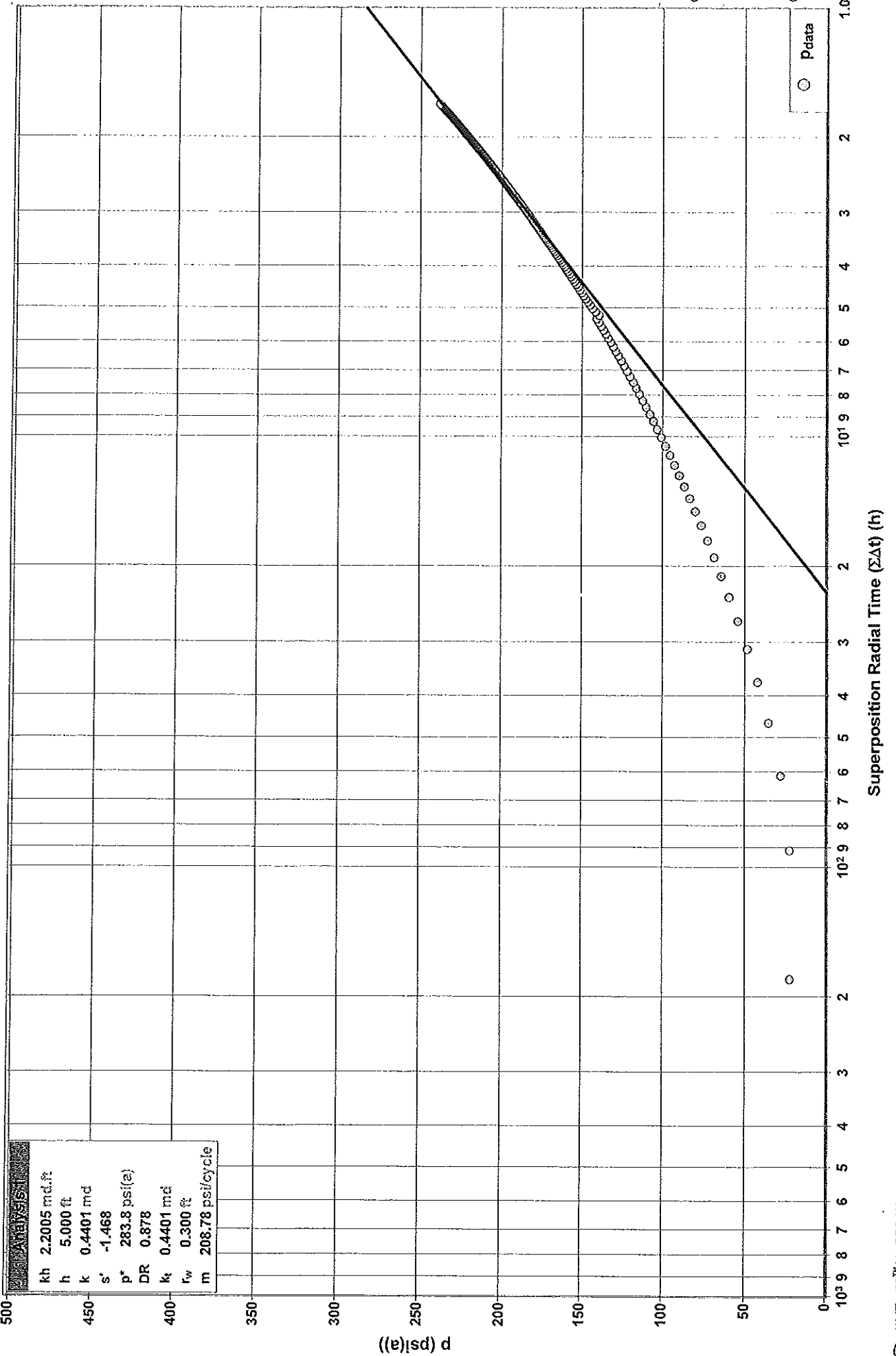
GRAVITY: 31.4 @ 60 DEG

CHLOR: 8,000 PPM  
PH:7.0  
RW: .70 @ 76 DEG

TOOL SAMPLE: 10% OIL, 20% WTR, 70% MUD

**DST #3 INITIAL SHUT IN**  
Radial

VESS OIL CORPORATION  
BASS #10  
DST #3 ARBUCKLE 3,743' - 3,814'



Analysis	
kh	2.2005 md.ft
h	5.000 ft
k	0.4401 md
s'	-1.468
p*	283.8 psf(a)
DR	0.878
k <sub>t</sub>	0.4401 md
r <sub>w</sub>	0.300 ft
m	208.78 psi/cycle

# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	2.2 md.ft	Total Skin (s')	-1.468
Effective Permeability (k)	0.4401 md	Skin Due to Damage (s <sub>d</sub> )	-1.468
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	0.4401 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> )	1.2 rbbl/d	Damage Ratio (DR)	0.878
Total Mobility ((k/μ) <sub>i</sub> )	0.19 md/cP	Flow Efficiency (FE)	1.139
Total Transmissivity ((kh/μ) <sub>i</sub> )	0.93 mdft/cP		
Slope (m)	208.78 psi/cycle		

### Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity (φ <sub>t</sub> )	15.00 %
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> )	4.1093e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.1983e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	283.8 psi(a)
Final Flowing Pressure (p <sub>wfo</sub> )	21.9 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-1.1 psi(a)

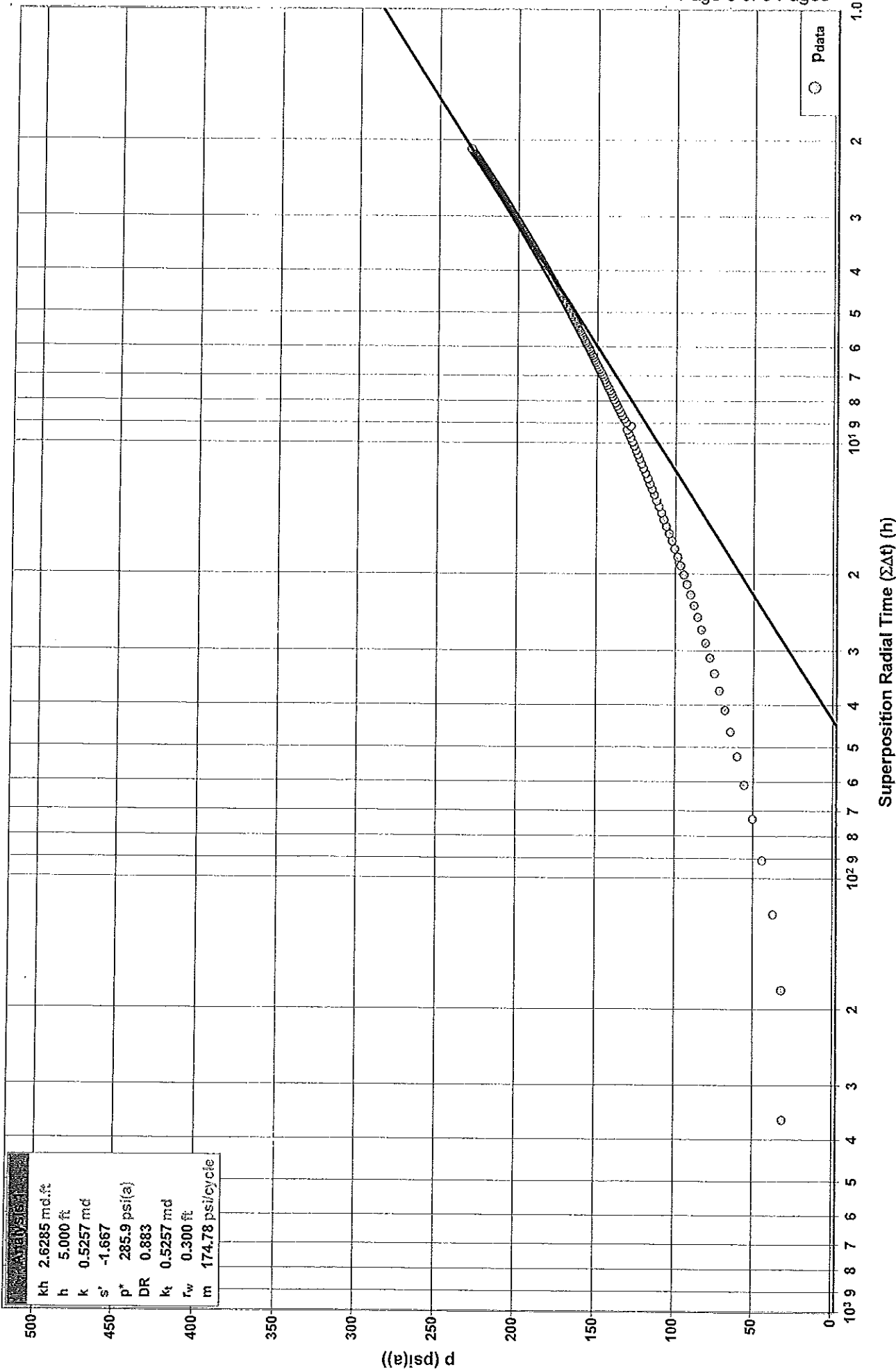
### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	106.0 °F
Reservoir Pressure (p <sub>resv</sub> )	1943.8 psi(a)
Oil Gravity (γ <sub>o</sub> )	31.4 °API
Oil Viscosity (μ <sub>o</sub> )	2.3768 cP
Oil Compressibility (c <sub>o</sub> )	9.0921e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.189
Solution Gas Ratio (R <sub>s</sub> )	349.6 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	0.50 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbl
Final Oil Rate (q <sub>o final</sub> )	1.0 bbl/d

VESS OIL CORPORATION  
 BASS #10  
 DST #3 ARBUCKLE 3,743' - 3,814'  
 Radial



kh	2.6285 md.ft
h	5.000 ft
k	0.5257 md
s'	-1.667
p*	285.9 psi(a)
DR	0.883
k <sub>t</sub>	0.5257 md
r <sub>w</sub>	0.300 ft
m	174.78 psi/cycle

Superposition Radial Time ( $\Sigma\Delta t$ ) (h)

# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	2.629 md.ft	Total Skin (s')	-1.667
Effective Permeability (k)	0.5257 md	Skin Due to Damage (s <sub>d</sub> )	-1.667
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	0.5257 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> )	1.2 rbb/d	Damage Ratio (DR)	0.883
Total Mobility ((k/μ) <sub>i</sub> )	0.22 md/cP	Flow Efficiency (FE)	1.132
Total Transmissivity ((kh/μ) <sub>i</sub> )	1.11 mdft/cP		
Slope (m)	174.78 psi/cycle		

### Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity (φ <sub>i</sub> )	15.00 %
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> )	4.1093e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.1983e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	285.9 psi(a)
Final Flowing Pressure (p <sub>wfo</sub> )	31.2 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-1.1 psi(a)

### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	106.0 °F
Reservoir Pressure (p <sub>resv</sub> )	1943.8 psi(a)
Oil Gravity (γ <sub>o</sub> )	31.4 °API
Oil Viscosity (μ <sub>o</sub> )	2.3768 cP
Oil Compressibility (c <sub>o</sub> )	9.0921e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.189
Solution Gas Ratio (R <sub>s</sub> )	349.6 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	1.25 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbbl
Final Oil Rate (q <sub>o final</sub> )	1.0 bbl/d

VESS OIL CORPORATION  
BASS #10

DST #3 ARBUCKLE  
3,743' - 3,814'

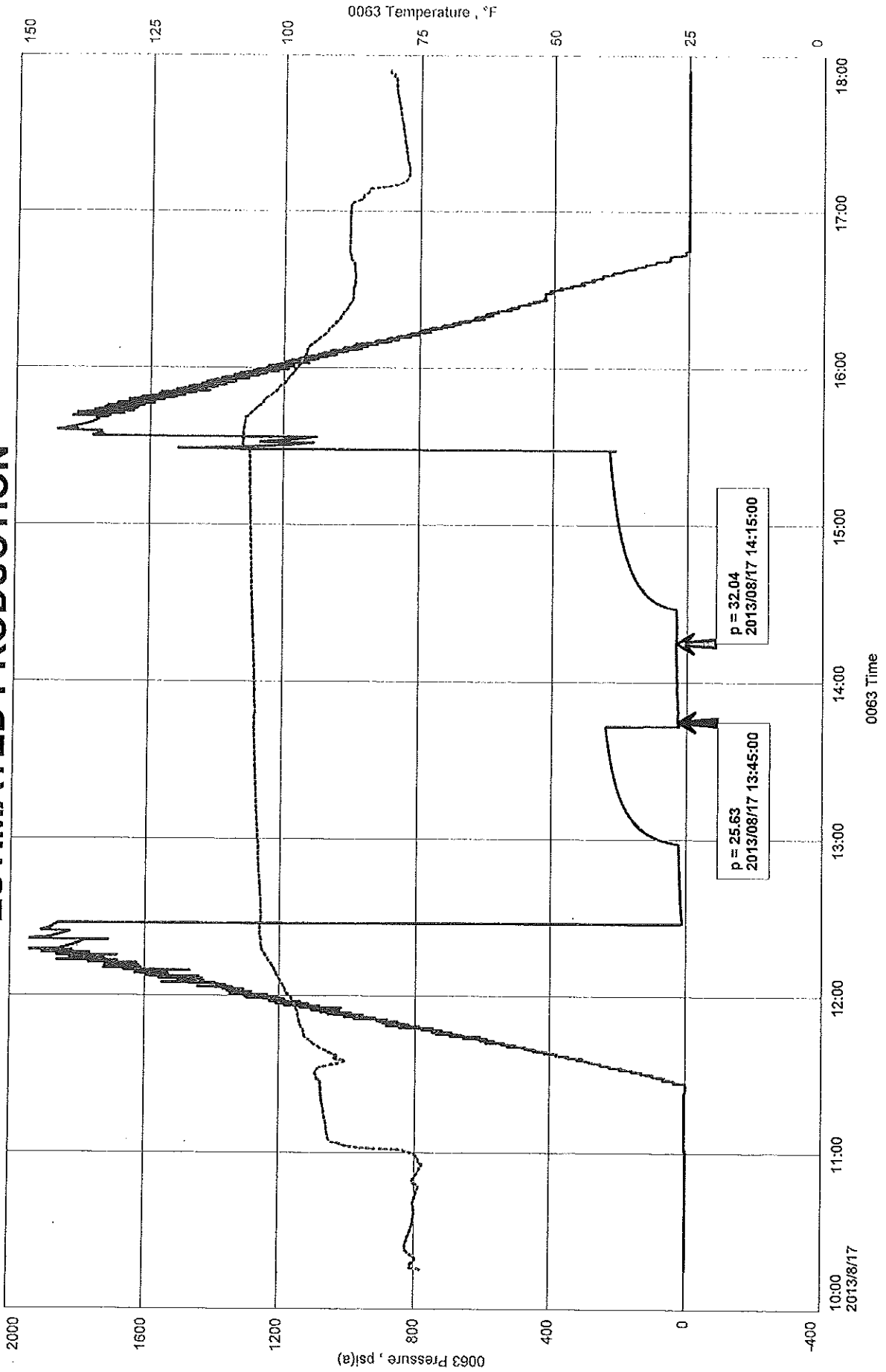
<u>DESCRIPTION</u>	<u>SECOND</u>	<u>FIRST</u>	<u>PRESSURE</u>	<u>DRILL-</u>	<u>FLUID</u>	<u>TIME</u>	<u>TOTAL</u>	<u>DAILY</u>	<u>AVERAGE</u>	<u>ESTIMATED</u>
FINAL FLOW	<u>READING</u>	<u>READING</u>	<u>CHANGE</u>	<u>PIPE</u>	<u>GRADIENT</u>	<u>CHANGE</u>	<u>TIME</u>	<u>PRODUCTION</u>	<u>PERCENTAGE</u>	<u>DAILY</u>
	32	26	6	SIZE-ID	0.377	30	1440	11	OIL	PRODUCTION
				0.0142					6.25%	1



VESS OIL CORPORATION  
DST#3 3743-3814 ARBUCKLE  
Start Test Date: 2013/08/17  
Final Test Date: 2013/08/17

BASS #10  
Formation: DST#3 3743-3814 ARBUCKLE  
Pool: WILDCAT  
Job Number: M530

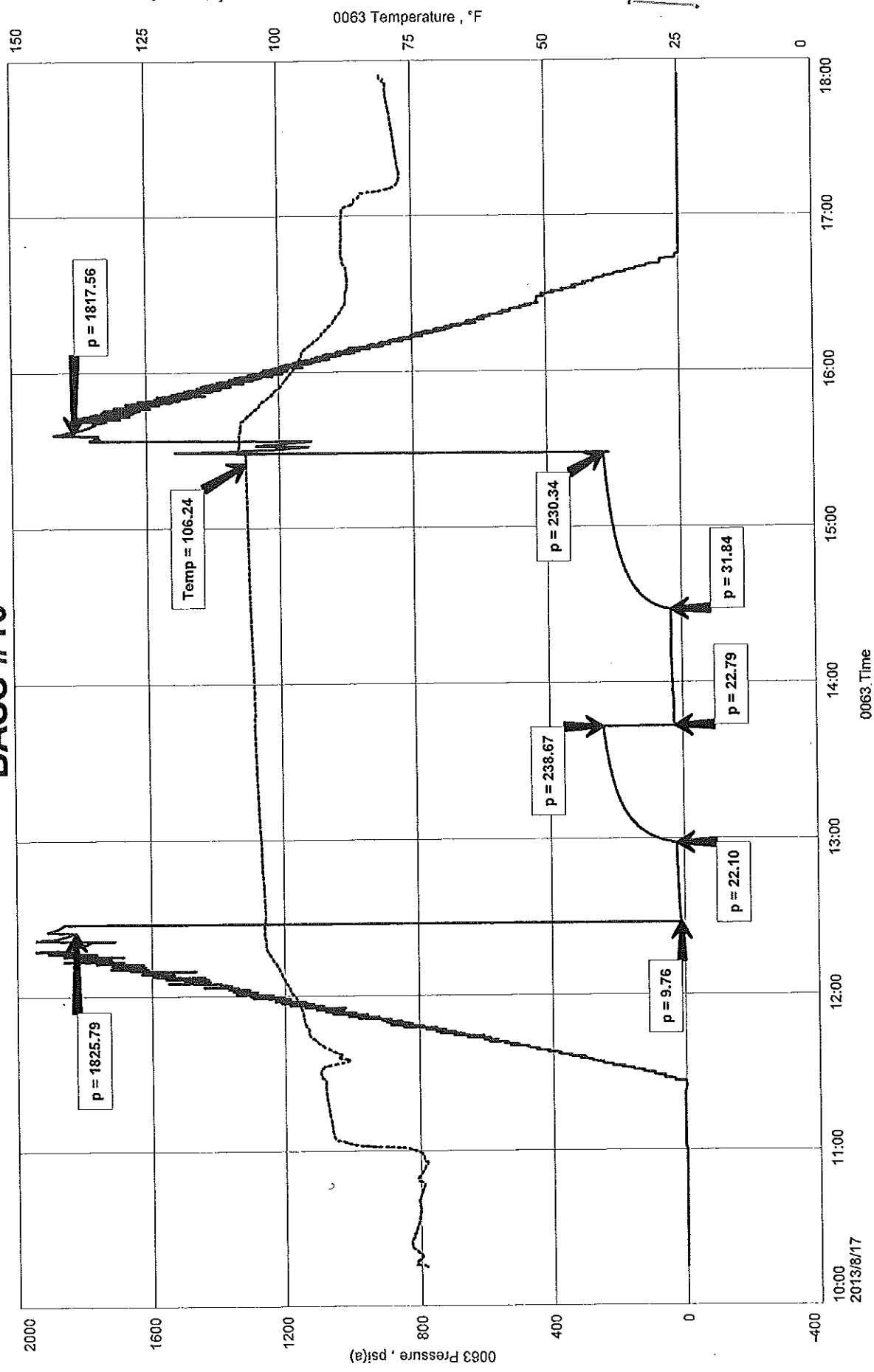
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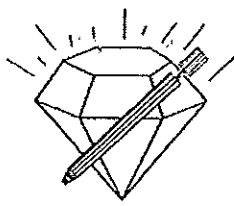


VESS OIL CORPORATION  
 DST#3 3743-3814 ARBUCKLE  
 Start Test Date: 2013/08/17  
 Final Test Date: 2013/08/17

Formation: DST#3 3743-3814 ARBUCKLE  
 Pool: WILDCAT  
 Job Number: M530

# BASS #10





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
BSS10DST4

Company Vess Oil Corporation Lease & Well No. Bass No. 10  
Elevation 2277 KB Formation Arbuckle Effective Pay      Ft. Ticket No. M531  
Date 8-18-13 Sec. 12 Twp. 10S Range 21W County Graham State Kansas  
Test Approved By Roger L. Martin Diamond Representative Mike Cochran

Formation Test No. 4 Interval Tested from 3,814 ft. to 3,824 ft. Total Depth 3,824 ft.  
Packer Depth 3,809 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Packer Depth 3,814 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 3,796 ft. Recorder Number 0063 Cap. 6,000 psi.  
Bottom Recorder Depth (Outside) 3,821 ft. Recorder Number 6884 Cap. 6,275 psi.  
Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length      ft. I.D.      in.  
Mud Type Chemical Viscosity 58 Weight Pipe Length      ft. I.D.      in.  
Weight 9.3 Water Loss 10.0 cc. Drill Pipe Length 3,782 ft. I.D. 3 1/4 in.  
Chlorides 3,400 P.P.M. Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 1 Anchor Length 10 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: Good, surface blow. Off bottom of bucket in 23 mins. No blow back during shut-in.  
2nd Open: Weak, surface blow increasing to 11 ins. No blow back during shut-in.

Recovered 25 ft. of clean oil = .256500 bbls. (Grind out: 100%-oil) Gravity: 31.4 @ 60°  
Recovered 275 ft. of oil specked muddy water = 2.821500 bbls. (Grind out: 3%-oil; 84%-water; 13%-mud) Chlorides: 22,000 Ppm PH: 7.0 RW: .42 @ 75°  
Recovered 300 ft. of TOTAL FLUID = 3.078000 bbls.  
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of       
Remarks Tool Sample Grind Out: 2%-oil; 97%-water; 1%-mud

Time Set Packer(s) 3:45 A.M. Time Started off Bottom 6:45 A.M. Maximum Temperature 112°  
Initial Hydrostatic Pressure.....(A) 1849 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 11 P.S.I. to (C) 73 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 320 P.S.I.  
Normal Flow Period.....Minutes 45 (E) 74 P.S.I. to (F) 138 P.S.I.  
Normal Closed In Period.....Minutes 60 (G) 320 P.S.I.  
Normal Hydrostatic Pressure.....(H) 1800 P.S.I.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	VESS OIL CORPORATION	Job Number	M531
Well Name	BASS #10	Representative	MIKE COCHRAN
Unique Well ID	DST#4 3814-3824 ARBUCKLE	Well Operator	VESS OIL CORPORATION
Surface Location	SEC.12-10S-21W GRAHAM CO.KS.	Report Date	2013/08/18
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	ROGER MARTIN
		Test Unit	NO. 1

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#4 3814-3824 ARBUCKLE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2013/08/18	Start Test Time	01:30:00
Final Test Date	2013/08/18	Final Test Time	09:25:00
		Well Fluid Type	01 OIL
Gauge Name	0063		
Gauge Serial Number			

### Test Results

Remarks RECOVERED:  
25' CO 100% OIL  
275' OSMW 3% OIL, 84% WTR, 13% MUD  
300' TOTAL FLUID

GRAVITY: 31.4 @ 60 DEG

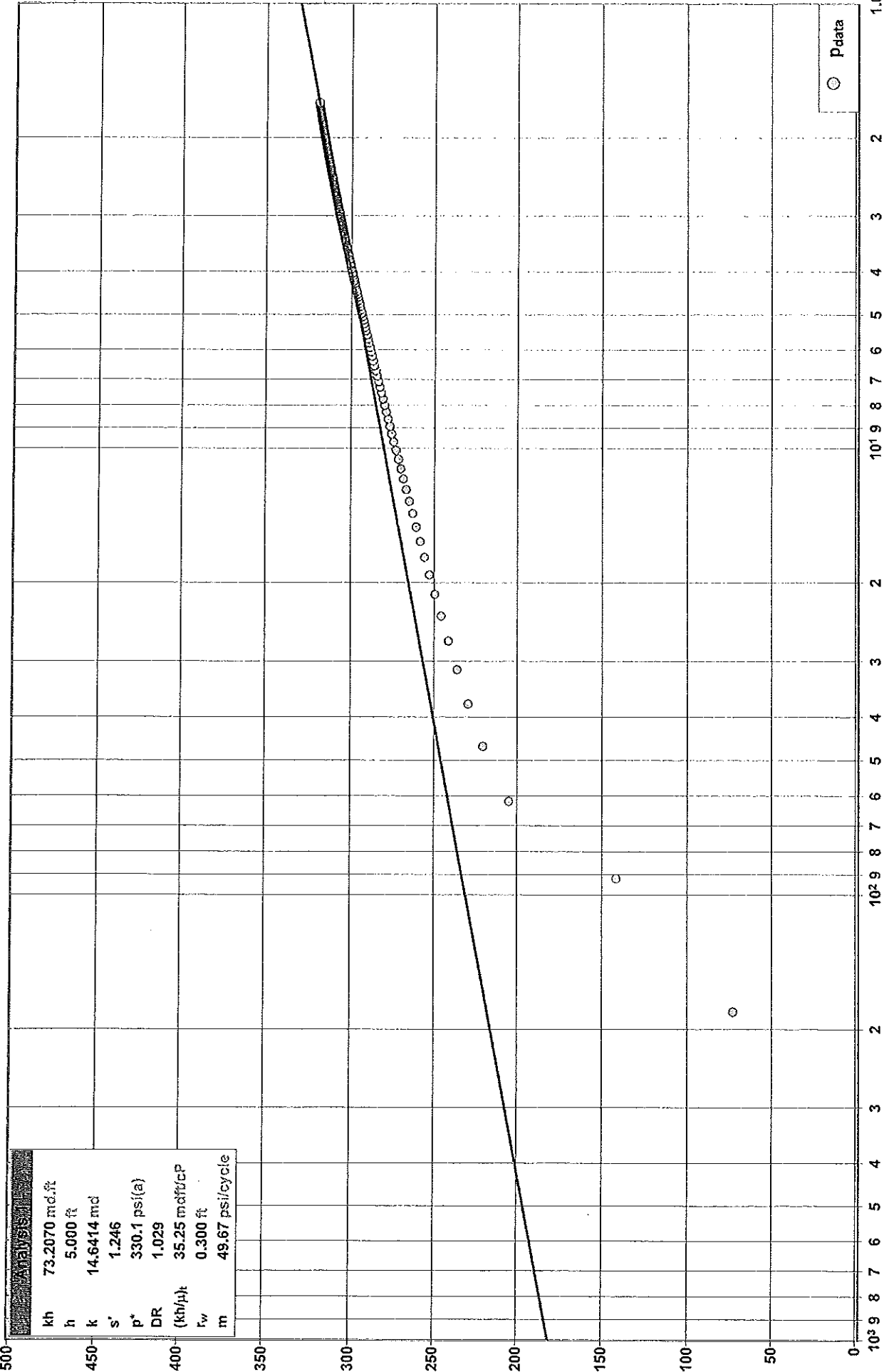
CHLOR: 22,000 PPM  
PH:7.0  
RW: .42 @ 75 DEG

TOOL SAMPLE: 2% OIL, 97% WTR, 1% MUD

**DST #4 INITIAL SHUT IN**  
**Radial**

VESS OIL CORPORATION  
 BASS #10  
 DST #4 ARBUCKLE 3,814' - 3,824'

kh	73.2070 md.ft
h	5.000 ft
k	14.6414 md
s'	1.246
p*	330.1 psi(a)
DR	1.029
(kh/μ)t	35.25 md-ft/cp
r <sub>w</sub>	0.300 ft
m	49.67 psi/cycle



Superposition Radial Time ( $\Sigma\Delta t$ ) (h)

# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	73.21 md.ft	Total Skin (s')	1.246
Effective Permeability (k)	14.6414 md	Skin Due to Damage (s <sub>d</sub> )	1.246
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	14.6414 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> )	53.8 psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>i</sub> )	10.8 rbb/d	Damage Ratio (DR)	1.029
Total Mobility ((k/μ) <sub>i</sub> )	7.05 md/cP	Flow Efficiency (FE)	0.972
Total Transmissivity ((kh/μ) <sub>i</sub> )	35.25 mdf/cP		
Slope (m)	49.67 psi/cycle		

### Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity (φ <sub>t</sub> )	15.00 %
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> )	4.1093e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.2333e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	330.1 psi(a)
Final Flowing Pressure (p <sub>wfo</sub> )	72.6 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-1.1 psi(a)

### Fluid Properties

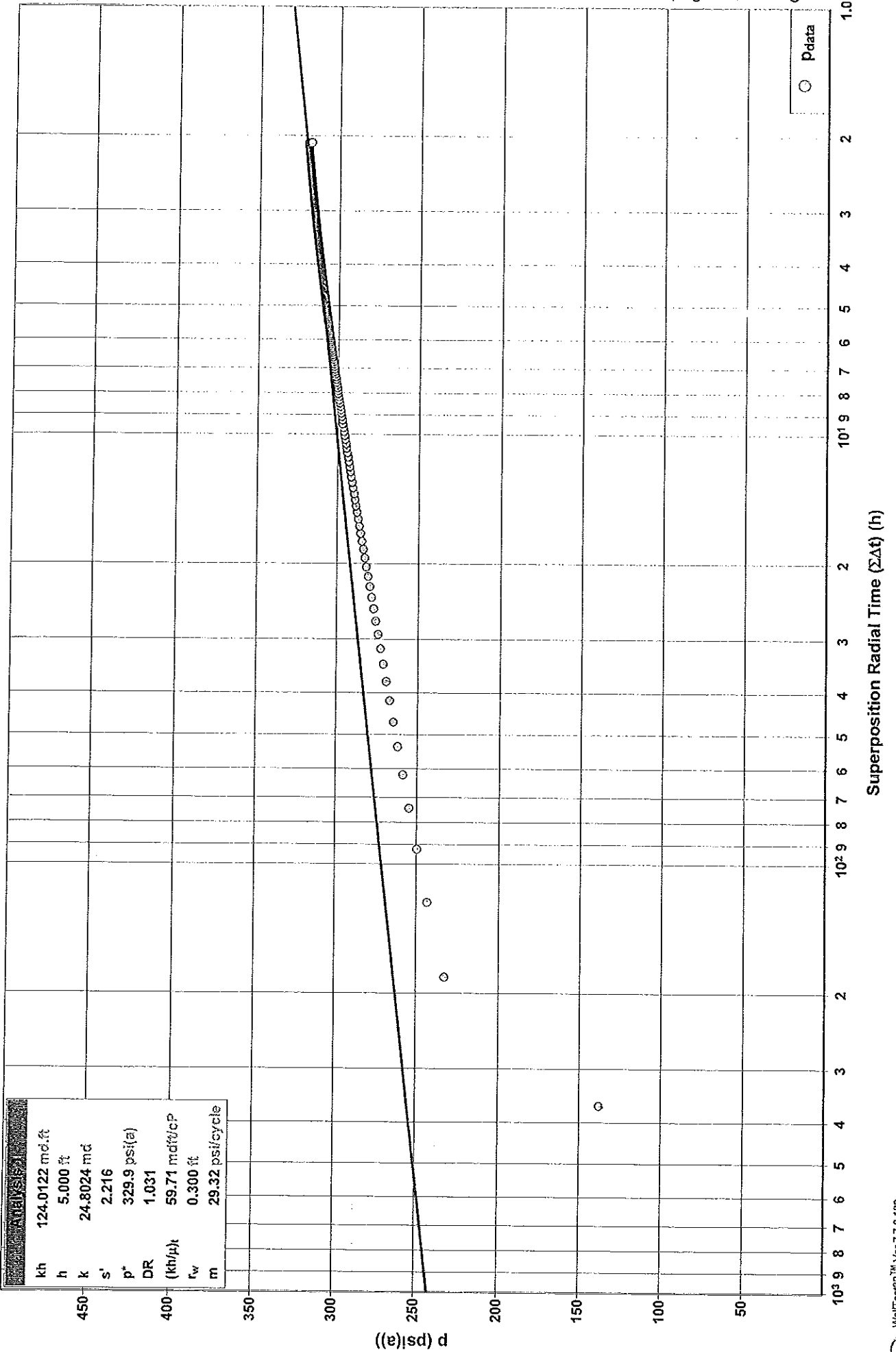
Reservoir Temperature (T <sub>resv</sub> )	112.0 °F
Reservoir Pressure (p <sub>resv</sub> )	2009.8 psi(a)
Oil Gravity (γ <sub>o</sub> )	31.4 °API
Oil Viscosity (μ <sub>o</sub> )	2.0770 cP
Oil Compressibility (c <sub>o</sub> )	9.5335e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.196
Solution Gas Ratio (R <sub>s</sub> )	358.7 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	0.51 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbbl
Final Oil Rate (q <sub>o final</sub> )	9.0 bbl/d

**DST #4 FINAL SHUT IN**  
Radial

VESS OIL CORPORATION  
BASS #10  
DST #4 ARBUCKLE 3,814' - 3,824'



# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	124 md.ft	Total Skin (s')	2.216
Effective Permeability (k)	24.8024 md	Skin Due to Damage (s <sub>d</sub> )	2.216
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	24.8024 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> )	56.5 psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>i</sub> )	10.8 rbbl/d	Damage Ratio (DR)	1.031
Total Mobility ((k/μ) <sub>i</sub> )	11.94 md/cP	Flow Efficiency (FE)	0.970
Total Transmissivity ((kh/μ) <sub>i</sub> )	59.71 mdf/cP		
Slope (m)	29.32 psi/cycle		

### Reservoir Parameters

Net Pay (h)	5.000 ft
Total Porosity (φ <sub>t</sub> )	15.00 %
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> )	4.1093e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.2333e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	329.9 psi(a)
Final Flowing Pressure (p <sub>wfO</sub> )	137.7 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-1.1 psi(a)

### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	112.0 °F
Reservoir Pressure (p <sub>resv</sub> )	2009.8 psi(a)
Oil Gravity (γ <sub>o</sub> )	31.4 °API
Oil Viscosity (μ <sub>o</sub> )	2.0770 cP
Oil Compressibility (c <sub>o</sub> )	9.5335e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.196
Solution Gas Ratio (R <sub>s</sub> )	358.7 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	1.27 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbl
Final Oil Rate (q <sub>o final</sub> )	9.0 bbl/d



VESS OIL CORPORATION  
BASS #10

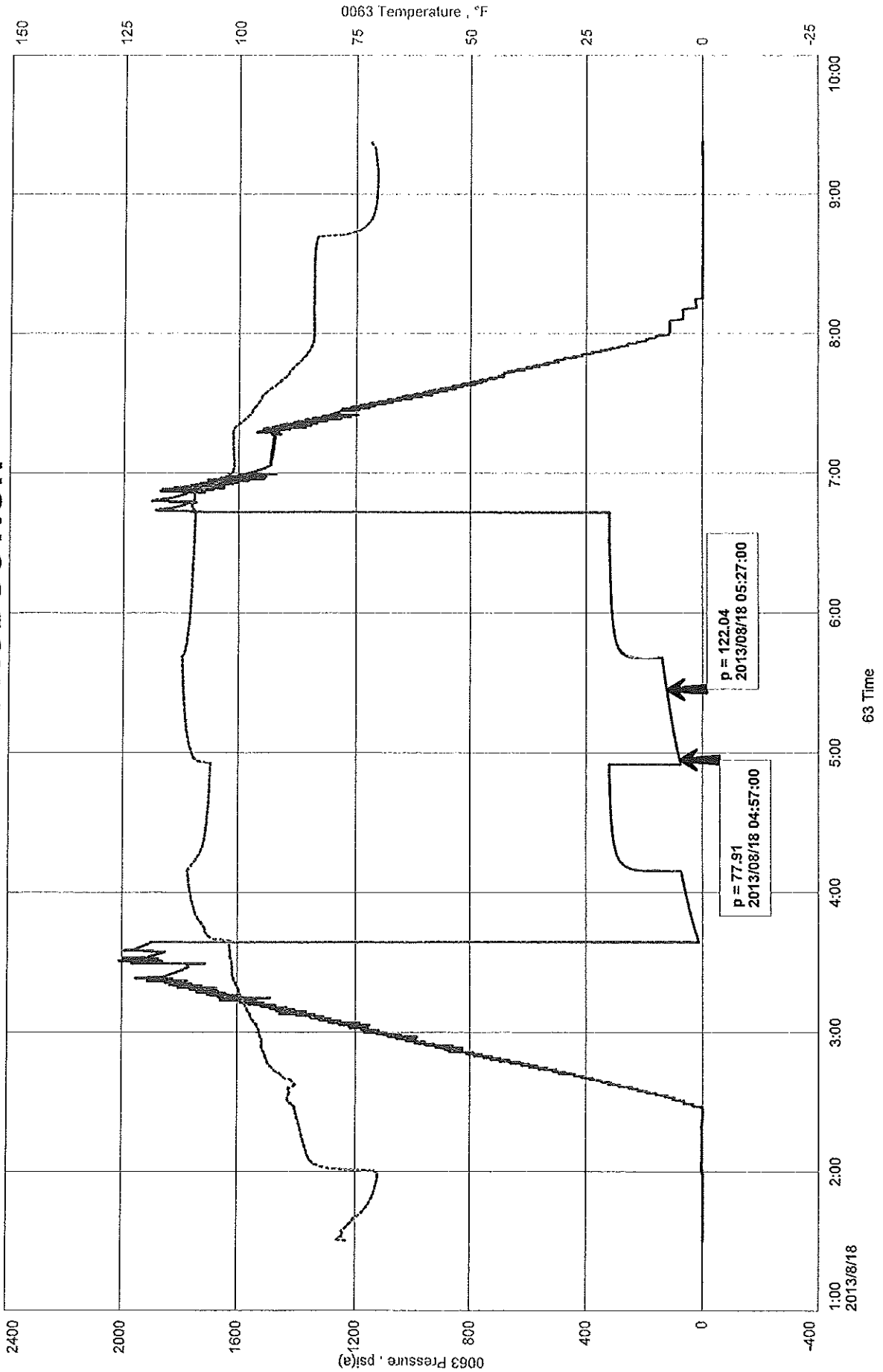
DST #4 ARBUCKLE  
3,814' - 3,824'

<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	122	78	44	0.0142	0.377	30	1440	80	11.00%	9

VESS OIL CORPORATION  
DST#4 3814-3824 ARBUCKLE  
Start Test Date: 2013/08/18  
Final Test Date: 2013/08/18

BASS #10  
Formation: DST#4 3814-3824 ARBUCKLE  
Pool: WILDCAT  
Job Number: M531

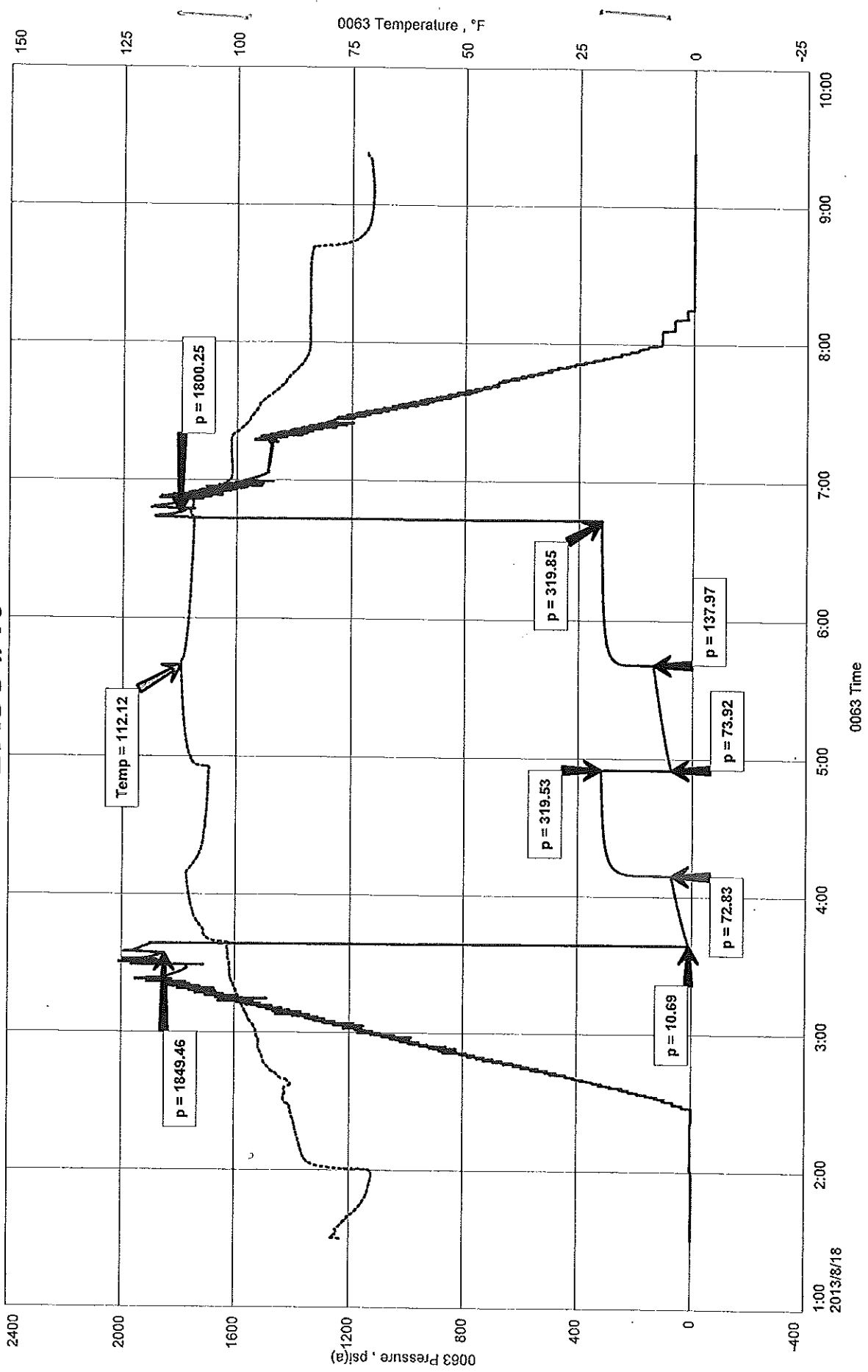
# ESTIMATED PRODUCTION

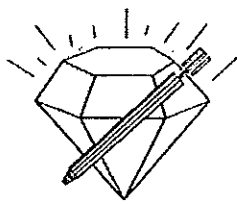


VESS OIL CORPORATION  
DST#4 3814-3824 ARBUCKLE  
Start Test Date: 2013/08/18  
Final Test Date: 2013/08/18

BASS #10  
Formation: DST#4 3814-3824 ARBUCKLE  
Pool: WILDCAT  
Job Number: M531

# BASS #10





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
BSS10DST5

Company Vess Oil Corporation Lease & Well No. Bass No. 10  
Elevation 2277 KB Formation Arbuckle Effective Pay          Ft. Ticket No. M532  
Date 8-19-13 Sec. 12 Twp. 10S Range 21W County Graham State Kansas  
Test Approved By Roger L. Martin Diamond Representative Mike Cochran

Formation Test No. 5 Interval Tested from 3,824 ft. to 3,834 ft. Total Depth 3,834 ft.  
Packer Depth 3,819 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Packer Depth 3,824 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Depth of Selective Zone Set          ft.

Top Recorder Depth (Inside) 3,806 ft. Recorder Number 0063 Cap. 6,000 psi.  
Bottom Recorder Depth (Outside) 3,831 ft. Recorder Number 6884 Cap. 6,275 psi.  
Below Straddle Recorder Depth          ft. Recorder Number          Cap.          psi.

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length          ft. I.D.          in.  
Mud Type Chemical Viscosity 58 Weight Pipe Length          ft. I.D.          in.  
Weight 9.3 Water Loss 10.0 cc. Drill Pipe Length 3,792 ft. I.D. 3 1/4 in.  
Chlorides 3,400 P.P.M. Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 1 Anchor Length 10 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 9 ins. No blow back during shut-in.

2nd Open: Very weak, surface blow increasing to 8 ins. No blow back during shut-in.

Recovered 48 ft. of clean oil = .492480 bbls. (Grind out: 100%-oil) Gravity: 31.2 @ 60°

Recovered 127 ft. of oil specked muddy water = 1.303020 bbls. (Grind out: 2%-oil; 85%-water; 13%-mud) Chlorides: 30,000 Ppm PH: 7.0 RW: .30 @ 68°

Recovered 175 ft. of TOTAL FLUID = 1.795500 bbls.

Recovered          ft. of         

Recovered          ft. of         

Recovered          ft. of         

Remarks Tool Sample Grind Out: 4%-oil; 94%-water; 2%-mud

Time Set Packer(s) 2:00 A.M. Time Started off Bottom 5:07 A.M. Maximum Temperature 110°

Initial Hydrostatic Pressure.....(A) 1887 P.S.I.

Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 48 P.S.I.

Initial Closed In Period.....Minutes 45 (D) 423 P.S.I.

Initial Flow Period.....Minutes 52 (E) 48 P.S.I. to (F) 84 P.S.I.

Initial Closed In Period.....Minutes 60 (G) 423 P.S.I.

Initial Hydrostatic Pressure.....(H) 1885 P.S.I.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	VESS OIL CORPORATION	Job Number	M532
Well Name	BASS #10	Representative	MIKE COCHRAN
Unique Well ID	DST#5 3824-3834 ARBUCKLE	Well Operator	VESS OIL CORPORATION
Surface Location	SEC.12-10S-21W GRAHAM CO.KS.	Report Date	2013/08/19
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	ROGER MARTIN
	Test Unit		NO. 1

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#5 3824-3834 ARBUCKLE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2013/08/19	Start Test Time	00:00:00
Final Test Date	2013/08/19	Final Test Time	07:20:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

### Test Results

Remarks RECOVERED:

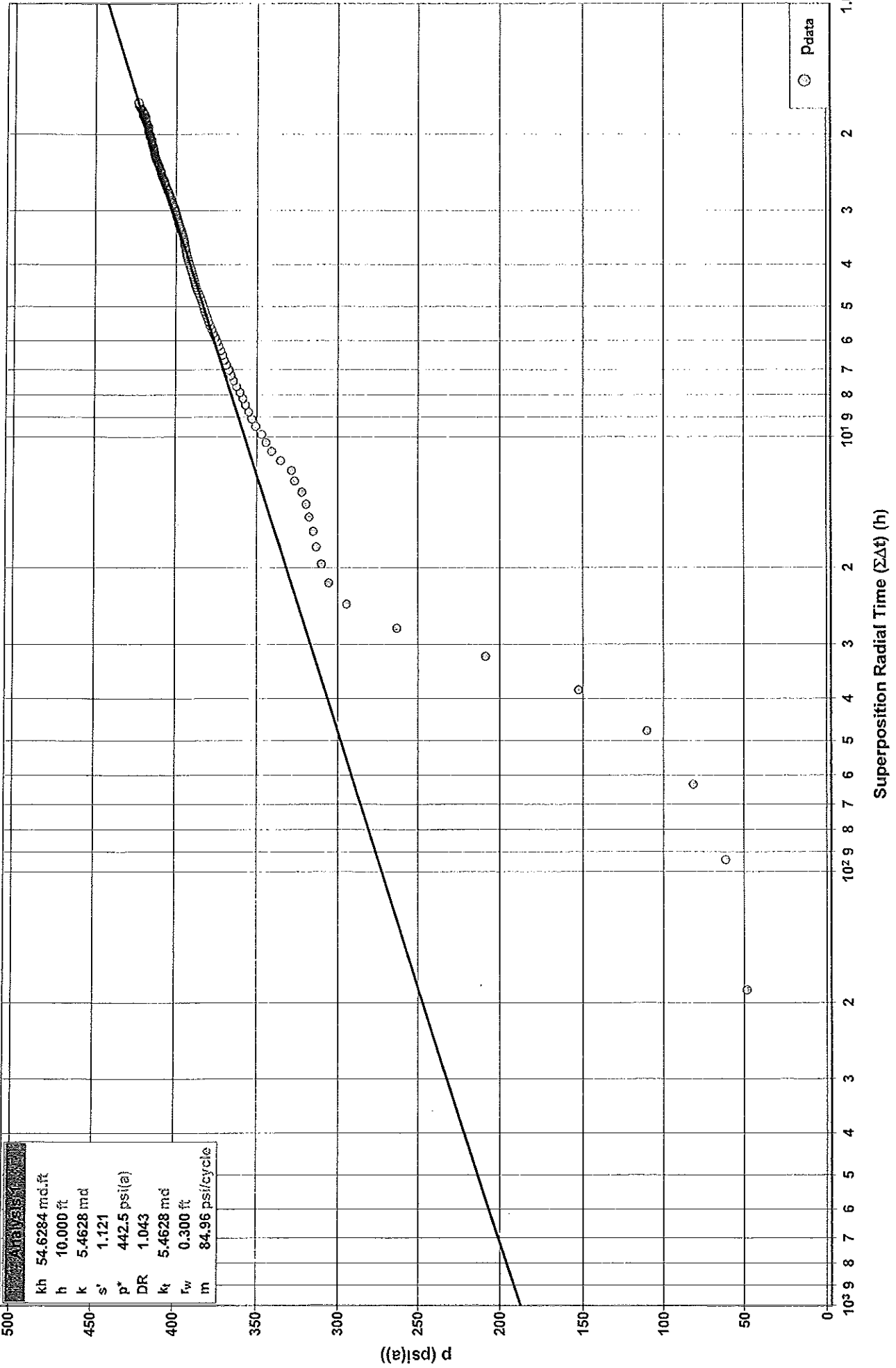
~48' CO 100% OIL  
127' OSMW 2% OIL, 85% WTR, 13% MUD  
175' TOTAL FLUID

GRAVITY: 31.2 @ 60 DEG

CHLOR: 30,000 PPM  
PH:7.0  
RW: .30 @ 68 DEG

TOOL SAMPLE: 4% OIL, 94% WTR, 2% MUD

VESSE OIL CORP  
 BASS #10  
 DST #5 ARBUCKLE 3,824' - 3,834'  
 Radial



# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	54.63 md.ft	Total Skin (s')	1.121
Effective Permeability (k)	5.4628 md	Skin Due to Damage (s <sub>d</sub> )	1.121
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	5.4628 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> )	82.7 psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>t</sub> )	13.2 rbbl/d	Damage Ratio (DR)	1.043
Total Mobility ((k/μ) <sub>t</sub> )	2.52 md/cP	Flow Efficiency (FE)	0.958
Total Transmissivity ((kh/μ) <sub>t</sub> )	25.21 mdf/cP		
Slope (m)	84.96 psi/cycle		

### Reservoir Parameters

Net Pay (h)	10.000 ft
Total Porosity (φ <sub>t</sub> )	15.00 %
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> )	4.1093e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.2174e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	442.5 psi(a)
Final Flowing Pressure (p <sub>wfo</sub> )	48.1 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-0.9 psi(a)

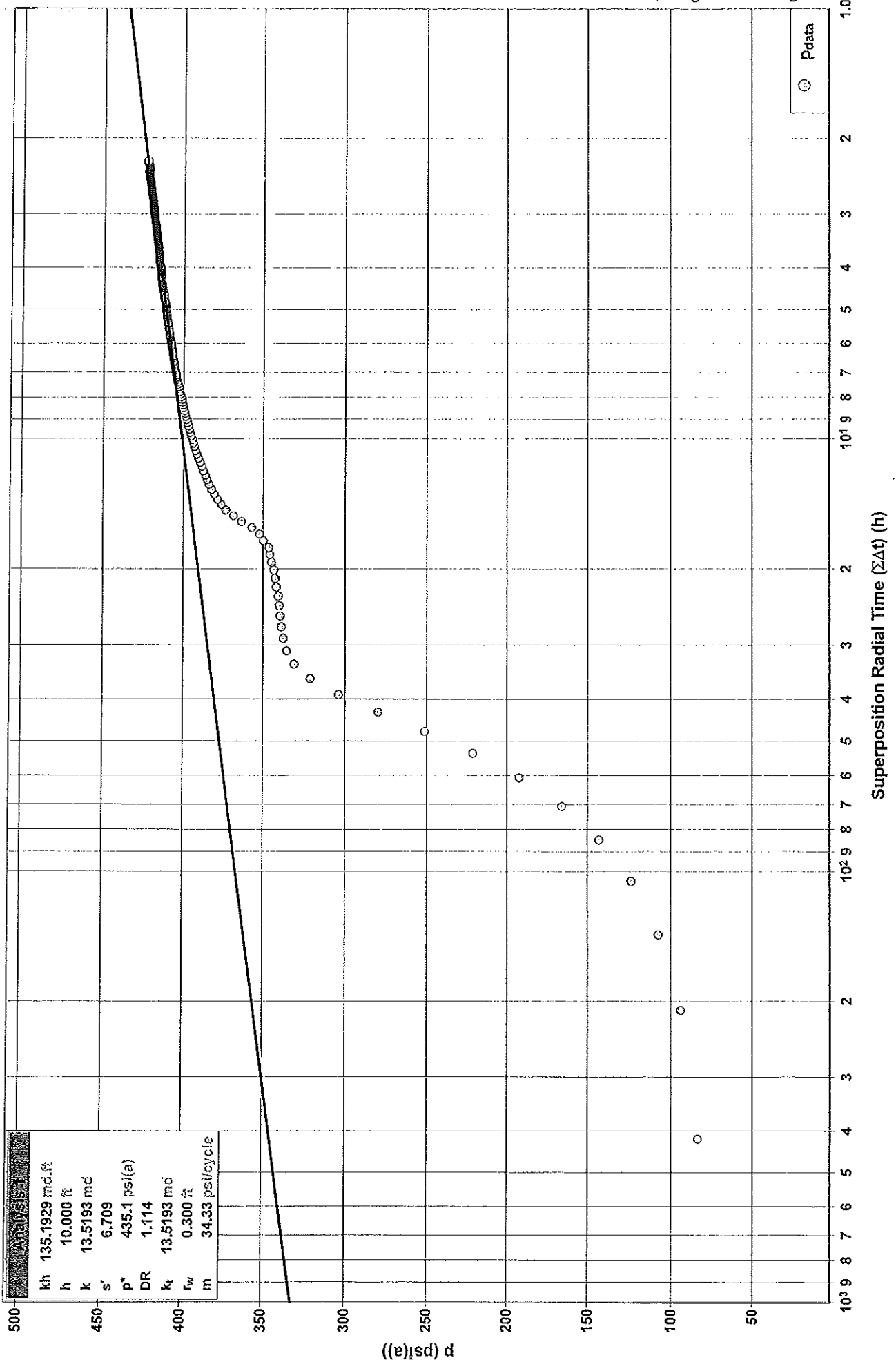
### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	110.0 °F
Reservoir Pressure (p <sub>resv</sub> )	2040.3 psi(a)
Oil Gravity (γ <sub>o</sub> )	31.2 °API
Oil Viscosity (μ <sub>o</sub> )	2.1670 cP
Oil Compressibility (c <sub>o</sub> )	9.3349e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.197
Solution Gas Ratio (R <sub>s</sub> )	363.8 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	0.52 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbbl
Final Oil Rate (q <sub>o final</sub> )	11.0 bbl/d

VESS OIL CORP  
 BASS #10  
 DST #5 ARBUCKLE 3,824' - 3,834'  
 DST #5 FINAL SHUT IN  
 Radial





# Oil Well Test - Buildup

## Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	135.2 md.ft	Total Skin (s')	6.709
Effective Permeability (k)	13.5193 md	Skin Due to Damage (s <sub>d</sub> )	6.709
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	13.5193 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> )	200.1 psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>t</sub> )	13.2 rbbl/d	Damage Ratio (DR)	1.114
Total Mobility ((k/μ) <sub>t</sub> )	6.24 md/cP	Flow Efficiency (FE)	0.898
Total Transmissivity ((kh/μ) <sub>t</sub> )	62.39 mdft/cP		
Slope (m)	34.33 psi/cycle		

### Reservoir Parameters

Net Pay (h)	10.000 ft
Total Porosity (φ <sub>t</sub> )	15.00 %
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> )	4.1093e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.2174e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	435.1 psi(a)
Final Flowing Pressure (p <sub>vfo</sub> )	83.5 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-0.9 psi(a)

### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	110.0 °F
Reservoir Pressure (p <sub>resv</sub> )	2040.3 psi(a)
Oil Gravity (γ <sub>o</sub> )	31.2 °API
Oil Viscosity (μ <sub>o</sub> )	2.1670 cP
Oil Compressibility (c <sub>o</sub> )	9.3349e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.197
Solution Gas Ratio (R <sub>s</sub> )	363.8 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	1.40 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbbl
Final Oil Rate (q <sub>o final</sub> )	11.0 bbl/d

DST #5 ARBUCKLE  
3,824' - 3,834'

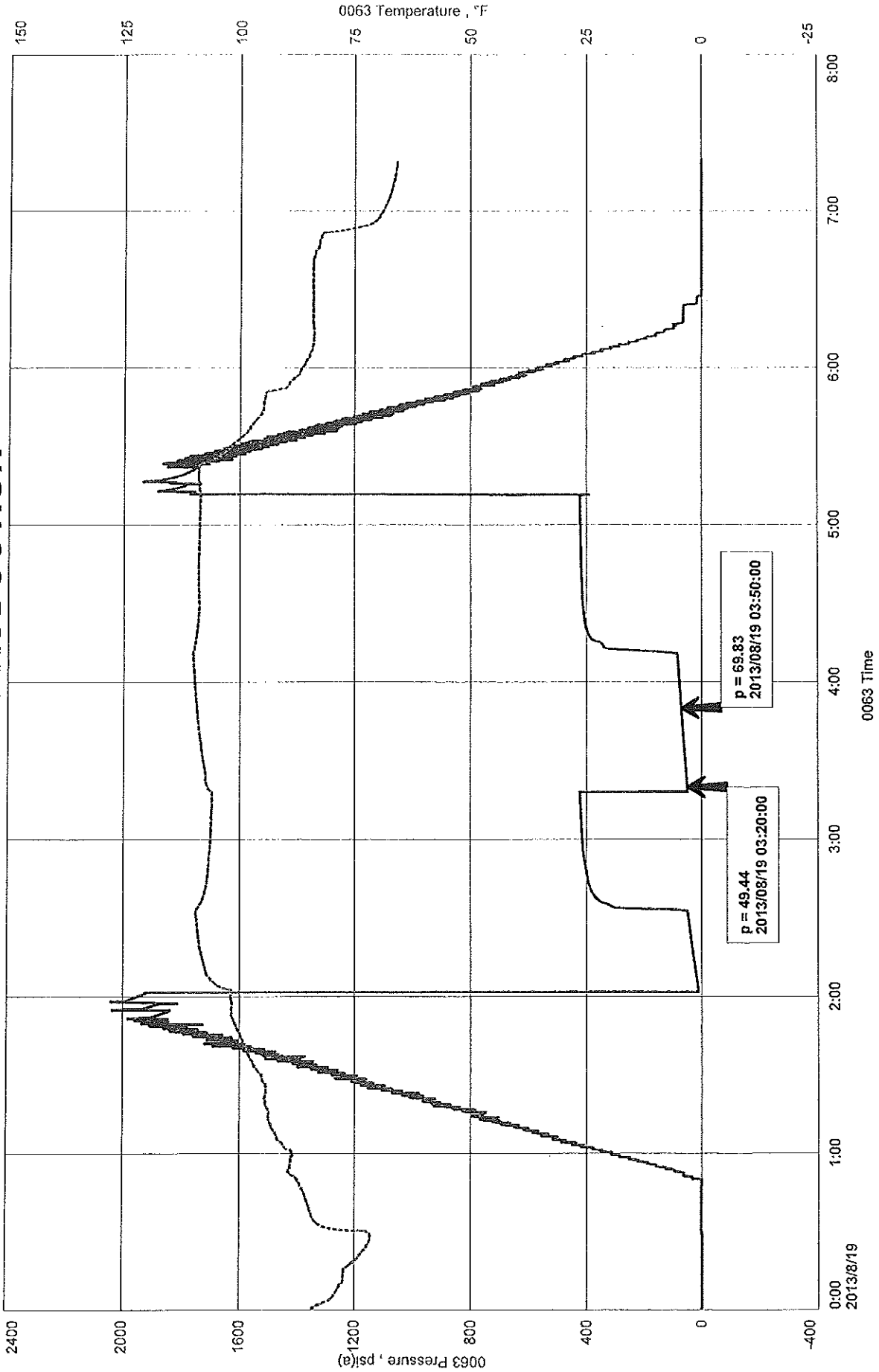
VESS OIL CORPORATION  
BASS #10

<u>DESCRIPTION</u>	<u>SECOND</u>	<u>FIRST</u>	<u>PRESSURE</u>	<u>DRILL-</u>	<u>FLUID</u>	<u>TIME</u>	<u>TOTAL</u>	<u>DAILY</u>	<u>AVERAGE</u>	<u>ESTIMATED</u>
FINAL FLOW	<u>READING</u>	<u>READING</u>	<u>CHANGE</u>	<u>PIPE</u>	<u>GRADIENT</u>	<u>CHANGE</u>	<u>TIME</u>	<u>PRODUCTION</u>	<u>PERCENTAGE</u>	<u>DAILY</u>
	70	49	21	<u>SIZE-ID</u>	0.377	30	1440	38	OIL	PRODUCTION
				0.0142					29.32%	11

VESS OIL CORPORATION  
 DST#5 3824-3834 ARBUCKLE  
 Start Test Date: 2013/08/19  
 Final Test Date: 2013/08/19

BASS #10  
 Formation: DST#5 3824-3834 ARBUCKLE  
 Pool: WILDCAT  
 Job Number: M532

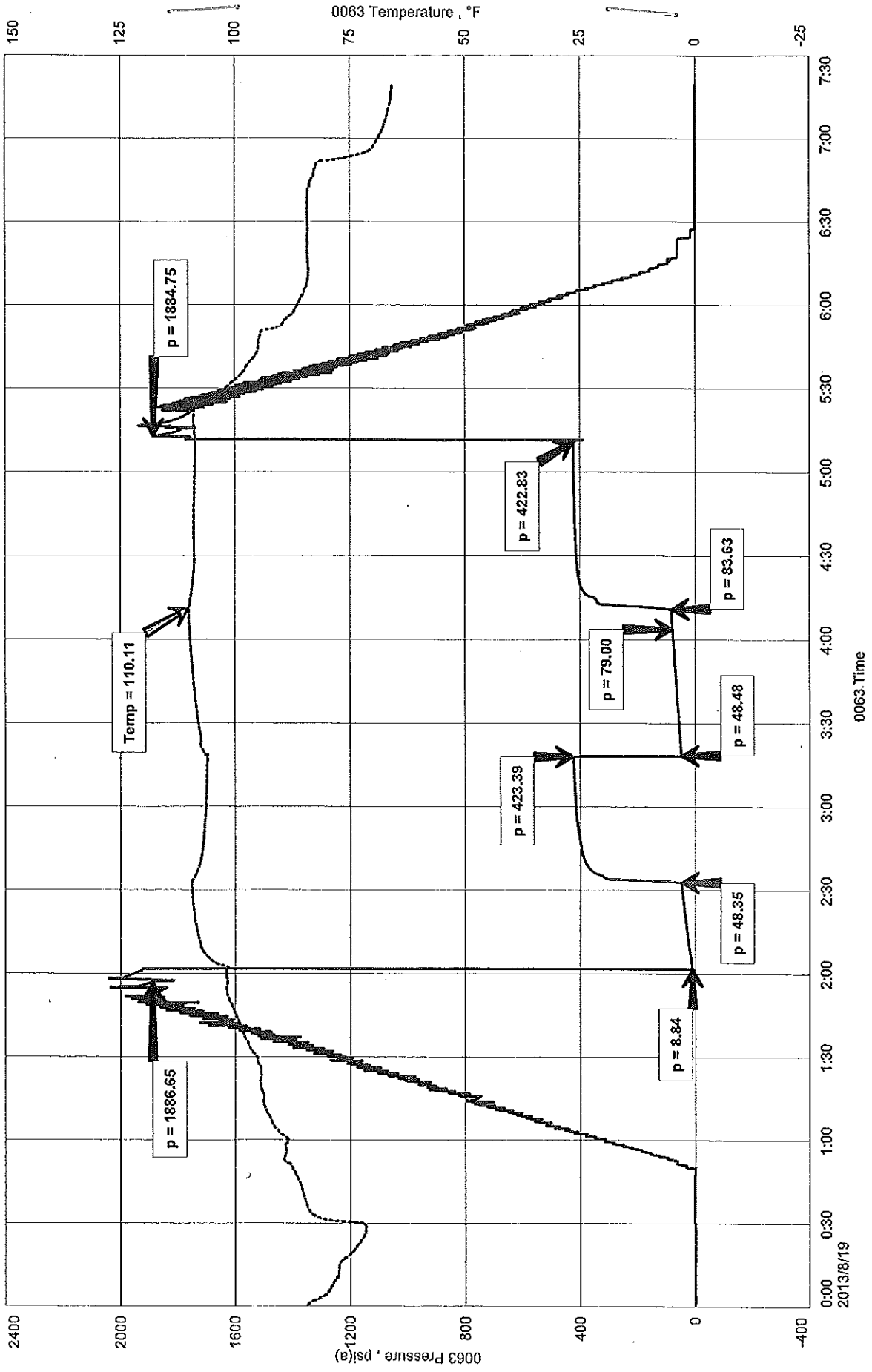
# ESTIMATED PRODUCTION

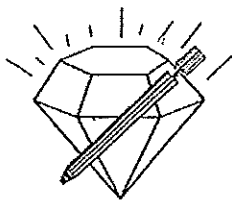


VESS OIL CORPORATION  
DST#5 3824-3834 ARBUCKLE  
Start Test Date: 2013/08/19  
Final Test Date: 2013/08/19

BASS #10  
Formation: DST#5 3824-3834 ARBUCKLE  
Pool: WILDCAT  
Job Number: M532

# BASS #10





**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
BSS10DST6

Company Vess Oil Corporation Lease & Well No. Bass No. 10  
Elevation 2277 KB Formation Arbuckle Effective Pay          Ft. Ticket No. M533  
Date 8-19-13 Sec. 12 Twp. 10S Range 21W County Graham State Kansas  
Test Approved By Roger L. Martin Diamond Representative Mike Cochran

Formation Test No. 6 Interval Tested from 3,834 ft. to 3,845 ft. Total Depth 3,845 ft.  
Packer Depth 3,829 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Packer Depth 3,834 ft. Size 6 3/4 in. Packer Depth          ft. Size          in.  
Depth of Selective Zone Set          ft.

Top Recorder Depth (Inside) 3,816 ft. Recorder Number 0063 Cap. 6,000 psi.  
Bottom Recorder Depth (Outside) 3,842 ft. Recorder Number 6884 Cap. 6,275 psi.  
Below Straddle Recorder Depth          ft. Recorder Number          Cap.          psi.

Drilling Contractor L. D. Drilling, Inc. - Rig 1 Drill Collar Length          ft. I.D.          in.  
Mud Type Chemical Viscosity 55 Weight Pipe Length          ft. I.D.          in.  
Weight 9.1 Water Loss 12.0 cc. Drill Pipe Length 3,802 ft. I.D. 3 1/4 in.  
Chlorides 4,000 P.P.M. Test Tool Length 32 ft. Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 1 Anchor Length 11 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: Good, surface blow. Off bottom of bucket in 3 mins. Weak, 1/4 in. blow back during shut-in.  
2nd Open: Good, surface blow. Off bottom of bucket in 5 mins. Weak, 1 1/2 in. blow back during shut-in.

Recovered 350 ft. of gas in pipe  
Recovered 115 ft. of clean oil = 1.179900 bbls. (Grind out: 100%-oil) Gravity: 30.4 @ 60°  
Recovered 170 ft. of gas & heavy oil cut muddy water = 1.744200 bbls. (Grind out: 12%-gas; 27%-oil; 53%-water; 8%-mud)  
Recovered 510 ft. of gas & oil specked muddy water = 5.232600 bbls. (Grind out: 2%-gas; 2%-oil; 95%-water; 1%-mud)  
Recovered 570 ft. of very slightly oil specked gassy water = 5.848200 bbls. (Grind out: 2%-gas; 98%-water w/some specks of oil) Chlorides: 26,000 Ppm PH: 7.0 RW: .28 @ 70°  
Recovered 1,365 ft. of TOTAL FLUID = 14.004900 bbls.

Remarks Tool Sample Grind Out: 1%-gas; 98%-water; 1%-mud w/some spots of oil

Time Set Packer(s) 7:00 P.M. Time Started off Bottom 10:00 P.M. Maximum Temperature 115°  
Initial Hydrostatic Pressure.....(A) 1829 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 29 P.S.I. to (C) 314 P.S.I.  
Initial Closed In Period.....Minutes 45 (D) 1037 P.S.I.  
Final Flow Period.....Minutes 45 (E) 321 P.S.I. to (F) 603 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 1038 P.S.I.  
Final Hydrostatic Pressure.....(H) 1801 P.S.I.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	VESS OIL CORPORATION	Job Number	M533
Well Name	BASS #10	Representative	MIKE COCHRAN
Unique Well ID	DST#6 3834-3845 ARBUCKLE	Well Operator	VESS OIL CORPORATION
Surface Location	SEC.12-10S-21W GRAHAM CO.KS.	Report Date	2013/08/20
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	ROGER MARTIN
	Test Unit		NO. 1

### Test Information

Test Type	CONVENTIONAL		
Formation	DST#6 3834-3845 ARBUCKLE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2013/08/19	Start Test Time	16:00:00
Final Test Date	2013/08/20	Final Test Time	01:20:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

### Test Results

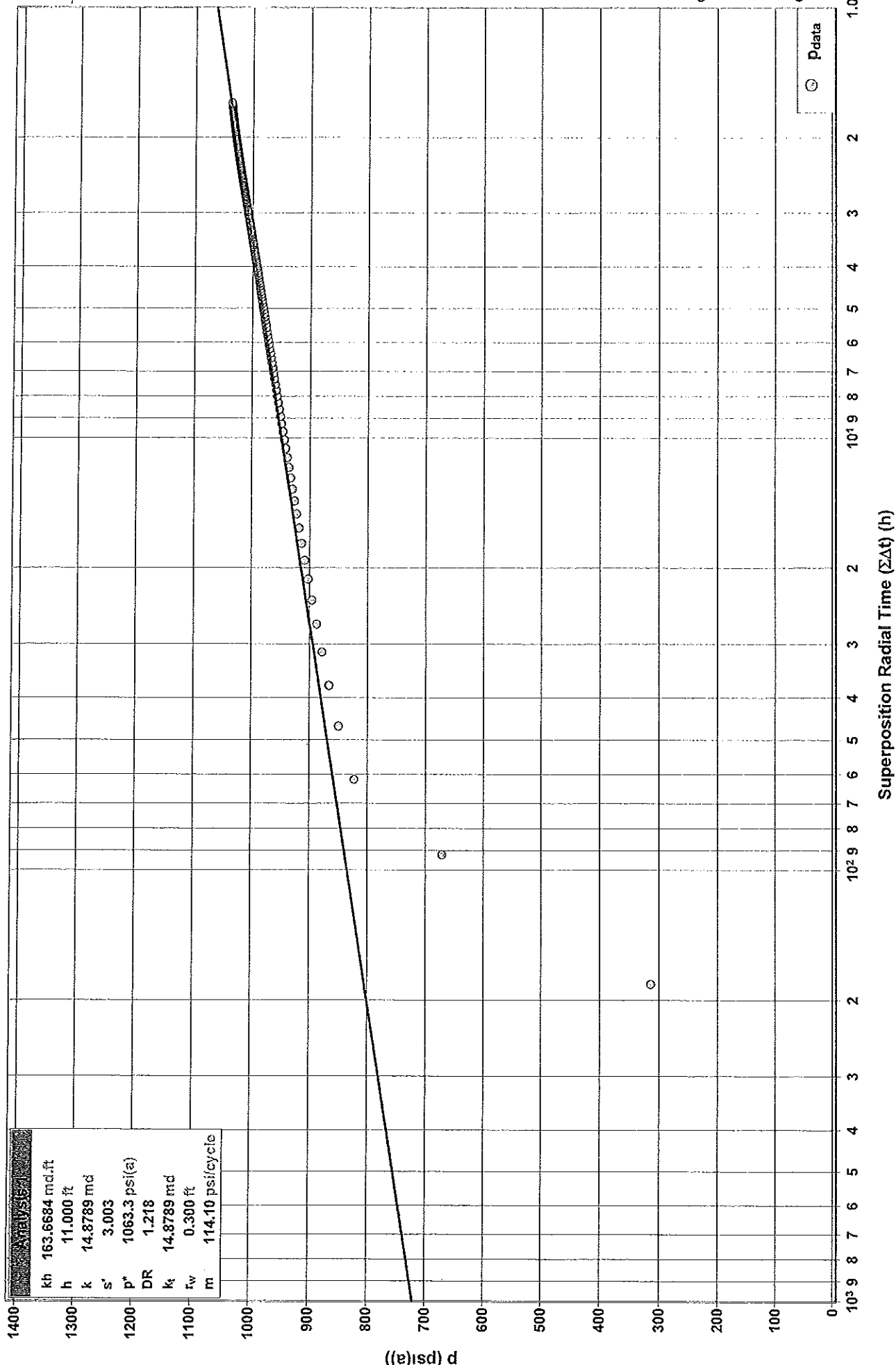
Remarks RECOVERED:  
350' GIP  
116' CO 100% OIL  
170' GHOCMW 12% GAS, 27% OIL, 53% WTR, 8% MUD  
510' GOSMW 2% GAS, 2% OIL, 95% WTR, 1% MUD  
570' VSOSGW 2% GAS, 98% WTR W/SOME SPECKS OF OIL  
1365' TOTAL FLUID

GRAVITY: 30.4 @ 60 DEG

CHLOR: 26,000 PPM  
PH:7.0  
RW: .28 @ 70 DEG

TOOL SAMPLE: 1% GAS, 98% WTR, 1% MUD W/ SOME SPOTS OF OIL

**VESS OIL CORPORATION**  
**BASS #10**  
**DST #6 3,834' - 3,845'**



kh	163.6684 md.ft
h	11.000 ft
k	14.8789 md
s'	3.003
p*	1063.3 psi(a)
DR	1.218
k <sub>g</sub>	14.8789 md
r <sub>w</sub>	0.300 ft
m	114.10 psi/cycle

## Oil Well Test - Buildup Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	163.7 md.ft	Total Skin (s')	3.003
Effective Permeability (k)	14.8789 md	Skin Due to Damage (s <sub>d</sub> )	3.003
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	14.8789 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>s,kin</sub> )	297.8 psi(a)
Total Fluid Rate (In situ) ((qβ) <sub>i</sub> )	51.0 rbbl/d	Damage Ratio (DR)	1.218
Total Mobility ((k/μ) <sub>i</sub> )	6.60 md/cP	Flow Efficiency (FE)	0.821
Total Transmissivity ((kh/μ) <sub>i</sub> )	72.65.mdf/cP		
Slope (m)	114.10 psi/cycle		

### Reservoir Parameters

Net Pay (h)	11.000 ft
Total Porosity (φ <sub>t</sub> )	20.00 %
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> )	3.6468e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.1676e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	1063.3 psi(a)
Final Flowing Pressure (p <sub>vfo</sub> )	312.4 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-0.9 psi(a)

### Fluid Properties

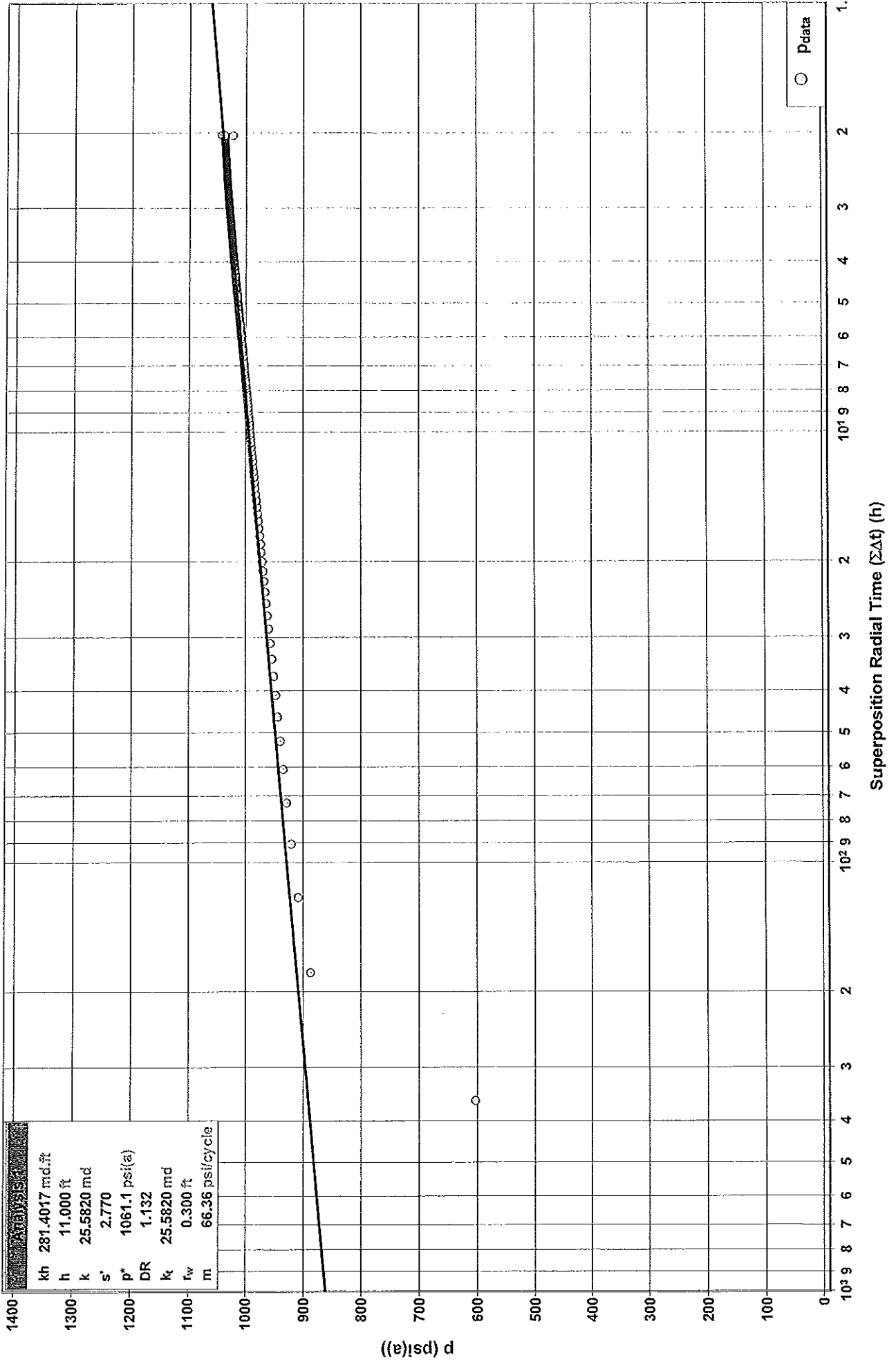
Reservoir Temperature (T <sub>resv</sub> )	115.0 °F
Reservoir Pressure (p <sub>resv</sub> )	1973.7 psi(a)
Oil Gravity (γ <sub>o</sub> )	30.4 °API
Oil Viscosity (μ <sub>o</sub> )	2.2528 cP
Oil Compressibility (c <sub>o</sub> )	9.2908e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.186
Solution Gas Ratio (R <sub>s</sub> )	334.5 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	0.51 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbl
Final Oil Rate (q <sub>o final</sub> )	43.0 bbl/d



VESS OIL CORPORATION  
 BASS #10  
 DST #6 3,834' - 3,845'  
 Radial



## Oil Well Test - Buildup Radial Flow Analysis

### Analysis Results

Flow Capacity (kh)	281.4 md.ft	Total Skin (s')	2.770
Effective Permeability (k)	25.5820 md	Skin Due to Damage (s <sub>d</sub> )	2.770
Effective Gas Permeability (k <sub>g</sub> )	md	Skin Due To Inclination (s <sub>inc</sub> )	
Effective Oil Permeability (k <sub>o</sub> )	25.5820 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> )	159.7 psi(a)
Total Fluid Rate (in situ) ((qβ) <sub>i</sub> )	51.0 rbbl/d	Damage Ratio (DR)	1.132
Total Mobility ((k/μ) <sub>i</sub> )	11.36 md/cP	Flow Efficiency (FE)	0.883
Total Transmissivity ((kh/μ) <sub>i</sub> )	124.91 mdft/cP		
Slope (m)	66.36 psi/cycle		

### Reservoir Parameters

Net Pay (h)	11.000 ft
Total Porosity (φ <sub>t</sub> )	20.00 %
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> )	3.6468e-06 1/psi
Total Compressibility (c <sub>t</sub> )	1.1676e-05 1/psi
Wellbore Radius (r <sub>w</sub> )	0.300 ft

### Pressures

Extrapolated Pressure (p*)	1061.1 psi(a)
Final Flowing Pressure (p <sub>vfo</sub> )	602.7 psi(a)
Final Measured Pressure (p <sub>last</sub> )	-0.9 psi(a)

### Fluid Properties

Reservoir Temperature (T <sub>resv</sub> )	115.0 °F
Reservoir Pressure (p <sub>resv</sub> )	1973.7 psi(a)
Oil Gravity (γ <sub>o</sub> )	30.4 °API
Oil Viscosity (μ <sub>o</sub> )	2.2528 cP
Oil Compressibility (c <sub>o</sub> )	9.2908e-06 1/psi
Oil Formation Volume Factor (B <sub>o</sub> )	1.186
Solution Gas Ratio (R <sub>s</sub> )	334.5 scf/bbl
Oil Correlation	Vasquez and Beggs
Oil Viscosity Correlation	Beggs & Robinson

### Production and Times

Corrected Time (t <sub>c</sub> )	1.25 h
Total Cumulative Production Oil (Cum <sub>oil</sub> )	0.00 Mbbbl
Final Oil Rate (q <sub>o final</sub> )	43.0 bbl/d

DST #6 ARBUCKLE  
3,834' - 3,845'

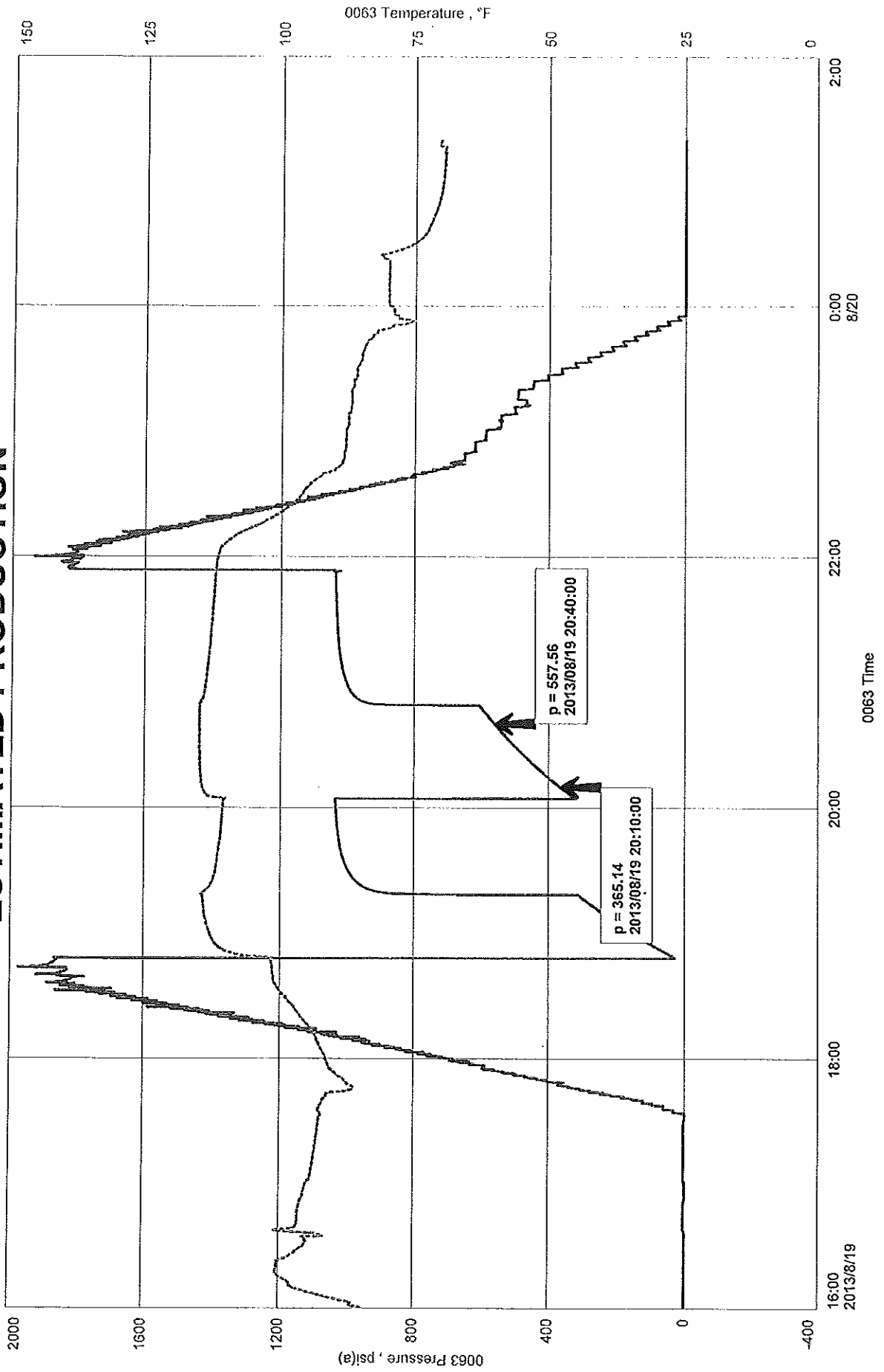
VESS OIL CORPORATION  
BASS #10

<u>DESCRIPTION</u>	<u>SECOND</u>	<u>FIRST</u>	<u>PRESSURE</u>	<u>DRILL-</u>	<u>FLUID</u>	<u>TIME</u>	<u>TOTAL</u>	<u>DAILY</u>	<u>AVERAGE</u>	<u>ESTIMATED</u>
FINAL FLOW	<u>READING</u>	<u>READING</u>	<u>CHANGE</u>	<u>PIPE</u>	<u>GRADIENT</u>	<u>CHANGE</u>	<u>TIME</u>	<u>PRODUCTION</u>	<u>PERCENTAGE</u>	<u>DAILY</u>
	558	365	193	<u>SIZE-ID</u>	0.379	30	1440	347	OIL	PRODUCTION
				0.0142					12.49%	43

BASS #10  
Formation: DST#6 3834-3845 ARBUCKLE  
Pool: WILDCAT  
Job Number: M533

VESS OIL CORPORATION  
DST#6 3834-3845 ARBUCKLE  
Start Test Date: 2013/08/19  
Final Test Date: 2013/08/20

# ESTIMATED PRODUCTION



VESS OIL CORPORATION  
DST#6 3834-3845 ARBUCKLE  
Start Test Date: 2013/08/19  
Final Test Date: 2013/08/20

BASS #10  
Formation: DST#6 3834-3845 ARBUCKLE  
Pool: WILDCAT  
Job Number: M533

# BASS #10

