

ORIGINAL

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

Operator: License # 30087  
Name: R.H.S. Oil Company  
Address P.O. Box 348  
Russell, KS 67665

Purchaser: \_\_\_\_\_  
Operator Contact Person: Rudy Herman  
Phone (913) 483-4898

Contractor: Name: Duke Drilling Co., Inc.  
License: 5929

X Wellsite Geologist: Nelson R. Thomas

Designate Type of Completion  
 New Well  Re-Entry  Workover  
 Oil  SWD  Temp. Abd.  
 Gas  Inj  Delayed Comp.  
 Dry  Other (Core, Water Supply, etc.)

If OWMO: old well info as follows:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Drilling Method:  
 Mud Rotary  Air Rotary  Cable  
1-15-90 1-20-90  
Spud Date Date Reached TD Completion Date

API NO. 15- 141-20,250-00-00  
County Osborne  
c N/2 NW NW Sec. 14 Twp. 10 Rge. 12  East West

4950 Ft. North from Southeast Corner of Section  
4620 Ft. West from Southeast Corner of Section  
(NOTE: Locate well in section plat below.)

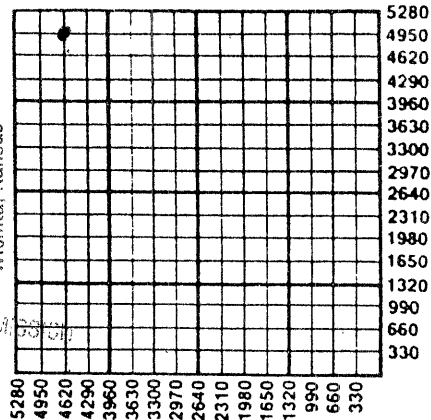
Lease Name Langley Well # 1

Field Name \_\_\_\_\_

Producing Formation \_\_\_\_\_

Elevation: Ground 1711 KB 1716

Total Depth 3306' PBTD \_\_\_\_\_



RECEIVED  
STATE CORPORATION COMMISSION  
Wichita, Kansas

FEB 16 1990

Amount of Surface Pipe Set and Cemented at 206' Feet  
Wichita, Kansas

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.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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.

Signature Rudy A. Herman  
Title Operator Date 2/12/90

Subscribed and sworn to before me this 12<sup>th</sup> day of February, 1990.

Notary Public LoAnn Sechtem  
Date Commission Expires August 29, 1992



K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Drillers Timelog Received  
Distribution  
KCC  SWD/Rep  NGPA  
KGS  Plug  Other (Specify)

PI X

**SIDE TWO**

Operator Name R.H.S. Oil Company Lease Name Langley Well # 1  
 Sec. 14 Twp. 10 Rge. 12  East  West  
 County Osborne

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken  Yes  No  
 (Attach Additional Sheets.)  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No  
 Electric Log Run  Yes  No  
 (Submit Copy.)

**Formation Description**  
~~See attached~~  
 Log  Sample Wichita Lab  
 Name TOPEKA Top 2653 Bottom  
Lansing 2950 3306-1590  
BKC 3294  
 See geological log attached

**CASING RECORD**  New  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
Surface	12 1/2"	8-5/8"	20#	206'	60/40poz	125	2% gel 3% cc

PERFORATION RECORD		Acid, Fracture, Shot, Cement Squeeze Record	
Shots Per Foot	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used)	Depth

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

Date of First Production \_\_\_\_\_ Producing Method  Flowing  Pumping  Gas Lift  Other (Explain) \_\_\_\_\_

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

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)  
**METHOD OF COMPLETION**  Open Hole  Perforation  Dually Completed  Commingled  
 Other (Specify) \_\_\_\_\_

Production Interval \_\_\_\_\_

ORIGINAL

DRILLER'S WELL LOG

DATE COMMENCED: January 15, 1990  
DATE COMPLETED: Janaury 20, 1990

R.H.S. Oil Company  
LANGLEY #1  
C N/2 NW NW  
Sec. 14, T10S, R12W  
Osborne County, Ks.

0 - 206' Surface Soil, Clay, Post Rock  
206 - 520' Shale & Sand  
520 - 743' Red Bed  
743 - 777' Anhydrite  
777 - 1060' Shale  
1060 - 2662' Lime & Shale  
2662 - 2893' Lime  
2893 - 2950' Shale & Lime  
2950 - 3306' Lime  
3306' RTD

ELEVATION: 1716 K.B.

Surface Pipe: Set new  
8-5/8", 20# pipe @206'  
w/125 sacks 60/40 pozmix  
2% gel 3% cc.

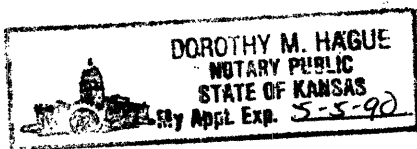
A F F I D A V I T

STATE OF KANSAS  
COUNTY OF BARTON) ss

Leonard Williamson of lawful age does swear and state that the facts and statements herein are true and correct to the best of his knowledge.

*Leonard Williamson*

Subscribed and sworn to before me this 26 day of January 1990.



*Dorothy M Hague*  
Notary Public

RECEIVED  
STATE OF KANSAS

FEB 16 1990

CONSERVATION DIVISION  
WICHITA, KANSAS

STATE OF KANSAS

AUG - 7 1990

CONSERVATION DIVISION  
Wichita, Kansas





# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

15-141-20250-00-00  
DAILY DRILLING RECORD

24 HOURS ENDING AT MIDNIGHT: 1-18 19 90 RIG NO. 1  
 WELL OWNER: BHS OIL CO. LEASE: LANTLEY WELL NO. 1  
 SECTION: 14 TOWNSHIP: 10 RANGE: 12 COUNTY: OSBORNE STATE: KS  
IF INJURED, SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
2736	2950		LIM - SHALE STRS	GARY REEVES
				DERRICKMAN: BILL DEAN
			35 STARCH 35 S.G.L. 3 HULLS	MOTORMAN: HAROLD WILEY
				HELPER: HAROLD WILEY
				HELPER:

DRILLING BITS	CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. 3 SIZE 7 7/8 MAKE SICK SERIAL NO. N3432 SERIAL NO. 32	REMARKS: 11:00-11:40 DRLG 11:40-11:51 RIGV 11:51-TELDRL				

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
2750	2006		1144	Larry Curtis
				DERRICKMAN: Dan Gowdy
				MOTORMAN: Frank Severnigan
				HELPER: * Francis Simmons
				HELPER:

DRILLING BITS	CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. 2 SIZE 7 7/8 MAKE SICK SERIAL NO. N3432 SERIAL NO. 3412	REMARKS: 7:00-7:05 7:05-7:14 7:14-7:25 7:25-7:35 7:35-7:45 7:45-7:55 10' 1/2" 7:55-8:05 8:05-8:15 20-1.25 spec 8:15-8:25 8:25-8:30 Drop ST. out 1-10' ST				

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
300	300			Curtis Uhl
				DERRICKMAN: Richard Buess
			35 Salt Mud 3 Starch	MOTORMAN: Ralph Droney
				HELPER: Leland Hamby
				HELPER:

DRILLING BITS	CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. 3 SIZE 7 7/8 MAKE SICK SERIAL NO. N3432 SERIAL NO.	REMARKS: 3:00 Bank Pipe 4:00 to 5:00 Pick up Tool & Run to Bottom On Bank @ 7:00pm Bit on Bottom @ 8:15pm Wash 38' to Bottom 8:15 to 9:50 Cand Mud 9:50 to 10:50 CTCH 10/15/15/15/15				

# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

15-141-20250-00-00  
DAILY DRILLING RECORD

HOURS ENDING AT MIDNIGHT: 1-17 19 90 RIG NO. 1  
 OWNER: R.H.S. OIL CO. LEASE: LANGLEY WELL NO. 1  
 SECTION: 14 TOWNSHIP: 10 RANGE: 12 COUNTY: OSBORNE STATE: KS  
 IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
1825	2180		LIM & SHALE	GARY REEVES	BILL DEAN	DARRELL LANE	TONY JULIAN	

DRILLING BITS: RUN NO. 3, SIZE 7/8, MAKE SICF, SERIAL NO. N34553, SERIAL NO. 11  
 CASING RECORD: SIZE 11-00-11-30 BOTTOMED AT 11-20-11-35 CEMENT USED RIGY DEFLECTION SURVEY 11-35-7:30 DEGREES OFF DRLLB  
 REMARKS: JET #10 1844 + 1851

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
2180	2500		lim & shale	Larry Curtis	Dan Gandy	Frank Severina	Frank Severina	

DRILLING BITS: RUN NO. 1214, SIZE 1 1/2, MAKE SICF, SERIAL NO. 1214  
 CASING RECORD: SIZE 7-00-7-15 BOTTOMED AT 7-15-7-20 CEMENT USED 11-30-30 DEFLECTION SURVEY 7-20-30 DEGREES OFF 10  
 REMARKS: JET #10 2302-2332 7-20-2455 split

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
2500	2836		Lime & Shale	Curtis Uhl	Richard Buess	Ralph Draney	Leland Hanby	

DRILLING BITS: RUN NO. 3, SIZE 7/8, MAKE SICF, SERIAL NO. N3453, SERIAL NO. 242  
 CASING RECORD: SIZE 3:00-11:00 BOTTOMED AT 11:00 CEMENT USED 11:00 DEFLECTION SURVEY 11:00 DEGREES OFF 11:00  
 REMARKS: RECEIVED STATE CORPORATION COMMISSION FEB 16 1990 CONSTRUCTION DIVISION Wichita, Kansas

15-141-20250-00-00

# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

## DAILY DRILLING RECORD

24 HOURS ENDING AT MIDNIGHT

WELL OWNER R.H.S. Oil Co. LEASE LAWLEY RIG NO. 1  
 SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY OSBORNE WELL NO. 1  
 STATE KS  
 IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	TO	FEET DRILLED	FORMATION	DRILLER
206	370		SHA E + SAND	GARY REEVES
370	743		SHALE	HORTON DERRICKMAN
743	770		SHALE	BILL DEAN
				MOTORMAN
				DARRELL LANE
				HELPER
				HAROLD WILEY
				HELPER

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>170</u>	<u>270</u>	REMARKS: <u>11:00-1:50 W.O.P. SET 5MPL-BOX-ROLLUP</u>				
SIZE <u>5 1/2"</u>	<u>7 1/2"</u>	<u>PIPE-TRIP IN W/ 5 1/2" FRR-RIG MAINT-LUBREASE</u>				
MAKE <u>SICF</u>	<u>FDS</u>	<u>BRAKES 1:50-1:58 PLUG + LEM 1:58-4:30 DRLG</u>				
SERIAL NO. <u>RR</u>	<u>RT</u>	<u>4:30-5:10 TRIP 4 1/2" @ 538 CUT 332' IN 1 1/4 HRS</u>				
SERIAL NO. <u>34</u>	<u>14</u>	<u>5:10-7:00 DRLG</u>				

FROM	TO	FEET DRILLED	FORMATION	DRILLER
770	777		Shale	Larry Curtis
777	1060		SHALE	DAN GOODY
1060	1570		SHALE + 1 inverts	FRANK SOURSIGN
				HELPER
				FRANK SOURSIGN

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>2</u>		REMARKS: <u>7:00-7:15 shift 7:15-3:00 PM</u>				
SIZE						
MAKE						
SERIAL NO.						
SERIAL NO. <u>64</u>		<u>JIT# 10945-1445</u>				

FROM	TO	FEET DRILLED	FORMATION	DRILLER
1060	1320		Shale & Lime	CURTIS UHL
			RECEIVED	DERRICKMAN
			STATE CORPORATION COMMISSION	RICHARD BUSS
			FEB 16 1990	MOTORMAN
			CONS. DIVISION	HELPER
				LELAND HUMBY
				HELPER

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>7</u>	<u>3</u>	REMARKS: <u>3:00-4:00 DRIG 4:55-6:20 TIP</u>				
SIZE <u>7 1/2"</u>	<u>7 1/2"</u>	<u>6:20 TO 11:00</u>				
MAKE <u>FDS</u>	<u>SICF</u>					
SERIAL NO. <u>RT</u>	<u>N3:53</u>					
SERIAL NO. <u>82</u>	<u>94</u>					

Jet @ 1655



# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

15-141-20250-00-00  
DAILY DRILLING RECORD

24 HOURS ENDING AT MIDNIGHT 1-15 1990 RIG NO. 1  
 WELL OWNER PHS Oil Co LEASE Langley WELL NO. 1  
 SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY Cherokee STATE Kansas  
IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
				<u>GARY REEVES</u>
				<u>BILL DEAN</u>
			<u>1 LIME</u>	<u>DARRELL LANE</u>
				<u>HAROLD WILEY</u>

DRILLING BITS	CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO.	REMARKS: <u>RIG UP</u>				
SIZE					
MAKE					
SERIAL NO.					
SERIAL NO.					

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
<u>0</u>	<u>42</u>		<u>1st &amp; 2nd Rock</u>	<u>Larry Curtis</u>
				<u>Dan Gandy</u>
				<u>Frank Sweeney</u>
				<u>Francis Sweeney</u>

DRILLING BITS	CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>1</u>	REMARKS: <u>1st &amp; 2nd Rock 1st &amp; 2nd Run - 17.7 Rate 2/15</u>				
SIZE <u>1 1/2</u>					
MAKE <u>SBS</u>					
SERIAL NO. <u>17</u>					
SERIAL NO.					

FEB 16 1990

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
				<u>Richard Buess</u>
				<u>Ralph Disney</u>
				<u>Leland Hamby</u>

DRILLING BITS	CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO.	REMARKS: <u>3:00 TO 6:00 pm Dr. 11" Surface &amp; Run Cement</u>				
SIZE	<u>8" casing 12.5 SAH @ 6:00 pm</u>				
MAKE	<u>&amp; Clean 4 size 2000s 1000s 1000s</u>				
SERIAL NO.	<u>Break Drum Nipple up</u>				
SERIAL NO.					

15-141-20250-00-00

Phone 913-483-2627, Russell, Kansas  
 Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812  
 Phone Ness City 913-798-3843

ORIGINAL

**ALLIED CEMENTING CO., INC. N<sup>o</sup> 8635**

Home Office P. O. Box 31

Russell, Kansas 67665

*Now*

Date	1-20-90	Sec.	1-1	Twp.	10s	Range	12w	Called Out	12:30AM	On Location	3:00AM	Job Start	3:15AM	Finish	5:00AM
Lease	Langhoy	Well No. #	1	Location	LURAY 5N 2 1/2 E 4S	County	OSBORN	State	KANSAS						
Contractor	Duke DRLG Rig #1														
Type Job	Rotary Plug.														
Hole Size	7 7/8	T.D.	3306'												
Csg.	8 5/8 Surface	Depth	206'												
Tbg. Size		Depth													
Drill Pipe	4 1/2 F-H	Depth	775'												
Tool		Depth													
Cement Left in Csg.		Shoe Joint													
Press Max.		Minimum	✓												
Meas Line		Displace													
Perf.															

**EQUIPMENT**

Pumptrk	No.	Cementer	<i>Bill</i>
	#177	Helper	
Pumptrk	No.	Cementer	
		Helper	
Bulktrk		Driver	<i>Mark</i>
	#155		
Bulktrk		Driver	

**DEPTH of Job**

Reference:	Pump TRACK Chrg.	
	100' per mile	
		Sub Total
		Tax
		Total

**Remarks:**

25 SK @ 775'  
 80 SK @ 600' w/ 1 SK FEEL  
 40 SK @ 250'  
 10 SK @ 40'  
 15 SK @ Rat Hole

**Owner**  
 To Allied Cementing Co., Inc.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

**Charge To** R.H.S. Oil Company

**Street**

**City** **State**

The above was done to satisfaction and supervision of owner agent or contractor.

**Purchase Order No.**

X *See memo to W. H. ...*

**CEMENT**

**Amount Ordered** 170 SK 6 3/4 60 gal

**Consisting of**

Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	

**Sales Tax**

**Handling** .90 PER SK

**Mileage** 103 PER TON MILE

**Sub Total**

**Total**

**Floating Equipment**

**FEB 16 1990**

*Stamp: RECEIVED FEB 16 1990*

483-2627, Russell, Kansas  
 6-793-5861, Great Bend, Kansas

15-141-20250-00-00

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

*New* ORIGINAL

# ALLIED CEMENTING CO., INC. N<sup>o</sup> 8509

Home Office P. O. Box 31

Russell, Kansas 67665

Date	1-15-90	Sec.	14	Twp.	10 <sup>W</sup>	Range	12 <sup>W</sup>	Called Out	3:00 P.M.	On Location	4:45 P.M.	Job Start	6:20 P.M.	Finish	6:52 P.M.
Lease	Lunny/ky	Well No.	1	Location	Lunny SN 3 1/2 E S. 1/4	County	Osborne	State	Ks.						
Contractor	Duke Drilling Co.	Rig #	1	Owner	Same										
Type Job	Set Surface Pipe														
Hole Size	12 1/4"	T.D.	207'												
Csg.	8 7/8"	Depth	206'												
Tbg. Size		Depth													
Drill Pipe		Depth													
Tool		Depth													
Cement Left in Csg.	10' 1 1/2'	Shoe Joint													
Press Max.		Minimum													
Meas Line		Displace													
Perf.															

To Allied Cementing Co., Inc.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To *RHS Oil Company*  
 Street *Box 348*  
 City *Russell* State *Ks. 67665*

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No.

X

### CEMENT

Amount Ordered *125 cks 6 7/8" poz 2 1/2" 3600*

Consisting of

Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	

Sales Tax

Handling *2 40 1/2*

Mileage *0.34 1/2 c/mi. (33 mi)*

Sub Total

Total

Floating Equipment

*Thanks*

### EQUIPMENT

No.	Cementer	<i>Gary H. Wagoner Mo.</i>
Pumptrk 83	Helper	
No.	Cementer	<i>Steve T.</i>
Pumptrk	Helper	
	Driver	
Bulktrk #155	Driver	

### DEPTH of Job

Reference:	#1 Pumptrk surface	360.00
	#8 1-8 7/8" surface plug	40.00
	#14 mileage @ 1.00/mi.	
	Sub Total	
	Tax	
	Total	

Remarks: *Cement Calculated to letter*

STATE OF KANSAS  
 FEB 16 1990

15-141-20250-00-00

Phone 913-483-2627, Russell, Kansas  
 Phone 316-793-5861, Great Bend, Kansas

**COPY**  
 Phone Plainville 913-434-2812  
 Phone Ness City 913-798-3843

**ALLIED CEMENTING CO., INC. N° 8635**  
 Home Office P. O. Box 31 Russell, Kansas 67665

*New*

Date	Sec.	Twp.	Range	Called Out	On Location	Job Start	Finish
1-20-90	1-1	10s	12w	12:30AM	3:00AM	3:15AM	5:00AM
Lease	Well No. #	Location		County	State		
Langhey	# 1	LURAY 5N 2 1/2 E 4S		OSBORN	KANSAS		

Contractor	Duke DRLg Rig # 1
Type Job	Rotary Plug.
Hole Size	7 7/8
Csg.	8 5/8 Surface
Tbg. Size	
Drill Pipe	4 1/2 F-H
Tool	
Cement Left in Csg.	
Press Max.	
Meas Line	
Perf.	

**EQUIPMENT**

Pumptrk	No. #177	Cementer	
		Helper	
Pumptrk	No.	Cementer	
		Helper	
Bulktrk	#155	Driver	
Bulktrk		Driver	

**DEPTH of Job**

Reference:	Pump TRUCK chrg.
	100 per mile
	Sub Total
	Tax
	Total

Remarks: 25 SK @ 775'  
 80 SK @ 600' w/ 1SK Seal  
 40 SK @ 250'  
 10 SK @ 40'  
 15 SK @ Rat Hole

Owner	To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Charge To	R.H.S. OIL Company
Street	
City	State
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X	

**CEMENT**

Amount Ordered	170 SK 6/40 60gpd
Consisting of	
Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	

Handling	.90 per SK
Mileage	103 PER TON MILE
	Sub Total
	Total

Floating Equipment

STATE REGISTRATION COMMISSION  
 FEB 16 1990  
 CONSTRUCTION DIVISION  
 Topeka, Kansas

Phone 913-483-2627, Russell, Kansas

Phone 316-793-5861, Great Bend, Kansas

15-141-20250-00-00

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

New

COPY

# ALLIED CEMENTING CO., INC. N<sup>o</sup> 8509

Home Office P. O. Box 31 Russell, Kansas 67665

Date	1-15-90	Sec.	14	Twp.	10 <sup>00</sup>	Range	12 <sup>00</sup>	Called Out	3:00 P.M.	On Location	4:45 P.M.	Job Start	6:20 P.M.	Finish	6:50 P.M.	
Lease	Lunay	Well No.	1	Location				Lunay SN 3 1/2 E side	County	Osborne	State	Ks.				

Contractor	Duke Drilling Co.	Rig #	1
Type Job	Set Surface Pipe		
Hole Size	12 1/4"	T.D.	207'
Csg.	8 7/8"	Depth	206'
Tbg. Size		Depth	
Drill Pipe		Depth	
Tool		Depth	
Cement Left in Csg.	10' 12"	Shoe Joint	
Press Max.		Minimum	
Meas Line		Displace	
Perf.			

Owner	Same
To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Charge To	RHS Oil Company
Street	Box 348
City	Russell
State	Ks. 67665
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X	
<b>CEMENT</b>	
Amount Ordered	125 lbs 6 7/8" 2 1/2" 2 1/2" 3 1/2"
Consisting of	
Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	
Sales Tax	
Handling	2 90¢/skt.
Mileage	0 034¢/skt/mi. (33 mi)
Sub Total	
Total	
Floating Equipment	Thanks

### EQUIPMENT

No.	Cementer	Gary H.
Pumptrk 83	Helper	Wayne M.
No.	Cementer	
Pumptrk	Helper	
	Driver	Steve T.
Bulktrk #155	Driver	

### DEPTH of Job

Reference:	#1 Cemented surface	360.00
	#2 8 1/8" surface plug	40.00
	#14 mileage @ 1.00/mi.	
	Sub Total	
	Tax	
	Total	

Remarks: Cement Circulated to Celler

RECEIVED  
STATE CORPORATION COMMISSION

FEB 16 1990

STATE CORPORATION COMMISSION  
KANSAS

# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

## DAILY DRILLING RECORD

FOR 24 HOURS ENDING AT MIDNIGHT: 1-20 1990 RIG NO. 1  
 WELL OWNER RHS OIL CO. LEASE LANGLEY WELL NO. 1  
 SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY OSBORNE STATE KS  
IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
3306			LIME	GARY REEVES	BILL DEAN	DARRELL LANE	HAROLD WILEY	
Plugging order by Gilbert			check					
Plug @ 715 w/ 7 1/2" x 7' thru drill pipe								
Plug @ 600 w/ 6" x 6' thru drill pipe								
Plug @ 400 w/ 4" x 4' thru drill pipe								
15' SAY Cement in HAT Hole								
Start plugging Hole @ 5:25								
Hole plugged @ 5:00								

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>3</u>		REMARKS: <u>1000 12:10 LFS @ 3306 12:10-5:00 L.D.D.P. + PLUG</u>				
SIZE <u>1 1/2"</u>		<u>HOLE 05:00-7:00 TEST + CLEAN BELLAR #1 + #2</u>				
MAKE <u>WAL</u>		<u>DRAIN PUMP</u>				
SERIAL NO. <u>1333</u>						
SERIAL NO.						

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
				LARRY CURTIS	DAN GOWDY	FRANK	FRANCIS	

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO.		REMARKS:				
SIZE						
MAKE						
SERIAL NO.						
SERIAL NO.						

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER

RECEIVED  
 STATE CORPORATION COMMISSION

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO.		REMARKS:				
SIZE						
MAKE						
SERIAL NO.						
SERIAL NO.						

FEB 7 1990  
 CONSERVATION DIVISION  
 Wichita, Kansas

# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

## DAILY DRILLING RECORD

FOR 24 HOURS ENDING AT MIDNIGHT 1-19 1990 RIG NO. 1  
 WELL OWNER RHS Well Co. LEASE LANSLEY WELL NO. 1  
 SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY OSBORNE STATE KS  
IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
3005	3075		LEAD	GARY REEVES	W. BELL	DEAN	DARRELL LANE	HAROLD WILLY
			DST #2 2997-3006					
			20-30-15-30					

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>2</u>	SIZE <u>7/8</u>	REMARKS: <u>11:00-1:32 PULL PIPE + RUN TOOL IN HOLE</u>				
MAKE <u>5111</u>	SERIAL NO. <u>42833</u>	<u>1:32-3:05 TOOL ON 3:05-5:46 PULL TOOL + GO TO BOTTOM</u>				
SERIAL NO. <u>363/4</u>		<u>WASH 10' 5:46-8:00 DRILL</u>				

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
3095	3180		LMV	Larry Curtis	Dan Gandy	Frank Sevenson	Frank Sevenson	

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>3</u>	SIZE <u>1 1/8</u>	REMARKS: <u>9:00-9:30</u>				
MAKE <u>5111</u>	SERIAL NO. <u>42833</u>					
SERIAL NO. <u>423/4</u>						

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
3180	3306		Lime	Curtis Uhl	Richard Buess	Ralph Draney	Leland Homby	

RECEIVED  
STATE COMMISSION  
FEB 16 1990  
COMMISSION DIVISION  
WICHITA, KANSAS

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>3</u>	SIZE <u>7/8</u>	REMARKS: <u>300 - Dry</u>				
MAKE <u>5111</u>	SERIAL NO. <u>N34353</u>	<u>Had to Replace Valves Seat in Pump 5:41 to 6:58 Dry</u>				
SERIAL NO. <u>495</u>						

# THE DUKE DRILLING COMPANY

# DAILY DRILLING RECORD

GREAT BEND, KANSAS

FOR 24 HOURS ENDING AT MIDNIGHT

WELL OWNER BHS OIL CO. LEASE LANCELEY 1-18 19 90 RIG NO. 1  
 SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY OSBORNE WELL NO. 1 STATE KS  
IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
2736	2950		L.M. - SHALE STRS	GARY REEVES	BILL DEAN	DARRELL LANE	HAROLD WILEY	
			35 STARCH 35 S.GEL 3 HULLS					

DRILLING BITS	
RUN NO.	3
SIZE	7 1/8
MAKE	SICK
SERIAL NO.	N34353
SERIAL NO.	32

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: 11:00-11:40 DR LG 11:40-11:53 RIGV 11:53-12:00 DRILL				

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
2950	3006		1144	Larry Curtis	Don Gandy	Frank Sovereign	* Francis Summers	

DRILLING BITS	
RUN NO.	3
SIZE	7 1/8
MAKE	SICK
SERIAL NO.	N34353
SERIAL NO.	3412

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: 7:00-7:15 DR LG 7:15-7:30 RIGV 7:30-7:45 DRILL 7:45-8:00 DR LG 8:00-8:15 RIGV 8:15-8:30 DRILL 8:30-8:45 DR LG 8:45-9:00 RIGV 9:00-9:15 DRILL 9:15-9:30 DR LG 9:30-9:45 RIGV 9:45-10:00 DRILL 10:00-10:15 DR LG 10:15-10:30 RIGV 10:30-10:45 DRILL 10:45-11:00 DR LG 11:00-11:15 RIGV 11:15-11:30 DRILL 11:30-11:45 DR LG 11:45-12:00 RIGV				

FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
3006	3006		35 Salt Mud 3 Starch	Curtis Uhl	Richard Buess	Ralph Droney	Leland Hamby	

DRILLING BITS	
RUN NO.	3
SIZE	7 1/8
MAKE	SICK
SERIAL NO.	N34353
SERIAL NO.	

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: 3:00-7:00 Bank ... Pipe 4:00 to 5:00 Pick up Tool & Run ... ON Bank @ 7:00pm BIT ON BOTTOM @ 8:15pm Wash 38' to Bottom 8:15 to 9:50 Sand mud 9:50 to 10:50 CTCH 10:15/15/15/15/15				



# THE DUKE DRILLING COMPANY

# DAILY DRILLING RECORD

GREAT BEND, KANSAS

FOR 24 HOURS ENDING AT MIDNIGHT

1-17 19 90 RIG NO. 1

WELL OWNER R.H.S. OIL CO.

LEASE LANGLEY

WELL NO. 1

SECTION 14 TOWNSHIP 10 RANGE 12

COUNTY OSBORNE

STATE KS

IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS

WE HAVE NOT BEEN INJURED THIS DAY

DRILLED FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
1825	2180		L.I.F. & SHALE	BARRY REEVES
				DERRICKMAN: BILL DEAN
				MOTORMAN: DARRELL LANE
				HELPER: TONY JULIAN
				HELPER:

DRILLING BITS	
RUN NO.	3
SIZE	7 7/8
MAKE	SICF
SERIAL NO.	N3453
SERIAL NO.	11

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: 11:00-11:30 DRILL - 11:30-11:35 RIG BY 11:35-7:30 DRILL				
JET #10 1844 + 1851				

DRILLED FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
2180	2500		lim & shale	Larry Curtis
				DERRICKMAN: Dan Gandy
				MOTORMAN: Frank Sovereign
				HELPER: Frank Sovereign
				HELPER:

DRILLING BITS	
RUN NO.	3
SIZE	7 7/8
MAKE	SICF
SERIAL NO.	N3453
SERIAL NO.	1714

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: 7:00-7:15 DRILL 7:15-7:30 RIG BY 7:30-3:00				
JET #10 2302-2332				

DRILLED FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER
2500	2736		Lime & Shale	Curtis Uhl
			RECEIVED	DERRICKMAN: Richard Buess
			STATE CORPORATION COMMISSION	MOTORMAN: Ralph Draney
			FEB 16 1990	HELPER: Leland Hanby
			CONSERVATION DIVISION	HELPER:
			Wichita, Kansas	HELPER:

DRILLING BITS	
RUN NO.	3
SIZE	7 7/8
MAKE	SICF
SERIAL NO.	N3453
SERIAL NO.	248

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: 3:00 - 11:00				

# THE DUKE DRILLING COMPANY

# DAILY DRILLING RECORD

GREAT BEND, KANSAS

FOR 24 HOURS ENDING AT MIDNIGHT

1-16 1990 RIG NO. 1

WELL OWNER R.H.S. Oil Co. LEASE LAWLEY

WELL NO. 1

SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY OSBORNE

STATE KS

IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS

WE HAVE NOT BEEN INJURED THIS DAY

DRILLED		FEET DRILLED	FORMATION	DRILLER
FROM	TO			
206	510		SHALE & SAND	GARY REEVES
526	743		F. SAND	HORTON DERRICKMAN
743	770		SHALE	BILL DEAN
				MOTORMAN DARBELL LANE
				HELPER HAROLD WILEY
				HELPER

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>178</u>	<u>278</u>	REMARKS: 11:00-1:50 W.O.C. SET SMPLE-BOX-ROLLUP				
SIZE <u>5 1/2</u>	<u>7 1/2</u>	PIPE-TRIP IN W/ 5 1/2 FRR-RIG MAINT-1 BREAST				
MAKE <u>SICF</u>	<u>FDS</u>	BRAKES 1:50-1:58 PLUG & LEM 1:58-4:30 DRLG				
SERIAL NO. <u>RT</u>	<u>RT</u>	4:30-5:10 TRIP 4 1/2" @ 538 OUT 332' IN 1 3/4 HRS				
SERIAL NO. <u>3/4</u>	<u>1/4</u>	5:10-7:00 DRLG				

DRILLED		FEET DRILLED	FORMATION	DRILLER
FROM	TO			
770	777		Shale	Larry Curtis
777	1060		Shale + 1 in. STR	DAN GOODY
1060	1570			MOTORMAN Frank Southerland
				HELPER Francis Summers
				HELPER

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>2</u>		REMARKS: 7:00-7:15 DRG, 7:15-3:00 PLUG				
SIZE		JIT # 12945-1445				
MAKE		Telcellan @ 1414				
SERIAL NO.						
SERIAL NO. <u>6 1/4</u>						

DRILLED		FEET DRILLED	FORMATION	DRILLER
FROM	TO			
1570	1820		Shale & Lime	Curtis Uhl
			RECEIVED	DERRICKMAN Richard Buess
			STATE CORPORATION COMMISSION	MOTORMAN Ralph Draney
			FEB 16 1990	HELPER Leland Humby
			CONSERVATION DIVISION	HELPER
			Wichita, Kansas	

DRILLING BITS		CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
RUN NO. <u>7 1/2</u>	<u>3 1/2</u>	REMARKS: 3:00-4:00 DRIG 4:55-6:20 TIP				
SIZE <u>7 1/2</u>	<u>7 1/2</u>	6:20 TO 11:00 DRIG				
MAKE <u>FDS</u>	<u>SICF</u>					
SERIAL NO. <u>RT</u>	<u>N37-23</u>					
SERIAL NO. <u>8 1/2</u>	<u>4 1/4</u>					

Jet @ 1655

# THE DUKE DRILLING COMPANY

GREAT BEND, KANSAS

15-141-20250-00-00  
DAILY DRILLING RECORD

FOR 24 HOURS ENDING AT MIDNIGHT

WELL OWNER PA's oil co LEASE Langley RIG NO. 1  
SECTION 14 TOWNSHIP 10 RANGE 12 COUNTY Osborne STATE Kansas  
IF INJURED: SIGN AND DESCRIBE INJURY UNDER REMARKS WE HAVE NOT BEEN INJURED THIS DAY

DRILLED FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
				<u>140RT</u>	<u>GARY REEVES</u>	<u>BILL DEAN</u>	<u>DARRELL LANE</u>	<u>HAROLD WILEY</u>
			<u>1 LIME</u>					

DRILLING BITS	
RUN NO.	
SIZE	
MAKE	
SERIAL NO.	
SERIAL NO.	

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: <u>REG UP</u>				

DRILLED FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
<u>0</u>	<u>42</u>		<u>1st &amp; 2nd rock</u>	<u>Larry Curtis</u>	<u>Dan Gandy</u>	<u>Frank Sorenson</u>	<u>Francis Sorenson</u>	

DRILLING BITS	
RUN NO.	<u>124</u>
SIZE	<u>5335</u>
MAKE	<u>AT</u>
SERIAL NO.	
SERIAL NO.	

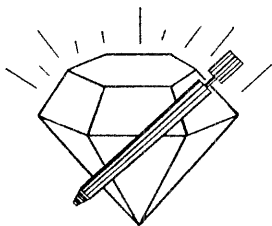
CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: <u>1st &amp; 2nd rock 17.15</u>				

FEB 16 1990

DRILLED FROM	DRILLED TO	FEET DRILLED	FORMATION	DRILLER	DERRICKMAN	MOTORMAN	HELPER	HELPER
				<u>Curtis Uhl</u>	<u>Richard Buess</u>	<u>Ralph Disney</u>	<u>Leland Hamby</u>	

DRILLING BITS	
RUN NO.	
SIZE	
MAKE	
SERIAL NO.	
SERIAL NO.	

CASING RECORD: SIZE	BOTTOMED AT	CEMENT USED	DEFLECTION SURVEY	DEGREES OFF
REMARKS: <u>3:00 TO 6:00pm Drill Surface &amp; Run Cement</u>				



DIAMOND TESTING
P. O. Box 157
HOISINGTON, KANSAS 67544
(316) 653-7550

Company RHS Oil Co. Lease & Well No. Langley No. 1
Elevation 1716 KB Formation Lansing/Kansas City Ticket No. J674
Date 1-19-90 Sec. 14 Twp. 10S Range 12W County Osborne State Kansas
Test Approved By Nelson R. Thomas Diamond Representative John Riedl

Formation Test No. 2 Interval Tested from 2,997 ft. to 3,006 ft. Total Depth 3,006 ft.
Packer Depth 2,992 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 2,997 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set
Top Recorder Depth (Inside) 2,980 ft. Recorder Number 13386 Cap. 3,875 psi
Bottom Recorder Depth (Outside) 3,003 ft. Recorder Number 13498 Cap. 3,925 psi
Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Duke Drlg Co., Inc. - Rig 1 Drill Collar Length -- I.D. 2 1/4 in.
Mud Type Starch Viscosity 50 Weight Pipe Length 940 ft. I.D. 2 7/8 in.
Weight 9.7 Water Loss 7.6 cc. Drill Pipe Length 2,027 ft. I.D. 3 1/4 in.
Chlorides 38,000 P.P.M. Test Tool Length 30 ft. Tool Size 3 1/2-FH in.
Jars: Make Bowen Serial Number 2 Anchor Length 9 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.

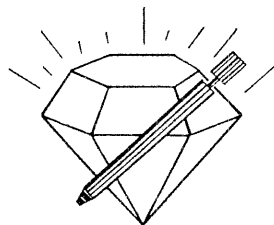
Blow: 1st Open: Weak blow. Dead in 15 mins.
2nd Open: No blow. Flushed tool but no help.

Recovered 20 ft. of drilling mud with oil specks in tool = .148 bbls.

Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks

Time Set Packer(s) 1:30 A.M. XXXX Time Started Off Bottom 3:05 A.M. XXXX Maximum Temperature 105°
Initial Hydrostatic Pressure (A) 1550 P.S.I.
Initial Flow Period Minutes 20 (B) 50 P.S.I. to (C) 50 P.S.I.
Initial Closed In Period Minutes 30 (D) 1091 P.S.I.
Final Flow Period Minutes 15 (E) 52 P.S.I. to (F) 52 P.S.I.
Final Closed In Period Minutes 30 (G) 1099 P.S.I.
Final Hydrostatic Pressure (H) 1546 P.S.I.



**DIAMOND TESTING**  
 P. O. Box 157  
 HOISINGTON, KANSAS 67544  
 (316) 653-7550

Company RHS Oil Co. Lease & Well No. Langley No. 1  
 Elevation 1716 KB Formation Lansing/Kansas City Ticket No. J673  
 Date 1-18-90 Sec. 14 Twp. 10S Range 12W County Osborne State Kansas  
 Test Approved By Nelson R. Thomas Diamond Representative John Riedl

Formation Test No. 1 Interval Tested from 3,002 ft. to 3,006 ft. Total Depth 3,006 ft.  
 Packer Depth 2,997 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Packer Depth 3,002 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 2,985 ft. Recorder Number 13386 Cap. 3,875 psi  
 Bottom Recorder Depth (Outside) -- ft. Recorder Number -- Cap. --  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_

Drilling Contractor Duke Drlg Co., Inc. - Rig 1 Drill Collar Length -- I.D. 2 1/4 in.  
 Mud Type Starch Viscosity 42 Weight Pipe Length 940 ft. I.D. 2 7/8 in.  
 Weight 9.7 Water Loss 7.6 cc. Drill Pipe Length 2,032 ft. I.D. 3 1/4 in.  
 Chlorides 38,000 P.P.M. Test Tool Length 30 ft. Tool Size 3 1/2-FH in.  
 Jars: Make Bowen Serial Number 2 Anchor Length 4 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 blow. Dead in 8 mins.  
 2nd Open: No blow. Flushed tool but no help.

Recovered 10 ft. of drilling mud = .074 bbls.  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Remarks Set on bridge 15 ft. off bottom.

Time Set Packer(s) 5:15 ~~XXXX~~ P.M. Time Started Off Bottom 6:10 ~~XXXX~~ P.M. Maximum Temperature 104°  
 Initial Hydrostatic Pressure ..... (A) 1543 P.S.I.  
 Initial Flow Period ..... Minutes 10 (B) 30 P.S.I. to (C) 32 P.S.I.  
 Initial Closed In Period ..... Minutes 15 (D) 50 P.S.I.  
 Final Flow Period ..... Minutes 15 (E) 32 P.S.I. to (F) 32 P.S.I.  
 Final Closed In Period ..... Minutes 15 (G) -- P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1520 P.S.I.