

ORIGINAL

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

RECEIVED

APR NO. 15- 095-21674 -0005

JUN 25 1993

CONSERVATION DIVISION
WICHITA, KS

Operator: License # 5428
Name: Graves Drilling Co., Inc.
Address P.O. Box 8250
city/State/Zip Wichita, KS 67208

Purchaser: _____
Operator Contact Person: Fredrick W. Stump

Phone (316) 687-2777

Contractor: Name: Duke Drilling Co., Inc.

License: 5929

Wellsite Geologist: Fredrick W. Stump

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, USW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBSD
 Coamingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____

06-06-93 06-12-93
Spud Date Date Reached TD Completion Date

W/2 SE NE Sec. 9 Twp. 28 Rge. 5 E W

660 Feet from N (circle one) Line of Section
990 Feet from E/W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name Young Well # 2

Field Name Dewey

Producing Formation _____

Elevation: Ground 1416' KB 1425'

Total Depth 3898 PBSD _____

Amount of Surface Pipe Set and Cemented at 231 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 cnt.

Drilling Fluid Management Plan D&F 7-6-93
(Data must be collected from the Reserve Pit)

Chloride content 5000 ppm Fluid volume 700 bbls

Dewatering method used hauling

Location of fluid disposal if hauled offsite: _____

Operator Name Pintel Petroleum Co.

Lease Name Wilson License No. 5086

NW Quarter Sec. 32 Twp. 27S S Rng. 5W E/W

County Kingman Docket No. CD-11808

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 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 geologist well report 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.

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 Fredrick W. Stump
Title Geologist Date 6/23/93

Subscribed and sworn to before me this 23rd day of June, 1993.

Notary Public Phyllis A. Freeman

Date Commission Expires June 9, 1994

PHYLLIS A. FREEMAN
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. _____

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

91

Operator Name Graves Drilling Co., Inc. Lease Name Young Well # 2

Sec. 9 Twp. 28 Rgs. 5 East West
 County Kingman

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 (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Lansing	2974	-1549
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cherokee Shale	3716	-2291
		Mississippi	3780	-2355
		Total Depth	3894	-2469

List All E.Logs Run:
 Dual Induction Laterolog
 Neutron II Log
 Coral Log

CASING RECORD <input checked="" 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
Surface	12 1/4"	8-5/8"	20#	231'	60/40 poz	175	2% gel 3%cc.

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				

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

TUBING RECORD		Size	Set At	Packer At	Liner Run	<input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj.			Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls. Gas-Oil Ratio Gravity

Disposition of Gas:	METHOD OF COMPLETION	Production Interval
<input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, submit ACO-18.)	<input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	_____



INVOICE

HALLIBURTON SERVICES

A Halliburton Company

INVOICE NO.	DATE
324713	06/06/1993

WELL LEASE NO./PLANT NAME		WELL/PLANT LOCATION		STATE	WELL/PLANT OWNER	
OUNG 2		KINGMAN		KS	SAME	
SERVICE LOCATION		CONTRACTOR		JOB PURPOSE		TICKET DATE
PRATT		DUKE DRILLING #5		CEMENT SURFACE CASING		06/06/1993
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA		FILE NO.
37790	R G MILLER			COMPANY TRUCK		51039

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

GRAVES DRILLING CO INC
800 TALLGRASS EXECUTIVE PARK
1100 E. 22ND STREET
WICHITA, KS 67226

PRICE REF. NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
000 117	TRICING AREA - EASTERN AREA MILEAGE	50	MI	2.75	137.50
001-016	CEMENTING CASING	232	FT	515.00	515.00
030 503	WOODEN PLUG	1	UNT		
504-308	CEMENT - STANDARD	8 5/8	IN	95.00	95.00
506 105	POZMIX A	105	SK	6.76	709.80
506-121	HALLIBURTON GEL 2%	4760	LB	.055	261.00
509 406	ANHYDROUS CALCIUM CHLORIDE	3	LB	.00	N/C
500-207	BULK SERVICE CHARGE	4	SK	28.25	113.00
500 306	MILEAGE CMTG MAT DEL OR RETURN	183	CFT	1.25	228.75
		381.00	TM1	.85	323.92
INVOICE SUBTOTAL					2,384.77
DISCOUNT - (BID)					476.95
INVOICE BID AMOUNT					1,907.82
*- KANSAS STATE SALES TAX					64.18
*- PRATT COUNTY SALES TAX					13.09
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					\$1,985.09

RECEIVED
KANSAS CORPORATION COMMISSION
JUN 25 1993
CONSERVATION DIVISION
WICHITA, KS
RECEIVED
JUN 14 1993

TERMS INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT.

ORIGINAL



REMIT TO:
P.O. BOX 951046
DALLAS, TX 75395-1046

INVOICE

HALLIBURTON SERVICES

A Halliburton Company

INVOICE NO.	DATE
364388	06/13/1993

WELL LEASE NO./PLANT NAME	WELL/PLANT LOCATION	STATE	WELL/PLANT OWNER		
YOUNG 2	KINGMAN	KS	SAME		
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET DATE		
PRATT	DUKE DRILLING #5	PLUG TO ABANDON	06/13/1993		
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
037790	JOE LIVINGSTON			COMPANY TRUCK	52032

GRAVES DRILLING CO INC
800 TALLGRASS EXECUTIVE PARK
8100 E. 22ND STREET
WICHITA, KS 67226

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-117	MILEAGE	50	MI	2.75	137.50 *
090-910	MISCELLANEOUS PUMPING JOB	1	UNT		
504-308	CEMENT - STANDARD	90	SK	6.76	608.40 *
506-105	POZMIX A	4080	LB	.055	224.40 *
506-121	HALLIBURTON-GEL 2%	3	LB	.00	N/C *
507-277	HALLIBURTON-GEL BENTONITE	5	SK	15.50	77.50 *
500-207	BULK SERVICE CHARGE	160	CFT	1.25	200.00 *
500-306	MILEAGE CMTG MAT DEL OR RETURN	332.325	TMI	.85	282.48 *
INVOICE SUBTOTAL					1,925.28
DISCOUNT-(BID)					346.54-
INVOICE BID AMOUNT					1,578.74
*-KANSAS STATE SALES TAX					77.36
*-PRATT COUNTY SALES TAX					15.80
INVOICE TOTAL - PLEASE PAY THIS AMOUNT =====>					\$1,671.90

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JUN 25 1993
CONSERVATION DIVISION
WICHITA, KS
RECEIVED
JUN 21 1993

TERMS INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT.

DRILLER'S WELL LOG

YOUNG #2
C-W/2 SE NE
Section 9-28S-5W
Kingman County, Kansas

GRAVES DRILLING CO., INC.
ELEVATIONS: 1416'Gr. 1425' KB
COMMENCED: June 6, 1993
COMPLETED: June 12, 1993

0' - 231' Surface soil, clay
231' - 1550' Shale
1550' - 2725' Shale and Lime
2725' - 2947' Heebner
2947' - 2972' Iatan
2972' - 3363' Lansing
3363' - 3657' Stark Shale
3657' - 3785' Cherokee
3785' - 3849' Mississippian
3849' - 3898' Mississippian Dolomite
3898' RTD
3894' LTD
D & A

SURFACE CASING: Set 5 jts.
8-5/8"x24# at 231'. Cemented
with 175 sacks 60/40 Pozmix, 2%
gel, 3% cc.

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JUN 25 1993
CONSERVATION DIVISION
WICHITA, KS

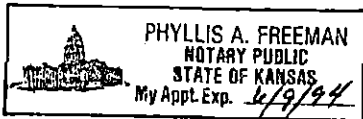
AFFIDAVIT

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

Fredrick W. Stump, of lawful age, does swear and state that the facts and statements herein are true and correct to the best of his knowledge.

Fredrick W. Stump
Fredrick W. Stump

Subscribed and sworn to me this 18th day of June, 1993.



Phyllis A. Freeman
NOTARY PUBLIC

My Commission Expires: 6/9/94

FORMATION

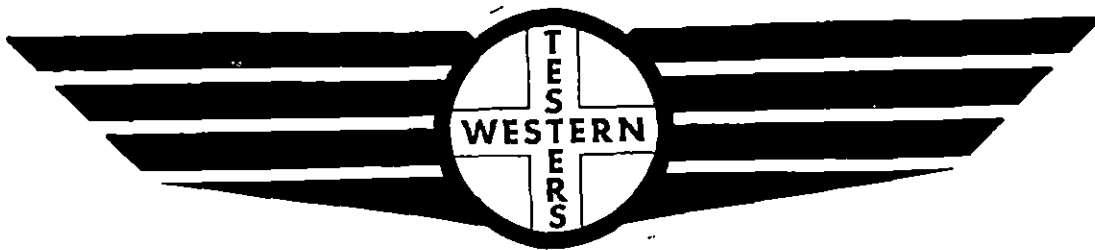
TEST

REPORT

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KANSAS CORPORATION COMMISSION

JUN 25 1993

CONSERVATION DIVISION
WICHITA, KS



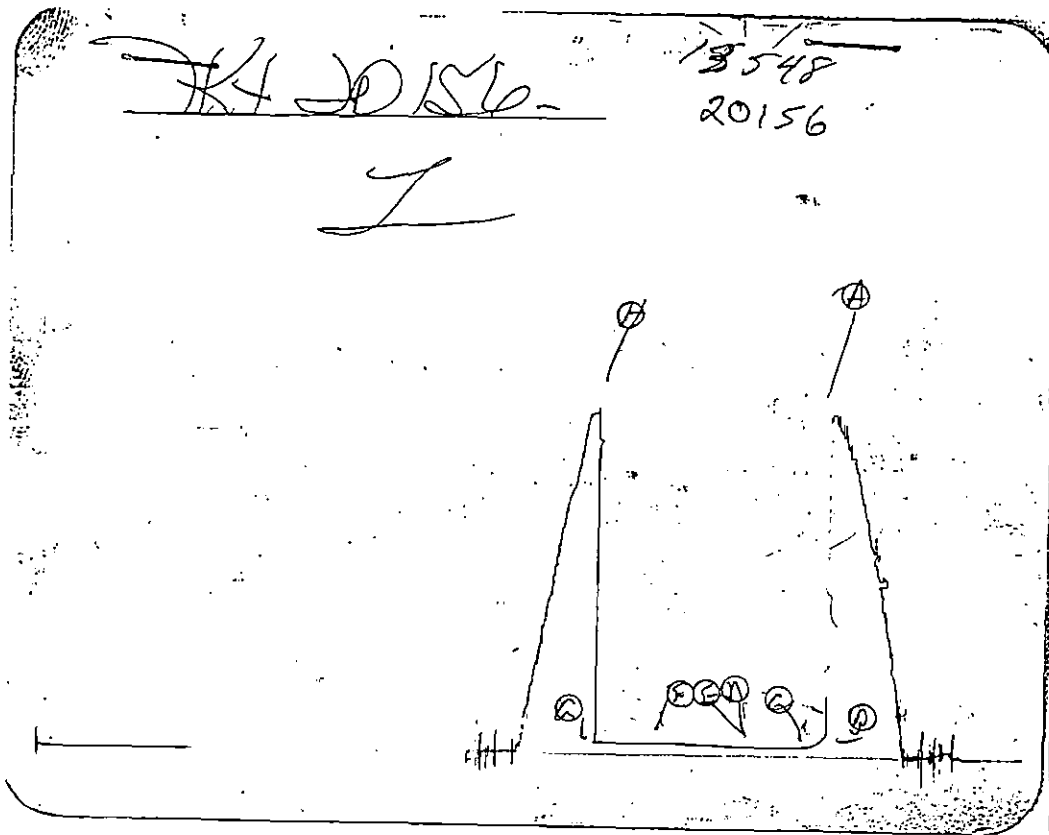
Home Office:

Wichita, Kansas 67201

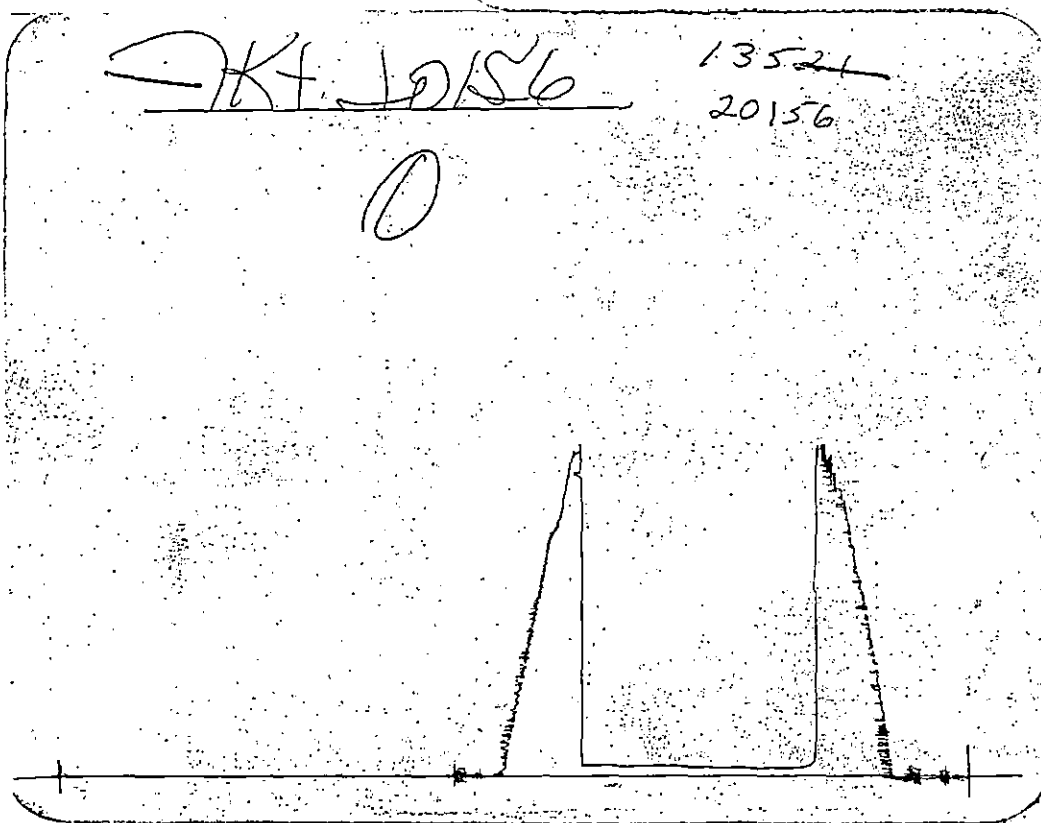
P.O. Box 1599

Phone 1 - 800 - 688 - 7021

COMPANY GRAVES DRILLING COMPANY, INCREASE & WELL NO. #2 YOUNG SEC. 9 TWP. 28S RGE. 5W TEST NO. 1 DATE 6/11/93



Inside Recorder



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 6/11/93
CUSTOMER : GRAVES DRILLING CO, INC.
WELL : #2 TEST: 1
ELEVATION: 1420 GL
SECTION : 9
RANGE : 5W COUNTY: KINGMAN
GAUGE SN#: 13548 RANGE : 4075
TICKET : 20156
LEASE : YOUNG
GEOLOGIST: STUMP
FORMATION: MISSISSIPPI
TOWNSHIP : 28S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3791.00 ft TO: 3810.00 ft TVD: 3810.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 3796.0 ft 3810.0 ft
TEMPERATURE: 118.0
DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3770.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 21.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 19.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH
PACKER DEPTH: 3786.0 ft SIZE: 6.750 in
PACKER DEPTH: 3791.0 ft SIZE: 6.750 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG #5
MUD TYPE : CHEMICAL
WEIGHT : 8.700 ppg
CHLORIDES : 6000 ppm
JARS-MAKE :
DID WELL FLOW?: NO
VISCOSITY : 52.00 cp
WATER LOSS: 10.400 cc
SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW. GAS TO SURFACE
IN 7 MINUTES. SEE GAS SHEET ATTACHED.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	0.0	0.0	100.0	DRILLING MUD
60.0	0.0	0.0	70.0	30.0	MUDDY WATER

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	75.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.6733 STB	AVERAGE WATER RATE:	16.1584 STB/D
WATER VOLUME:	0.5891 STB		
TOTAL FLUID :	1.2624 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1692.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	60.00	60.00
INITIAL SHUT-IN	45.00		60.00
FINAL FLOW	60.00	60.00	60.00
FINAL SHUT-IN	45.00		60.00

FINAL HYDROSTATIC PRESSURE: 1702.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1805.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	52.00	52.00
INITIAL SHUT-IN	45.00		52.00
FINAL FLOW	60.00	52.00	65.00
FINAL SHUT-IN	51.00		66.00

FINAL HYDROSTATIC PRESSURE: 1797.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 6/11/93	TICKET : 20156
CUSTOMER : GRAVES DRILLING CO, INC.	LEASE : YOUNG
WELL : #2 TEST: 1	GEOLOGIST: STUMP
ELEVATION: 1420 GL	FORMATION: MISSISSIPPI
SECTION : 9	TOWNSHIP : 28S
RANGE : 5W COUNTY: KINGMAN	STATE : KS
GAUGE SN#: 13548 RANGE : 4075	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
15 MIN	MERLA	0.250	9" WATER	5050 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	0.250	9" WATER	5050 SCF/D
20 MIN	MERLA	0.250	8" WATER	4760 SCF/D
30 MIN	MERLA	0.250	7" WATER	4450 SCF/D
40 MIN	MERLA	0.250	7" WATER	4450 SCF/D
50 MIN	MERLA	0.250	7" WATER	4450 SCF/D
60 MIN	MERLA	0.250	7" WATER	4450 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 6/11/93	TICKET : 20156
CUSTOMER : GRAVES DRILLING CO, INC.	LEASE : YOUNG
WELL : #2 TEST: 1	GEOLOGIST: STUMP
ELEVATION: 1420 GL	FORMATION: MISSISSIPPI
SECTION : 9	TOWNSHIP : 28S
RANGE : 5W	COUNTY: KINGMAN
WELL SN#: 13548	STATE : KS
	RANGE : 4075
	CLOCK : 12

INITIAL FLOW

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	52.00	52.00
5.00	52.00	0.00
10.00	52.00	0.00
15.00	52.00	0.00

INITIAL SHUT IN

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	52.00	52.00	0.00
6.00	52.00	0.00	0.00
9.00	52.00	0.00	0.00
12.00	52.00	0.00	0.00
15.00	52.00	0.00	0.00
18.00	52.00	0.00	0.00
21.00	52.00	0.00	0.00
24.00	52.00	0.00	0.00
27.00	52.00	0.00	0.00
30.00	52.00	0.00	0.00
33.00	52.00	0.00	0.00
36.00	52.00	0.00	0.00
39.00	52.00	0.00	0.00
42.00	52.00	0.00	0.00
45.00	52.00	0.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	52.00	52.00
5.00	52.00	0.00
10.00	53.00	1.00
15.00	54.00	1.00
20.00	55.00	1.00
25.00	57.00	2.00
30.00	59.00	2.00
35.00	60.00	1.00
40.00	61.00	1.00
45.00	62.00	1.00
50.00	63.00	1.00
55.00	64.00	1.00
60.00	65.00	1.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	65.00	65.00	0.00
6.00	65.00	0.00	0.00
9.00	65.00	0.00	0.00
12.00	65.00	0.00	0.00
15.00	65.00	0.00	0.00
18.00	65.00	0.00	0.00
21.00	66.00	1.00	0.00
24.00	66.00	0.00	0.00
27.00	66.00	0.00	0.00
30.00	66.00	0.00	0.00
33.00	66.00	0.00	0.00
36.00	66.00	0.00	0.00
39.00	66.00	0.00	0.00
42.00	66.00	0.00	0.00
45.00	66.00	0.00	0.00
48.00	66.00	0.00	0.00
51.00	66.00	0.00	0.00

FORMATION

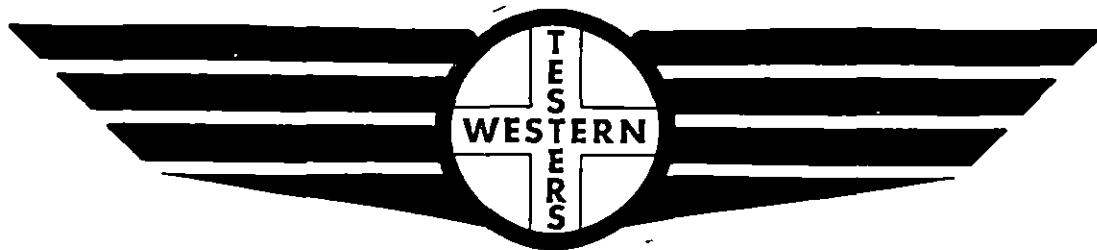
TEST

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KANSAS CORPORATION COMMISSION

JUN 25 1993

CONSERVATION DIVISION
WICHITA, KS



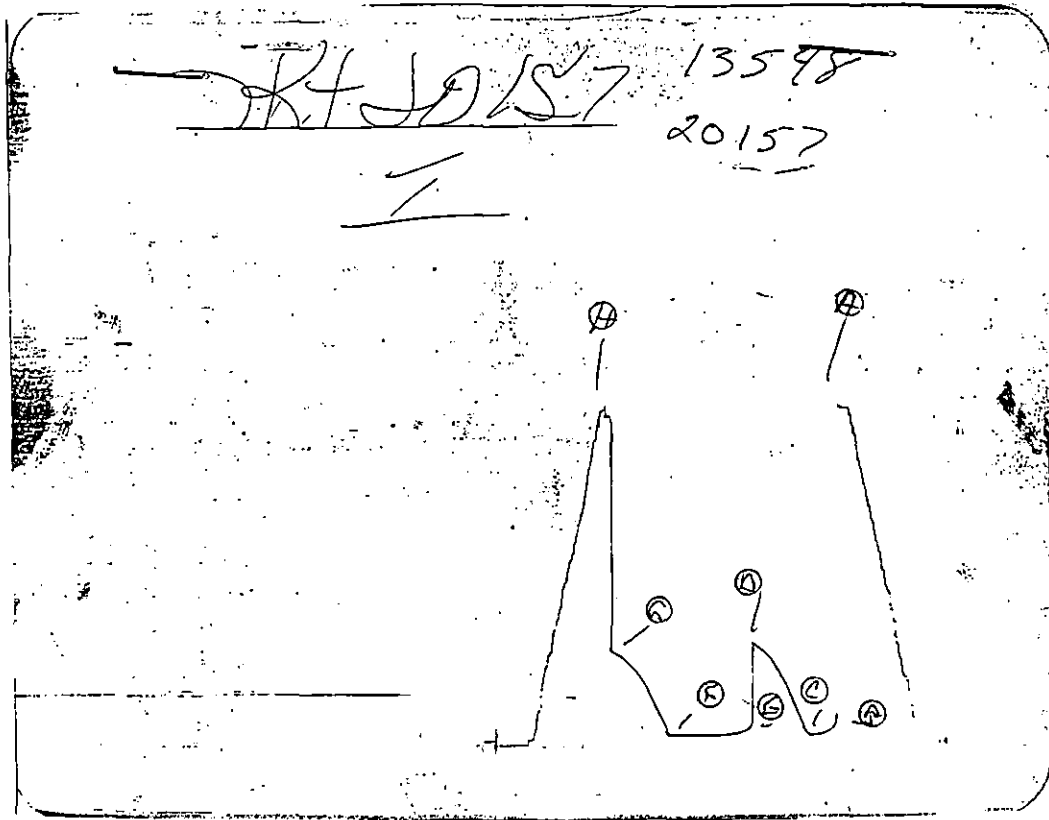
Home Office:

Wichita, Kansas 67201

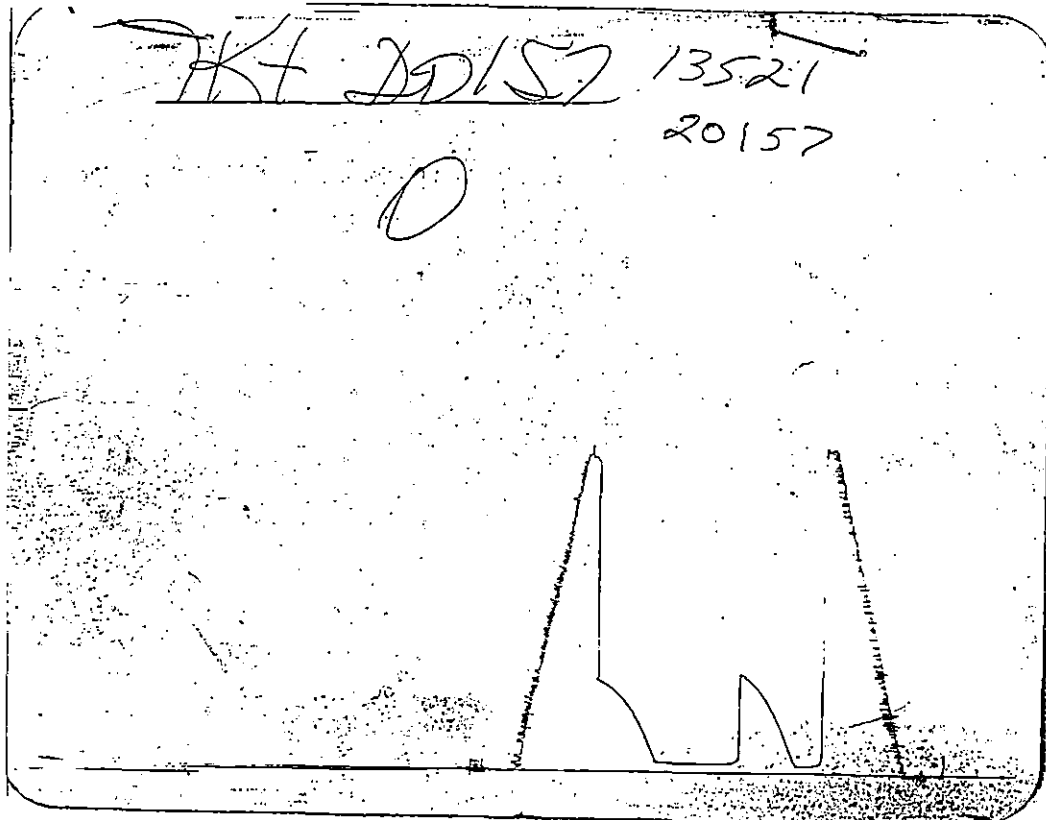
P.O. Box 1599

Phone 1 - 800 - 688 - 7021

COMPANY GRAVES DRILLING CO., INC. LEASE & WELL NO. #2 YOUNG SEC. 9 TWP. 28S RGE. 5W TEST NO. 2 DATE 6/12/93



Inside Recorder



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 6/12/93
CUSTOMER : GRAVES DRILLING CO, INC.
WELL : #2 TEST: 2
ELEVATION: 1420 GL
SECTION : 9
RANGE : 5W COUNTY: KINGMAN
GAUGE SN#: 13548 RANGE : 4075
TICKET : 20157
LEASE : YOUNG
GEOLOGIST: STUMP
FORMATION: MISSISSIPPI
TOWNSHIP : 28S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3812.00 ft TO: 3830.00 ft TVD: 3830.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3817.0 ft 3820.0 ft
TEMPERATURE: 118.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3791.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	21.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	18.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	3807.0 ft	SIZE:	6.750 in
PACKER DEPTH:	3812.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG #5
MUD TYPE : CHEMICAL
WEIGHT : 8.700 ppg
CHLORIDES : 6000 ppm
JARS-MAKE :
DID WELL FLOW?: NO
VISCOSITY : 52.00 cp
WATER LOSS: 10.400 cc
SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

FAIR BLOW INCREASING TO BOTTOM OF BUCKET IN 5 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	2.0	0.0	0.0	98.0	SLIGHTLY OIL SPECKED MUD
60.0	2.0	0.0	58.0	40.0	SL. OIL SPECKED MUDDY WTR

RATE INFORMATION

OIL VOLUME:	0.0252 STB	TOTAL FLOW TIME:	75.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	8.6178 STB/D
MUD VOLUME:	0.7490 STB	AVERAGE WATER RATE:	15.6197 STB/D
WATER VOLUME:	0.4881 STB		
TOTAL FLUID :	1.2624 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1784.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	91.00	70.00
INITIAL SHUT-IN	45.00		537.00
FINAL FLOW	60.00	60.00	60.00
FINAL SHUT-IN	45.00		506.00

FINAL HYDROSTATIC PRESSURE: 1774.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1793.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	88.00	62.00
INITIAL SHUT-IN	45.00		541.00
FINAL FLOW	60.00	67.00	67.00
FINAL SHUT-IN	45.00		501.00

FINAL HYDROSTATIC PRESSURE: 1776.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 6/12/93	TICKET : 20157
CUSTOMER : GRAVES DRILLING CO, INC.	LEASE : YOUNG
WELL : #2 TEST: 2	GEOLOGIST: STUMP
ELEVATION: 1420 GL	FORMATION: MISSISSIPPI
SECTION : 9	TOWNSHIP : 28S
RANGE : 5W COUNTY: KINGMAN	STATE : KS
GAUGE SN#: 13548 RANGE : 4075	CLOCK : 12

INITIAL FLOW

<u>Time</u> (min)	<u>Pressure</u>	<u>Delta P</u>
0.00	88.00	88.00
5.00	88.00	0.00
10.00	71.00	-17.00
15.00	62.00	-9.00

INITIAL SHUT IN

<u>Time</u> (min)	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	62.00	62.00	0.00
6.00	72.00	10.00	0.00
9.00	108.00	36.00	0.00
12.00	160.00	52.00	0.00
15.00	213.00	53.00	0.00
18.00	263.00	50.00	0.00
21.00	312.00	49.00	0.00
24.00	355.00	43.00	0.00
27.00	391.00	36.00	0.00
30.00	427.00	36.00	0.00
33.00	462.00	35.00	0.00
36.00	486.00	24.00	0.00
39.00	503.00	17.00	0.00
42.00	520.00	17.00	0.00
45.00	541.00	21.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	67.00	67.00
5.00	67.00	0.00
10.00	67.00	0.00
15.00	67.00	0.00
20.00	67.00	0.00
25.00	67.00	0.00
30.00	67.00	0.00
35.00	67.00	0.00
40.00	67.00	0.00
45.00	67.00	0.00
50.00	67.00	0.00
55.00	67.00	0.00
60.00	67.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	87.00	87.00	0.00
6.00	138.00	51.00	0.00
9.00	179.00	41.00	0.00
12.00	226.00	47.00	0.00
15.00	265.00	39.00	0.00
18.00	310.00	45.00	0.00
21.00	344.00	34.00	0.00
24.00	372.00	28.00	0.00
27.00	396.00	24.00	0.00
30.00	422.00	26.00	0.00
33.00	443.00	21.00	0.00
36.00	465.00	22.00	0.00
39.00	481.00	16.00	0.00
42.00	491.00	10.00	0.00
45.00	501.00	10.00	0.00