

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

ORIGINAL

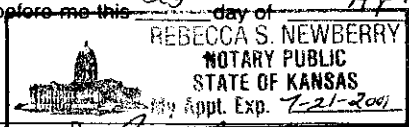
Operator: License # 31191
 Name: R&B Oil & Gas
 Address: PO Box 195
 City/State/Zip: Attica, Kansas 67009-0195
 Purchaser: _____
 Operator Contact Person: Randy Newberry
 Phone: (316) 254-7251
 Contractor: Name: Duke Drilling Co., Inc.
 License: 5929
 Wellsite Geologist: Tim Pierce
 Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, 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./SWD
 Plug Back Plug Back Total Depth
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Enhr.?) Docket No. _____
 02-05-01 02-11-01 3-7-01
 Spud Date or Date Reached TD Completion Date or
 Recompletion Date Recompletion Date

API No. 15 - 077-21392-0000
 County: Harper County, Kansas
C-E/2 SE SE Sec. 18 Twp. 31 S. R. 8 East West
660 feet from (S) N (circle one) Line of Section
330 feet from (E) W (circle one) Line of Section
 Footages Calculated from Nearest Outside Section Corner:
 (circle one) NE (SE) NW SW
 Lease Name: Bertholf Well #: 2
 Field Name: Spivey-Grabs-Basil
 Producing Formation: Mississippi
 Elevation: Ground: 1647' Kelly Bushing: 1655'
 Total Depth: 4540' Plug Back Total Depth: _____
 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 cmt.
 Drilling Fluid Management Plan MU 9-26-03
 (Data must be collected from the Reserve Pit)
 Chloride content _____ ppm Fluid volume 240 bbls
 Dewatering method used Hauled off
 Location of fluid disposal if hauled offsite: _____
 Operator Name: Jody Oil & Gas, Corp
 Lease Name: Sanders License No.: #3
 Quarter SW Sec. 20 Twp. 31 S. R. 8 East West
 County: Harper Docket No.: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 of 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: Randy Newberry
 Title: President Date: 4-23-01
 Subscribed and sworn to before me this 23rd day of April
2001
 Notary Public: Rebecca S. Newberry
 Date Commission Expires: 7-21-2001



KCC Office Use ONLY

Letter of Confidentiality Attached
 If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report
 UIC Distribution

X

Operator Name: R&B Oil & Gas Lease Name: Bertholf Well #: 2

Sec. 18 Twp. 31 S. R. 8 East West County: Harper County, Kansas

INSTRUCTIONS: Show important tops and base 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. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

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)

List All E. Logs Run:
 Dual Induction
 Dual Compensated Porosity
 Sonic Bond

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
Mississippi	4418	2770

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	# Sacs Used	Type and Percent Additives
Surface	12-1/4"	8-5/8"	23#	231'	60/40 Poz	185	3%cc 2%gel
Production	7-7/8"	5-1/2"	14#	4537'	50/50 Poz	125	10%salt 2%gel

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 Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	4426 to 4436	600 gal 10% DSFE	
		18,000# 100 mesh	
		33,000# 12/20	
		4,000# Acfrac	

TUBING RECORD		Size	Set At	Packer At	Liner Run
		2 7/8	4490		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr.			Producing Method		
3-20-01			<input type="checkbox"/> Flowing <input checked="" 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
	13	160	200	12.3	32

Disposition of Gas Vented Sold Used on Lease *(If vented, Sumit ACO-18.)*

METHOD OF COMPLETION Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval _____

ALLIED CEMENTING CO., INC. 5187

Federal Tax I.D.# 48-0727860

ORIGINAL

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Medicine Lodge

15-077-21392-0000

DATE <u>2-05-01</u>	SEC. <u>B</u>	TWP. <u>31s</u>	RANGE <u>8w</u>	CALLED OUT <u>4:00 pm</u>	ON LOCATION <u>5:30 pm</u>	JOB START <u>6:50 pm</u>	JOB FINISH <u>7:05 pm</u>
LEASE <u>Bertholf</u>	WELL# <u>2</u>	LOCATION <u>MAG Plant 2s,</u>	COUNTY <u>Harper</u>	STATE <u>KS.</u>			
OLD OR NEW (Circle one) <u>NEW</u>				<u>w/into</u>			

CONTRACTOR <u>Duke #2</u>	OWNER <u>R+B Oil + Gas</u>
TYPE OF JOB <u>Surface</u>	CEMENT
HOLE SIZE <u>12 1/4</u> T.D. <u>231</u>	AMOUNT ORDERED
CASING SIZE <u>8 5/8 x 25'</u> DEPTH <u>231</u>	<u>185 sx 60:40:2 + 3.00</u>
TUBING SIZE _____ DEPTH _____	
DRILL PIPE _____ DEPTH _____	
TOOL _____ DEPTH _____	
PRES. MAX <u>150</u> MINIMUM _____	COMMON <u>111</u> @ <u>6.35</u> <u>704.81</u>
MEAS. LINE _____ SHOE JOINT _____	POZMIX <u>74</u> @ <u>3.25</u> <u>240.50</u>
CEMENT LEFT IN CSG. <u>15'</u>	GEL <u>3</u> @ <u>9.50</u> <u>28.50</u>
PERFS. _____	CHLORIDE <u>6</u> @ <u>28.00</u> <u>168.00</u>
DISPLACEMENT <u>14 Bbls Freshwater</u>	
EQUIPMENT	
PUMP TRUCK CEMENTER <u>CA 108</u>	
# <u>352</u> HELPER <u>Shane W</u>	
BULK TRUCK	HANDLING <u>194</u> @ <u>1.05</u> <u>203.70</u>
# <u>242</u> DRIVER <u>Jason</u>	MILEAGE <u>194 x .28</u> <u>.04</u> <u>209.52</u>
BULK TRUCK	
# _____ DRIVER _____	TOTAL <u>1555.07</u>

REMARKS:

SERVICE

<u>Pipe on Bottom, Break circulation</u>	DEPTH OF JOB <u>231</u>	
<u>Dump 185 sx 60:40:2 + 3.00</u>	PUMP TRUCK CHARGE <u>0-300'</u>	<u>470.00</u>
<u>1 switch valves + Release plug</u>	EXTRA FOOTAGE _____	@ _____
<u>Displace with 14 Bbls Freshwater</u>	MILEAGE <u>27</u>	@ <u>3.00</u> <u>81.00</u>
<u>Start in</u>	PLUG <u>wooden 8 5/8"</u>	@ <u>45.00</u> <u>45.00</u>
<u>Circulate 50 sx to PIT. ✓</u>		@ _____
		@ _____
		TOTAL <u>596.00</u>

CHARGE TO: R+B Oil + Gas
STREET P.O. Box 195
CITY Antica STATE KANSAS ZIP 67109

FLOAT EQUIPMENT

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 is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE R.A. Miller

TAX _____
TOTAL CHARGE 1869.13
DISCOUNT 186.92 IF PAID IN 30 DAYS
1682.21
R.A. Miller
PRINTED NAME

ALLIED CEMENTING CO., INC.

15-077-21392-0000
5173

Federal Tax I.D.# 48-0727860

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Med Lodge

ORIGINAL

Workover File

DATE <u>2-12-01</u>	SEC. <u>18</u>	TWP. <u>31S</u>	RANGE <u>8W</u>	CALLED OUT <u>2:00 AM</u>	ON LOCATION <u>4:00 AM</u>	JOB START <u>8:45 AM</u>	JOB FINISH <u>9:30 AM</u>
LEASE <u>Berthoff</u>	WELL# <u>2</u>	LOCATION <u>Mag Plant 2S w/into</u>		COUNTY <u>Harper</u>	STATE <u>KS</u>		
OLD OR <u>(NEW)</u> (Circle one)							

CONTRACTOR <u>Duke #2</u>	OWNER <u>R+B Oil + Gas</u>
TYPE OF JOB <u>Production</u>	CEMENT
HOLE SIZE <u>7 7/8</u>	T.D. <u>4540</u>
CASING SIZE <u>5 1/2</u>	DEPTH <u>4541.75</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL <u>AFU Insert</u>	DEPTH <u>4515.35</u>
PRES. MAX <u>1000</u>	MINIMUM <u>450</u>
MEAS. LINE	SHOE JOINT <u>26.40</u>
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT <u>110 BBLs 2% KCL Water</u>	
EQUIPMENT	
PUMP TRUCK CEMENTER <u>Justin Hart</u>	
# <u>359-265</u> HELPER <u>Mark Brungardt</u>	
BULK TRUCK	
# <u>242</u> DRIVER <u>David Felio</u>	
BULK TRUCK	
#	DRIVER

AMOUNT ORDERED <u>125 3x 50-50-0 r</u>	
<u>12% salt + 5# Kol-seal + 3% FL-10</u>	
<u>25 2x 60-40-4 plug Rat + Mouse Holes</u>	
COMMON A <u>78</u>	@ <u>6.35</u> <u>495.30</u>
POZMIX <u>72</u>	@ <u>3.25</u> <u>234.00</u>
GEL <u>1</u>	@ <u>9.50</u> <u>9.50</u>
CHLORIDE	@
<u>KOL-SEAL 625#</u>	@ <u>.38</u> <u>237.50</u>
<u>SALT 13</u>	@ <u>7.00</u> <u>91.00</u>
<u>FL-10 32#</u>	@ <u>8.00</u> <u>256.00</u>
	@
	@
HANDLING <u>176</u>	@ <u>1.05</u> <u>184.80</u>
MILEAGE <u>176 X 27</u>	<u>.04</u> <u>190.08</u>
TOTAL <u>1698.18</u>	

REMARKS:

Pipe on Bottom Break Circ. 20 BBLs
Mud Clean 25 5x 60-40-4 plug Rat + Mouse
65 5x 50-50-0 12% salt 5# Kol-seal 3% FL-10
@ 14.3# wash Pump + lines Release Plug Start
Disp. @ 6 BPM @ 75 BBLs out lift press slow
Rate 5 BPM 90 BBLs slow Rate 4 BPM @ 105
BBLs slow Rate 3 BPM @ 450# 110 BBLs
Bump Plug to 1000# Release press Float Held

SERVICE

DEPTH OF JOB <u>4541</u>	
PUMP TRUCK CHARGE	<u>1214.00</u>
EXTRA FOOTAGE	@
MILEAGE <u>27</u>	@ <u>3.00</u> <u>81.00</u>
PLUG <u>5 1/2 TRP</u>	@ <u>50.00</u> <u>50.00</u>
	@
	@
TOTAL <u>1345.00</u>	

CHARGE TO: R+B Oil + Gas
 STREET P.O. Box
 CITY ATLICA STATE KANSAS ZIP 67109

FLOAT EQUIPMENT

<u>5 1/2</u>	
<u>1- Guide Shoe</u>	@ <u>150.00</u> <u>150.00</u>
<u>1- AFU Insert</u>	@ <u>235.00</u> <u>235.00</u>
<u>4- Centralizers</u>	@ <u>50.00</u> <u>200.00</u>
	@
	@
TOTAL <u>585.00</u>	

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 is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX	
TOTAL CHARGE <u>3628.18</u>	
DISCOUNT <u>362.82</u>	IF PAID IN 30 DAYS

SIGNATURE R.G. Miller

R.G. Miller
 PRINTED NAME

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

ORIGINAL

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

Purchaser: Texaco
Operator Contact Person: Fredrick W. Stump
Phone (316) 687-2777

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

Wellsite Geologist: Dean Pattisson

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, 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 _____ PBTB
_____ Commingled _____ Docket No. _____
_____ Dual Completion _____ Docket No. _____
_____ Other (SWD or Inj?) _____ Docket No. _____
09-09-91 09-15-91 10-2-91
Spud Date Date Reached TD Completion Date

API NO. 15- 077-21,248-0000
County Harper
NE - SW - NE - _____ Sec. 18 Twp. 31 Rge. 8 W
990 Feet from S/N (circle one) Line of Section
1650 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 Sanders Well # 1
Field Name Spivey-Grabs
Producing Formation Mississippian
Elevation: Ground 1630' KB 1638'
Total Depth 4464' PBTB _____
Amount of Surface Pipe Set and Cemented at 268' 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 AITI
(Data must be collected from the Reserve Pit)
Chloride content 70,000 ppm Fluid volume 910 bbls
Dewatering method used hauled
Location of fluid disposal if hauled offsite: _____
Operator Name Energy Marketing Inc.
Lease Name Spivey Grabs License No. 30793
SW Quarter Sec. 7 Twp. 31 S Rng. 8 W
County Harper Docket No. C-53248

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 11-14-91

Subscribed and sworn to before me this 14th day of November 19 91.
Notary Public Phillip A. Freeman

PHILLIP A. FREEMAN
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 6-9-94

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
 Wireline Log Received
 Geologist Report Received
RECEIVED
KANSAS CORPORATION COMMISSION
Distribution
 KCC SWD/Rep NGPA
NOV 19 1991 Plug Other
11-15-91
(Specify)
CONSERVATION DIVISION
WICHITA, KS
Form ACO-1 (7-91)

Operator Name Graves Drilling Co., Inc. Lease Name Sanders Well # 1

Sec. 18 Twp. 31 Rge. 8
 East
 West

County Harper

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.)

List All E.Logs Run:

Name	Formation (Top), Depth and Datum	
	Top	Datum
Heebner	3419	-1781
Lansing	3639	-2001
Bs KC	4182	-2544
Cherokee	4318	-2680
Mississippian	4408	-2770

Dual Induction
 Dual Compensated Porosity

CASING RECORD <input checked="" type="checkbox"/> New <input checked="" 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"	23#	268'	60/40poz	175	2% gel 3% cc.
Production	7-7/8"	5 1/2"	14#	4463'	50/50poz	100	10% salt 2%gel

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 Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	4410 - 4420	500 gal. acid (10% DSFE)	
		Frac w/860 sx sand & 38,500 gal.	
		My-T-Frac.	

TUBING RECORD Size 2 7/8" Set At 4380' Packer At _____ Liner Run Yes No

Date of First, Resumed Production, SWD or Inj. 10-2-91 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	25	150	100	6000-1	

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

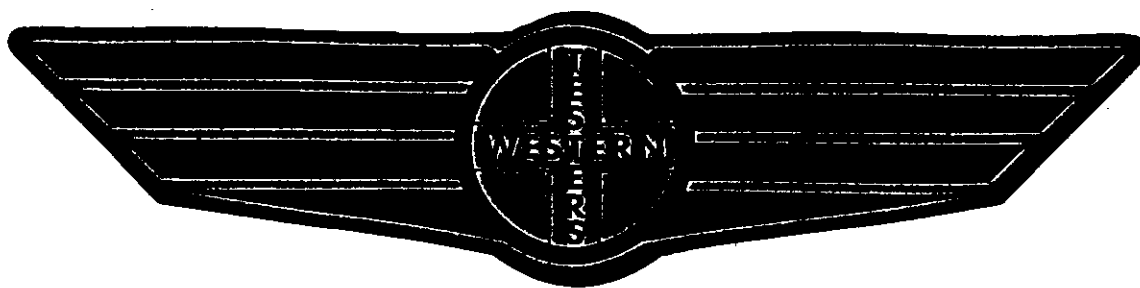
METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: 4410 - 4420

15-077 -21248 -0000

ORIGINAL

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800 - 688 - 7021

COMPANY GRAVES DRILLING CO., INC. LEASE & WELL NO. SANDERS #1 SEC. 18 TWP. 31S RGE. 8W TEST NO. 1 DATE 9/14/91

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 9-14-91 TICKET : 17452
CUSTOMER : GRAVES DRILLING CO. INC. LEASE : SANDERS
WELL : 1 TEST: 1 GEOLOGIST : ?
ELEVATION : 1638 KB FORMATION : MISSISSIPPI
SECTION : 18 TOWNSHIP : 31S
RANGE : 8W COUNTY : HARPER STATE : KANSAS
GAUGE SN# : 1051 RANGE : 4250 CLOCK : 12

INTERVAL FROM : 4415 TO : 4430 TOTAL DEPTH : 4430
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4410 SIZE : 6.63
PACKER DEPTH : 4415 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : DUKE RIG 2
MUD TYPE : CHEMICAL VISCOSITY : 52
WEIGHT : 9.4 WATER LOSS (CC) : 8.8
CHLORIDES (PPM) : 7000
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 256 FT I.D. inch : 2.50
DRILL PIPE LENGTH : 4139 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 15 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5XH

BLOW COMMENT #1 : INITIAL FLOW PERIOD STRONG BLOW - GAS TO SURFACE
BLOW COMMENT #2 : IN 7 MINUTES - SEE FLOW CHART.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

15-077-21248-0000
ORIGINAL

RECOVERED : 60 FT OF: OIL CUT MUD-20%GAS10%OIL;70%MUD
RECOVERED : 120 FT OF: HVY OIL CUT MUD-25%GAS;30%OIL;40%MUD;5%WTR
RECOVERED : 60 FT OF: OIL CUT MUDDY WATER
RECOVERED : 0 FT OF: 10%GAS;20%OIL;30%MUD;40%WATER
RECOVERED : 0 FT OF: CHLORIDES 52000 P.P.M.

Total Barrels Fluid = 1.46
Total Fluid Prod Rate = 23.31 BFPD
Indicated Oil Rate = 5.25 BOPD
Indicated Wtr Rate = 3.32 BWPD
Corrected Oil Rate = 3.11 BOPD
Corrected Wtr Rate = 1.97 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 8:20 P.M.

TIME STARTED OFF BOTTOM : 12:20 A.M.

WELL TEMPERATURE : 118

INITIAL HYDROSTATIC PRESSURE

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 63

FINAL FLOW PERIOD MIN: 60

FINAL CLOSED IN PERIOD MIN: 96

FINAL HYDROSTATIC PRESSURE

(A) 2234

(B) 105

(D) 1183

(E) 117

(G) 1153

(H) 2189

PSI TO (C) : 105

PSI TO (F) : 117

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : GRAVES DRILLING CO. INC.
RIG : HARPER-KANSAS
FIELD : SANDERS
WELL : 1
DATE : 9-14-91
GAUGE NO : 1051

OPERATIONAL COMMENTS

COMPANY : GRAVES DRILLING CO. INC.
 WELL : 1
 GAUGE # : 1051
 DATE : 14/ 9/91

FIELD : SANDERS
 JOB # : 17452
 DEPTH : 4430
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	8:20: 0	0.000	105.000	118.00	0.000
3	8:24:59	0.083	105.000	118.00	0.000
4	8:30: 0	0.167	105.000	118.00	0.000
5	8:35: 0	0.250	105.000	118.00	0.000
6	8:39:59	0.333	105.000	118.00	0.000
7	8:45: 0	0.417	105.000	118.00	0.000
8	8:50: 0	0.500	105.000	118.00	0.000
INITIAL SHUT-IN PERIOD					
9	8:53: 0	0.550	746.000	118.00	641.000
10	8:56: 0	0.600	930.000	118.00	184.000
11	8:59: 0	0.650	1015.000	118.00	85.000
12	9: 2: 0	0.700	1060.000	118.00	45.000
13	9: 5: 0	0.750	1089.000	118.00	29.000
14	9: 8: 0	0.800	1108.000	118.00	19.000
15	9:11: 0	0.850	1123.000	118.00	15.000
16	9:14: 0	0.900	1132.000	118.00	9.000
17	9:17: 0	0.950	1139.000	118.00	7.000
18	9:20: 0	1.000	1148.000	118.00	9.000
19	9:23: 0	1.050	1155.000	118.00	7.000
20	9:26: 0	1.100	1160.000	118.00	5.000
21	9:29: 0	1.150	1165.000	118.00	5.000
22	9:32: 0	1.200	1168.000	118.00	3.000
23	9:35: 0	1.250	1171.000	118.00	3.000
24	9:38: 0	1.300	1174.000	118.00	3.000
25	9:41: 0	1.350	1176.000	118.00	2.000
26	9:44: 0	1.400	1179.000	118.00	3.000
27	9:47: 0	1.450	1181.000	118.00	2.000
28	9:50: 0	1.500	1182.000	118.00	1.000
29	9:53: 0	1.550	1183.000	118.00	1.000
FINAL FLOW PERIOD					
30	9:54: 0	1.567	117.000	118.00	-1066.000
31	9:57:59	1.633	117.000	118.00	0.000
32	10: 3: 0	1.717	117.000	118.00	0.000
33	10: 8: 0	1.800	117.000	118.00	0.000
34	10:12:59	1.883	117.000	118.00	0.000
35	10:18: 0	1.967	117.000	118.00	0.000
36	10:23: 0	2.050	117.000	118.00	0.000
37	10:27:59	2.133	117.000	118.00	0.000
38	10:33: 0	2.217	117.000	118.00	0.000
39	10:38: 0	2.300	117.000	118.00	0.000
40	10:42:59	2.383	117.000	118.00	0.000
41	10:48: 0	2.467	117.000	118.00	0.000
42	10:53: 0	2.550	117.000	118.00	0.000
FINAL SHUT-IN PERIOD					
43	10:56: 0	2.600	117.000	118.00	0.000
44	10:58:59	2.650	600.000	118.00	483.000
45	11: 2: 0	2.700	815.000	118.00	215.000
46	11: 5: 0	2.750	905.000	118.00	90.000
47	11: 8: 0	2.800	957.000	118.00	52.000
48	11:11: 0	2.850	991.000	118.00	34.000

COMPANY : GRAVES DRILLING CO. INC.
WELL : 1
GAUGE # : 1051
DATE : 14/ 9/91

FIELD : SANDERS
JOB # : 17452
DEPTH : 4430
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	11:13:59	2.900	1012.000	118.00	21.000
50	11:17: 0	2.950	1034.000	118.00	22.000
51	11:20: 0	3.000	1048.000	118.00	14.000
52	11:23: 0	3.050	1062.000	118.00	14.000
53	11:26: 0	3.100	1072.000	118.00	10.000
54	11:29: 0	3.150	1080.000	118.00	8.000
55	11:31:59	3.200	1089.000	118.00	9.000
56	11:35: 0	3.250	1097.000	118.00	8.000
57	11:38: 0	3.300	1103.000	118.00	6.000
58	11:41: 0	3.350	1108.000	118.00	5.000
59	11:44: 0	3.400	1114.000	118.00	6.000
60	11:46:59	3.450	1117.000	118.00	3.000
61	11:50: 0	3.500	1122.000	118.00	5.000
62	11:53: 0	3.550	1124.000	118.00	2.000
63	11:56: 0	3.600	1129.000	118.00	5.000
64	11:59: 0	3.650	1133.000	118.00	4.000
65	12: 1:59	3.700	1135.000	118.00	2.000
66	12: 5: 0	3.750	1137.000	118.00	2.000
67	12: 8: 0	3.800	1139.000	118.00	2.000
68	12:11: 0	3.850	1142.000	118.00	3.000
69	12:14: 0	3.900	1145.000	118.00	3.000
70	12:17: 0	3.950	1148.000	118.00	3.000
71	12:20: 0	4.000	1150.000	118.00	2.000
72	12:23: 0	4.050	1151.000	118.00	1.000
73	12:26: 0	4.100	1152.000	118.00	1.000
74	12:29: 0	4.150	1153.000	118.00	1.000

WESTERN TESTING CO. INC.

GAS FLOW REPORT

Date : 9-14-91 Ticket # : 17452
 Customer : GRAVES DRILLING CO. INC. Lease : SANDERS
 Well : 1 Test : 1 Geologist : ?
 Elevation (KB) : 1638 Formation : MISSISSIPPI
 Section : 18 Township : 31S
 Range : 8W County : HARPER State : KANSAS
 Gauge SN # : 1051 Range : 4250 Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
PRE FLOW =====				
7 MIN.	MERLA	3/4"		GAS TO SURFACE
10 MIN.	MERLA	3/4"	4 PSIG	156000 C.F.P.D.
20 MIN.	MERLA	3/4"	12 PSIG	288000 C.F.P.D.
30 MIN.	MERLA	3/4"	15 PSIG	331000 C.F.P.D.

SECOND FLOW =====				
10 MIN.	MERLA	3/4"	18 PSIG	370000 C.F.P.D.
20 MIN.	MERLA	3/4"	15 PSIG	331000 C.F.P.D.
30 MIN.	MERLA	3/4"	15 PSIG	331000 C.F.P.D.
40 MIN.	MERLA	3/4"	15 PSIG	331000 C.F.P.D.
50 MIN.	MERLA	3/4"	15 PSIG	331000 C.F.P.D.
60 MIN.	MERLA	3/4"	15 PSIG	331000 C.F.P.D.

Gas Bottle SN # :
 Date Bottle Filled : 9-14-91
 Date to be Invoiced : 9-14-91

ORIGINAL
HALLIBURTON SERVICES

15-077-21248-0000

A Halliburton Company

INVOICE

INVOICE NO.	DATE
173514	09/09/1991

WELL LEASE NO./PLANT NAME		WELL/PLANT LOCATION		STATE	WELL/PLANT OWNER	
SANDERS 1		HARPER		KS	SAME	
SERVICE LOCATION		CONTRACTOR	JOB PURPOSE		TICKET DATE	
PRATT		DUKE DRLG CO	CEMENT SURFACE CASING		09/09/1991	
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.	
337790	BOB MILLER			COMPANY TRUCK	21943	

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
PRICING AREA - MID CONTINENT					
000-117	MILEAGE	27	MI	2.60	70.20
		1	UNT		
001-016	CEMENTING CASING	267	FT	475.00	475.00
		1	UNT		
030-503	CMTG PLUG LA-11, CP-1, CP-3, TOP	8.625	IN	90.00	90.00
		1	EA		
504-308	STANDARD CEMENT	175	SK	5.35	936.25
507-277	HALLIBURTON GEL BENTONITE	3	SK	14.75	44.25
509-406	ANHYDROUS CALCIUM CHLORIDE	5	SK	26.25	131.25
500-207	BULK SERVICE CHARGE	191	CFT	1.15	219.65
500-306	MILEAGE CMTG MAT DEL OR RETURN	231.85	TMI	.80	185.48
	INVOICE SUBTOTAL				2,152.08
	DISCOUNT-(BID)				387.34-
	INVOICE BID AMOUNT				1,764.74
	*-KANSAS STATE SALES TAX				52.86
	*-PRATT COUNTY SALES TAX				12.44
	INVOICE TOTAL - PLEASE PAY THIS AMOUNT				\$1,830.04

RECEIVED
KANSAS CORPORATION COMMISSION

NOV 15 1991

11-15-91
CONSERVATION DIVISION
WICHITA, KS

RECEIVED
SEP 11 1991

5304 112032

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.



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

INVOICE

HALLIBURTON SERVICES

ORIGINAL

A Halliburton Company

15-077-21248-0000

INVOICE NO.	DATE
173558	09/15/1991

WELL LEASE NO./PLANT NAME		WELL/PLANT LOCATION		STATE	WELL/PLANT OWNER
SANDERS 1		HARPER		KS	SAME
SERVICE LOCATION		CONTRACTOR		JOB PURPOSE	
PRATT		DUKE #2		CEMENT PRODUCTION CASING	
TICKET DATE					
09/15/1991					
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
337790	R G MILLER			COMPANY TRUCK	22240

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

171006 951391

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
000-117	MILEAGE	27	MI	2.60	70.20
		1	UNT		
001-016	CEMENTING CASING	4461	FT	1,300.00	1,300.00
		1	UNT		
030-016	CEMENTING PLUG SW ALUM TOP	5.5	IN	50.00	50.00
12A	GUIDE SHOE - 5 1/2" 8RD THD.	1	EA	105.00	105.00
825.205					
24A	INSERT FLOAT VALVE - 5 1/2" 8RD	1	EA	83.00	83.00
815.19251					
27	FILL-UP UNIT 5 1/2"-6 5/8"	1	EA	30.00	30.00
815.19311					
40	CENTRALIZER 5-1/2" MODEL S-4	5	EA	44.00	220.00
807.93022					
018-317	SUPER FLUSH	12	SK	87.00	1,044.00
509-968	SALT	600	LB	.10	40.00
504-308	STANDARD CEMENT	63	SK	5.35	337.05
506-105	POZMIX A	62	SK	3.29	203.98
506-121	HALLIBURTON-GEL 2%	2	SK	.00	N/C
508-291	GILSONITE BULK	1250	LB	.35	437.50
509-968	SALT	600	LB	.10	60.00
507-775	HALAD-322	53	LB	6.15	325.95
500-207	BULK SERVICE CHARGE	159	CFT	1.15	182.85
500-306	MILEAGE CMTG MAT DEL OR RETURN	170.27	TMI	.80	136.22
INVOICE SUBTOTAL					4,625.75
DISCOUNT - (BID)					832.60-
INVOICE BID AMOUNT					3,793.15
*-KANSAS STATE SALES TAX					73.60

RECEIVED
KANSAS CORPORATION COMMISSION

NOV 15 1991

11-15-91
CONSERVATION DIVISION
WICHITA, KS

RECEIVED
SEP 17 1991

***** CONTINUED ON NEXT PAGE *****

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.