Company Graves Drilling Company, Inc. Lease & Well No. Warren #1

Elevation 1659 Kelly Bushing Formation Mississippi Effective Pay ------ Ft. Ticket No. 3467

Date 1/7/80 Sec. 17 Twp. 31S Range 8W County Harper State Kansas

Test Approved by R. M Lineham Western Representative Dave Sloan

Formation Test No. 1 Interval Tested from 4423 ft. to 4441 ft. Total Depth 4441 ft.

Packer Depth 4418 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4423 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4432 ft. Recorder Number 2604 Cap. 4150

Bottom Recorder Depth (Outside) 4435 ft. Recorder Number 6246 Cap. 5200

Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. --

Drilling Contractor Graves Drilling Co. Drill Collar Length 154 I. D. 2.2 in.

Mud Type chemical Viscosity 52 Weight Pipe Length -- I. D. -- in.

Weight 9.8 Water Loss 16.4 cc. Drill Pipe Length 4249 I. D. 3.8 in.

Chlorides 16,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½OD in.

Jars: Make -- Serial Number -- Anchor Length 18 ft. Size 5½OD in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½FH in.

Blow: Strong. Gas to surface two minutes on final flow period. See attached sheeet for gas measurements.

Recovered 10 ft. of slightly gas and oil cut mud

Recovered 62 ft. of heavy oil cut mud

Recovered 62 ft. of muddy oil

Recovered 62 ft. of oil

Recovered 52 ft. of slightly water cut oil

Remarks: 72 water Chlorides 54,000 ppm

Time Set Packer(s) 10:40 A.M. P.M. Time Started Off Bottom 1:25 A.M. P.M. Maximum Temperature 122°

Initial Hydrostatic Pressure			(A)	2257	P.S.I.	
Initial Flow Period	Minutes	15	(B)	60 P.S.I.	to (C)	55 P.S.I.
Initial Closed In Period	Minutes	45	(D)	1073	P.S.I.	
Final Flow Period	Minutes	60	(E)	79 P.S.I.	to (F)	96 P.S.I.
Final Closed In Period	Minutes	45	(G)	987	P.S.I.	
Final Hydrostatic Pressure			(H)	2192	P.S.I.	

WTC

GAS FLOW REPORT

Date 1/7/80 Ticket 3467 Company Graves Drilling Company, Inc.

Well Name and No. Warren #1 Dst No. 1 Interval Tested 4423'-4441'

County Harper State Kansas Sec. 17 Twp. 31S Rg. 8W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						
SECOND FLOW						
	10 min.	10" of water		1/2" orifice		~~19,900 CFPD~~
	20 min.	14" of water		1/2" orifice		23,700 CFPD
	30 min.	16" of water		1/2" orifice		25,100 CFPD
	40 min.	14" of water		1/2" orifice		23,700 CFPD
	50 min.	12" of water		1/2" orifice		21,900 CFPD
	60 min.	12" of water		1/2" orifice		21,900 CFPD

GAS BOTTLE

Serial No. ------- Date Bottle Filled --------- Date to be Invoiced 1/7/80

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME GRAVES DRILLING COMPANY, INC.

Authorized by R. M.Lineham

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 1/7/80 Test Ticket No. 3467

Recorder No. 2604 Capacity 4150 Location 4432 Ft.

Clock No. ------- Elevation 1659 Kelly Bushing Well Temperature 122 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2257 P.S.I.	Open Tool	10:40A M	
B First Initial Flow Pressure	60 P.S.I.	First Flow Pressure	15 Mins.	15 Mins.
C First Final Flow Pressure	55 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1073 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	79 P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins.
F Second Final Flow Pressure	96 P.S.I.			
G Final Closed-in Pressure	987 P.S.I.			
H Final Hydrostatic Mud	2192 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 3 Inc.		Breakdown: 15 Inc.		Breakdown: 12 Inc.		Breakdown: 15 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	60	0	55	0	79	0	96
P 2 5	60	3	200	5	79	3	211
P 3 10	55	6	440	10	77	6	402
P 4 15	55	9	602	15	77	9	521
P 5		12	688	20	77	12	600
P 6		15	770	25	77	15	665
P 7		18	832	30	77	18	719
P 8		21	885	35	83	21	768
P 9		24	922	40	87	24	810
P10		27	952	45	89	27	841
P11		30	981	50	91	30	870
P12		33	1004	55	94	33	899
P13		36	1021	60	96	36	924
P14		39	1036			39	939
P15		42	1054			42	958
P16		45	1073			45	987
P17							
P18							
P19							
P20							

Warren 1
DST-1

Tkt#3467

I.