WELL NAME: Gordner #2-11
COMPANY: Deutsch Oil Company
LOCATION: 11-25S-11W
Stafford County, Kansas
DATE: 2/5/98

ORIGINAL

11-25-11W

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Deutsch Oil Co. DATE 1-30-98
WELL NAME: Gordner #2-11 KB 1809.00 ft TICKET NO: 10870 DST #1
LOCATION : 11-25S-11W CO Stafford KS GR 1801.00 ft FORMATION: Howard
INTERVAL : 2760.00 To 2835.00 ft TD 2835.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 5	Rec.	13547	11018			
SI 0	Range(Psi).	4200.0	4425.0	0.0	0.0	0.0
SF 0	Clock(hrs)	12 HR	12 HR			
FS 0	Depth(ft)	2763.0	2832.0	0.0	0.0	0.0

TIME DATA----------
PF Fr. 1000 to 1005 hr
IS Fr. to hr
SF Fr. to hr
FS Fr. to hr

	Field	1	2	3	4
A. Init Hydro	0.0	0.0	0.0	0.0	0.0
B. First Flow	0.0	0.0	0.0	0.0	0.0
. Final Flow	0.0	0.0	0.0	0.0	0.0
C. In Shut-in	0.0	0.0	0.0	0.0	0.0
D. Init Flow	0.0	0.0	0.0	0.0	0.0
E. Final Flow	0.0	0.0	0.0	0.0	0.0
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0
Final Hydro	0.0	0.0	0.0	0.0	0.0
side/Outside	O	O			

T STARTED 0830 hr
T ON BOTM hr
T OPEN 1000 hr
T PULLED 1005 hr
T OUT 1100 hr

RECOVERY
Tot Fluid 30.00 ft of 0.00 ft in DC and 30.00 ft in DP
30.00 ft of Thin drilling mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	3000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	66000.00 lbs
Initial Str Wt	36000.00 lbs
Unseated Str Wt	36000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.50 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	2745.00 ft

BLOW DESCRIPTION
Initial Flow:
Not ran
nal Flow:
Not ran

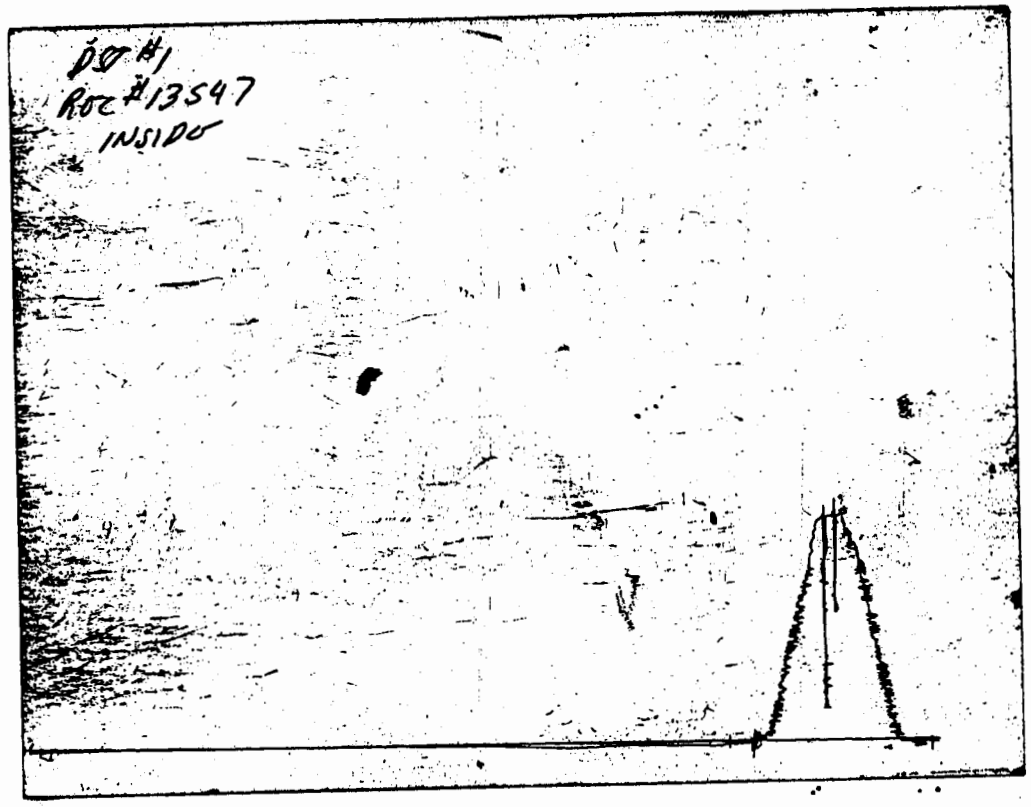
MUD DATA----------

Mud Type	Chemical
Weight	8.60 lb/c
Vis.	37.00 S/L
W.L.	12.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	0.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	John Riedl
Co. Rep.	Kent Deutsch
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: N

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

ORIGINAL

TRILOBITE TESTING L.L.C.

P.O. Box 862 • Hays, Kansas 67601

Test Ticket

№ 10870

Well Name & No. GARDNER #2-11 Test No. 1 Date 1-30-98

Company DEUTSCH OIL CO. Zone Tested HOWARD

Address 1115 BITTING BUILDING 107 N MARKET ST WICHITA KS 67202 Elevation 1809 KB 1801 GL

Co. Rep / Geo. KENT DEUTSCH Cont. DUKE DRLG RIG 2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 11 Twp. 25S Rge. 11W Co. STAFFORD State KS

No. of Copies 6OC Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) N

Interval Tested 2760 - 2835 Initial Str Wt./Lbs. 36000 Unseated Str Wt./Lbs. 36000

Anchor Length 75' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 66000

Top Packer Depth 2755 Tool Weight 3000

Bottom Packer Depth 2760 Hole Size — 7 7/8" V Rubber Size — 6 3/4" V

Total Depth 2835 Wt. Pipe Run 0 Drill Collar Run 0

Mud Wt. 8.6 LCM — Vis. 37 WL 12 Drill Pipe Size 4½XH Ft. Run 2745

Blow Description 1ST FLOW: NOT RAN

2ND FLOW: "

REMARKS: HAD 20' OF FILLUP; OPENED TOOL + STARTED SLIDING; CAME OUT WITH T

Recovery — Total Feet 30 GIP — Ft. in DC — Ft. in DP 30

Rec. 30	Feet Of THIN DRILLING MUD	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT — °F Gravity — °API D@ — °F Corrected Gravity — °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 8,000 ppm System

(A) Initial Hydrostatic Mud	PSI	Recorder No. 13547		T-Started 0830	
(B) First Initial Flow Pressure	PSI	(depth) 2763		T-Open 1000	
(C) First Final Flow Pressure	PSI	Recorder No. 11018		T-Pulled 1005	
(D) Initial Shut-in Pressure	PSI	(depth) 2832		T-Out 1100	
(E) Second Initial Flow Pressure	PSI	Recorder No. —			
(F) Second Final Flow Pressure	PSI	(depth) —			
(G) Final Shut-in Pressure	PSI	Initial Opening 5		Test MISRUN	
(H) Final Hydrostatic Mud	PSI	Initial Shut-in		Jars	
		Final Flow		Safety Joint	
		Final Shut-in		Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

TRILOBITE TESTING L.L.C.

OPERATOR : Deutsch Oil Co. DATE 1-30-98
WELL NAME: Gordner #2-11 KB 1809.00 ft TICKET NO: 10871 DST #2
LOCATION : 11-25S-11W CO Stafford KS GR 1801.00 ft FORMATION: Howard
INTERVAL : 2760.00 To 2835.00 ft TD 2835.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13547	13547	11018		
SI 45	Range(Psi)	4200.0	4200.0	4475.0	0.0	0.0
SF 30	Clock(hrs)	12 HR	12 HR	12 HR		
FS 45	Depth(ft)	2763.0	2763.0	2832.0	0.0	0.0

TIME DATA----------
PF Fr. 1600 to 1630 hr
IS Fr. 1630 to 1715 hr
SF Fr. 1715 to 1745 hr
FS Fr. 1745 to 1830 hr

	Field	1	2	3	4
A. Init Hydro	1207.0	1222.0	0.0	0.0	0.0
P First Flow	14.0	29.0	0.0	0.0	0.0
Final Flow	16.0	33.0	0.0	0.0	0.0
C. In Shut-in	58.0	63.0	0.0	0.0	0.0
D. Init Flow	31.0	30.0	0.0	0.0	0.0
E. Final Flow	62.0	77.0	0.0	0.0	0.0
F. Fl Shut-in	340.0	342.0	0.0	0.0	0.0
Final Hydro	1180.0	1196.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 1500 hr
T ON BOTM 1555 hr
T OPEN 1600 hr
T PULLED 1830 hr
T OUT 2000 hr

RECOVERY
Tot Fluid 35.00 ft of 0.00 ft in DC and 35.00 ft in DP
30.00 ft of Gas in pipe
35.00 ft of Drilling mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	3000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	46000.00 lbs
Initial Str Wt	36000.00 lbs
Unseated Str Wt	38000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.50 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	2745.00 ft

BLOW DESCRIPTION
Initial Flow:
Strong blow bottom of bucket in 1 1/2 min. no blow back
Final Flow:
Fair blow (4") dying in 15 min.
flushed tool but no help

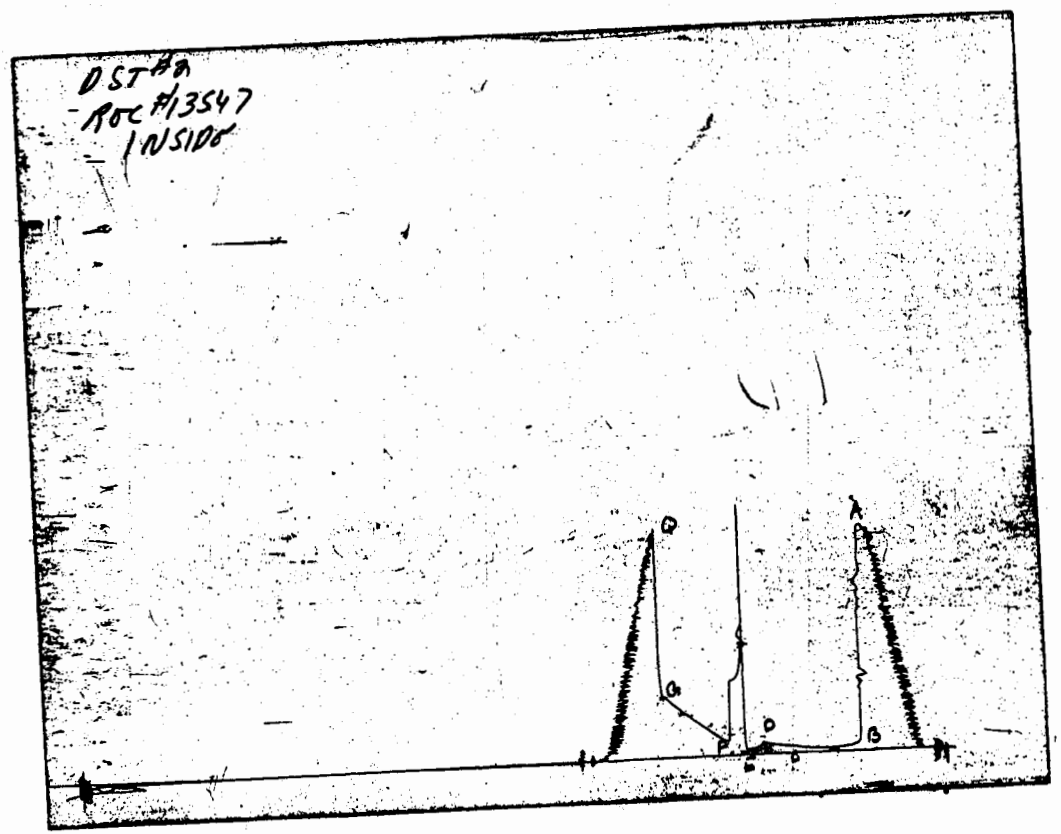
MUD DATA----------

Mud Type	Chemical
Weight	8.80 lb/cf
Vis.	40.00 S/L
W.L.	13.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	96.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	John Riedl
Co. Rep.	Kent Deutsch
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10871

Well Name & No. GARDNER #1-11 Test No. 2 Date 1-30-98

Company DEUTSCH OIL CO. Zone Tested HOWARD

Address 1115 BITTING BUILDING 107 N MARKET ST WICHITA KS 67202 Elevation ____ KB ____ GL

Co. Rep / Geo. KENT DEUTSCH Cont. DUKE DRLG RIG 2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 11 Twp. 25S Rge. 11W Co. STAFFORD State KS

No. of Copies R&C Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) N

Interval Tested 2760-2835 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. 38,000

Anchor Length 75' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 46,000

Top Packer Depth 2755 Tool Weight 3,000

Bottom Packer Depth 2760 Hole Size — 7 7/8" V Rubber Size — 6 3/4" V

Total Depth 2835 Wt. Pipe Run 0 Drill Collar Run 0

Mud Wt. 8.8 LCM — Vis. 40 WL 13 Drill Pipe Size 4½ XH Ft. Run 2745

Blow Description 1ST FLOW: STRONG BLOW BOB IN 1½ MINUTES NO BLOWBACK AND FLOW: FAIR BLOW (4") DYING IN 15 MINUTES; FLUSHED TOOL BUT NO I

Recovery — Total Feet 35 GIP 30 Ft. in DC — Ft. in DP 35

Rec. 35	Feet Of DRILLING MUD	%gas	%oil	%water	100%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 96 °F Gravity — °API D@ — °F Corrected Gravity — °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 8,000 ppm System

(A) Initial Hydrostatic Mud	1207 PSI	Recorder No.	13547 RXXX	T-Started	1500
(B) First Initial Flow Pressure	14 PSI	(depth)	2763	T-Open	1600
(C) First Final Flow Pressure	16 PSI	Recorder No.	11018	T-Pulled	1830
(D) Initial Shut-in Pressure	58 PSI	(depth)	2832	T-Out	2000
(E) Second Initial Flow Pressure	31 PSI	Recorder No.	—		
(F) Second Final Flow Pressure	62 PSI	(depth)	—		
(G) Final Shut-in Pressure	340 PSI	Initial Opening	30	Test	V
(H) Final Hydrostatic Mud	1180 PSI	Initial Shut-in	45	Jars	
		Final Flow	30	Safety Joint	
		Final Shut-in	45	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [signature] 1-30-98

TRILOBITE TESTING L.L.C.

OPERATOR : Deutsch Oil Co. DATE 2-1-98
WELL NAME: Gordner #2-11 KB 1809.00 ft TICKET NO: 10872 DST #3
LOCATION : 11-25S-11W CO Stafford KS GR 1801.00 ft FORMATION: Lansing
INTERVAL : 3475.00 To 3550.00 ft TD 3550.00 ft TEST TYPE: CONV

RECORDER DATA

	Mins		Field	1	2	3	4
PF	30	Rec.	13547	13547	11018		
SI	60	Range(Psi)	4200.0	4200.0	4425.0	0.0	0.0
SF	30	Clock(hrs)	12 HR	12 HR	12 HR		
FS	60	Depth(ft)	3478.0	3478.0	3547.0	0.0	0.0

TIME DATA----------
PF Fr. 0230 to 0300 hr
IS Fr. 0300 to 0400 hr
SF Fr. 0400 to 0430 hr
FS Fr. 0430 to 0530 hr

	Field	1	2	3	4
A. Init Hydro	1605.0	1608.0	0.0	0.0	0.0
B. First Flow	12.0	23.0	0.0	0.0	0.0
C1. Final Flow	20.0	30.0	0.0	0.0	0.0
C. In Shut-in	976.0	985.0	0.0	0.0	0.0
D. Init Flow	0.0	0.0	0.0	0.0	0.0
E. Final Flow	0.0	0.0	0.0	0.0	0.0
F. Fl Shut-in	1081.0	1101.0	0.0	0.0	0.0
G. Final Hydro	1584.0	1631.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0100 hr
T ON BOTM 0225 hr
T OPEN 0230 hr
T PULLED 0530 hr
T OUT 0700 hr

RECOVERY
Tot Fluid 90.00 ft of 0.00 ft in DC and 90.00 ft in DP
300.00 ft of Gas in pipe
90.00 ft of Very slight oil cut gassy mud
0.00 ft of 15% gas 2% oil 83% water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	3000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	60000.00 lbs
Initial Str Wt	40000.00 lbs
Unseated Str Wt	42000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.50 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	3475.00 ft

MUD DATA----------

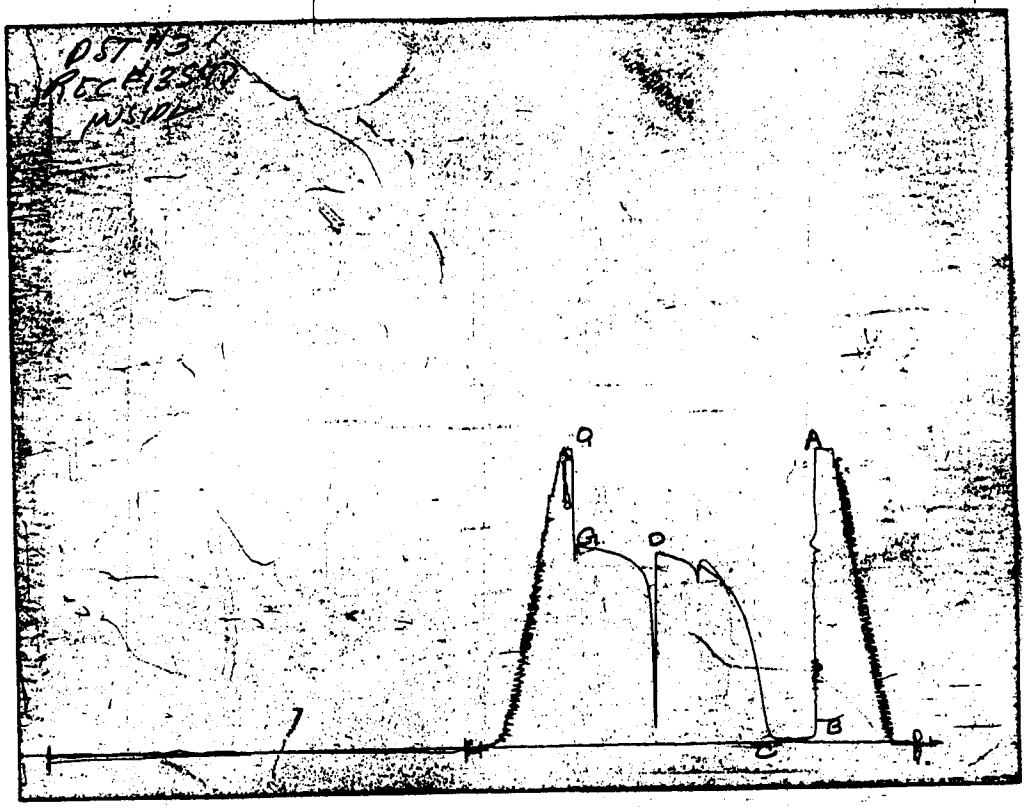
Mud Type	Chemical
Weight	9.00 lb/g
Vis.	44.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	106.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	John Riedl
Co. Rep.	Kent Deutsch
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow:
Strong blow bottom of bucket in 7 min
Decreasing after 15 min. down to 6"
by end of flow
Final Flow:
No blow

SAMPLES:
SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10872

Well Name & No. GORDNER # 2-11 Test No. 3 Date 2-1-98

Company DEUTSCH OIL CO Zone Tested LANSING

Address 125 BITTING BUILDING 107 N MARKET ST WICHITA KS 67202 Elevation 1809 KB 1801 GL

Co. Rep / Geo. KENT DEUTSCH Cont. DUKE DRLG #2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 11 Twp. 25S Rge. 11W Co. STAFFORD State KS

No. of Copies ALL Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) N

Interval Tested 3478-3550

Anchor Length 72 FT

Top Packer Depth 3473

Bottom Packer Depth 3478

Total Depth 3550

Mud Wt. 9 LCM — Vis. 44 WL 8

Initial Str Wt./Lbs. 40000 Unseated Str Wt./Lbs. 42000

Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 60000

Tool Weight 3,000

Hole Size — 7 7/8" √ Rubber Size — 6 3/4" √

Wt. Pipe Run 0 Drill Collar Run 0

Drill Pipe Size 4½ XH Ft. Run 3475

Blow Description 1ST FLOW: STRONG BLOW BOB IN 7 MINUTES - OFF BOTTOM IN 15 MINUTES DOWN TO 6" BY END OF FLOW

2ND FLOW: NO BLOW

REMARKS: TOOL PLUGGED 2ND FLOW

Recovery — Total Feet 90 GIP 300 Ft in DC — Ft in DP 90

Rec. 90 Feet Of VS OIL CUT MUD %gas 2 %oil 8 %water 90 %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

BHT 106 °F Gravity — °API DC — °F Corrected Gravity — °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud	1605 PSI	Recorder No.	13547	Started	0100
(B) First Initial Flow Pressure	12 PSI	(depth)	3490	Open	0230
(C) First Final Flow Pressure	20 PSI	Recorder No.	14014	T-Pulled	0530
(D) Initial Shut-in Pressure	976 PSI	(depth)	3545	Out	0700
(E) Second Initial Flow Pressure	INVALID PSI	Recorder No.			
(F) Second Final Flow Pressure	INVALID PSI	(depth)			
(G) Final Shut-in Pressure	1081 PSI	Initial Opening	30	Test	
(H) Final Hydrostatic Mud	1584 PSI	Initial Shut-in	60	Jars	
		Final Flow	30	Safety Joint	
		Final Shut-in	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

TRILOBITE TESTING L.L.C.

OPERATOR : Deutsch Oil Co. DATE 2-1-98
WELL NAME: Gordner #2-11 KB 1809.00 ft TICKET NO: 10873 DST #4
LOCATION : 11-25S-11W CO Stafford KS GR 1801.00 ft FORMATION: Lansing
INTERVAL : 3475.00 To 3550.00 ft TD 3550.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 90	Rec.	13547	13547	6234		
SI 15	Range(Psi)	4200.0	4200.0	4500.0	0.0	0.0
SF 0	Clock(hrs)	12 HR	12 HR	12 HR		
FS 0	Depth(ft)	3478.0	3478.0	3547.0	0.0	0.0

TIME DATA----------
PF Fr. 0900 to 1030 hr
IS Fr. 1030 to 1045 hr
SF Fr. to hr
FS Fr. to hr

	Field	1	2	3	4
A. Init Hydro	1636.0	1640.0	0.0	0.0	0.0
B. First Flow	32.0	41.0	0.0	0.0	0.0
. Final Flow	85.0	44.0	0.0	0.0	0.0
C. In Shut-in	570.0	591.0	0.0	0.0	0.0
D. Init Flow	0.0	0.0	0.0	0.0	0.0
E. Final Flow	0.0	0.0	0.0	0.0	0.0
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0
G. Final Hydro	1606.0	1610.0	0.0	0.0	0.0
Inside/Outside		O	O	I	

T STARTED 0800 hr
T ON BOTM hr
T OPEN 0900 hr
T PULLED 1045 hr
T OUT 1230 hr

RECOVERY
Tot Fluid 160.00 ft of 0.00 ft in DC and 160.00 ft in DP
120.00 ft of Gas in pipe
160.00 ft of Very slight oil cut gassy mud
0.00 ft of 10% gas 2% oil 88% water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	3000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	60000.00 lbs
Initial Str Wt	40000.00 lbs
Unseated Str Wt	44000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.50 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	3475.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak blow 2" decreasing to 1/2"
Flushed tool 20 min. into flow
and received weakening 3" blow
Flushed tool 40 min. into flow and
received slow building blow
throughout. Had 10" blow by end
of period.
Final Flow:
Not ran

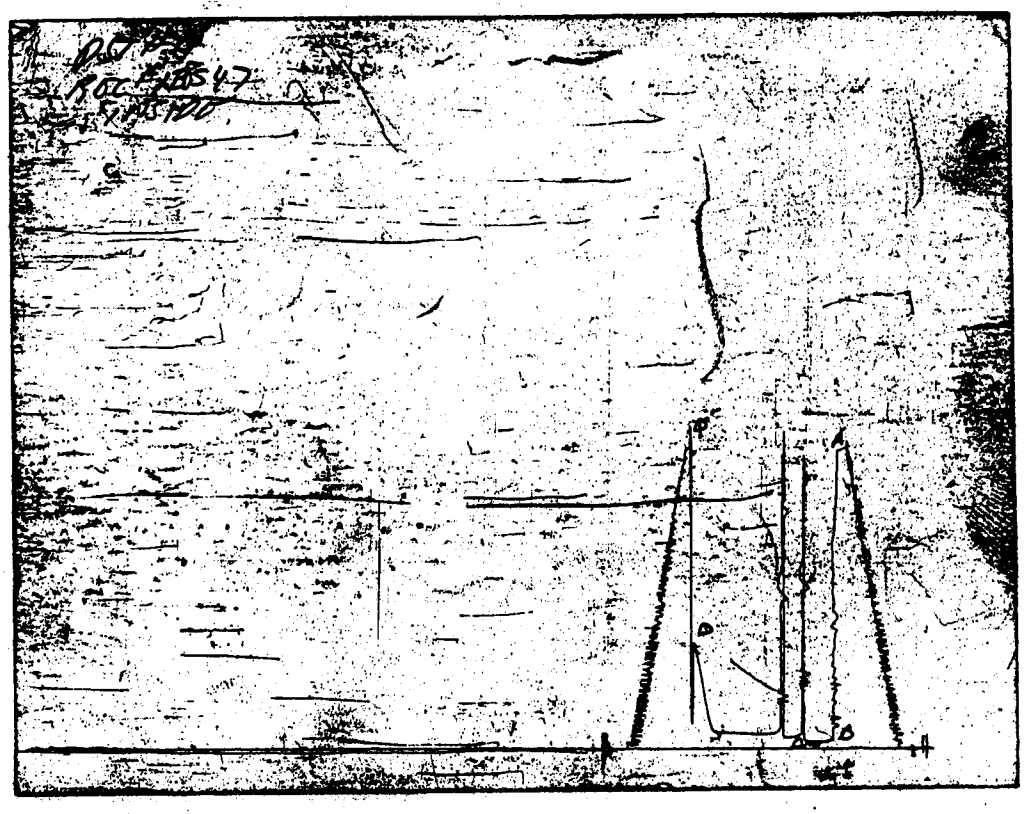
MUD DATA----------

Mud Type	Chemical
Weight	9.00 lb/c
Vis.	44.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	106.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	John Riedl
Co. Rep.	Kent Deutsch
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10873

Well Name & No. GORDNER #2-11 Test No. 4 Date 2-1-98

Company DEUTSCH OIL CO. Zone Tested LANSING

Address 111 S BITING BUILDING 107 N MARKET ST Elevation 1809 KB 1801 GL

Co. Rep / Geo. KENT DEUTSCH Cont. DUKE DRLG #2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 11 Twp. 25S Rge. 11W Co. STAFFORD State KS

No. of Copies 8&C Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) N

A.
B.

Interval Tested 3425-3550 Initial Str Wt./Lbs. 40000 Unseated Str Wt./Lbs. 44000

Anchor Length 75FT Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 60000

Top Packer Depth 3420 Tool Weight 3,000

F. Bottom Packer Depth 3425 Hole Size — 7 7/8" V Rubber Size — 6 3/4" V

Total Depth 3550 Wt. Pipe Run 0 Drill Collar Run 0

Mud Wt. 9 LCM — Vis. 44 WL 8 Drill Pipe Size 4½XH Ft. Run 3425

Blow Description 1ST FLOW: WEAK BLOW 2" DECREASING TO ½; FLUSHED TOOL 20 MIN INTO FLOW & RECEIVED WEAKENING 3" BLOW & FLUSHED TOOL 40 MINUTES INTO FLOW & RECEIVED SLOW BUILDING BLOW (2ND FLOW: NO BLOW) THROUGHOUT. HAD 10" BLOW BY END OF PERIOD.

Recovery — Total Feet 160 FLUID GIP 120 Ft. in DC — Ft. in DP 160

Rec. 160	Feet Of VC OIL CUT GASSY MUD	10 %gas	2 %oil	%water	88 %mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
In: Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 106° °F Gravity — °API D@ — °F Corrected Gravity — °API

RW — @ — °F Chlorides 3,000 ppm Recovery Chlorides 7,000 ppm System

(A) Initial Hydrostatic Mud	1636 PSI	Recorder No.	13547 RUN D	T-Started	0800
(B) First Initial Flow Pressure	32 PSI	(depth)	3478	T-Open	0900
(C) First Final Flow Pressure	85 PSI	Recorder No.	6234	T-Pulled	1045
(D) Initial Shut-in Pressure	570 PSI	(depth)	3547	T-Out	1230
(E) Second Initial Flow Pressure	— PSI	Recorder No.	—		
(F) Second Final Flow Pressure	— PSI	(depth)	—		
(G) Final Shut-in Pressure	— PSI	Initial Opening	90	Test	V
(H) Final Hydrostatic Mud	1606 PSI	Initial Shut-in	15	Jars	
		Final Flow	0	Safety Joint	
		Final Shut-in	0	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	
				TOTAL PRICE $	

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Approved By [signature]

Our Representative John Reed

TRILOBITE TESTING L.L.C.

OPERATOR : Deutsch Oil Co. DATE 2-1-98
WELL NAME: Gordner #2-11 KB 1809.00 ft TICKET NO: 10874 DST #5
LOCATION : 11-25S-11W CO Stafford KS GR 1801.00 ft FORMATION: Lansing/KC
INTERVAL : 3592.00 To 3650.00 ft TD 3650.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13547	13547	6234		
SI 45	Range(Psi)	4200.0	4200.0	4500.0	0.0	0.0
SF 30	Clock(hrs)	12 HR	12 HR	12 HR		
FS 60	Depth(ft)	3595.0	3595.0	3647.0	0.0	0.0

TIME DATA----------
PF Fr. 2240 to 2310 hr
IS Fr. 2310 to 2355 hr
SF Fr. 2355 to 0025 hr
FS Fr. 0025 to 0125 hr

	Field	1	2	3	4
A. Init Hydro	1690.0	1683.0	0.0	0.0	0.0
B. First Flow	25.0	52.0	0.0	0.0	0.0
Final Flow	37.0	39.0	0.0	0.0	0.0
C. In Shut-in	1150.0	1165.0	0.0	0.0	0.0
D. Init Flow	50.0	70.0	0.0	0.0	0.0
E. Final Flow	58.0	82.0	0.0	0.0	0.0
F. Fl Shut-in	1180.0	1172.0	0.0	0.0	0.0
Final Hydro	1664.0	1659.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 2130 hr
T ON BOTM 2235 hr
T OPEN 2240 hr
T PULLED 0125 hr
T OUT 0300 hr

RECOVERY
Tot Fluid 150.00 ft of 0.00 ft in DC and 150.00 ft in DP
30.00 ft of Gas in pipe
30.00 ft of Very slight oil cut gasy watery mud
0.00 ft of 5% gas 1% oil 10% water 84% mud
120.00 ft of Muddy water 60% water 40% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 35000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	3000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	6000.00 lbs
Initial Str Wt	42000.00 lbs
Unseated Str Wt	45000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.50 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	3575.00 ft

BLOW DESCRIPTION
Initial Flow:
Fair blow (slow build to 5")
Final Flow:
Weak blow dead in 10 min. flushed
tool but no help

MUD DATA----------

Mud Type	Chemical
Weight	9.30 lb/cf
Vis.	45.00 S/L
W.L.	9.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	109.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	John Riedl
Co. Rep.	Kent Deutsch
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10874

Well Name & No. GORDNER #2-11 Test No. 5 Date 2-2-98

Company DEUTSCH OIL CO. Zone Tested LANSING/KC

Address 105 BITTING BUILDING 100 N MARKET WICHITA Elevation 1809 KB 1801 GL

Co. Rep / Geo. KENT DEUTSCH Cont. DUKE DRLG RIG 2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 11 Twp. 25S Rge. 11W Co. STAFFORD State KS

No. of Copies 6 Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) N

Interval Tested 3592-3650 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. 45000

Anchor Length 58 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 6000

Top Packer Depth 3587 Tool Weight 3,000

Bottom Packer Depth 3592 Hole Size — 7 7/8" √ Rubber Size — 6 3/4" √

Total Depth 3650 Wt. Pipe Run 0 Drill Collar Run 0

Mud Wt. 9.3 LCM — Vis. 45 WL 9 Drill Pipe Size 4½XH Ft. Run 3575

Blow Description 1ST FLOW: FAIR BLOW (SLOW BUILD TO 5")

2ND FLOW: WEAK BLOW DEAD IN 10 MINUTES FLUSHED TOOL BUT NO HOT

Recovery — Total Feet 150 FLUID GIP 30 Ft. in DC — Ft. in DP 150

Rec. 30 Feet Of VS OIL CUT (GAS) WATERY MUD 5 %gas 1 %oil 10 %water 84 %mud

Rec. 120 Feet Of MUDDY WATER %gas %oil 60 %water 40 %mud

Rec. ____ Feet Of ____ %gas %oil %water %mud

Rec. ____ Feet Of ____ %gas %oil %water %mud

Rec. ____ Feet Of ____ %gas %oil %water %mud

BHT 109 °F Gravity — °API D@ — °F Corrected Gravity — °API

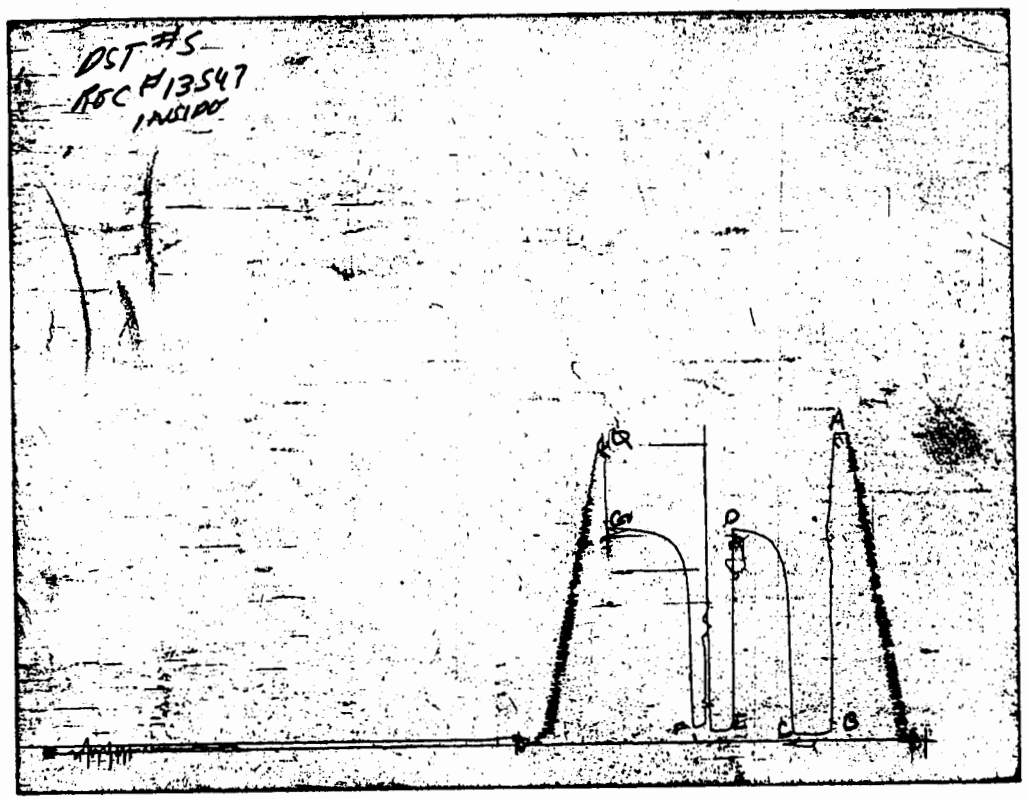
RW .26 @ 60 °F Chlorides 35,000 ppm Recovery Chlorides 7,000 ppm System

(A) Initial Hydrostatic Mud	1690 PSI	Recorder No.	13547 READ	T-Started	2150
(B) First Initial Flow Pressure	25 PSI	(depth)	3595	T-Open	2240
(C) First Final Flow Pressure	27 PSI	Recorder No.	6234	T-Pulled	0125
(D) Initial Shut-in Pressure	1160 PSI	(depth)	3647	T-Out	0300
(E) Second Initial Flow Pressure	50 PSI	Recorder No.			
(F) Second Final Flow Pressure	58 PSI	(depth)	—		
(G) Final Shut-in Pressure	1180 PSI	Initial Opening	30	Test	√
(H) Final Hydrostatic Mud	1664 PSI	Initial Shut-in	45	Jars	
		Final Flow	30	Safety Joint	
		Final Shut-in	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	

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Approved By [signature]

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

OPERATOR : Deutsch Oil Co. DATE 2-2-98
WELL NAME: Gordner #2-11 KB 1809.00 ft TICKET NO: 10875 DST #6
LOCATION : 11-25S-11W CO Stafford KS GR 1801.00 ft FORMATION: Viola
INTERVAL : 3798.00 To 3900.00 ft TD 3900.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13547	13547	6234		
SI 60	Range(Psi)	4200.0	4200.0	4500.0	0.0	0.0
SF 20	Clock(hrs)	12 HR	12 HR	12 HR		
FS 60	Depth(ft)	3801.0	3801.0	3897.0	0.0	0.0

TIME DATA----------
PF Fr. 2050 to 2120 hr
IS Fr. 2120 to 2220 hr
SF Fr. 2220 to 2240 hr
FS Fr. 2240 to 2340 hr

	Field	1	2	3	4
A. Init Hydro	1815.0	1814.0	0.0	0.0	0.0
B. First Flow	530.0	548.0	0.0	0.0	0.0
Final Flow	564.0	562.0	0.0	0.0	0.0
C. In Shut-in	635.0	629.0	0.0	0.0	0.0
D. Init Flow	510.0	518.0	0.0	0.0	0.0
E. Final Flow	560.0	576.0	0.0	0.0	0.0
F. Fl Shut-in	630.0	642.0	0.0	0.0	0.0
Final Hydro	1792.0	1788.0	0.0	0.0	0.0
side/Outside	O	O	I		

T STARTED 1930 hr
T ON BOTM 2045 hr
T OPEN 2050 hr
T PULLED 2340 hr
T OUT 0130 hr

RECOVERY
Tot Fluid 420.00 ft of 0.00 ft in DC and 420.00 ft in DP
120.00 ft of Gassy oil cut watery mud
0.00 ft of 30% gas 5% oil 20% water 45% mud
60.00 ft of Gassy oil cut water 305 gas 5% oil 65% water
240.00 ft of Gassy water 25% gas 75% water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 34000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	3000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	44000.00 lbs
Unseated Str Wt	46000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.50 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	3788.00 ft

BLOW DESCRIPTION
Initial Flow:
Strong blow Gas to surface in 3 min.
muddy must in 25 min.
Final Flow:
Gas to surface accompanied by muddy
mist throughout

MUD DATA----------

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	42.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	118.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	John Riedl
Co. Rep.	Kent Deutsch
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

GAS RECOVERY

COMPANY: Deutsch Oil Co. DATE: 2-2-98
WELL NAME: Gordner #2-11 KB Elev: 1809.00 ft TICKET #10875 DST #6
WELL LOCATION: 11-25S-11W CO Stafford KS GR Elev: 1801.00 ft FORMATION: Viola
INTERVAL Fr.: 3798.00 To 3900.00 T.D.: 3900.00 ft TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Merla Gauge

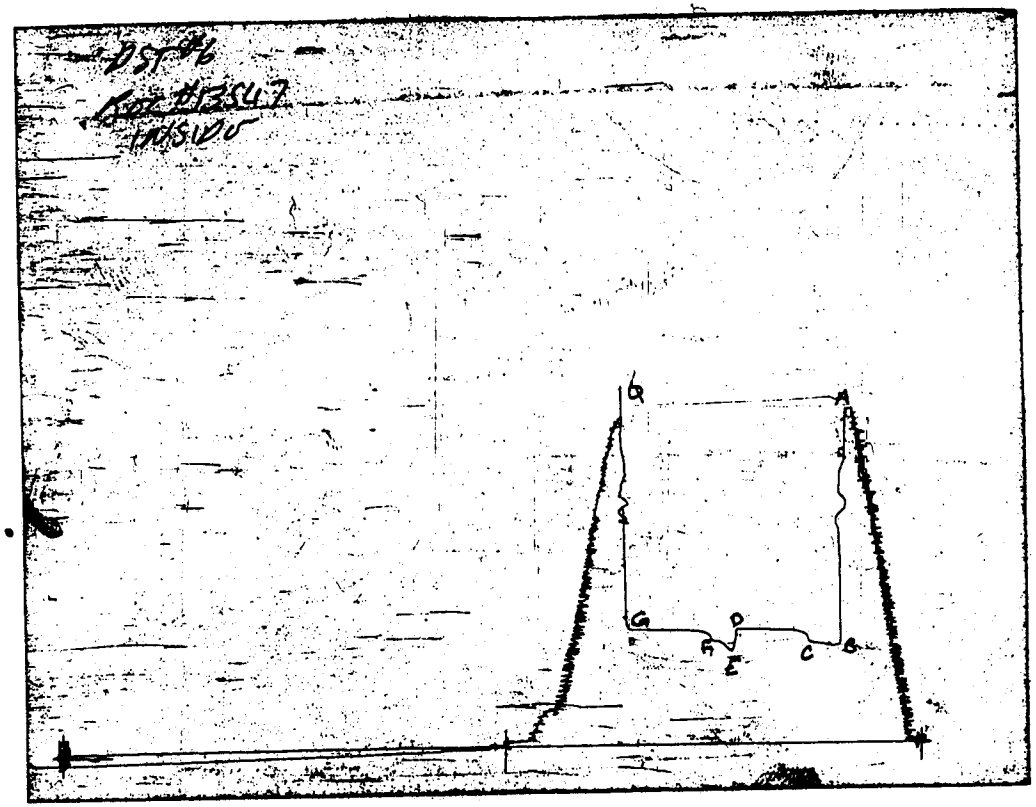
***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.25	0	10	802000.0
10	1.25	0	14	980000.0
15	1.25	0	14	980000.0
20	1.25	0	14	980000.0
25	1.25	0	12	893000.0
30	1.25	0	12	893000.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.25	0	10	802000.0
10	1.25	0	14	980000.0
15	1.25	0	16	1064000.0
20	1.25	0	20	1146000.0

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

DEUTSCH OIL — OPERATOR

GORDNER #2-11 — WELL NAME AND NO.

6 — DST NO.

Min.	Ins. of Water PSIG	Orifice Size	CF/D	Min.	Ins. of Water PSIG	Orifice Size	CF/D
5	10	1/4	802 MCF/D	5	10	1/4	802 MCF/D
10	14	"	980 "	10	14	"	980 "
15	14	"	980 "	15	16	"	1064 "
20	14	"	980 "	20	18	"	1146 "
25	12	"	893 "				
30	12	"	893 "				

Remarks:

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10875

Well Name & No. GARDNER #2-11 Test No. 6 Date 2-2-98

Company DEUTSCH OIL CO. Zone Tested VIOLA

Address 111 S BITTING BUILDING 107 N MARKET WICHITA KS Elevation 1809 KB 1801 GL

Co. Rep / Geo. KENT DEUTSCH Cont. DUKE DRLG #2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 11 Twp. 25S Rge. 11W Co. STAFFORD State KS

No. of Copies R06 Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) N

Interval Tested 3798 - 3900 Initial Str Wt./Lbs. 44000 Unseated Str Wt./Lbs. 46000

Anchor Length 102' Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 80000

Top Packer Depth 3793 Tool Weight 3,000

Bottom Packer Depth 3798 Hole Size — 7 7/8" V Rubber Size — 6 3/4" V

Total Depth 3900 Wt. Pipe Run 0 Drill Collar Run 0

Mud Wt. 9 LCM — Vis. 42 WL 9.6 Drill Pipe Size 4½XH Ft. Run 3788

Blow Description 1ST FLOW: STRONG BLOW GTS 3 MINUTES; MUDDY MIST IN 2S.
2ND FLOW: GAS TO SURFACE ACCOMPANIED BY MUDDY MIST THROUGHOUT
(SEE GAS VOLUME REPORT)

Recovery — Total Feet 420 GIP GAS TO SURFACE Ft. in DC — Ft. in DP 420

Rec. 120	Feet Of	GASSY OIL CUT WATERY MUD	30 %gas	5 %oil	20 %water	45 %mud
Rec. 60	Feet Of	GASSY OIL CUT WATER	30 %gas	5 %oil	65 %water	%mud
Rec. 240	Feet Of	GASSY WATER	25 %gas	%oil	75 %water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud

BHT 118 °F Gravity — °API D@ — °F Corrected Gravity — °API

RW .22 @ 70 °F Chlorides 34,000 ppm Recovery Chlorides 8,000 ppm System

(A) Initial Hydrostatic Mud	1815 PSI	Recorder No.	13547 ROAD	T-Started	1930
(B) First Initial Flow Pressure	530 PSI	(depth)	3801	T-Open	2050
(C) First Final Flow Pressure	564 PSI	Recorder No.	6234	T-Pulled	2340
(D) Initial Shut-in Pressure	635 PSI	(depth)	3810	T-Out	0130
(E) Second Initial Flow Pressure	510 PSI	Recorder No.	—		
(F) Second Final Flow Pressure	560 PSI	(depth)	—		
(G) Final Shut-in Pressure	630 PSI	Initial Opening	30	Test	V
(H) Final Hydrostatic Mud	1792 PSI	Initial Shut-in	60	Jars	
		Final Flow	20	Safety Joint	
		Final Shut-in	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	

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Approved By