15-055-21461 12-23s-34w

Well Name:	KRAUS #14-12				
Company :	WESTPORT OIL & GAS CO				
Location - Sec:	12	**Twp:**	23S	**Rge:**	34W
County:	FINNEY	**State:**	KS		
Date:	01/08/96				

TRILOBITE TESTING L.L.C.

OPERATOR : Westport Oil & Gas Co DATE 01/04/96
WELL NAME: Kraus #14-12 KB 2496.00 ft TICKET NO: 8831 DST #1
LOCATION : 12-23S-34W, Finney Cty KS GR 2491.00 ft FORMATION: Atoka
INTERVAL : 4509.00 To 4540.00 ft TD 4540.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13339	13339	13276		
SI 60	Range(Psi)	4000.0	4000.0	0.0	0.0	0.0
SF 60	Clock(hrs)	AK-1	AK-1	AK-1		
FS 120	Depth(ft)	4535.0	4535.0	4530.0	0.0	0.0

TIME DATA----------
PF Fr. 0306 to 0336 hr
IS Fr. 0336 to 0436 hr
SF Fr. 0436 to 0536 hr
FS Fr. 0536 to 0736 hr

	Field	1	2	3	4
A. Init Hydro	2233.0	2256.0	0.0	0.0	0.0
B. First Flow	0.0	0.0	0.0	0.0	0.0
B1. 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	20.0	42.0	0.0	0.0	0.0
E. Final Flow	20.0	42.0	0.0	0.0	0.0
F. Fl Shut-in	363.0	395.0	0.0	0.0	0.0
G. Final Hydro	2213.0	2252.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0020 hr
T ON BOTM 0304 hr
T OPEN 0306 hr
T PULLED 0736 hr
T OUT 0915 hr

RECOVERY
Tot Fluid 2.00 ft of 0.00 ft in DC and 0.00 ft in DP
2.00 ft of Drilling mud w/ oil specks

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

Tool Wt.	0.00 lbs
Wt Set On Packer	30000.00 lbs
Wt Pulled Loose	74000.00 lbs
Initial Str Wt	60000.00 lbs
Unseated Str Wt	62000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	4193.00 ft
H.W. I.D	2.70 in
H.W. Length	316.00 ft

SALINITY 3000.00 P.P.M. A.P.I. Gravity 0.00

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

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	48.00 S/L
W.L.	8.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	115.00 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	Rod Steinbrink
Co. Rep.	Ron Osterbuhr
Contr.	Abercrombie
Rig #	4
Unit #	
Pump T.	

BLOW DESCRIPTION

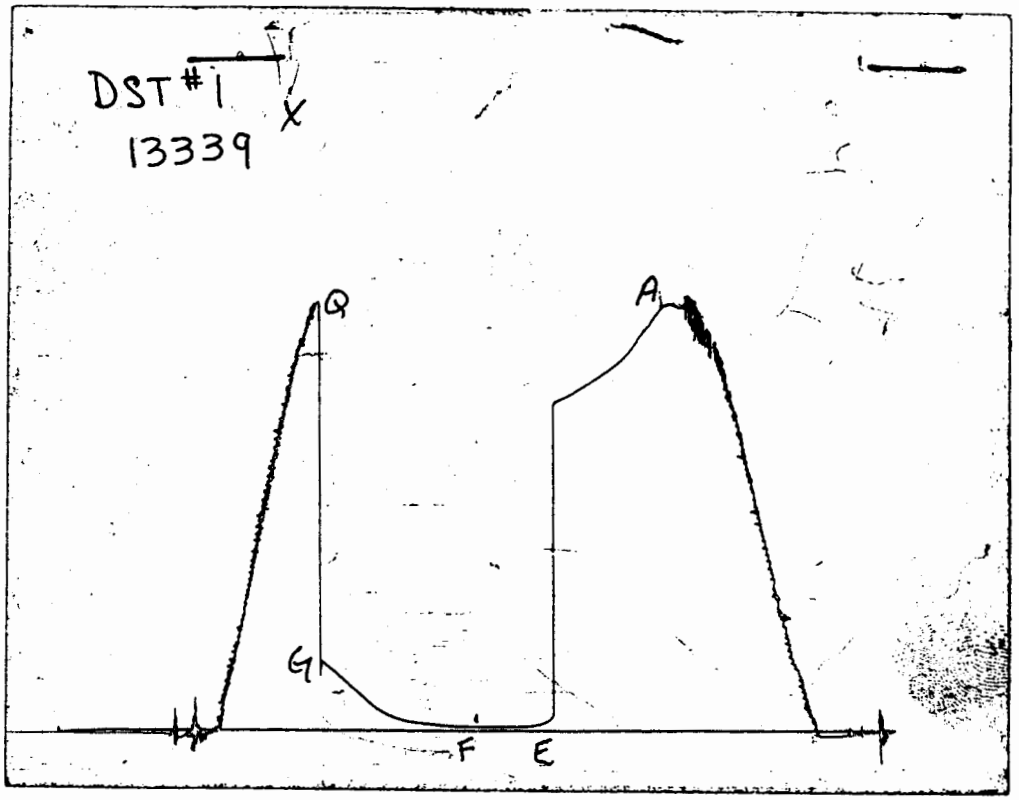
Initial Flow -
Weak .25" blow, died in 10 min

Final Flow -
No return blow

SAMPLES:
SENT TO:

Test Successful: N

CHART PAGE



This is an actual photograph of recorder chart

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Kraus #14-12

LOCATION : 12-23S-34W, Finney Cty KS

TICKET No. 8831 D.S.T. No. 1 DATE 01/04/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 31

TOTAL TOOL 61

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 61

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4193

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4570

TOTAL DEPTH 4540

TOTAL DRILL PIPE ABOVE K.B. 30

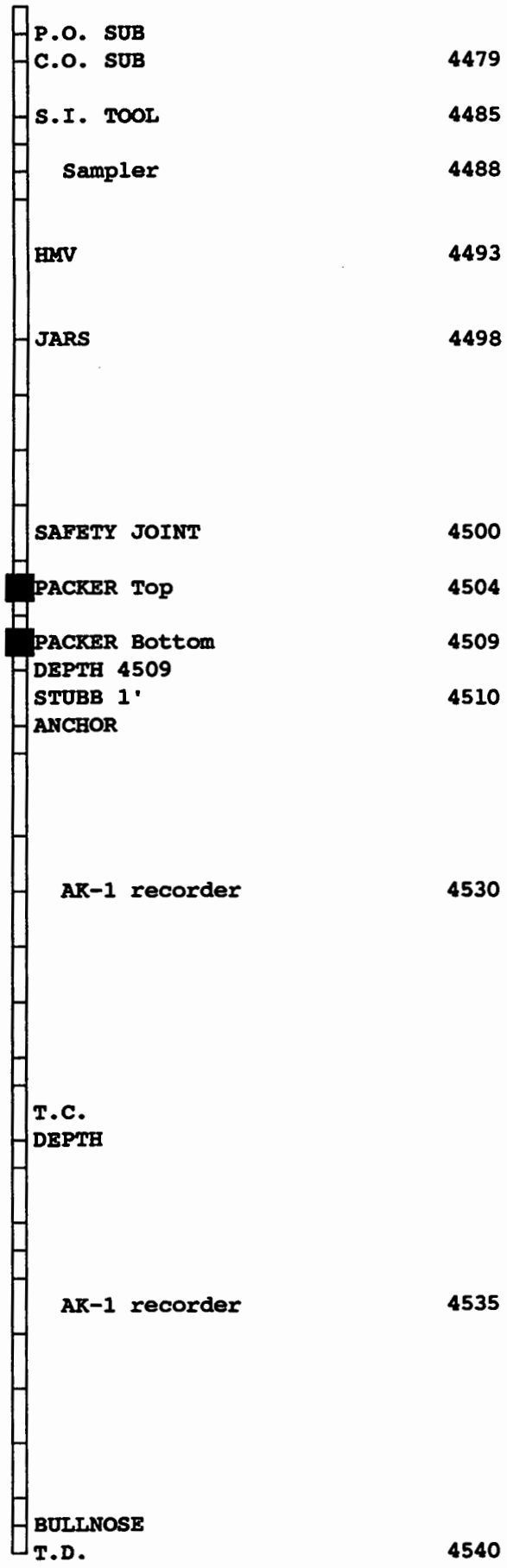
REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -
Oil specks, Mud 4000 ml, Pressure 0 PSI,
Total 4000 ml

SAMPLER ANALYSIS -
Resistivity 1.7 ohms @ 80 F;
Chlorides 3000 ppm

PIT MUD ANALYSIS -
Chlorides 3000 ppm, Resist 1.7 ohms @ 80 F;
Viscosity 48, Mud Wt 9.2, Filtrate 8.2



P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 8831

Well Name & No. Kraus #14-12 Test No. 1 Date 1-4-96

Company Westport Oil & Gas Company Zone Tested Atoka

Address 410 17th Street #2410 Denver, CO. 80202 Elevation 2496 KB 2491 GL

Co. Rep / Geo. Ron Osterbuhr Cont. Abercrombie #4 Est. Ft. of Pay ___ Por. ___ %

Location: Sec. 12 Twp. 23S Rge. 34W Co. Finney State KS

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

Interval Tested 4509 - 4540 Initial Str Wt./Lbs. 60,000 Unseated Str Wt./Lbs. 62,000

Anchor Length 31' Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 74,000

Top Packer Depth 4504 Hole Size — 7 7/8" ___ Rubber Size — 6 3/4" ___

Bottom Packer Depth 4509 Wt. Pipe I.D. — 2.7 Ft. Run 316'

Total Depth 4540 Drill Collar — 2.25 Ft. Run —

Mud Wt. 9.2 LCM ___ Vis. 48 WL 8.2 Drill Pipe Size 4½" XH Ft. Run 4193'

Blow Description Weak ¼" blow died in 10 mins.

FF: No return blows.

Recovery — Total Feet 2' Ft. in DC — Ft. in WP 2' Ft. in DP —

Rec.	Feet Of		%gas	%oil	%water	%mud
Rec. 2'	Feet Of	Drlg. Mud	%gas	%oil	%water	%mud
Rec.	Feet Of	w/Oil Specks	%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud

BHT 115° °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API

RW 1.7 @ 80° °F Chlorides 3,000 ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud	2233 PSI	Recorder No.	13276	T-Started	00:20
(B) First Initial Flow Pressure	___ PSI	@ (depth)	4530	T-Open	03:06
(C) First Final Flow Pressure	___ PSI	Recorder No.	13339	T-Pulled	07:36
(D) Initial Shut-in Pressure	___ PSI	@ (depth)	4535	T-Out	09:15
(E) Second Initial Flow Pressure	20 PSI	Recorder No.	—		
(F) Second Final Flow Pressure	20 PSI	@ (depth)	—		
(G) Final Shut-in Pressure	363 PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2213 PSI	Initial Shut-in	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-in	120	Straddle	___
				Circ. Sub	X N/C
				Sampler	X 200
				Extra Packer	___
				Elect. Rec.	___
				Other	___
				TOTAL PRICE $	1050

Approved By Larry D. Benedick

Our Representative Rod Steinbrink

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 8831 Date 1-4-96

Company Name Westport Oil & Gas Cont. Abercrombie #4

Lease Kraus #14-12 Test No. 1 Atoka

County Finney KS. Sec. 12 Twp. 23S Rng. 34W

SAMPLER RECOVERY

Gas _____ ML

Oil Specks ML

Mud 4,000 ML

Water _____ ML

Other _____ ML

Pressure 0 PSI

Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 3,000 ppm.

Resistivity 1.7 ohms @ 80° F

Viscosity 48

Mud Weight 9.2

Filtrate 8.2

Other _____

SAMPLER ANALYSIS

Resistivity 1.7 ohms @ 80° F

Chlorides 3,000 ppm.

Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

MIDDLE

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

BOTTOM

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

TRILOBITE TESTING L.L.C.

OPERATOR : Westport Oil & Gas Co DATE 1/5/96
WELL NAME: Kraus #14-12 KB 2496.00 ft TICKET NO: 8832 DST #2
LOCATION : 12-23S-34W, Finney Cty KS GR 2491.00 ft FORMATION: Morrow
INTERVAL : 4611.00 To 4646.00 ft TD 4646.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13339	13339	13276		
SI 60	Range(Psi)	4000.0	4000.0	0.0	0.0	0.0
SF 60	Clock(hrs)	AK-1	AK-1	AK-1		
FS 120	Depth(ft)	4641.0	4641.0	4636.0	0.0	0.0

TIME DATA----------
PF Fr. 0015 to 0045 hr
IS Fr. 0045 to 0145 hr
SF Fr. 0145 to 0245 hr
FS Fr. 0245 to 0445 hr

	Field	1	2	3	4
A. Init Hydro	2343.0	2340.0	0.0	0.0	0.0
B. First Flow	72.0	81.0	0.0	0.0	0.0
B1. Final Flow	83.0	84.0	0.0	0.0	0.0
C. In Shut-in	1070.0	1025.0	0.0	0.0	0.0
D. Init Flow	135.0	125.0	0.0	0.0	0.0
E. Final Flow	155.0	150.0	0.0	0.0	0.0
F. Fl Shut-in	1090.0	1050.0	0.0	0.0	0.0
G. Final Hydro	2323.0	2322.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 2015 hr
T ON BOTM 0013 hr
T OPEN 0015 hr
T PULLED 0445 hr
T OUT 0745 hr

RECOVERY
Tot Fluid 255.00 ft of 0.00 ft in DC and 0.00 ft in DP
45.00 ft of Gas in pipe
15.00 ft of Gassy mud cut oil - 10% gas, 50% oil, 40% mud
60.00 ft of Heavy gas & oil cut mud - 45% gas, 25% oil, 30% mud
180.00 ft of Gassy oil cut mud - 10% gas, 10% oil, 80% mud

SALINITY 0.00 P.P.M. A.P.I. Gravity 31.20

BLOW DESCRIPTION
Initial Flow -
Weak to fair blow off bottom in 11 min

Initial Shutin -
Bled off blow, surface return built to .25", died at 30 min

Final Flow -
Fair to strong blow off bottom in 1.5 min

Final Shutin -
Bled off blow, surface return built to 1" died at 60 min

SAMPLES:
SENT TO:

Test Successful: Y

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

Tool Wt.	0.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	70000.00 lbs
Initial Str Wt	62000.00 lbs
Unseated Str Wt	64000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	4287.00 ft
H.W. I.D	2.70 in
H.W. Length	316.00 ft

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

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	45.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	121.00 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	Rod Steinbrink
Co. Rep.	Ron Osterbuhr
Contr.	Abercrombie
Rig #	4
Unit #	
Pump T.	

COMPUTER OIL EVALUATION BY TRILOBITE TESTING, L.L.C.

Westport Oil & Gas Co Inc

Kraus #14-12 DST 2

12 23S 34W Finney COUNTY

ELEVATION:	2496	KB	EST. PAY	6	FT
DATUM:	-2146		ZONE TESTED:	Morrow	
TEST INTERVAL:	4611-4646		TIME INTERVALS:	30-60-60-120	
RECORDER DEPTH:	4641		VISCOSITY:	11.78	CP
BOTTOM HOLE TEMP:	121		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	2			
TOTAL FEET OF RECOVERY:	255.00	CORRECTED PIPE FILLUP:	411.141	
TOTAL BARRELS OF RECOVERY:	1.79	CORR. BARRELS OF RECOVERY:	4.005	BBL
BARRELS IN DRILL PIPE:	0.00	API GRAVITY:	31	
BARRELS IN WEIGHT PIPE:	1.79	FLUID GRADIENT:	0.377	
BARRELS IN DRILL COLLARS:	0.00			
GAS OIL RATIO:	0.98	CU.FT/BBL		
BUBBLE POINT PRESSURE:	29			
UNCORRECTED INITIAL PRODUCTION:			28.56	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			64.08	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			15.13	

INITIAL SLOPE	768.20	PSI/CYCLE	FINAL SLOPE	272.10	PSI/CYCLE
INITIAL P*	1160.31	PSI	FINAL P*	1116.27	PSI

TRANSMISSIBILITY	38.30	(MD.-FT./CP.)
PERMEABILITY	75.19	(MD.)
INDICATED FLOW CAPACITY	451.12	(MD.FT)
PRODUCTIVITY INDEX	0.04	(BBL/DAY/PSI)
DAMAGE RATIO	0.65	
RADIUS OF INVESTIGATION	82.26	(FT.)
POTENTIOMETRIC SURFACE	443.63	(FT.)
DRAWDOWN FACTOR	3.796	(%)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE	0.00	
THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE	0.00	

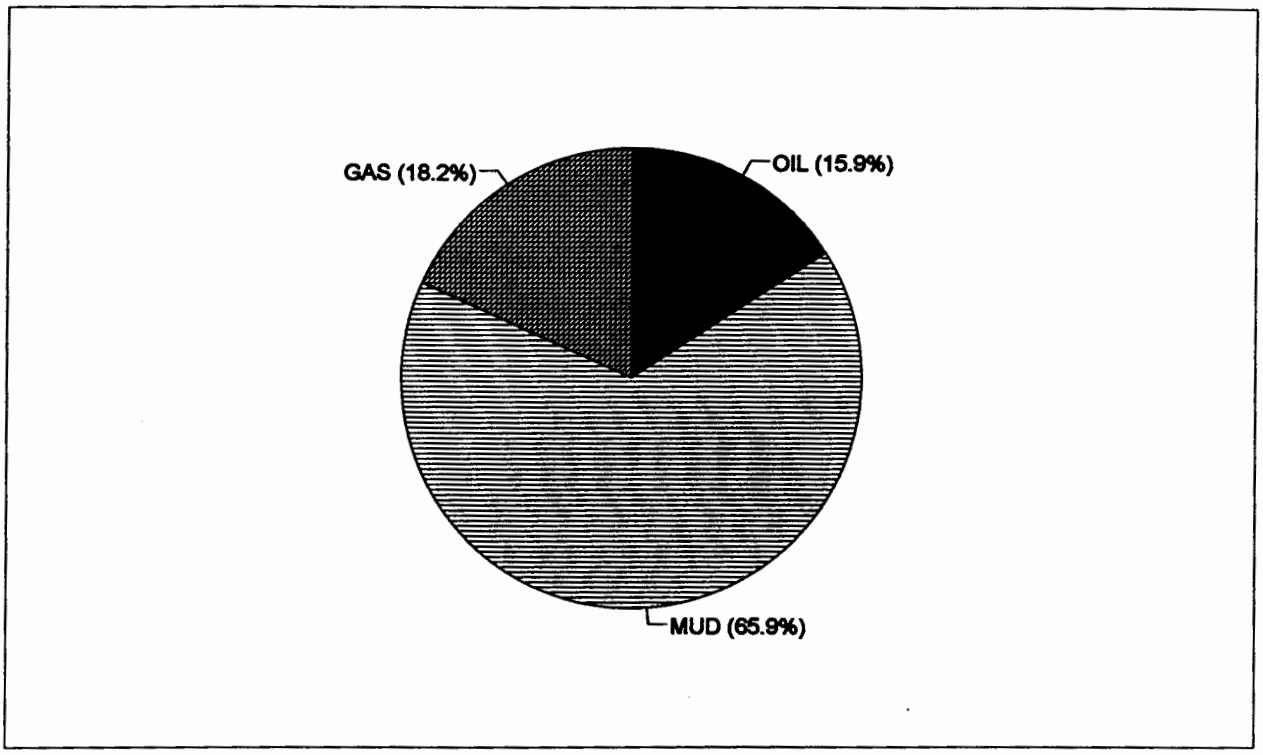
CALCULATED RECOVERY ANALYSIS WEIGHT PIPE

DST # 2 TICKET # 8832

****

SAMPLE #	TOTAL FEET		GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
1	15		10	1.5	50	7.5		0	40	6
2	60		45	27	25	15		0	30	18
3	180		10	18	10	18		0	80	144
4				0		0		0		0
5				0		0		0		0
TOTAL	255	18.23529		46.5	15.88235	40.5	0	0	65.88235	168

			HRS OPE	BBL/DAY
BBL OIL=	0.2835	*	1.50	4.536
BBL WATER	0	*		0
BBL MUD=	1.176			
BBL GAS=	0.3255			



FLUID SAMPLER DATA

Ticket No.: 8832 Date: 1/5/96

Company: WESTPORT OIL & GAS CO, INC

Lease: KRAUS #14-12 Test No.: 2

County: FINNEY Sec.: 12 Twp.: 23S Rng.: 34W

SAMPLER RECOVERY

Gas	200	ML
Oil	3000	ML
Mud	800	ML
Water		ML
Other		ML
Pressure	600	PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity	1.8	ohms@	80	F
Chlorides		2800		ppm.
Gravity	31.2	corrected @60F		

PIT MUD ANALYSIS

Chlorides	2800		
Resistivit		ohms@	F
Viscosity	45		
Mud Wt.	9.2		
Filtrate	8		
LCM			

PIPE RECOVERY

TOP

Resistivit	ohms@	F
Chlorides		ppm.

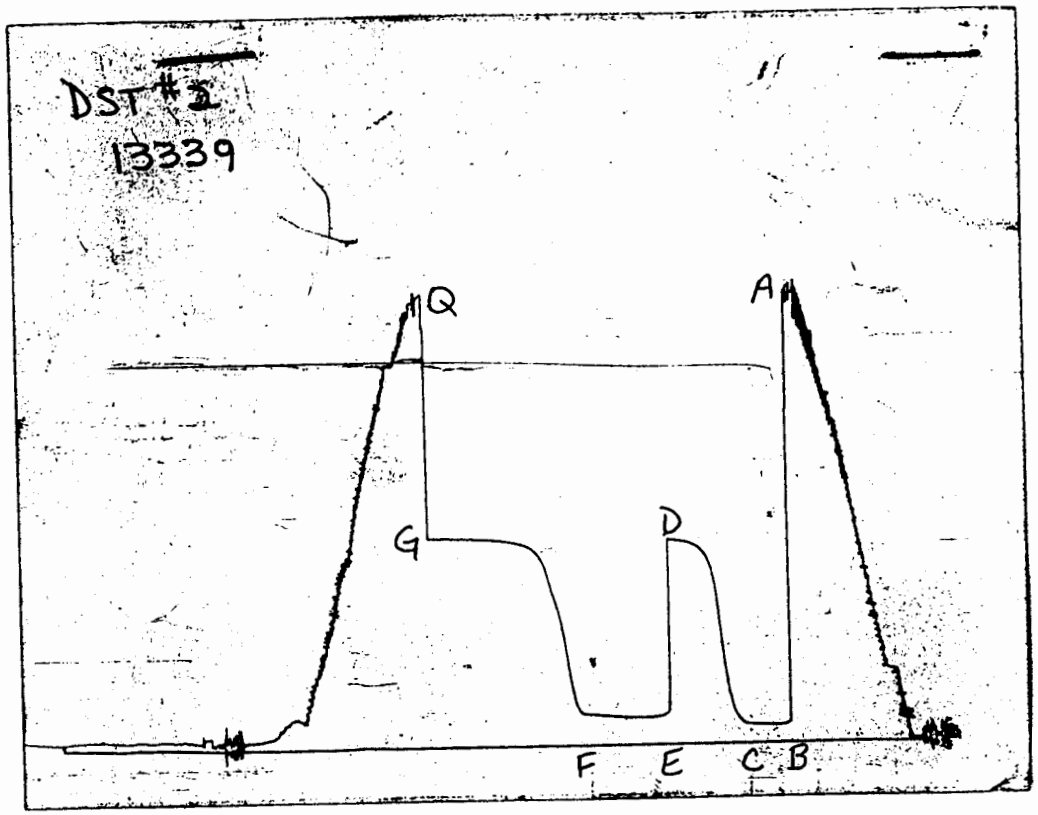
MIDDLE

Resistivit	ohms@	F
Chlorides		ppm.

BOTTOM

Resistivit	1.8	ohms@	80	F
Chlorides		2800		ppm.

CHART PAGE



This is an actual photograph of recorder chart

INITIAL FLOW

DST # 2
RECORDER 13339

TIME(MIN)	PRESSURE	<> PRESSURE
0	81.12	81.1
3	81.12	0.0
6	81.12	0.0
9	81.12	0.0
12	81.12	0.0
15	82.16	1.0
18	82.16	0.0
21	82.16	0.0
24	84.24	2.1
27	84.24	0.0
30	84.24	0.0

FINAL FLOW

DST # 2
RECORDER 13339

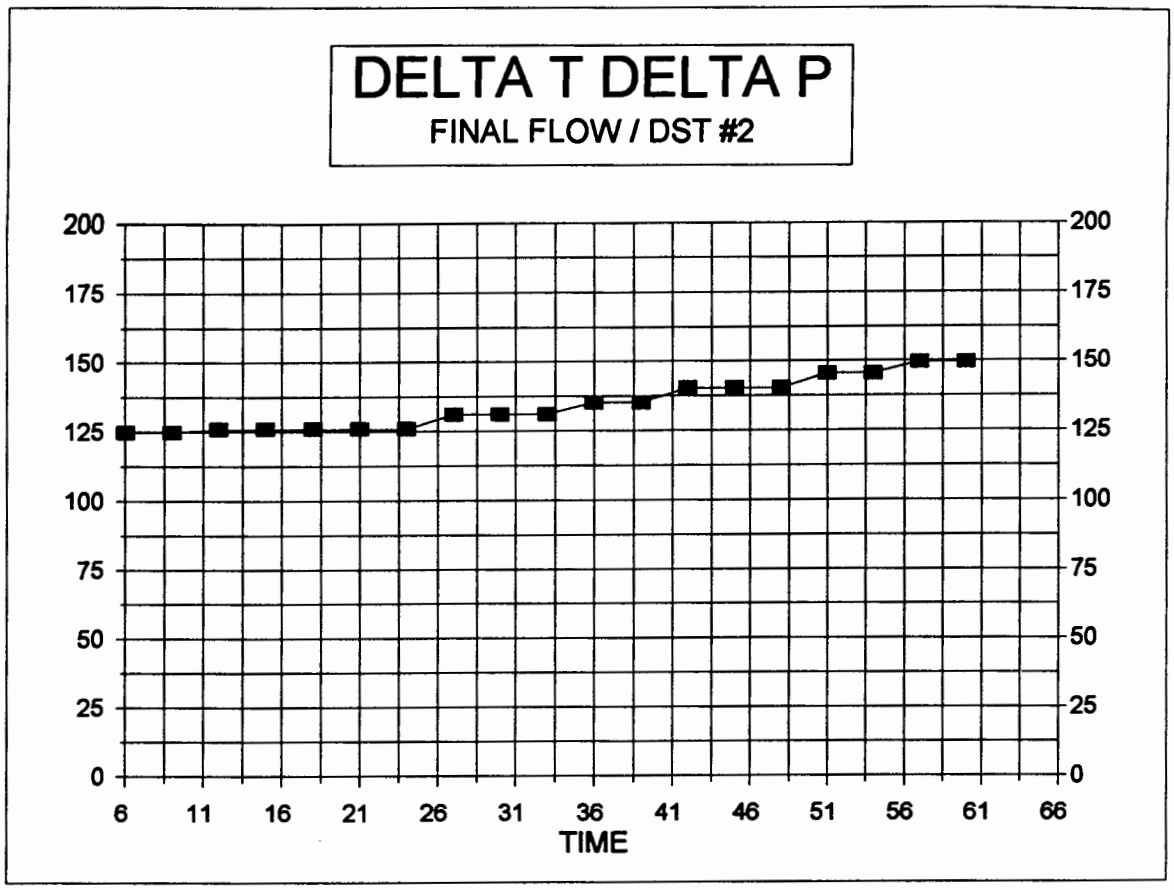
TIME(MIN)	PRESSURE	<> PRESSURE
0	124.77	124.8
3	124.77	0.0
6	124.77	0.0
9	124.77	0.0
12	125.81	1.0
15	125.81	0.0
18	125.81	0.0
21	125.81	0.0
24	125.81	0.0
27	131.00	5.2
30	131.00	0.0
33	131.00	0.0
36	135.15	4.2
39	135.15	0.0
42	140.34	5.2
45	140.34	0.0
48	140.34	0.0
51	145.53	5.2
54	145.53	0.0
57	149.68	4.2
60	149.68	0.0

INITIAL SHUT-IN

Kraus #14-12

DST # 2	SLOPE	768.2	PSI/CYCLE
INITIAL FLOW TIME 30	P*	1160.31	PSI

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	89.44	1.041	89.4	11
	6	95.68	0.778	6.2	6
	9	120.62	0.637	24.9	4
	12	155.90	0.544	35.3	4
	15	224.54	0.477	68.6	3
	18	327.49	0.426	102.9	3
	21	483.95	0.385	156.5	2
	24	659.38	0.352	175.4	2
	27	800.61	0.325	141.2	2
	30	885.79	0.301	85.2	2
	33	929.84	0.281	44.0	2
	36	951.91	0.263	22.1	2
Q	39	969.95	0.248	18.0	2
	42	977.96	0.234	8.0	2
	45	993.99	0.222	16.0	2
	48	1001.99	0.211	8.0	2
	51	1008.00	0.201	6.0	2
	54	1011.00	0.192	3.0	2
	57	1016.00	0.184	5.0	2
X	60	1025.03	0.176	9.0	2



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 15.13434

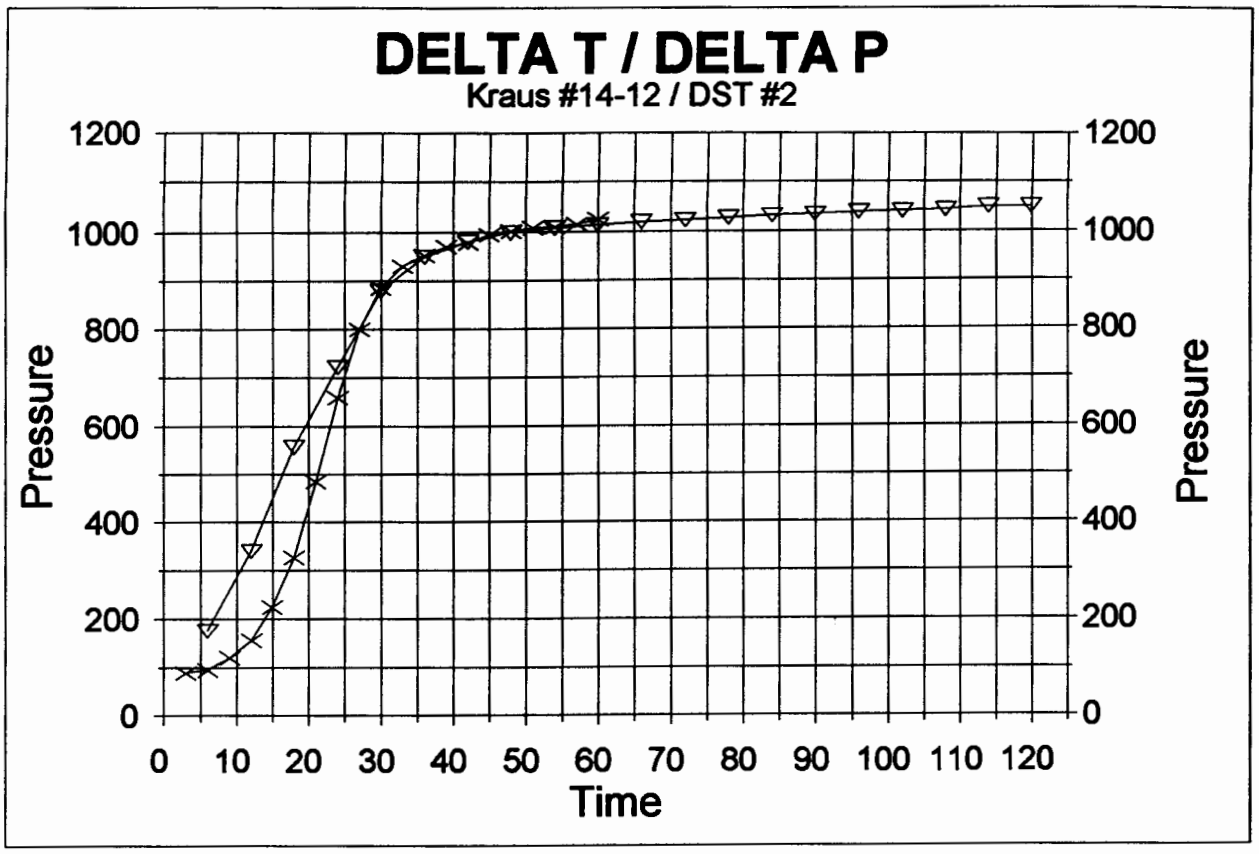
FINAL SHUT-IN

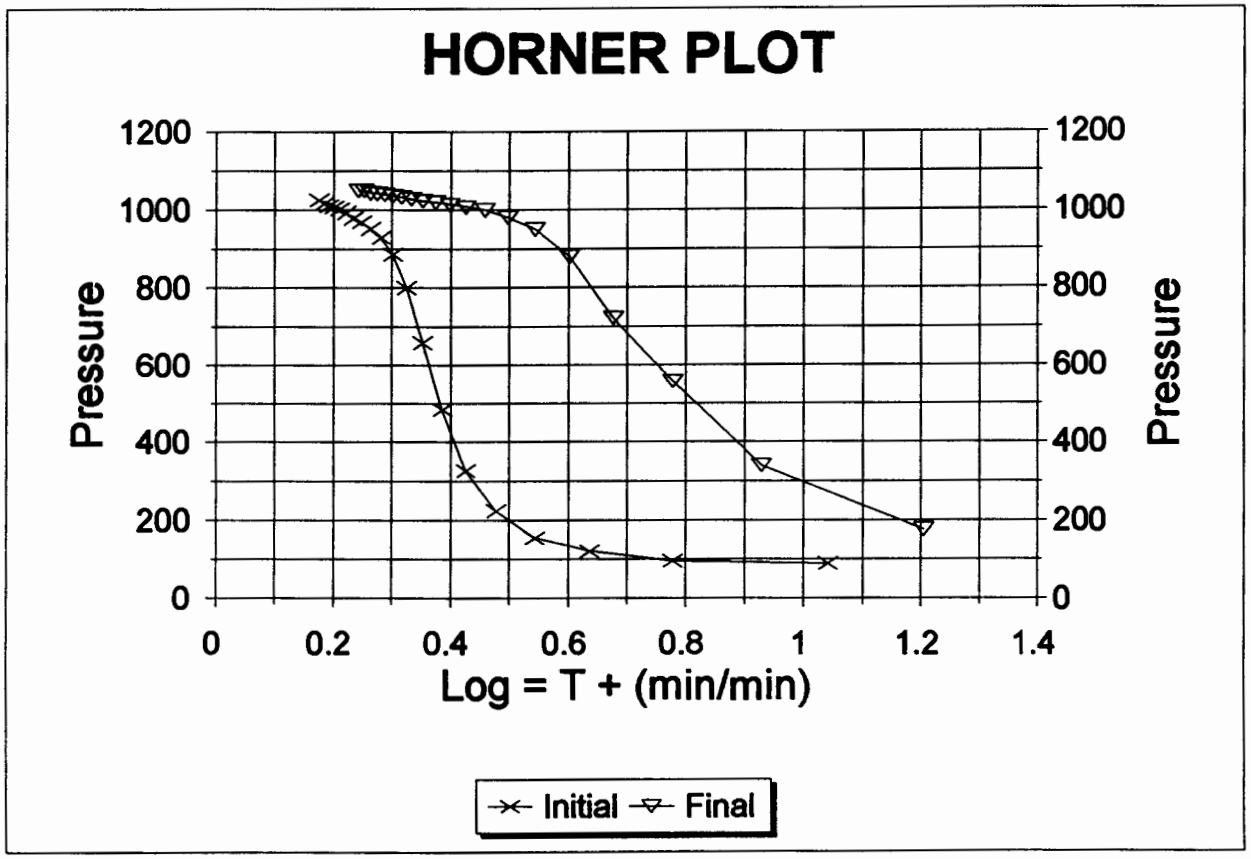
Kraus #14-12

DST # 2 SLOPE 272.1 PSI/CYCLE

TOTAL FLOW TIME 90 P* 1116.27 PSI

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	6	176.70	1.204	176.7	16
	12	341.00	0.929	164.3	9
	18	557.22	0.778	216.2	6
	24	722.42	0.677	165.2	5
	30	879.78	0.602	157.4	4
	36	949.90	0.544	70.1	4
Q	42	980.97	0.497	31.1	3
	48	999.99	0.459	19.0	3
	54	1008.00	0.426	8.0	3
	60	1014.00	0.398	6.0	3
	66	1020.00	0.374	6.0	2
	72	1024.02	0.352	4.0	2
	78	1028.04	0.333	4.0	2
	84	1033.07	0.316	5.0	2
	90	1036.08	0.301	3.0	2
	96	1040.10	0.287	4.0	2
	102	1042.11	0.275	2.0	2
	108	1044.12	0.263	2.0	2
	114	1050.15	0.253	6.0	2
X	120	1050.15	0.243	-0.0	2


DELTA T / DELTA P
Kraus #14-12 / DST #2
Pressure
Time
0
200
400
600
800
1000
1200
0 10 20 30 40 50 60 70 80 90 100 110 120


HORNER PLOT
Pressure
Log = T + (min/min)
0
200
400
600
800
1000
1200
0 0.2 0.4 0.6 0.8 1 1.2 1.4
Initial
Final

WELL NAME Knaus DST # 2 RECORDER # 13339

INIT. HYD. MUD. 2340 FINAL HYD. MUD 2322

	INITIAL FLOW MINUTES / INTERVAL		INITIAL SHUTIN MINUTES / INTERVAL			FINAL FLOW MINUTES / INTERVAL		FINAL SHUTIN MINUTES 6 / INTERVAL	
	.078	81	—		1	.120	125	~~.149~~	
	.078		.086		2	.120		.170	
	.078		.092		3	.120		~~.243~~	
	.078		.116		4	.120		.328	
	.078		.150		5	.121		~~.409~~	
	.079		.216		6	.121		.538	
	.079		.315		7	.121		.703	
	.079		.466		8	.121		.860	
	.081		.640		9	.121		.930	
	.081		.781		10	.126		.961	
	.081	84	.866		11	.126		.980	
			.910		12	.126		.988	
			.932		13	.130		.994	
			.950		14	.130		1.000	
			.958		15	.135		1.004	
			.974		16	.135		1.008	
			.982		17	.135		1.013	
			.988		18	.140		1.016	
			.991		19	.140		1.020	
			.996		20	.144		~~1.028~~	
			1.005	1025	21	.144	150	1.024	
					22			1.030	1050
					23			1.030	
					24				
					25				
					26				
					27				

TRILOBITE TESTING L.L.C.
P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8832

Well Name & No. Kraus #14-12 Test No. 2 Date 1-5-96
Company Westport Oil & Gas Company, Inc. Zone Tested Morrow
Address 410 17th Street #2410 Denver, CO. 80202 Elevation 2496 KB 2491 GL
Co. Rep / Geo. Ron Osterbuhr Cont. Abercrombie #4 Est. Ft. of Pay 5 Por. ___ %
Location: Sec. 12 Twp. 23S Rge. 34W Co. Finney State KS.
No. of Copies Nrm. Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) ___

Interval Tested 4611 - 4646 Initial Str Wt./Lbs. 62,000 Unseated Str Wt./Lbs. 64,000
Anchor Length 35' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 70,000
Top Packer Depth 4606 Hole Size — 7 7/8" ___ Rubber Size — 6 3/4" ___
Bottom Packer Depth 4611 Wt. Pipe I.D. — 2.7 Ft. Run 316'
Total Depth 4646 Drill Collar — 2.25 Ft. Run —
Mud Wt. 9.2 LCM — Vis. 45 WL 8.0 Drill Pipe Size 4½" XH Ft. Run 4287'

Blow Description IF: Weak to Fair blow off bttm. in 11 mins.
ISI: Bled off blow - surface return built to ¼" died @ 30 mins
FF: Fair to strong blow off bttm in 1½ mins
FSI: Bled off blow - surface return built to 1" died @ 60 mins

Recovery — Total Feet 255' Ft. in DC — Ft. in WP 225 Ft. in DP —

			%gas	%oil	%water	%mud
Rec. 45'	Feet Of	GIP				
Rec. 15'	Feet Of	GMCO	10	50	—	40
Rec. 60'	Feet Of	HGOCM	45	25	—	30
Rec. 180'	Feet Of	GOCM	10	10	—	80
Rec.	Feet Of					

BHT 121° °F Gravity 30 °API D@ 48 °F Corrected Gravity 31.2 °API
RW ___ @ ___ °F Chlorides ___ ppm Recovery Chlorides 2,800 ppm System

(A) Initial Hydrostatic Mud	2343 PSI	Recorder No.	13276	T-Started	00:15
(B) First Initial Flow Pressure	72 PSI	@ (depth)	4636	T-Open	00:15
(C) First Final Flow Pressure	83 PSI	Recorder No.	13339	T-Pulled	04:45
(D) Initial Shut-in Pressure	1070 PSI	@ (depth)	4641	T-Out	07:45
(E) Second Initial Flow Pressure	135 PSI	Recorder No.	—		
(F) Second Final Flow Pressure	155 PSI	@ (depth)	—		
(G) Final Shut-in Pressure	1090 PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2323 PSI	Initial Shut-in	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-in	120	Straddle	___
				Circ. Sub	X N/C
				Sampler	X 200
				Extra Packer	___
				Elect. Rec.	___
				Other	___
				TOTAL PRICE $	1050

Approved By Larry G. Benedick
Our Representative Rod Steinbrink

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 8832 Date 1-5-96

Company Name Westport Oil & Gas Cont. Abercrombie #4

Lease Kraus #14-12 Test No. #2 Morrow

County Finney KS. Sec. 12 Twp. 23S Rng. 34W

SAMPLER RECOVERY

Gas 200 ML

Oil 3,000 ML

Mud 800 ML

Water — ML

Other _____ ML

Pressure 600# PSI

Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 2,800 ppm.

Resistivity _____ ohms @ _____ F

Viscosity 45

Mud Weight 9.2

Filtrate 8.0

Other _____

SAMPLER ANALYSIS

Resistivity 1.8 ohms @ 80° F

Chlorides 2,800 ppm.

Gravity 31.2 corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

MIDDLE

Resistivity _____ ohms @ _____ F

Chlorides _____ ppm.

BOTTOM

Resistivity 1.8 ohms @ 80° F

Chlorides 2,800 ppm.

TRILOBITE TESTING L.L.C.

OPERATOR : Westport Oil & Gas Co — DATE 01/08/96
WELL NAME: Kraus #14-12 — KB 2496.00 ft — TICKET NO: 8833 — DST #3
LOCATION : 12-23S-34W, Finney Cty KS — GR 2491.00 ft — FORMATION: Mississippian
INTERVAL : 4740.00 To 4776.00 ft — TD 4776.00 ft — TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13339	13339	13276		
SI 60	Range(Psi)	4000.0	4000.0	0.0	0.0	0.0
SF 90	Clock(hrs)	AK-1	AK-1	AK-1		
FS 120	Depth(ft)	4771.0	4771.0	4767.0	0.0	0.0

TIME DATA----------
PF Fr. 2330 to 2400 hr
IS Fr. 2400 to 0100 hr
SF Fr. 0100 to 0230 hr
FS Fr. 0230 to 0430 hr

	Field	1	2	3	4
A. Init Hydro	2373.0	2392.0	0.0	0.0	0.0
B. First Flow	31.0	60.0	0.0	0.0	0.0
B1. Final Flow	31.0	60.0	0.0	0.0	0.0
C. In Shut-in	415.0	439.0	0.0	0.0	0.0
D. Init Flow	52.0	71.0	0.0	0.0	0.0
E. Final Flow	52.0	71.0	0.0	0.0	0.0
F. Fl Shut-in	1090.0	1112.0	0.0	0.0	0.0
G. Final Hydro	2353.0	2380.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 2145 hr
T ON BOTM 2328 hr
T OPEN 2330 hr
T PULLED 0430 hr
T OUT 0700 hr

RECOVERY
Tot Fluid 60.00 ft of 0.00 ft in DC and 0.00 ft in DP
60.00 ft of Oil cut mud - 10% oil, 90% mud

SALINITY 0.00 P.P.M. A.P.I. Gravity 25.00

BLOW DESCRIPTION

Initial Flow -
Weak surface blow built to .5"

Initial Shutin -
No return

Final Flow -
Weak surface blow slowly built to 2"

Final Shutin -
No return

SAMPLES:
SENT TO:

Test Successful: Y

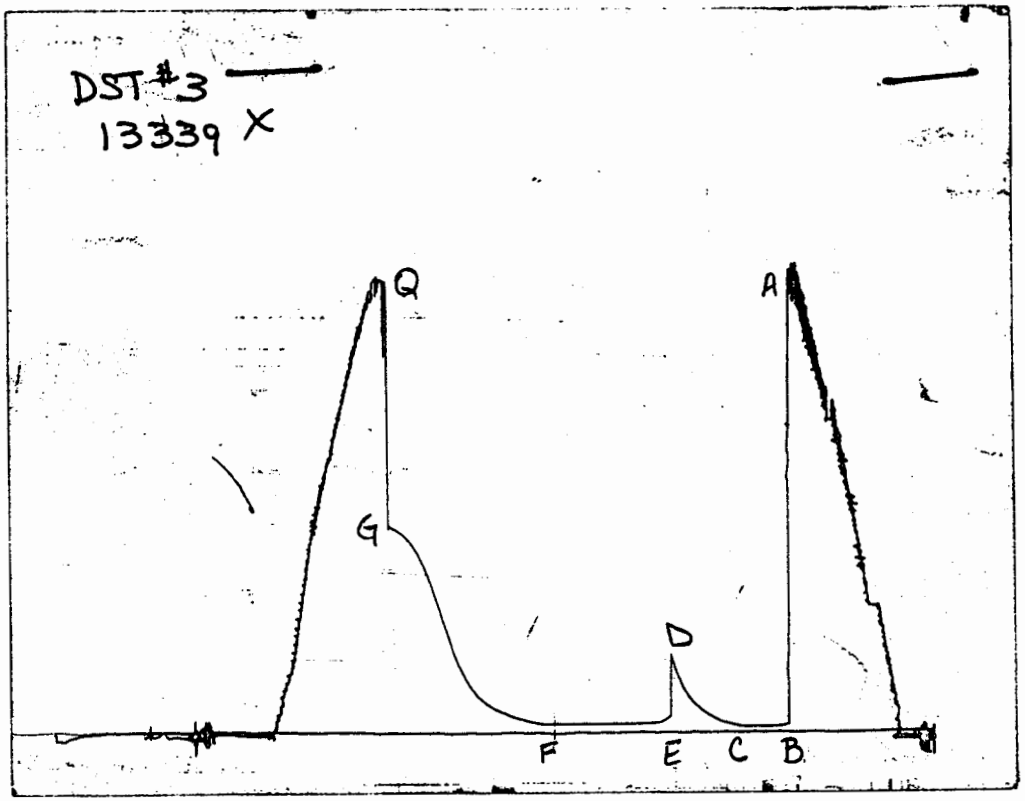
TOOL DATA----------

Tool Wt.	0.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	110000.00 lbs
Initial Str Wt	64000.00 lbs
Unseated Str Wt	64000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	4411.00 ft
H.W. I.D	2.70 in
H.W. Length	316.00 ft

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

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	52.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	123.00 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	Rod Steinbrink
Co. Rep.	Ron Osterbuhr
Contr.	Abercrombie
Rig #	4
Unit #	
Pump T.	

CHART PAGE



This is an actual photograph of recorder chart

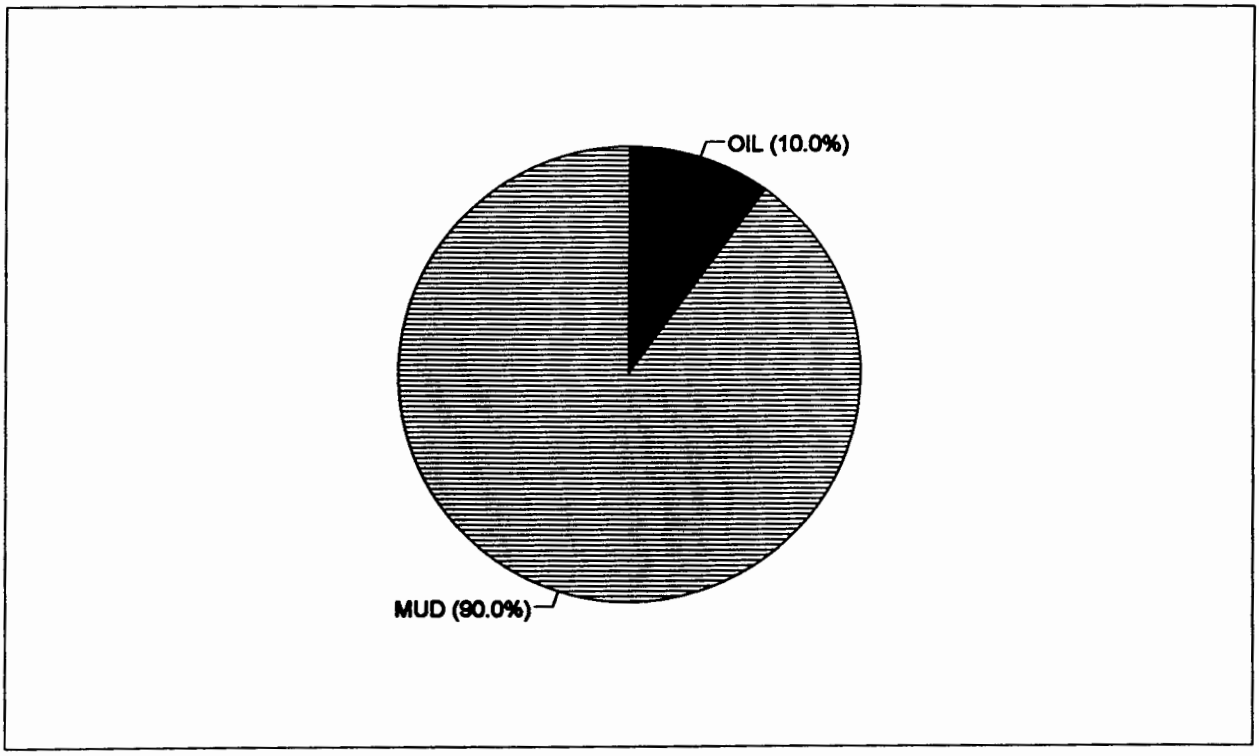
CALCULATED RECOVERY ANALYSIS WEIGHT PIPE

DST # 2 TICKET # 8833

****

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
1	60		0	10	6		0	90	54
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	60	0	0	10	6	0	0	90	54

			HRS OPE	BBL/DAY
BBL OIL=	0.042	*	2.00	0.504
BBL WATER	0	*		0
BBL MUD=	0.378			
BBL GAS=	0			



*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Kraus #14-12

LOCATION : 12-23S-34W, Finney Cty KS

TICKET No. 8833 D.S.T. No. 3 DATE 01/08/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 32

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 36

TOTAL TOOL 68

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 68

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4411

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4795

TOTAL DEPTH 4776

TOTAL DRILL PIPE ABOVE K.B. 19

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -
Gas 500 ml, Oil 2500 ml, Mud 1000 ml,
Pressure 350 PSI, Total 4000 ml

SAMPLER ANALYSIS -
Resist 1.6 ohms @ 70 F; Chlorides 3800 ppm;
Gravity 25 corrected @ 60 F

PIT MUD ANALYSIS -
Chlorides 3800 ppm; Resist 1.6 ohms @ 70 F;
Viscosity 52, Mud Wt 9.2, Filtrate 8

P.O. SUB	
C.O. SUB	4708
S.I. TOOL 5'	4714
Sampler	4719
HMV 5'	4724
JARS 5'	4729
SAFETY JOINT 2'	4731
PACKER Top	4735
PACKER Bottom	4740
DEPTH 4740	
STUBB 1'	4741
ANCHOR	
T.C.	
DEPTH	
AK-1 recorder	4767
AK-1 recorder	4771
BULLNOSE	
T.D.	4776

TRILOBITE TESTING L.L.C.
P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8833

Well Name & No. Kraus #14-12 Test No. 3 Date 1-8-96
Company Westport Oil & Gas Company, Inc. Zone Tested Mississippian
Address 410 17th Street #2410 Denver, CO. 80202 Elevation 2496 KB 2501 GL
Co. Rep / Geo. Ron Osterbuhr Cont. Abercrombie #4 Est. Ft. of Pay ___ Por. ___ %
Location: Sec. 12 Twp. 23S Rge. 34W Co. Finney State KS.
No. of Copies Nrm. Distribution Sheet (Y, N) N Turnkey (Y, N) ___ Evaluation (Y, N) ___

Interval Tested 4740 - 4776 Initial Str Wt./Lbs. 64,000 Unseated Str Wt./Lbs. 64,000
Anchor Length 36' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 110,000
Top Packer Depth 4735 Hole Size — 7 7/8" ___ Rubber Size — 6 3/4" ___
Bottom Packer Depth 4740 Wt. Pipe I.D. — 2.7 Ft. Run 316'
Total Depth 4776 Drill Collar — 2.25 Ft. Run —
Mud Wt. 9.2 LCM ___ Vis. 52 WL 8.0 Drill Pipe Size 4½" XH Ft. Run 4411'

Blow Description IF: Weak surface blow built to ½"
ISI: No return
FF: Weak surface blow slowly built to 2"
FSI: No return.

Recovery — Total Feet 60' Ft. in DC — Ft. in WP 60' Ft. in DP —

Rec.	___	Feet Of		%gas	%oil	%water	%mud
Rec.	___	Feet Of		%gas	%oil	%water	%mud
Rec.	60'	Feet Of	OCM	%gas	10 %oil	— %water	90 %mud
Rec.	___	Feet Of		%gas	%oil	%water	%mud
Rec.	___	Feet Of		%gas	%oil	%water	%mud

BHT 123° °F Gravity 25.4 °API D@ 64 °F Corrected Gravity 25 °API
RW ___ @ ___ °F Chlorides ___ ppm Recovery Chlorides 3,800 ppm System

(A) Initial Hydrostatic Mud	2373 PSI	Recorder No.	13276	T-Started	21:45
(B) First Initial Flow Pressure	31 PSI	@ (depth)	4767	T-Open	23:30
(C) First Final Flow Pressure	31 PSI	Recorder No.	13339	T-Pulled	04:30
(D) Initial Shut-in Pressure	415 PSI	@ (depth)	4771	T-Out	07:00
(E) Second Initial Flow Pressure	52 PSI	Recorder No.	—		
(F) Second Final Flow Pressure	52 PSI	@ (depth)	—		
(G) Final Shut-in Pressure	1090 PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2353 PSI	Initial Shut-in	60	Jars	X 200
		Final Flow	90	Safety Joint	X 50
		Final Shut-in	120	Straddle	___
				Circ. Sub	X N/C
				Sampler	X 200
				Extra Packer	___
				Elect. Rec.	___
				Other	___
				TOTAL PRICE $	1050

Approved By Harry G. Benedick
Our Representative Rod Steinbrink

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 8833 Date 1-8-96

Company Name Westport Oil & Gas. Cont. Abercrombie #4

Lease Kraus #14-12 Test No. 3 Mississippian

County Finney KS. Sec. 12 Twp. 23S Rng. 34W

SAMPLER RECOVERY

Gas 500 ML

Oil 2500 ML

Mud 1000 ML

Water ML

Other ML

Pressure 350# PSI

Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 3,800 ppm.

Resistivity 1.6 ohms @ 70° F

Viscosity 52

Mud Weight 9.2

Filtrate 8.0

Other

SAMPLER ANALYSIS

Resistivity 1.6 ohms @ 70° F

Chlorides 3,800 ppm.

Gravity 25 corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity ohms @ F

Chlorides ppm.

MIDDLE

Resistivity ohms @ F

Chlorides ppm.

BOTTOM

Resistivity ohms @ F

Chlorides ppm.