

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 1 Date 10/16/93
Company RITCHIE EXPLORATION, INC. Zone TORONTO
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3360-3400
Anchor Length 40
Top Packer Depth 3355
Bottom Packer Depth 3360
Total Depth 3400

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____
Mud Wt. 9.6 lb/Gal.
Viscosity 45 Filtrate 10.4

Tool Open @ 5:59 AM Initial Blow FAIR TO STRONG BLOW - BOTTOM OF BUCKET IN 11 TO 12 MIN

Final Blow FAIR TO STRONG BLOW - BOTTOM OF BUCKET IN 10 TO 11 MINUTES

Recovery - Total Feet 330

Flush Tool? NO

Rec. 300 Feet of GAS IN PIPE
Rec. 82 Feet of GSY MUD CUT OIL-15% GAS/ 82% OIL/ 3% MUD
Rec. 186 Feet of CLEAN GASSY OIL-10% GAS/90% OIL
Rec. 62 Feet of GSY OIL CUT MUD-5% GAS/12% OIL/83% MUD
Rec. _____ Feet of _____

BHT 106 °F Gravity 27 °API @ 78 °F Corrected Gravity 25.8 °API
RW _____ @ _____ °F Chlorides 1300 ppm Recovery Chlorides 1300 ppm System

(A) Initial Hydrostatic Mud 1744.4 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 33.3 PSI @ (depth) 3397 w / Clock No. 22993

(C) First Final Flow Pressure 85.5 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 1101.1 PSI @ (depth) 3392 w / Clock No. 30410

(E) Second Initial Flow Pressure 107.7 PSI AK1 Recorder No. _____ Range _____

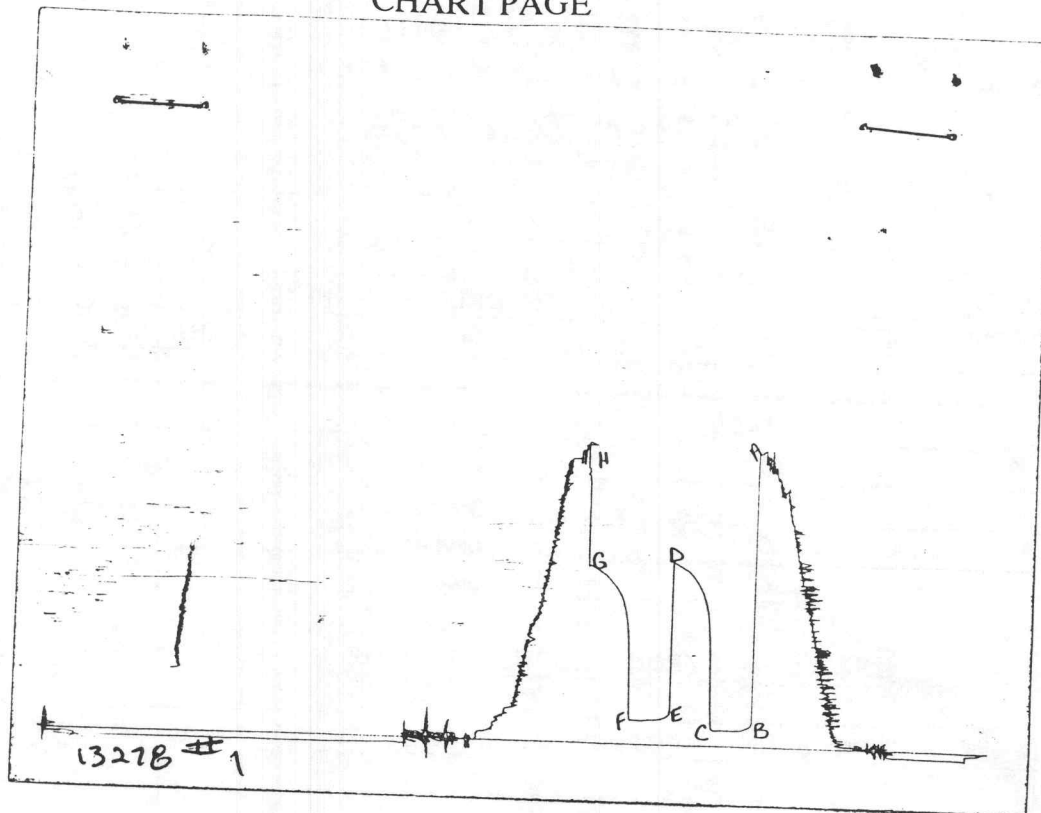
(F) Second Final Flow Pressure 145.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1088.8 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1671.1 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative GARY PEVOTEAUX

CHART PAGE

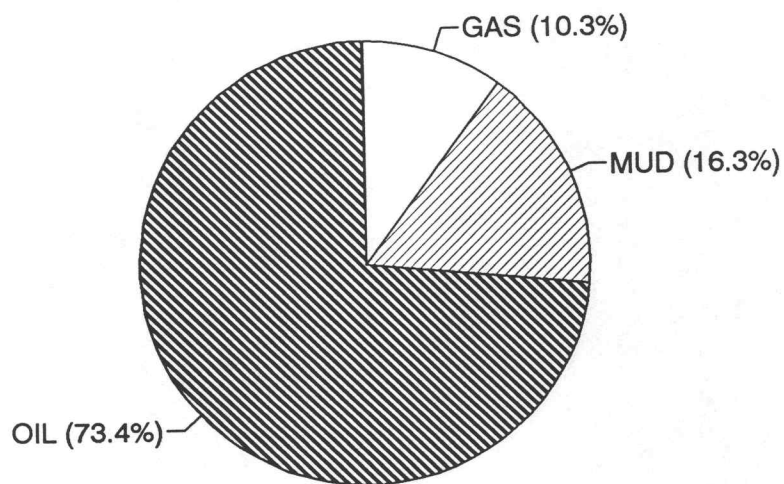


This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1736	1744.4
(B) FIRST INITIAL FLOW PRESSURE	34	33.3
(C) FIRST FINAL FLOW PRESSURE	85	85.5
(D) INITIAL CLOSED-IN PRESSURE	1099	1101.1
(E) SECOND INITIAL FLOW PRESSURE	105	107.7
(F) SECOND FINAL FLOW PRESSURE	144	145.5
(G) FINAL CLOSED-IN PRESSURE	1082	1088.8
(H) FINAL HYDROSTATIC MUD	1668	1671.1

CALCULATED RECOVERY ANALYSIS						DRILL	PIPE		
DST #	1			TICKET		6116			
SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	82	15	12.3	82	67.24	0	0	3	2.46
2	186	10	18.6	90	167.4	0	0	0	0
3	62	5	3.1	12	7.44	0	0	83	51.46
4			0		0		0		0
5			0		0		0		0
TOTAL	330	10.30303	34	73.4	242.08	0	0	16.3	53.92

			HRS	BBL/DAY
BBL OIL=	3.4423776	*	1	82.617
BBL WATER=	0	*		0
BBL MUD=	0.7667424			
BBL GAS	0.48348			



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Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 2 Date 10/16/93
Company RITCHIE EXPLORATION, INC. Zone LANSING
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3420-3455
Anchor Length 35
Top Packer Depth 3415
Bottom Packer Depth 3420
Total Depth 3455

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 62
Mud Wt. 9.6 lb/Gal.
Viscosity 45 Filtrate 10

Tool Open @ 9:10 PM Initial Blow STRONG BLOW - BOTTOM OF BUCKET IN 8 MINUTES

Final Blow STRONG BLOW - BOTTOM OF BUCKET IN 9 MINUTES

Recovery - Total Feet 660 Flush Tool? NO

Rec. 50 Feet of GAS IN PIPE
Rec. 20 Feet of CLEAN OIL
Rec. 150 Feet of OIL CUT MUDDY WATER-4% OIL/60% WTR/ 36% MUD
Rec. 125 Feet of MUDDY WATER WITH OIL SPOTS-80% WTR/ 20% MUD
Rec. 365 Feet of SALT WATER WITH OIL SPOTS

BHT 108 °F Gravity N.A. °API @ _____ °F Corrected Gravity 25 °API
RW 0.14 @ 72 °F Chlorides 66000 ppm Recovery Chlorides 1300 ppm System

(A) Initial Hydrostatic Mud 1733.3 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 35.5 PSI @ (depth) 3452 w / Clock No. 22993

(C) First Final Flow Pressure 164.4 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 912.2 PSI @ (depth) 3447 w / Clock No. 30410

(E) Second Initial Flow Pressure 197.7 PSI AK1 Recorder No. _____ Range _____

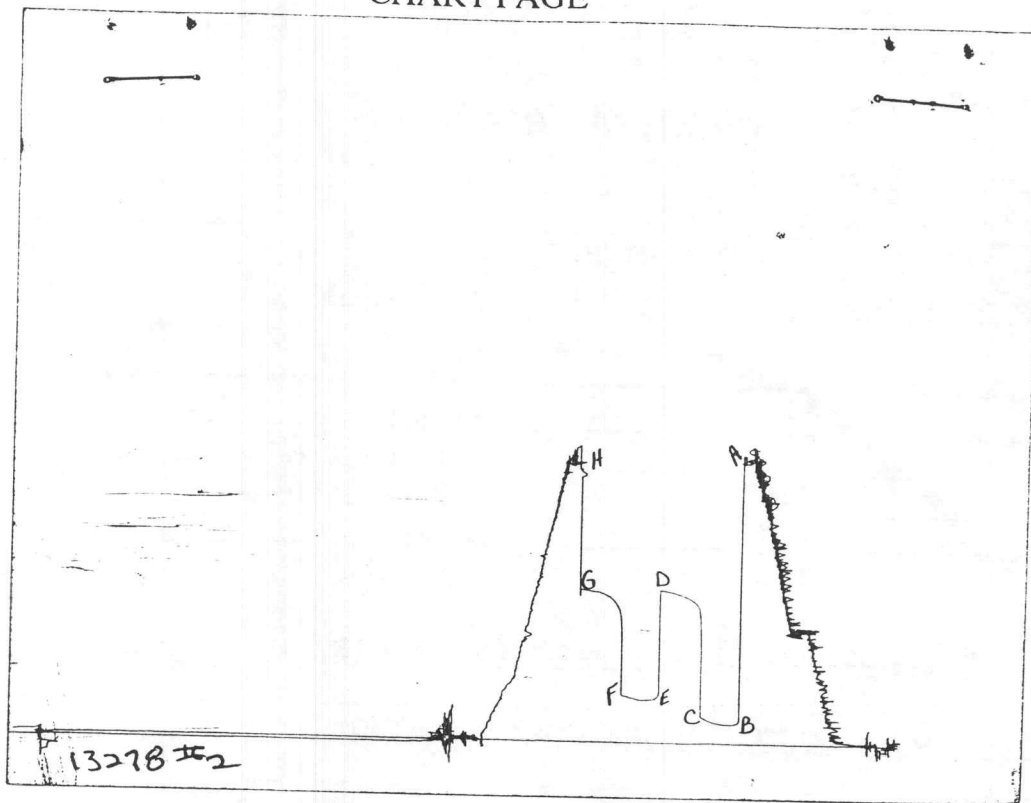
(F) Second Final Flow Pressure 293.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 922.2 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1677.7 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative GARY PEVOTEAUX

CHART PAGE



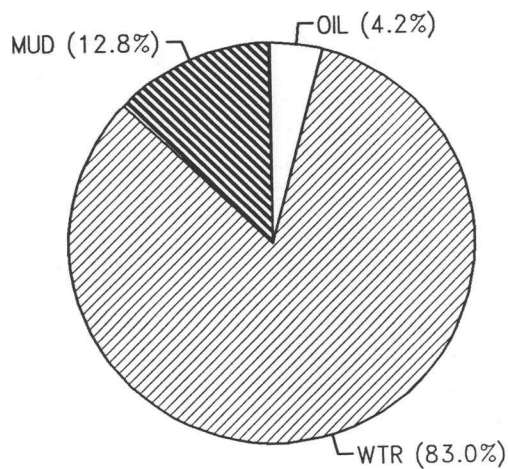
This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1725	1733.3
(B) FIRST INITIAL FLOW PRESSURE	34	35.5
(C) FIRST FINAL FLOW PRESSURE	159	164.4
(D) INITIAL CLOSED-IN PRESSURE	909	912.2
(E) SECOND INITIAL FLOW PRESSURE	195	197.7
(F) SECOND FINAL FLOW PRESSURE	294	293.3
(G) FINAL CLOSED-IN PRESSURE	916	922.2
(H) FINAL HYDROSTATIC MUD	1679	1677.7

CALCULATED RECOVERY ANALYSIS

DST	2	TICKET #		6117					
SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	20	0	0	100	20	0	0	0	0
PIPE 2	150	0	0	4	6	60	90	36	54
3	125	0	0	0	0	80	100	20	25
4	303	0	0	0	0	100	303	0	0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	62	0	0	0	0	100	62	0	0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	660		0		26		555		79

			HRS OPEN	BBL/DAY
BBL OIL=	0.36972	*	1	8.87328
BBL WATER=	7.31364	*		175.52736
BBL MUD=	1.12338			
BBL GAS =	0			



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Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 3 Date 10/17/93
Company RITCHIE EXPLORATION, INC. Zone LANS-50-70'
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3444-3478
Anchor Length 34
Top Packer Depth NONE
Bottom Packer Depth 3444
Total Depth 3478

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 62
Mud Wt. 9.4 lb/Gal.
Viscosity 48 Filtrate 9.2

Tool Open @ 10:35 AM Initial Blow FAIR TO STRONG BLOW - BOTTOM OF BUCKET IN 13 MINUTES

Final Blow FAIR TO STRONG BLOW - BOTTOM OF BUCKET IN 22 MINUTES

Recovery - Total Feet 345

Flush Tool? NO

Rec. 3 Feet of CLEAN OIL
Rec. 95 Feet of OIL CUT WATERY MUD-2% OIL/33% WTR/65% MUD
Rec. 62 Feet of OIL CUT MUDDY WATER-1% OIL/ 70% WTR/ 29% MUD
Rec. 185 Feet of MUDDY WATER WITH OIL SPOTS
Rec. _____ Feet of _____

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.18 @ 73 °F Chlorides 59000 ppm Recovery Chlorides 1700 ppm System

(A) Initial Hydrostatic Mud 1733.3 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 33.3 PSI @ (depth) 3475 w / Clock No. 22993

(C) First Final Flow Pressure 115.5 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 911.1 PSI @ (depth) 3470 w / Clock No. 30410

(E) Second Initial Flow Pressure 117.7 PSI AK1 Recorder No. _____ Range _____

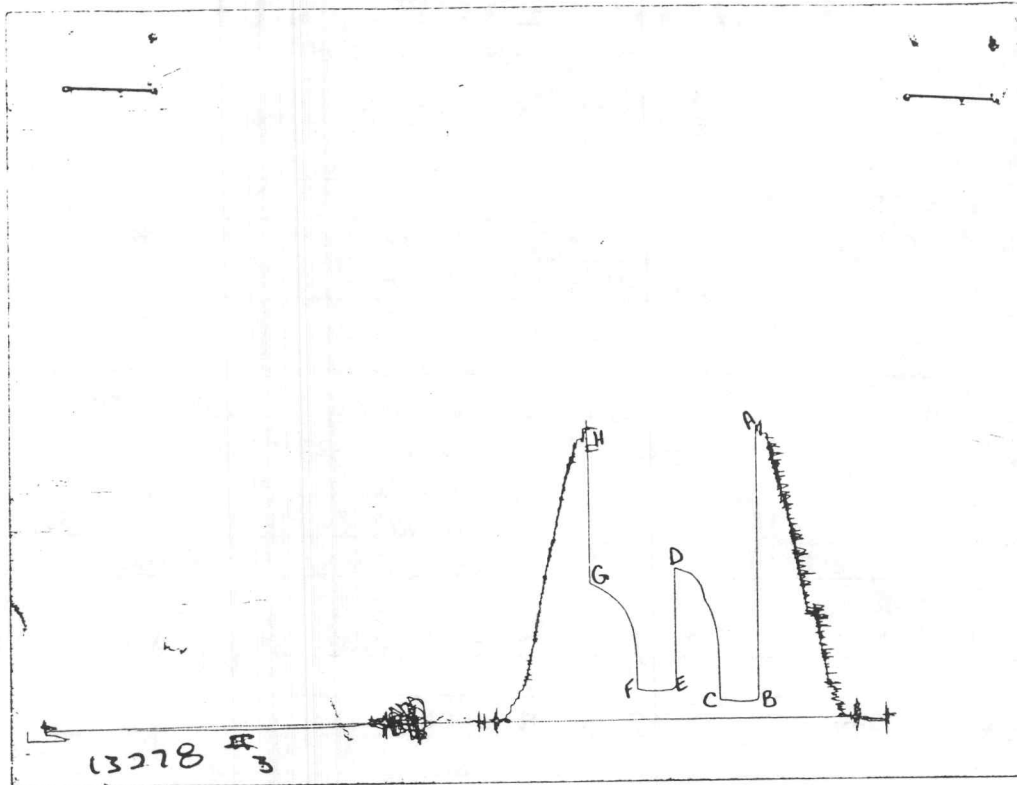
(F) Second Final Flow Pressure 171.1 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 823.3 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1666.6 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1727	1733.3
(B) FIRST INITIAL FLOW PRESSURE	30	33.3
(C) FIRST FINAL FLOW PRESSURE	112	115.5
(D) INITIAL CLOSED-IN PRESSURE	908	911.1
(E) SECOND INITIAL FLOW PRESSURE	116	117.7
(F) SECOND FINAL FLOW PRESSURE	168	171.1
(G) FINAL CLOSED-IN PRESSURE	817	823.3
(H) FINAL HYDROSTATIC MUD	1664	1666.6

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1727	1733.3
(B) FIRST INITIAL FLOW PRESSURE	30	33.3
(C) FIRST FINAL FLOW PRESSURE	112	115.5
(D) INITIAL CLOSED-IN PRESSURE	908	911.1
(E) SECOND INITIAL FLOW PRESSURE	116	117.7
(F) SECOND FINAL FLOW PRESSURE	168	171.1
(G) FINAL CLOSED-IN PRESSURE	817	823.3
(H) FINAL HYDROSTATIC MUD	1664	1666.6

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Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 4 Date 10/18/93
Company RITCHIE EXPLORATION, INC. Zone LANS/140-200
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3510-3590
Anchor Length 80
Top Packer Depth 3505
Bottom Packer Depth 3510
Total Depth 3590

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 120
Mud Wt. 9.4 lb/Gal.
Viscosity 49 Filtrate 9.2

Tool Open @ 7:36 AM Initial Blow FAIR BLOW - BOTTOM OF BUCKET IN 29 MINUTES

Final Blow FAIR BLOW-AS ABOVE

Recovery - Total Feet 266

Flush Tool? NO

Rec. 160 Feet of GAS IN PIPE
Rec. 82 Feet of CLEAN OIL
Rec. 122 Feet of GASSY OIL CUT MUD-10%GAS/35%OIL/55%MUD
Rec. 62 Feet of GASSY OIL CUT MUD-5%GAS/15%OIL/80%MUD
Rec. _____ Feet of _____

BHT 110 °F Gravity 30 °API @ 78 °F Corrected Gravity 28.8 °API
RW _____ @ _____ °F Chlorides 1800 ppm Recovery Chlorides 1800 ppm System

(A) Initial Hydrostatic Mud 1776.6 PSI AK1 Recorder No. 10248 Range 4400

(B) First Initial Flow Pressure 63.3 PSI @ (depth) 3587 w / Clock No. 22993

(C) First Final Flow Pressure 114.4 PSI AK1 Recorder No. 13278 Range 4400

(D) Initial Shut-in Pressure 1148.8 PSI @ (depth) 3520 w / Clock No. 30410

(E) Second Initial Flow Pressure 119.9 PSI AK1 Recorder No. _____ Range _____

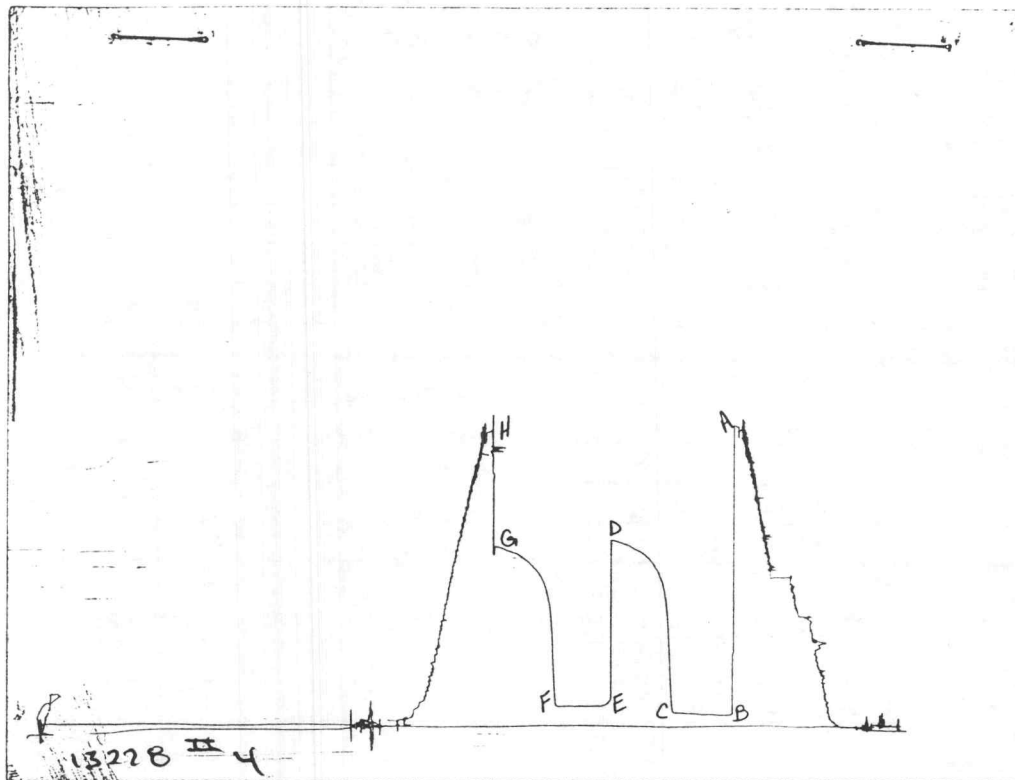
(F) Second Final Flow Pressure 144.4 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1115.5 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1733.3 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative GARY PEVOTEAUX

CHART PAGE



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	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1771	1776.6
(B) FIRST INITIAL FLOW PRESSURE	57	63.3
(C) FIRST FINAL FLOW PRESSURE	109	114.4
(D) INITIAL CLOSED-IN PRESSURE	1143	1148.8
(E) SECOND INITIAL FLOW PRESSURE	118	119.9
(F) SECOND FINAL FLOW PRESSURE	141	144.4
(G) FINAL CLOSED-IN PRESSURE	1111	1115.5
(H) FINAL HYDROSTATIC MUD	1733	1733.3

CALCULATED RECOVERY ANALYSIS

DST

4

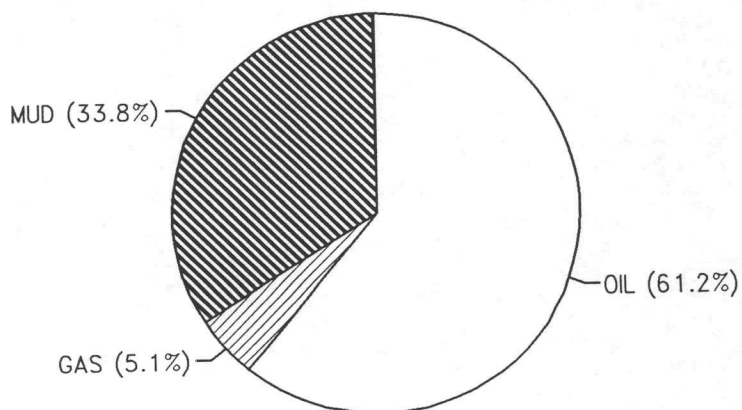
TICKET #

6119

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	82	0	0	100	82	0	0	0	0
PIPE 2	64	10	6.4	35	22.4	0	0	55	35.2
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	58	10	5.8	35	20.3	0	0	55	31.9
COLLAR 2	62	5	3.1	15	9.3	0	0	80	49.6
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	266		15.3		134		0		116.7

HRS OPEN BBL/DAY

BBL OIL= 1.629312 * 1.5 26.068992
 BBL WATER= 0 * 0
 BBL MUD= 0.899079
 BBL GAS = 0.134529



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 5 Date 10/19/93
Company RITCHIE EXPLORATION, INC. Zone ARBUCKLE
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3624-3702 Drill Pipe Size 4.5" XH
Anchor Length 78 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3619 Drill Collar - 2.25 Ft. Run 240
Bottom Packer Depth 3624 Mud Wt. 9.5 lb/Gal.
Total Depth 3702 Viscosity 49 Filtrate 9.2

Tool Open @ 3:15 AM Initial Blow WEAK TO FAIR BLOW - (1 TO 8" IN WATER)

Final Blow WEAK TO FAIR BLOW - (1 TO 4.5" IN WATER)

Recovery - Total Feet 230 Flush Tool? NO

Rec. 40 Feet of GAS IN PIPE
Rec. 130 Feet of CLEAN GASSY OIL-12% GAS/ 88% OIL
Rec. 40 Feet of GSY OIL CUT MUD-5% GAS/ 25% OIL/ 70% MUD
Rec. 60 Feet of OIL CUT WATERY MUD-15% OIL/15% WTR/70% MUD
Rec. _____ Feet of _____

BHT 112 °F Gravity 27 °API @ 78 °F Corrected Gravity 25.9 °API
RW _____ @ _____ °F Chlorides 2000 ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud 1833.3 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 61.1 PSI @ (depth) 3634 w / Clock No. 22993

(C) First Final Flow Pressure 114.4 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 902.2 PSI @ (depth) 3699 w / Clock No. 30410

(E) Second Initial Flow Pressure 116.6 PSI AK1 Recorder No. _____ Range _____

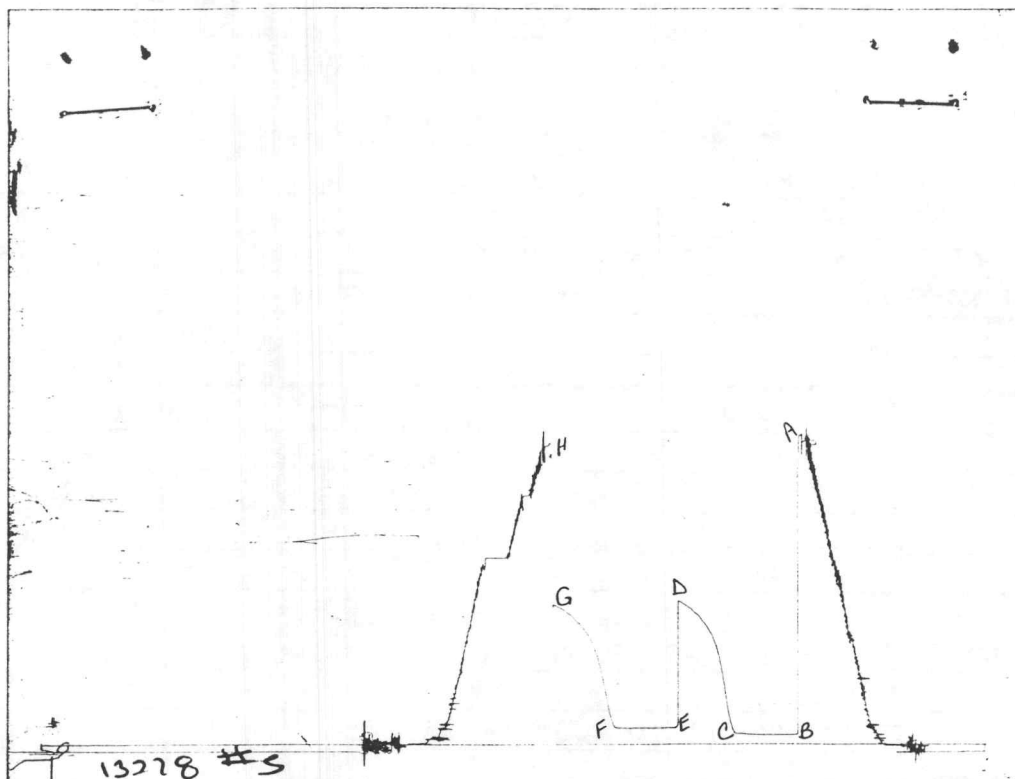
(F) Second Final Flow Pressure 147.7 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 894.5 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1766.6 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1835	1833.3
(B) FIRST INITIAL FLOW PRESSURE	57	61.1
(C) FIRST FINAL FLOW PRESSURE	112	114.4
(D) INITIAL CLOSED-IN PRESSURE	896	902.2
(E) SECOND INITIAL FLOW PRESSURE	114	116.6
(F) SECOND FINAL FLOW PRESSURE	144	147.7
(G) FINAL CLOSED-IN PRESSURE	890	894.5
(H) FINAL HYDROSTATIC MUD	1767	1766.6

DST #

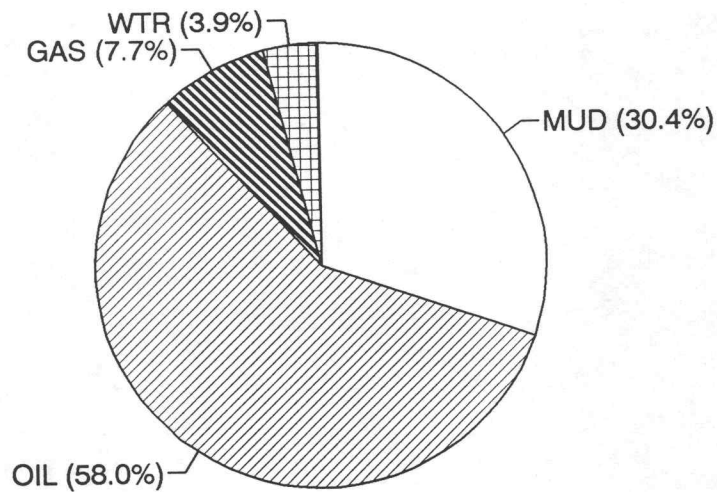
5

TICKET

6120

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
1	130	12	15.6	88	114.4	0	0	0	0
2	40	5	2	25	10	0	0	70	28
3	60	0	0	15	9	15	9	70	42
4			0		0		0		0
5			0		0		0		0
TOTAL	230	7.65	17.6	58.00	133.4	3.91	9	30.434783	70

			HRS OP	BBL/DAY
BBL OIL=	0.652326	*	1.5	10.437216
BBL WATER=	0.04401	*		0.70416
BBL MUD=	0.3423			
BBL GAS=	0.086064			



MUD
OIL
GAS
WTR

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Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 6 Date 10/19/93
Company RITCHIE EXPLORATION, INC. Zone ARBuckle
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3702-3709
Anchor Length 7
Top Packer Depth NONE
Bottom Packer Depth 3702
Total Depth 3709

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 240
Mud Wt. 9.3 lb/Gal.
Viscosity 53 Filtrate 9.6

Tool Open @ 4:20 PM Initial Blow STRONG BLOW-PACKER FAILED/PICKED UP AND RESET TOOL/
PACKER FAILED AGAIN

Final Blow _____

Recovery - Total Feet 275 Flush Tool? NO

Rec. 275 Feet of MUD WITH OIL SPECKS
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 111 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 2000 ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 10248 Range 4400

(B) First Initial Flow Pressure _____ PSI @ (depth) 3706 w / Clock No. 30410

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

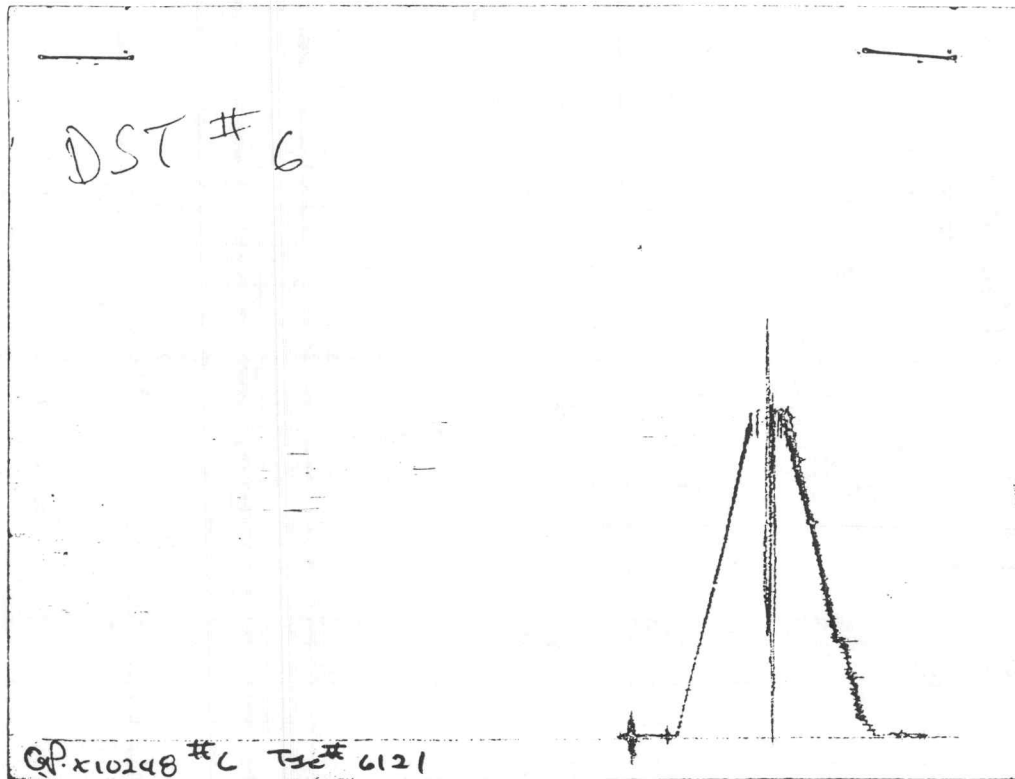
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in _____ Final Shut-in _____

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 7 Date 10/19/93
Company RITCHIE EXPLORATION, INC. Zone ARBUCKLE
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3703-3709
Anchor Length 6
Top Packer Depth 3698
Bottom Packer Depth 3703
Total Depth 3709

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 240
Mud Wt. 9.3 lb/Gal.
Viscosity 53 Filtrate 9.6

Tool Open @ 7:40 PM Initial Blow STRONG BLOW-PACKER FAILED/PICKED UP AND RESET TOOL/
PACKER FAILED AGAIN
Final Blow NONE

Recovery - Total Feet 140 Flush Tool? NO

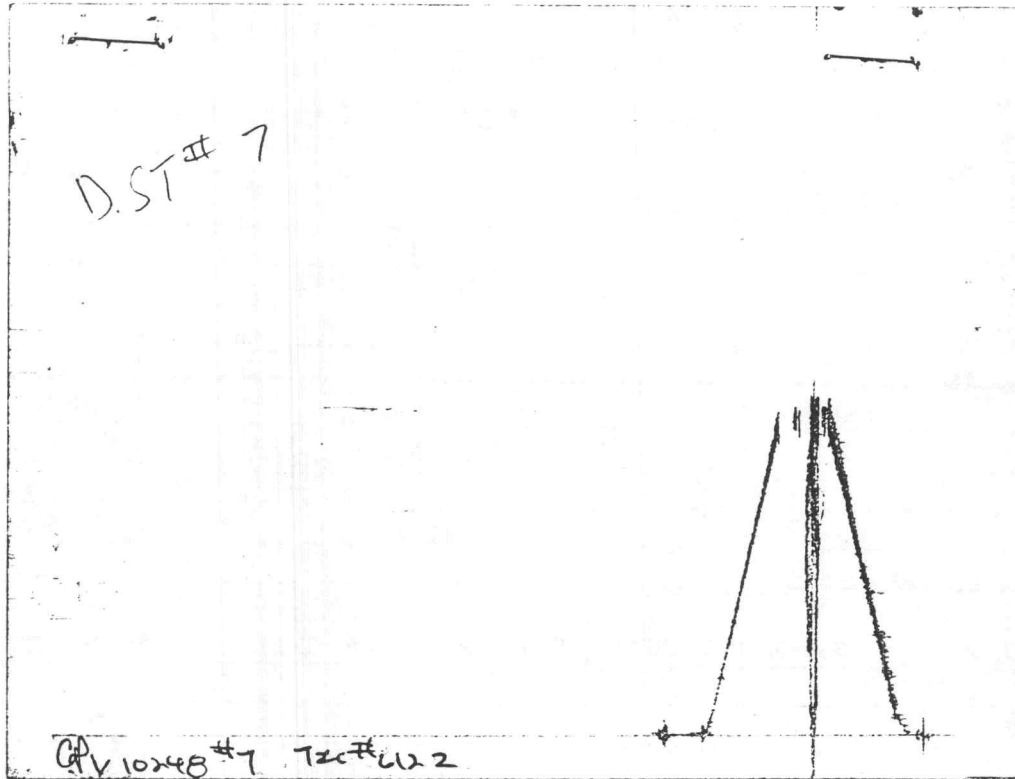
Rec. 140 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 111 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 2000 ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 10248 Range 4400
(B) First Initial Flow Pressure _____ PSI @ (depth) 3706 w / Clock No. 30410
(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure _____ PSI Initial Opening _____ Final Flow _____
(H) Final Hydrostatic Mud _____ PSI Initial Shut-in _____ Final Shut-in _____

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 8 Date 10/19/93
Company RITCHIE EXPLORATION, INC. Zone ARBUCKLE
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3625-3709
Anchor Length 84
Top Packer Depth 3620
Bottom Packer Depth 3625
Total Depth 3709

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 240
Mud Wt. 9.3 lb/Gal.
Viscosity 53 Filtrate 9.6

Tool Open @ 11:28 PM Initial Blow FAIR BLOW-(5 TO 7" IN WATER)
SLID TOOL 3-4" TO BOTTOM
Final Blow WEAK TO FAIR BLOW

Recovery - Total Feet 312 Flush Tool? NO

Rec. 45 Feet of GAS IN PIPE
Rec. 155 Feet of CLEAN GASSY OIL-5% GAS/ 95% OIL
Rec. 98 Feet of OIL CUT MUD-15% OIL/ 85% MUD
Rec. 59 Feet of OIL CUT WATERY MUD-10% OIL/10%WTR/80% MUD
Rec. _____ Feet of _____

BHT 112 °F Gravity 24 °API @ 72 °F Corrected Gravity 23 °API
RW _____ @ _____ °F Chlorides 2000 ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud 1851.1 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 71.1 PSI @ (depth) 3633 w / Clock No. 22993

(C) First Final Flow Pressure 145.5 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 896.6 PSI @ (depth) 3706 w / Clock No. 30410

(E) Second Initial Flow Pressure 162.2 PSI AK1 Recorder No. _____ Range _____

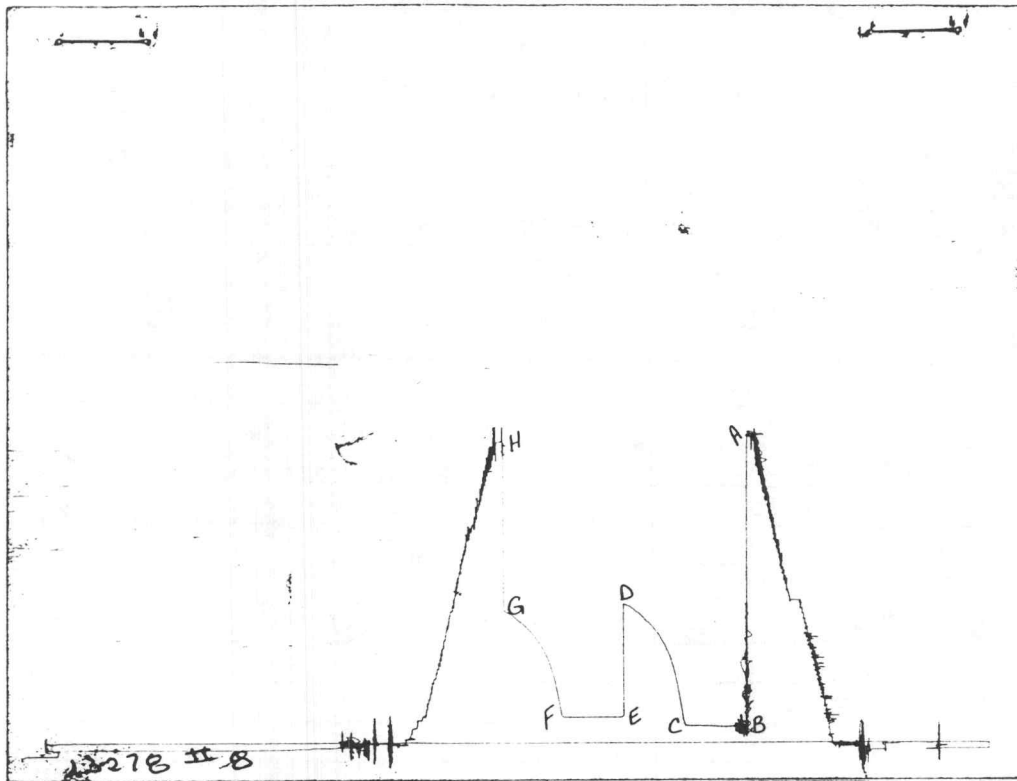
(F) Second Final Flow Pressure 188.8 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 844.4 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1788.8 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative GARY PEVOTEAUX

CHART PAGE



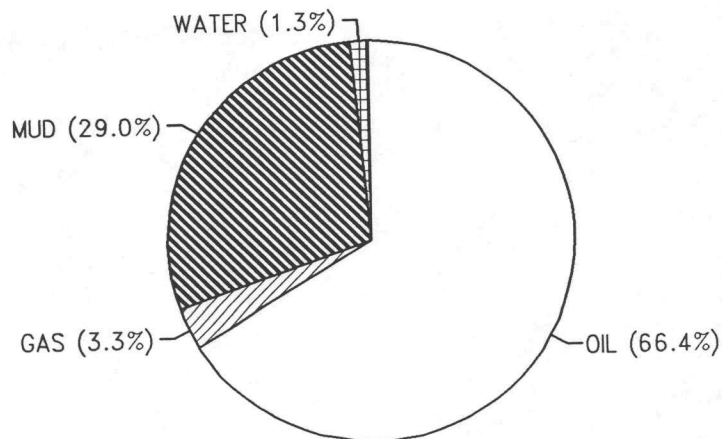
This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1834	1851.1
(B) FIRST INITIAL FLOW PRESSURE	69	71.1
(C) FIRST FINAL FLOW PRESSURE	137	145.5
(D) INITIAL CLOSED-IN PRESSURE	890	896.6
(E) SECOND INITIAL FLOW PRESSURE	157	162.2
(F) SECOND FINAL FLOW PRESSURE	184	188.8
(G) FINAL CLOSED-IN PRESSURE	837	844.4
(H) FINAL HYDROSTATIC MUD	1786	1788.8

CALCULATED RECOVERY ANALYSIS

DST	8	TICKET #		6124					
SAMPLE #	TOTAL FEET	GAS %	FEET	OIL %	FEET	%	WATER FEET	%	MUD FEET
DRILL 1	72	5	3.6	95	68.4	0	0	0	0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	83	5	4.15	95	78.85	0	0	0	0
COLLAR 2	98	0	0	15	14.7	0	0	85	83.3
3	59	0	0	10	5.9	10	5.9	80	47.2
4			0		0		0		0
5			0		0		0		0
TOTAL	312		7.75		167.85		5.9		130.5

		HRS OPEN	BBL/DAY
BBL OIL=	1.4589585	*	1.5
BBL WATER=	0.028851	*	23.343336
BBL MUD=	0.638145		0.461616
BBL GAS =	0.0714855		



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name VAN LOUNEN 31-B #1 Test No. 9 Date 10/20/93
Company RITCHIE EXPLORATION, INC. Zone ARBUCKLE
Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2187
Co. Rep./Geo. KEVIN KESSLER Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 21W Co. GRAHAM State KS

Interval Tested 3708-3717
Anchor Length 9
Top Packer Depth NONE
Bottom Packer Depth 3708
Total Depth 3717

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 240
Mud Wt. 9.4 lb/Gal.
Viscosity 43 Filtrate 9.6

Tool Open @ 11:42 AM Initial Blow WEAK TO FAIR BLOW-(1 TO 7" IN WATER)

Final Blow WEAK BLOW- (1 TO 4" IN WATER)

Recovery - Total Feet 195 Flush Tool? NO

Rec. 30 Feet of GAS IN PIPE
Rec. 25 Feet of CLEAN GASSY OIL-25%GAS/75%OIL
Rec. 50 Feet of OIL CUT WATERY MUD-20%OIL/20%WTR/60%MUD
Rec. 120 Feet of MUDDY WATER WITH OIL SPECKS-96%WTR/4%MUD
Rec. _____ Feet of _____

BHT 112 °F Gravity 25 °API @ 70 °F Corrected Gravity 24 °API
RW _____ @ _____ °F Chlorides 9800 ppm Recovery Chlorides 1900 ppm System

(A) Initial Hydrostatic Mud 1844.4 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 25.5 PSI @ (depth) 3709 w / Clock No. 22993

(C) First Final Flow Pressure 63.3 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 791.1 PSI @ (depth) 3714 w / Clock No. 30410

(E) Second Initial Flow Pressure 77.7 PSI AK1 Recorder No. _____ Range _____

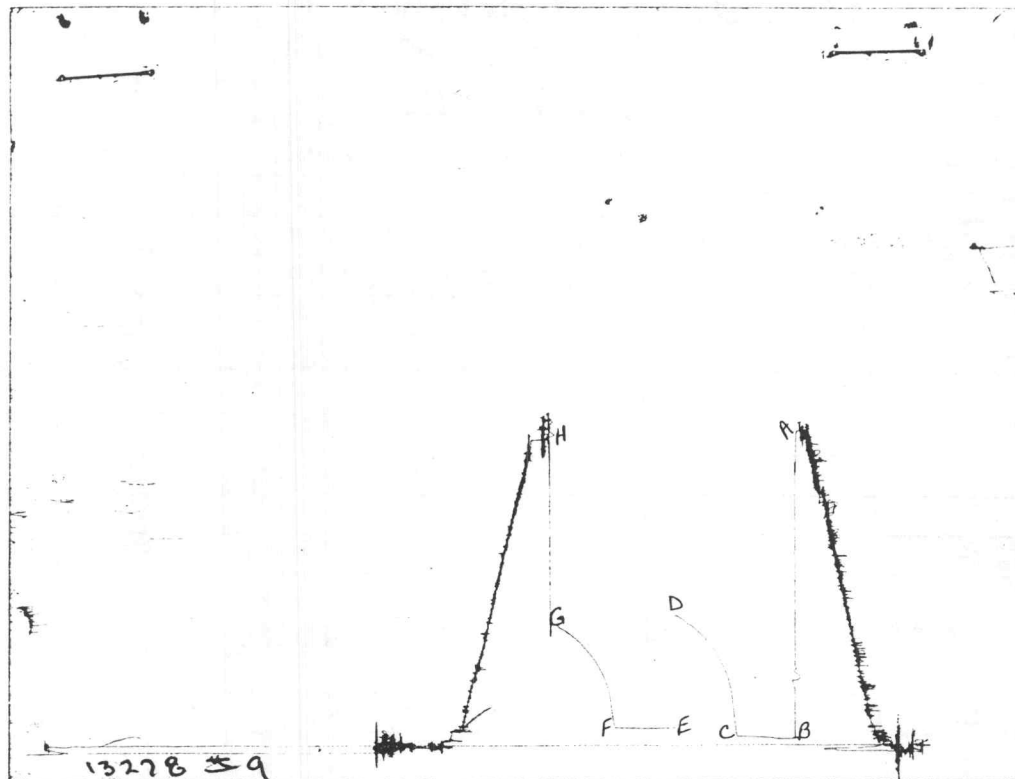
(F) Second Final Flow Pressure 112.2 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 752.2 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1784.4 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1839	1844.4
(B) FIRST INITIAL FLOW PRESSURE	23	25.5
(C) FIRST FINAL FLOW PRESSURE	64	63.3
(D) INITIAL CLOSED-IN PRESSURE	786	791.1
(E) SECOND INITIAL FLOW PRESSURE	73	77.7
(F) SECOND FINAL FLOW PRESSURE	107	112.2
(G) FINAL CLOSED-IN PRESSURE	749	752.2
(H) FINAL HYDROSTATIC MUD	1778	1784.4

DST #

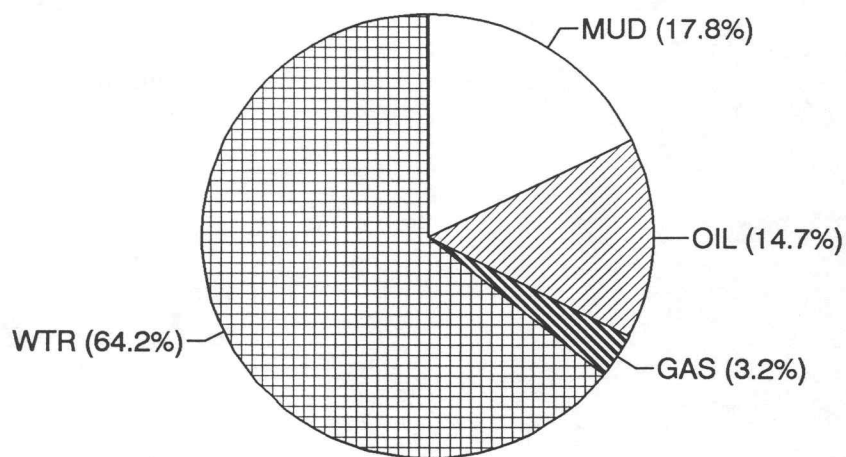
9

TICKET

6124

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	25	25	6.25	75	18.75	0	0	0	0
2	50	0	0	20	10	20	10	60	30
3	120	0	0	0	0	96	115.2	4	4.8
4			0		0		0		0
5			0		0		0		0
TOTAL	195	3.21	6.25	14.74	28.75	64.21	125.2	17.846154	34.8

			HRS OP	BBL/DAY
BBL OIL=	0.1405875	*	1.5	2.2494
BBL WATER=	0.612228	*		9.795648
BBL MUD=	0.170172			
BBL GAS=	0.0305625			



MUD
OIL
GAS
WTR