TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Computer Inventoried Drill-Stem Test Data

Well Name: NOLLETTE #P-4 Test No. 1 Date: 1/6/92
Company: LUFF EXPLORATION CO Zone Tested: LKC-"H-I"
Address: 1580 LINCOLN ST DENVER CO 80203 Elevation: 3134 K.B.
Co. Rep./Geo.: GREG MAGRUDER Cont.: WHITE & ELLIS #8 Est. Ft. of Pay: 4
Location: Sec. 4 Twp. 11S Rge. 33W Co. LOGAN State KS

Interval Tested: 4218-4280 Drill Pipe Size: 4.5 XH
Anchor Length: 62 Wt. Pipe I.D. - 2.7 Ft. Run:
Top Packer Depth: 4213 Drill Collar — 2.25 Ft. Run:
Bottom Packer Depth: 4218
Total Depth: 4280

Mud Wt.: 9.3 lb / gal. Viscosity: 45 Filtrate: 11.2

Tool Open @ 8:15 AM Initial Blow: STRONG-OFF BOTTOM OF BUCKET IN 4 MINUTES'

Final Blow: STRONG-OFF BOTTOM OF BUCKET IN 4 MINUTES

Recovery — Total Feet: 992 Flush Tool? NO

Rec. 930 Feet of GAS IN PIPE

Rec. 682 Feet of CLEAN GASSY OIL-20%GAS/80%OIL

Rec. 124 Feet of OIL CUT GSY MUD-20%GAS/20%OIL/60%MUD

Rec. 124 Feet of OIL CUT GSY MUD-20%GAS/10%OIL/70%MUD

Rec. 62 Feet of SLTLY OIL CUT GSY MUD-10%GAS/5%OIL/85%MUD

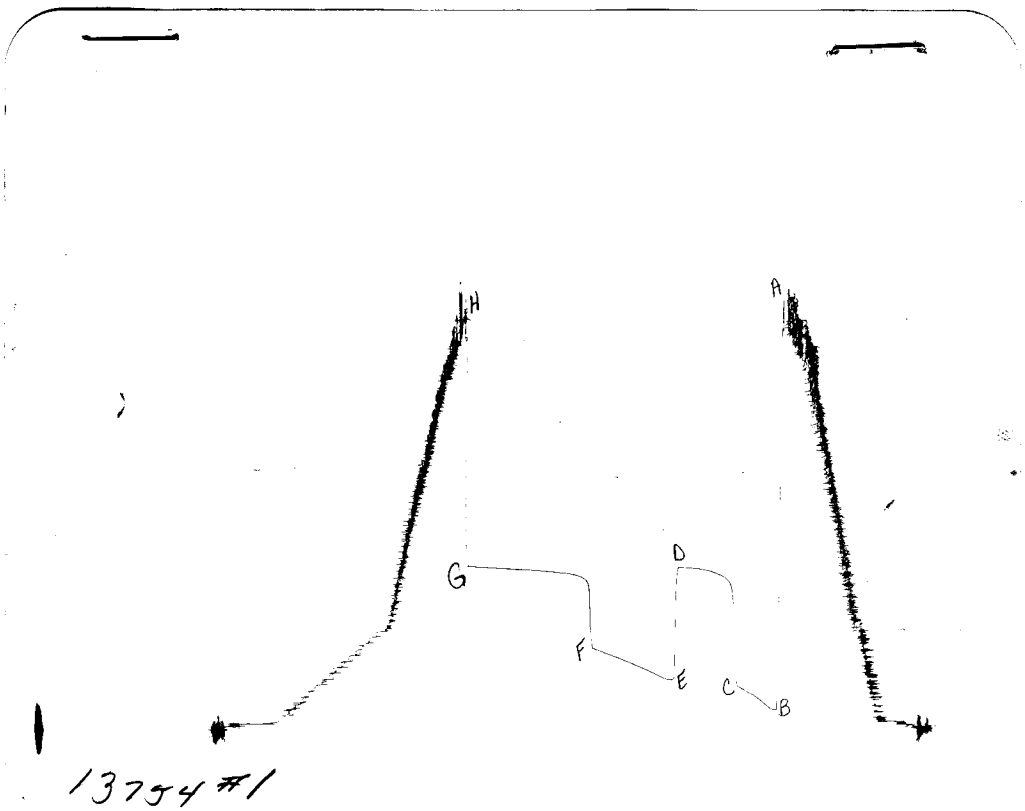
BHT 116 °F Gravity °API @ °F Corrected Gravity 36 °API

RW @ °F Chlorides ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud	2210.2 PSI	AK1 Recorder No.	13754	Range	4000
(B) First Initial Flow Pressure	71.2 PSI	@ (depth)	4222	w/Clock No.	8179
(C) First Final Flow Pressure	201.3 PSI	AK1 Recorder No.	13849	Range	4375
(D) Initial Shut-in Pressure	810.2 PSI	@ (depth	4276	w/Clock No.	26199
(E) Second Initial Flow Pressure	220.2 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	385.2 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-in Pressure	810.2 PSI	Initial Opening	30	Final Flow	60
(H) Final Hydrostatic Mud	2110.2 PSI	Initial Shut-in	45	Final Shut-in	90

Our Representative: DAN BANGLE TOTAL PRICE $ 1000

Printcraft Printers - Hays, KS



This is an actual photograph of recorder chart

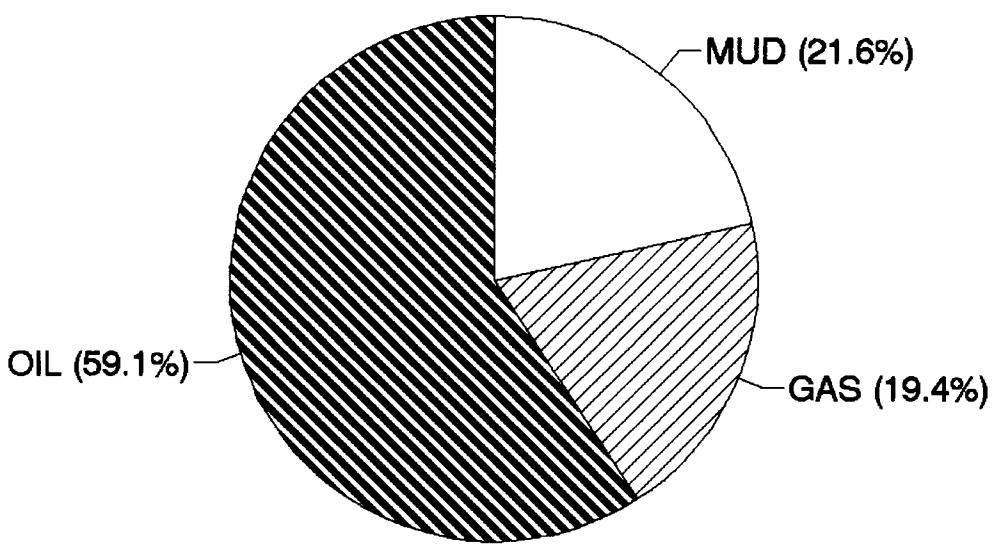
POINT	PRESSURE FIELD READING	PRESSURE OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2208	2210.2
(B) FIRST INITIAL FLOW PRESSURE	68	71.2
(C) FIRST FINAL FLOW PRESSURE	196	201.3
(D) INITIAL CLOSED-IN PRESSURE	808	810.2
(E) SECOND INITIAL FLOW PRESSURE	216	220.2
(F) SECOND FINAL FLOW PRESSURE	383	385.2
(G) FINAL CLOSED-IN PRESSURE	808	810.2
(H) FINAL HYDROSTATIC MUD	2107	2110.2

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 1 TICKET # 4691

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
1	682	20	136.4	80	545.6	0	0	0	0
2	124	20	24.8	20	24.8	0	0	60	74.4
3	124	20	24.8	10	12.4	0	0	70	86.8
4	62	10	6.2	5	3.1	0	0	85	52.7
5			0		0		0		0
TOTAL	992	19.4	192.2	59.0625	585.9	0	0	21.5625	213.9

		HRS OPEN	BBL/DAY
BBL OIL= 8.331498	*	1.5	133.304
BBL WATER 0	*		0
BBL MUD= 3.041658			
BBL GAS 2.733084			



TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 4691 Date 1/6/92

Company Name LUFF EXPLORATION CO

Lease NOLLETTE #P-4 Test No. 1

County LOGAN Sec. 4 Twp. 11S Rng. 33W

SAMPLER RECOVERY

Gas 100 ML

Oil 2900 ML

Mud 0 ML

Water 0 ML

Other 0 ML

Pressure 200 PSI

Total 3000 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.

Resistivity 0.68 ohms @ 82 F

Viscosity 45

Mud Weight 9.3

Filtrate 11.2

Other _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F

Chlorides _____ 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 COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 4691 Date 1-6-92

Company Name Luff Exploration Co.

Lease Nollette # P-4 Test No. 1

County Logan Sec. 4 Twp. 11 Rng. 33

SAMPLER RECOVERY

Gas 100 ML

Oil 2900 ML

Mud 0 ML

Water 0 ML

Other 0 ML

Pressure 200 PSI

Total 3000 ML

PIT MUD ANALYSIS

Chlorides 8,000 ppm.

Resistivity .68 ohms @ 82 F

Viscosity 45

Mud Weight 9.3

Filtrate 11.2

Other

SAMPLER ANALYSIS

Resistivity ohms @ F

Chlorides ppm.

Gravity 38 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 COMPANY

P.O. Box 362 • Hays, Kansas 67601

Truck (Got Stuck)

Test Ticket

№ 4691

Well Name & No. Nollette #P-4 Test No. 1 Date 1-6-92

Company Luff Exploration Co. Zone Tested H-I L.KC

Address 1580 Lincoln St. Denver, Colo. 80203 Elevation 3134 K.B.

Co. Rep./Geo. Greg Magruder Cont. White & Ellis #8 Est. Ft. of Pay 4

Location: Sec. 4 Twp. 11 Rge. 33 Co. Logan State Ks.

No. of Copies 5 Distribution Sheet ____ Yes X No Turnkey ____ Yes X No No Evaluation

Interval Tested 4218-4280 Drill Pipe Size 4.5 XH

Anchor Length 62 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4213 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4218 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 4280 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.3 lb/gal. Viscosity 45 Filtrate 11.2

Tool Open @ 8:15 A.M. Initial Blow Strong - off bottom of bucket in 4 min.

Final Blow Strong - off bottom of bucket in 4 min.

Recovery — Total Feet 992 Feet of Gas in Pipe 920 Flush Tool? ____

Rec. 682	Feet Of C Gsy O	20 %gas	%oil	%water	%mud
Rec. 124	Feet Of O.C. Gsy M	20 %gas	20 %oil	%water	60 %mud
Rec. 124	Feet Of O.C. Gsy M	20 %gas	10 %oil	%water	70 %mud
Rec. 62	Feet Of Slt/y O.C Gsy M	10 %gas	5 %oil	%water	85 %mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 116 °F Gravity ____ °API @ ____ °F Corrected Gravity 36 °API

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

(A) Initial Hydrostatic Mud	2208 PSI	AK1 Recorder No.	13754	Range	4000
(B) First Initial Flow Pressure	68 PSI	@ (depth)	4222	w/Clock No.	8179
(C) First Final Flow Pressure	196 PSI	AK1 Recorder No.	13849	Range	4375
(D) Initial Shut-In Pressure	808 PSI	@ (depth)	4276	w/Clock No.	26199
(E) Second Initial Flow Pressure	216 PSI	AK1 Recorder No.	____	Range	____
(F) Second Final Flow Pressure	383 PSI	@ (depth)	____	w/Clock No.	____
(G) Final Shut-In Pressure	808 PSI	Initial Opening	30	Test	____
(H) Final Hydrostatic Mud	2107 PSI	Initial Shut-In	45	Jars	X
		Final Flow	60	Safety Joint	X
		Final Shut-In	90	Straddle	____
				Circ. Sub	____
				Sampler	X
				Extra Packer	____
				Other	2nd.
				TOTAL PRICE $	1000.00

TRILOBITE TESTING COMPANY 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 SUBSTAINED, 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 Greg Magruder

Our Representative Don Brandle

Printcraft Printers - Hays, KS

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name NOLLETTE #P-4 Test No. 2 Date 1/7/92
Company LUFF EXPLORATION CO Zone Tested LKC-"J"
Address 1580 LINCOLN ST DENVER CO 80203 Elevation 3134 K.B.
Co. Rep./Geo. GREG MAGRUDER Cont. WHITE & ELLIS #8 Est. Ft. of Pay 4
Location: Sec. 4 Twp. 11S Rge. 33W Co. LOGAN State KS

Interval Tested 4282-4308 Drill Pipe Size 4.5 XH
Anchor Length 26 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 4277 Drill Collar — 2.25 Ft. Run
Bottom Packer Depth 4282
Total Depth 4308

Mud Wt. 9.1 lb / gal. Viscosity 49 Filtrate 12.8

Tool Open @ 12:10 AM Initial Blow STRONG-OFF BOTTOM OF BUCKET IN 5 MINUTES

Final Blow STRONG-OFF BOTTOM OF BUCKET IN 6 MINUTES

Recovery — Total Feet 697 Flush Tool? NO

Rec. 806 Feet of GAS IN PIPE

Rec. 573 Feet of CLEAN GASSY OIL-25%GAS/75%OIL

Rec. 124 Feet of OIL CUT GSY MUD-20%GAS/15%OIL/65%MUD

Rec. Feet of

Rec. Feet of

BHT 116 °F Gravity °API @ °F Corrected Gravity 38 °API

RW @ °F Chlorides ppm Recovery Chlorides 9000 ppm System

(A) Initial Hydrostatic Mud 2190.2 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 51.2 PSI @ (depth) 4286 w/Clock No. 8179

(C) First Final Flow Pressure 90.2 PSI AK1 Recorder No. 13849 Range 4375

(D) Initial Shut-in Pressure 534.2 PSI @ (depth 4304 w/Clock No. 26199

(E) Second Initial Flow Pressure 131.2 PSI AK1 Recorder No. Range

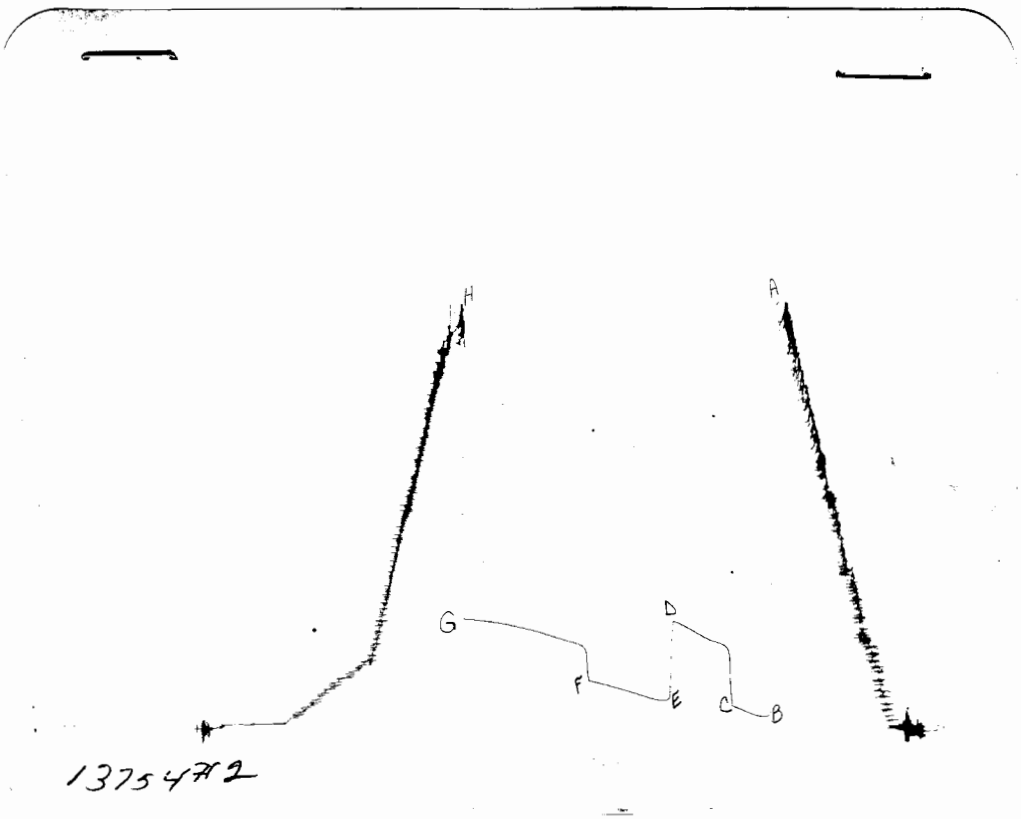
(F) Second Final Flow Pressure 230.2 PSI @ (depth) w/Clock No.

(G) Final Shut-in Pressure 543.2 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2090.2 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative DAN BANGLE TOTAL PRICE $ 1000

Printcraft Printers - Hays, KS



This is an actual photograph of recorder chart

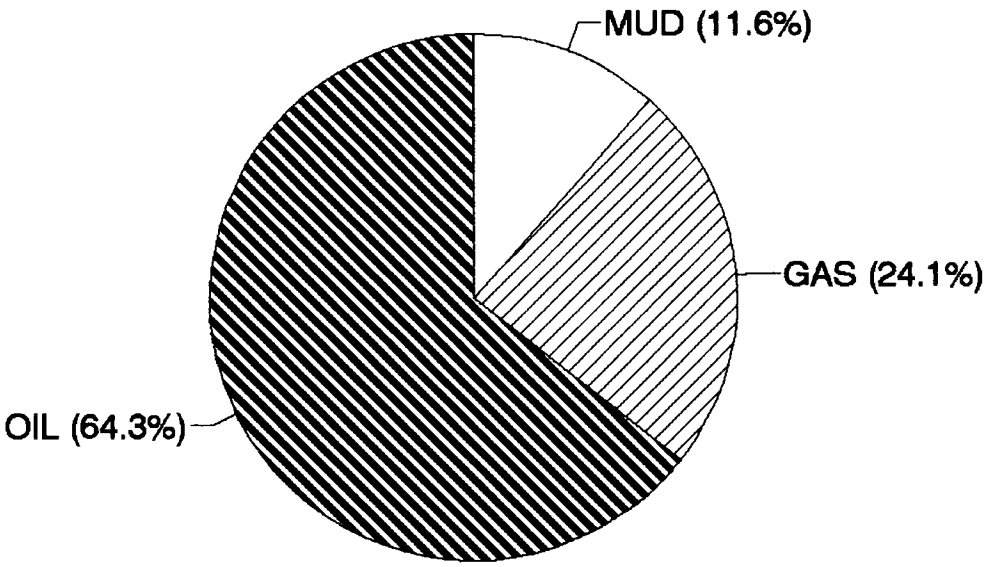
POINT	PRESSURE FIELD READING	PRESSURE OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2188	2190.2
(B) FIRST INITIAL FLOW PRESSURE	49	51.2
(C) FIRST FINAL FLOW PRESSURE	88	90.2
(D) INITIAL CLOSED-IN PRESSURE	531	534.2
(E) SECOND INITIAL FLOW PRESSURE	127	131.2
(F) SECOND FINAL FLOW PRESSURE	226	230.2
(G) FINAL CLOSED-IN PRESSURE	541	543.2
(H) FINAL HYDROSTATIC MUD	2087	2090.2

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 2 TICKET # 4692

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
1	573	25	143.25	75	429.75	0	0	0	0
2	124	20	24.8	15	18.6	0	0	65	80.6
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	697	24.1	168.05	64.3257	448.35	0	0	11.5638	80.6

		HRS OPEN	BBL/DAY
BBL OIL= 6.375537	*	1.5	102.009
BBL WATER 0	*		0
BBL MUD= 1.146132			
BBL GAS 2.389671			



TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 4692 Date 1/7/92

Company Name LUFF EXPLORATION CO

Lease NOLLETTE #P-4 Test No. 2

County LOGAN Sec. 4 Twp. 11S Rng. 33W

SAMPLER RECOVERY

Gas 100 ML

Oil 2500 ML

Mud 0 ML

Water 0 ML

Other 0 ML

Pressure 150 PSI

Total 2600 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.

Resistivity 0.7 ohms @ 81 F

Viscosity 49

Mud Weight 9.1

Filtrate 12.8

Other _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F

Chlorides _____ 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 COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 4692 Date 1-7-92

Company Name Luff Exploration Co.

Lease Nollette #P-4 Test No. 2

County Logan Sec. 4 Twp. 11 Rng. 33

SAMPLER RECOVERY

Gas 100 ML

Oil 2500 ML

Mud 0 ML

Water 0 ML

Other 0 ML

Pressure 150 PSI

Total 2600 ML

PIT MUD ANALYSIS

Chlorides 9,000 ppm.

Resistivity .70 ohms @ 81 F

Viscosity 49

Mud Weight 9.1

Filtrate 12.8

Other

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F

Chlorides _____ 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 COMPANY

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 4692

Fax 303-861-2481

Well Name & No. Nollette #P-4 Test No. 2 Date 1-7-92

Company Luff Exploration Co. Zone Tested "I" L.K.C

Address Elevation 3134 K.B.

Co. Rep./Geo. Greg Magruder Cont. White + Ellis #8 Est. Ft. of Pay 4

Location: Sec. 4 Twp. 11 Rge. 33 Co. Logan State Ks.

No. of Copies 5 Distribution Sheet ____ Yes X No Turnkey ____ Yes X No No Evaluation

Interval Tested 4282 - 4308 Drill Pipe Size 4.5 XH

Anchor Length 26 Top Choke — 1" ____ Bottom Choke — 3/4" ____

Top Packer Depth 4277 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Bottom Packer Depth 4282 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 4308 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.1 lb/gal. Viscosity 49 Filtrate 12.8

Tool Open @ 12:10 A.M. Initial Blow Strong - off bottom of bucket in 5 min.

Final Blow Strong - off bottom of bucket in 6 min.

Recovery — Total Feet 697 Feet of Gas in Pipe 806 Flush Tool? ____

Rec. 573	Feet Of C. Gsy O	25 %gas	%oil	%water	%mud
Rec. 124	Feet Of O. C. Gsy M	20 %gas	15 %oil	%water	65 %mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 116 °F Gravity ____ °API @ ____ °F Corrected Gravity 38 °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 9,000 ppm System

(A) Initial Hydrostatic Mud	2188	PSI	AK1 Recorder No.	13754	Range	4000
(B) First Initial Flow Pressure	49	PSI	@ (depth)	4286	w/Clock No.	8179
(C) First Final Flow Pressure	88	PSI	AK1 Recorder No.	13849	Range	4375
(D) Initial Shut-In Pressure	531	PSI	@ (depth)	4304	w/Clock No.	26199
(E) Second Initial Flow Pressure	127	PSI	AK1 Recorder No.	____	Range	____
(F) Second Final Flow Pressure	226	PSI	@ (depth)	____	w/Clock No.	____
(G) Final Shut-In Pressure	541	PSI	Initial Opening	30	Test	____
(H) Final Hydrostatic Mud	2087	PSI	Initial Shut-In	45	Jars	X
			Final Flow	60	Safety Joint	X
			Final Shut-In	90	Straddle	____
					Circ. Sub	____
					Sampler	X
					Extra Packer	____
					Other	2ns.
					TOTAL PRICE $	____

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Approved By Greg Magruder

Our Representative Dan Bangle

Printcraft Printers - Hays, KS

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name NOLLETTE #P-4 Test No. 3 Date 1/8/92
Company LUFF EXPLORATION CO Zone Tested JOHNSON
Address 1580 LINCOLN ST DENVER CO 80203 Elevation 3134 K.B.
Co. Rep./Geo. GREG MAGRUDER Cont. WHITE & ELLIS #8 Est. Ft. of Pay
Location: Sec. 4 Twp. 11S Rge. 33W Co. LOGAN State KS

Interval Tested 4602-4645 Drill Pipe Size 4.5 XH
Anchor Length 43 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 4597 Drill Collar — 2.25 Ft. Run
Bottom Packer Depth 4602
Total Depth 4645

Mud Wt. 9.3 lb / gal. Viscosity 56 Filtrate 15.6

Tool Open @ 4:45 PM Initial Blow WEAK-BUILDING TO 2"

Final Blow WEAK-BUILDING TO 2"

Recovery — Total Feet 80 Flush Tool? NO

Rec. 80 Feet of OIL CUT MUD-10%OIL/90%MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 124 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 14000 ppm System

(A) Initial Hydrostatic Mud 2510.3 PSI Ak1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 47.2 PSI @ (depth) 4606 w/Clock No. 8179

(C) First Final Flow Pressure 47.2 PSI AK1 Recorder No. 13849 Range 4375

(D) Initial Shut-in Pressure 426.2 PSI @ (depth 4641 w/Clock No. 26199

(E) Second Initial Flow Pressure 58.3 PSI AK1 Recorder No. Range

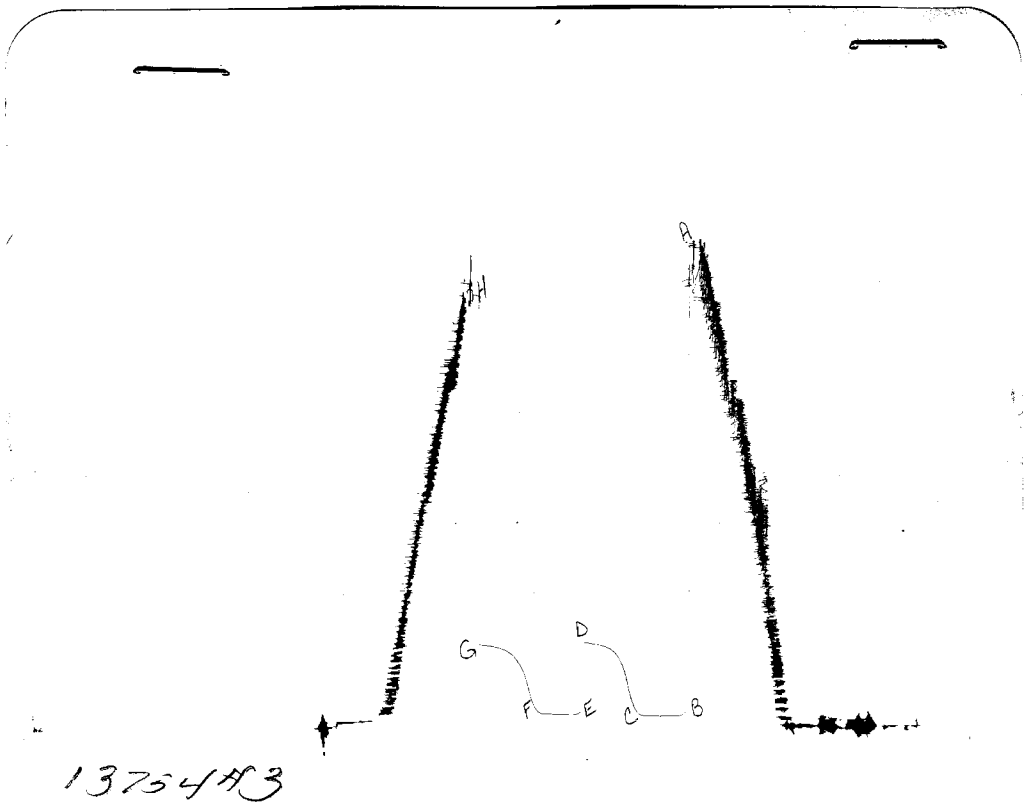
(F) Second Final Flow Pressure 58.3 PSI @ (depth) w/Clock No.

(G) Final Shut-in Pressure 403.2 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2391.2 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative DAN BANGLE TOTAL PRICE $ 1000

Printcraft Printers - Hays, KS



This is an actual photograph of recorder chart

POINT	PRESSURE FIELD READING	PRESSURE OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2500	2510.3
(B) FIRST INITIAL FLOW PRESSURE	44	47.2
(C) FIRST FINAL FLOW PRESSURE	44	47.2
(D) INITIAL CLOSED-IN PRESSURE	422	426.2
(E) SECOND INITIAL FLOW PRESSURE	55	58.3
(F) SECOND FINAL FLOW PRESSURE	55	58.3
(G) FINAL CLOSED-IN PRESSURE	400	403.2
(H) FINAL HYDROSTATIC MUD	2389	2391.2

TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 4693 Date 1/8/92

Company Name LUFF EXPLORATION CO

Lease NOLLETTE #P-4 Test No. 3

County LOGAN Sec. 4 Twp. 11S Rng. 33W

SAMPLER RECOVERY

Gas 0 ML

Oil 500 ML

Mud 0.9 ML

Water 0 ML

Other 0 ML

Pressure 100 PSI

Total ML

PIT MUD ANALYSIS

Chlorides ppm.

Resistivity 0.86 ohms @ 80 F

Viscosity 56

Mud Weight 9.3

Filtrate 15.6

Other

SAMPLER ANALYSIS

Resistivity ohms @ F

Chlorides 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 COMPANY

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 4693 Date 1-8-92

Company Name Luff Exploration Co.

Lease Nollette #P-4 Test No. 3

County Logan Sec. 4 Twp. 11 Rng. 33

SAMPLER RECOVERY

Gas 0 ML

Oil 10% 500 ML

Mud 90% ML

Water 0 ML

Other 0 ML

Pressure 100 PSI

Total ML

PIT MUD ANALYSIS

Chlorides 14,000 ppm.

Resistivity .86 ohms @ 80 F

Viscosity 56

Mud Weight 9.3

Filtrate 15.6

Other

SAMPLER ANALYSIS

Resistivity ohms @ F

Chlorides 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 COMPANY

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 4693

Well Name & No. Nollette #P-4 Test No. 3 Date 1-8-92

Company Huff Exploration Co. Zone Tested Johnson

Address Elevation 3134 K.B

Co. Rep./Geo. Greg Magruder Cont. White & Ellis #8 Est. Ft. of Pay

Location: Sec. 4 Twp. 11 Rge. 33 Co. Logan State Ks.

No. of Copies 5 Distribution Sheet Yes X No Turnkey Yes X No No Evaluation

Interval Tested 4602-4645 Drill Pipe Size 4.5 XH

Anchor Length 43 Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4597 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4602 Wt. Pipe I.D. — 2.7 Ft. Run

Total Depth 4645 Drill Collar — 2.25 Ft. Run

Mud Wt. 9.3 lb/gal. Viscosity 56 Filtrate 15.6

Tool Open @ 4:45 P.M. Initial Blow Weak-building to 2"

Final Blow Weak-building to 2"

Recovery — Total Feet 80 Feet of Gas in Pipe Flush Tool?

Rec. 80	Feet Of	O.C.M.	%gas	10 %oil	%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 124 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 14,000 ppm System

(A) Initial Hydrostatic Mud	2500 PSI	AK1 Recorder No.	13754	Range	4000
(B) First Initial Flow Pressure	44 PSI	@ (depth)	4606	w/Clock No.	8179
(C) First Final Flow Pressure	44 PSI	AK1 Recorder No.	13849	Range	4375
(D) Initial Shut-In Pressure	422 PSI	@ (depth)	4641	w/Clock No.	26199
(E) Second Initial Flow Pressure	55 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	55 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	400 PSI	Initial Opening	30	Test	
(H) Final Hydrostatic Mud	2389 PSI	Initial Shut-In	45	Jars	X
		Final Flow	30	Safety Joint	X
		Final Shut-In	45	Straddle	
				Circ. Sub	
				Sampler	X
				Extra Packer	
				Other	2nd
				TOTAL PRICE $	

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Approved By Greg Magruder

Our Representative Dan Bangle

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