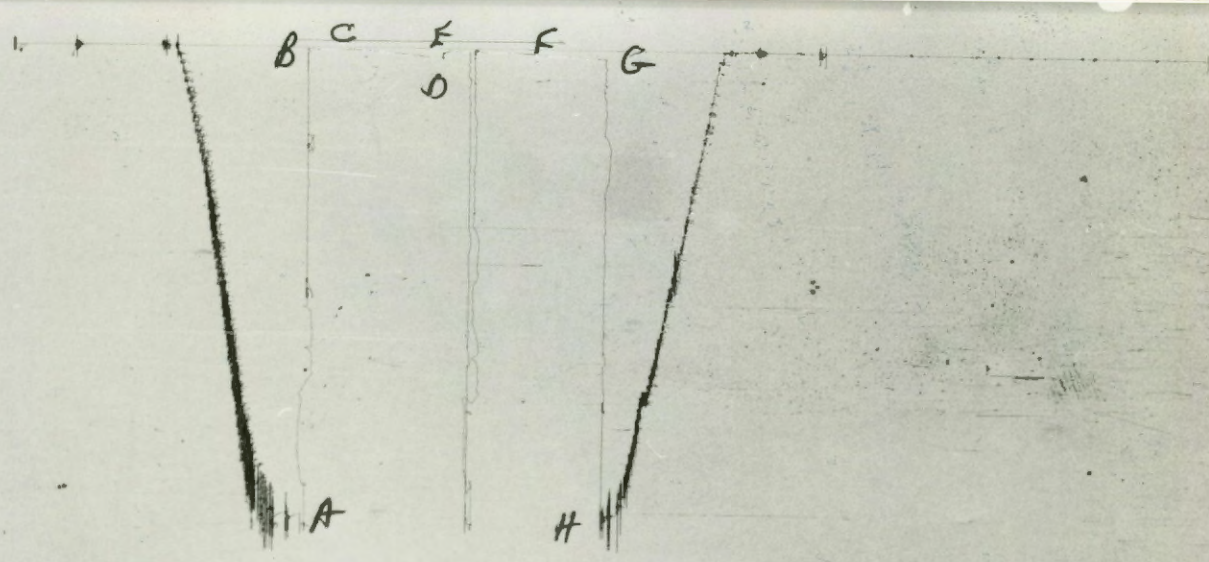




TICKET NO. 53988100
28-FEB-83
HAYS

FORMATION TESTING SERVICE REPORT

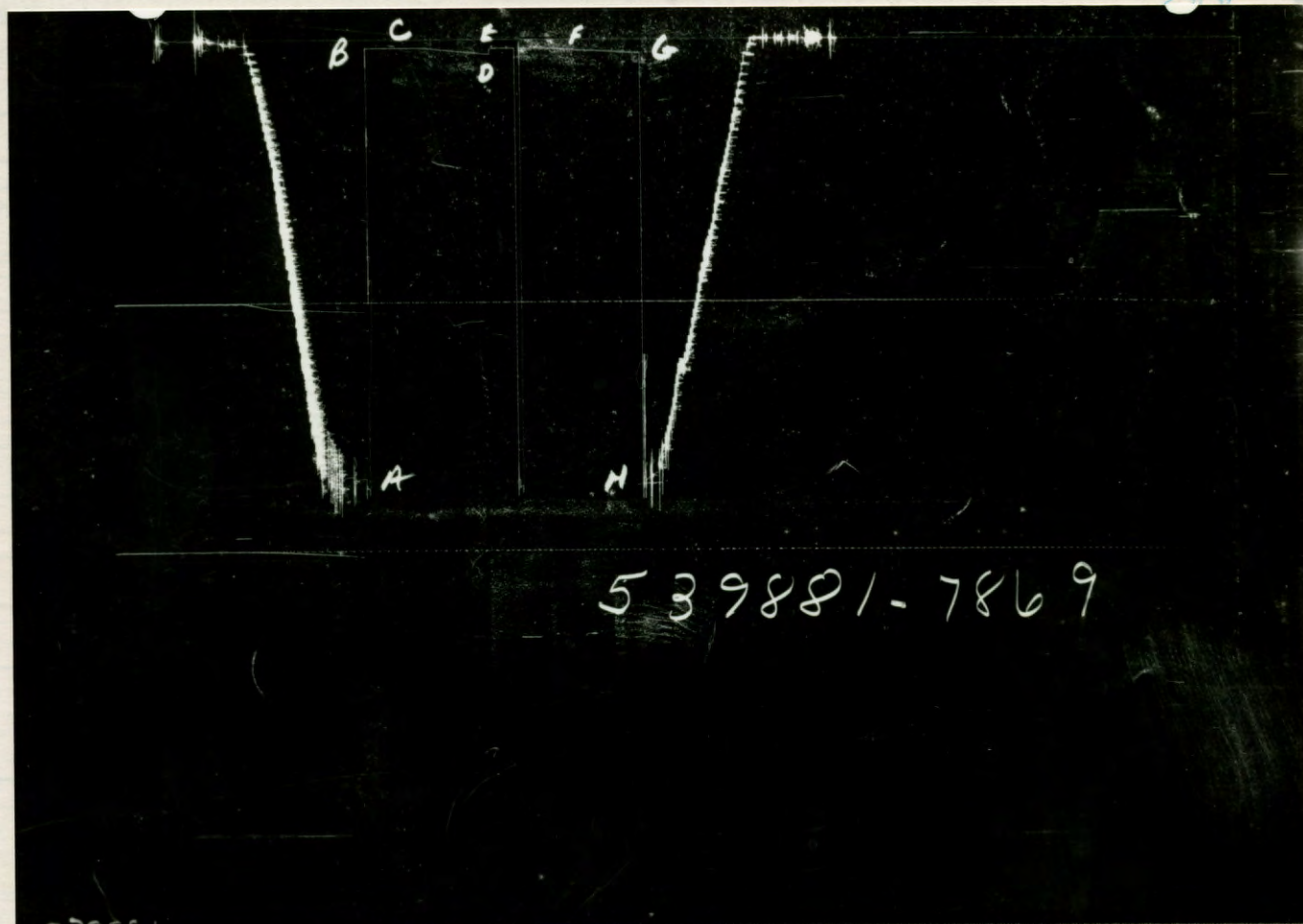
LEASE NAME	STEPHENS	WELL NO.	1	TEST NO.	1	TESTED INTERVAL	3268.1' - 3306.1'	LEASE OWNER/COMPANY NAME	RUPE OIL COMPANY, INCORPORATED
LEGAL LOCATION SEC. - TWP. - RNG.	12-15-20W	FIELD AREA	WEST OF SCHOECHERON	COUNTRY	ELLIS	STATE	OKLAHOMA	DR/IC	



539881-7870

GAUGE NO: 7870 DEPTH: 3261.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1709.7			
B	INITIAL FIRST FLOW		6.7			
C	FINAL FIRST FLOW		9.4	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN		9.4			
D	FINAL FIRST CLOSED-IN		34.9	45.0	45.0	C
E	INITIAL SECOND FLOW		21.2			
F	FINAL SECOND FLOW		12.7	30.0	30.0	F
F	INITIAL SECOND CLOSED-IN		12.7			
G	FINAL SECOND CLOSED-IN		32.5	60.0	60.0	C
H	FINAL HYDROSTATIC		1709.4			



GAUGE NO: 7869 DEPTH: 3303.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1723	1730.5			
B	INITIAL FIRST FLOW	20	33.7	30.0	30.0	F
C	FINAL FIRST FLOW	29	33.7			
C	INITIAL FIRST CLOSED-IN	29	33.7	45.0	45.0	C
D	FINAL FIRST CLOSED-IN	59	58.8			
E	INITIAL SECOND FLOW	29	40.1	30.0	30.0	F
F	FINAL SECOND FLOW	39	35.0			
F	INITIAL SECOND CLOSED-IN	39	35.0	60.0	60.0	C
G	FINAL SECOND CLOSED-IN	49	54.8			
H	FINAL HYDROSTATIC	1703	1728.9			

EQUIPMENT & HOLE DATA

FORMATION TESTED: LANSING "A"
 NET PAY (ft): 3.0
 GROSS TESTED FOOTAGE: 38.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 1987
 TOTAL DEPTH (ft): 3306.0
 PACKER DEPTH(S) (ft): 3268
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.90
 MUD VISCOSITY (sec): 42
 ESTIMATED HOLE TEMP. (°F): 100
 ACTUAL HOLE TEMP. (°F): @ ft

TICKET NUMBER: 53988100

DATE: 2-23-83 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: HAYS

TESTER: K. SCHMEIDLER

WITNESS: JIM CRISLER

DRILLING CONTRACTOR: DUNNE GARDNER #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

P_{sig} AT SURFACE: _____
 cu.ft. OF GAS: _____
 cc OF OIL: _____
 cc OF WATER: _____
 cc OF MUD: _____
 TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ _____ °F
 GAS/OIL RATIO (cu.ft. per bbl): _____
 GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

7 FEET OF DRILLING MUD - NO SHOW OF OIL

MEASURED FROM
TESTER VALVE

REMARKS:

TOOL SLID 4' TO BOTTOM.
 HT-500 TEMPERATURE CHART WAS NOT SENT IN FOR PROCESSING.

[illegible]

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3034.0	
4		FLEX WEIGHT.....	4.500	2.764	90.0	
50		IMPACT REVERSING SUB.....	5.250	2.250	1.0	3124.0
4		FLEX WEIGHT.....	4.500	2.764	124.0	
12		DUAL CIP VALVE.....	5.000	0.870	6.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3259.0
80		AP RUNNING CASE.....	5.000	3.060	4.0	3261.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3268.0
20		FLUSH JOINT ANCHOR.....	5.000	3.840	31.0	
83		HT-500 TEMPERATURE CASE.....	5.000	3.750	1.5	3301.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	3303.0
TOTAL DEPTH						3306.0

EQUIPMENT DATA

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

Rupe Oil Co., Inc.

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 539881

(This Order Must Be Filled Out and Signed By Company Representative)

Company
Orig. Chart

Rupe Oil Co., Inc.

5

& Reports

ATT.

P.O. BOX
STREET & NO. 2273

BUILDING

CITY

STATE

Wichita, Ks.

ZIP CODE NUMBER

67201

Company



ATT.

P.O. BOX
STREET & NO.
BUILDING

Reports

CITY

STATE

ZIP CODE NUMBER

Company



ATT.

P.O. BOX
STREET & NO.
BUILDING

Reports

CITY

STATE

ZIP CODE NUMBER

Company



ATT.

P.O. BOX
STREET & NO.
BUILDING

Reports

CITY

STATE

ZIP CODE NUMBER

Company



ATT.

P.O. BOX
STREET & NO.
BUILDING

Reports

CITY

STATE

ZIP CODE NUMBER

Owner - Operator - or His Agent

SIGNED

Lance Z. Cook, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)



TICKET NO. 53988200

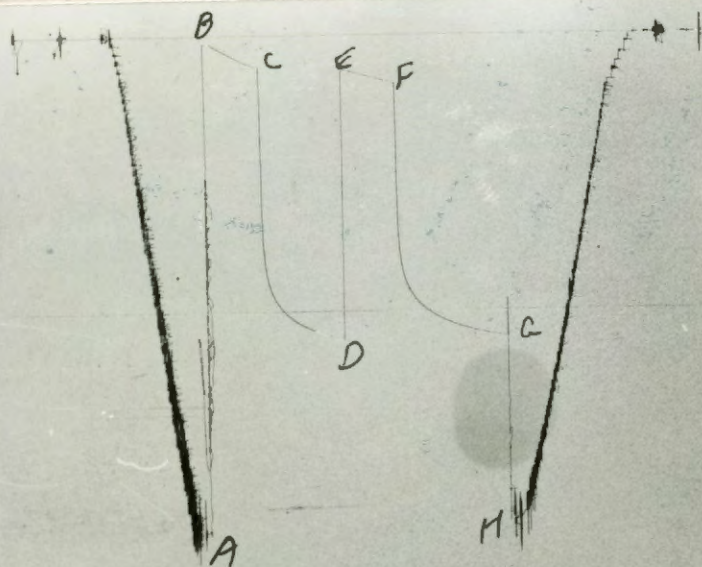
01-MAR-83

HAYS

FORMATION TESTING SERVICE REPORT

8 7 0

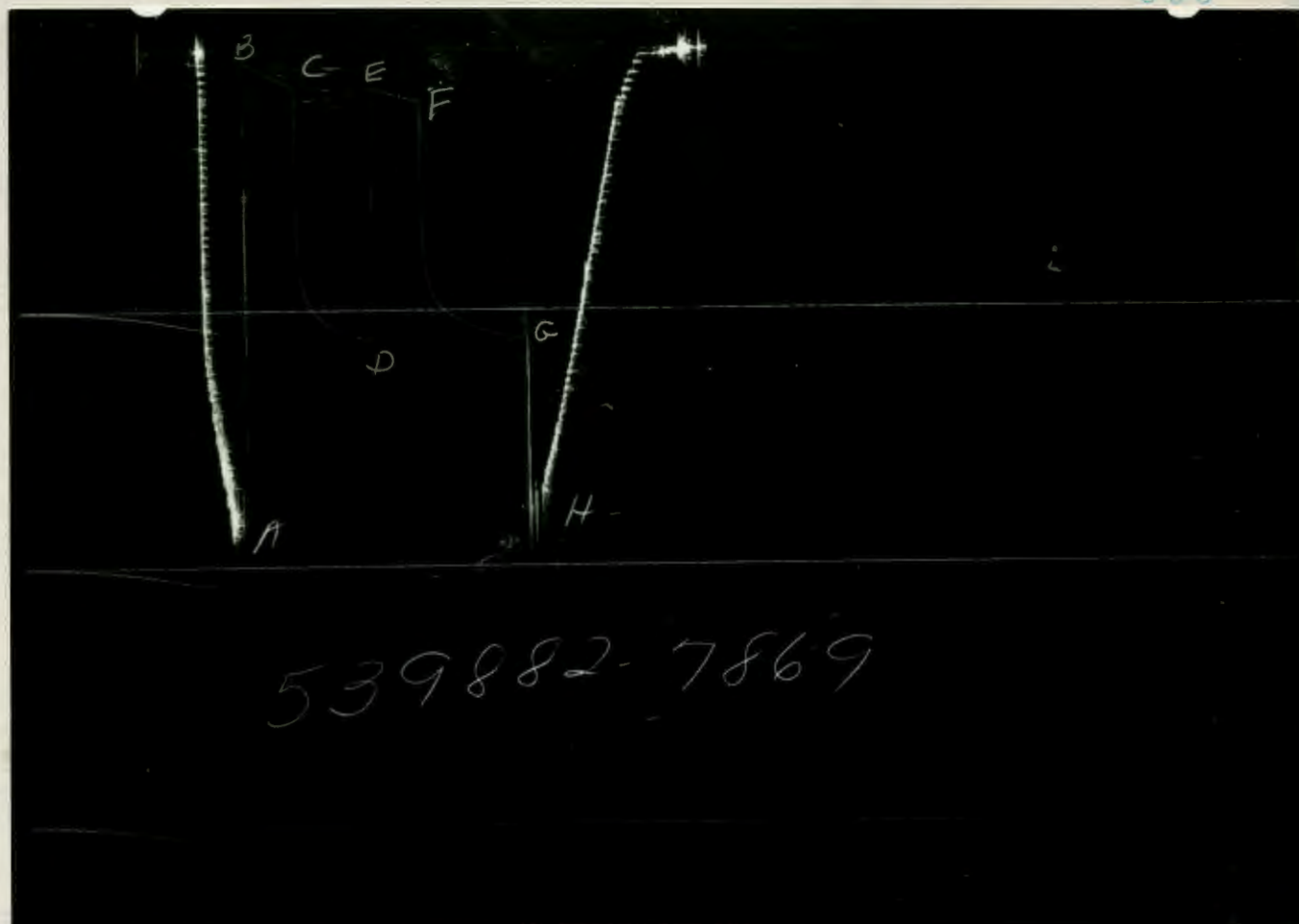
STEPHENS	1	2	3341. - 3374.	RUPE OIL COMPANY, INCORPORATED
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
LEGAL LOCATION SEC. - TWP. - RNG.	12 - 15S - 20W	FIELD AREA	WEST OF SCHOENCHEN	COUNTY
				ELLIS
				STATE
				KANSAS
				SM/PW



539882-7870

GAUGE NO: 7870 DEPTH: 3328.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1806.5			
B	INITIAL FIRST FLOW		32.9			
C	FINAL FIRST FLOW		120.4	30.0	30.5	F
C	INITIAL FIRST CLOSED-IN		120.4			
D	FINAL FIRST CLOSED-IN		1111.2	45.0	44.8	C
E	INITIAL SECOND FLOW		134.2			
F	FINAL SECOND FLOW		178.7	30.0	29.0	F
F	INITIAL SECOND CLOSED-IN		178.7			
G	FINAL SECOND CLOSED-IN		1104.5	60.0	60.6	C
H	FINAL HYDROSTATIC		1761.1			



GAUGE NO: 7869 DEPTH: 3371.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1830	1827.3			
B	INITIAL FIRST FLOW	39	47.6			
C	FINAL FIRST FLOW	147	143.8	30.0	30.5	F
C	INITIAL FIRST CLOSED-IN	147	143.8			
D	FINAL FIRST CLOSED-IN	1130	1133.0	45.0	44.8	C
E	INITIAL SECOND FLOW	157	154.7			
F	FINAL SECOND FLOW	196	200.7	30.0	29.0	F
F	INITIAL SECOND CLOSED-IN	196	200.7			
G	FINAL SECOND CLOSED-IN	1130	1125.8	60.0	60.6	C
H	FINAL HYDROSTATIC	1772	1778.2			

EQUIPMENT & HOLE DATA

FORMATION TESTED: KANSAS CITY "E" ZONE
 NET PAY (ft): 4.0
 GROSS TESTED FOOTAGE: 33.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 1987
 TOTAL DEPTH (ft): 3374.0
 PACKER DEPTH(S) (ft): 3335, 3341
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.90
 MUD VISCOSITY (sec): 43
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 90 @ 3369.0 ft

TICKET NUMBER: 53988200DATE: 2-24-82 TEST NO: 2TYPE DST: OPEN HOLE

HALLIBURTON CAMP:

HAYSTESTER: K. SCHMEIDLERWITNESS: JOHN CARNES

DRILLING CONTRACTOR:

DUNN - GARDNER #2FLUID PROPERTIES FOR
RECOVERED MUD & WATER

SOURCE

RESISTIVITY

CHLORIDES

_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

Pstg AT SURFACE: _____

cu.ft. OF GAS: _____

cc OF OIL: _____

cc OF WATER: _____

cc OF MUD: _____

TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ _____ °F
 GAS/OIL RATIO (cu.ft. per bbl): _____
 GAS GRAVITY: _____

CUSHION DATA

TYPE AMOUNT WEIGHT

_____	_____	_____
_____	_____	_____

RECOVERED:

341 FEET OF WATERY MUD (NO SHOW OF OIL)

MEASURED FROM
TESTER VALVE

REMARKS:

[illegible]

TICKET NO: 53988200

CLOCK NO: 17421 HOUR: 12



GAUGE NO: 7870

DEPTH: 3328.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	32.9			
2	5.0	37.2	4.3		
3	10.0	55.7	18.5		
4	15.0	74.0	18.3		
5	20.0	91.8	17.9		
6	25.0	106.7	14.9		
C 7	30.5	120.4	13.7		
FIRST CLOSED-IN					
C 1	0.0	120.4			
2	3.0	894.6	774.2	2.7	1.046
3	6.0	954.2	833.9	5.0	0.786
4	9.0	989.0	868.6	7.0	0.642
5	12.0	1013.9	893.5	8.6	0.549
6	15.0	1031.0	910.6	10.0	0.483
7	18.0	1046.6	926.2	11.3	0.431
8	21.0	1058.1	937.7	12.4	0.390
9	24.0	1067.8	947.5	13.4	0.356
10	27.0	1076.9	956.5	14.3	0.328
11	30.0	1083.9	963.5	15.1	0.305
12	33.0	1091.4	971.1	15.9	0.284
13	36.0	1097.8	977.5	16.5	0.267
14	39.0	1103.1	982.8	17.1	0.251
15	42.0	1108.5	988.1	17.7	0.237
D 16	44.8	1111.2	990.9	18.2	0.226
SECOND FLOW					
E 1	0.0	134.2			
2	5.0	133.7	-0.5		
3	10.0	144.5	10.8		
4	15.0	154.4	9.9		
5	20.0	162.6	8.2		
6	25.0	170.8	8.2		
F 7	29.0	178.7	8.0		
SECOND CLOSED-IN					
F 1	0.0	178.7			
2	5.0	910.7	732.0	4.6	1.113
3	10.0	969.8	791.0	8.6	0.841
4	15.0	1001.1	822.3	12.0	0.697
5	20.0	1024.2	845.5	15.0	0.599
6	25.0	1042.1	863.4	17.6	0.529
7	30.0	1056.2	877.5	19.9	0.475
8	35.0	1067.8	889.1	22.1	0.432
9	40.0	1077.4	898.6	23.9	0.396
10	45.0	1086.1	907.4	25.6	0.366

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
11	50.0	1093.0	914.3	27.2	0.341
12	55.0	1099.5	920.8	28.6	0.319
G 13	60.6	1104.5	925.8	30.0	0.297

REMARKS:

TICKET NO: 53988200

CLOCK NO: 17420 HOUR: 12


HALLIBURTON
SERVICES

GAUGE NO: 7869

DEPTH: 3371.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	47.6			
2	5.0	61.3	13.7		
3	10.0	79.4	18.1		
4	15.0	98.0	18.7		
5	20.0	116.1	18.1		
6	25.0	129.5	13.3		
C 7	30.5	143.8	14.4		
FIRST CLOSED-IN					
C 1	0.0	143.8			
2	3.0	911.4	767.5	2.8	1.042
3	6.0	975.4	831.6	5.0	0.782
4	9.0	1011.3	867.4	6.9	0.643
5	12.0	1035.7	891.9	8.6	0.549
6	15.0	1053.7	909.9	10.0	0.483
7	18.0	1068.1	924.3	11.3	0.431
8	21.0	1080.4	936.6	12.4	0.390
9	24.0	1090.7	946.8	13.4	0.356
10	27.0	1099.3	955.5	14.3	0.329
11	30.0	1106.6	962.8	15.1	0.305
12	33.0	1113.1	969.3	15.9	0.285
13	36.0	1119.2	975.3	16.5	0.267
14	39.0	1124.6	980.8	17.1	0.251
15	42.0	1129.1	985.3	17.7	0.237
D 16	44.8	1133.0	989.1	18.2	0.226
SECOND FLOW					
E 1	0.0	154.7			
2	5.0	157.8	3.1		
3	10.0	168.0	10.2		
4	15.0	177.8	9.8		
5	20.0	186.3	8.5		
6	25.0	194.0	7.7		
F 7	29.0	200.7	6.7		
SECOND CLOSED-IN					
F 1	0.0	200.7			
2	5.0	930.2	729.5	4.6	1.109
3	10.0	989.9	789.2	8.5	0.844
4	15.0	1021.7	821.0	12.0	0.696
5	20.0	1045.1	844.5	15.0	0.599
6	25.0	1062.6	862.0	17.6	0.530
7	30.0	1076.4	875.7	19.9	0.475
8	35.0	1088.3	887.6	22.0	0.432
9	40.0	1098.4	897.8	23.9	0.396
10	45.0	1106.7	906.0	25.6	0.366

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
11	50.0	1114.0	913.3	27.2	0.341
12	55.0	1119.9	919.3	28.6	0.319
G 13	60.6	1125.8	925.1	30.0	0.297

REMARKS:

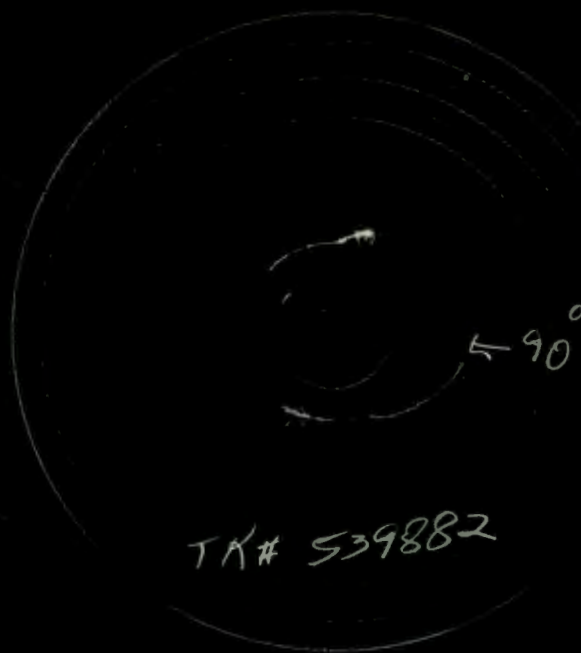
		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3101.0	
3		DRILL COLLARS.....	4.500	2.764	90.0	
50		IMPACT REVERSING SUB.....	5.250	2.750	1.0	3191.0
3		DRILL COLLARS.....	4.500	2.764	124.0	
12		DUAL CIP VALVE.....	5.000	0.870	6.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3326.0
80		AP RUNNING CASE.....	5.000	3.060	4.0	3328.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3335.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3341.0
20		FLUSH JOINT ANCHOR.....	5.000	3.840	26.0	
83		HT-500 TEMPERATURE CASE.....	5.000	3.750	1.5	3369.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	3371.0
TOTAL DEPTH						3374.0

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



10° each circle

Indicated Flow
Capacity

$$kh = \frac{1637 Q_g T}{m}$$

md-ft

Average Effective
Permeability

$$k = \frac{kh}{h}$$

md

Skin Factor

$$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi \mu c_t r_w^2} + 3.23 \right] \text{ ---}$$

Damage Ratio

$$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87 mS} \text{ ---}$$

Indicated Flow
Rate (Maximum)

$$AOF_1 = \frac{Q_g m(P^*)}{m(P^*) - m(P_f)} \text{ MCFD}$$

Indicated Flow
Rate (Minimum)

$$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}} \text{ MCFD}$$

Approx. Radius of
Investigation

$$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}} \text{ ft}$$

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

Rupe Oil Co., Inc.

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 539882

(This Order Must Be Filled Out and Signed By Company Representative)

Company Rupe Oil Co., Inc.
Orig. Chart

5

& Reports

ATT.

P.O. BOX
STREET & NO. 2273

BUILDING

CITY

STATE Wichita KS,

ZIP CODE NUMBER

67201

Company



Reports

ATT.

P.O. BOX
STREET & NO.

BUILDING

CITY

STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.

BUILDING

CITY

STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.

BUILDING

CITY

STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.

BUILDING

CITY

STATE

ZIP CODE NUMBER

Owner - Operator - or His Agent

SIGNED

John L. Carr

, Agent

Send 1st, 2nd and 3rd Copy with Charts

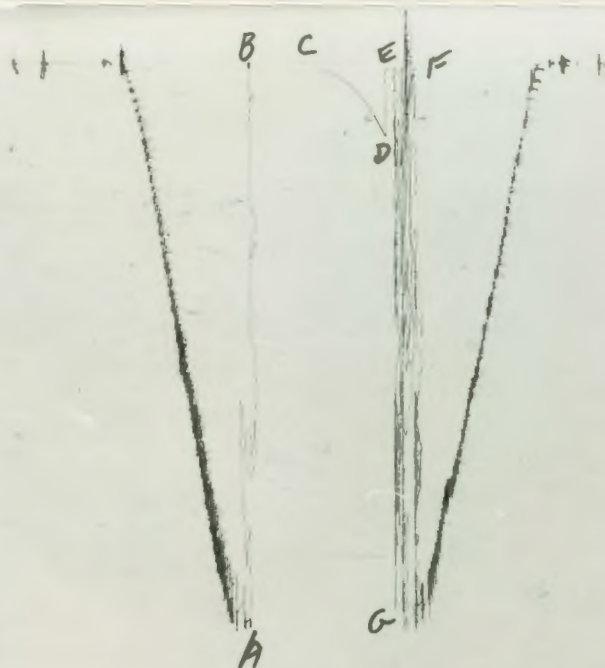
(Use Additional Sheets When Necessary)



TICKET NO. 53988300
01-MAR-83
HAYS

FORMATION TESTING SERVICE REPORT

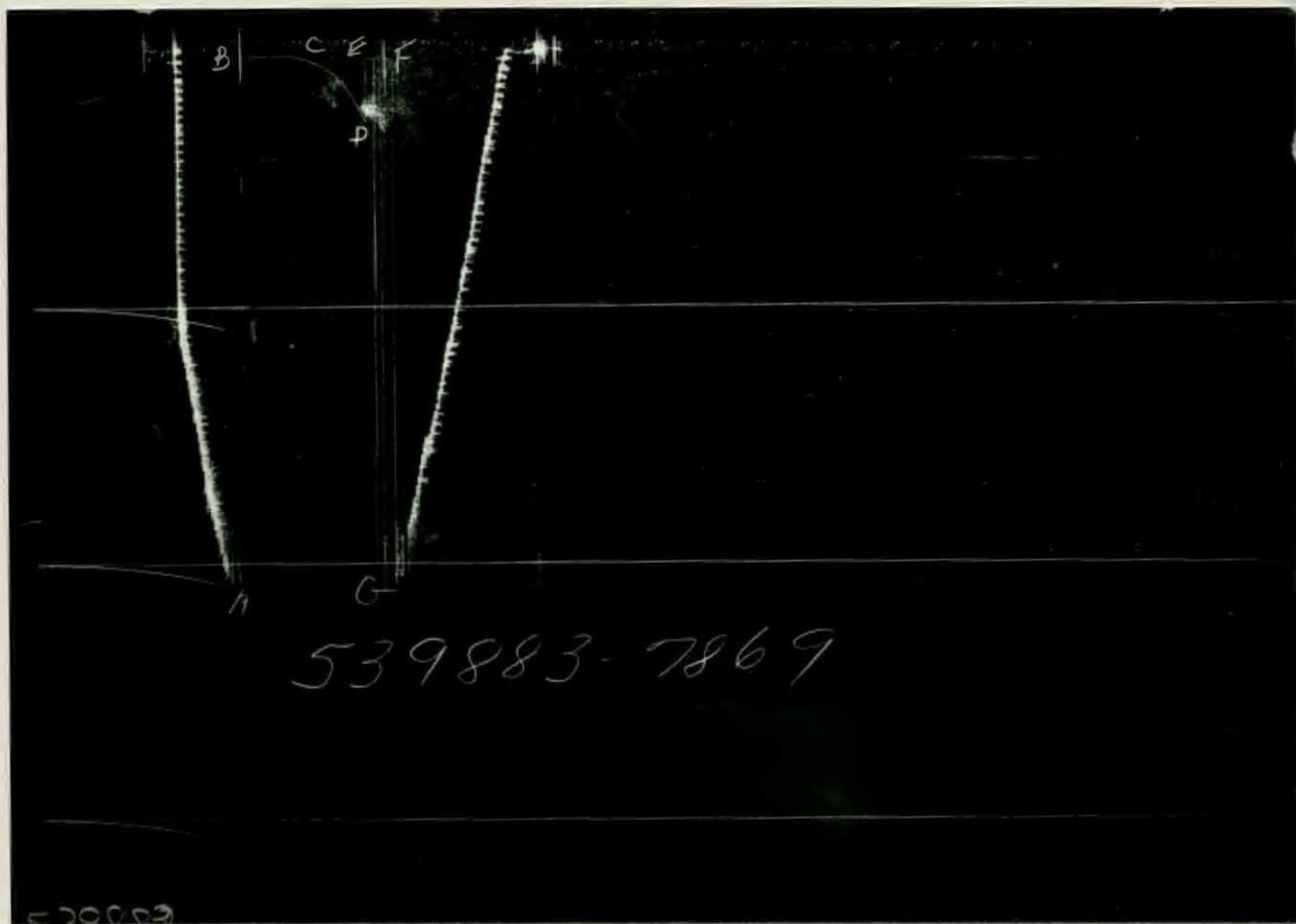
STEVENS	1	3	3578.1 - 3599.1	RUPE OIL COMPANY, INCORPORATED
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
LEGAL LOCATION SEC. - TWP. - RANG.	12 20S 15W	FIELD AREA	WEST OF SCHONCHEN	COUNTY
			ELLIS	STATE KANSAS
				S/J



539883-7870

GAUGE NO: 7870 DEPTH: 3565.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1963.9			
B	INITIAL FIRST FLOW		9.3			
C	FINAL FIRST FLOW		12.0	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN		12.0			
D	FINAL FIRST CLOSED-IN		266.7	45.0	45.0	C
E	INITIAL SECOND FLOW		28.5			
F	FINAL SECOND FLOW		22.4	16.0	16.0	F
G	FINAL HYDROSTATIC		1962.1			



GAUGE NO: 7869 DEPTH: 3596.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1966	1976.3			
B	INITIAL FIRST FLOW	20	25.0	30.0	30.0	F
C	FINAL FIRST FLOW	20	26.8			
C	INITIAL FIRST CLOSED-IN	20	26.8	45.0	45.0	C
D	FINAL FIRST CLOSED-IN	294	283.0			
E	INITIAL SECOND FLOW	29	40.4	16.0	16.0	F
F	FINAL SECOND FLOW	39	36.7			
G	FINAL HYDROSTATIC	1946	1970.5			

EQUIPMENT & HOLE DATA

FORMATION TESTED: MARMATON
 NET PAY (ft): 8.0
 GROSS TESTED FOOTAGE: 21.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 1987
 TOTAL DEPTH (ft): 3599.0
 PACKER DEPTH(S) (ft): 3572. 3578
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 10.20
 MUD VISCOSITY (sec): 44
 ESTIMATED HOLE TEMP. (°F): 105
 ACTUAL HOLE TEMP. (°F): @ ft

TICKET NUMBER: 53988300DATE: 2-25-83 TEST NO: 3TYPE DST: OPEN HOLEHALLIBURTON CAMP:
HAYSTESTER: K. SCHMEIDLERWITNESS: JIM CRISLERDRILLING CONTRACTOR:
DUNN & GARDNER DRILLINGFLUID PROPERTIES FOR
RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

Pstg AT SURFACE: _____
 cu.ft. OF GAS: _____
 cc OF OIL: _____
 cc OF WATER: _____
 cc OF MUD: _____
 TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ _____ °F
 GAS/OIL RATIO (cu.ft. per bbl): _____
 GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

10 FEET OF MUD WITH NO SHOW OF OIL.

MEASURED FROM
TESTER VALVE

REMARKS:

CHART FOR HT 500 NOT SENT FOR PROCESSING.

[illegible]

TICKET NO. 53988300

		O.D.	I.D.	LENGTH	DEPTH
1		DRILL PIPE.....	4.500	3.826	3338.0
3		DRILL COLLARS.....	4.500	2.250	90.0
50		IMPACT REVERSING SUB.....	5.250	2.750	1.0
3		DRILL COLLARS.....	4.500	2.250	124.0
12		DUAL CIP VALVE.....	5.000	0.750	6.0
60		HYDROSPRING TESTER.....	5.000	0.870	5.0
80		AP RUNNING CASE.....	5.000	3.060	4.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0
20		FLUSH JOINT ANCHOR.....	5.000	3.840	14.0
83		HT-500 TEMPERATURE CASE.....	5.000		1.5
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0
TOTAL DEPTH					3599.0

EQUIPMENT DATA

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

Rupe O. I. Co., Inc.

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 539883

(This Order Must Be Filled Out and Signed By Company Representative)

Company
Orig. Chart

Rupe Oil Co., Inc.

S
& Reports

ATT.

P.O. BOX
STREET & NO. PA Box 2273
BUILDING
CITY Wichita, Ks.
STATE
ZIP CODE NUMBER 67201

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING
CITY
STATE
ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING
CITY
STATE
ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING
CITY
STATE
ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING
CITY
STATE
ZIP CODE NUMBER

SIGNED

John Clarnes
Owner - Operator - or His Agent

, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)

LEASE NAME		WELL NO.		TEST NO.		TESTED INTERVAL		LEASE OWNER/COMPANY NAME	
STEVENS		1		4		3606.1 - 3614.1		RUPE OIL COMPANY, INCORPORATED	
LEGAL LOCATION		FIELD AREA		COUNTY		STATE		PW/IC	
SEC. - TWP. - RNG.		SNOKEY HILLS		ELLIS		KANSAS			
12-155-20W									

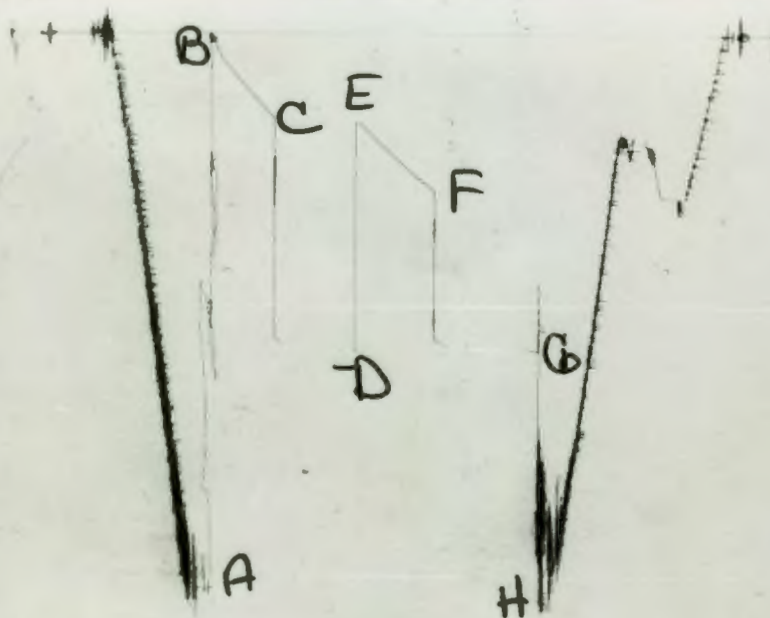


TICKET NO. 53988400

02-MAR-83

HAYS

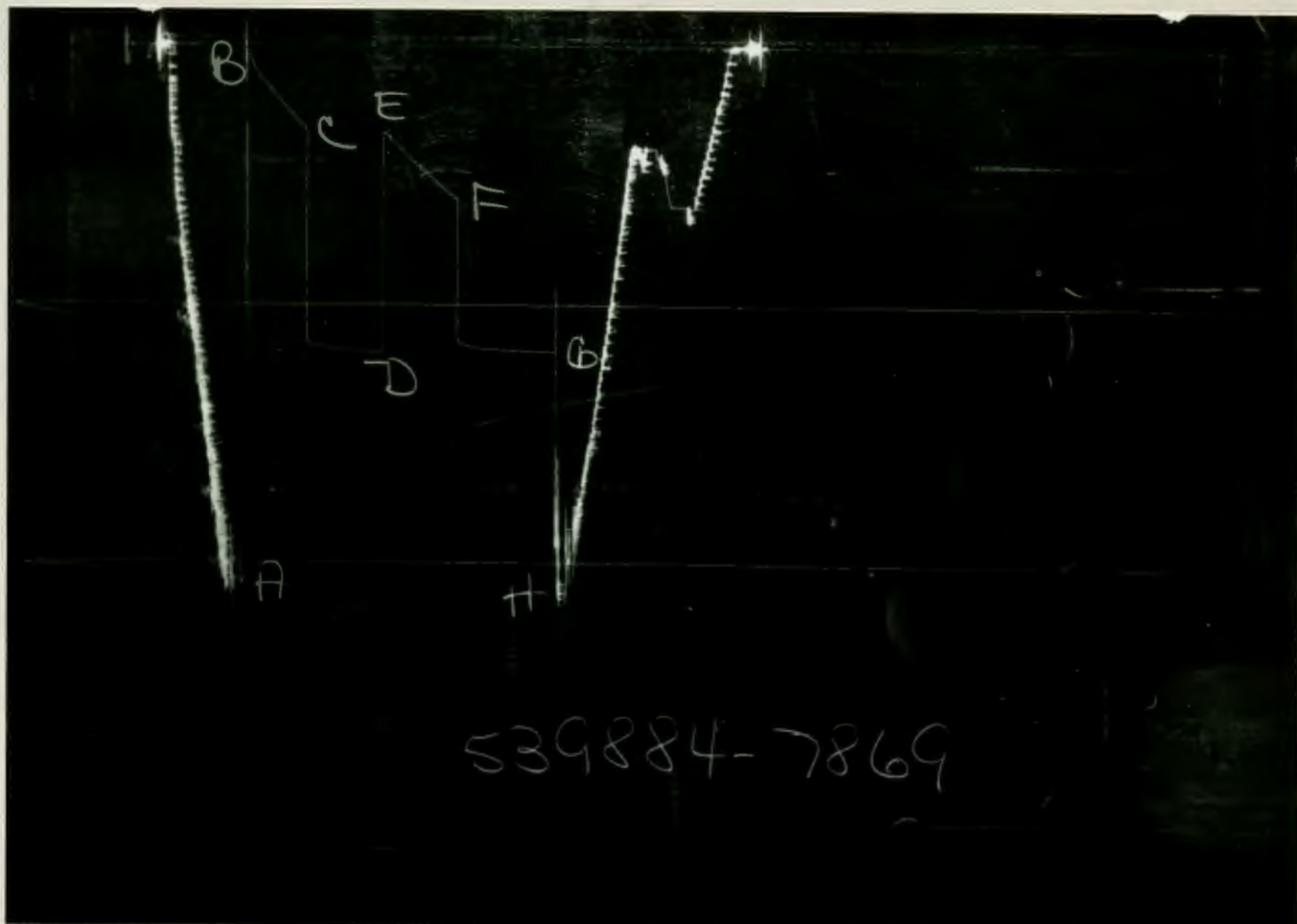
FORMATION TESTING SERVICE REPORT



539884-7870

GAUGE NO: 7870 DEPTH: 3593.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1989.2			
B	INITIAL FIRST FLOW		16.4			
C	FINAL FIRST FLOW		317.5	30.0	35.0	F
C	INITIAL FIRST CLOSED-IN		317.5			
D	FINAL FIRST CLOSED-IN		1177.6	45.0	44.3	C
E	INITIAL SECOND FLOW		334.7			
F	FINAL SECOND FLOW		586.2	45.0	43.2	F
F	INITIAL SECOND CLOSED-IN		586.2			
G	FINAL SECOND CLOSED-IN		1176.6	60.0	57.4	C
H	FINAL HYDROSTATIC		1974.0			



GAUGE NO: 7869 DEPTH: 3611.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2043	1973.0			
B	INITIAL FIRST FLOW	29	34.4	30.0	35.0	F
C	FINAL FIRST FLOW	323	329.7			
C	INITIAL FIRST CLOSED-IN	323	329.7	45.0	44.3	C
D	FINAL FIRST CLOSED-IN	1178	1183.6			
E	INITIAL SECOND FLOW	333	337.4	45.0	43.2	F
F	FINAL SECOND FLOW	587	594.7			
F	INITIAL SECOND CLOSED-IN	587	594.7	60.0	57.4	C
G	FINAL SECOND CLOSED-IN	1169	1182.5			
H	FINAL HYDROSTATIC	1966	1977.4			

FORMATION TESTING SERVICE REPORT

EQUIPMENT & HOLE DATA

FORMATION TESTED: REAGAN SAND
 NET PAY (ft): 6.0
 GROSS TESTED FOOTAGE: 8.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 1987
 TOTAL DEPTH (ft): 3614.0
 PACKER DEPTH(S) (ft): 3600. 3606
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 10.20
 MUD VISCOSITY (sec): 44
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 103 @ 3609.0 ft

TICKET NUMBER: 53988400

DATE: 2-26-83 TEST NO: 4

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: HAYS

TESTER: K. SCHMIEDLER

WITNESS: JOHN CARNES

DRILLING CONTRACTOR: DUNN AND GARDNER

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
 cu.ft. OF GAS: _____
 cc OF OIL: _____
 cc OF WATER: _____
 cc OF MUD: _____
 TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ _____ °F
 GAS/OIL RATIO (cu.ft. per bbl): _____
 GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

1190 FEET OF SALTWATER - NO SHOW OF OIL

MEASURED FROM
TESTER VALVE

REMARKS:

[illegible]

TICKET NO: 53988400

CLOCK NO: 17420 HOUR: 12



GAUGE NO: 7869

DEPTH: 3611.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	34.4			
2	5.0	88.6	54.1		
3	10.0	136.1	47.6		
4	15.0	175.8	39.7		
5	20.0	216.8	41.0		
6	25.0	254.6	37.8		
7	30.0	291.4	36.8		
C 8	35.0	329.7	38.4		

FIRST CLOSED-IN

C 1	0.0	329.7			
2	3.0	1151.5	821.7	2.8	1.100
3	6.0	1160.2	830.4	5.1	0.836
4	9.0	1166.3	836.6	7.1	0.691
5	12.0	1170.4	840.6	8.9	0.593
6	15.0	1173.0	843.3	10.5	0.523
7	18.0	1175.3	845.6	11.9	0.470
8	21.0	1177.1	847.3	13.1	0.426
9	24.0	1178.2	848.4	14.2	0.391
10	27.0	1179.7	850.0	15.2	0.361
11	30.0	1180.7	850.9	16.1	0.336
12	33.0	1181.3	851.5	17.0	0.314
13	36.0	1182.4	852.7	17.8	0.295
14	39.0	1182.4	852.7	18.4	0.278
15	42.0	1183.4	853.7	19.1	0.263
D 16	44.3	1183.6	853.8	19.6	0.253

SECOND FLOW

E 1	0.0	337.4			
2	6.0	368.5	31.1		
3	12.0	409.4	40.9		
4	18.0	449.4	40.0		
5	24.0	485.7	36.3		
6	30.0	523.5	37.8		
7	36.0	555.9	32.4		
8	42.0	589.2	33.3		
F 9	43.2	594.7	5.4		

SECOND CLOSED-IN

F 1	0.0	594.7			
2	4.0	1156.3	561.7	3.8	1.308
3	8.0	1163.7	569.0	7.3	1.032
4	12.0	1168.3	573.7	10.4	0.876
5	16.0	1171.6	576.9	13.3	0.770
6	20.0	1173.8	579.1	15.9	0.692
7	24.0	1175.0	580.4	18.4	0.629

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
8	28.0	1176.4	581.7	20.6	0.579
9	32.0	1177.7	583.0	22.7	0.537
10	36.0	1179.2	584.6	24.6	0.502
11	40.0	1179.9	585.2	26.5	0.471
12	44.0	1180.7	586.0	28.2	0.444
13	48.0	1181.6	586.9	29.8	0.420
14	52.0	1181.6	586.9	31.2	0.399
15	56.0	1182.1	587.5	32.6	0.380
G 16	57.4	1182.5	587.9	33.1	0.373

REMARKS:

TICKET NO: 53988400

CLOCK NO: 17421 HOUR: 12



GAUGE NO: 7870

DEPTH: 3593.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW						SECOND CLOSED-IN - CONTINUED					
B	1	0.0	16.4			8	28.0	1170.3	584.1	20.6	0.579
	2	5.0	72.6	56.2		9	32.0	1171.5	585.3	22.7	0.537
	3	10.0	124.5	51.9		10	36.0	1172.6	586.4	24.7	0.501
	4	15.0	165.0	40.5		11	40.0	1173.2	587.0	26.5	0.471
	5	20.0	206.0	41.0		12	44.0	1174.1	587.8	28.2	0.444
	6	25.0	244.1	38.1		13	48.0	1174.7	588.4	29.7	0.420
	7	30.0	280.8	36.7		14	52.0	1175.8	589.6	31.2	0.399
C	8	35.0	317.5	36.6		G 15	56.0	1176.2	590.0	32.7	0.379
						16	57.4	1176.6	590.4	33.1	0.373
FIRST CLOSED-IN											
C	1	0.0	317.5								
	2	3.0	1144.2	826.7	2.8	1.103					
	3	6.0	1154.1	836.7	5.2	0.832					
	4	9.0	1159.5	842.1	7.2	0.690					
	5	12.0	1163.1	845.6	8.9	0.593					
	6	15.0	1165.8	848.4	10.5	0.523					
	7	18.0	1168.2	850.7	11.9	0.469					
	8	21.0	1170.3	852.9	13.1	0.427					
	9	24.0	1172.1	854.6	14.2	0.391					
	10	27.0	1173.1	855.6	15.3	0.361					
	11	30.0	1174.5	857.0	16.2	0.336					
	12	33.0	1175.0	857.5	17.0	0.314					
	13	36.0	1175.7	858.3	17.8	0.295					
	14	39.0	1176.4	859.0	18.5	0.278					
	15	42.0	1176.7	859.3	19.1	0.263					
D	16	44.3	1177.6	860.1	19.6	0.253					
SECOND FLOW											
E	1	0.0	334.7								
	2	6.0	356.6	21.9							
	3	12.0	398.0	41.4							
	4	18.0	438.4	40.4							
	5	24.0	476.0	37.6							
	6	30.0	513.4	37.3							
	7	36.0	546.4	33.0							
	8	42.0	579.2	32.9							
F	9	43.2	586.2	7.0							
SECOND CLOSED-IN											
F	1	0.0	586.2								
	2	4.0	1148.5	562.3	3.8	1.315					
	3	8.0	1156.7	570.5	7.3	1.033					
	4	12.0	1161.2	575.0	10.4	0.877					
	5	16.0	1164.7	578.5	13.3	0.770					
	6	20.0	1167.0	580.8	15.9	0.692					
	7	24.0	1168.8	582.5	18.4	0.629					

REMARKS:

TICKET NO. 53988400

		O.D.	I.D.	LENGTH	DEPTH
1		4.500	3.826	3366.0	
4		4.500	2.764	90.0	
50		5.250	2.750	1.0	3456.0
4		4.500	2.764	124.0	
12		5.000	0.870	6.0	
60		5.000	0.750	5.0	3591.0
80		5.000	3.060	4.0	3593.0
70		6.750	1.530	6.0	3600.0
70		6.750	1.530	6.0	3606.0
20		5.000	3.840	1.0	
83		5.000		1.5	3609.0
81		5.000		4.0	3611.0
TOTAL DEPTH					3614.0

EQUIPMENT DATA

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

Rupe Oil Co., Inc.

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 539884

(This Order Must Be Filled Out and Signed By Company Representative)

Company
Orig. Chart

Rupe Oil Co., Inc.

5
& Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

P.O. Box 2273

CITY
STATE

Wichita, Ks

ZIP CODE NUMBER

67201

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Owner - Operator - or His Agent

SIGNED

John L. Barnes

, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)

TEMPERATURE

RECORDER

CHART



10° each circle

Indicated Flow
Capacity

$$kh = \frac{1637 Q_g T}{m}$$

md-ft

Average Effective
Permeability

$$k = \frac{kh}{h}$$

md

Skin Factor

$$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi \mu c_f r_w^2} + 3.23 \right] \text{ ---}$$

Damage Ratio

$$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87 mS} \text{ ---}$$

Indicated Flow
Rate (Maximum)

$$AOF_1 = \frac{Q_g m(P^*)}{m(P^*) - m(P_f)}$$

MCFD

Indicated Flow
Rate (Minimum)

$$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$$

MCFD

Approx. Radius of
Investigation

$$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_f}}$$

ft