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112

YX

CONTINENTAL OIL COMPANY

PONCA CITY, OKLAHOMA
SEPTEMBER 14, 1951

CONTINENTAL OIL COMPANY
A. W. SHONYO NO. 1 WELL
NO. EDWARDS FIELD
ELLSWORTH COUNTY, KANSAS

A ROUTINE ANALYSIS OF THE SIMPSON SAND AND ARBUCKLE LIME IS SUBMITTED FOR THE SUBJECT WELL. COMPLETED AT A TOTAL DEPTH OF 3204 FEET, THE SIMPSON SAND WAS PERFORATED FROM 3122 TO 3138 FEET. THE ESTIMATED INITIAL POTENTIAL IS 200 BARRELS PUMPING.

SEVEN IRREDUCIBLE TESTS WERE DETERMINED ON THE SIMPSON SAND CORES. THESE VALUES ARE RECORDED ON THE DATA SHEET AND MARKED BY AN ASTERISK. ALL OTHER VALUES WERE READ FROM THE ENCLOSED CURVE.

SIX LABORATORY FLOODING TESTS WERE CONDUCTED ON THE FRESH CORES AND THEIR RESULTS MAY BE FOUND ON A SEPARATE SHEET.

R. J. CAVANAUGH
LABORATORY FOREMAN
PRODUCTION RESEARCH DIVISION
DEVELOPMENT AND RESEARCH DEPARTMENT

RJC-VH

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CONTINENTAL OIL COMPANY

CORE ANALYSIS REPORT

CORE SUMMARY

OPERATOR <u>CONTINENTAL OIL COMPANY</u>	REPORT DATE <u>9-14-51</u> LABORATORY No. <u>YX</u>
WELL <u>A. W. SHONYO No. 1</u>	PRELIMINARY REPORT TO <u>J. B. STEELE, JR.</u>
FIELD <u>No. EDWARDS</u>	ON <u>4/4/24/51</u>
COUNTY <u>ELLSWORTH</u> STATE <u>KANSAS</u>	REFERENCE ELEVATION <u>1650 G.L.</u>
LOCATION <u>Sec. 19 T8 R17</u> <u>17S-9W-9</u>	

CORE RECORDS

		3-26-51	3-28-51	3-30-51	4-3-51		
DATE CORED		3-26-51	3-28-51	3-30-51	4-3-51		
CORE No.		1	2&3	4&5	6&7		
TYPE OF CORE		DIAMOND	DIAMOND	DIAMOND	DIAMOND		
FORMATION		SIMPSON	SIMP. ARB.	ARBUCKLE	ARBUCKLE		
INTERVAL CORED: FROM	FEET	3123	3174	3184	3194		
TO	FEET	3159	3181	3194	3204		
RECOVERED	FEET	36	9	8	9.5		
ANALYZED	FEET	36	8	8	9		
TYPE DRILLING MUD		WATER BASE WATER BASE WATER BASE WATER BASE					
WEIGHT	#GAL.	10.5	10.4	10.1	9.9		
VISCOSITY	MARSH SEC.	37	42	42	41		
WATER LOSS	CC/30 MIN.	16	8.2	9.2	6.6		
PH		6.4	6.4	6.4	6.4		
CHLORIDES	PPM	101,000.	101,000.	89,100.	84,300.		
REPORTED OIL GRAVITY	°API						

AVERAGES

FORMATION							
INTERVAL AVGD.: FROM	FEET						
TO	FEET						
PRODUCTIVE (2)	FEET						
NON-PRODUCTIVE	FEET						
CORE LOSS	FEET						
PROBABLE PRODUCTION							
POROSITY	%						
PERMEABILITY — HORZ.	MD.						
SATURATION:							
RESIDUAL OIL	% PORE SP.						
RESIDUAL WATER	% PORE SP.						
VACANT	% PORE SP.						
I.W.S. (3)	% PORE SP.						

WELL COMPLETION DATA

COMPLETED AT TD 3204'. PERFORATED 3122-38' IN SIMPSON SAND. EST. 1P 200 BARRELS PUMPING.

(DRILLING WIRE 4-16-51)

CONTINENTAL OIL COMPANY

CORE ANALYSIS REPORT RESULTS OF LABORATORY TESTS

OPERATOR **CONTINENTAL OIL COMPANY WELL A. W. SHONYO No. 1**

LABORATORY No. **YX**

SAMPLE NO.	DEPTH FEET	POROSITY %	PERMEABILITY TO AIR MILLIDARCYS (1)		SATURATION % PORE SPACE				CHLORIDES OF CORE WATER 1000 PPM (4)	PROBABLE PRODUCTION (2)	FLUORESCENCE YELLOW
			HORIZONTAL	VERTICAL	OIL	WATER	VACANT	I.W.S. (3)			
SIMPSON											
1	3123.5	1.0	-.1	-.1						NF	NONE
2	3124.5	5.4	2.9	0.4	29	46	25		127	NCF	80% DULL
3	3125.5	11.4	64	51	26	27	47	35	194	OIL	DULL
4	3126.5	12.3	5.1	-.1	13	85	82		65	NCF	10% DULL
5	3127.5	14.6	14	11	23	60	17	34	97	OIL	90% DULL
6	3128.5	15.3	20	16	27	51	22	32	121	OIL	90% DULL
7	3129.5	18.7	153	27	18	45	37	21	114	OIL	80% DULL
8	3130.5	16.7	41	8.1	22	49	29	28	108	OIL	DULL
9	3132.5	15.0	65	2.6	39	50	11	26*	136	OIL	DULL
10	3133.5	15.5	64	59	32	45	23	26	152	OIL	DULL
11	3134.5	16.0	28	40	32	47	21	27*	124	OIL	DULL
12	3135.5	15.1	40	6.0	22	54	24	27*	91	OIL	DULL
13	3136.5	10.2	6.9	0.5	35	60	5		116	OIL	YELLOW
14	3137.5	16.1	177	161	30	34	36	15*	167	OIL	DULL
15	3138.5	15.7	57	27	31	41	28	26	141	OIL	DULL
16	3139.5	18.8	195	17	21	49	30	24*	140	OIL	DULL
17	3140.5	19.7	363	303	16	59	25	13*	162	OIL	DULL
18	3141.5	15.3	54	4.2	21	55	24	27	137	OIL	DULL
19	3142.5	7.5	1.8	0.2						NCF	50% YELLOW
20	3143.5	10.9	17	4.1	39	53	8	36*	159	OIL	DULL
21	3144.5	9.3	0.6	0.2	11	82	7		69	NF	50% YELLOW
22	3145.5	9.4	7.4	1.0	24	55	21		109	NCF	50% DULL
23	3146.5	8.2	3.9	10	22	50	28		117	NCF	DULL
24	3147.5	6.0	7.1	1.5	30	45	25		165	NCF	80% DULL
25	3148.5	5.1	-.1	-.1	1	82	17		71	NF	DULL
26	3149.5	10.2	-.1	0	2	43	55		79	NF	NONE
27	3150.5	14.9	1.3	0.5	3	81	16		41	NCF	NONE
28	3151.5	22.2	0.3	0.3	1	88	11		40	NF	NONE
29	3152.5	20.7	0.7	0.5						NF	NONE
30	3153.5	15.8	2.6	1.9	1	98	1		37	NCF	NONE
31	3154.5	23.5	NA	NA	6	92	2		66		NONE
32	3155.5	8.0	0.2	-.1	0	89	11		56	NF	NONE
33	3156.5	6.5	-.1	-.1	5	88	7		71	NF	NONE
34	3157.5	7.6	3.1	-.1						NCF	NONE
35	3158.5	8.3	1.7	0.3	2	70	28		48	NCF	NONE
SIMPSON-ARBUCKLE											
36	3174.5	11.6	164	54	22	44	34		123	OIL	DULL
37	3175.5	10.7	207	80	28	43	29		186	OIL	DULL
38	3176.5	8.4	93	83	37	31	32		203	OIL	DULL
ARBUCKLE LIME											
39	3178.5	1.5	-.1	-.1	17	26	57		250	NF	DULL
40	3179.5	15.4	49	16	17	66	17		104	OIL	DULL
ARBUCKLE											
41	3180.5	3.5	-.1	-.1	29	55	16		155	NF	DULL
42	3181.5	14.3	20	9.8	27	59	14		119	OIL	DULL
43	3182.5	4.9	-.1	-.1	6	71	23		48	NF	NONE

(1) " - " INDICATES 'LESS THAN'

(2) PROBABLE PRODUCTION IF COMPLETELY ISOLATED

(3) IRREDUCIBLE INTERSTITIAL WATER SATURATION. VALUES SHOWN IN TABLE ARE THOSE READ FROM ENCLOSED CURVE. POINTS ON CURVE ARE ACTUAL LABORATORY DETERMINATIONS

(4) EQUIVALENT SODIUM CHLORIDE.

(D) DISINTEGRATED

(NF) NO FLOW

(NCF) NO COMMERCIAL FLOW

(NS) NO SAMPLE OR NO SEALED SAMPLE

(NA) NO ANALYSIS

* ACTUAL VALUES AS DETERMINED IN THE LABORATORY.

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CONTINENTAL OIL COMPANY

CORE ANALYSIS REPORT RESULTS OF LABORATORY TESTS

OPERATOR CONTINENTAL OIL COMPANY WELL A. W. SHOMO No. 1

LABORATORY No. YX

SAMPLE NO.	DEPTH FEET	POROSITY %	PERMEABILITY TO AIR MILLIDARCS (1)		SATURATION % PORE SPACE				SALINITY OF CORE WATER 1000 PPM (4)	PROBABLE PRODUCTION (2)	FLUORESCENCE YELLOW
			HORIZONTAL	VERTICAL	OIL	WATER	VACANT	I.W.S. (3)			
46	3184.0	15.1	89	25	16	24	60		184		YELLOW
47	3185.0	10.3	68	96	53	31	16		266		YELLOW
48	3186.0	13.1	144	338	12	24	64		207		YELLOW
49	3187.0	14.0	2.1	0.2	18	59	23		88		YELLOW
44	3188.0	2.3	10	1.2							YELLOW
45	3189.0	1.0	-.1	-.1							YELLOW
50	3190.0	14.3	16	1.7	10	35	55		119		YELLOW
51	3194.5	6.3	1.1	191							YELLOW
52	3195.5	16.2	1173	199	15	54	31		80		YELLOW
53	3196.5	9.1	4.9	1.6	57	36	7		156		YELLOW
54	3197.5	9.7	25	4.9	58	40	2		170		YELLOW
55	3199.5	4.3	-.1	0.5	21	52	27		148		YELLOW
56	3200.5	5.3	691	40							YELLOW
57	3201.5	3.5	2.6	19							YELLOW
58	3202.5	10.2	25	52	19	44	37		143		YELLOW
59	3203.5	4.2	1.0	-.1							YELLOW

(1) " - " INDICATES 'LESS THAN'

(2) PROBABLE PRODUCTION IF COMPLETELY ISOLATED

(3) IRREDUCIBLE INTERSTITIAL WATER SATURATION. VALUES MARKED BY AN ASTERISK (*) ARE LABORATORY DETERMINATIONS.

(4) EQUIVALENT SODIUM CHLORIDE.

(D) DISINTEGRATED

(NF) NO FLOW

(NCF) NO COMMERCIAL FLOW

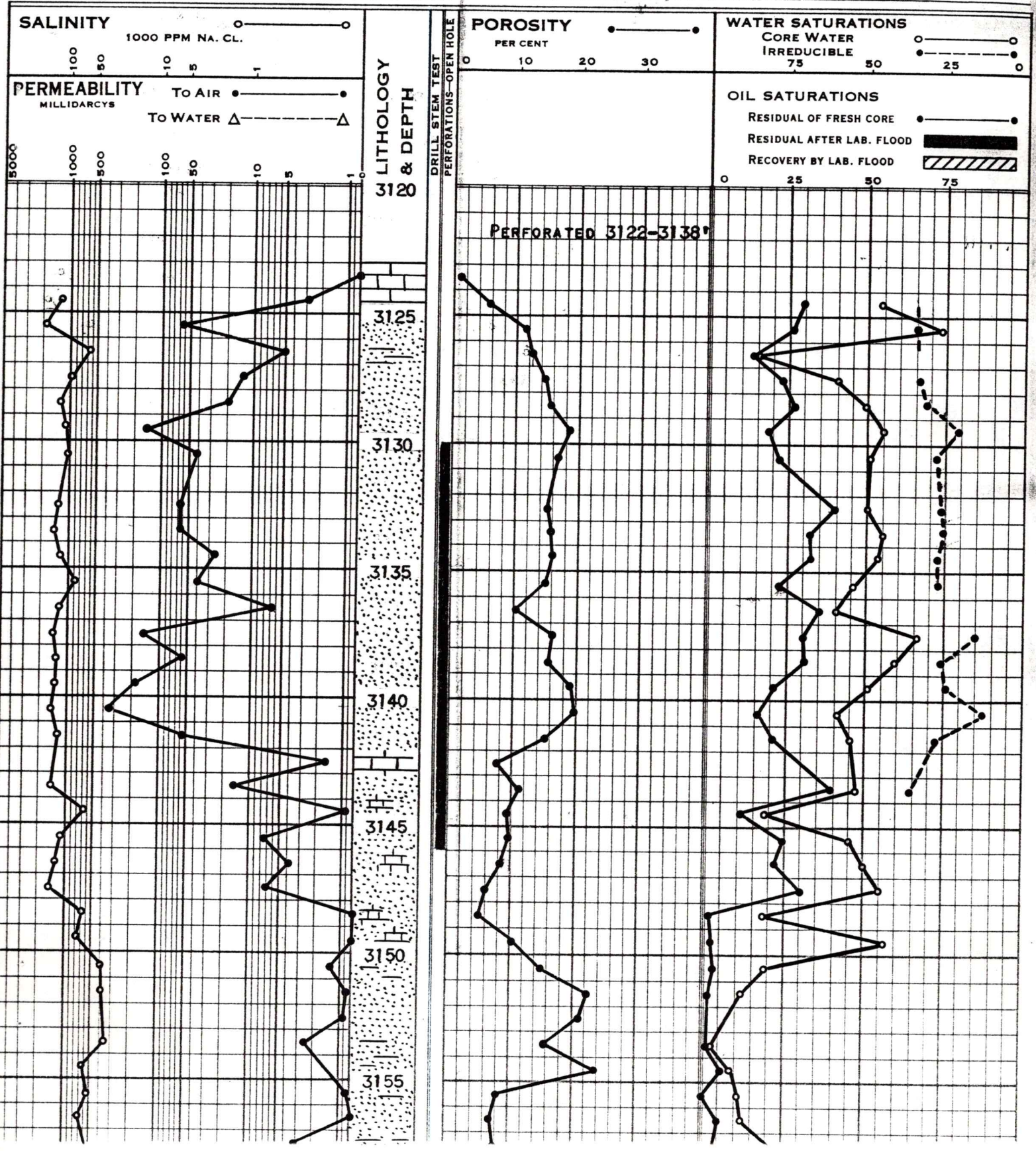
(NS) NO SAMPLE OR NO SEALED SAMPLE

(NA) NO ANALYSIS

CONTINENTAL OIL COMPANY

CORELOG

OPERATOR CONTINENTAL OIL COMPANY WELL A. W. SHONYO No. 1 LABORATORY No. YX
FIELD No. EDWARDS REFERENCE ELEVATION 1650' GL MUD WATER BASE
FORMATION SIMPSON SAND AND ARBUCKLE LIME



LABORATORY FLOODING TESTS

OPERATOR CONTINENTAL OIL COMPANY

WELL A. W. SHONYO No. 1

FIELD NORTH EDWARDS

LAB. No. YX

SPL. No.	DEPTH FT	POROSITY %	BEFORE FLOODING SATURATIONS		FLOOD SAMPLE DATA			AFTER FLOODING RESIDUAL SATURATION	
			OIL % PORE SPACE	TIME MIN	MAX. PRESS. PSIG	WATER THRU CC	OIL RECOVERY % PORE SPACE	OIL % PORE SP.	WATER % PORE SP.
4F	3126.0	12.3	16	545	40	7	0.3	16	
9F	3132.0	15.0	13	385	40	110	0.7	13	61
13F	3136.0	10.2	47	445	40	445	2.5	44	
17F	3140.0	19.7	25	265	20	3676	0.5	24	66
18F	3141.0	15.3	25	265	20	1520	0.8	23	
37F	3175.0	10.7	24	385	40	4870	0.7	23	77

LABORATORY FLOODING TESTS

OPERATOR CONTINENTAL OIL COMPANY

WELL A. W. SHONYO No. 1

FIELD NORTH EDWARDS

LAB. No. YX

SPL. No.	DEPTH FT	POROSITY %	BEFORE FLOODING SATURATIONS		FLOOD SAMPLE DATA				AFTER FLOODING RESIDUAL SATURATION	
			OIL % PORE SPACE	TIME MIN	MAX. PRESS. PSIG	WATER THRU CC	OIL RECOVERY % PORE SPACE		OIL % PORE SP.	WATER % PORE SP.
4F	3126.0	12.3	16	545	40	7	0.3		16	
9F	3132.0	15.0	13	385	40	110	0.7		13	61
13F	3136.0	10.2	47	445	40	445	2.5		44	
17F	3140.0	19.7	25	265	20	3676	0.5		24	66
18F	3141.0	15.3	25	265	20	1520	0.8		23	
37F	3175.0	10.7	24	385	40	4870	0.7		23	77

CONTINENTAL OIL COMPANY
PRODUCTION LABORATORY

IRREDUCIBLE WATER — PERMEABILITY

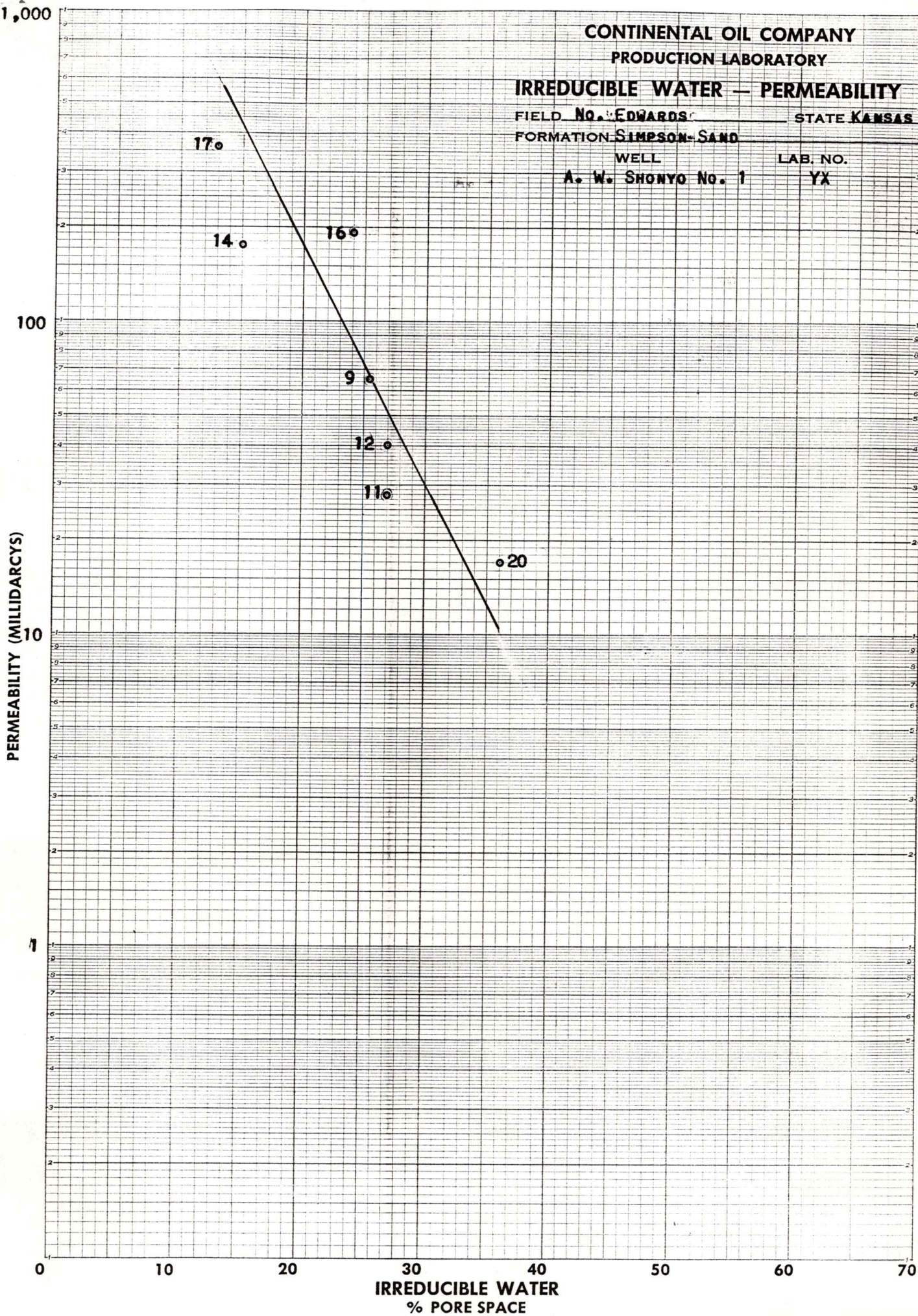
FIELD No. EDWARDSSTATE KANSASFORMATION SIMPSON SAND

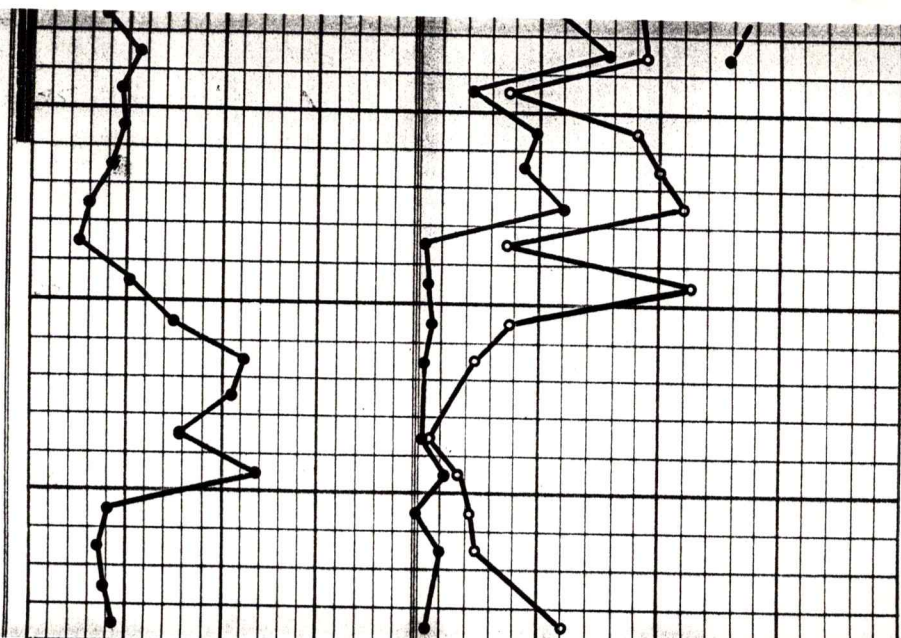
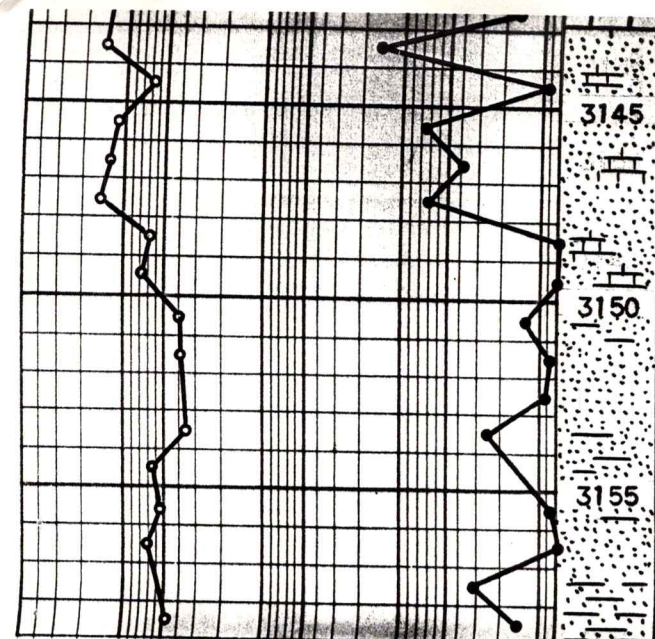
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A. W. SHONYO No. 1

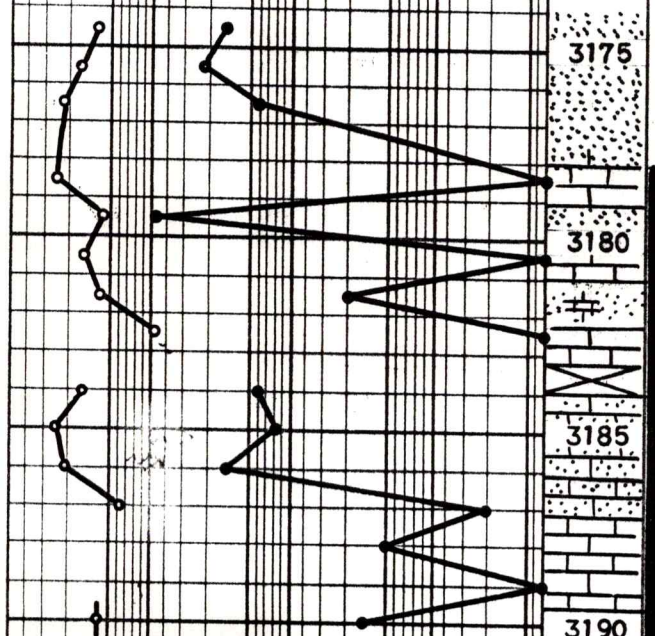
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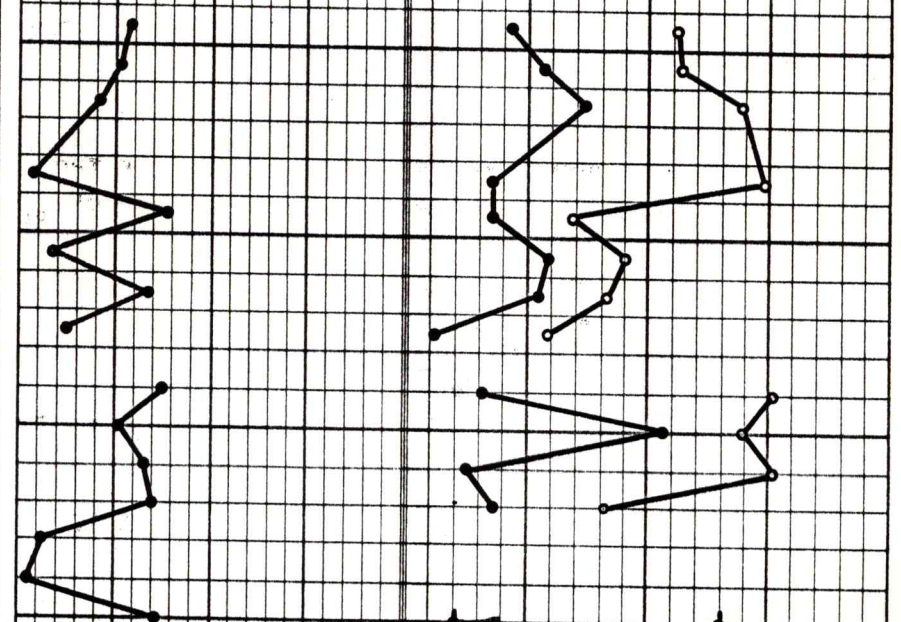




TOP OF ARBUCKLE 3178'



DST 3178-84', OPEN 1 HR., REC. 1780' OIL AND 60' OIL-CUT MUD.



DST 3184-89', OPEN 15 MIN., REC. 418' OIL.

DST 3189-94', OPEN 15 MIN., REC. 520' OIL.

SEE 5 1/2" AT 3203'

DST 3199-3204', OPEN 10 MIN., REC. 410' WATER.