CORE ANALYSIS REPORT

FOR

JONES-GEBERT OIL, INC.

HAINES NO. 1 WELL

WILDCAT

SUMNER COUNTY, KANSAS

12-31-2 W

CORE LAB

PETROLEUM RESERVOIR ENGINEERING

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS 1, TEXAS

June 22, 1961

REPLY TO
4010 N. YOUNGS BLVD.
P. O. BOX 7128
OKLAHOMA CITY, OKLA.

Jones-Gebert Oil, Inc.
1007 Central Building
Wichita, Kansas

Attention: Mr. George R. Jones

Subject: Core Analysis
Haines No. 1 Well
Wildcat
Sumner County, Kansas

Gentlemen:

Mississippian formation from 3756 to 3762 feet exhibits residual fluid saturations indicative of oil productive formation with higher than normal gas-oil ratios. Due to the low permeability, successful completion will be dependent upon formation treatment increasing the productive capacity. Average core analysis values and theoretical maximum recoverable oil estimates have been calculated and are presented on page one of the report.

Formation from 3762 to 3775 feet exhibits extremely low to immeasurable permeability and is of little productive significance.

We sincerely appreciate this opportunity to be of service.

Very truly yours,

Core Laboratories, Inc.

J G Evertson Jr

J. G. Evertson, Jr.,
District Manager

JGE:HC:sp
7 cc. - Addressee

Form F-11B

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

 File CP-10-676 FC

Well Haines No. 1

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Mississippian 3756.0-3762.0

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	6.0	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE		52.2
FEET OF CORE INCLUDED IN AVERAGES	6.0	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	(e)	40
AVERAGE PERMEABILITY: MILLIDARCYS	5.0	OIL GRAVITY: °API	(e)	42
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	30	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	(e)	320
AVERAGE POROSITY: PER CENT	18.9	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	(e)	1.22
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	11.0	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT		721

Calculated maximum solution gas drive recovery is 205 barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 560 barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (*Please refer to footnotes for further discussion of recovery estimates.*)

FORMATION NAME AND DEPTH INTERVAL:

FEET OF CORE RECOVERED FROM ABOVE INTERVAL		AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	
FEET OF CORE INCLUDED IN AVERAGES		AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	
AVERAGE PERMEABILITY: MILLIDARCYS		OIL GRAVITY: °API	
PRODUCTIVE CAPACITY: MILLIDARCY-FEET		ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT		ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE		CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (*Please refer to footnotes for further discussion of recovery estimates.*)

(c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY JONES-GEBERT OIL INC. DATE ON 6-6-61 FILE NO. CP-10-676 FC

WELL HAINES NO. 1 DATE OFF 6-7-61 ENGRS. BOYLE

FIELD WILDCAT FORMATION MISSISSIPPIAN ELEV. 1318' RB

COUNTY SUMNER STATE KANSAS DRLG. FLD. WATER BASE MUD CORES DIAMOND

LOCATION E/2 SE NW SEC 12-31S-2W REMARKS SAMPLED BY CLI AS DIRECTED BY CLIENT

SAND LIMESTONE CONGLOMERATE CHERT

SHALE DOLOMITE VERTICAL FRACTURE

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TABULAR DATA and INTERPRETATION

SAMPLE NUMBER	DEPTH FEET	PERM. MD. *	POROSITY %	RESIDUAL SATURATION % PORE SPACE		PROD
				OIL	TOTAL WATER	
1	3756-57	0.7	11.1	9.9	39.6	
2	57-58	1.8	18.4	6.0	62.5	
3	58-59	16	20.4	15.7	43.2	
4	59-60	1.5	14.4	13.2	48.5	
5	60-61	6.3	26.5	13.2	55.5	
6	61-62	3.7	22.3	8.1	63.6	
7	62-63	1.1	21.7	1.0	78.3	
8	63-64	0.1	16.6	4.8	71.0	
9	64-65	<0.1	19.2	0.0	78.6	
10	65-66	<0.1	20.2	0.0	78.2	
11	66-67	0.4	22.9	0.0	79.5	
12	67-68	0.1	20.7	0.0	81.5	
13	68-69	<0.1	16.8	0.0	82.7	
14	69-70	0.1	20.8	0.0	78.4	
15	3770-71	0.7	21.3	0.0	79.3	
16	3772-73	0.1	12.5	4.0	57.0	
17	73-74	3.7	17.4	13.2	46.5	
18	3774-75	0.5	20.0	TR	77.5	

COMPLETION COREGRAPH

