Form OGC - 3

MISSOURI OIL AND GAS COUNCIL

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐

NAME OF COMPANY OR OPERATOR Landmark Production Inc. DATE 2/11/1981

c/o Odyssey Petroleum Inc.

1801-B S. Butler Dr. (Address) Harrisonville, Missouri (City) 64701 (State)

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
Phillip W. Lomax and Helen L. Lomax	2	1000

WELL LOCATION (give footage from section lines)

297 ft. from (N) (S) sec. line 1850 ft. from (E) (W) sec. line

WELL LOCATION Section 18 Township 44 Range 33 County Cass

Nearest distance from proposed location to property or lease line: 297 feet

Distance from proposed location to nearest drilling, completed or applied — for well on the same lease: 472 feet

Proposed depth:	Rotary or Cable tools	Approx. date work will start
150'	Rotary	m Feb. 13, 1981

Number of acres in lease: 58.443

Number of wells on lease, including this well, completed in or drilling to this reservoir: 2

Number of abandoned wells on lease: 0

If lease, purchased with one or more wells drilled, from whom purchased: Name _____ Address _____

No. of Wells: producing _____ inactive _____ abandoned _____

Status of Bond

Single Well ☐ Amt. _____ Blanket Bond ☒ Amt. $40,000

☒ ON FILE ☐ ATTACHED

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed.

Proposed casing program:

amt.	size	wt./ft.	cem.
150 ft	2 7/8"	6.5	to surface

Approved casing — To be filled in by State Geologist

amt.	size	wt./ft.	cem.

I, the undersigned, state that I am the Agent of the Landmark Production Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature M B Walton

Permit Number: 20150

Approval Date: 2/13/81

Approved By: J.e.S. Wallace B. Lowe

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☐ SAMPLES REQUIRED

☒ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @:

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council P.O. Box 250 Rolla, Mo. 65401

One will be returned.

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

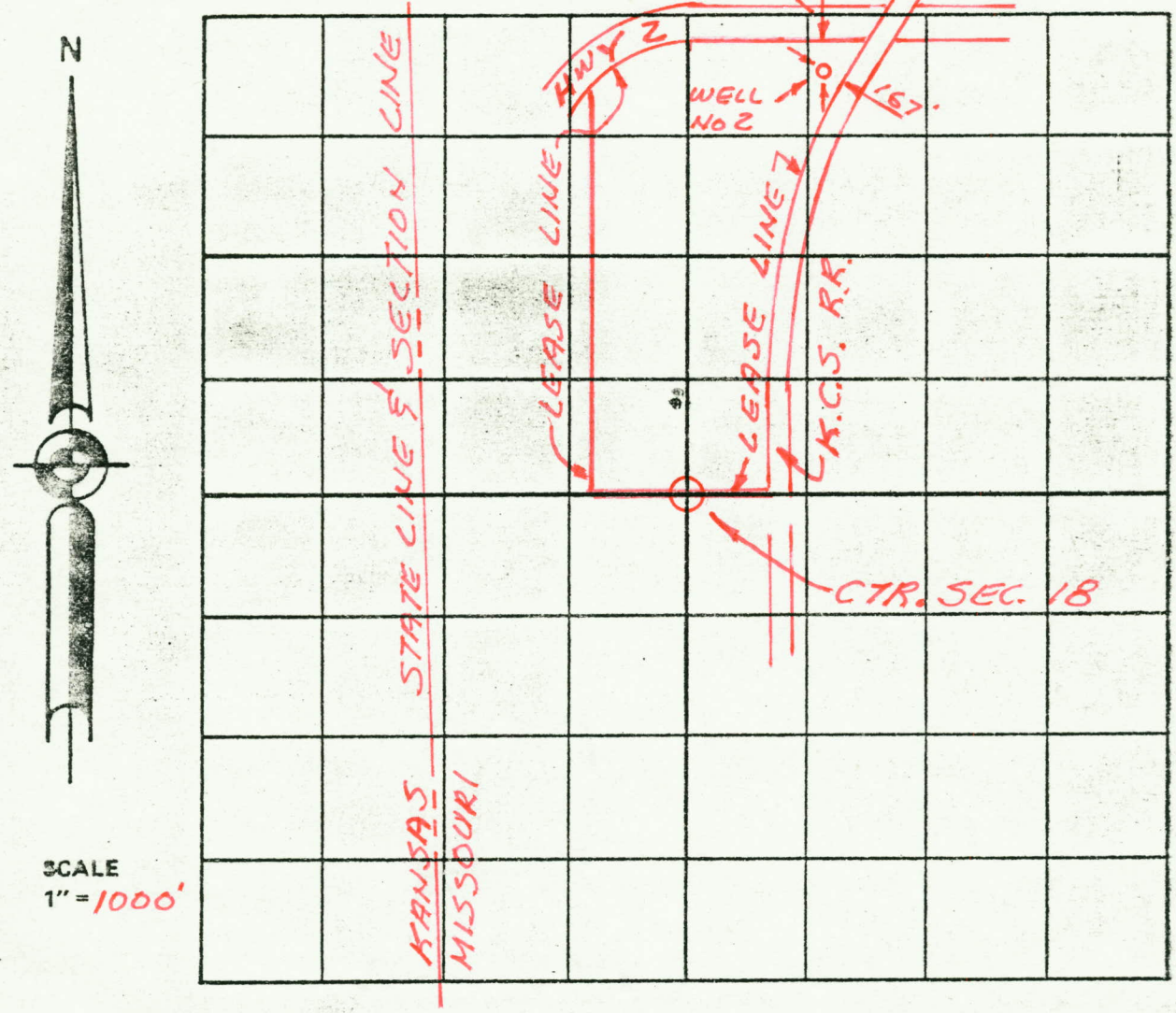
Form OGC—4

MISSOURI OIL AND GAS COUNCIL
WELL LOCATION PLAT

Owner: Landmark Production Inc.

Lease Name: Phullip W. Lomax County: Cass

297 feet from North (N) - (S) line and 1850 feet from East (E) - (W) line of Sec. 18, Twp. 44 N, Range 33



SCALE 1" = 1000'

REMARKS: Well No. 2

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50-2.030 for survey requirements.

This is to Certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

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FEB 13 1981
MO. OIL & GAS COUNCIL

MISSOURI LS-918 HOWARD L. SHERMAN REGISTERED LAND SURVEYOR (SEAL)

Howard L. Sherman 918
Registered Land Surveyor Number

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250, Rolla, Mo. 65401

One will be returned.

MISSOURI OIL AND GAS COUNCIL

Form OGC-6

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MO. OIL & GAS COUNCIL

NOTICE OF INTENTION TO ABANDON WELL

Name of Lease P.W. and H.L. Lomax Date 12-28-81

Well No. #2 is located 297 feet from (N) (S) line and 1850

feet from (E) (W) line of Section 18 Township 44N Range 33W

Cass County, Missouri The elevation of the ground at well site is 1003

_____ feet above sea level.

Name and address of Contractor or Company which will do work is:

Zimmerman Well Service

4081 Sunnydale Dr., Moab, Utah 84532

DETAILS OF WORK

(Indicate size, kind, and depth of plugs, where casing will be pulled, other pertinent details)

No casing was set.
Hole was plugged with cement from T.D. to surface

CERTIFICATE: I, the undersigned, state that I am the Manager of the Landmark Production, Inc (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Mendell M. Bell

Signature Mendell M. Bell

Remit two copies; one will be returned

Form OGC-7

MISSOURI OIL AND GAS COUNCIL
PLUGGING RECORD

Owner: LANDMARK PRODUCTION, INC.	Address: 34 Corporate Woods - Suite 350, 10950 Grandview, Overland Park, KS 66210
Name of Lease: P.W. and H.L. Lomax	Well No.: #2
Location of Well: 297' f N Line and 1850' f E Line in Sec. 18, T44N, R33W	Sec-Twp-Rge or Block & Survey:	County: Cass

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production) Oil (bbls/day)	Gas (MCF/day)	Dry?
Landmark Production, Inc.	No	-----	-----	Dry

Date Abandoned:	Total depth	Amount well producing prior to abandonment. Oil (bbls/day)	Gas (MCF/day)	Water (bbls./day)
2-14-81	120'	------	------	------

Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of abandonment	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used Indicate zones squeeze cemented, giving amount cement.
Bethany Falls	Dead Oil	85' to 95'	

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Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped etc)	Packers and shoes
N/A					

Was well filled with mud-laden fluid?

Indicate deepest formation containing fresh water.

NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

Name	Address	Direction from this well:

Method of disposal of mud pit contents: No mud used - Pits dried naturally and were back-filled with soil.

Use reverse side for additional detail The hole was plugged from T.D. to surface with cement.

File this form in duplicate with

CERTIFICATE: I, the undersigned, state that I am the Manager of the Landmark Production Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Mendell M. Bell

Signature Mendell M. Bell

Remit two copies; one will be returned

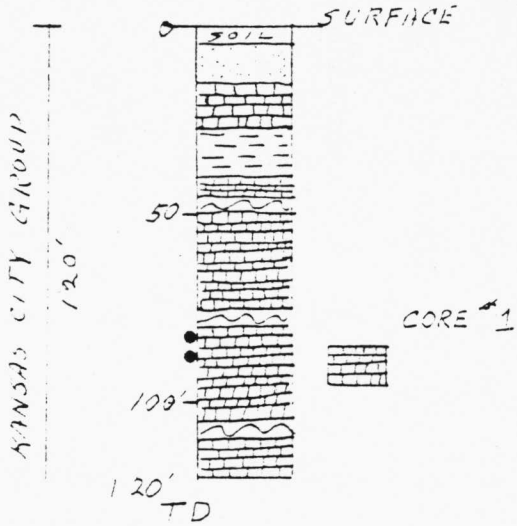
LOMAX WELL #2

The purpose of this hole was to obtain a core from the Bethany Falls limestone member. The zone was drilled through in Lomax #1 and its petroliferous nature was noted. The description of the interval is included in the accompanying descriptions of the samples.

LOMAX NO 2

Sec 18 T 44 N R 33 W

ELV 1,003



Name of Lease:
Phillip W. Lomax

Number Acres in Lease:
58

Location:
NC-Sec 18-T44N-R33W

Date of Report:
April 15, 1981

County:
Cass

State:
Missouri

Well No:
2

Well Location:
Sec 18, T44N-R33W
297' fr. N line
850' fr. E line

Company:
Odyssey Joint Venture

Surface Elevation:
1,003'

Casing Record:
Not cased.

Date Spudded:
February 10, 1981

Cementing Record:
Filled with cement.

Date Completed or Abandoned:
February 12, 1981

Hole Size:
9-7/8" to 120'

Total Depth:
120'

Permanent Datum G. L. Elev. K. B. --
Log Measured from G. L. D. F. --
Drill Measured from G. L. G. L. 1,003

Sample and Core Descriptions

Formation	Depth(s)	Unit Description
	0-5	clay, dark brown, silty
	5-15	sand, fine-grained, tan, clayey
	15-25	limestone, medium brown, crystalline, fossiliferous
	25-40	shale, gray, calcareous with fossiliferous limestone fragments
	40-45	limestone, tan and black, crystalline with some calcareous shale
	45-50	shale, black, fissile
	50-75	limestone, buff to tan, dense, fossiliferous
	75-80	shale, black, fissile, sandy

Lomax - Well No. 2

80-85	limestone, buff to tan, fossiliferous, crystalline, with oil showing; show is similar to an asphalt hydrocarbon
85-95	Core #1 - Cut 10'. Received 9'8".
	85'-87.5' Limestone, buff to gray, fossiliferous; oil in ooliclastic vugular openings as asphaltic stainings.
	87.5'-95.0' Limestone, buff to gray, fossiliferous, crystalline.
95-100	limestone, buff to gray, fossiliferous, crystalline
100-105	limestone, buff to tan, fossiliferous, crystalline with some gray to black shale
105-110	shale, black, fissile, silty, with some fossiliferous limestone fragments
110-115	limestone, tan, crystalline, with some gray shale and a small amount of blue-green sand
115-120	limestone, buff, crystalline
T.D.	

Permit #: 20150 Date Issued: 2-13-81

County: Cass Date Cancelled:

CONFIDENTIAL UNTIL: Date Plugged: 2-14-81

OGC FORMS	Date Received
1	
2	
3	2-13-81
3i	
4	2-13-81
4i	
5	
6	1-11-82
7	1-11-82
8	
11	
12	
Misc. Form 2	

COMMENTS:

	TYPE	ID #	Date Received
Logs			
Samples	chip		
	core		
Analyses	water		
	core		4-6-81

Additional Submitted Data:

CORE ANALYSIS REPORT

FOR

LANDMARK Production

~~ODYSSEY JOINT~~ VENTURE NO. 1

LOMOX NO. 2 WELL

CASS COUNTY, MISSOURI

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
OKLAHOMA CITY, OKLAHOMA

REPLY TO
SUITE 133
400 SOUTH VERMONT
OKLAHOMA CITY, OKLA.
73108

MARCH 27, 1981

LANDMARK Production
~~ODYSSEY PETROLEUM,~~ INC.
1801 B SOUTH BUTLER DRIVE
HARRISONVILLE, MISSOURI 64701

ATTN: MR. BRENT NATRASS

SUBJECT: CORE ANALYSIS DATA
LOMOX NO. 2 WELL
CASS COUNTY, MISSOURI
CLI FILE 3406-00297

GENTLEMEN:

DIAMOND CORES WERE TAKEN IN THE SUBJECT WELL AND LATER TRANSPORTED TO OUR CHANUTE LABORATORY FOR ANALYTICAL PURPOSE. THE MEASURED DATA FOLLOWS ON THE ACCOMPANYING PAGES OF THIS REPORT.

THE ACCOMPANYING COREGRAPH PRESENTS THE SURFACE CORE GAMMA LOG AND BINOMIALLY AVERAGED CORE ANALYSIS DATA IN GRAPHICAL FORM TO AID CORRELATION WITH DOWNHOLE ELECTRICAL SURVEYS.

PRODUCTIVITY INDICATED FROM THE RESIDUAL FLUID SATURATION DATA IN THE INTERVAL ANALYZED BETWEEN 85 AND 90 FEET WOULD LIKELY BE OIL AFTER FORMATION TREATMENT.

ZONAL DATA AVERAGES ALONG WITH ESTIMATES OF RECOVERABLE OIL (WHERE APPLICABLE) ARE PRESENTED ON THE CORE SUMMARY PAGE OF THIS REPORT.

WE APPRECIATE THIS OPPORTUNITY OF SERVING YOU.

VERY TRULY YOURS,

CORE LABORATORIES, INC.

Dale E. Boyle

DALE E. BOYLE
DISTRICT MANAGER

5 CC - ADDRESSEE
2 CC - ALVIN WINESTOCK

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Landmark Production
~~ODYSSEY JOINT VENTURE~~ NO. 1
LOMOX NO. 2 WELL
LOMOX FIELD
CASS COUNTY, MO.

DATE : 2-23-81
FORMATION :
DRLG. FLUID: WATER BASE MUD
LOCATION : SEC. 18-44S-33W

FILE NO : 3406-00297
ANALYSTS : HUDSON
LABORATORY: CHANUTE, KS

DEAN STARK ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD MAXIMUM	POR %	OIL% PORE	WTR% PORE	GRAIN DEN	DESCRIPTION
1	85.0-86.0	12.	12.7	52.4	20.9	2.73	LM SL/SHY PP VUGS
2	86.0-87.0	6.6	14.9	47.7	39.0	2.72	LM PP VUGS
3	87.0-88.0	3.3	11.6	64.1	33.0	2.74	LM SL/SHY PP VUGS
4	88.0-89.0	21.	15.7	61.7	34.9	2.71	LM SL/SHY PP VUGS
5	89.0-90.0	<0.1	4.7	56.6	17.4	2.72	LM PP VUGS
	90.0-91.0						LM

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 representations, as to the productivity, proper operations, 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
Oklahoma District

Company Landmark Production ~~ODYSSEY JOINT VENTURE~~ NO. 1 Page 2

Well LOMOX NO. 2 CLI File 3406-00297

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME	(UNKNOWN)				
DEPTH INTERVAL	85-90				
FEET OF CORE RECOVERED FROM ABOVE INTERVAL	5				
FEET OF CORE INCLUDED IN AVERAGES	4				
AVERAGE PERMEABILITY: MILLIDARCYS	11				
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	44				
AVERAGE POROSITY: PER CENT	13.7				
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	56.5				
AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	32.0				
AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	30				
OIL GRAVITY: °API	10				
ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL					
ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.01				
CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	737				

Calculated maximum solution gas drive recovery is * barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. These recovery estimates represent theoretical maximum values for solution gas drive and do not take into account any prior production or drainage to other areas. The difference between the calculated stock-tank oil in place and the solution gas drive recovery estimates, which are barrels per acre-foot, represent that portion of the reservoir oil which is available for possible secondary recovery techniques. Estimates of additional recoverable oil by secondary or enhanced methods would necessitate a complete engineering study of the subject reservoir.

* LOW ENERGY RESERVOIR

(c) calculated (e) estimated (m) measured

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY ~~ODYSSEY JOINT VENTURE~~ Landmark Production NO. 1 FILE NO. 3406-00297

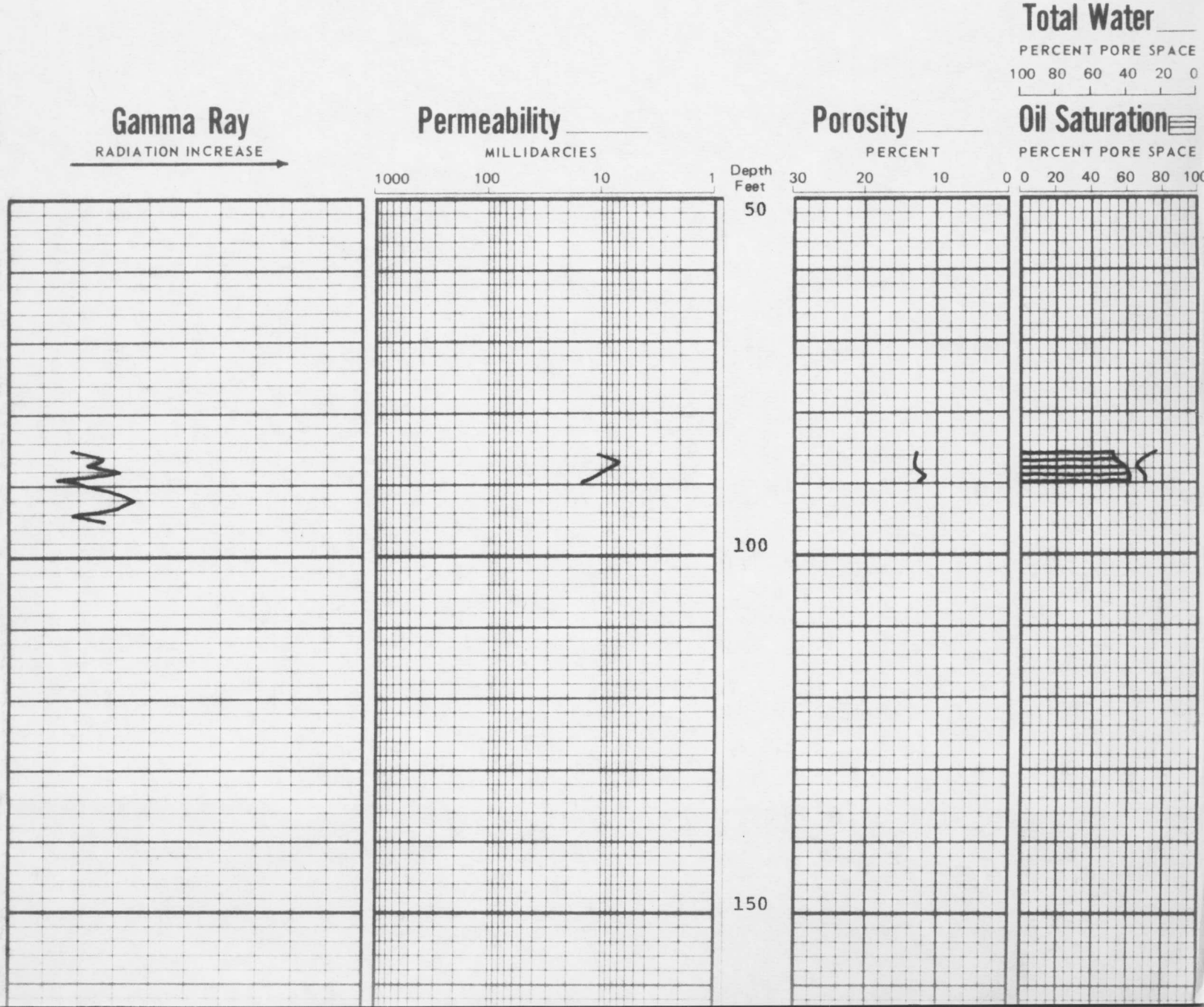
WELL LOMOX NO. 2 DATE 2/24/81

FIELD LOMOX FORMATION UNKNOWN ELEV. UNKNOWN

COUNTY CASS STATE MISSOURI DRLG. FLD. WATER CORES

LOCATION SEC. 18-44s-33w

CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material 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 or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations 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.

VERTICAL SCALE: 5" = 100'