Permit #: 20004

Date Issued: 11/18/74

County: GENTRY

Date Cancelled:

CONFIDENTIAL UNTIL:

Date Plugged: 12/2/74

OGC FORMS	Date Received
1	
2	
3	9/30/74
3i	
4	10/11/74
4i	
5	1/13/75
6	✓ 1/13/75
7	1/13/75
8	
11	
12	
Misc. Form 2	

	TYPE	ID #	Date Received
Logs			
Samples	chip		
	core		
Analyses	water	D 3616	12/23/74
	core	FL 274-95L	12/23/74

Additional Submitted Data:

COMMENTS:

Stripped 10/27/81

da

2

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 The Anschutz Corporation DATE 9-26-74

1110 Denver Club Bldg — Address; Denver, Colo — City; 80202 — State

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
Arda T. Slocum	#1	970 est

WELL LOCATION 1860 ~~1980~~ ft. from (N) ~~(S)~~ sec. line 660 ft. from ~~(E)~~ (W) sec. line (give footage from section lines)

WELL LOCATION Section 11 Township 62N Range 32W County Gentry

Nearest distance from proposed location to property or lease line: 660 feet

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

Proposed depth: 2600 ft. Rotary ~~or Cable~~ tools Approx. date work will start Nov. 4, 1974

970
830
140' Drift

Number of acres in lease: 240

Number of wells on lease, including this well, completed in or drilling to this reservoir: 1

Number of abandoned wells on lease: 0

170' csg

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. 30,000 ☒ 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'	8 5/8"	24 lb	to surf
To T.D.	5½"	15.5 lb	150 sx

Approved casing – To be filled in by State Geologist

amt.	size	wt./ft.	cem.
170 min	8 5/8	24	to Surf.
	– OK –		

I, the undersigned, state that I am the geologist of the Anschutz (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 Henry Ohlen

Permit Number: 20004

Approval Date: 18 NOV 1974

Approved By: W B Howe by Wells

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.

☒ SAMPLES REQUIRED

☐ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @: any DST's

RECEIVED SEP 30 1974 MO. OIL & GAS COUNCIL

MISSOURI OIL AND GAS COUNCIL

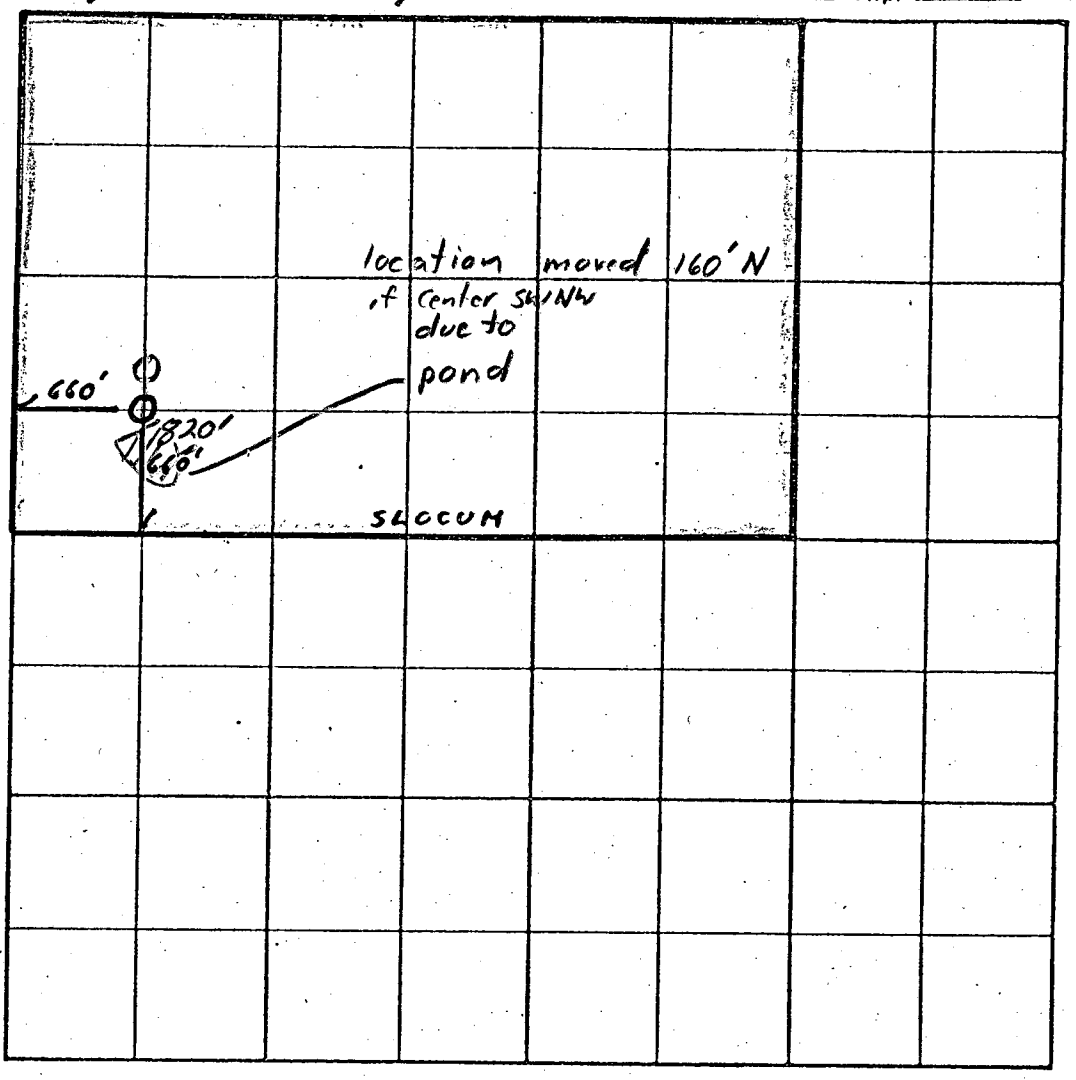
WELL LOCATION PLAT

Form OGC - 4

Owner: The Anschutz Corporation

Lease Name: Arda T. Slocum County. Gentry

1860
1980 feet from (N) ~~(S)~~ line and 660 feet from ~~(E)~~ (W) line of Sec. 11 Twp. 62N Range 32W



SCALE
1" = 1000'

REMARKS: Wildcat Creek Area (#2)

RECEIVED
OCT 11 1974
MO. OIL & GAS COUNCIL

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest lease and section lines, and from the nearest well on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well. Do not confuse survey lines with lease lines. See rule 7 - 3 (b) for survey requirements.

(SEAL)

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

Registered Land Surveyor

MISSOURI OIL AND GAS COUNCIL

WELL LOCATION PLAT

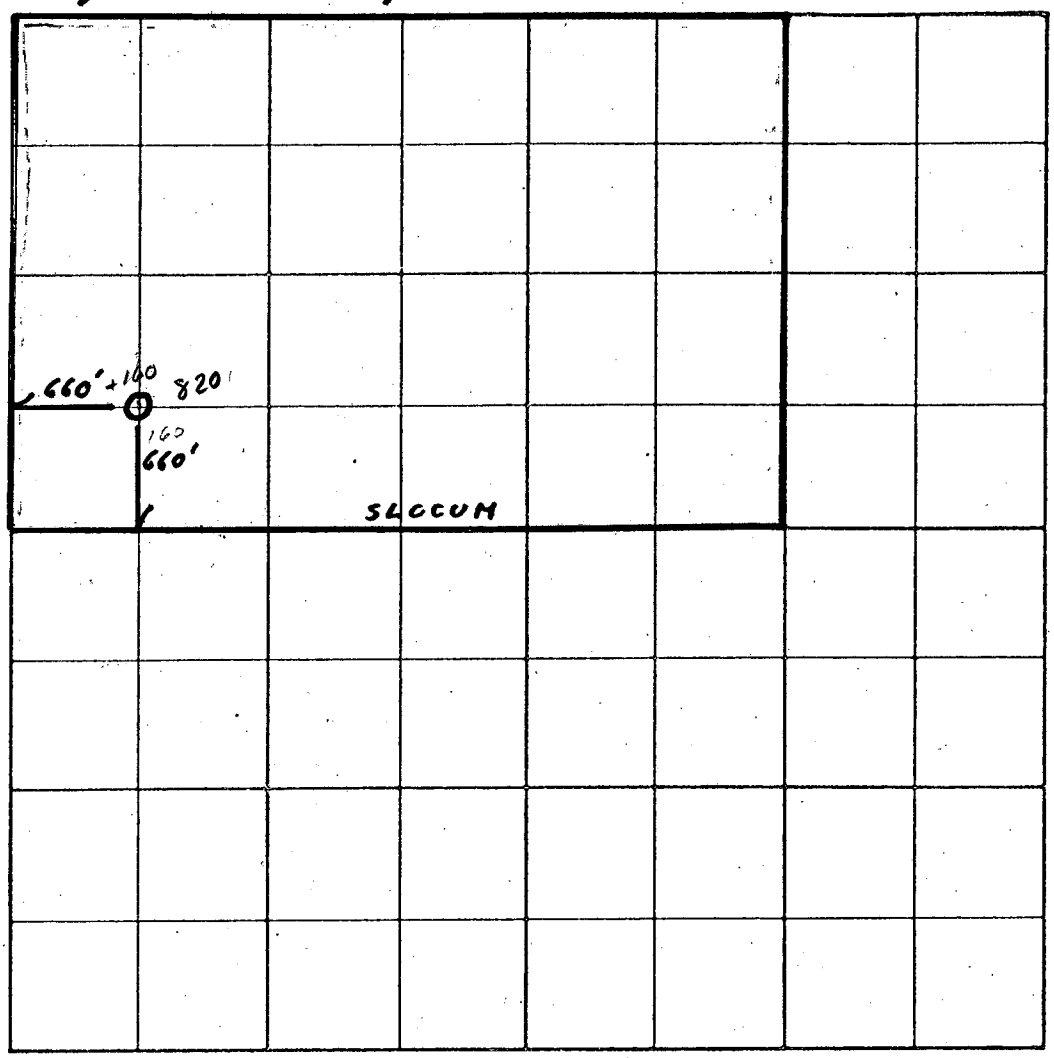
Form OGC - 4

Owner: The Anschutz Corporation

Lease Name: Arda T. Slocum County, Gentry

1980 feet from (N) ~~(S)~~ line and 660 feet from ~~(E)~~ (W) line of Sec. 11 Twp. 62N Range 32W

1860



SCALE
1" = 1000'

REMARKS: Wildcat Creek Area (#2)

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest lease and section lines, and from the nearest well on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well. Do not confuse survey lines with lease lines. See rule 7 - 3 (b) for survey requirements.

(SEAL)

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

Registered Land Surveyor

MISSOURI OIL AND GAS COUNCIL

Form OGC-5

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

New Well [X] | Work-Over [ ] | Deepen [ ] | Plug Back [ ] | Same Reservoir [ ] | Different Reservoir [ ] | Oil [ ] | Gas [ ] | Dry [ ]

Owner: The Anschutz Corporation	Address: 1110 Denver Club Building, Denver, Colorado 80202
Lease Name: ARDA T. SLOCUM	Well Number: 1
Location: SW NW Sec. 11-62N-32W	Sec. -- TWP-Range or Block & Survey
County: Gentry	Permit number (OGC3 number): 20004
Date spudded: 11-24-74	Date total depth reached: 12-1-74
Date completed, ready to produce: 12-2-74 D&A	Elevation (DF, RKB, RT or Gr.): 927 est. feet KB
Elevation of casing hd. flange: feet	
Total depth: 2453	P. B. T. D.
Producing interval (s) for this completion	Rotary tools used (interval) From surface to TD; Drilling Fluid used mud
Cable tools used (interval) From ... to ...	
Was this well directionally drilled? No	Was directional survey made?
Was copy of directional survey filed?	Date filed
Type of electrical or other logs run (list logs filed with the State Geologist): DIL, FDC, CNL	Schlumberger
Date filed: Forwarded by Schlumberger	

CASING RECORD

Casing (report all strings set in well---conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	12¼"	8 5/8"	24	212	100	None

TUBING RECORD

Size	Depth set	Packer set at
in.	ft.	ft.

LINER RECORD

Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.		

PERFORATION RECORD

Number per ft.	Size & type	Depth Interval

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Am't. & kind of material used	Depth Interval

INITIAL PRODUCTION

Date of first production: D & A

Producing method (indicate if flowing, gas lift or pumping---if pumping, show size & type of pump:)

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	API (Corr.)

Tubing pressure	Casing pressure	Cal'ted rate of Production per 24 hrs.	Oil	Gas	Water	Gas—oil ratio
			bbls.	MCF	bbls.	

Disposition of gas (state whether vented, used for fuel or sold):

Method of disposal of mud pit contents: Pumped below surface casing.

CERTIFICATE: I, the undersigned, state that I am the Prod. Administrator of the Anschutz Corporation (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 George Mohr

JAN 13 1975

MO. OIL & GAS COUNCIL

Remit two copies; one will be returned.

THE ANSCHUTZ CORPORATION ARDA T. SLOCUM

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Cherokee	520		
Mississippian	1152		
Kinderhook	1430		
Lime Creek	1457		
Hunton	1538		
Maquoketa	2059		
Viola	2105		
Simpson	2328		
St. Peter	2394		
Arbuckle	2412		
No Cores.			
DST #1	2230	2320	Straddle test, of Viola (Test data forwarded by Halliburton). Mud Logging Report forwarded by Core Lab.

JAN 1 3 1975
MO. OIL & GAS COUNCIL

*Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well if available.

This Well Completion or Recompletion report and well log shall be filed with the Missouri State Geologist not later than 30 days after project completion.

MISSOURI OIL AND GAS COUNCIL

Form OGC-6

NOTICE OF INTENTION TO ABANDON WELL

Name of Lease ARDA T. SLOCUM Date 12-31-74

Well No 1 is located 1860 feet from (N) ~~(S)~~ line and 660

feet from ~~(E)~~ (W) line of Section 11 Township 62N Range 32W

Gentry County. The elevation of the ground at well site is 970 est.

_____ feet above sea level.

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

Drilling Contractor: Lohman-Johnson Pollution Control, Inc.
1302 Old National Bank Building
Evansville, Indiana 47708

DETAILS OF WORK

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

Well was drilled to TD of 2453 KB and completed as D & A. 8 5/8" 24# Surface Casing is set at 212 KB.
12-2-74 Set cement plugs as follows:

25 sks. 2420-2340'
25 sks. 1190-1110'
25 sks. 250-170' across base of surface pipe.
5 sk. plug at top of surface pipe, and top of pipe cut off below plow depths.

CERTIFICATE: I, the undersigned, state that I am the Prod. Admin. of the Anschutz Corporation (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.

George Mohr
Signature George Mohr

RECEIVED
JAN 13 1975
MO. OIL & GAS COUNCIL

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

NOTICE OF INTENTION TO ABANDON WELL

Name of Lease Slocum Date 30 NOV 74

Well No 1 is located _____ feet from (N) (S) line and _____

feet from (E) (W) line of Section _____ Township _____ Range _____

_____ County The elevation of the ground at well site is _____

_____ feet above sea level.

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

DETAILS OF WORK

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

Plug thru ST Peter horizon -
plug across Penn - Miss boundary
plug across Penn - drift boundary specially
@ base of surface pipe

plug @ top of surface pipe w/ pipe to be
cut off below plow depth -

CERTIFICATE: I, the undersigned, state that I am the _____ of the _____ (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

above data given to Hank Ohlen
by telephone - 30 NOV 1974
by J. Wells -

Signature

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

Form OGC-7

MISSOURI OIL AND GAS COUNCIL
PLUGGING RECORD

Owner: The Anschutz Corporation	Address: 1110 Denver Club Bldg. Denver, Colorado 80202
Name of Lease: ARDA T. SLOCUM	Well No.: 1
Location of Well: SW NW Sec. 11-62N-32W	Sec-Twp-Rge or Block & Survey: R
County: Gentry	
Application to drill this well was filed in name of: The Anschutz Corporation	Has this well ever produced oil or gas: NO
Character of well at completion (initial production) Oil (bbls/day):	Gas (MCF/day):
Dry?: YES	
Date Abandoned: 12-2-74	Total depth: 2453
Amount well producing prior to abandonment. Oil (bbls/day):	Gas (MCF/day):
Water (bbls./day):	

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.

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
8 5/8"	212	None	212		

Was well filled with mud-laden fluid? YES

Indicate deepest formation containing fresh water. Drift

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

Name	Address	Direction from this well:
See Attached Plat		

Method of disposal of mud pit contents: Pumped below surface casing

Use reverse side for additional detail

File this form in duplicate with

CERTIFICATE: I, the undersigned, state that I am the Prod. Admin. of the Anschutz Corporation (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.

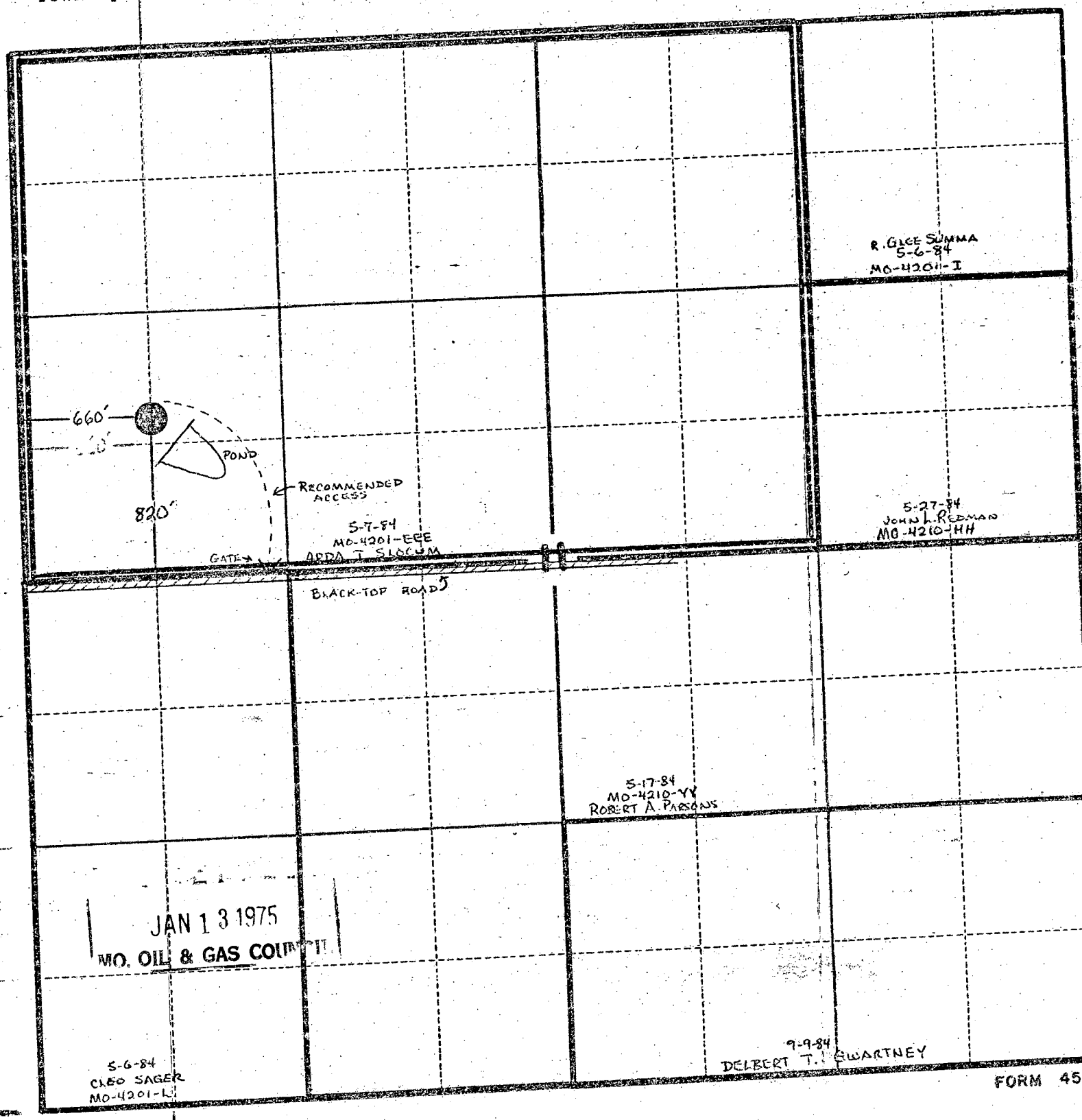
Signature George Mohr

JAN 13 1975
MO. OIL & GAS COUNCIL

Remit two copies; one will be returned

SLOCUM No. 1 - 160' N. OF C SW/4 NW/4 SEC. 11-T62N, R32W

Township 62 N, Range 32 W, County GENTRY, State MISSOURI



FORM 45

#2 - WILDCAT CREEK AREA

Jack Wells
Missouri Geol Survey

KILPATRICK ASSOCIATES INC.

CHEMISTS & ENGINEERS

2740 So. PLATTE RIVER DRIVE, ENGLEWOOD, COLORADO 80110
P. O. BOX 1067 • AREA CODE 303 • TELEPHONE 789-9130

WATER ANALYSIS REPORT

TO: The Anschutz Corporation
1110 Denver Club Building
Denver, Colorado 80202

Results Reported (date) 12/12/74 by W. H. Kilpatrick
Laboratory Number D 3616 Job Number
Sample Taken (date) 12/2/74 by
Sample Received (date) 12/3/74 by W. H. Kilpatrick

LOCATION WHERE SAMPLE WAS TAKEN

Company The Anschutz Corporation Lease Well No. Slocum #1
SW NW Sec. 11 TWP 62N Range 32W Survey
District #1 Field County Gentry State Missouri
Producing Formation Viola Top
Remarks: (type of sample and where in system it was taken)

CHEMICAL AND PHYSICAL PROPERTIES

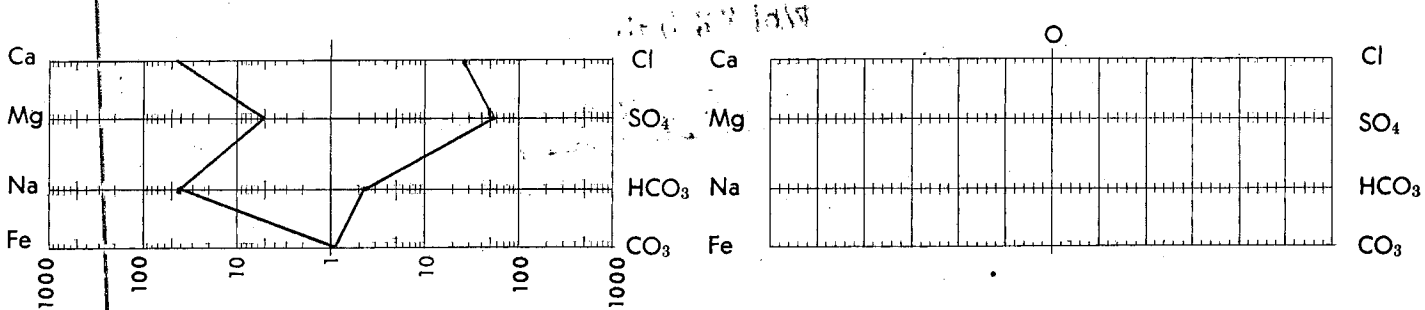
Temp. at Collection °F. pH 6.98 @ 68 °F Resistivity 2.04 (ohm meters)@ 68 °F
Specific Gravity @ °F. H_2S mg/1. O_2 mg/1. Free CO_2 mg/1.
Total Alkalinity 115.2 mg/1($CaCO_3$). Total Hardness 1891 mg/1($CaCO_3$). Turbidity
Total Dissolved Solids (By Evaporation) 5614 mg/1. (By Calculation) 5201 mg/1. Total Suspended Solids mg/1.
Dissolved Iron mg/1(Fe). Total Iron 2.1 mg/1(Fe).

	mg/1	MEQ/1		mg/1	MEQ/1
Calcium (Ca)	648	32.40	Chloride (Cl)	995	28.03
Magnesium (Mg)	66	5.43	Sulfate (SO_4)	2430	50.63
Sodium (Na)	970	42.17	Bicarbonate (HCO_3)	141	2.31
Potassium (K)	31	0.79	Carbonate (CO_3)	0	
Barium (Ba)			Hydroxide (OH)	0	
Lithium (Li)	0.022	–			
Total Cations		80.79	Total Anions		80.97

REMARKS: **Total milliequivalents of cations and anions are actually equal. These values actually measured represent a measure of the precision of our lab work. Also trace amounts of other ions may actually be present.**

Note: All results are reported as the constituent named unless otherwise noted.

CHART OF WATER CHARACTER—MEQ PER LITER



MUD AND CUTTINGS ANALYSIS

THE ANSCHUTZ CORPORATION-NCRA-DOW CHEMICAL

NO. 1 SLOCUM

WILDCAT

GENTRY COUNTY, MISSOURI

RECEIVED
DEC 16 1974
MO. OIL & GAS COUNCIL

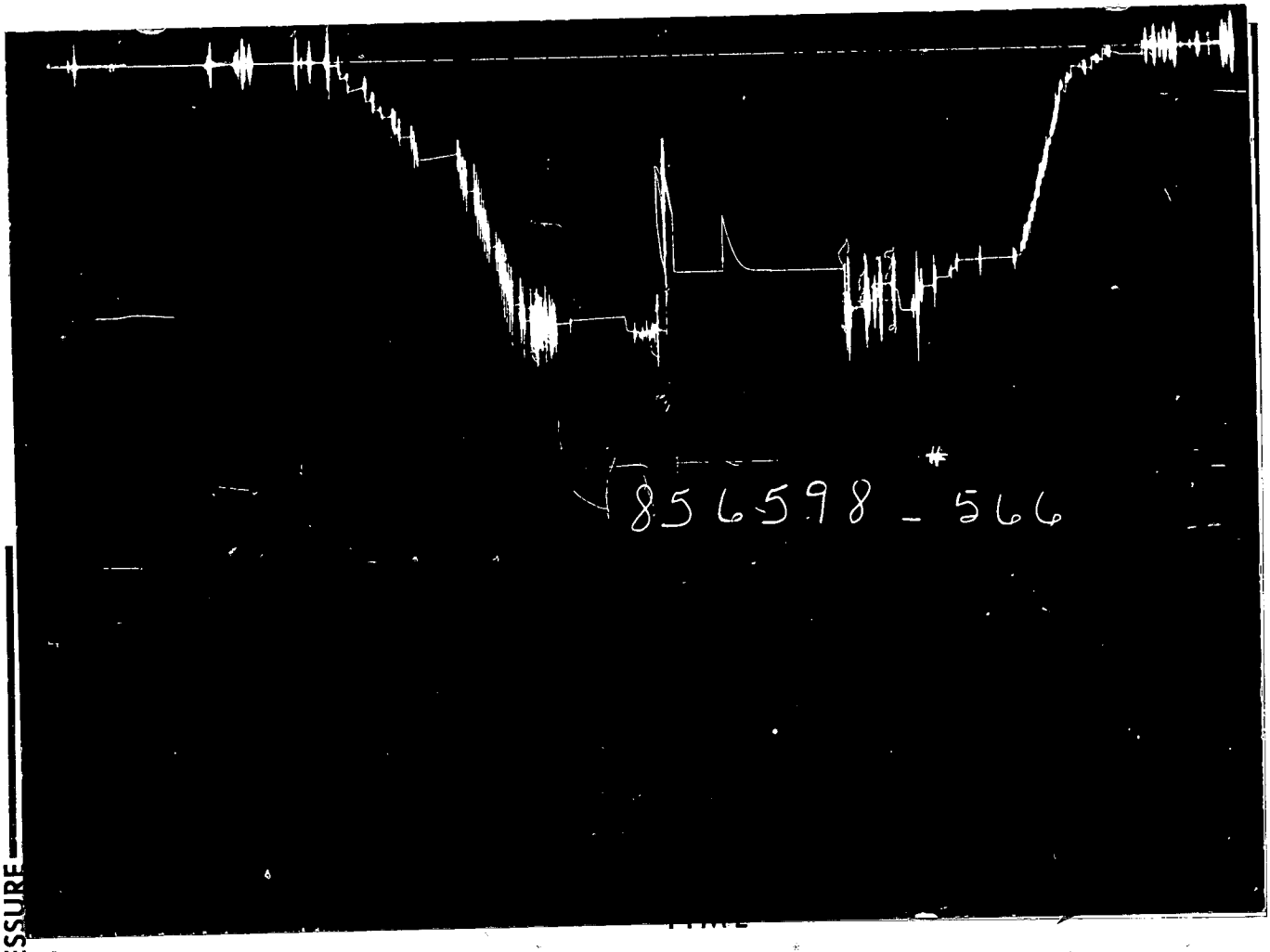
CORE LAB
PETROLEUM RESERVOIR ENGINEERING

Formation Testing Service Report

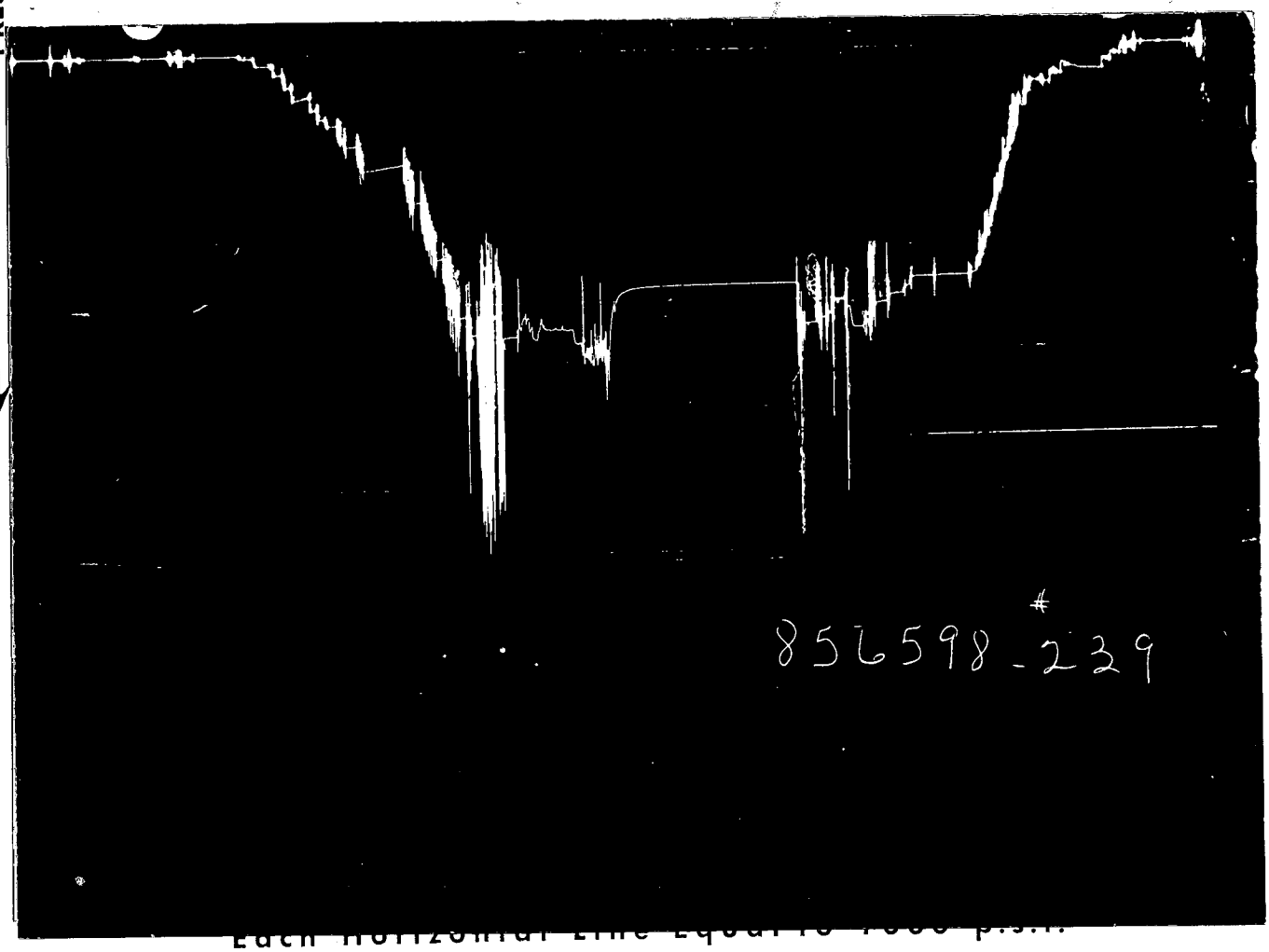
Lease Name	SLOCUM
Well No.	1
Test No.	1
Tested Interval	2230' - 2320'
Lease Owner/Company Name	THE ANSCHUTZ CORPORATION INCORPORATED

DEC 0 9 1974
MO. OIL & GAS COUNCIL

HALLIBURTON SERVICES
DUNCAN, OKLAHOMA



PRESSURE



Each horizontal line equal to 1000 p.s.i.

FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface

Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____

Gravity _____ ° API @ _____ °F.

Gas/Oil Ratio _____ cu. ft./bbl.

		RESISTIVITY		CHLORIDE CONTENT
Recovery Water	@	°F.		ppm
Recovery Mud	@	°F.		ppm
Recovery Mud Filtrate	@	°F.		ppm
Mud Pit Sample	@	°F.		ppm
Mud Pit Sample Filtrate	@	°F.		ppm

Mud Weight 9.1 vis 40 cp

Date	12-1-74	Ticket Number	856598
Kind of Job	STRADDLE TEST OPEN HOLE	Halliburton District	WINFIELD
Tester	DURHAM	Witness	HALEY
Drilling Contractor	LOHMANN AND JOHNSON	NM	S

EQUIPMENT & HOLE DATA

Formation Tested	Viola Lime		
Elevation	977' K.B.		Ft.
Net Productive Interval	90'		Ft.
All Depths Measured From	Kelly Bushing		
Total Depth	2452'		Ft.
Main Hole/Casing Size	7 7/8"		
Drill Collar Length	427'	I.D. 2¼"	
Drill Pipe Length	1774'	I.D. 3.826"	
Packer Depth(s)	2230' - 2320'		Ft.
Depth Tester Valve	2212'		Ft.

Cushion	TYPE	AMOUNT	Ft.	Depth Back Pres. Valve	DCIP VALVE 2208'	Surface Choke	¼"	Bottom Choke	3/4"

Recovered 950' Feet of muddy water

Recovered 950' Feet of water

Recovered Feet of

Recovered Feet of

Recovered Feet of

Remarks Tool opened for a 5 minute first flow with a strong blow in 1 minute. Closed tool for a 30 minute first closed in pressure. Tool reopened for a 29 minute second flow with a strong blow for 15 minutes - then decreasing to a very weak blow in 30 minutes. Took a 46 minute second closed in pressure.

TEMPERATURE	Gauge No. 566 Depth: 2216' Ft.	Gauge No. 239 Depth: 2351' Ft.	Gauge No. Depth: Ft.	TIME
	12 Hour Clock	12 Hour Clock	Hour Clock	Tool Opened A.M. 12:55 P.M.
Est. °F.	Blanked Off NO	Blanked Off YES	Blanked Off	Opened Bypass A.M. 2:45 P.M.
2341' @ Actual 93 ?°F.	Pressures	Pressures	Pressures	

		Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic		-	1098	-	1109				
First Period Flow	Initial	415.5	489	-	-			___	___
	Final	632.2	635	-	-			5	5
	Closed in	868.9	866	-	-			30	30
Second Period Flow	Initial	632.2	644	-	-			___	___
	Final	868.9	866	-	-			30	29
	Closed in	868.9	867	HYDROSTATIC RELEASE:				45	46
Third Period Flow	Initial				934			___	___
	Final								
	Closed in								
Final Hydrostatic		-	1026	-	1099			___	___

Legal Location Sec. - Twp. - Rng.: C/SW-NW 11 - 62N - 32W

Lease Name: SLOCUM

Well No.: 1

Test No.: 1

Field Area: WILDCAT

Tested Interval: 2230' - 2320'

Meas. From Tester Valve

County: GENTRY

State: MISSOURI

Lease Owner/Company Name: THE ANSCHUTZ CORPORATION INCORPORATED

FORMATION TEST DATA

FORM 181-R1—PRINTED IN U.S.A.

LITTLE'S 96671 10M 8/74

5

Gauge No.	566	Depth	2216'	Clock No.	4204	12 hour	Ticket No.	856598

	First Flow Period		First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log}\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log}\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log}\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.000	489	.000		635	.000	644	.000		866					
1	.0066	508	.0068		864	.0269	745**	.307		867					
2	.0132	537	.0136		865	.0605	822								
3	.0198	570	.0204		866	.0941	856								
4	.0264	607	.0272		866	.1277	864								
5	.0330	635	.0340		866	.1613	865								
6			.0408		866	.1950	866								
7			.0476		866										
8			.0544		866										
9			.0612		866										
10			.0680		866										
11			.0952		866										
12			.1224		866										
13			.1496		866										
14			.1768		866										
15			.2040		866										

Gauge No.	239	Depth	2351'	Clock No.	3228	hour	12

0															
1															
2															
3				HYDROSTATIC RELEASE:			934								
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
Reading Interval	1		*			5									Minutes

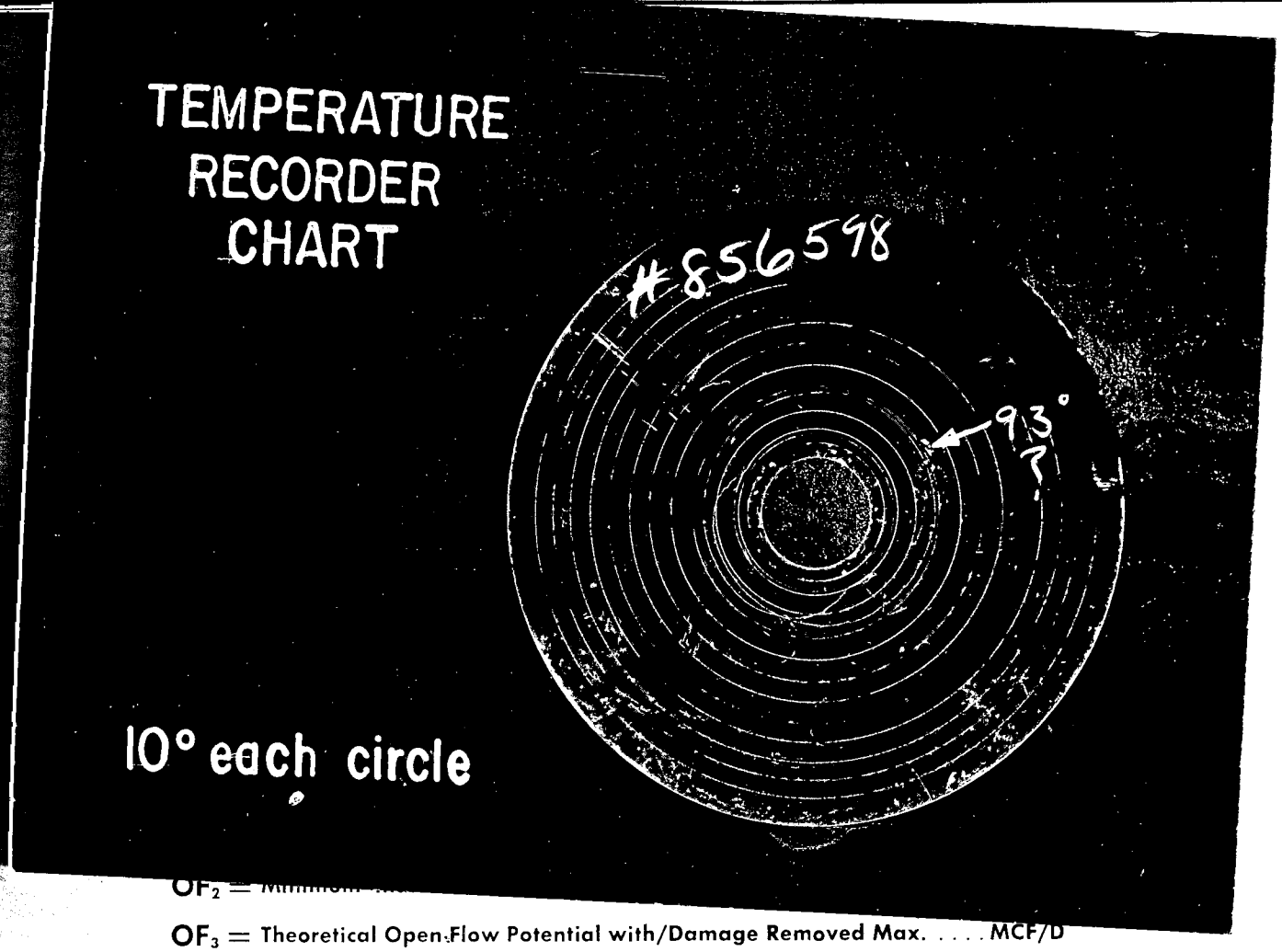
REMARKS: * FIRST 10 READINGS = 1 MINUTE EACH AND THE LAST 5 READINGS = 4 MINUTES EACH... ** INTERVAL = 4 MINUTES.

SPECIAL PRESSURE DATA

TICKET NO. 856598

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	5 3/4"	2"	1'	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	1774'	
Drill Collars	6¼"	2¼"	427'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	3/4"	4'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	3/4"	4'	2212'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2¼"	4'	2216'
Hydraulic Jar	5"	1"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	2¼"	4'	2230'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2¼"	90'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly	6 3/4"	2¼"	4'	2320'
Distributor				
Packer Assembly				
FLUSH JOINT Anchor Pipe Safety Joint	5"	2¼"	25'	
Side Wall Anchor	6 3/4"	2¼"	6'	2345'
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case	5"	2¼"	4'	2351'
Total Depth				

EQUIPMENT DATA



OF_2 = Minimum ...

OF_3 = Theoretical Open-Flow Potential with/Damage Removed Max. . . . . MCF/D

OF_4 = Theoretical Open Flow Potential with/Damage Removed Min. . . . . MCF/D

P_s = Extrapolated Static Pressure . . . . . Psig.

P_F = Final Flow Pressure . . . . . Psig.

P_{ot} = Potentiometric Surface (Fresh Water *) . . . . . Feet

Q = Average Adjusted Production Rate During Test . . . . . bbls/day

Q_1 = Theoretical Production w/Damage Removed . . . . . bbls/day

Q_g = Measured Gas Production Rate . . . . . MCF/D

R = Corrected Recovery . . . . . bbls

r_w = Radius of Well Bore . . . . . Feet

t = Flow Time . . . . . Minutes

t_o = Total Flow Time . . . . . Minutes

T = Temperature Rankine . . . . . °R

Z = Compressibility Factor . . . . . ——

μ = Viscosity Gas or Liquid . . . . . CP

Log = Common Log

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.