

Total Depth Drilled 2531'
 Oil String Set 2517'
 Plug Back Depth None
 Vertical or Directional Hole Vertical

Permit No. _____
 Serial No. _____
 Lease Name H.A. Koogler
 Well No. 93
 Field El Dorado
 District El Dorado

State Kansas State Reg. District _____
 Section 21 Township 26S Range 5E
 Location of Well: 990' FWL, 1050' FWL, 1111/4 Distance From Nearest Town (9) Mine Miles - El Dorado, Kansas

DATE SUMMARY	Date	Work Performed By	Remarks
Location Staked	4-8-52	Civil Engineering Dept.	
Dig Pit	4-10-52	Bud Edwards Drig. Co., Wichita, Kans.	
Commenced Erecting Derrick			Portable Rig
Commenced Raising Up	4-16-52	Bud Edwards Drig. Co., Wichita, Kans.	Portable Rig
Initial Rigging Up Completed	4-16-52		
Commenced Drilling (Spud Date)	4-10-52		
Completed Drilling (Total Depth)	4-25-52		
Moved In Cable Tools	4-29-52		
Oil String Casing Set	4-27-52		
Plug Back (Final)	None		
Perforations (Final)	5-7-52	Lane Wells Co. El Dorado, Kansas	
Completed Subsurface Installations (Final)	5-10-52	Bud Edwards Drig. Co., Wichita, Kans.	
Completed Well Head Installations (Final)	5-10-52		
Commenced Bringing In (Final)	4-30-52		
Well Cleaned (Final)	5-10-52		
Completed Abandonment			
Completed Abandonment			

* Insert the first work started, as: Build Road, Build Board Road and Turn around, Dig Canal, Clear and/or Grade Location, Lay fuel and Water Lines, Dig Slush Pit, Build Rig Foundation, or, Install Drilling Foundation.

NO. DAYS WATER USED None : SOURCE Furnished by Contractor.
 NO. DAYS FUEL USED None : KIND : KIND

Measuring Point Will Be Ground Kelly Bushing None Surface Csg. None
 Kelly Drive Bushing 2517'-6313' Elevation 4' Surface Csg. Flg. None

Transfer No. In: 6106-6132 CASING, TUBING, & * CEMENTING RECORD Transfer No. Out _____

Size	Weight	Collars & Threads	Kind	Rge	Jts.	Total Feet Less Threads		Total No. Scratchers and Where Placed	Total No. Centralizers and Where Placed
						Put In	Left In		
8-5/8"	324	6"	8"	1	1	103'		None	None
8-5/8"	214	6"	8"	1	4			None	None
8-5/8"									
5-1/2"	15.54	6-3/4"	J-55	2	84	2513'		None	2 - 2319' - 2458'
5-1/2"									
2"	4.76	5"	8 Rod. J-55	2	82	2556'			

* Following each string of casing, and using the full width of the sheet, give complete cementing record as follows: Where landed, Amount and kind of cement, Amount and kind of Additives, Stages of Cementing, Cement Tops, Slurry weight per Gal. and WOC Hours.

Give the balance of Well Record by Sections, in the order listed below, carefully following instructions in the Field Manual for each section. Use the reverse side of this sheet and subsequent sheets on Form X-6727 As needed.

Section 1- Production Tests and Potential Test Data
 Section 2- Formation Summary
 Section 3- Depth Measurements
 Section 4- Drill Stem Tests
 Section 5- Perforating and Squeeze Record
 Section 6- Survey Particulars

Lease Name H.A. Koogler Well No. 93 of 4 Sheets

585

Handwritten notes:
 5-1/2" @ 2512' with 100 lbs. cement
 Water Pump @ 2480 - 2508
 Run down Open Hole 2517-88
 Cut Open Hole 2089 - 2028
 Check 2435-45 sand level samples
 Ref 5 1/2" Plug @ 2510 (4/22/80)

PRODUCTION NO. 1 - PRODUCTION DATA:

2 1/2" Oil Well Completion - Pumping.

Production test completed on May 15, 1952, in the Viola Line and Simpson Sand Formations; Simpson Sand Formation, top - 2483', bottom 2516'; Simpson Sand Formation, top - 2516', bottom - 2551'. Perforated 5-1/2" casing in Viola Line formation from 2482' to 2508' W/105 15/32" balls. Open hole, Simpson Sand Formation, from 2517' to 2558'. Well pumped on 24 hour test at a rate of 35 barrels oil, 3 barrels water, per day. Pump set at 2552' W/1-1/2" Plunger, 3 1/4" Rods. 2 1/2" Stroke, 12 s.p.m. Test after acidizing Viola Line W/1000 gallons acid; Gravity 32.2 @ 60°. Allowable 100%.

PRODUCTION NO. 2 - FORMATION SUMMARY:

Formation	From	To	Core No.	Core Log Run No.	Micro Log Run No.	Latero-Log Gamma-Ray & Sp.	Remarks
Viola	2483'	2516'	1	1	1	1	
Simpson	2516'	2545'	1 & 2	1	1	1	
Sand	2545'	2548'	2	1	1	1	
Gray to Green	2548'	2549'	2	1	1	1	
White, Sandy	2549'	2551'	2	1	1	1	
Sandy, Gray	2551'	2552'	2	1	1	1	
Green	2552'	2556'	2	1	1	1	
Core	2556'	2558'	2				

PRODUCTION NO. 3 - DEPTH MEASUREMENTS:

Drillers	Steel Line	Micro Log	Latero-Log Gamma-Ray	Ind. Log	Perf. Line	Ft. Plus or Minus	K.P. to O.L.	Surface Depth
2558'	2558'	2558'	2558'	2558'	2558'	4'	4'	2554'
2517'	2558'					4'	4'	2513'
2558'	2558'				2550'	4'	4'	2554'

PRODUCTION NO. 5 - PERFORATING RECORD:

Formation	From	To	No.	Size	Kind	Tool Set @
Simpson, Viola	2482'	2508'	105	15/32"	Bullets	2508'

PRODUCTION NO. 6 - SURVEYS PERFORMED:

Kind	From	To
Schlumberger Micro-Log	1500'	2553'
Schlumberger Latero-Log, Gamma-Ray & Sp.	105'	2554'
Schlumberger Induction Log & Sp.	1500'	2554'

TY-Sun Deviation Survey:

Depth	Deg. off Vertical
500'	1-1/2°
1000'	1-1/2°
1500'	1°
2000'	1-1/4°

SECTION NO. 1 - CORE RECORD:

No.	From	To	Recovered	Description
1	2485'	2525'	140'	Dolomite, with saturation and staining.
	2485'	2505'		Dolomite, with spotted staining.
	2505'	2508'		Dolomite, with saturation and staining.
	2508'	2510'		Dolomite, sandy, with spotted staining.
	2510'	2515'		Dolomite, sandy, good stain.
	2515'	2516'		Sand with saturation and staining of oil.
	2516'	2525'		
2	2525'	2558'	31'	Sand, with saturation and staining of oil.
	2525'	2529'		Sand, white to Green w/spotted staining of oil.
	2529'	2530'		Sand, with saturation and staining of oil.
	2530'	2536'		Sand, white to Green w/spotted staining of oil.
	2536'	2537'		Siltstone
	2537'	2539'		Shale, Brown, Sandy.
	2539'	2540'		Shale, Sandy, Gray-Green.
	2540'	2541'		Sand, Shaley, Gray to Green.
	2541'	2545'		Shale and Sand.
	2545'	2548'		Shale, Gray to Green.
	2548'	2549'		Dolomite, Sandy.
	2549'	2551'		Shale, Sandy, Gray to Green.
	2551'	2552'		Sand.
	2552'	2556'		Lost Core.
	2556'	2558'		

SECTION NO. 8 - BIT RECORD:

No. Used	Size	Drag or		No. Ft.	
		Rock	Hook	From	To
1	7-7/8"	Hook	Hook	105'	720'
2	"	"	"	720'	1593'
3	"	"	"	1593'	1905'
4	"	"	"	1905'	2222'
5	"	"	"	2222'	2525'
6	"	"	"	2525'	2558'

SECTION NO. 9 - ACIDIZING AND OTHER COMPLETION OPERATIONS:

Strato-Frac - Simpson Sand Formation - 5-4-52.

Run 2" U.B. tubing w/Baker Packer set at 2494'. Pumped in 18 barrels oil, pressure up to 1300f, broke down to 900f. Pumping at rate of 4 barrels per minute. Pumped in 1500 gallons of Dowell X-500 with 3/16" sand per gallon (1125f sand), pressure 1200f, broke down to 900f. Pumped at rate of 2-1/4 barrels per minute. Flushed with 36 barrels oil, pressure dropped off to vacuum in 1-3/4 minutes after pump shut down. 2 1/2 hour balling test in Simpson Sand Formation after Strato-frac, made 2 1/2 bbls. oil, 5 bbls. water. Balled 36 barrels load oil back.

Acidized - Viola Lime Formation - 5-8-52.

Acidized Viola Lime Formation from 2482' to 2508' thru 105' - 15/32" perforations with 1,000 gallons 15% acid with surface tension reducing agent added, 53 barrels water load, under vacuum. 10 hour balling test made 2 1/2 gallons fluid per hour, 50% water.

SECTION NO. 10 - SUMMARY OF OPERATIONS:

L. Drilling and Exploratory Operations Performed;

4-25-52	Core No. 1
4-26-52	Core No. 2
4-26-52	Schlumberger Induction and Sp. Log No. 1
4-26-52	Schlumberger Latero-Log - Gamma-Ray and Sp. Log No. 1
4-26-52-4-27-52	Schlumberger Micro-Log No. 1

SECTION NO. 10 - SUMMARY OF OPERATIONS (CONTINUED):

Completion Operations Performed:

4-29-52 - 5-10-52, incl.
 Moved in Cable Tools. Moved in, rigged up, bailed hole, drilled out plug, cement to 2517', cleaned out to bottom at 2558'. Washed hole with 100 gallons acid. 2 1/2 hour bailing test made 90 gallons oil, 30 gallons water. Strato-Frased Simpson Sand Formation as follows; Ran 2" tubing with Baker Packer set at 2494'. Pumped in 18 barrels oil, under 1300' pressure, broke down to 900'. Pumped at rate of 4 barrels per minute. Pumped in 1500 gallons Dowell X-500 with 3/16" sand per gallon (112 1/2 Sand), under 1200' pressure, broke down to 900'. Pumped at rate of 2-1/4 barrels per minute. Flushed with 36 barrels oil, pressure dropped off to vacuum in 1-3/4 minutes after pump shut down. 2 1/2 hour bailing test made 2 1/2 barrels oil, 5 barrels water. Set Lane Wells ridge plug at 2512', perforated 5-1/2" casing from 2482' to 2508' with 105 - 15/32" bullets. 2 1/2 hour bailing test in Viola Lime Formation after perforating made 1 1/2 barrels oil. Acidized Viola Lime Formation from 2482' to 2508' with 1000 gallons 15% acid with surfactant reducing cement added and 53 barrels load water, under vacuum, thru 105 - 15/32" perforations. 10 hour bailing test made 2 1/2 gallons fluid per hour, 50% water. Bailed back load water, drilled out plug and cleaned out to bottom. Ran tubing and rods.

SECTION NO. 11 - FORMATION RECORDED:

Formation	From	To	Remarks
Surface Hole	0'	105'	
Oil	105'	115'	
Oil and Shale Streaks	115'	110'	
Oil and Shale	110'	525'	
Oil	525'	565'	
Oil	565'	660'	
Oil	660'	880'	
Oil and Lime Shells	880'	1145'	
Oil and Lime	1145'	1450'	
Oil and Shale Streaks	1450'	1590'	
Oil and Lime	1590'	1650'	
Oil, Cherty	1650'	1850'	
Oil	1850'	1930'	
Oil and Chert	1930'	1985'	
Oil and Lime Streaks	1985'	2170'	
Oil, Shale Streaks	2170'	2290'	
Oil	2290'	2485'	
Oil	2485'	2505'	Top of Viola Lime @ 2483'
Oil	2505'	2508'	Core No. 1 from 2485' to 2525'.
Oilomite, W/saturation and staining	2508'	2510'	
Oilomite, W/spotted staining	2510'	2515'	
Oilomite, W/saturation and staining	2515'	2516'	Top of Simpson Sand @ 2516'.
Oilomite, W/spotted staining	2516'	2525'	
Oilomite, Sandy W/spotted staining	2525'	2529'	Core No. 2 from 2525' to 2558'.
Oilomite, Sandy, good stain	2529'	2530'	
Oil and W/saturation and staining of oil	2530'	2536'	
Oil and W/saturation and staining of oil	2536'	2537'	
Oil and, White to Green W/spotted staining of oil	2537'	2539'	
Oilomite, Brown, Sandy	2539'	2540'	
Oilomite, Sandy Grey, Green	2540'	2544'	
Oil and, Shaley, Gray to Green	2544'	2545'	
Oil and Sand	2545'	2548'	
Oil and Gray to Green	2548'	2549'	
Oilomite, Sandy	2549'	2551'	
Oil and, Sandy, Gray to Green	2551'	2552'	
Oil and	2552'	2556'	
Oil and	2556'	2558'	
Oil and	2558'		

CORE DESCRIPTION

Magnolia #93 M. A. Koogler
 NE SW NW Section 21-26S-5E

By Owen E. Homeister

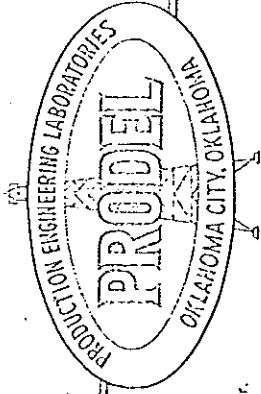
Core #1 2485-2525, full recovery

2485-86, dolo., f. sucrose, sat. stn.
 86-87, same w/some white chert
 87-88, dolo, f. sucrose, sat. stn.
 88-89, same
 89-90, as above w/consid. white cx., (50%),
 sat. stn.
 90-91, dolo. as above, some grn argill. mat.
 & cx.
 91-92, dolo., few small vugs.
 92-93, cx., wht, tr. dolo & stn.
 93-94, dolo., f. suc., sat. stn, some cx.
 94-95, dolo., f. suc., sat. stn, consid.
 cx. (50%)
 95-96, dolo., f. suc., sat. stn, some cx.
 96-97, same
 97-98, same w/few small vugs.
 98-99, same
 99-2500, same w/inc. vug. poros.
 2500-01, same
 01-02, same w/ex. vug. por.
 02-03, same
 03-04, same
 04-05, same
 05-06, dolo., f. suc, vug. por. w/sp. stn
 06-07, same
 07-08, dolo., f. sucrose, sp. stn, some cx (10%)
 08-09, dolo, f. to v. large, v. ex. vug. poros.
 w/sat. stn.
 09-10, dolo., dense, f. xlyn, no stn, few
 sand grns, ss. m. gran, sat. stn.
 10-11, sandy dolo., sp. stn.
 11-12, same
 12-13, same
 13-14, same
 14-15, same w/inc. stn.
 15-16, dolo. ss. good stn.
 16-17, ss., sat. stn oil
 17-18, same
 18-19, ss. some dolo. cem., sat. stn
 19-20, same
 20-21, same
 21-22, ss. w/sat. stn
 22-23, same
 23-24, same
 24-25, same

Core #2, 2525-60, rec. 31'

2525-26, ss., f. to m. gran w/sat stn oil.,
 grains rounded to subang., friable.
 26-27, same
 27-28, same
 28-29, same
 29-30, ss., wht to grn, argill., w/sp. stn
 oil.
 30-31, ss., med. gran w/sat. stn oil.
 31-32, ss., f. gran w/sp. sat. stn oil
 32-33, same
 33-34, ss., f. to m. gran w/sat. stn oil,
 friable.
 34-35, same
 35-36, same
 36-37, ss., wh. to grn, argill., w/sp. stn o:
 37-38, siltstone, glauc. no stn.
 38-39, same w/some pyrite
 39-40, sandy brn ls. w/glauc. & some sh.
 pebbles, Conglomeritic.
 40-41, sandy gry-grn waxy shale.
 41-42, sh., gry to grn w/abundant red disc
 shaped hematite nod.
 42-43, sh., gry-grn w/abund. yellow to brn
 hem. nod.
 43-44, same
 44-45, ss., gry to grn, argill. shaley
 45-46, shale & sand
 46-47, same
 47-48, same
 48-49, sh., gry to gry-grn w/phos. pebbles
 49-50, sandy dolo., f. xlyn, v. dense
 50-51, dolo., gry, f. xlyn w/few scattered
 sand grains.
 51-52, sandy gry to gry-grn sh.
 52-53, ss., f. to m. gran. argill.
 53-54, sand, w.some grn sh.
 54-55, same
 55-56, same

Assumed last 4' lost.



Production Engineering Laboratories

A. ARMSTRONG, JR.
WARD M. EDINGER

855 BRANIFF BUILDING, OKLAHOMA CITY, OKLAHOMA

May 14, 1952

File: CG-3750

Re: Core Analysis
Magnolia Petroleum Company
M. A. Koogler #95
El Dorado Field
Butler County, Kansas

Magnolia Petroleum Company
917 First National Building
Wichita, Kansas

Attention: J. R. Puckett

Gentlemen:

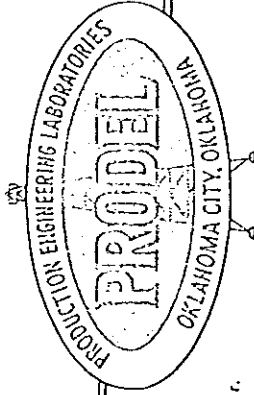
The Simpson sand is oil productive where permeable, from 2314 to 2336 feet. This section is summarized at the base of the coregraph with unit recoveries given.

Very truly yours,

PRODUCTION ENGINEERING LABORATORIES, INC.

WME:bc

Ward M. Edinger (l.a.)
Ward M. Edinger



Production Engineering Laboratories

1722 S. W. 4th St. OKLAHOMA CITY 6, OKLAHOMA
209 N. W. 4th St. May 13, 1952

A. ARMSTRONG, JR.
WARD M. EDINGER

CORE ANALYSIS REPORT

Company... Magnolia Petroleum Company

Location... Sec. 75 Twp. 25 Rge. File OC-2750

Well... M. A. Kooglor #93

Elevation... Remarks...

Field... El Dorado

Engineers... Prodol

County... Butler

Type Core Barrel...

State... Kansas

Sample Number	Depth Feet	Permeability Millidarcys	Porosity Percent	Residual Saturation Percent Pore Space		Probable Production	Permeability	Porosity	Water Saturation	Oil Saturation
				Oil	Water					
							75	50	0	0
							60	40	0	25

Sample Number	Depth Feet	Permeability Millidarcys	Porosity Percent	Residual Saturation Percent Pore Space	Probable Production	Permeability	Porosity	Water Saturation	Oil Saturation
1	2510.5	0.0	10.4	36.5	48.1	None	75	50	0
2	2511.5	0.0	12.1	15.7	61.9	None	60	40	20
3	2512.5	0.0	10.7	0.0	42.1	None	60	40	0
4	2513.5	0.0	13.5	4.4	40.0	None	60	40	0
5	2514.5	0.5	14.8	8.1	43.9	Oil	60	40	0
6	2515.5	1.0	15.7	19.1	52.2	Oil	60	40	0
7	2516.5	1.3	12.8	30.5	58.6	Oil	60	40	0
8	2517.5	1.8	13.9	34.5	40.3	Oil	60	40	0
9	2518.5	2.0	12.9	17.8	30.5	Oil	60	40	0
10	2519.5	0.9	10.5	31.4	51.4	Oil	60	40	0
11	2520.5	0.7	11.9	31.9	40.3	Oil	60	40	0
12	2521.5	0.4	8.1	25.0	76.5	(2)	60	40	0
13	2522.5	1.0	9.8	44.7	44.9	Oil	60	40	0
14	2523.5	7.8	13.5	11.9	28.1	Oil	60	40	0
15	2524.5	3.3	12.5	29.6	52.0	Oil	60	40	0
16	2525.5	9.0	12.8	23.4	67.9	Oil	60	40	0
17	2526.5	1.6	9.8	32.7	44.9	Oil	60	40	0
18	2527.5	19.0	16.5	18.2	21.8	Oil	60	40	0
19	2528.5	16.0	15.9	25.2	50.0	Oil	60	40	0
20	2529.5	1.0	17.1	20.9	60.8	Oil	60	40	0

Simpson Sand

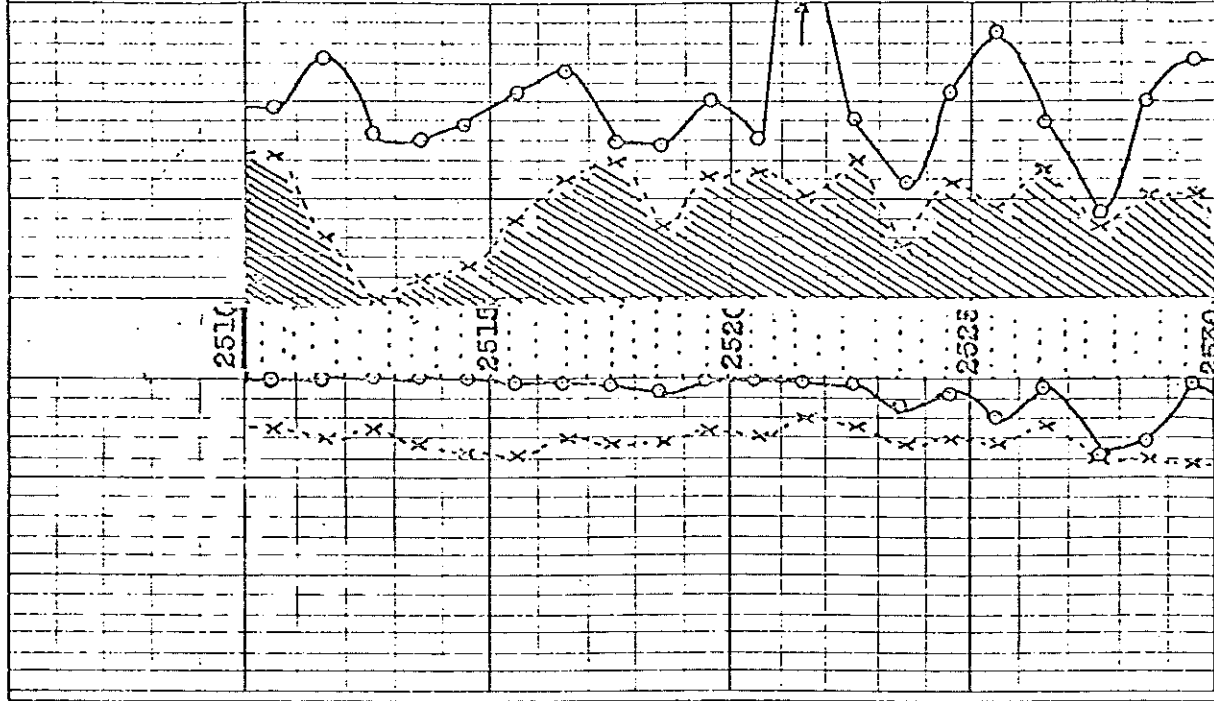
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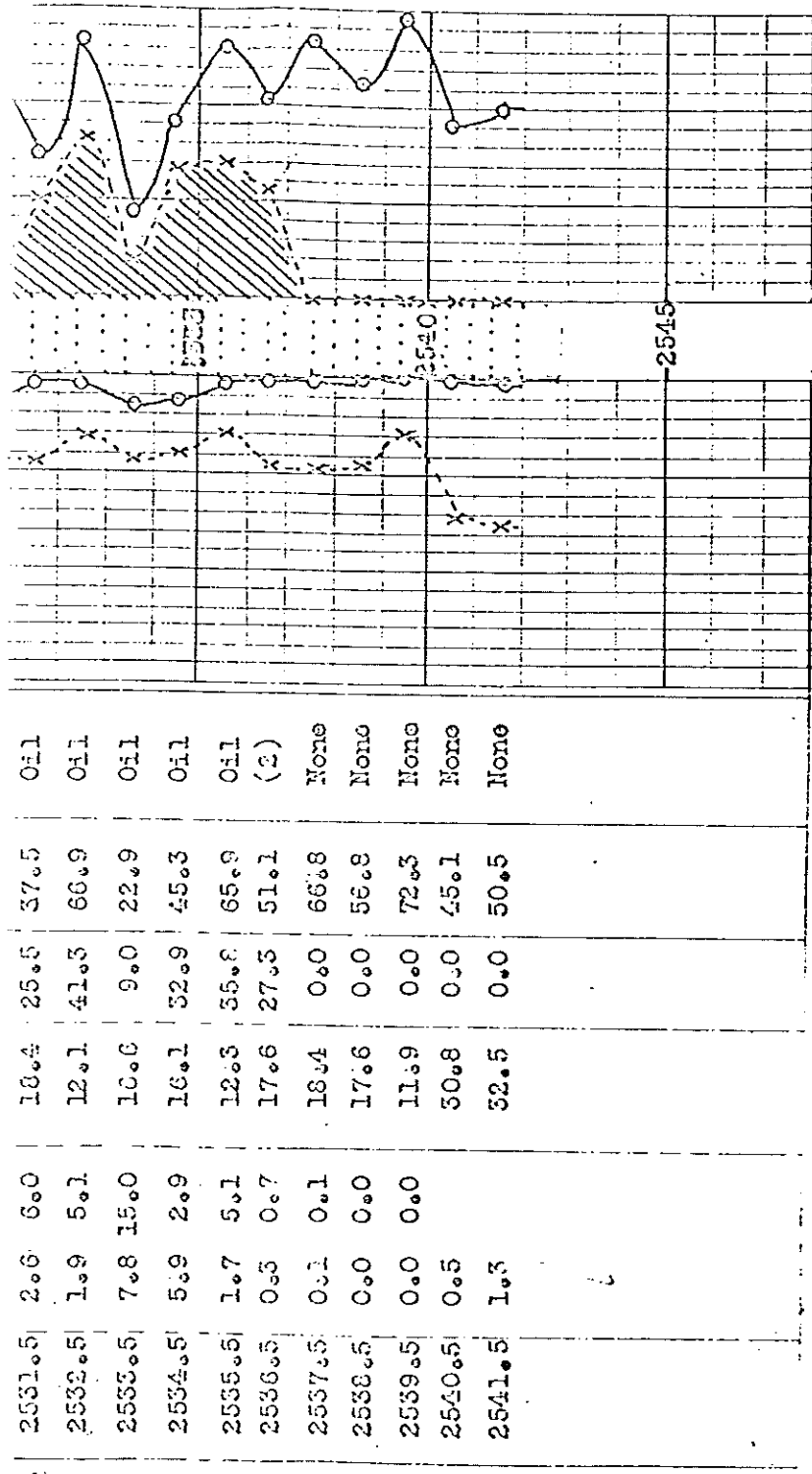
2515

2520

2525

2530





(1) See Letter
 (2) Low permeability—non pay

(3) Transition zone (a) Oil to water
 (b) Gas to oil (c) Gas to water
 (4) Oil—not commercially productive

SUMMARY

Formation Name... SIMPSON Depth 2510 to 2541.5 feet Core Recovery..... Percent
 productive formation recovered..... 21..... feet Possible productive formation..... feet

Average of determined values:
 permeability H₀.520, V₀0.7, mdcys.
 porosity..... 14.0..... percent
 saturation..... 25.4..... percent
 water saturation..... 47.9..... percent
 connate water..... 35..... percent
 gravity produced oil..... °API

Estimated or measured reservoir data used:
 Original solution gas/oil ratio..... 180..... cu. ft./bbl.
 Original formation volume factor..... 1.15..... bbls./bbl.
 Original saturation pressure..... 700..... PSI
 Original bottom hole pressure..... 1080..... PSI

(A) By capillary pressure
 (B) Empirical
 (C) Oil coring data
 (D) From fluid behavior analysis
 (E) Field measurement
 Permeability Distribution Factor (Perfect distribution — 1.0)

By gas expansion to zero PSI... 107.....
 By complete water drive, pressure maintained..... 313.....
 By pattern flooding to 95% water cut.....
 (F) From electric log
 (G) From drilling time
 (H) From production data

ELEVATION—
1201.0 F.
1503 K.D.

OPERATOR— Magnolia Petroleum Co.
FARM— H.A. Kocqler No. 99
LOCATION— NE SW NW
FOOTAGE
S. T. R. (SUR.) SEC. 21-26S-5E
CO.-PA. Butler
STATE KANSAS
AREA M1 Sorredo Field

CASING RECORD:—

3 5/8" bot @ 103'
2 1/2" bot @ 2517'

DATE COMMENCED— 4/11/52

DATE COMPLETED— 5/16/52

PRODUCTION FORMATION—

Viola and Simpson

INITIAL PRODUCTION—

P 35 HO & 3 BH, 24 hours.
Gr. 32^o

REMARKS—

FORMATION	DEPTH	SUU-SEA	THICK	SOURCE
Lensing	1649	- 246		Shales.
Kansas City	1983	- 680		Shales
Skinner sand	2423	-1133		"
No Mississippian rocks apparent	2482	-1179		"
Viola	2516	-1213		"
Simpson	2558	-1255		Drlr.
Total Depth (corrected)				

Top Lensing 1649 -346

Top Kansas City 1983 -680

Top Skinner sd. 2423 -1133

Sp. sat. stn in samples from 2435-43.

No rocks of Mississippian age were recognized in samples.

Top Viola 2482 -1179.

Drilled to 2485, circ. samples show cherty dolomite w/sat. stn oil.

*Cored 2485-2525, full recovery. 2485-2510, dolo. w/sat. stn oil, 2510-16 sandy dolo w/sp stn of oil, 2516-2525, sandstone w/sat. stn oil.

Top Simpson 2516 -1213

*Cored 2525-60, rec. 51', 2525-40 sandstone w/cst. to sp. sat. stn oil, 2540-50 shale & sandstone, hematite indls. from 2541-42 (Red Rock) 2550-56 shale & ss. w/1' sandy dolo.

Total Depth 2560 = 2558 corrected.

Ran Colunbier Interolog and Microlog.

5 1/2" bot @ 2517' & cen. w/100 necks

CO to bottom, washed w/100 gals. nah acid. Bailed 4 EO & 14 GWH, 2 hours.
Stratiface w/plug @ 2494, 1500 gals., 1125% sand, broke 1500#, 1200#, then to vac., flushed w/54 HO. Bailed 36 HLO, short 18 HLO

Bailed 20 HO & 1 BH, 24 hours, inc. 2 bbls. new oil; last 4 hrs. 34 GWH, no water.

Set plug 2512, perf. 2482-2508 w/105 sh., bailed 24 GWH, no water, 12 hours.

Refract w/1000 gals., 53 BW on vac., bailed 24 GWH, 10 hrs., 50% LW.

Bailed 24 CO & 10 BWH, 24 hrs. est 14 BWD. P 35 HO & 3 BH, 24 hrs. 12 - 27" SPI, Gr. 32^o

Accorred testing before abandoning hole.

Case and Well No. 11. S. Saylor Number 93 Date: 1-1-75

Ground Water Hydrogeologic

Cell Production 1-2-0 Gals/Day
Water Production 11-50 Gals/Day
Pumping Rate 23-0 Gals/Day

Production Test Unit (Barrel)
Low (High or Contaminant)

Usage Rate
Gals/Day 1 PPM

Date Started 6-2-74

Alco 297

Batch

Corrosion Test Coupon Data - Inches Per Year

Before Treatment MA With Present Treatment

g. Penetration Rate
fting Rate

Cost Rate - Dollars

	Before Treatment	After Treatment
Labor & Pulling Machine Expense	<u>62.00</u>	<u>237.00</u>
Tools		<u>2.00</u>
Supplies		<u>30.00</u>
Jobbing		<u>57.00</u>
Equipment		<u>124.50</u>
miscellaneous		
Inhibitor		
Totals	<u>163.00</u>	

Time Interval:

From 6-2-74 To 6-2-74 From 6-2-74 To 1-1-75

Cost Per Year
Gals Per Year
Gals Off Per Year for Repairs

103.60
1.00
1.00

227.57
1.00

Estimated Profit or Loss from Inhibitor Treatment, \$/Yr. 140.00 *

REMARKS: * Yearly inhibitor cost only

WELL RECO.

ACIDIZING RECORDS:

Acidized on March 17, 1955 w/1000 gals 15% acid by Halliburton. Well took acid on vacuum. Flushed w/25 barrels water.

REMEDIAL WORK REPORT

WORK PERFORMED Cleaned Out
 BY J. H. Wagner - El Dorado, Kansas
 WORK COMMENCED July 30, 1955
 WORK COMPLETED August 1, 1955
 TOTAL DEPTH 2558'
 Measuring Pt. Kelly Bushing
 ELEVATION 1299'

REMARKS:

Moved in contract cable tools to clean out. Moved in, rigged up, pulled rods and tubing. Tools string in to 2523'. Washed hole and cleaned out to 2557'. One (1') foot of iron in bottom of hole. Run tubing, rods and put well to pumping. Well Complete.

NOTE: ALL MEASUREMENTS ARE KELLY BUSHING MEASUREMENTS - 2558' K.B.M. equals 2554' G.L.M.

PRODUCTION DATA

Production before cleaning out; 48 barrels oil, 100 barrels water.

Pumping test after cleaning out, completed on August 4, 1955 in the Viola Lime and Simpson Sand Formations: Viola Lime; top, 2483'; bottom, 2516'; Simpson Sand; top, 2516'; bottom, 2545'. Perforations in 5-1/2" casing, in Viola Lime formation, from 2482' to 2508', open hole, Simpson Sand formation from 2517' to 2557'. Well pumped on 24 hour test: rate 56 barrels oil; 84 barrels water. Pump set at 2545' with 1-1/2" plunger, 2" tubing 3/4" rods, 48" stroke, 20 S.P.M. Allowable 100%. Gravity 34.

Contractor's Statement

54 Hrs.	@	9.375	\$506.25
Moving In			133.80
Extra Labor			68.10
			<u>\$708.15</u>

ACIDIZING REPORT

Acidized on December 13, 1955 with 500 gallons 15% acid, through 2" tubing, under vacuum. Tubing flushed with 12 barrels water, casing flushed with 20 barrels water.

INTEROFFICE CORRESPONDENCE

FROM

J.P. McLaughlin

DATE March 31, 1955

TO

Walter R. McLaughlin

SUBJECT:

ACIDIZING WELLS - EG PARADO FIELD

Dear Sir:

This is to advise that the well listed below was acidized during the month of March 1955.

M.A. KOCHLER WELL NO. 93

Acidized on March 17, 1955 with 1000 gallons, 15% acid, by Halliburton. Well took acid on vacuum. Flushed with 25 barrels water.

Yours very truly,

J.P. LRS

DEAL WITH ONLY ONE SUBJECT IN EACH LETTER - WRITE - DO NOT TELEGRAPH OR TELEPHONE EXCEPT IN EMERGENCY

PRODUCTION WORK REPORT

LEASER NAME

L.L. Koogler

WELL NO.

93

LOCATION

970' WIL, 1650' FWL, NW/4
Section 21, 26S, 5E
Butler County, Kansas

WORK PERFORMED

Cleaned Out

BY

J.H. Wagner
El Dorado, Kansas

WORK COMMENCED

July 30, 1955

DATE

WORK COMPLETED

August 1, 1955

TOTAL DEPTH

2558'

MEASURING POINT

Kelly Dishing

ELEVATION

1299'

REMARKS:

Moved in contract cable tools to clean out. Moved in, rigged up, pulled rods and tubing. Tools string in to 2523'. Washed hole and cleaned out to 2557'. One (1') foot of iron in bottom of hole. Run tubing, rods and put well to pumping. Well Complete.

NOTE: ALL MEASUREMENTS ARE KELLY DUSHING MEASUREMENTS - 2558' K.D.H. equals 2554' G.I.M.

PRODUCTION DATA

Production before cleaning out; 48 barrels oil, 100 barrels water.

Pumping test after cleaning out, completed on August 1, 1955 in the Viola lime and Simpson Sand formations; Viola lime; top, 2483'; bottom, 2516'; Simpson Sand; top, 2516'; bottom, 2545'. Formations in 5-1/2" casing in Viola lime formation, from 2482' to 2508, open hole, Simpson Sand formation from 2517' to 2557'. Well pumped on 24 hour test; rate 56 barrels oil; 64 barrels water. Pump set at 2545' with 1-1/2" plunger, 2" tubing, 3/4" rods, 48" stroke, 20 S.P.M. Allowable 100%. Gravity 34.

COPY

January 5, 1956

J.F. Rosenberger - El Dorado, Kansas

W.B. Povers - Wichita, Kansas

ACIDIZING REPORT - EL DORADO DISTRICT

Dear Sir:

This is to advise that the well listed below was acidized during the month of December 1955.

M.A. KOOGLER WELL NO. 93

Acidized on December 13, 1955 with 500 gallons 15% acid, through 2" tubing, under vacuum. Tubing flushed with 12 barrels water, casing flushed with 20 barrels water.

Yours very truly,

LWT:

②

cc: E & P - (11-59)
 E. S. Walcott
 U. C. Kelpatnick

CLASSIFIED AS 716 HT HOLE 4-26-63

Mobil Oil Company
 SUPPLEMENT TO WELL RECORD

X-9070 LEASE M.A. KOONER DATE 5-16-63

WELL NO. DISTRICT DIVISION
 K WICHITA DENVER

STATE COUNTY OR PARISH
 KANSAS BUTLER

REASON FOR WORK
 DRILL DEEPER TO DEVELOP PRODUCE

- WORK OVER
- CLEAN OUT
- RECOMPLETION
- DRILL DEEPER
- REDRILL

APPROPRIATION NO. AMOUNT REQUESTED APPROXIMATE EXPENDITURE ESTIMATED MONTHS TO PAY OUT
 DV # 2033 \$ 1000 \$ 800 4-73-63

WORK PERFORMED BY DATE WORK COMMENCED DATE COMPLETED
 WHITE AND ELLIS DRIG. 4-73-63

PRODUCTION BEFORE
 25 BOPD AND 483 BWPD

POTENTIAL TEST AFTER
 23 BOPD AND 506 BWPD - NOTE: VIOLA-SIMPSON PRODUCTION

AND SAVING OF OPEN HOLE RESULTS

PREVIOUS T.D. 2558 P.B.T.D. 2557 MEASURING POINT
 IN INCONCLUSIVE ARBUCKLE TEST

PRESENT T.D. 2593 P.B.T.D. 2593 MEASURING POINT
 KELLY BUCKHOLE 66L-4'

PREVIOUS PRODUCING FORMATION(S) AND DEPTH(S) PRESENT PRODUCING FORMATION(S) AND DEPTH(S)
 VIOLA PERM. 2558-2538 VIOLA PERM. 2589-2505

CHANGE(S) IN CASING RECORD
 15% acid with 10N de-emulsifying additive opposite Arbutle

IRRIE
 ARBUCKLE OPEN HOLE 2589-2593

SUMMARY OF OPERATIONS

blowd in cable tool and sealed casing. Cleaned out to 2557 KB and drilled deeper to TD 2593 KB. Encountered iron at 2557 and considerable casing of Simpson shale. Top Arbutle by samples 2589 KB (-1286). Dumped 55 gal 15% acid with 10N de-emulsifying additive opposite Arbutle open hole with boiler. Ran rods and tubing and resumed production.

WGM

U. C. Kelpatnick

Mobil Oil Company
SUPPLEMENT TO WELL RECORD

DATE 11-18-63

X-5970
LEASE M. A. Koofter WELL NO. 93 DISTRICT Wichita DIVISION Denver
STATE Kansas COUNTY OR PARISH Butler

REASON FOR WORK WORK OVER
Increase Artuclke production. CLEAN OUT
 RECOMPLETION
 DRILL DEEPER
 REDRILL

APPROPRIATION NO. DV 2033A AMOUNT REQUESTED \$ 42,000 APPROXIMATE EXPENDITURE \$ 2,000 ESTIMATED MONTHLY PAY OUT 5 ABANDONMENT
WORK PERFORMED BY White & Ellis Drilling Co. DATE WORK COMMENCED 6-17-63 DATE COMPLETED 6-23-63
PRODUCTION BEFORE

23 B.O.P.D. & 403 B.W.P.D.
POTENTIAL TEST AFTER
30 B.O.P.D. & 381 B.W.P.D.

1958-70 Report on 2593

PREVIOUS T.D.	P.G.T.D.	MEASURING POINT
2593	2593-None	(KB) - 4: 28 6L
PRESENT T.D.	P.D.T.D.	MEASURING POINT
2628	2628-None	(KB) - 4: 28 6L
PREVIOUS RECORDS (FORMATION(S) AND DEPTH(S)) 2517-28: Arb. 2589-2628: Present 2628-2508 (Formation(s) and Depth(s)) 2517-38: Arb. O.H. 2589, 2628		

CHANGE(S) IN CASING RECORD

None

SUMMARY OF OPERATIONS

Moved in cable tools. Cleaned out 2580-93. Drilled new hole 2593 - 2628', encountered caving and apparently some iron, approx 1050'. fluid in hole. Ran Lane Wells. Gamma Ray & Neutron logs. Ran Haliburton 4 1/4" Chen Hole packer on 27/8" C Tub. set @ 2592' w/ perf. @ 2598 & 2603' anchor on Bottom. safety jt. on top of pkr. & Cast Iron Disc on top of 4' handling sub. Scottd 500gal. NE Acid to Bottom of Tub. Broke cast iron disc @ 1100# & treated Arb. zones. Fluid communicated around pkr. w/csg loaded purped 1/4 Bbl per min. @ 200%. Flushed w/16 Bbl. lease oil. Load 16 Bbl. oil Plus 12 Bbls. acid water. Swabbed Libbels Load Oil 4-12 Bbls acid Wtr. & 58 Bbls S.W. in 6 1/2 Hrs. Pulled Tub. & pkr. ran tub. & rods P O P.