TA FE PACIFIC

SANTA FE PACIFIC

OIL DEVELOPMENT CO.
OF TEXAS

MID-CONTINENT PET. CORP.

MAGNOLIA

● 1

U. D. Sawyer "E"

Drlg. Started Feb. '49
Abandoned Dec. '49
Ø 1-27

● 2-27
Drlg. Started June '50
Completed Oct. '50

Drlg. Started Feb. '49
Completed Aug. '49
● 1

● 1-B
Drlg. Started Apr. '51
Comp. Sept. '51

28

SANTA FE PACIFIC

MID-CONTINENT PET. CORP.

27

U.D. SAWYER "D"

MID-CONTINENT PET. CORP.

26

● 1
Drlg. Started June '48
Completed Feb. 49

● 1
Drlg. Started June '50
Comp. Feb. '51

U.D. SAWYER, "C"

MID-CONTINENT PET. CORP.

Drlg. Started Sept. '47
Completed May '48
● 1

Drlg. Started May '48
Completed Jan. '49
● 1

TA FE PACIFIC

DESSIE SAWYER

U.D. SAWYER "A"

SANTA FE PACIFIC

MAGNOLIA

Drlg. Started May '48
Abandoned Feb. '50
Ø 1

Drilled by
Skelly Oil Co.

Drlg. Started June '48
Completed March 49
● 1

Drilled by
Mid-Continent Pet. Corp.

Exhibit A-1

U.D. SAWYER

U.D. SAWYER "B"

33

J. E. WARREN

MAGNOLIA

34

GULF

35

GULF

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701 S. 33rd WEST AVE. TULSA TELEPHONE 54-5819

Case 149
Exh. 9-C

FIELD WIDE SURVEY

CROSSROADS DEVONIAN FIELD

10-7-51

WELL & NO.	B. H. P. at -8141' PREVIOUS DATE	PSI GAGE	CURRENT DATE	PSI GAGE	LOSS LBS.	#DAY	SHUT IN HOURS	WATER LEVEL IN TUBING	PAGE NO.
MID-CONTINENT PETROLEUM CORPORATION									
Dessie Sawyer #1	2-3-51	4853#	10-7-51	4822#	31	.126	31:15	9208'	1
U.D.Sawyer "C" #1	3-6-51	4860	"	4847	13	.053	33:20	None	2
U.D.Sawyer "D" #1	2-2-51	4872	"	4849	23	.093	34:50	"	3
MAGNOLIA PETROLEUM COMPANY									
Santa Fe-Pacific "B" #1			10-7-51	4853				None	4
OIL DEVELOPEMENT COMPANY OF TEXAS									
Santa Fe-Pacific Railroad Fee 27 #2	11-4-50	4854	10-7-51	4859	4# Gain		37	None	5

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1307 Bell
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PREMONT, TEXAS Phone 3101 MIDLAND, TEXAS Phone 3599

SNYDER, TEXAS Phone 1457

Field Crossroads Devonian Invoice No. T 10-143

Company Mid-Continent Petroleum Corporation

Lease Dessie Sawyer Well No. 1

Date 10-7-51 Time 14:30 Status of Well Static

Pay Devonian Top 11715' Bottom T.D. 12231' Datum -8141'

Tubing 2½" EUE Depth 12177' B.H.C. No Plug or Pin Plug Packer No

Casing 5½" OD Depth 12218' Perforations 11840' Liner No Tree Top 2½" EUE

Depth Feet	Pressure lbs. sq. in.	Pressure Δ	Gradient lbs./ft.
28	418		
2008	1096	678	.342
4008	1782	686	.343
6008	2459	677	.339
8008	3132	673	.337
10008	3890	758	.379
11750	4660	770	.442
11950	4754	94	.470
12150	4847	93	.465
-310	-144		
11840	4703	Perf.	.465
340	119		
12180	4822	Datum	.345
-8141	4822	"	.345

Casing Press.	673# DWT
Tubing Press.	412½# DWT
Oil Level	at top
Water Level	9208'
Hours—Shut In	31:15 Flowing
Temp. @	12150'-196° & 196°F.
Elevation—D.F.	4039' Ground
Last Test Date	2-3-51 Static 30h46m
Press. Last Test	4853#
B.H.P. Change	31#
Loss/Day	.126#
Choke Size	
Oil Bbls./day	
Water Bbls./day	
Total Bbls./day	
Orifice and Line	
Static and Differential	
Gas Sp. Gr.	Tf
Cu. ft./day	
GOR	
GFR	

PRODUCTIVITY INDEX—BBLS./DAY/LBS. DROP

Last Cumulative Production

Present Cumulative Production

Production Between Tests

Instrument Amerada Number 7499 Recovery Factor Bbls./pound Loss

Run By Rex Shearer Calibration No. M 63 Calculated By FP

Calculations and Remarks: Assumed reservoir gradient .345

FORM R S 1 75M 1-51

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Field Crossroads Devonian Invoice No. T 10-143

Company Mid-Continent Petroleum Corporation

Lease U. D. Sawyer "C" Well No. 1

Date 10-7-51 Time 16:20 Status of Well Static

Pay Devonian Top 12000' Bottom 12092' T.D. 12102' Datum -8141'

Tubing 2½" EUE Depth 12100' B.H.C. 12100' Plug or Pin Packer

Casing 5½" OD Depth 12097' Perforations 12040-92' Liner Tree Top 2½" OCT

Depth Feet	Pressure lbs. sq. in.	Pressure Δ	Gradient lbs./ft.
26	717		
2006	1396	679	.343
4006	2076	680	.340
6006	2757	681	.341
8006	3436	679	.340
10006	4106	670	.335
11686	4671	565	.336
11886	4743	72	.360
12086	4816	73	.365
6	2		
12092	4818	Bottom of perf.	.365
83	29		
12175	4847	Datum	.345
-8141	4847	"	.345

Casing Press. 697# DWT
Tubing Press. 718# DWT
Oil Level at top
Water Level none
Hours—Shut In 33:20 Flowing
Temp. @ 12086'-193° & 193°F.
Elevation—D.F. 4034' Ground
Last Test Date 3-6-51
Press. Last Test 4860# static 145 hrs
B.H.P. Change 13#
Loss/Day .053#
Choke Size
Oil Bbls./day
Water Bbls./day
Total Bbls./day
Orifice and Line
Static and Differential
Gas Sp. Gr. Tf
Cu. ft./day
GOR
GFR

PRODUCTIVITY INDEX—BBLS./DAY/LBS. DROP

Last Cumulative Production
Present Cumulative Production
Production Between Tests

Instrument Amerada Number 7499 Recovery Factor Bbls./pound Loss

Run By Rex Shearer Calibration No. M 63 Calculated By PP

Calculations and Remarks: Assumed reservoir gradient .345

FORM R.S. 1 75M 1-51

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Field Crossroads Devonian Invoice No. T 10-143

Company Mid-Continent Petroleum Corporation

Lease U. D. Sawyer "D" Well No. 1

Date 10-7-51 Time 17:55 Status of Well Static

Pay Devonian Top 11950' Bottom 12150' T.D. 12150' Datum -8141'

Tubing 2 1/2" EUE Depth 12112' B.H.C. None Plug or Pin Plug Packer No

Casing 5½" OD Depth 12147' Perforations 12000-50' Liner No Tree Top 2½" OCT

Depth Feet	Pressure lbs. sq. in.	Pressure Δ	Gradient lbs./ft.
27	723		
2007	1398	675	.341
4007	2084	686	.343
6007	2760	682	.338
8007	3442	682	.341
10007	4109	667	.334
11692	4679	570	.338
11892	4749	70	.350
12092	4819	70	.350
-42	-15		
12050	4804	Bottom of perf.	.350
131	45		
12181	4849	Datum	.345
-8141	4849	"	.345

Casing Press.	720½# DWT
Tubing Press.	717½# DWT
Oil Level	at top
Water Level	none
Hours—Shut In	34:50 Flowing
Temp. @	12092'-194° & 194°F.
Elevation—D.F.	4040' Ground
Last Test Date	2-2-51 static 32h 20
Press. Last Test	4872#
B.H.P. Change	23#
Loss/Day	.093#
Choke Size	
Oil Bbls./day	
Water Bbls./day	
Total Bbls./day	
Orifice and Line	
Static and Differential	
Gas Sp. Gr.	Tf
Cu. ft./day	
GOR	
GFR	

PRODUCTIVITY INDEX—BBLS./DAY/LBS. DROP

Last Cumulative Production

Present Cumulative Production

Production Between Tests

Instrument Amerada Number 7499 Recovery Factor Bbls./pound Loss

Run By Rex Shearer Calibration No. M 63 Calculated By FP

Calculations and Remarks: Assumed reservoir gradient .345

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Field Crossroads Devonian Invoice No. T 10-142

Company Magnolia Petroleum Company

Lease Santa Fe - Pacific "B" Well No. 1

Date 10-7-51 Time 12:41 Status of Well Static

Pay Devonian Top 12130' Bottom 12137' T.D. 12137' Datum -8141'

Tubing 2" EUE Depth 12125'? B.H.C. Plug or Pin B.P. Packer

Casing 7" OD Depth 12130' Perforations Open Liner Tree Top 2" 11½ Reg.

Depth Feet	Pressure lbs. sq. in.	Pressure Δ	Gradient lbs./ft.
26	712		
2006	1393	681	.344
4006	2090	697	.349
6006	2758	668	.334
8006	3431	673	.337
10006	4104	673	.337
11676	4668	564	.339
11876	4742	74	.370
11976	4779	37	.370
12076	4816	37	.370*
61	23		
12137	4839	Bottom of pay	.370
39	13		
12176	4852	Datum	.345
-8141	4852	"	.345

Casing Press. 683# DWT
Tubing Press. 714# DWT
Oil Level atop
Water Level none
Hours—Shut In Flowing
Temp. @ 12076'-193° & 193° F.
Elevation—D.F. 4035' Ground
Last Test Date
Press. Last Test
B.H.P. Change
Loss/Day
Choke Size
Oil Bbls./day
Water Bbls./day
Total Bbls./day
Orifice and Line
Static and Differential
Gas Sp. Gr. Tf
Cu. ft./day
GOR
GFR

PRODUCTIVITY INDEX—BBLS./DAY/LBS. DROP

Last Cumulative Production

Present Cumulative Production

Production Between Tests

Instrument Amerada Number 7499 Recovery Factor Bbls./pound Loss

Run By Rex Shearer Calibration No. M 63 Calculated By FP

Calculations and Remarks: *Considered sediment and not water. Assumed reservoir gradient .345

FORM R.S. I 75M 1-51

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Field Crossroads Devonian Invoice No. nT 10-141

Company Oil Developement Company of Texas

Lease Santa Fe - Pacific Railroad Fee 27 Well No. 2

Date 10-7-51 Time 11:00 Status of Well Static

Pay Devonian Top 11747' Top Pay 11778' Bottom Not drilled Thru T.D. 11880' Datum -8141'

Tubing 2½" EUE Depth 11875' B.H.C. None Plug or Pin Plug Packer No

Casing 5½" Depth 11775' Perforations Open Hole Liner Tree Top 2½" OCT

Depth Feet	Pressure lbs. sq. in.	Pressure Δ	Gradient lbs./ft.
30	715		
2010	1393	678	.342
4010	2079	686	.343
6010	2760	681	.342
8010	3439	679	.340
10010	4109	670	.335
11480*	4604	495	.337
11670	4673	69	.363
11770	4713	40	.400
11870	752	39	.390
10	4		
11880	4756	Bottom of Perf.	.390*
298	103		
12178	4859	Datum	.345
-8141	4859	"	.345

Casing Press. 720# DWT
Tubing Press. 715# "
Oil Level at top
Water Level none
Hours—Shut In 37:00 Flowing
Temp. @ 11870'-194° & 194°F.
Elevation—D.F. 4037' Ground 4026'
Last Test Date 11-4-50
Press. Last Test 4854# Extr. to 8141#
B.H.P. Change 4# gain
Loss/Day
Choke Size
Oil Bbls./day
Water Bbls./day
Total Bbls./day
Orifice and Line
Static and Differential
Gas Sp. Gr. Tf
Cu. ft./day
GOR
GFR

PRODUCTIVITY INDEX—BBLS./DAY/LBS. DROP

Last Cumulative Production

Present Cumulative Production

Production Between Tests

Instrument Amerada Number 7499

Recovery Factor Bbls./pound Loss

Run By Rex Shearer Calibration No. M 63 Calculated By PP

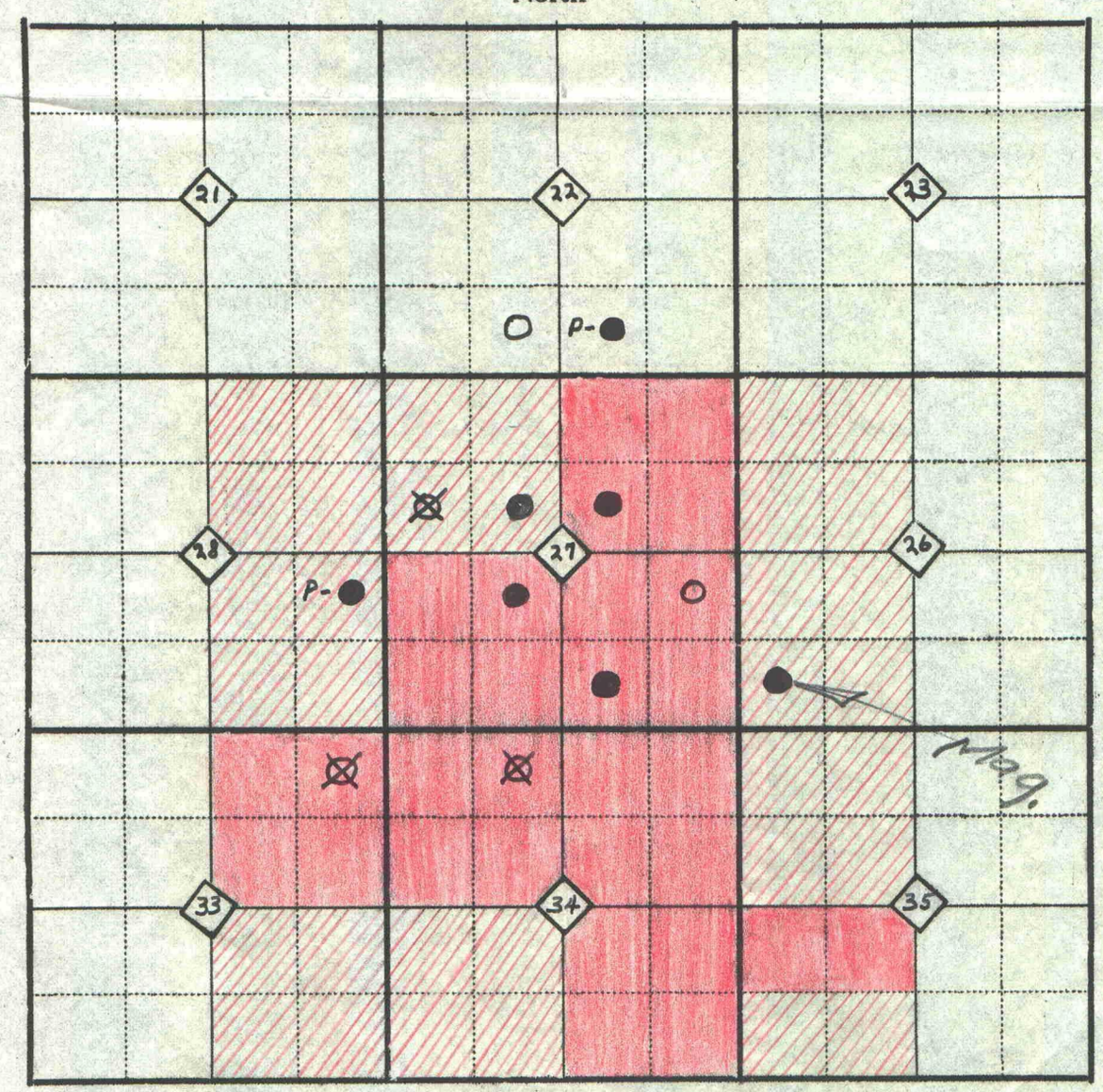
Calculations and Remarks:

*Considered sediment and not water.
Assumed reservoir gradient .345

P- ● - SW¼SE¼ 22 - Magnolia-Santa Fe-1-d - Pennsylvanian
○ - SE¼SW¼ 22 - Oil Dev.Co-Santa Fe-1-22 - Drilling
● - SW¼SW¼ 26 - Magnolia-Santa Fe-1-C - Devonian
● - SW¼SE¼ 27 - Mid-Continent-Sawyer-1 - Devonian
● - NE¼SW¼ 27 - Mid-Continent-Dessie - Devonian
● - SW¼NE¼ 27 - Mid-Continent-Sawyer-D - Devonian
⊗ - SW¼NW¼ 27 - Oil Dev.Co-Santa Fe-1 - Dry hole Devonian
○ - SE¼NW¼ 27 - Oil Dev.Co-Santa Fe-2-27 - Drilling
○ - NE¼SE¼ 27 - Mid-Continent-Sawyer-1-C - Drilling
P- ● - NE¼SE¼ 28 - Magnolia-Santa Fe-1-B - Pennsylvanian
⊗ - NE¼NE¼ 33 - Skelly Oil Co-Sawyer-1 - Dry hole devonian
⊗ - NE¼NW¼ 34 - Mid-Continent-Sawyer-1-B - Dry hole Devonian

Township 9 South Range 36 East

North



CROSSROADS DEVONIAN FIELD BELOW 12,200 FEET
Solid Red--Owned by Sawyers Diagonal--Owned by AT&SF, et al
● - Devonian wells below 12,000 ○ - Drilling wells
P-● - Pennsylvanian approx 9,700 ⊗ - Dry holes

Exhibit "A"