county Daviess

sec 28 twp 59 rge 27 W

owner Francis, Dr. H. H.

elev 862 MGS 6323 ~~rge~~ Spl.

farm Lewis, Anna No. 1 TD 762 fm TD Spergen shows oil stain

status d&a date completed 1939

remarks:

280 FNL 00004

70 FWL ~~00003~~

~~00002~~

~~00001~~

✓

RECENT DRILLING

in

NORTHWESTERN MISSOURI

By

FRANK C. GREENE

REPORT OF INVESTIGATIONS NO. 1

1945

EDWARD L. CLARK, *Director and State Geologist*

MISSOURI GEOLOGICAL SURVEY AND
WATER RESOURCES

ROLLA, MISSOURI

Log of Dr. H. H. Francis No. 1 Anna Lewis. Location: 780 feet south and 70 feet east of northwest corner of SW 1/4 sec. 28, T. 59 N., R. 27 W., Daviess County, Missouri, near the south edge of Gallatin. Surface elevation, 861.7 feet (P.T.). Commenced, 9-10-1939, and completed, about 10-27-1939. Total depth, 762 feet. Dry and abandoned. Drilled with cable tools. Casing record: 8 inch set at about 18 feet; and 6 1/4 inch at 438 feet. Contractor: Edw. Feyh, Kansas City, Missouri.

FORMATIONAL SUMMARY

	Thickness, feet	*Depth, feet*
Pennsylvanian system:		
Kansas City group	80	80
Pleasanton group	110	190
Henrietta group	82	272
Cherokee group	478	750
Mississippian system:		
St. Louis (?) formation	5	755
Spergen-Upper Warsaw formations	7	762, T.D.

NOTE: Samples began at 255 feet, correlation above 255 feet from driller's log.

WATER ANALYSIS

Horizon	*T.D.S.*	Parts per million *Cl.*	*SO_4*	*Na-K as Na*
Cherokee ("Squirrel sand") at 310-360 ft.	2748.0	713.0	677.1	989.8

SAMPLE LOG

	Thickness, feet	*Depth, feet*
No samples	255	255
Pennsylvanian system:		
Henrietta group:		
Shale, gray with some sand aggregates, coal, black shale and some gray, nodular limestones	5	260
Limestone and dolomite, gray to tan, fine-grained. Residue, 10 percent, of chalcedony, beekites and kaolinized fossil fragments	5	265
Limestone, gray, argillaceous. Residue, 20 percent, of brown, porous shale, chalcedonic chert and crinoids	7	272
Cherokee group:		
Sandstone, angular grains, much mica and calcareous cement	18	290
Shale, gray, sandy with mica and plant remains	20	310
Sandstone, angular grains, micaceous with some gray shale and plant remains between 315-322 feet. Tar occurs in the sample from 330-340 feet	36	346
No samples	9	355
Shale, gray with plant remains and some gray limestone fragments	5	360
No samples	30	390
Shale, black and gray with some dark tan limestone	2	392
No samples	18	410
Shale, gray, soft with siderite nodules	5	415
No samples	25	440
Shale, black, carbonaceous with pyrite and some limestone fragments	5	445
No samples	55	500
Shale, dark gray to black, carbonaceous with a small amount of concretionary siderite	10	510

	Thickness, feet	*Depth, feet*
No samples	30	540
Sandstone, fine-grained, argillaceous, micaceous	5	545
No samples	50	595
Shale, gray, sandy, micaceous with siderite spherulites	5	600
No samples	80	680
Sandstone, fine-grained with mica	5	685
Sandstone, coarse-grained, angular	25	710
Shale, gray to dark gray with siderite oolites. A fine-grained siltstone occurs between 710-715 feet	15	725
Sandstone, fine-grained, quartzitic with gray shale and dark brown siderite oolites	6	731
Sand, medium-grained, angular with dark stains of heavy oil and tar	4	735
Sand, coarse to medium coarse, angular, regenerated grains	15	750
Mississippian system:		
St. Louis (?) formation:		
Limestone, white, dense with much caved gray shale and siderite spherulites obscuring the residue	5	755
Spergen-Upper Warsaw formations:		
Limestone, tan, highly fossiliferous with green to gray shale. Residue, 10 percent, of red, chalcedonic chert and green shale	7	762, T.D.

27-F-29

MISSOURI GEOLOGICAL SURVEY AND WATER RESOURCES

County: Daviess

Owner: H. H. Francis - #1 Anna Lewis

Location: Sec. 28, T. 59, R. 27

Source: Drilling well, 340 ft.

Analysis No.: 3159 Total Depth_____ and NO._____

Date Analyzed: 10-17-39

Analyst: R. T. Holuf

Collector: H. S. McQueen

CONSTITUENTS:	IN PARTS PER MILLION.	
Turbidity	Turbid - Bailer Sample	
Color	None	
Odor	ND	
Total Suspended Solids	ND	
Total Dissolved Solids	2748.0	RV
Loss on Ignition	ND	
Chloride Radicle (Cl)	713.0	20.11
Nitrate Radicle (NO_3)	ND	
Sulphate (SO_4)	677.1	14.08
Bi-Carbonate Radicle (HCO_3)	683.3	10.47
Carbonate Radicle (CO_3)	00	
Sodium (Na) Potassium (K) as Na	989.8	43.06
Magnesium (Mg)	9.6	.79
Iron (Fe)	ND	
Manganese (Mn)	----	
Silica (SiO_2)	5.2	
Calcium (Ca)	18.9	.94
Total Hardness	86.6	
Carbonate Hardness	86.6	
Alkalinity	523.4	
Precipitated Iron (Pp't. Fe.)	ND	
Temporary Hardness	ND	
Al_2O_3 + Fe_2O_3	3.20	

Remarks: This sample from 340 ft. Squirrel sand 310-350 ft. Cherokee formation. Pennsylvanian System. SWL 100 ft.

Copies to: H. H. Francis, F. C. Greene, File

cc: fog.

10-4-39

27-F-30

MISSOURI GEOLOGICAL SURVEY AND WATER RESOURCES - ROLLA, MO.

COUNTY Daviess LOG NUMBER 6323

COMPANY OR OWNER Dr. H. H. Francis

FARM Anna Lewis WELL NO. 1

LOCATION SW NW SW SEC. 28 T. 59 R. 27W

CONTRACTOR Ed Feyh

DRILLER Ed Feyh TOOL DR.

COMMENCED Sept. 1939 COMPLETED 1939

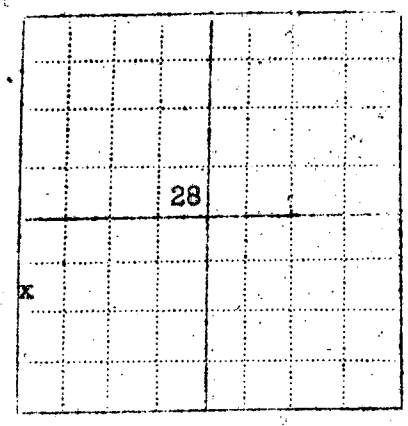
PRODUCTION D & A PLOTTED Yes

Hole CASING RECORD 8" below 18'

WATER RECORD

SOURCE OF LOG 41 samples

REMARKS Location: 780' S and 70' E of center of West line Sec. 28



ELEV. 863.72 P.T. Aid

TOTAL DEPTH 762

CHEM. ANAL. NO.

FORMATION	THICK	DEPTH	FORMATION	THICK	DEPTH
Drilling at 250' September 21, 1939.					
McQueen was at the well today and arranged for the samples.					
No Samples	255	255			
Henrietta	17	272			
Cherokee	478	750			
St. Louis	5	755			
Spergen or Upper Warsaw	7	762 TD			

Log of Dr.H.H.Francis #1 Anna Lewis,SW NW SW sec.28,T.59 N.,R.27 W.,
Daviess County,Mo., Contractor Ed Feyh. Commenced Sept.10,1939
Source-Driller's log Elev.862

Clay	0	5	
Lime	5	21	
Gray shale	21	23	
Lime hard	23	25	
Shale gray	25	26	
Lime hard	26	32	
Slate black	32	34	
Shale blue	34	42	
Lime white seamy	42	56	
Shale gray	56	62	
Lime	62	65	
Shale & slate black	65	70	
Lime white- soft center	70	80	
Shale green	80	85	
Shale gray	85	190	
Lime	190	193	
Black shale & gray soft	193	230	
Hard gray shale	230	247	
Sand	247	250	
Black shate	250	253	
Gray shale	253	264	
Lime hard	264	270	
Gray shale	270	281	
Sand soft	281	285	
Sand hard	285	289	
Gray shale sandy soft	289	310	light water
Sand gray soft	310	350	water
Shale black soft	350	351	
Shale gray soft	351	415	Red bed 392
Lime shell	415	417	
Shale gray	417	440	
Shale black	440	445	
Shale gray	445	465	
Shale red & green	465	466	
Blue shale	466	490	
Shale dark	490	510	
Shale gray	510	522	
Shale blue	522	535	
Sandy shale brown	535	555	
Sand gray	555	563	
Shale black & blue	563	582	
Shale gray sandy	582	596	
Sand gray	596	602	
Shale sandy gray soft	602	636	
Lime	636	638	
Shale blue	638	640	
Sand	640	642	
Shale blue	642	684	Show of oil
Sand gray	684	702	water rises to
Sand gray harder	702	712	100' of surface

over

Shale blue	712-714	
Sand dark hard	714-728	
Shale & sand	728-730	
Sand white hard	730-746	oil show 735-740
Shale gray	746-752	very hard at 740
Lime white	752-756	
Shale gray	756-757	
Lime gray very hard	757-762	Shut down Oct.27