15-163-02539-00-00

## General Exploration Inc.

MILLER THEATRE BUILDING
TELEPHONE 3-2311

## Wichita, Kansas

National Associated Petroleum Company
No. 1 Highley
CNE NE 2-8-20W, Rooks County, Kansas
Elevation: 1906

Anhydrite	1440
Neva limestone	2370
Topeka limestone	2888
Heebner shale	3088
Brown Lansing limestone	3114
White Lansing limestone	3130
Base Kansas City limestone	3339
No Conglomerate	
Reworked Arbuckle	3386
Arbuckle Dolomite	3 <b>393</b>
Total Depth	3444
All measurements corrected to derr	iak flaam

ς	By Redmon	By Schlumberger
Oil stains	2969-2975	2966-2974
Spotted saturation	3004-3011	3003-3010 P
Show of free oil in samples	3037-3043	3034-3044 P
Spotted saturation	3099-3102	3103-3107
Fair saturation	3165-3170	3165-3170 P
Spotted saturation	3183-3187	3184-3186
Spotted saturation	3202-3206	3200-3202
Fair saturation	3209-3212	3207-3211 P
The rocks immediately under	-	000,-021,
lying this zone appear to		
contain water.		
Apparently good saturation	3281-3287	3278-3292 P
Spotted saturation	3 <b>296-</b> 3 <b>29</b> 9	3295-3304 P
Spotted saturation	3 <b>325-332</b> 6	3323-3328 P
Spotted saturation	3369-3374	No indication. P

The upper ten feet of the Arbuckle dolomite contained considerable oil residue staining with fair porosity.

Arbuckle rocks from 3430-35 were highly porous and appeared to contain water.

We recommended casing be cemented at 3400 feet and the oil zones tested through perforations as indicated.

2 8 20W 95 27

1-31-44

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## Sample Log by Hal Redmon

Shale   2800-10	FORMATION	DEPTH
Seand and red shale	shale	2000 : 0
sand and red shale         2840           lime         2850           gray and red shale         2865           leached buff lime         2885           dark shale         2915           dark shale         2920           leached lime         2950           dark shale         2965           leached lime         2965           dark shale         2965           leached crystalline lime         2965           dense gray lime         3012           dark red and green shale         3012           derine lime         3030           maroon shale         3030           leached fossiliferous colitic lime         3055           dense lime with some white chert         308           black shale         3090           fossiliferous lime         3105           red and green shale         3122           white dense lime         3130           red and gray shale         3220           partly leached crystalline lime         3220           white lime with some chert         3248           red and gray shale         3350           dense lime         3550           red shale         3560	leached lime	_
gray and red shale leached buff lime dark shale dense gray mottled lime dense lime dense gray lime dense gray lime dense gray lime dense lime maroon shale leached fossiliferous colitic lime dense lime with some white chert black shale fossiliferous lime red and green shale brown cherty lime red and green shale white dense lime solution for an and gray shale partly leached crystalline lime white lime with some chert red and gray shale partly leached crystalline lime white lime with some chert red and gray shale partly leached crystalline lime solution white lime with some chert red and gray shale partly leached crystalline lime solution solutio	sand and red shale	
gray and red shale	lime	
Leached buff lime	gray and red shale	
dark shale dense gray mottled lime dark shale leached buff lime containing dark chert dark shale leached lime dense lime dense gray lime dense lime dense lime dense lime with some white chert black shale fossiliferous lime red and green shale brown cherty lime dand green shale dense lime solution fossiliferous lime solution fossiliferous dark chert solution soluti	leached buff lime	
dense gray mottled lime         2915           dark shale         2920           leached buff lime containing dark chert         2945           dark shale         2950           leached lime         2960           dark shale         2965           leached crystalline lime         2980           dense gray lime         3012           dark red and green shale         3018           dense lime         3030           leached fossiliferous colitic lime         3055           dense lime with some white chert         3088           black shale         3090           fossiliferous lime         3105           red and green shale         3122           white dense lime         3122           red and green shale         3180           red and gray shale         3200           partly leached crystalline lime         3220           white lime with some chert         3248           red and gray shale         3359           black shale         3356           dense lime         3356           red shale         3566           coarsely crystalline fossiliferous lime         3580           red and green shale         3386	dark shale	
dark shale leached buff lime containing dark chert 2945 dark shale leached lime 2950 leached lime 2960 dark shale leached crystalline lime 2965 leached crystalline lime 2965 dense gray lime 3012 dark red and green shale 3018 dense lime 3037 leached fossiliferous colitic lime 3037 dense lime with some white chert 3088 black shale fossiliferous lime 3090 red and green shale 3105 red and green shale 3122 red and green shale 3130 white dense lime 3180 red and gray shale partly leached crystalline lime 3220 white lime with some chert 3248 red and gray shale partly leached crystalline lime 3350 dense lime 3350 dense lime 3350 dense lime 3350 dense lime 3350 red shale 3356 coarsely crystalline fossiliferous lime 3368 red and green shale 3366 red and green shale 3386 reworked Arbuckle dolomite 3393	dense gray mottled lime	
leached buff lime containing dark chert         2945           dark shale         2950           leached lime         2965           dark shale         2965           leached crystalline lime         2980           dense gray lime         3012           dark red and green shale         3018           dense lime         3030           maroon shale         3037           leached fossiliferous colitic lime         3055           dense lime with some white chert         3088           black shale         3090           fossiliferous lime         3105           red and green shale         3105           brown cherty lime         3122           red and green shale         3180           white dense lime         3180           red and gray shale         3220           partly leached crystalline lime         3220           white lime with some chert         3248           red and gray shale         3339           black shale         3356           dense lime         3356           red shale         3356           coarsely crystalline fossiliferous lime         3380           red and green shale         3386 <tr< td=""><td></td><td></td></tr<>		
dark shale       2950         deark shale       2965         leached crystalline lime       2980         dense gray lime       3012         dark red and green shale       3018         dense lime       3030         maroon shale       3037         leached fossiliferous colitic lime       3055         dense lime with some white chert       3088         black shale       3090         fossiliferous lime       3105         red and green shale       3122         red and green shale       3130         white dense lime       3180         red and gray shale       3200         partly leached crystalline lime       3220         white lime with some chert       3248         red and gray shale       3350         partly leached crystalline lime       3359         black shale       3359         dense lime       3356         coarsely crystalline fossiliferous lime       3368         red and green shale       3386         reworked Arbuckle dolomite       3393	leached buff lime containing dark chert	
dearhed lime	dark shale	
dark shale       2965         leached crystalline lime       2980         dense gray lime       3012         dark red and green shale       3018         dense lime       3030         maroon shale       3037         leached fossiliferous colitic lime       3055         dense lime with some white chert       3088         black shale       3090         fossiliferous lime       3105         red and green shale       3122         red and green shale       3120         white dense lime       3180         red and gray shale       3220         partly leached crystalline lime       3220         white lime with some chert       3248         red and gray shale       3350         dense lime       3339         black shale       3350         dense lime       3350         red shale       3356         coarsely crystalline fossiliferous lime       3368         red and green shale       3380	leached lime	
dense gray lime  dense gray lime  dark red and green shale  dense lime  maroon shale  leached fossiliferous colitic lime  dense lime with some white chert  dense lime with some white chert  black shale  fossiliferous lime  red and green shale  brown cherty lime  red and green shale  white dense lime  red and gray shale  partly leached crystal line lime  yea and gray shale  partly leached crystalline lime  some		
dense gray lime  dark red and green shale  dense lime  3030  maroon shale  leached fossiliferous colitic lime  dense lime with some white chert  3088  black shale  fossiliferous lime  red and green shale  brown cherty lime  red and green shale  white dense lime  red and gray shale  partly leached crystal line lime  white lime with some chert  red and gray shale  partly leached crystalline lime  3220  white lime with some chert  sed and gray shale  partly leached crystalline lime  3248  dense lime  3356  dense lime  3366  coarsely crystalline fossiliferous lime  red and green shale  red and green shale  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite	leached crystalline lime	
dark red and green shale  dense lime  3030  maroon shale  leached fossiliferous colitic lime  dense lime with some white chert  3088  black shale  fossiliferous lime  red and green shale  shale  red and green shale  white dense lime  red and gray shale  partly leached crystal line lime  white lime with some chert  red and gray shale  partly leached crystalline lime  3220  white lime with some chert  red and gray shale  partly leached crystalline lime  3248  red and gray shale  partly leached crystalline lime  3356  partly leached crystalline lime  3366  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite	dense gray lime	
maroon shale leached fossiliferous colitic lime dense lime with some white chert dense lime with some white chert black shale fossiliferous lime red and green shale brown cherty lime red and green shale white dense lime red and gray shale partly leached crystalline lime white lime with some chert red and gray shale partly leached crystalline lime s220 white lime with some chert red and gray shale partly leached crystalline lime s3248 red and gray shale partly leached crystalline lime s3550 dense lime red shale coarsely crystalline fossiliferous lime red and green shale reworked Arbuckle dolomite Arbuckle dolomite	dark red and green shale	
leached fossiliferous colitic lime  dense lime with some white chert  black shale  fossiliferous lime  red and green shale  white dense lime  red and gray shale  partly leached crystalline lime  white lime with some chert  red and gray shale  partly leached crystalline lime  some and gray shale  partly leached crystalline lime  some dand gray shale  partly leached crystalline lime  some chert  red and gray shale  partly leached crystalline lime  some chert  red and gray shale  partly leached crystalline lime  some chert  some ch		
dense lime with some white chert  dense lime with some white chert  3088 black shale  fossiliferous lime  red and green shale  white dense lime  red and gray shale  partly leached crystal line lime  white lime with some chert  red and gray shale  partly leached crystalline lime  3220  white lime with some chert  red and gray shale  partly leached crystalline lime  3260  partly leached crystalline lime  3339  black shale  dense lime  3350  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite		
dense lime with some white chert  black shale  fossiliferous lime  red and green shale  brown cherty lime  red and green shale  white dense lime  red and gray shale  partly leached crystal line lime  white lime with some chert  red and gray shale  partly leached crystalline lime  black shale  dense lime  3339  black shale  coarsely crystalline fossiliferous lime  3386  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite  3088  3090  3090  3180  3114  3122  3180  3180  3220  3248  3248  3260  3339  3368  3368  3368  3368  3368  3368  3368  3368  3386	leached fossiliferous colitic lime	
fossiliferous lime red and green shale brown cherty lime red and green shale white dense lime red and gray shale partly leached crystalline lime white lime with some chert red and gray shale partly leached crystalline lime slack shale dense lime red and gray shale partly leached crystalline lime slack shale dense lime red shale coarsely crystalline fossiliferous lime red and green shale reworked Arbuckle dolomite 3393	dense lime with some white chert	
red and green shale  brown cherty lime  red and green shale  white dense lime  red and gray shale  partly leached crystalline lime  white lime with some chert  red and gray shale  partly leached crystalline lime  3248  red and gray shale  partly leached crystalline lime  3350  partly leached crystalline lime  3360  partly leached crystalline lime  3350  black shale  dense lime  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite  3305		
red and green shale brown cherty lime red and green shale white dense lime red and gray shale partly leached crystalline lime white lime with some chert red and gray shale partly leached crystalline lime 3220 white lime with some chert 3248 red and gray shale partly leached crystalline lime 3360 partly leached crystalline lime 3359 black shale dense lime 3550 red shale coarsely crystalline fossiliferous lime 368 reworked Arbuckle dolomite 3386 Arbuckle dolomite		
red and green shale  white dense lime  red and gray shale  partly leached crystalline lime  white lime with some chert  red and gray shale  partly leached crystalline lime  3220  white lime with some chert  3248  red and gray shale  partly leached crystalline lime  3360  partly leached crystalline lime  3379  black shale  dense lime  3356  red shale  coarsely crystalline fossiliferous lime  3366  red and green shale  reworked Arbuckle dolomite  3386  Arbuckle dolomite	red and green shale	
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white dense lime  red and gray shale  partly leached crystalline lime  white lime with some chert  red and gray shale  partly leached crystalline lime  black shale  dense lime  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  3180  3200  3220  3248  3260  3260  3339  3550  3550  3568  3356  3368  3386  3386  3386  3386		
partly leached crystalline lime  partly leached crystalline lime  white lime with some chert  red and gray shale  partly leached crystalline lime  black shale  dense lime  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  3200  3220  3248  3248  3260  3379  3380  3399  3399  3399		
partly leached crystalline lime  white lime with some chert  red and gray shale  partly leached crystalline lime  black shale  dense lime  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  3220  3248  3260  3379  3380  3390  3390  3390  3390  3390		
red and gray shale partly leached crystalline lime black shale dense lime red shale coarsely crystalline fossiliferous lime red and green shale reworked Arbuckle dolomite 3248 3260 3359 3359 3359 3359 3368 3368 3386 3386 3386	partly leached crystal line lime	
red and gray shale partly leached crystalline lime  black shale dense lime  red shale coarsely crystalline fossiliferous lime red and green shale reworked Arbuckle dolomite  Arbuckle dolomite  3260 3339 3350 3350 3350 3360 3360 3386 3386		
black shale dense lime  red shale coarsely crystalline fossiliferous lime  red and green shale reworked Arbuckle dolomite  3393  Arbuckle dolomite	red and gray shale	
dense lime  red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite  3550  3568  3368  3386  3386	partly leached crystalline lime	
red shale  coarsely crystalline fossiliferous lime  red and green shale  reworked Arbuckle dolomite  Arbuckle dolomite  3393		
coarsely crystalline fossiliferous lime 3380 red and green shale 3386 reworked Arbuckle dolomite 3393 Arbuckle dolomite		
red and green shale reworked Arbuckle dolomite  Arbuckle dolomite  3380 3386 3393		
red and green shale reworked Arbuckle dolomite  Arbuckle dolomite  3386 3393	coarsely crystalline fossiliferous lime	
Arbuckle dolomite 3393	red and green shale	
Arbuckie dolomite	reworked Arbuckle dolomite	<del>-</del>
	Arbuckie dolomite	3444

Measurements in log corrected to derrick floor.

2 9 20W 95 2-7