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Quinoco Petroleum Inc.  
HUCK "A" #13  
NE NW NW; Section 31-11S-20W  
Ellis County, Kansas

5½" PRODUCTION CASING SET

CONTRACTOR: Red Tiger Drilling Company (Rig #7)  
COMMENCED: August 14, 1989  
COMPLETED: August 22, 1989  
ELEVATIONS: 2262' K.B. 2260' D.F. 2257' G.L.  
MEASUREMENTS: All depths measured from the Kelly Bushing.  
CASING PROGRAMS: Surface - 8 5/8" @ 260'  
Production - 5½" @ 3957'  
SAMPLES: Samples saved and examined from 3100' to R.T.D.  
DRILLING TIME: Drilling time recorded and kept 3100' to R.T.D.  
FORMATION TESTING: There were two (2) drill stem tests run by Trilobite Testing.  
ELECTRIC LOG: By Schlumberger: Compensated Neutron-Formation Density,  
Phase Induction-SFL, Microlog and Cyberlook.

<u>FORMATION</u>	<u>LOG DEPTH</u>	<u>SUB-SEA DATUM</u>
Anhydrite	1667	+595
Topeka	3283	-1021
Heebner	3496	-1234
Toronto	3523	-1261
Lansing	3536	-1274
Base Kansas City	3746	-1484
Marmaton	3788	-1526
Conglomerate	3801	-1539
Conglomerate Chert	3824	-1562
Arbuckle	3842	-1580
Rotary Total Depth	3958	-1696
Log Total Depth	3958	-1696

(All zones and tops corrected to log measurements.)

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

TOPEKA SECTION

3307-3374' Limestone, beige, dolomitic, finely crystalline, sucrosic, fair intercrystalline porosity, no shows.

3359-3374' Limestone, gray; fossiliferous, slightly cherty; poorly developed porosity plus trace gray brown chert, no shows. Trace brown to beige, dolomitic, limestone, fair porosity, no shows.

3398-3403' Limestone, gray to cream, granular, slightly fossiliferous, sparry calcite cement, no shows.

PLATTSMOUTH

3442-3450' Limestone, cream to gray, slightly fossiliferous, granular, fair vugular porosity, golden brown to light brown stain and saturation; show of free oil and faint odor in fresh samples.

3462-3468' Limestone, gray, finely crystalline, slightly chalky, spotty brown edge staining; no show of free oil or odor in fresh samples.

3484-3494' Limestone, white to gray, slightly fossiliferous, chalky; trace gray fossiliferous chert, no shows.

TORONTO SECTION

3523-3530' Limestone, cream to white; slightly fossiliferous, chalky, poor visible porosity, trace white boney chert.

LANSING SECTION

3536-3541' Limestone, gray to cream, highly fossiliferous; fair porosity, fair spotty to even brown stain and saturation; show of free oil and odor in fresh samples.

3572-3580' Limestone, gray, fossiliferous; chalky, fair vuggy porosity; fair stain and saturation; show of free oil and odor in fresh samples. Trace gray to white chert.

3594-3600' Limestone, gray, fossiliferous; slightly chalky, poorly developed porosity; trace brown stain; no show of free oil or odor in fresh samples.

3612-3617' Limestone, white; highly oolitic; fair intercrystalline to vugular type porosity; fair stain and saturation and no odor in fresh samples..

3621-3627' Limestone, gray; fossiliferous, granular, good intercrystalline to fossil cast to vugular porosity; good dull gray to dark brown stain; show of free oil and good odor in fresh samples.

3632-3639' Limestone, tan; fossiliferous, fair porosity; dark brown stain and saturation, show of free oil and fair odor in fresh samples.

3675-3681' Limestone, gray; slightly chalky; poor visible porosity; trace brown spotty stain; no show of free oil or odor in fresh samples.

3696-3703' Limestone, gray to white; slightly fossiliferous; chalky in part, spotty stain; trace free oil and no odor in fresh samples.

3713-3720' Limestone, brown to beige; highly dolomitic; sucrosic, good pin point porosity, 100% stain and saturation; good show of free oil and faint odor in fresh samples.

3728-3732' Limestone, cream to white, fossiliferous, chalky; fair porosity, dull gray to brown stain; trace free oil and no odor in fresh samples.

3742-3745' Limestone, as immediately above.

DRILL STEM TEST #1            3702-3750'

Open:	I.F. 30" F.F. 60"
Blow:	Strong
Recovery:	1250' gas in pipe 990' gassy oil 60' mud cut oil
Pressures:	ISIP 674 psi (60") FSIP 634 psi (120") IFP 245-349 psi FFP 380-451 psi HSH 1963-1933 psi

MARMATON SECTION

3784-3800' Limestone, white to green to yellow green, sandy, chalky, trace FeS<sub>2</sub>, no shows.

CONGLOMERATE SECTION

3824-3838' Chert, orange, yellow, beige, slightly dolomitic, no shows.

ARBUCKLE SECTION

3842-3850' Dolomite, beige to brown, finely crystalline; sucrosic, scattered pin point porosity, spotty to even stain and saturation; show of free oil and fair odor in fresh samples.

3850-3854' Dolomite, as immediately above, increased stain and saturation; show of free oil and fair odor in fresh samples.

DRILL STEM TEST #2                    3842-3854'

Open:	I.F. 30" F.F. 60"
Blow:	Weak to strong
Recovery:	180' gas in pipe 194' clean gassy oil 32' mud cut oil (trace of water) 420' water, trace of oil
Pressures:	ISIP 569 psi (60") FSIP 569 psi (120") IFP 77-176 psi FFP 209-286 psi HSH 2084-1989 psi

3859-3864' Dolomite, tan to beige, sucrosic; fair to good porosity; fair stain and saturation; fair show of free oil and good odor in fresh samples.

3866-3872' Dolomite, highly cherty, spotty brown stain, trace free oil and faint odor, and dolomite as above.

3872-3880' Dolomite, beige; sucrosic, plus abundant white to gray; boney, chert; plus dolomite, gray to white to pink; fine grading to medium crystalline, scattered porosity; few sandy, spotty stain; show of free oil and fair odor in fresh samples.

3886-3896' Dolomite, gray; fine to medium crystalline; fair intercrystalline porosity; trace vugular porosity; fair dull gray to dark brown to black stain; show of free oil and fair odor in fresh samples.

3898-3910' Dolomite, white to beige to pink; finely crystalline; poor visible porosity, trace tarry stain; no show of free oil or odor in fresh samples.

3910-3920' Dolomite, gray to white; finely crystalline, poor visible porosity, no shows.

3920-3940' Dolomite, fine to medium crystalline, slightly cherty, poor porosity.

3940-3958' Dolomite, as above.

Rotary Total Depth    3958' (-1696)  
Log Total depth       3958' (-1696)

Quinoco Petroleum Inc.

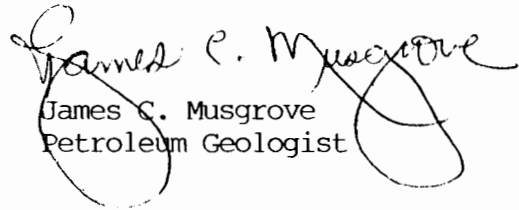
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**RECOMMENDATION:** On the basis of the favorable structural position and the positive results of the drill stem tests, it was recommended that 5½" production casing be set and cemented at 3957' (one foot off bottom) and the following zones be tested:

1) Arbuckle	3860-3861'	Perforate
2) Arbuckle	3847-3851'	Perforate
3) Lansing	3714-3720'	Perforate
4) Lansing	3621-3625	Perforate
5) Lansing	3596-3599'	Perforate

Respectfully submitted,

  
James C. Musgrove  
Petroleum Geologist