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GEOLOGICAL REPORT

HITTLE NO. 3
1900'FSL 850'FEL
SECTION 21 TWP 31S RGE 4E
COWLEY COUNTY, KS.
API 15-035-24130

OPERATOR:	Anstine-Musgrove PO Box 2444 Ponca City, OK.
SPUD:	March 3, 2001
LOGGED:	March 15, 2001
TOTAL DEPTH:	3430
CONTRACTOR:	James Dixon Moline, KS.
SURFACE CASING:	8 5/8" @ 200'
ELECTRIC LOGGING:	Log-Tech Hayes, KS.
SURVEYS:	Dual Induction & Dual Compensated Porosity Logs
ELEVATIONS:	1270' Kelly Bushing (Est) All measurements from KB
STATUS:	5 ½" Casing set for further testing

Elevations
1270 KB est

All measurements from KB

Formation	DEPTH	SUB-SEA
Admire Gas Sand	614-623	+656
Layton "A" Sand	2403-09	-1133
Layton "B" Sand	2418-37	-1148
Kansas City Lime	2456	-1186
Base Kansas City	2610	-1340
Marmation	2702	-1432
Cherokee	2806	-1536
Bartlesville Sand	Absent	
Mississippian	2996	-1726
Kinderhook	3246	-1976
Chattanooga Shale	3270	-2000
Arbuckle Dolomite	3328	-2058

STRUCTURAL COMPARSION

Formation	A/M Hittle #3	A/M Hittle #2	UPLAND Hittle H#1
Layton "A" Sand	-1133	-1147	-1127
Layton "B" Sand	-1148	-1169	-1150
Marmation	-1432	-1445	-1426
Cherokee	-1536	-1561	-1548
Mississippian	-1736	-1751	-1728
Arbuckle Dolomite	-2058	-2069	-2051
Miss/Arb Thickness	322	318	323

SAMPLE DESCRIPTIONS OF OIL BEARING ZONES

Layton "A" Sand 2403-09 Sandstone, Gray, fine grained ,micaceous, friable, odor & stain.

Layton "B" Sand 2418-37 Sandstone , Gray to translucent, medium to fine grained, micaceous, odor & stain.

Arbuckle Dolomite 3328-RTD Dolomite, gray to tan, some chert, good vuggy porosity, good odor, fluorescence & well stained thru-out.

REMARKS: Based on samples & electric log calculations casing was run for futhur testing. The Layton sands and Arbuckle should produce.

Recommend zones to be tested

Layton"A" sand 2403-2409
Layton "B" sand 2418-2437

Arbuckle Hittle zone 3386-3390
Arbuckle 45' sone 3372-3378
Arbuckle 2nd zone 3342-3348
Arbuckle top zone 3330-3336

There were no other zones in the subject well that were found to warrant testing.

James R. Craig 3-28-2001