

# Martin K. Dubois

Consulting Geologist

1321 East 11th Avenue • Winfield, Kansas 67156 • 316-221-4129

May 1, 1980

## GEOLOGICAL REPORT

Kansas Oil Corporation  
#1 Leighton  
NE-SE-NW 36-14S-28W  
Gove County, Kansas

### MORNING REPORTS:

4/23 Drilling surface hole  
4/24 1960, drilling  
4/25 2731, drilling  
4/26 3250, drilling  
4/27 3700, drilling  
4/28 3888, running DST #1  
4/29 3922, going in hole after DST #2  
4/30 4012, ran production casing

### FORMATION TOPS:

<u>Formation</u>	KOC #1 Leighton NE-SE-NW 36-14S-28W		Slawson Leighton B-1 SE-NW-NW 36-14S-28W		Relation of KOC well to Slawson well
	<u>Sample</u>	<u>E-Log</u>	<u>E-Log</u>		
Anhydrite	1926	1929 (+558)	1951 (+561)		-2
Heebner	3632	3642(-1155)	3648(-1136)		-19
Lansing	3673	3682(-1195)	3691(-1179)		-16
Lansing "J"	3908	3906(-1419)	3914(-1402)		-17
B. Kansas City	3990	3986(-1498)	3992(-1480)		-18

### SHOWS AND DRILLSTEM TESTS:

Lower L-KC "F" Zone  
Smp1 3830-36 Limestone, tan, fine grained, rounded fossil grains,  
E-Log 3829-34 fair intergranular porosity, slight oil stain, very  
slight show of free oil (fine grained skeletal  
grainstone)

This interval was not tested.

L-KC "I" Zone  
 Smp1 3870-78  
 E-Log 3874-80

Limestone, tan, medium grained, slightly rounded skeletal grains, poor intergranular porosity, slight oil stain, slight show of free oil (skeletal wackestone and packstone)

DST #1 3868-88 (3866-86, E-Log)  
 30-30-30-30

Recovered 15' mud

Flow pressures: 20-20, 31-31

Shut in pressures: 41-31

Hydrostatic pressures: 1901-1901

L-KC "J" Zone  
 Smp1 3910-15  
 E-Log 3910-15

Limestone, tan, medium to coarse grained, oolitic, fair intergranular and moldic porosity, fair show of free oil in 20% of porous sample (oolitic grainstone)

DST #2 3905-22 (3903-20, E-Log)  
 30-60-30-60

Recovered 216' oil cut mud (10% gas, 22% oil, 10% water, 58% mud)

Flow pressures: 10-61, 61-82

Shut in pressures: 1105-1095

Hydrostatic pressures: 1901-1881

L-KC "K" Zone  
 Smp1 3936-41  
 E-Log 3934-39

Limestone, white, fine grained, rounded fossil grains, chalky in part, poor to fair intergranular porosity, light oil stain, no free oil (skeletal packstone)

This zone was not tested

#### RECOMMENDATIONS:

Despite being 16' low on the top of the Lansing to a dry hole a quarter mile northwest, the Kansas Oil Corporation #1 Leighton is a potential oil well. There are two zones that may be oil productive, the Lansing-Kansas City "J" and "K" zones. The "J" zone appears to be the better of the two based on sample shows and log calculations. Although the "K" zone calculates pay on the log, it is doubtful that it will produce oil since no free oil was seen in the samples and the zone was chalky. It should be tested, however.

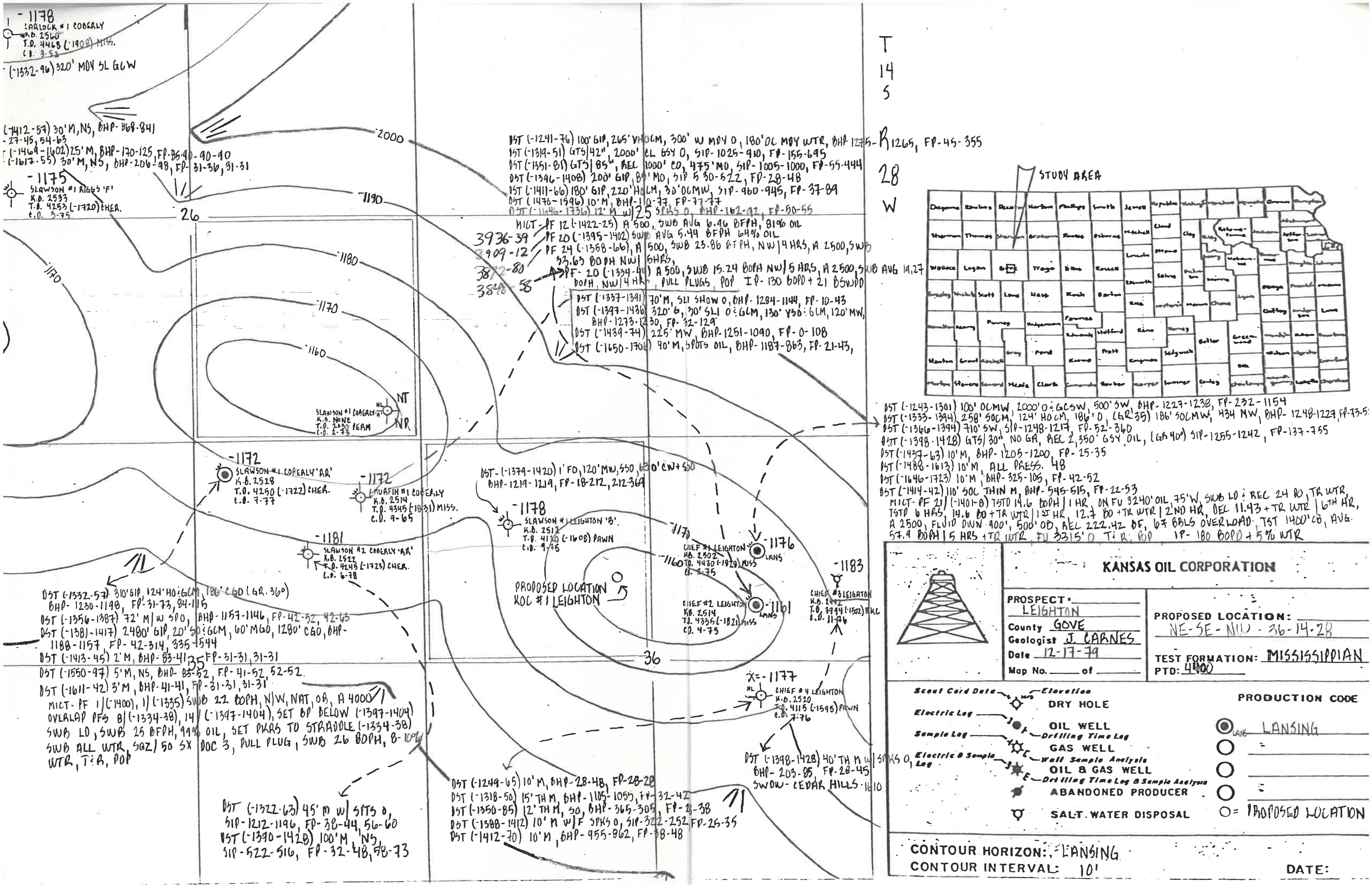
It is recommended that the following intervals be perforated and treated:

L-KC "J" zone	3910-3915
L-KC "K" zone	3934-3938

Respectfully submitted,

*Martin K. Dubois*

Martin K. Dubois



-1178  
 ARLOCK #1 COBEALY  
 K.B. 2560  
 T.O. 4468 (-1902) MISS.  
 C.O. 3-53

(-1412-57) 30' M, NS, BHP-708-841  
 -27-45, 54-63  
 (-1469-1602) 25' M, BHP-170-125, FP-86-90-90-90  
 (-1617-55) 30' M, NS, BHP-206-98, FP-31-30, 31-31

-1175  
 SLAWSON #1 RIGGS 'F'  
 K.B. 2533  
 T.O. 4253 (-1720) CHEA.  
 C.O. 3-75

-1172  
 SLAWSON #1 COBEALY 'AR'  
 K.B. 2528  
 T.O. 4250 (-1722) CHEA.  
 C.O. 7-77

-1172  
 MADAFIN #1 COBEALY  
 K.B. 2514  
 T.O. 4345 (-1831) MISS.  
 C.O. 9-65

-1181  
 SLAWSON #2 COBEALY 'AR'  
 K.B. 2522  
 T.O. 4245 (-1723) CHEA.  
 C.O. 6-78

-1178  
 SLAWSON #1 LEIGHTON 'B'  
 K.B. 2512  
 T.O. 4120 (-1608) PAWN  
 C.O. 9-75

-1176  
 CHIEF #1 LEIGHTON  
 K.B. 2502  
 T.O. 4430 (-1829) MISS.  
 C.O. 4-75

-1183  
 CHIEF #3 LEIGHTON  
 K.B. 2477  
 T.O. 3944 (-1502) EKC  
 C.O. 11-76

-1177  
 CHIEF #4 LEIGHTON  
 K.B. 2520  
 T.O. 4115 (-1595) PAWN  
 C.O. 7-76

DST (-1332-57) 310' GIP, 124' HO:6CM, 186' C&O (GR. 360)  
 BHP-1230-1198, FP-31-73, 84-115  
 DST (-1356-1387) 72' M/W 500, BHP-1157-1146, FP-42-52, 42-65  
 DST (-1381-1417) 2400' GIP, 20' 50:6CM, 60' M60, 1280' C&O, BHP-1188-1157, FP-42-314, 335-544  
 DST (-1413-45) 2' M, BHP-83-41, FP-31-31, 31-31  
 DST (-1550-97) 5' M, NS, BHP-83-52, FP-41-52, 52-52  
 DST (-1611-42) 3' M, BHP-41-41, FP-31-31, 31-31

MICT-PF 1/(1400), 1/(1335) SWB 22 BOPH, N/W, NAT, OB, A 4000  
 OVERLAP PFS 8/(1334-38), 14/(1397-1404), SET BP BELOW (-1397-1404)  
 SWB LD, SWB 25 BOPH, 99% OIL, SET PKRS TO STRADDLE (-1334-38)  
 SWB ALL WTR 50Z/50 SX DOC 3, PULL PLUG, SWB 26 BOPH, 8-10%  
 WTR, T&A, POP

DST (-1322-63) 45' M W/ 5FTS O,  
 SIP-1212-1196, FP-38-44, 56-60  
 DST (-1390-1428) 100' M, NS,  
 SIP-522-516, FP-32-48, 38-73

DST (-1249-65) 10' M, BHP-28-48, FP-28-28  
 DST (-1318-50) 15' TH M, BHP-1105-1055, FP-32-42  
 DST (-1350-85) 12' TH M, 50, BHP-365-305, FP-28-38  
 DST (-1388-1412) 10' M W/ F 5PKS O, SIP-322-252, FP-26-35  
 DST (-1412-70) 10' M, BHP-955-862, FP-38-48

DST (-1241-76) 100' GIP, 265' VHO:CM, 300' W M04 O, 180' OC M04 WTR, BHP-1275-1265, FP-45-355  
 DST (-1319-51) 6T5/42", 2000' EL 654 O, SIP-1025-910, FP-155-645  
 DST (-1351-81) 6T5/85", REC 1000' OD, 475' MO, SIP-1005-1000, FP-55-444  
 DST (-1346-1408) 200' GIP, 80' MO, SIP 5 30-522, FP-28-48  
 DST (-1411-66) 180' GIP, 220' HO:CM, 30' OCMW, SIP-960-945, FP-37-89  
 DST (-1476-1596) 10' M, BHP-110-77, FP-77-77  
 DST (-1646-1736) 12' M W/ 25 5PKS O, BHP-162-97, FP-80-55

MICT-PF 12 (-1422-25) A 500, SWB AVG 6.96 BOPH, 81% OIL  
 PF 20 (-1395-1402) SWB AVG 5.44 BOPH 64% OIL  
 PF 24 (-1358-66), A 500, SWB 23.86 BOPH, NW 1/4 HRS, A 2500, SWB 33.63 BOPH NW 1/4 HRS,  
 PF-20 (-1334-94) A 500, SWB 15.24 BOPH NW 1/4 HRS, A 2500, SWB AVG 14.27 BOPH, NW 1/4 HRS, PULL PLUGS, POP I.P. 130 BOPD + 21 BSWD

DST (-1337-1391) 70' M, SW 5HOW O, BHP-1284-1144, FP-10-43  
 DST (-1397-1436) 320' G, 70' SLI O:6CM, 130' V50:6CM, 120' MW, BHP-1273-1230, FP-32-129  
 DST (-1439-74) 225' MW, BHP-1251-1090, FP-0-108  
 DST (-1650-1706) 90' M, 5PKS OIL, BHP-1187-863, FP-21-43,

DST (-1374-1420) 1' FO, 120' MW, 550, 60' CW+50  
 BHP-1219-1219, FP-18-212, 212-364

T  
14  
5

R 1265, FP-45-355

28  
W



DST (-1243-1301) 100' OCMW, 2000' O:6CSW, 500' SW, BHP-1227-1238, FP-232-1154  
 DST (-1333-1394) 258' 50CM, 124' HO:CM, 186' O, (GR 35) 186' 50CMW, 434 NW, BHP-1248-1227, FP-73-5:  
 DST (-1366-1394) 710' SW, SIP-1248-1217, FP-52-360  
 DST (-1398-1428) 6T5/30" NO GA, REC 2,350' 654 OIL, (GR 40) SIP-1255-1242, FP-137-755  
 DST (-1437-63) 10' M, BHP-1205-1200, FP-25-35  
 DST (-1488-1613) 10' M, ALL PRESS. 48  
 DST (-1646-1723) 10' M, BHP-325-105, FP-42-52  
 DST (-1414-42) 110' 50C THIN M, BHP-545-515, FP-22-53  
 MICT-PF 21 (-1401-8) TSTD 14.6 BOPH/1 HR, ON FU 3240' OIL 75' W SWB LD: REC 24 80 TR WTR, TSTD 6 HRS, 14.6 BOPH + TR WTR | 1ST HR, 12.7 BOPH + TR WTR | 2ND HR, DEL 11.43 + TR WTR | 6TH HR, A 2500, FLUID DWN 400', 500' OD, REC 222.42 OF, 67 BBLs OVERLOAD, TST 1400' CB, AVG. 57.4 BOPH | 5 HRS + TR WTR, FU 3315' O T&A, POP I.P. 180 BOPD + 5% WTR

**KANSAS OIL CORPORATION**

---

PROSPECT: LEIGHTON

County: GOVE

Geologist: J. CARNES

Date: 12-17-79

Map No. \_\_\_\_\_ of \_\_\_\_\_

---

PROPOSED LOCATION: NE-SE-NW-36-14-28

---

TEST FORMATION: MISSISSIPPIAN

PTD: 4400

---

**Scout Card Data** — Elevation

**Electric Log** — **DRY HOLE**

**Sample Log** — **OIL WELL**

**Electric & Sample Log** — **GAS WELL**

**Well Sample Analysis** — **OIL & GAS WELL**

**Drilling Time Log & Sample Analysis** — **ABANDONED PRODUCER**

**SALT WATER DISPOSAL**

---

**PRODUCTION CODE**

LANE LANING

---

**CONTOUR HORIZON:** LANING

**CONTOUR INTERVAL:** 10'

**DATE:** \_\_\_\_\_

-1412 (No 0 SURVEY)  
 CARLOCK #1 COBEALY  
 K.B. 2560  
 T.O. 4468 (-1903) MISS.  
 C.O. 3-52

DST (-1412-57) 30' M, NS, BHP-868, 841  
 FP 25-47, 54-63

-1410 (TITE)  
 SLAWSON #1 AIGBBS 'F'  
 K.B. 2593  
 T.O. 4153 (-1720) CHER.  
 C.O. 2-75

DST (-1397-1436) 320' G, 30' SLI 0: GCM, 130' V50: GCM, 120' MW,  
 BHP-1273-1230, FP-32-129

DST (-1396-1408) 200' GIP, 85' MO,  
 BHP-570-522, FP-28-48  
 MICT-PF (-1395-1402) SWB AVG. 5.44  
 BF, 64% OIL

DST (-1379-1420) 1' FO, 120' MW, 550  
 630' CW, 550, BHP-1219-1219,  
 FP-18-212, 212-369

T  
14  
S  
R  
28  
W



1898: 4': 21%  
 SLAWSON #1 COBEALY 'AA'  
 K.B. 2518  
 T.O. 4250 (-1722) CHER.  
 C.O. 7-77

1405: 4': 18%  
 MDAFIN #1 COBEALY  
 K.B. 2514  
 T.O. 4345 (-1821) MISS.  
 C.O. 9-65

1412: 5': 16%  
 SLAWSON #2 COBEALY 'AA'  
 K.B. 2522  
 T.O. 4245 (-1723) CHER.  
 C.O. 6-78

1403: 4': 16%  
 SLAWSON #1 LEIGHTON 'B'  
 K.B. 2512  
 T.O. 4120 (-1608) PAWN  
 C.O. 9-75

CHIEF #1 LEIGHTON  
 K.B. 2502  
 T.O. 4430 (-1919) MISS.  
 C.O. 2-75

1394  
 CHIEF #2 LEIGHTON  
 K.B. 2514  
 T.O. 4335 (-1821) MISS.  
 C.O. 4-75

CHIEF #3 LEIGHTON  
 K.B. 2492  
 T.O. 3994 (-1522) WCL  
 C.O. 11-76

No. 106  
 CHIEF #4 LEIGHTON  
 K.B. 2520  
 T.O. 4115 (-1596) PAWN  
 C.O. 7-76


DST (-1381-1417) 2490' GIP, 20' 50: GCM, 60' MGO, 1280' CGO,  
 BHP-1188-1157, FP-42-314, 325-544  
 MICT-PF 1/ (-1400) 1 (-1335) SWB 22 BOPH NW, NAT OB,  
 A 4000 OVERLAP RES 35 B (-1334-38), 14/ 1397-1404  
 SET BP BELOW (-1404) SWB LD, SWB 25 BOPH, 99% OIL, SET  
 PKAS TO STRADDLE (-1334-38) SWB ALL WTR, 5QZ 1 50 SX DOC3,  
 PULL PLUG, SWB 26 BOPH, 8-10% WTR ('J' ZONE) POP

DST (-1390-1428) 100' M, NS  
 BHP-522-516, FP-32-48, 58-73

DST (-1388-1412) 10' M, W F/SPKS OIL,  
 BHP-322-252, FP-25-35

DST (-1398-1428) 40' TH M W/ SPKS OIL,  
 BHP-203-85, FP-28-45

DST (-1398-1428) GTS 30", NO GA, REC 2,350' GSY OIL, (GR. 40°) BHP-1255-1242,  
 FP-137-755  
 MICT-PF (-1401-08) TSTD 14.6 BOPH/1HR, ON FU-3240' OIL, 75' W, SWB LD: REC,  
 24 BO: TR WTR, TSTD 6 HRS, 14.60 BO+TR WTR/1ST HR, 12.7 BO+TR WTR  
 2ND HR, DEC-11.43 BO: TR WTR/1ST HR, A 2500, FLUID DWN 900',  
 500' OB, REC 222.42 BF, 67 BDIS OVERLOAD, TSTD 1400' OB, AVG. 57.9 BOPH/  
 5 HRS + TR WTR, FU 3315' OIL, T:R, POP, 1P-180 BOPD + 5% WTR

<b>KANSAS OIL CORPORATION</b>		
	<b>PROSPECT:</b> LEIGHTON <b>County:</b> GOVE <b>Geologist:</b> J. CARNES <b>Date:</b> 12-17-79 <b>Map No.:</b> _____ of _____	<b>PROPOSED LOCATION:</b>  <b>TEST FORMATION:</b> MISSISSIPPIAN PTD: 4400
	<b>Scout Card Data</b> → Elevation <b>Electric Log</b> → DRY HOLE <b>Sample Log</b> → OIL WELL <b>Electric &amp; Sample Log</b> → Gas Well, Oil & Gas Well, Abandoned Producer, Salt Water Disposal	1400: 4': 15% → POROSITY THICKNESS SUBSEA DATUM OF 'J' ZONE LANSING PRODUCTION CODE
	NP - FORMATION NOT PENETRATED NT - NO PAILSTEM TEST OF ZONE	(Symbol) LANSING (Symbol) (Symbol) (Symbol) (Symbol) PROPOSED LOCATION
	<b>CONTOUR HORIZON:</b> LANSING 'J' ZONE <b>CONTOUR INTERVAL:</b> 10' <b>DATE:</b>	

CHARLOK #1 COBEALY  
 K.B. 2560  
 T.O. 4468 (-1908) MISS.  
 C.O. 3-52

SLAWSON #1 RIGGS 'F'  
 K.B. 2533  
 T.O. 4253 (-1720) CHER.  
 C.O. 5-75

SLAWSON #1 COBEALY 'A'  
 K.B. NONE  
 T.O. 2050 TEAM  
 C.O. 2-75

DISC-7-77  
 IP-85 BOPD +10% WT  
 DA-5 BOPD  
 CUM-11,029

SLAWSON #1 COBEALY 'AA'  
 K.B. 2518  
 T.O. 4250 (-1722) CHER.  
 C.O. 7-77

MUAFIN #1 COBEALY  
 K.B. 2514  
 T.O. 4345 (-1831) MISS.  
 C.O. 9-65

SLAWSON #2 COBEALY 'AA'  
 K.B. 2522  
 T.O. 4245 (-1723) CHER.  
 C.O. 6-78

SLAWSON #1 LEIGHTON 'B'  
 K.B. 2512  
 T.O. 4120 (-1608) PAWN  
 C.O. 9-75

PROPOSED LOCATION  
 KOC #1 LEIGHTON

CHIEF #1 LEIGHTON  
 K.B. 2502  
 T.O. 4430 (-1929) MISS LANS  
 C.O. 2-75

CHIEF #2 LEIGHTON  
 K.B. 2514  
 T.O. 4355 (-1821) MISS LANS  
 C.O. 4-75

DISC-2-75  
 WELLS-2  
 IP-316 BOPD  
 DA-33 BOPD  
 CUM-95,221

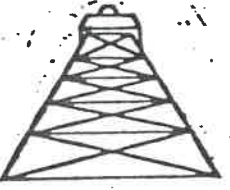
CHIEF #3 LEIGHTON  
 K.B. 2492  
 T.O. 3994 (-1502) KLC  
 C.O. 11-74

CHIEF #4 LEIGHTON  
 K.B. 2520  
 T.O. 4115 (-1596) PAWN  
 C.O. 7-76

T  
14  
S  
  
R  
28  
W



○ = PROPOSED LOCATION

<b>KANSAS OIL CORPORATION</b>	
	<b>PROSPECT:</b> LEIGHTON <b>County:</b> GOVE <b>Geologist:</b> J. CARNES <b>Date:</b> 12-17-79 <b>Map No.:</b> 1 of 4
<b>PROPOSED LOCATION:</b> _____	
<b>TEST FORMATION:</b> MISSISSIPPIAN PTD: 4600	
<b>Scout Card Data</b> Electric Log Sample Log Electric & Sample Log	<b>Elevation</b> DRY HOLE OIL WELL Drilling Time Log GAS WELL Well Sample Analysis OIL & GAS WELL Drilling Time Log & Sample Analysis ABANDONED PRODUCER SALT WATER DISPOSAL
<b>PRODUCTION CODE</b>	
○ LANS LANSING ○ = ○ = ○ =	
<b>CONTOUR HORIZON: PRODUCTION MAP</b>	
<b>CONTOUR INTERVAL:</b> _____	
<b>DATE:</b> 6-79	