

# State Geological Survey

## WICHITA BRANCH

### KANSAS DRILLERS LOG

API No. 15 — 151 — 20881  
County Number

Operator  
McCoy Petroleum Corporation

Address  
One Main Place / Suite 410 Wichita Ks. 67202

Well No. 1 Lease Name Copenhaver

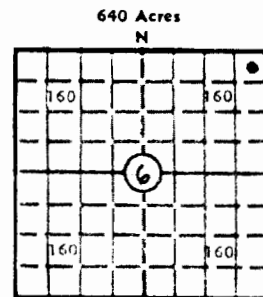
Footage Location 330 feet from (N) (S) line 330 feet from (E) (W) line

Principal Contractor Sweetman Drilling Inc. Geologist Bob McCann

Spud Date 0-16-81 Total Depth 4325 P.B.T.D. 4272

Date Completed 4-25-81 Oil Purchaser Koch

S. 6 T. 26 R. 12 E. W  
Loc. NE NENE  
County Pratt



Locate well correctly

Elev.: Gr. 1889

DF 1896 KB 1899

### CASING RECORD

Report of all strings set — surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface	12 1/4	8 5/8	28*	358	Common	300	2% gel 3% calchlor
Production	7 7/8	4 1/2	10.5*	4323'	Common	225	1/4" per sack Floreal

### LINER RECORD

Top, ft.	Bottom, ft.	Sacks cement
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### PERFORATION RECORD

Shots per ft.	Size & type	Depth interval
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### TUBING RECORD

Size	Setting depth	Packer set at
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3	Jumbo Jets	3876-3878
3	Jumbo Jets	3870-3872
2	Jumbo Jets	3814-3824
3	Jumbo Jets	3675-3681

### ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
44481 Acid 2,000 gallons MOD 202	3876-3878
Acid 5,000 gallons 15% HCL	3870-3872
	3675-3681

### INITIAL PRODUCTION

Date of first production 4-25-81 Producing method (flowing, pumping, gas lift, etc.) Pump

RATE OF PRODUCTION PER 24 HOURS Oil 70 bbls. Gas 71 MCF Water 71 bbls. Gas-oil ratio   CFPB

Disposition of gas (vented, used on lease or sold) used on lease Producing interval(s)  

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator <b>McCoy Petroleum Corporation</b>		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:		
Well No. <b>1</b>	Lease Name <b>Copenhaver</b>	<b>Oil</b>		
S <b>6</b> T <b>26</b> R <b>12</b> E <b>W</b>				
<b>WELL LOG</b> Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.		SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.		
FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
see attached report				
USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.				
Date Received	Signature			
	Title			
	Date			

6-26-12W



Natural Gas • Crude Oil  
Exploration & Production

# McCOY PETROLEUM CORPORATION

One Main Place / Suite 410 Wichita, Kansas 67202

John Roger McCoy  
President

316-265-9697

Harvey H. McCoy  
Vice-President

## DAILY REPORT

McCoy Petroleum Corporation  
#1 Copenhaver  
NE NE NE Section 6-26S-12W  
Wildcat  
Pratt County, Kansas  
A.P.I. # 15-151-20,881

Contractor: Sweetman Drilling, Inc.  
Geologist: Robert E. McCann

Elevations: 1899 KB 1896 DF 1889 GL

03-16-81 Move in Rotary Tools. Rig up. Spud @ 4:30 P.M. Set used 8-5/8" surface casing @ 358' with 300 sacks common cement, 2% gel, 3% calcium chloride. P.D. @ 12:15 A.M. 3-17-81.

03-17-81 W.O.C. @ 358'.

### SAMPLE TOPS

03-18-81	Drilling @ 1890'.	Heebner	3453(-1554)
		Toronto	3473(-1574)
03-19-81	Drilling @ 2814'.	Brown Lime	3621(-1722)
		Lansing	3647(-1748)
03-20-81	Drilling @ 3600'.	B/KC	3950(-2051)
		Mississippian	4036(-2137)
03-21-81	Drilling @ 3710'.	Viola	4125(-2226)
		Simpson Shale	4210(-2311)
03-22-81	Drilling @ 3871'.	Simpson Sand	4219(-2320)
		Arbuckle	4303(-2404)
03-23-81	Circulating @ 4070'.	RTD	4325(-2426)
03-24-81	Drilling @ 4279'.		
03-25-81	RTD 4325'. Logging.		

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DST #1 3664-3692' (L-KC) 30' Zone  
Open 30", S.I. 45", Open 60", S.I. 60"  
Strong blow. Gas to surface in 33 minutes.  
Recovered 390' of fluid as follows:  
90' oil and gas cut mud,  
120' heavily oil and gas cut mud,  
120' gassy oil,  
40' froggy oil,  
20' muddy water.  
ISIP 883# FSIP 831#  
FP 120-124# 150-156#

03-21-81 Drilling @ 3710'.

DST #2 3807-3835' (L-KC) 160' Zone  
Open 30", S.I. 45", Open 60", S.I. 60"  
Strong blow throughout test.  
Recovered 290' fluid as follows:  
50' slightly oil and gas cut mud,  
150' medium to heavily oil and gas cut mud,  
90' gassy froggy oil.  
ISIP 779# FSIP 831#  
FP 83-83# 104-104#

03-22-81 Drilling @ 3871'.

DST #3 3856-3886' (L-KC) 220' Zone  
Open 30", S.I. 45", Open 60", S.I. 60"  
Strong blow throughout test.  
Recovered 180' gas in pipe,  
40' slightly oil and gas cut mud,  
120' heavily oil and gas cut mud.  
ISIP 156# FSIP 197#  
FP 114-72# 104-93#

DST #4 4038-4070' (Mississippian)  
Open 30", S.I. 45", Open 90", S.I. 90"  
Strong blow throughout test.  
Recovered 3026' gas in pipe,  
50' gas cut mud with a few oil spots,  
60' gas cut and very slightly oil cut mud.  
ISIP 416# FSIP 1049#  
FP 135-83# 83-83#

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DST #5 4206-4244' (Simpson)  
 Open 30", S.I. 45", Open 30", S.I. 45"  
 Weak blow on 1st open. Dead on 2nd open.  
 Recovered 30' mud.  
 ISIP 779# FSIP 779#  
 FP 72-52# 52-41#

#### ELECTRIC LOG TOPS

Heebner	3454(-1555)
Toronto	3474(-1575)
Brown Lime	3620(-1721)
Lansing	3643(-1744)
B/KC	3949(-2050)
Mississippian	4034(-2135)
Viola	4125(-2226)
Simpson Shale	4209(-2310)
Simpson Sand	4218(-2319)
Arbuckle	4304(-2405)
LTD	4325(-2426)

03-26-81 Set 129 joints of new 4-1/2" OD, 10.5#, K-55, API casing at 4323'. Halliburton cement with 225 sacks common cement with 1/4#/sack of Floseal. P.D. @ 4:45 A.M.

04-13-81 Rig up Hayes Well Service. Run Dresser Atlas Gamma Ray CCL Log from PBTD @ 4272' up to 3400'. Swab down to 2300' with casing swab. Perforate the following Lansing-Kansas City zones:

(L-KC 220' Zone) 3876-3878' 3 shots/foot w/Jumbo Jets  
 3870-3872' 3 shots/foot w/Jumbo Jets

(L-KC 160' Zone) 3814-3824' 2 shots/foot w/Jumbo Jets

(L-KC 30' Zone) 3675-3681' 3 shots/foot w/Jumbo Jets

Swab down to 3900' with casing swab. Show of oil on last 2 pulls. Let set 1/2 hour. Pull swab. Made .80 BF, 30% oil, 70% fresh load water. Rig up to run tubing. Run Halliburton RTTS Packer and Retrievable Bridge Plug on new 2-3/8" EUE tubing. Test L-KC 220' Zone as follows: Set Bridge Plug @ 3895'. Set RTTS Packer @ 3853'. Seating nipple 1 joint above RTTS Packer. Run tubing swab. Tubing dry. Halliburton acidize with 250 gallons 15% HCL. Pressure up in steps to 1000#. Start feeding, increase rate to 1/4 BPM @ 600#, 1/2 BPM @ 900#, 1 BPM @ 950#, 1-1/2 BPM @ 1000#, 1.7 BPM @ 1100#, 2 barrels overflush, finish @ 1.7 BPM @ 1050#. ISIP 900#, 15" pressure drop to 400#. Bleed back and start swabbing after 25'. Total load = 23 barrels. Made 3 pulls with tubing swab. 1st pull from 1/2 way down, 2nd and 3rd pull from seating nipple. Last 1/3 of last pull was all oil. Shut down for night. Total recovered on 3 pulls = 18.23 BF (-5.77 BL).

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04-14-81 Overnight fill up = 1,500' of fluid. 1,300' of oil and 200' of acid water. Swab down. Recovered 5.80 BF. Swab 1.50 BOPH, 10% water/1 hr. Rig up Halliburton to acidize with 2,000 gallons MOD-202 acid. Treat @ 3 BPM. Maximum pressure 1300# with 6 barrels in formation. Final pressure 1200#. ISIP 700#. On vacuum in 12 minutes. Total load = 63 barrels.

Swab back 34.28 BF (-28.72 BL) Swab 4.64 BOPH, 15% water, last hour.

Prepare to test L-KC 160' Zone. Casing pressure on annulus = 230#. Blow down. Unload 1.74 bbl. oil out annulus by heads. Release RTTS Packer. Pick up Bridge Plug and reset @ 3852'. Reset RTTS Packer @ 3789'. Perforations from 3814 to 3824' in L-KC 160' Zone are now open to tubing. Run tubing swab. Swab 4.31 BF, 60% acid water on 1st pull and 2.32 BF, 85% acid water on 2nd pull. Take 1 hour test making a pull each 15 minutes. Recovered 4.42 BF, 90% acid water for the hour.

Prepare to test L-KC 30' Zone. Release RTTS Packer. Pick up Bridge Plug and reset @ 3697'. Set RTTS Packer @ 3665'. Made 3 pulls with tubing swab. Recovered 3.48 BF, mostly acid water, on 1st 2 pulls and .14 BF on last pull. Tubing essentially dry on last 2 pulls. Shut down for night.

04-15-81 Overnight fill up = 1,300'. Run swab, recovered 3.48 BF on 1st pull, 36% oil, 64% acid water, 2nd pull recovered 3.48 BF, 97% acid water. 3rd pull - dry. Release packer. Casing went on vacuum. Run tubing swab. 1st pull recovered 2.32 bbl. acid, 2nd pull recovered 1.74 bbl. acid, 3rd pull recovered 1.45 bbl. acid. Lower Packer to blank pipe below upper perforations. Pressure up to 1400# on tubing to check packer. Held pressure.

Lower Bridge Plug and RTTS Packer to retest L-KC 160' Zone. It appears the acid water on the initial test must have come either through a channel or a packer leak. Set Bridge Plug @ 3852'. Set RTTS Packer @ 3789'. Run tubing swab. 1st 3 pulls recovered 8.99 BF, 5% oil. 4th pull recovered 1.01 BF, 5% oil. 5th pull recovered .87 BF, 5% oil. Shut down 30" for lunch. 6th pull recovered 1.45 BF, good oil %. 7th pull (1/2 hr.) recovered 2.32 BF, 75% oil. 1 hour test: (4 pulls) recovered 4.05 BF, 12% oil. Chlorides during last hour checked 110,000 ppm. It appears the acid treatment on the 220' Zone partially channeled to the 160' Zone. The water is probably coming from a porous zone @ 3838-3834', between the 220' oil zone and the 160' oil zone.

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Move Bridge Plug and RTTS Packer back up hole to test 30' Zone. Set Bridge Plug @ 3697'. Set RTTS Packer @ 3650'. Made 2 pulls with tubing swab. 1st pull recovered 3.01 bbl. water and oil, 2nd pull recovered 1.16 bbl., mostly oil with good show of gas. Rig up Halliburton to acidize. Acidize with 500 gallons 15% HCL. Pressure up in steps to 700# maximum pressure, start feeding. Fed 1 BPM @ 650#. Feed 1-1/2 BPM @ 550# dropping to 500#. Final pressure 500#. ISIP 400#. On vacuum in 12 minutes. Total load = 27 barrels. Swab 1 hour. Recovered 18.56 BF, show of oil, on 1st 2 pulls. Recovered 3.48 BF, 80% oil, on 3rd pull. Recovered 3.48 BF, 80% oil, on 4th pull. Good show of gas. Shut in for night.

04-16-81 Fill up 1400' oil overnight. Swab tubing. 1st hour, swab 15.95 BF, 45% oil (7.21 BOPH and 8.74 BWPH). 2nd hour, swab 8.70 BF, 62% oil (5.41 BOPH and 3.29 BWPH). 3rd hour, swab 6.67 BF, 60% oil (3.98 BOPH and 2.69 BWPH).

Last 2 hours swabbing from 30' Zone, average 4.70 BOPH and 2.99 BWPH.

Release RTTS Packer. Latch onto Bridge Plug. Pull tubing, packer and Bridge Plug. Run 2-3/8" EUE tubing as follows: 31.32' long, slotted, orange peeled mud anchor, seating nipple, 122 joints of tubing and (1) 8' sub. Total tally = 3911.94'. Swing @ 3919.44'. Shut down for night.

SUMMARY: All L-KC perforations are now open to production.

220' Zone: Swab 4.64 BOPH  
160' Zone: Communicated with 220' Zone  
30' Zone: Swab 4.70 BOPH & 2.99 BWPH

04-17-81 SICP 60# Run new 1-1/2" x 2" x 12' RWAC Pump, 155 new 3/4" sucker rods, (1) 6' pony rod, (1) 2' pony rod and 16' polish rod. Make up well head. Release Pulling Unit. Will set Pumping Unit and Tank Battery next week.

04-20-81 Will set surface equipment when mud dries up.

04-21-81 Wait on mud.

04-22-81 Wait on mud.

04-23-81 Setting Tank Battery.

04-24-81 Setting Tank Battery and Pumping Unit. Pumping Unit is new CDR 114-169-54 with new Arrow C-96 Engine.

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04-25-81      Equipment set and connected. Start well pumping.  
04-26-81      Fill Gun Barrel and start over into stock. Made 121 Bbl. oil  
                 and water. Vent gas.  
04-27-81      Pump 70 BOPD and 71 BWPD.

I.P. 70 BOPD

Complete.