

C SIDE ONE

API NO. 15-167-22,679.....
County..Russell.....
NE..NE..NE.... Sec. 31. Twp 14..Rge. 13. X East
West

..4900..... Ft North from Southeast Corner of Section
 ...330..... Ft West from Southeast Corner of Section
 (Note: Locate well in section plat below)

Lease Name.....G. Miller "A".....Well #18-31..

Field Name.....Hall-Gurney.....

Producing Formation.....LKC 'C', 'D', 'G', 'F'.....

Elevation: Ground.....1743.....1748.....

Section Plat

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State Geological Survey
WICHITA

BRANCH

5280
4950
4620
4290
3960
3630
3300
2970
2640
2310
1980
1650
1320
990
660
330

A 12x12 grid with a dot in the top right corner.

WATER SUPPLY INFORMATION

Disposition of Produced Water:	— Disposal
Docket #	Repressuring

Questions on this portion of the ACO-1 call:
Water Resources Board (913) 296-3717

Source of Water: _____
Division of Water Resources Permit #.....

Groundwater.....Ft North from Southeast Corner
(Well)Ft West from Southeast Corner of
Sec Twp Rge East West

X Surface Water 3630 Ft North from Southeast Corner
(Stream, pond etc) 3020 Ft West from Southeast Corner
Sec 31 Twp 14 Rge 13 East X West

Other (explain).....
(purchased from city, R.W.D. #)

Information on slide two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have

SIDE TWO

Operator Name Solar Petroleum, Inc. Lease Name..... G. Miller "A" Well #..... 18-31

Sec..... 31 Twp..... 14 Rge..... 13 ☐ East
☒ West County..... Russell

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken ☐ Yes ☒ No
 Samples Sent to Geological Survey ☐ Yes ☒ No
 Cores Taken ☒ Yes ☐ No

Formation Description
☒ Log ☐ Sample

Name Top Bottom

Core interval 2880'-3010'

See Attachment for core description

Anhydrite 684'
 Topeka 2578'
 Heebner 2808'
 Toronto 2826'
 Lansing Kansas City 2876'
 Base Kansas City 3088'
 Gorham Sand 3152'
 Granite Wash 3186'
 RTD 3222'

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Geological Survey
 Logs sent earlier

Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio	Gravity
		TSTM			
	64 Bbls	MCF	96 Bbls	CFPB	

METHOD OF COMPLETION

Production Interval

Disposition of gas: ☒ Vented ☐ Open Hole ☒ Perforation
☐ Sold ☐ Other (Specify)
☐ Used on Lease

Surface	12 1/4"	8-5/8"	23#	695	60/40poz	325	2% gel 3%cc.
Production	7-7/8"	5 1/2"	15 1/2#	3221'	common	250	10% salt 5% Gilsoni

PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record	
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)	Depth
See Attachment					

TUBING RECORD	Size	Set At	Packer at	Liner Run	☐ Yes ☒ No
	2 1/2	3218	no		
Date of First Production	Producing Method				
11/14/85	☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (explain).....				

31-14-13W

DRILLER'S WELL LOG

DATE COMMENCED: October 14, 1985
 DATE COMPLETED: October 24, 1985

Solar Petroleum, Inc.
 G. Miller 'A' 18-31
 NE NE NE
 Sec. 31, T14S, R13W
 Russell County, Ks.

ELEVATION: 1748 K.B.

0 - 138' Surface Soil, Sand, Post Rock,
 Shale
 138 - 684' Hard Sand, Shale, Red Bed
 684 - 719' Anhydrite
 719 - 2512' Lime & Shale
 2512 - 2560' Lime
 2560 - 2578' Shale & Sand
 2578 - 2809' Lime
 2809 - 2813' Shale
 2813 - 2876' Lime & Shale
 2876 - 3088' Lime
 3088 - 3186' Shale & Lime
 3186 - 3222' Granite Wash
 3222' RTD

FORMATION DATA

Anhydrite	684'
Howard	2512'
Severy	2560'
Topeka	2578'
Heebner	2809'
Toronto	2826'
Douglas	2839'
Kansas City	2876'
Base K.C.	3088'
Granite Wash	3186'
RTD	3222'

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Surface Pipe: Set new
 8-5/8", 23# pipe @695'
 w/325 sacks 60/40 pozmix
 2% gel 3% cc.

Production pipe: Set
 New & Used 5 1/2", 15 1/2#
 @3221' w/250 sacks common
 w/10% salt & 5% Gilsonite
 w/10 bbls. salt flush.

A F F I D A V I T

STATE OF KANSAS
 COUNTY OF BARTON) ss

Leonard Williamson of lawful age, does swear and state that the facts and
 statements herein are true and correct to the best of his knowledge.

Leonard Williamson

Subscribed and sworn to before me this 29 day of October 1985.

My Comm. Expires:

4-29-86

Leontine M. Hague

Miller 'A' # 18-31

CORE DESCRIPTION

31-14-13W

CORE #1 - *2880-2916.5

- 2880-90 LS, lt gy, fnly xstln, dns, little-no visible $\emptyset$, trace scattered bleeding oil throughout interval (LKC 'A' zone)
- 2890-95.5 SH, m gy, dns, frm
- 2895.5-2902 LS, off wh, buff, gd oolmoldic $\emptyset$, poss frac (?), abund bleeding oil in upper portion of interval (LKC 'C' porosity)
- 2902-2909.5 LS, lt gy, fnly xstln, dns, tgt, w/frequent thin shale stringers
- 2902.5-2913 LS, off wh, exc oolmoldic $\emptyset$ oil sat, evidence of poss frac., very uncon core (LKC 'D' porosity)
- 2913-2915.5 LS, AA, inc dns/tgt w/depth, scatt bleeding oil

CORE #2 *2916.5-2961

- 2916.5-18 LS, AA, trace of bleeding oil
- 2918-21 LS, off wh, lt gy, fr oolmoldic $\emptyset$, becoming inc tgt/dns w/depth
- 2921-39 LS, lt gy, v fnly xstln, dns, tgt, intbdd w/shale stringers, no sho oil
- 2939-40 SH, lt gy, dns, w/LS, AA
- 2940-47 LS, AA, abundant shale stringers
- 2947-50 LS, off wh, fr oolmoldic $\emptyset$, evid of poss frac, scattered bleeding oil, sm SH stringers throughout
- 2950-57.5 LS, lt gy, dns, tgt, abund crinoid frags, interbdd w/m gy shale
- 2957.5-58.5 LS, lt gy, dns, tgt
- 2958.5-60.25 LS, off, wh, fr oolmoldic $\emptyset$, abund foss frags, prob sm inter-frag $\emptyset$, fr bleeding oil

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MONTANA

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Miller A' #18-31

CORE #3 *2961-2990 31-14-13W

- 2961-61.5 LS, off wh, sl oolitic-oolmoldic sm bleeding oil
2961.5-68 LS, lt gy, dns, tgt w/occ sh lams & chert nods
2968-69.5 LS, wh, lt gy oolmoldic, tr bleeding oil
2969.5-75.5 LS, AA, with inc vis $\emptyset$, scatt bleeding oil throughout
2975.5-81 LS, wh lt gy, oolmoldic AA, dec in bleeding oil, sm chl
2981-84 LS, AA, chlky, poss frac (?), little-no bleeding oil
2984-88 LS, lt gy, oolmoldic, dec in vis $\emptyset$, little-no sho of oil

CORE #4 *2990-3010

- 2990-97 LS, lt gy, off wh, oolmoldic, good vis $\emptyset$, no sho of oil
2997-3010 LS, lt-m gy, dns tgt, no vis $\emptyset$, interbedded w/abund thin
shale lams, sh m gy, dk gy, sm carb.

* NOTE: Core depths are 'measured' depths

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WICHITA BRANCH

G. MILLER "A" 18-31

31-14-13W

<u>Perforations</u>	<u>Zone</u>	<u>SPF</u>	<u>Acid</u>
2972-74'	LKC "G"	4	500 gals 15% mud acid 1500 gals 28% INS 1000 gals 28% INS w/1#/gal Benzoic
2920-52	LKC "F"	4	1000 gals 28% INS
2900, 2901, 2912, 2913		1	3000 gals 28% NE
2898-2903	LKC "C"	4	
2910-2915	LKC "D"	4	

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