

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR Landmark Production Inc. DATE 2/6/81
c/o Odyssey Petroleum Inc.
1801 B S. Butler Dr. Harrisonville Missouri 64701
Address City State

DESCRIPTION OF WELL AND LEASE			
Name of lease <u>James B. Chaffin, Sr.</u>	Well number <u>1</u>	Elevation (ground) <u>1080</u>	
WELL LOCATION (give footage from section lines) <u>1479</u> ft. from (N) (S) sec. line <u>511</u> ft. from (E) (W) sec. line			
WELL LOCATION Section <u>30</u> Township <u>44</u> Range <u>33</u>			County <u>Cass</u>
Nearest distance from proposed location to property or lease line: <u>511</u> feet		Distance from proposed location to nearest drilling, completed or applied - for well on the same lease: _____ feet	
Proposed depth: <u>700</u>	Rotary or Cable tools <u>Rotary</u>	Approx. date work will start <u>February 12, 1981</u>	
Number of acres in lease: <u>158.65</u>		Number of wells on lease, including this well, completed in or drilling to this reservoir: <u>1</u> Number of abandoned wells on lease: _____	
If lease, purchased with one or more wells drilled, from whom purchased: Name _____ Address _____		No. of Wells: producing _____ inactive _____ abandoned _____	
Status of Bond Single Well <input type="checkbox"/> Amt. _____ Blanket Bond <input checked="" type="checkbox"/> Amt. <u>\$40,000.</u> <input checked="" type="checkbox"/> ON FILE <input type="checkbox"/> ATTACHED			
Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed.			
Proposed casing program:		Approved casing - To be filled in by State Geologist	
amt. <u>125ft</u> size <u>7"</u> wt./ft. <u>17</u> to <u>surface</u> cem. _____	amt. _____ size _____ wt./ft. _____ cem. _____	amt. _____ size _____ wt./ft. _____ cem. _____	amt. _____ size _____ wt./ft. _____ cem. _____
I, the undersigned, state that I am the <u>Agent</u> of the <u>Landmark Production Inc.</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.			
Signature <u>MR. Nathan</u>			

Permit Number: 20143

Approval Date: 2/9/81

Approved By: William B. Howe

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250 Rolla, Mo. 65401

One will be returned.

SAMPLES REQUIRED
 SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @: _____

RECEIVED

FEB 09 1981

MO. OIL & GAS COUNCIL

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

MISSOURI OIL AND GAS COUNCIL
WELL LOCATION PLAT

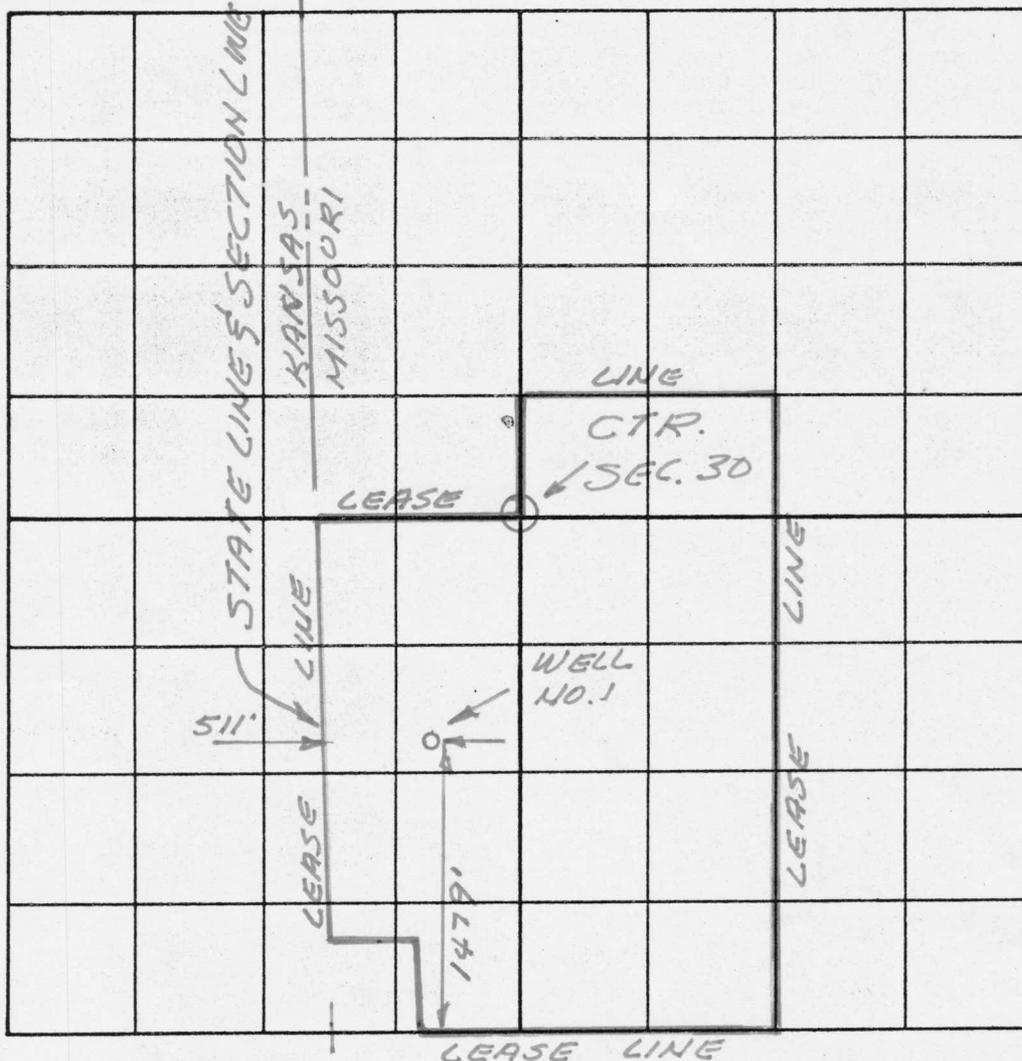
Form OGC-4

Owner: LANDMARK PRODUCTION, INC.

JAMES B. CHAFFIN, SR.

CASS

Lease Name: _____ County: _____
1479 feet from SOUTH line and 511 feet from WEST line of Sec. 30, Twp. 44 N, Range 33
 (N) - (S) (E) - (W)



SCALE
1" = 1000'

REMARKS: _____

WELL NO. 1

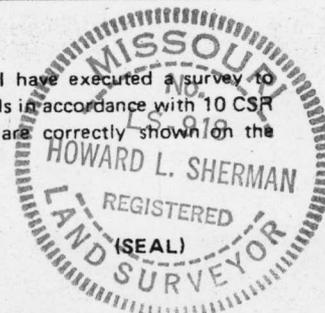
INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50-2.030 for survey requirements.

This is to Certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

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Howard L. Sherman 918
Registered Land Surveyor Number

CHAFFIN WELL #1

There is 28' of Upper Knobtown sandstone and the Hepler is only 7'; neither formation seemed to be petroliferous. The Englevale, about 14 thick, is apparently gas bearing. The Squirrel sand is not present. The Bartlesville and an unidentified sand body immediately above the Bartlesville have an apparent chance for gas production.

JAMES S CHAFFIN
S46 30 T44N R33 W
1479 FSL / 811 FWL
EIV 080



Name of Lease: James B. Chaffin Number Acres in Lease: 158.65 Location: W 1/2, Sec 30-T 44N-R33W

Date of Report: February 24, 1981 County: Cass State: Missouri

Well No: 1 Well Location: Sec 30 T44N-R33W
1,479' fr. S line
511' fr. W line Company: Odyssey Joint Venture

Surface Elevation: 1,080' Casing Record:
120.0', 7" J55 to 119.8'
871', 4-1/2" with 8" float shoe
10.5 lb. production casing

Date Spudded: February 16, 1981 Cementing Record:
42 Sacks, Portland A
120 Sacks, Portland A

Date Completed or Abandoned: Hole Size:
9-7/8" to 124'
6-1/4" to 890'

Total Depth: 910' Permanent Datum G. L. Elev. K. B. --
Log Measured from G. L. D. F. --
Drill Measured from G. L. G. L. 1.080'

Sample and Core Descriptions

<u>Formation</u>	<u>Depth(s)</u>	<u>Unit Descriptions</u>
	0-5	soil, clays, brown; chert chips
	5-10	clay, light brown to tan, silty
	10-15	clay, light brown, sandy; few chert (brown) chips
	15-25	shale, blue-gray, soft; carbon specks
	25-30	shale, gray, sandy; showings of limestone, tan, dense 20%
	30-40	limestone, light gray to tannish, dense; possibly fossiliferous/cherty?
	40-45	shale, dark gray, very sandy, carbonaceous

Chaffin - Well No. 1

45-50	shale, dark gray, very sandy, carbonaceous; minor sandstone, very fine-grained, highly carbonaceous
50-55	shale, dark gray, very sandy, carbonaceous; showings of coal, black, fissile
55-60	shale, light gray, soft, sandy; coal, black 5%
60-75	shale, light gray to blue-gray, sandy, finely micaceous
75-80	shale, gray to light gray, sandy; limestone, tannish-buff, very fine-grained, 20%; coal, black, soft, 10%
80-100	shale, gray, sandy, flakey
100-105	shale, gray, sandy; sandstone, light gray to white, very fine-grained (shale and sandstone possibly variegated)
105-115	sandstone, light gray, very fine-grained, very thinly bedded, carbonaceous
115-125	shale, light gray, sandy
125-130	cement and limestone, tan, dense, lithic
130-135	limestone, tan, fragments with shale, light gray
135-145	shale, dark gray, fissile, sandy; shale, light gray, calcareous
145-150	limestone, dark gray, dense, cherty; shale, gray, sandy 10%
150-160	limestone, dark gray, dense, cherty, fossiliferous, argillaceous in part
160-175	limestone, tan, dense, cherty, slight staining
175-180	shale, gray, fissile; limestone, tan 40%, slight staining
180-185	shale, black, hard, argillaceous

Chaffin - Well No. 1

185-187	shale, gray; limestone, gray, crystalline
187-197	<u>Core #1</u> - Cut 10'. Received 10'. Limestone, light gray, coarsely-grained; fragments of chert and sandstone in limestone matrix; massive. Unit as a whole appears to be dry, porous and permeable.
197-205	limestone, light tan-buff, dense to fine crystalline
205-210	shale, black, fissile
210-225	limestone, light gray, fine crystalline; stain-dead oil
225-230	shale, dark gray, hard, fissile; shale, light gray, sandy, soft
230-235	limestone, tan, dense; shale, light gray, sandy
235-250	shale, dark gray, sandy; shale, light gray, soft
250-275	sandstone, very fine, rounded grains, highly carbonaceous
275-350	shale; shaley sandstone, gray
350-355	shale, gray, with trace limestone stringer
355-360	limestone
360-365	black coal with dark gray shale
365-385	shale, dark gray, sandy
385-390	coal, black, hard; shale, dark gray, sandy
390-395	shale, dark gray, sandy; coal, black 5%
395-410	shale, gray, sandy; shale, dark gray and sandy
410-415	shale, gray-green, soft
415-420	limestone, light tan, saccharoidal; fossiliferous; shale, gray-green

Chaffin - Well No. 1

420-425	shale, gray; limestone, brown, dense, fossiliferous
425-445	limestone, brown; tan, mottled, dense, fossiliferous, minor shale, dark
445-460	shale, gray, sandy
460-465	limestone, brown, gray-brown, fine-grained
465-475	sandstone, gray, very fine-grained; shale, black, hard, fissile
475-480	limestone, tan, dense, highly fossiliferous; shale, gray, soft, 40%
480-490	limestone, tan to light tan, dense
490-495	shale, gray; limestone, tan, dense
495-500	shale, gray, sandy; minor show coal
500-505	shale, gray-dark gray, black, hard
505-510	limestone, tan-brown, dense with some gray shale 20%
510-515	limestone, tan-brown, dense with some interbedded coal, black
515-520	shale, sandy, gray; coal, black
520-535	limestone, tan-light gray, dense, fine crystalline
535-590	shale, gray
590-600	<u>Core #2</u> - Cut 10'. Received 9.8'. 590-590.8 Shale. 590.8-592 Shaley, lime 2 fracks bleeding oil, brown, calcareous. Acid released oil. 592-599.8 Shale, dark gray, sandy. Oil is in zone of fractures as well as in the pores of the rock. Good gas flowing from hole.

Chaffin - Well No. 1

600-610 Core #3 - Cut 10'. Received 10'.
600-600.8 Shale.
600.8-601.4 Sand.
601.4-607.0 Shale with coalified near base.
607-610 Shale, greenish-blue, appears phosphatic, calcareous.

610-630 sandstone, gray, shaley, calcareous
630-635 limestone, with trace coal, black, fissile
635-670 shale, gray with trace sandy shale
670-685 sandstone, gray
685-725 shale, dark gray, blocky
725-730 sandstone, gray, shaley, fine-grained with dark gray shale
730 745 sandstone, gray, fine-grained, shaley
745-775 shale, gray, sandy
775-810 sandstone, gray, fine-grained, poor sorting
810-820 shale, gray, blocky, with trace sandstone
820-845 sandstone, gray, shaley
845-880 shale, black, blocky
880-885 shale, as above with trace limestone, brown, dense
885-890 shale, as above with trace cherty limestone
890-910 missing

T. D.