



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI OIL AND GAS COUNCIL

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

NOV 16 1993

APPLICATION TO DRILL     DEEPEN     PLUG BACK     FOR AN OIL WELL     OR GAS WELL

NAME OF COMPANY OR OPERATOR: PENSE BROTHERS DRILLING CO., INC.  
 ADDRESS: P.O. Box 551 CITY: FREDERICKTOWN  
 DATE: DEVELOPMENTAL-10/02/93  
 THIS APP. DATE: 11/11/93  
 STATE: MO ZIP CODE: 63645

DESCRIPTION OF WELL AND LEASE  
 NAME OF LEASE: MARKHAM WELL NUMBER: 3 ELEVATION (GROUND): 955' (TOP)  
 WELL LOCATION: (GIVE FOOTAGE FROM SECTION LINE)

1150 FT. FROM (S) SECTION LINE 747 FEET FROM (E) SECTION LINE  
 WELL LOCATION SECTION TOWNSHIP RANGE COUNTY  
NW/4 SE/4 SE/4 5 44N 33W CASS

NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE 167 FEET  
 DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED - FOR WELL ON THE SAME LEASE 253.3 FEET

PROPOSED DEPTH: 325' DRILLING CONTRACTOR, NAME AND ADDRESS: PENSE BRAS. DRG. CO., INC., Box 551, FREDERICKTOWN, MO 63645  
 ROTARY OR CABLE TOOLS: ROTARY (AIR) APPROX. DATE WORK WILL START: DEVELOPMENTAL APP 10/02/93  
 COMMENCED: 10/03/93  
 NUMBER OF ACRES IN LEASE: 60 NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR: 2  
 NUMBER OF ABANDONED WELLS ON LEASE: 0

IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?  
 NAME: \_\_\_\_\_ ADDRESS: N/A  
 NO. OF WELLS: PRODUCING \_\_\_\_\_ INJECTION \_\_\_\_\_ INACTIVE 1 ABANDONED \_\_\_\_\_

STATUS OF BOND:  SINGLE WELL AMOUNT \$ \_\_\_\_\_  BLANKET BOND AMOUNT \$ 20,000.00  ON FILE  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.)  
N/A

PROPOSED CASING PROGRAM				APPROVED CASING - TO BE FILLED IN BY STATE GEOLOGIST			
AMOUNT	SIZE	WT/FT	CEM.	AMOUNT	SIZE	WT/FT	CEM.
<u>50'</u>	<u>7"</u>	<u>17LB.</u>	<u>TO SURF</u>				
<u>TD TO SURF</u>	<u>4 1/2"</u>	<u>10.5 LB</u>	<u>TO SURF</u>				

I, the undersigned, state that I am the ASSISTANT V. P. of the PENSE BRAS. DRG. CO., INC. (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: B. E. Blancey DATE: 11/12/93  
B. E. BLANCEY

PERMIT NUMBER: #20571  
 APPROVAL DATE: 10/2/93 Per verbal communication  
 APPROVED BY: James H. Kelly  
 DRILLER'S LOG REQUIRED     E-LOGS REQUIRED IF RUN  
 CORE ANALYSIS REQUIRED IF RUN     DRILL STEM TEST INFO. REQUIRED IF RUN  
 SAMPLES REQUIRED  
 SAMPLES NOT REQUIRED  
 WATER SAMPLES REQUIRED AT \_\_\_\_\_

NOTE: THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION

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.

I, \_\_\_\_\_ of the \_\_\_\_\_ Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.

DRILLER'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI OIL AND GAS COUNCIL  
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

RECEIVED

Form OGC-5

NOV 17 1993

NEW WELL  WORKOVER  DEEPEN  PLUG BACK  INJECTION  SAME RESERVOIR  DIFFERENT RESERVOIR  OIL  GAS  DRY

OWNER <i>PENSE BROTHERS DRILLING CO., INC.</i>		ADDRESS <i>P.O. Box 551, FREDERICKTOWN, MO 63645</i>			
LEASE NAME <i>J. MARKHAM ET UX</i>		WELL NUMBER <i>DEVELOPMENTAL #3</i>			
LOCATION <i>NW/4 SE/4 SE/4</i>		SEC. TWP. AND RANGE OR BLOCK AND SURVEY <i>5 T 44N R 33W</i>			
COUNTY <i>CASS</i>	PERMIT NUMBER (OGC-3 OR OGC-31) <i>20571 JCT DEVELOPMENTAL APP. 10/02/93 No to be assigned.</i>				
DATE SPUNDED <i>10/03/93</i>	DATE TOTAL DEPTH REACHED <i>10/04/93</i>	DATE COMPLETED READY TO PRODUCE OR INJECT <i>10/15/93</i>	ELEVATION (DF, RKR, RT, OR Gr.) FEET <i>955 GR. (TAD)</i>	ELEVATION OF CASING HD. FLANGE FEET <i>956' 9"</i>	
TOTAL DEPTH <i>315'</i>	PLUG BACK TOTAL DEPTH <i>N/A</i>				
PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION <i>260' THRU 276'</i>		ROTARY TOOLS USED (INTERVAL) <i>(AIR)</i>		CABLE TOOLS USED (INTERVAL)	
WAS THIS WELL DIRECTIONALLY DRILLED? <i>N/A</i>		WAS DIRECTIONAL SURVEY MADE? <i>N/A</i>		WAS COPY OF DIRECTIONAL SURVEY FILED? <i>N/A</i>	
TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST) <i>GAMMA - NEUTRAL</i>				DATE FILED <i>11/18/93</i>	

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)						
PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
<i>SURFACE</i>	<i>9 5/8"</i>	<i>7"</i>	<i>17 LB.</i>	<i>52' 05"</i>	<i>4</i>	<i>NIL</i>
<i>PRODUCTION CASING</i>	<i>6 1/4"</i>	<i>4 1/2"</i>	<i>10.5 LB.</i>	<i>303'</i>	<i>50</i>	<i>NIL</i>

TUBING RECORD

LINER RECORD

SIZE IN.	DEPTH SET FEET	PACKER SET AT FEET	SIZE INCH	TOP FEET	BOTTOM FEET	SACKS CEMENT	SCREEN FEET
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PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FEET	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
<i>2</i>	<i>3 1/8" DML-HSC</i>	<i>260' THRU 276'</i>	<i>200 GAL 15% HCl ACID</i>	<i>260' THRU 276'</i>
			<i>1500 10 X 20 SAND</i>	<i>260' THRU 276'</i>
			<i>1000 8 X 12 SAND</i>	<i>260' THRU 276'</i>

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION <i>10/15/93</i>		PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING - IF PUMPING, SHOW SIZE AND TYPE OF PUMP) <i>PUMPING - 1 1/2" X 4' PUMP</i>				
DATE OF TEST <i>10/16/93</i>	HOURS TESTED <i>24</i>	CHOKE SIZE <i>N/A</i>	OIL PRODUCED DURING TEST <i>8</i> bbls.	GAS PRODUCED DURING TEST <i>4</i> MCF	WATER PRODUCED DURING TEST <i>4</i> bbls.	OIL GRAVITY <i>33.4</i> API (CORR.)
TUBING PRESSURE <i>NIL</i>	CASING PRESSURE <i>TSTM</i>	CALC'D RATE OF PRODUCTION PER 24 HOURS		OIL <i>8</i> bbls.	GAS <i>4</i> MCF	WATER <i>4</i> bbls.

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)  
*VENTED*

METHOD OF DISPOSAL OF MUD PIT CONTENTS

*CUTTINGS ONLY - NO ADDITIVES - TO BE OVERFLOWED WITH TOPSOIL*

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE *ASS'T. VICE PRESIDENT* OF THE *PENSE BROS DRG. CO., INC.* 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.

DATE <i>11/12/93</i>	SIGNATURE <i>B. E. BLANCETT - B. E. BLANCETT</i>
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**INSTRUCTIONS:** ATTACH DRILLERS LOG OR OTHER ACCEPTABLE LOG OF WELL.

\* SHOW ALL IMPORTANT ZONES OF POROSITY, DETAIL OF ALL CORES, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

**DETAIL OF FORMATIONS PENETRATED**

FORMATION	TOP	BOTTOM	DESCRIPTION (SEE * ABOVE)
Pennsylvanian	0	7	TOPSOIL TO CLAY
	7	29	SHALE, GREY TO LIGHT GREY
	29	63	LIMESTONE, GREY TO LIGHT BROWN
	63	72	SHALE, GREY TO DARK GREY
	72	88	LIMESTONE, SANDY TO SHALY INTERFACES
	88	96	SHALE + CONGLOMERATE, SOME COAL
	96	104	LIMESTONE, TAN TO WHITE
	104	107	SHALE, GREY TO LIGHT GREY
	107	111	LIMESTONE, BUFF
	111	248	SHALY, SOME SANDY, MOSTLY CALCAREOUS
	248	255	SHALE, DARK GREY TO BLACK
	255	280	SANDSTONE WITH SHALY TO CALCAREOUS STREAKS - Best oil shows: 262' to 264', 267' to 269', 270' to 275'
	280	315	SHALE, GREY TO BLUE GREY TD - 315'

TELEPHONE OR CONFERENCE RECORD

DATE 12-15-93

TELEPHONE CALL				CONFERENCE	
<input checked="" type="checkbox"/> INCOMING	<input type="checkbox"/> LOCAL	<input type="checkbox"/> OUTGOING	<input type="checkbox"/> LONG DISTANCE	<input type="checkbox"/> FIELD	<input type="checkbox"/> OFFICE

SUBJECT

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PERSONS INVOLVED	
NAME Bill Blawett	ADDRESS Pense Bros Drilling
NAME Evan Kifer	ADDRESS DNR/DGLS
NAME	ADDRESS

SUMMARY OF CONVERSATION

Markham #3 Survey plat (Page 1 of 2) has an error. Well #2 in place should be well #1 in place. Markham #2 was cancelled. Wells are numbered correctly on the 2nd page.

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ACTION TAKEN

Mr. Blawett's error was noted on the original plat on file.

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FINAL RESULTS

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ROUTE TO

<input type="checkbox"/> PLEASE ANSWER THIS	<input type="checkbox"/> REVIEW & COMMENT	<input type="checkbox"/> FOR YOUR INFORMATION
<input type="checkbox"/> PREPARE REPLY FOR MY SIGNATURE	<input type="checkbox"/> NECESSARY ACTION	<input checked="" type="checkbox"/> FILE

ADDITIONAL REMARKS

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SIGNATURE  
Evan A. Kifer

W. C. LETHCHO  
 COUNTY ENGINEER & SURVEYOR  
 Bates County Court House  
 BUTLER, MO. 64730  
 Phone 679-4031

NOVEMBER 11 1993

NORTH



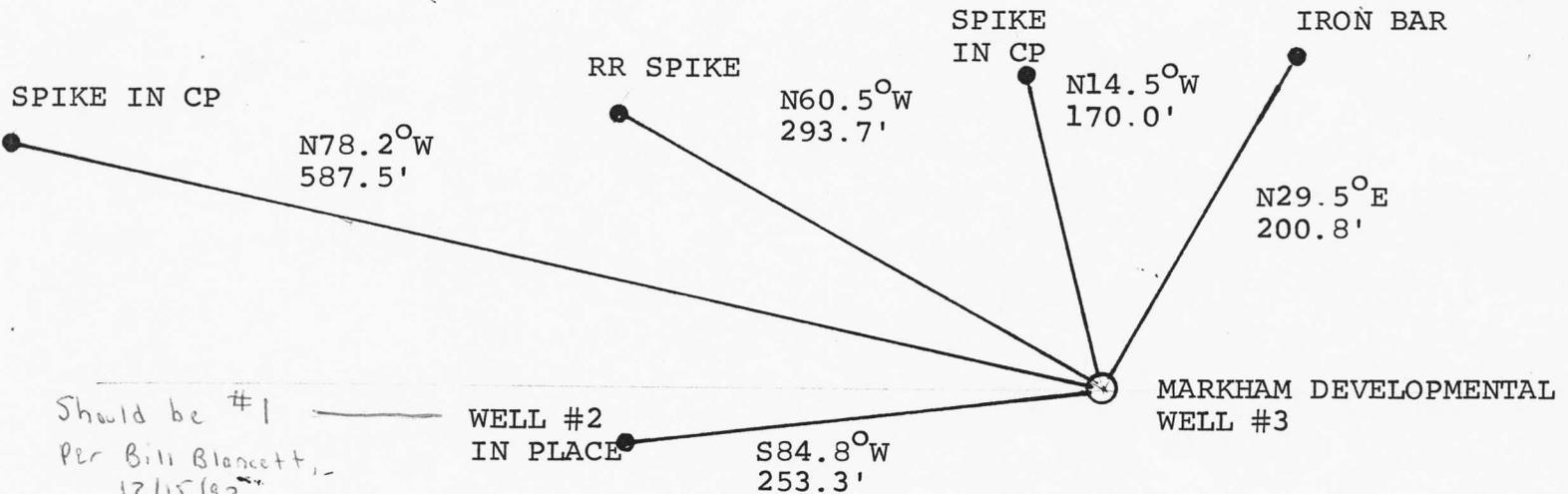
FOR: PENSE BROTHERS DRILLING CO. INC  
 ADRIAN MO 64720

WELL REFERENCE TIES IN THE SE $\frac{1}{4}$ SE $\frac{1}{4}$  5-44-33  
 IN CASS COUNTY MISSOURI.

THIS IS TO CERTIFY THE REFERENCE TIES SHOWN ARE  
 IN ACCORDANCE WITH CURRENT MINIMUM STANDARDS.

1"=100'  
 MAG BRGS  
 8° EAST DECL.

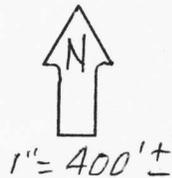
*William C. Lethcho 11-11-93*  
 WILLIAM C. LETHCHO LS-1539



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MO Oil & Gas Council

WELL LOCATION MAP  
CASS CO TAX MAP  
16-03



CO. ROAD

Sheet 2 of 2

*William C. Lethcho*

WILLIAM C. LETHCHO LS-1539  
BATES COUNTY SURVEYOR

RECEIVED  
NOV 17 1993

MO Oil & Gas Council

40.00 AC

MCMANON

3

1

2

8

2

#3

10

747 ±

DEVELOPMENTAL  
WELL

2.012  
19.65 AC

2.014  
18.75 AC

1150 ±

MARKHAM

Public Road

SEC LINE

T44 R33