



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

APPLICATION TO DRILL DEEPE: PLUG BACK FOR AN OIL WELL OR GAS WELL

NAME OF COMPANY OR OPERATOR: PENSE BROTHERS DRILLING CO., INC. DATE: 4/02/94
ADDRESS: P.O. Box 551 CITY: FREDERICKTOWN STATE: MO ZIP CODE: 63645

DESCRIPTION OF WELL AND LEASE
NAME OF LEASE: MC MAHON WELL NUMBER: 4 ELEVATION (GROUND): 938 (TOPO)
WELL LOCATION: 1820 FT. FROM (S) SECTION LINE 1050 FEET FROM (E) SECTION LINE
(GIVE FOOTAGE FROM SECTION LINE)

WELL LOCATION: SECTION 5 TOWNSHIP 43N RANGE 33W COUNTY CASS
NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE: 270 FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED - FOR WELL ON THE SAME LEASE: 332.4 FEET

PROPOSED DEPTH: 300' DRILLING CONTRACTOR, NAME AND ADDRESS: PENSE BRDS. DRG. CO., INC. BOX 551, FREDERICKTOWN, MO 63645 ROTARY OR CABLE TOOLS: ROTARY (A/B) APPROX DATE WORK WILL START: ON PERMIT
NUMBER OF ACRES IN LEASE: 40 NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR: 4
NUMBER OF ABANDONED WELLS ON LEASE: 0

IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?
NAME: N/A NO OF WELLS PRODUCING: 2
ADDRESS: INJECTION: INACTIVE: 2
ABANDONED: _____

STATUS OF BOND: SINGLE WELL AMOUNT \$ BLANKET BOND AMOUNT \$ 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.
50'	7"	19.5 LB	TO SURF	"	"	"	"
295'	4 1/2"	9.5 LB	TO SURF	"	"	"	"

I, the undersigned, state that I am the ASSISTANT VICE PRESIDENT of the PENSE BRDS. 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. Blancett DATE: 4/02/94
B. E. BLANCETT

PERMIT NUMBER: #20575 APPROVAL DATE: 3/18/94 APPROVED BY: JAMES HOLLY WILLIAMS PER FAX

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.

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: APR 07 1994



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

Form OGC-5

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>WILLIAM R. McMAHON, ET UX</i>		WELL NUMBER <i>4</i>	
LOCATION <i>NE/4 SE/4</i>		SEC. TWP. AND RANGE OR BLOCK AND SURVEY <i>5, T 43N, R 33W</i>	
COUNTY <i>CASS</i>	PERMIT NUMBER (OGC-3 OR OGC-31) <i>20575</i>		
DATE SPUNDED <i>3/18/94</i>	DATE TOTAL DEPTH REACHED <i>3/20/94</i>	DATE COMPLETED READY TO PRODUCE OR INJECT <i>6/15/94</i>	ELEVATION (DF, RKR, RT, OR Gr) FEET <i>938 (TOPO)</i>
TOTAL DEPTH <i>305'</i>	PLUG BACK TOTAL DEPTH <i>N/A</i>	ELEVATION OF CASING HD. FLANGE <i>939.5</i>	FEET
PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION <i>243' THRU 253'</i>		ROTARY TOOLS USED (INTERVAL) <i>0' TO 305'</i>	CABLE TOOLS USED (INTERVAL) <i>N/A</i>
DRILLING FLUID USED <i>N/A</i>	WAS THIS WELL DIRECTIONALLY DRILLED? <i>N/A</i>	WAS COPY OF DIRECTIONAL SURVEY FILED? <i>N/A</i>	DATE FILED <i>N/A</i>
TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST) <i>GAMMA-NEUTRON</i>			DATE FILED <i>6/20/94</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>SURF CSG</i>	<i>8 5/8"</i>	<i>7"</i>	<i>19 LB.</i>	<i>49' 9"</i>	<i>4</i>	<i>N/A</i>
<i>PRDD CSG</i>	<i>6 1/4"</i>	<i>4 1/2"</i>	<i>9.5 LB.</i>	<i>289' 3"</i>	<i>52</i>	<i>N/A</i>

TUBING RECORD

LINER RECORD

SIZE	DEPTH SET	PACKER SET AT	SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
<i>2 3/8</i> IN.	<i>240</i> FEET	<i>N/A</i> FEET	<i>N/A</i> INCH	<i>N/A</i> FEET	<i>N/A</i> FEET	<i>N/A</i>	<i>N/A</i> FEET

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>243' THRU 253'</i>	<i>{ 250 GAL 15% HCL 1500 LB. 10/20 SAND 2000 LB 8/12 SAND }</i>	<i>243' THRU 253'</i>

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION <i>6/15/94</i>		PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING — IF PUMPING, SHOW SIZE AND TYPE OF PUMP) <i>P+P (1 1/2" x 4", ALL BRASS, 4 CUP (10) CUP HOLDDOWN TO 5/8" ROD.)</i>					
DATE OF TEST <i>6/15/94</i>	HOURS TESTED <i>24</i>	CHOKE SIZE <i>N/A</i>	OIL PRODUCED DURING TEST <i>10</i> bbls.	GAS PRODUCED DURING TEST <i>6</i> MCF	WATER PRODUCED DURING TEST <i>3</i> bbls.	OIL GRAVITY <i>33.4</i> API (CORR)	
TUBING PRESSURE <i>N/A</i>	CASING PRESSURE <i>69 LBS.</i>	CALCULATED RATE OF PRODUCTION PER 24 HOURS <i>10 BBLT</i>		OIL <i>10</i> bbls.	GAS <i>6</i> MCF	WATER <i>3</i> bbls.	
GAS OIL RATIO <i>600-1</i>							

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 OVERFILLED WITH TOPSOIL.

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE *ASST. V.P.* OF THE *PENSE BROTHERS DRILLING 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
JUN 27 1994
6/20/94

SIGNATURE
B.E. Blawett
B.E. BLAWETT

RECEIVED
JUN 22 1994

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)
Penn.	125'	135'	SILTSTONE TO SANDSTONE, FINE GRAINED TO SILTY, GRAY
	135'	235'	SHALE, DENSE TO SILTY, LIGHT GRAY TO BLUE GRAY
	235'	245'	SHALE, DARK GRAY TO BLACK, CONGLOMERATE OF SANDSTONE, CLAY, SHALE & COAL NEAR BASE.
	245'	255'	SANDSTONE, MEDIUM TO FINE GRAINED, CALCITIC, TAN TO LIGHT BROWN, GOOD FLUORESCENCE AND GAS/OIL CUT, OIL TO PIT WHILE DRILLING.
	255'	265'	SANDSTONE, FINE TO SOME MEDIUM GRAINED, SLIGHTLY CALCITIC, FAIR FLUORESCENCE, STAINING & CUT, FREE OIL STILL CONTINUING TO PIT WHILE DRILLING.
	265'	275'	SANDSTONE TO SILTSTONE, SLIGHTLY CALCITIC, SLIGHT FLUORESCENCE & CUT, SLIGHT FREE OIL TO PIT.
	275'	285'	SHALE TO LIMY SHALE, SLIGHT SILTSTONE STRATIFICATIONS, VERY SLIGHT FLUORESCENCE, CUT & GAS EMANATION.
	285'	295'	LIMESTONE, DENSE, GRAY TO SHALE NEAR BASE.
	295'	305'	SHALE, CLAY & COAL WITH UNDERCLAY AT BASE.
			305' TD

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

WELL REFERENCE TIES IN THE NORTHEAST QUARTER OF THE SOUTHEAST
QUARTER OF SECTION 5, TOWNSHIP 43 NORTH, RANGE 33 WEST OF THE
5TH PRINCIPAL MERIDIAN IN CASS COUNTY, MISSOURI.

FOR: PENSE BROTHERS DRILLING CO. INC.
ADRIAN, MO 64720
816-297-2701

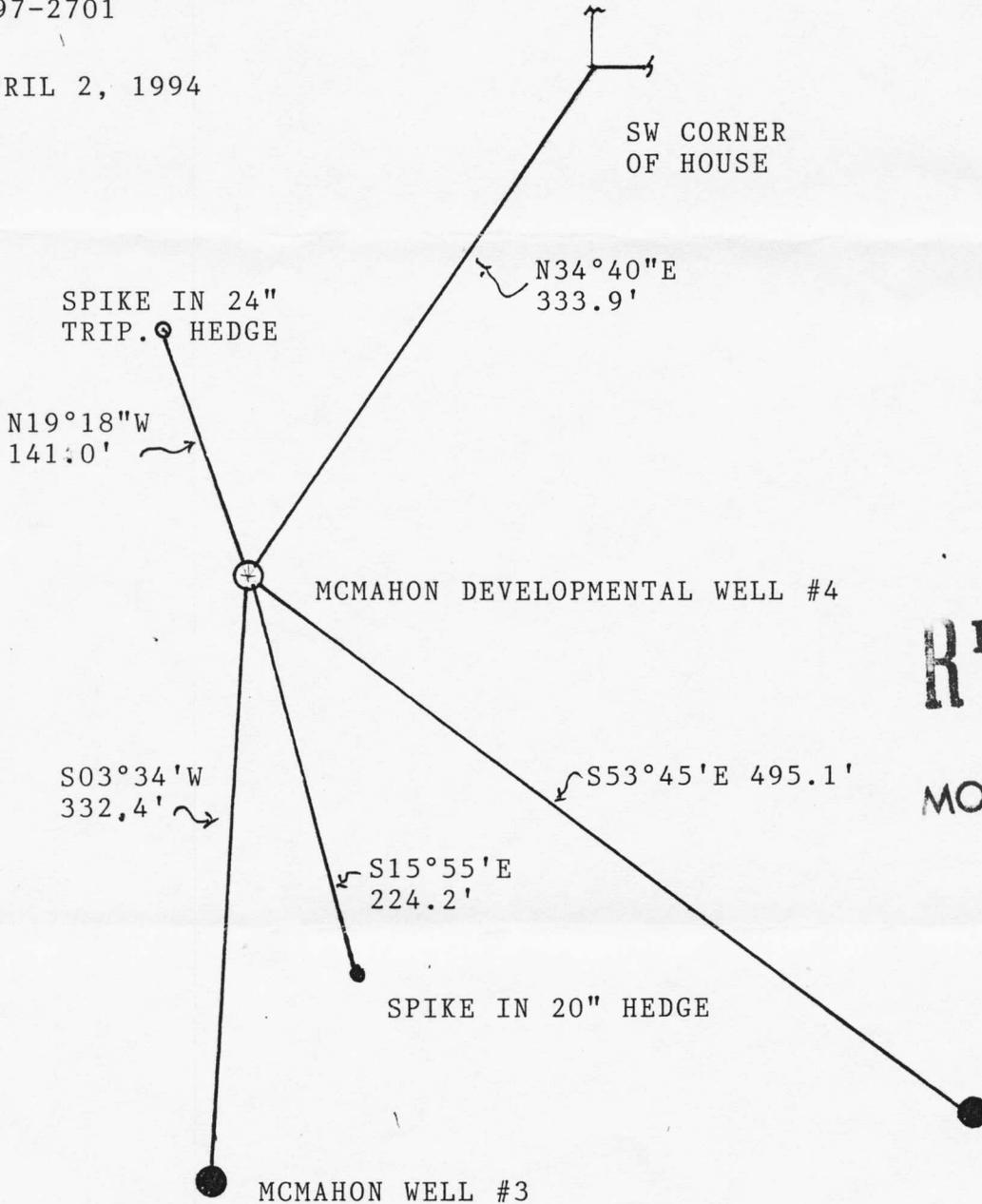
1"=100'



MAG. BRGS.
8° EAST DECL

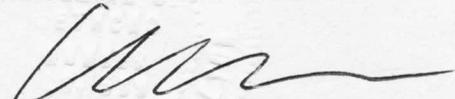
APRIL 2, 1994

SHEET 1 OF 2



RECEIVED
APR 07 1994
MO Oil & Gas Council

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


WILLIAM C. LETHCHO LS-1539

WELL LOCATION MAP
CASS COUNTY TAX MAP
16-03
SHEET 2 OF 2



1"=400'±

CO. ROAD

169 90

40.00 AC

DEV. WELL #4
McMAHON LSE.

1050'

WILLIAM C. LETHCHO
LS-1539

*\$71.05

662 38

662 38

662 38

632 38

7

8

9

10

2.011
19.65 AC

2.012
19.65 AC

2.013
18.75 AC

2.014
18.75 AC

RECEIVED
APR 07 1994

MO Oil & Gas Council

PIPELINE EASEMENT

MARKHAM LSE

1820'

662 80

662 80

632 80

632 80

5

4

T43N
R33W

7 AC (D)

2

8

9