

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR DNR - GEOL SURVEY DATE Sept 77

Bx 250 Rolla MO
Address City State

DESCRIPTION OF WELL AND LEASE

Name of lease ERDA TS Well number 32 Elevation (ground) 753

WELL LOCATION (give footage from section lines)
16 ft. from (S) sec. line 1124 ft. from (E) sec. line

WELL LOCATION Section 11 Township 31 Range 33 County BARTON

Nearest distance from proposed location to property or lease line: _____ feet
Distance from proposed location to nearest drilling, completed or applied - for well on the same lease: NA feet

Proposed depth: 200 Rotary or Cable tools Rotary (Air) Approx. date work will start _____

Number of acres in lease: _____ Number of wells on lease, including this well, completed in or drilling to this reservoir: _____
NA Number of abandoned wells on lease: _____

If lease, purchased with one or more wells drilled, from whom purchased: Name NA No. of Wells: producing _____
Address _____ inactive _____
abandoned _____

Status of Bond NA ON FILE
Single Well Amt. _____ Blanket Bond Amt. _____ 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.
STRAT TEST

Proposed casing program:				Approved casing - To be filled in by State Geologist			
amt.	size	wt./ft.	cem.	amt.	size	wt./ft.	cem.
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

I, the undersigned, state that I am the _____ of the _____ (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 _____

Permit Number: 20024
Approval Date: Sept 1977
Approved By: Wallace A. Hunt

SAMPLES REQUIRED
 SAMPLES NOT REQUIRED

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

WATER SAMPLES REQUIRED @: _____

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

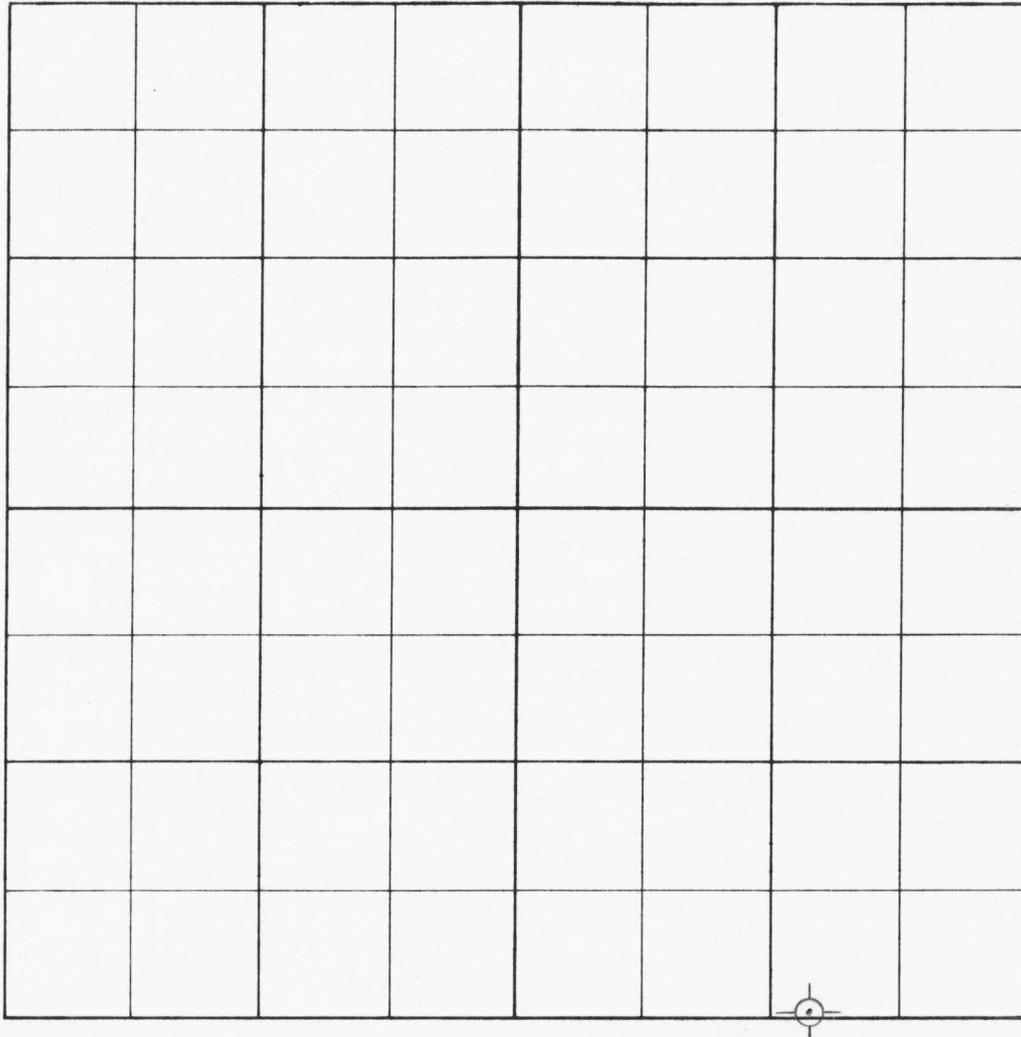
One will be returned. Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

WELL LOCATION PLAT

Owner: DNR - GEOL SURVEY

Lease Name: ERDA TS No. 32 County, BARTON

16 feet from (N) (S) line and 1124 feet from (E) (W) line of Sec. 11 Twp. 31 Range 33



SCALE
1" = 1000'

REMARKS: _____

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest lease and section lines, and from the nearest well on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well. Do not confuse survey lines with lease lines. See rule 7 - 3 (b) for survey requirements.

(SEAL)

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

Registered Land Surveyor

TEST BORING LOG

Project E. R. D. A. T. S.
Sec. 11, T. 31N., R. 33W.
 Address Township 31 N. Range 33 W
 City & State Mindemine, Missouri

Boring No. 32 Sheet 1 of 3
 Surface Elevation 753' Offset _____
 Date Started 8/25/77 Completed _____
 Driller _____ Rig _____

Abbreviations: A.O. - Auger Only R.B. - Rock Bit C.W. - Core Water
 H.A. - Hollow Auger S.S. - Split Spoon C.A. - Core Air
 W.B. - Wash Bore S.T. - Shelby Tube F.B. - Finger Bit

DEPTH		METHOD	PENETRATION RECORD		CORE RECOVERY	SAMPLE DESCRIPTION COLOR-MATERIAL-MOISTURE-CLAY CONSISTENCY SAND DENSITY
FROM	TO		POCKET PENETRO-METER	NO. OF BLOWS		
0.0'	5.0'	AH				Red brown silty clay, sandstone
5.0'	10.0'	AH				Red orange sandy silty clay
10.0'	15.0'	AH				Sandstone, Light brown
15.0'	20.0'	AH				Red light brown sandstone, dark gray shale
20.0'	25.0'	AH				Gray shale
25.0'	30.0'	AH				Gray shale w/siltstone
30.0'	35.0'	AH				Light gray siltstone
35.0'	40.0'	AH				Gray shale, w/siltstone
40.0'	45.0'	AH				Sandstone, gray shale & clay
45.0'	50.0'	AH				Gray shale, siltstone, coal at 49'6" to 50'
50.0'	55.0'	AH				Gray shale, siltstone, trace coal at 55'
55.0'	60.0'	AH				Light gray shale, siltstone
60.0'	65.0'	AH				Light gray shale, siltstone
65.0'	70.0'	AH				Same
70.0'	75.0'	AH				Light gray shale, & dark gray shale
75.0'	80.0'	AH				Sandy, silty, light gray shale

REMARKS: (Casing, Water Loss, Etc.)

Water Level

Time

Date

(Completion)

TEST BORING LOG

 Project E. R. D. A.

 Boring No. 32 Sheet 2 of 3

Surface Elevation _____ Offset _____

Address _____

 Date Started 8/25/77 Completed 8/30/77

City & State _____

Driller _____ Rig _____

Abbreviations: A.O. - Auger Only R.B. - Rock Bit C.W. - Core Water
 H.A. - Hollow Auger S.S. - Split Spoon C.A. - Core Air
 W.B. - Wash Bore S.T. - Shelby Tube F.B. - Finger Bit

DEPTH		METHOD	PENETRATION RECORD		CORE RECOVERY	SAMPLE DESCRIPTION COLOR-MATERIAL-MOISTURE-CLAY CONSISTENCY SAND DENSITY
FROM	TO		POCKET PENETRO-METER	NO. OF BLOWS		
80.0'	85.0'	AH				Light gray, dark gray sandstone and silt
85.0'	90.0'	AH				Same
90.0'	95.0'	AH				Same
95.0'	100.0'	AH				Light gray sandstone, coal at 100' about 6"
100.0'	105.0'	AH				underclay, Light gray sandstone, & black shale
105.0'	110.0'	AH				Black shale & light gray shale
110.0'	115.0'	AH				Black shale & gray sandstone
115.0'	120.0'	AH				Same
120.0'	125.0'	AH				Black shale
125.0'	130.0'	AH				Same
130.0'	135.0'	AH				Black shale w/layers of silt
135.0'	140.0'	AH				Same
140.0'	145.0'	AH				Layer gray & black shale w/silt
145.0'	150.0'	AH				Same
150.0'	155.0'	AH				Layer gray & black shale w/silt w/traces oil
155.0'	160.0'	AH				Sandstone, dark gray shale

REMARKS: (Casing, Water Loss, Etc.)

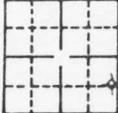
Water Level

Time

Date

_____ (Completion)

WILDCAT

STATE	FR & COMP MISSOURI	10-3-80	MAP NO.	S-T-R	11-31N-33W	S
OPER	DNR GEOLOGICAL SURVEY			SPOT	APP S/2 S/2 SE	INIT
	BOX 250, ROLLA, MO			CO	BARTON	S
WELL	32 ERDA - TS			ELEV	753 GR	FIN
CONTR	LAYNE-WESTERN			16' fs1, 1124' fe1, Sec		
FIELD	WILDCAT					
IP	D&A					
	API 24-011-20024					

SPUD 9-25-77, no surf csg

RTD 185, logs

D&A FIRST REPORTED AND COMPLETED 9-25-77

GR SPL TOPS:

MISS LM 180 + 573

RTD 185 + 568

TD IN MISS

COMP ISSUED 10-17-77



Petroleum Information Corporation

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