

this permit originally issued to Emery Energy, now owned by Town Oil Co.

Missouri Oil and Gas Council

Form OGC-3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

APPLICATION TO DRILL  DEEPEN  PLUG BACK

for an oil well  or gas well

NAME OF COMPANY OR OPERATOR Town Oil Co. DATE 12/6/85  
Route 4 Paola KS 66071  
Address City State

DESCRIPTION OF WELL AND LEASE

Name of lease Asjes Well number G-2 Elevation (ground) 1089

WELL LOCATION (give footage from section lines)  
1306.5 ft. from (N) (S) sec. line 1187.5 ft from (E) (W) sec. line

WELL LOCATION Section 4 Township 46N Range 33W County CASS

Nearest distance from proposed location to property or lease line: 165 feet  
Distance from proposed location to nearest drilling, completed or applied for well on the same lease: 810 feet

Proposed depth 680 Drilling contractor, name & address \_\_\_\_\_ Rotary or Cable Tools  Approx. date work will start see note

Number of acres in lease 110 Number of wells on lease, including this well, completed in or drilling to this reservoir: \_\_\_\_\_  
Number of abandoned wells on lease: \_\_\_\_\_

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

Status of Bond Single Well  Amt. \_\_\_\_\_ Blanket Bond  Amt. 20,000  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.

Proposed casing program				Approved casing -- To be filled in by State Geologist			
amt.	size	wt/ft	cem.	amt.	size	wt/ft	cem.
<u>20'</u>	<u>7"</u>	<u>30#</u>	<u>no</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>660'</u>	<u>2 3/8</u>	<u>4.5</u>	<u>yes</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

I, the undersigned, state that I am the Partner of the Town Oil (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 Lester Town

Permit Number: 20180

Approval Date: 12/6/85

Approved By: Wallace B. Hunt BWN

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 for driller's signature

- Drillers log required
- E-logs required if run
- Core analysis required if run
- Drill stem test info. required if run
- Samples required
- Samples not required

RECEIVED  
DEC 16 1985

WATER SAMPLES REQUIRED @

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.

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL  DEEPEN  PLUG BACK

NAME OF COMPANY OR OPERATOR Emery Energy, Inc DATE 4-16-81  
R. R. 1 Box 390 Osawatomie, Kansas 66064  
 Address City State

DESCRIPTION OF WELL AND LEASE			
Name of lease <b>Asjes, Everet</b>	Well number <b>G-2</b>	Elevation (ground) <b>1089</b>	
WELL LOCATION (give footage from section lines) <b>1306.5</b> ft. from (N) <input checked="" type="checkbox"/> sec. line <b>1187.5</b> ft. from (E) <input checked="" type="checkbox"/> sec. line			
WELL LOCATION Section <u>4</u> Township <u>46</u> Range <u>33</u>			County <b>Cass</b>
Nearest distance from proposed location to property or lease line: <b>1187.5</b> <sup>165</sup> feet		Distance from proposed location to nearest drilling, completed or applied - for well on the same lease: <b>810</b> feet	
Proposed depth: <b>680</b>	Rotary or Cable tools <b>Rotary</b>	Approx. date work will start <b>4-20-81</b>	
Number of acres in lease: <b>110</b>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <b>10</b> Number of abandoned wells on lease: <b>0</b>		
If lease, purchased with one or more wells drilled, from whom purchased: Name <b>McGowan Drilling</b> Address <b>Mound City, Kansas</b>		No. of Wells: producing <b>1</b> inactive <b>0</b> abandoned <b>0</b>	
Status of Bond Single Well <input type="checkbox"/> Amt. _____ Blanket Bond <input checked="" type="checkbox"/> Amt. <b>20,000</b> <span style="float: right;"><input checked="" type="checkbox"/> ON FILE <input type="checkbox"/> ATTACHED</span>			
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>20'</u>	size <u>7"</u>	wt./ft. <u>30#</u>	cem. <u>no</u>
<u>660</u>	<u>2-3/8</u>	<u>4.5</u>	<u>yes</u>
I, the undersigned, state that I am the <b>V-President</b> of the <b>Emery Energy, Inc.</b> (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>Devon M. Hurst</u>			

Permit Number 20180  
 Approval Date: 5/5/81  
 Approved By: Les Wallace B. Howe

SAMPLES REQUIRED  
 SAMPLES NOT REQUIRED

RECEIVED

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 for driller's signature

APR 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.

W

MISSOURI OIL AND GAS COUNCIL

Form OGC-5

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

New Well  Work-Over  Deepen  Plug Back  Same Reservoir  Different Reservoir  Oil  Gas  Dry

Owner <b>Emery Energy</b>		Address <b>RR1 Box 390 Osawatomie, Mo 66064</b>		
Lease Name <b>Asjes</b>		Well Number <b>G-2</b>		
Location <b>1306.5 FNSL + 1187.5 FESL</b>		Sec. - TWP-Range or Block & Survey <b>4 46N 33W</b>		
County <b>CASS</b>	Permit number (OGC3 number) <b>20180</b>			
Date spudded <b>11-11-81</b>	Date total depth reached <b>11-12-81</b>	Date completed, ready to produce <b>11-14-81</b>	Elevation (DF, RKR, RT or Gr.) feet	Elevation of casing hd. flange feet <b>Same as surface</b>
Total depth <b>669.4</b>	P. B. T. D. <b>663.9</b>			
Producing interval (s) for this completion		Rotary tools used (interval) From <b>0</b> to <b>TD</b> Drilling Fluid used <b>Water &amp; Air</b>	Cable tools used (interval) From <b>None</b> to	
Was this well directionally drilled? <b>NO</b>	Was directional survey made? <b>NO</b>	Was copy of directional survey filed? <b>NO</b>	Date filed	
Type of electrical or other logs run (list logs filed with the State Geologist)			Date filed <b>4/5/82</b>	

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	Amt pulled
Surface	9"	6 7/8"		20'		
Production	5 1/4"	2"		670'	87 + 4 Bag	

TUBING RECORD

LINER RECORD

Size in.	Depth set	Packer set at	Size in.	Top	Bottom	Sacks cement	Screen (ft.)
1	476.9 ft.	464 ft.		N/A ft	N/A ft	N/A	N/A

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
	1 1/2" Glasjots	469-470-471-	Water Gel- 2	clay - stab. - 10
		472-473-476-	sand 20-40 - 10	Sand - 8-12 - 10
		477-478	sand 10-20 - 10	Salt - 1

INITIAL PRODUCTION

Date of first production <b>8-15-82</b>	Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump.) <b>Pumping See Monthly Production Report #5 Churchill 1 1/2 x 4'</b>					
Date of test <b>None</b>	Hrs. tested <b>Na</b>	Choke size <b>Na</b>	Oil prod. during test <b>Na</b> bbls.	Gas prod. during test <b>Na</b> MCF	Water prod. during test <b>Na</b> bbls.	Oil gravity <b>23</b> API (Corr.)
Tubing pressure <b>0</b>	Casing pressure <b>0</b>	Cal'd rate of Production per 24 hr.	Oil <b>1</b> bbls.	Gas <b>0</b> MCF	Water <b>5</b> bbls.	Gas-oil ratio <b>0</b>

Disposition of gas (state whether vented, used for fuel or sold): **vented**

Method of disposal of mud pit contents: **Hauled away**

CERTIFICATE: I, the undersigned, state that I am the **V-Pres** of the **Emery Energy** (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 herein are true, correct and complete to the best of my knowledge.

**Dwain M. Hunt**  
Signature

RECEIVED

APR 22 1982

MO. OIL & GAS COUNCIL

RECEIVED

MAY 03 1982

MO. OIL & GAS COUNCIL

RECEIVED

APR 12 1982

MO. OIL & GAS COUNCIL

0-8 soil  
0-15 shale  
15-62 lime  
62-92 shale  
92-102 lime  
102-130 shale  
130-135 lime  
135-138 carb shale  
138-176 shale  
176-180 lime  
180-186 shale  
186-218 lime  
218-222 carb shale  
222-245 lime  
245-249 carb shale  
249-260 lime (hortha)  
260-263- shale  
263-268- lime  
268-302 shale  
302-340 sandy shale  
340-361 shale  
361-374 sand  
374-398 shale  
398-403 sand  
403-424 shale  
424-429 lime  
429-444 shale  
444-449 lime  
449-452 carb shale  
452-456 lime  
456-460 carb shale  
460-469 lime  
469-480 sand  
480-496 shale  
496-500 lime  
500-503 carb shale  
503-510 lime  
510-516 sand  
516-604 shale  
604-608 sand  
608-614 shale  
614-618 sand  
618-625 shale  
625-629 sand  
629-680 shale TD

Volume 86

# Short-Cuts

## TANK CAPACITY

BBL. (42 gal.) equals  $D^2 \times H \times .79$   
D equals diameter in feet  
H equals height in feet

## BARRELS PER DAY

gals. per minute  $\times 144 =$  BPD

HP equals BPH  $\times .001736$

BPH equals PSI  $\times .0008$

PSI equals Square Inch

## FIGURE PUMP DRIVES

Diameter of Pump Shaft

Diameter of Engine Shaft

SPM = Strokes per Minute

RPM = Engine Speed

R = Gear Box Ratio

C = Shaft Center Distance

D = RPMxd over SPM

d = SPMxRxR over RPM

SPM = RPMxD over D

R = RPMxD over SPM

BELT LENGTH =  $2C + \frac{\pi(D+d)}{2}$

\*Need these to figure belt length

TO FIGURE AMPS =  $\frac{WATTS}{746}$

VOLETS =  $\frac{WATTS}{1.36}$

146 WATTS equal 1 HP

# Log Book

## MINNIE OIL CO

Route 4

Paola, Kansas 66071

913-294-2125

2-9-2

RECEIVED

MAY 22 1989

MO. Oil & Gas Council  
Economic Geology

21138

Thickness of Strata	Formation	Total Depth	Remarks
0-7	Soft shale	7	
11	Clay	18	Soft
11	S shale	29	
13	Shale	42	
9	S shale	51	
2	Shale	53	
4	shale	57	
8	shale	65	
5	S shale	70	
12	shale	82	
7	S shale	89	
19	shale	108	
5	shale	113	
		115	
4	shale	119	
7	shale	126	Hard
7	shale	133	
		136	
24	S shale	160	
5	Dark shale	165	
65	S shale	230	
10	Dark shale	240	
15	S shale	255	green
4	shale	259	
7	S shale	266	
8	S shale	274	Red Bed

Thickness of Strata	Formation	Total Depth	Remarks
1	Sand	274	LT Brown - L.Mey
6	Sand	280	LT Brown - Garland
3.5	Sandy lime	287.5	White
3	Sand	288.5	DK Br No Stone
Per 1.5 Sand		288	good oil show
Per 5 Sand		293	V-good oil show
Per 1 Sand		294	Broken shale
Per 4.5 Sand		298.5	V-good oil show
1 Sand		299.5	LT oil show DK gray
Per 5.5 Sand		305	V-V good oil show
1 Sand shale		306	LT oil show
3 Sand		309	V-good oil show
2 Sand shale		311	good oil show
1 Sand shale		312	White sand
1 Limestone		314	Brown
3 shale		317	
5 shale		322	
5 shale		327	34
8 lime		335	34
11 shale		349	34
5 shale		354	
1 shale & slate		360	
			1262.00
	2 sack cement	-2.5	12.00
	1 1/2 in	4"	
	1 in	4"	25.00
	1 1/2 in cement		75.00
	rig time		1372.00
			1447.00

CASING AND TUBING MEASUREMENTS

Farm: \_\_\_\_\_ County \_\_\_\_\_  
 State: Well No. \_\_\_\_\_  
 Elevation \_\_\_\_\_  
 Commenced Spuding \_\_\_\_\_  
 Finished Drilling \_\_\_\_\_  
 Driller's Name \_\_\_\_\_  
 Driller's Name \_\_\_\_\_  
 Driller's Name \_\_\_\_\_  
 Tool Dresser's Name \_\_\_\_\_  
 Tool Dresser's Name \_\_\_\_\_  
 Tool Dresser's Name \_\_\_\_\_  
 Contractor's Name \_\_\_\_\_

(Section) \_\_\_\_\_ (Township) \_\_\_\_\_ (Range) \_\_\_\_\_  
 Distance from \_\_\_\_\_ line, \_\_\_\_\_ ft.  
 Distance from \_\_\_\_\_ line, \_\_\_\_\_ ft.

CASING AND TUBING RECORD

10" Set \_\_\_\_\_ 10" Pulled \_\_\_\_\_  
 8" Set \_\_\_\_\_ 8" Pulled \_\_\_\_\_  
 6 1/2" Set \_\_\_\_\_ 6 1/2" Pulled \_\_\_\_\_  
 4" Set \_\_\_\_\_ 4" Pulled \_\_\_\_\_  
 2" Set \_\_\_\_\_ 2" Pulled \_\_\_\_\_

Feet	In.	Feet	In.	Feet	In.
32.00					
28.75					
6.075					
28.90					
89.35					
29.80					
119.45					
28.90					
148.35					
29.00					
176.35					
27.20					
204.15					
28.30					
232.45					
27.55					
260.70					
28.00					
282.20					
27.30					
316.50					
28.05					
324.95					