Cancelled HEWB 3/22/95

Missouri Oil and Gas Council

Form OGC-3I

INJECTION WELL PERMIT APPLICATION: to drill, deepen, plug back, or convert an existing well

APPLICATION TO DRILL ☒ **DEEPEN** ☐ **PLUG BACK** ☐ **CONVERSION** ☐

NAME OF COMPANY OR OPERATOR Town Oil Company DATE 3-2-84

Route 4 (Address) Paola (City) KS (State)

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
Walton	31-W	1020

WELL LOCATION (give footage from section lines): 2395 ft. from (N) (~~S~~) sec line; 2185 ft. from (~~E~~) (W) sec line

WELL LOCATION: Section 4 Township 46 Range 33 — COUNTY: Cass

Nearest distance from proposed location to property or lease line: 10 feet

Distance from proposed location to nearest drilling, completed or applied – for well on the same lease: 210 feet

Proposed depth	Rotary or Cable tools	Drilling Contractor, name and address	Approx. date work will start
600'	Rotary	Company Tools	When approved

Number of acres in lease: Approx 85

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 Harry Knoche

Address Belton, MO

No of Wells: producing _____ injection _____ inactive _____ abandoned _____

Status of Bond

Single Well ☐ Amt. _____ Blanket Bond ☒ Amt. 20,000 ☒ ON FILE ☐ ATTACHED

Outline Proposed Stimulation Program

Water injection and secondary recovery

Proposed casing program

amt.	size	wt/ft	cem.
600'	2"	3.75	to surface

Approved casing – To be filled in by State Geologist

amt.	size	wt/ft	cem.
600	2"	3.75	to surface

I, the undersigned, state that I am the _____ Partner of the Town Oil Co. (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 Michael Town

Permit Number #20439

Approved Date 4/25/84

Approved by Wallace B. Howe KD

☐ SAMPLES REQUIRED ☒ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @ _____

RECEIVED APR 09 1984 MO. OIL & GAS COUNCIL

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

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.

3/12/82

I Lester Town of the Town Oil Co.

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 Michael Town

Date 3-2-84

Proposed Operations Data

Proposed average daily injection, pressure 400 psig, rate 25 bpd/~~gpm~~ volume 300 bbl/~~gal~~

Approved average daily injection, (to be filled in by State Geologist). pressure 400 psig, rate 25 bpd/gpm, volume 300 bbl/gal

Proposed maximum daily injection, pressure 700 psig, rate 50 bpd/~~gpm~~ volume 1000 bbl/~~gal~~

Approved maximum daily injection, (to be filled in by State Geologist). pressure 600 psig, rate 50 bpd/gpm, volume 1000 bbl/gal

Estimated fracture pressure/gradient of injection zone breakdown 800 psi/foot

Describe the source of the injection fluid produced and fresh water

Submit an appropriate analysis of the injection fluid. (Submit on separate sheet).

See enclosed water analysis report

Describe the compatibility of the proposed injected fluid with that of the receiving formations, including total dissolved solids comparisons.

Same

Give an accurate description of the injection zone including lithologic descriptions, geologic name, thickness, depth, porosity, and permeability.

See the enclosed driller's log, gamma ray and core analysis

Give an accurate description of the confining zones including lithologic description, geologic name, thickness, depth, porosity, and permeability.

See the enclosed driller's log, gamma ray and core analysis

Submit all available logging and testing data on the well.

Give a detailed description of any well needing corrective action which penetrates the injection zone in the area of review (½ mile radius around well). Include the reason for and proposed corrective action.

None

RECEIVED

APR 09 1984

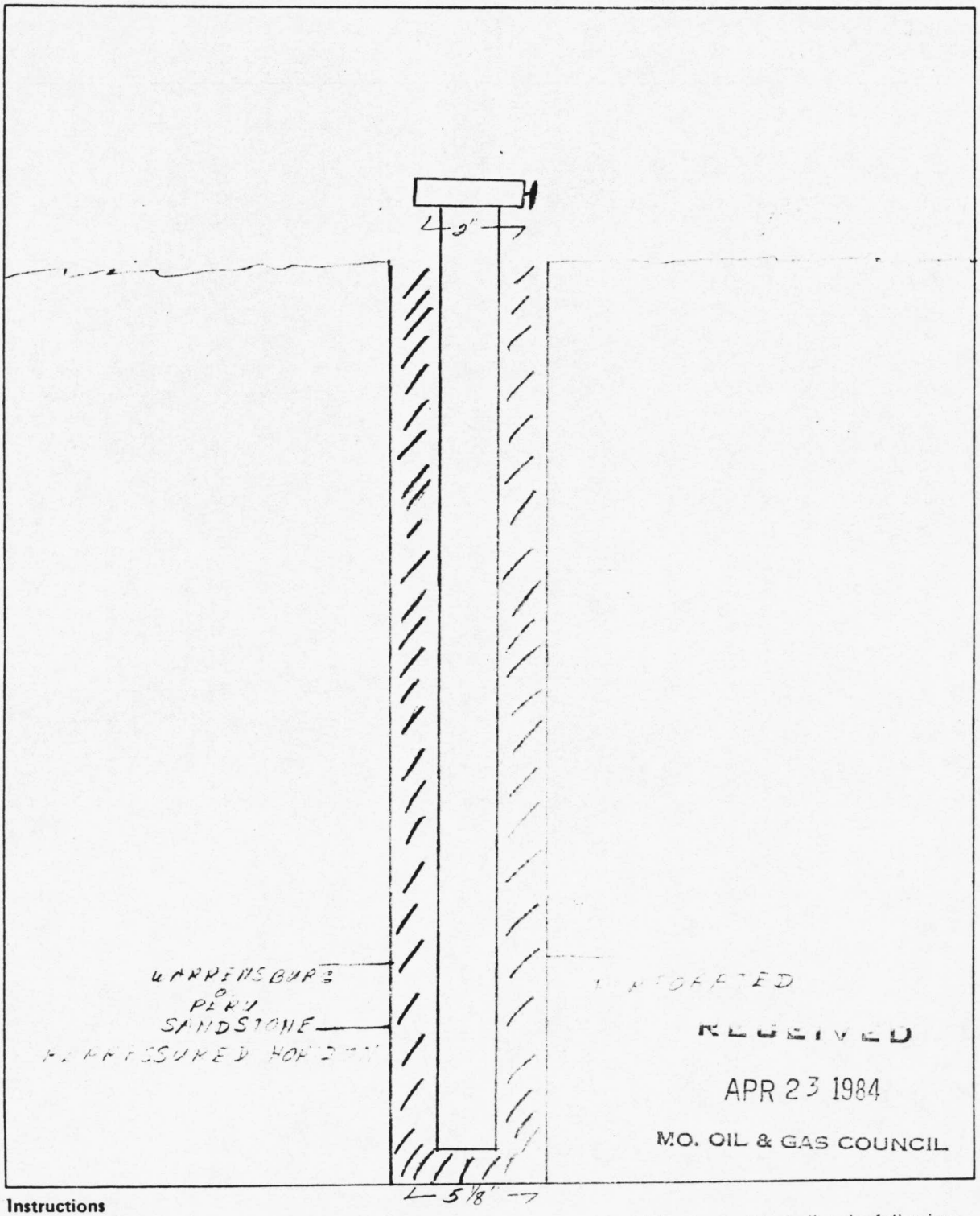
MO. OIL & GAS COUNCIL

#20439

County Jackson Permit # _____ Operator Town Oil Well # _____

Missouri Oil and Gas Council
INJECTION WELL SCHEMATIC

Form OGC-11



Instructions

On the above space draw a neat accurate schematic diagram of the applicant injection well including the following: configuration of well head, total depth or plug back total depth, depth of all injection or disposal intervals, and their formation names, lithology of all formations penetrated, depths of the tops and bottoms of all casing and tubing, size and grade of all casing and tubing, and the type and depth of packer, depth, location, and type of all cement, depth of all perforations and squeeze jobs, and geologic name and depth to bottom of all underground sources of drinking water which may be affected by the injection. Use back if additional space is needed, or attach sheet.

#20439

3/12/82

#20439

Area of Review Wells (½ mile radius around well) that Penetrate the Injection Interval

Lease	Well #	Location	Owner	Depth	Type	Date Spudded	Date Completed	Construction
Beary	54A	165' from (N)(S) sec. line 1652.25' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	1/81	1/81	Surface 9" hole 7" casing 20.583' Production 6¼" hole 4" casing 629.80'
Beary	54C	546.4 from (N)(S) sec. line 1652.2 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	12/80	12/80	Surface 9" hole 7" casing 21.583' Production 6¼' hole 4" casing 630.6'
Beary	54C1	546.6 from (N)(S) sec. line 1652.2 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	520	O	1/81	1/81	Surface: 9" hole 7" casing 21.67' Production 6¼" hole 4" casing 462.50'
Beary	54E	930.2' from (N)(S) sec. line 1652.2' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	1/81	1/81	Surface 9" hole 7" casing 20.75' Production: 6¼" hole 4" casing 628.35'
Beary	B-55	355 from (N)(S) sec. line 1542 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	1/81	1/81	Surface 9" hole 7" casing 21.42' Production 6¼" hole 4" casing 628.70'
		_____ from (N)(S) sec. line _____ from (E)(W) sec. line Sec. ____ T. ____ N. R. ____						
		_____ from (N)(S) sec. line _____ from (E)(W) sec. line Sec. ____ T. ____ N. R. ____						
		_____ from (N)(S) sec. line _____ from (E)(W) sec. line Sec. ____ T. ____ N. R. ____						

Attach additional sheets if necessary

Instructions

In the above grid place the descriptions of area of review wells (½ mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other = specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion information, detailing the cement, casing, and subsurface casing information.

#20489

Area of Review Wells (½ mile radius around well) that Penetrate the Injection Interval

Lease	Well #	Location	Owner	Depth	Type	Date Spudded	Date Completed	Construction
Walton	T-1 (1-W)	900' from (N)(S) sec. line 2480' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil /#20024	600'	I	Unknown	12/78	Surface: 8" hole 6¼" casing 500' Producing: 6¼" hole 4" casing 600' 20 sks cement
Beary	D-59	741.5' from (N)(S) sec. line 1064' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy #20224	640'	I	11/81	11/81	Surface: 9" hole 6" casing 20' Production: 6¼" hole 4" casing 635' 83 sks
Beary	B-3	356' from (N)(S) sec. line 1012' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy #20223	640'	I	11/81	11/81	Surface: 9" hole 6" casing 17.5' Production: 5¼" hole 2" casing 637' 83 sks
Beary	53 FW	1077' from (N)(S) sec. line 1760' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy #20269	960'	D	1/81	3/81	Surface: 9" hole 7" casing 20' Production: 6¼" hole 4" casing 958.5' 150 sks
Walton	2W	330' from (N)(S) sec. line 2635' from (E)(W) sec. line Sec. 4 T. 46 N. R 33W	Town Oil #20096	620'	I	12/80	12/80	Surface: 8 5/8" hole 6¼" casing 22' Production 5¼" hole 2" casing 520" 87 sks
Walton	3W	330' from (N)(S) sec. line 2305' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil #20097	620'	I	12/80	12/80	Surface: 8 5/8" hole 6¼" casing 21' Producing: 5¼" hole 2" casing 539' 87 sks
McLaughlin	SWD1	2002' from (N)(S) sec. line 1562' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Prairie Energy #20367	904'	D	7/82	7/82	Surface: Casing: 6 3/4" hole 4½" casing 900' Sks 139
		_____ from (N)(S) sec. line _____ from (E)(W) sec. line Sec. ____ T. ____ N. R. ____						

Attach additional sheets if necessary

Instructions

In the above grid place the descriptions of area of review wells (½ mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other = specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion information, detailing the cement, casing, and subsurface casing information.

Area of Review Wells (½ mile radius around well) that Penetrate the Injection Interval

Lease	Well #	Location	Owner	Depth	Type	Date Spudded	Date Completed	Construction
Walton	5W	1201' from (N)(S) sec. line 2200 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	600	0	2/82	2/82	Surface: 9" hole 6¼" casing 20.9' Production: 5 1/8" hole 2" casing 592'
Walton	6W	1555' from (N)(S) sec. line 2330 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	593	0	9/77	9/77	Surface: 6¼" casing 20' Production: 2" casing 573'
Walton	8W	1580' from (N)(S) sec. line 1595 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	614	0	9/77	9/77	Surface: 6¼" casing 18' Production: 2" casing 612'
Walton	20	2229' from (N)(S) sec. line 2383' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	550	0	2/76	2/76	Surface: 8" hole 8" casing 20' Intermediate 8" hole 6¼" casing 456' Producing: 6¼" hole 4½" casing 535'
Walton	22	1413' from (N)(S) sec. line 1775' from (E)(W) sec. line Sec. 4 T. 46N N. R 33W	Town Oil	594	0	8/76	8/76	Surface 8" hole 8" casing 23' Production: 6½" hole 4¼" casing 570'
Walton	24	164' from (N)(S) sec. line 2505' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	620	0	1/81	1/81	Surface: 8 5/8" hole 6¼" casing 21' Production: 5¼" hole 2" casing 620'
Walton	25	165' from (N)(S) sec. line 2835' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	620	0	11/80	11/80	Surface 8 5/8" hole 6¼" casing 21' Production: 5¼" 2" casing 610'
Walton	26	165' from (N)(S) sec. line 2140' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	620	0	10/80	10/80	Surface: 8 5/8" hole 6¼" casing 22' Production: 5¼" hole 2" casing 600'

Attach additional sheets if necessary

Instructions

In the above grid place the descriptions of area of review wells (½ mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other = specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion information, detailing the cement, casing, and subsurface casing information.

8402#

#20439

Area of Review Wells (½ mile radius around well) that Penetrate the Injection Interval

Lease	Well #	Location	Owner	Depth	Type	Date Spudded	Date Completed	Construction
Walton	29	495' from (N)(S) sec. line 2140' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	608	O	9/77	10/77	Surface: 7" casing 74' Production: 4" casing 596'
Walton	31	1261' from (N)(S) sec. line 1517' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	590	O	1/81	2/81	Surface: 8 5/8" hole 6¼" casing 21' Production: 5¼" hole 2" casing 502'
Walton	32	1258' from (N)(S) sec. line 1847' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	600	O	2/82	2/82	Surface: 9" hole 6¼" casing 20' Production: 5 1/8" hole 2" casing 588.05'
Walton	37	2221 from (N)(S) sec. line 1518 from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Town Oil	595	O	3/82	3/82	Surface: 9" hole 6¼" casing 20.5' Production: 5 1/8" hole 6¼" casing 595.20
Asjes	C-4	547' from (N)(S) sec. line 882' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	639	O	11/81	11/81	Surface: 9" hole 6¼" casing 20' Production: 5¼" hole 2" casing 640'
Asjes	C-6	547' from (N)(S) sec. line 559' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	634	O	7/81	7/81	Surface: 9" hole 6¼" casing 20' Production: 5¼" hole 2" casing 636.5'
Asjes	C-8	547' from (N)(S) sec. line 18' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	670	O	7/81	7/81	Surface: 9" hole 6¼" casing 22' Production: 5¼" hole 2" casing 660'
Asjes	C-10	54' from (N)(S) sec. line 159' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	636	O	9/81	9/81	Surface: 9" hole 6¼" casing 20' Production: 5¼" hole 2" casing 636.5'

Attach additional sheets if necessary

Instructions

In the above grid place the descriptions of area of review wells (½ mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other = specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion information, detailing the cement, casing, and subsurface casing information.

#2 0438

Area of Review Wells (½ mile radius around well) that Penetrate the Injection Interval

Lease	Well #	Location	Owner	Depth	Type	Date Spudded	Date Completed	Construction
Asjes	E-4	812' from (N)(S) sec. line 882' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33N	Emery Energy	629	O	11/81	11/81	Surface: 9" hole 6¼" casing 20' Production: 5¼" hole 2" casing 640'
Asjes	G-2	1306.5' from (N)(S) sec. line 1187.5' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	669.4	O	11/81	11/81	Surface: 9" hole 6¼" casing 20' Production: 5¼" hole 2" casing 670'
Asjes	G-4	1303' from (N)(S) sec. line 972' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	666.0	O	11/81	11/81	Surface: 9" hole 6¼" casing 17.6' Production: 5¼" hole 2" casing 670'
Beary	A-52	165' from (N)(S) sec. line 1872' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	642	O	1/81	1/81	Surface: 9" hole 7" casing 21' Production 6¼" hole 4" casing 628.4'
Beary	52C	546.46' from (N)(S) sec. line 1872.25' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	1/81	1/81	Surface: 9" hole 7" casing 35' Production: 6¼" hole 4" casing 627.80'
Beary	E-52	927.92' from (N)(S) sec. line 1872.25' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	641	O	1/81	1/81	Surface: 9" hole 7" casing 21.853' Production: 6¼" hole 4" casing 628.35'
Beary	53B	355.78' from (N)(S) sec. line 1762.25' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	1/81	1/81	Surface: 9" hole 7" casing 21.583" Production: 6¼" hole 4" casing 630.85'
Beary		738.19' from (N)(S) sec. line 1762.25' from (E)(W) sec. line Sec. 4 T. 46 N. R. 33W	Emery Energy	640	O	1/81	1/81	Surface: 9" hole 7" casing 20.9' Production: 6¼" hole 4" casing 627.5'

Attach additional sheets if necessary

Instructions

In the above grid place the descriptions of area of review wells (½ mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other = specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion information, detailing the cement, casing, and subsurface casing information.

Walton Lease

PUBLIC NOTICE

Town Oil Company, Rt. 4, Paola, Kansas has applied for injection wells to be drilled to an approximate depth of 600 feet at the following locations:

No.	Distance from North Line of Section	Distance from East or West Line of Section
4W	965'	2514' E
7W	1607'	2050' E
9W	2025'	2341' E
10W	2080'	2667' E
11W	1100'	1682' E
12W	1740'	1683' E
13W	2060'	1683' E
14W	2413'	1683' E
15W	2417'	1358' E
16W	2067'	1358' E
17W	1747'	1358' E
18W	1427'	1357' E
19W	1102'	1357' E
20W	847'	2044' E
21W	330'	2043' E
22W	648'	2362' E
23W	648'	2679' E
24W	1121'	2404' W
25W	1275'	2696' E
26W	1545'	2180' W
27W	1860'	2685' W
28W	2399'	2538' W
29W	2400'	2507' E
30W	2406'	2167' E
31W	2395'	2185' W
32W	2105'	2250' W
33W	1860'	2425' W
34W	648'	2409' W
35W	330'	2413' W
36W	30'	2416' W
37W	30'	2679' E
38W	30'	2360' E
39W	30'	2042' E

of Section 4, Township 46, Range 33, in Cass County, Missouri.

Written comments or request for additional information regarding such wells should be directed within fifteen (15) days of this notice to:

State Geologist
Missouri Oil and Gas Council
P.O. Box 250
Rolla, Missouri 65401

36-1c

AFFIDAVIT OF PUBLICATION

RI SS.

ing duly sworn according to law, says that he is the ton-Raymore Star-Herald, a weekly newspaper of printed and published continously for a period ears in the County of Cass, State aforesaid: and r has complied with the provisions of the Laws Page 431; and that the notice hereto annexed was er for ...1..... weeks consecutively, as follows:

92 No. 36 dated 1/26 19 84

..... No. ..... dated ....., 19.....

..... No. ..... dated ....., 19.....

..... No. ..... dated ....., 19.....

..... No. ..... dated ....., 19.....

..... No. ..... dated ....., 19.....

7.00

Joseph Maurer
Publisher

n to before me this 27th day of Jan

icial seal.

Peggy Miller
Notary Public

RECEIVED
FEB 03 1984
M.O. OIL & GAS COUNCIL

NALCO

REPORT OF WATER ANALYSIS

Company Town Oil Company

Date 5-4-81
Analysis No.
Sampling Date 5-3-81
Date Sample Rec'd.

Sample Marked Walton

DISSOLVED SOLIDS			RESULTS AS COMPOUNDS	
Cations	mg/l	meq/l		mg/l
Sodium, Na (Calc.)	6,969	303	as NaCl	
Calcium, Ca	560	28	as $CaCO_3$	1,400
Magnesium, Mg	194	16	as $CaCO_3$	800
Barium, Ba	5	0	as $BaSO_4$	9
Cations Total	7,728	347		
Anions				
Chloride, Cl	11,897	336	as NaCl	19,600
Sulfate, SO_4	0	0	as Na_2SO_4	0
Carbonate, CO_3	0	0	as $CaCO_3$	0
Bicarbonate, HCO_3	688	11	as $CaCO_3$	564
Anions Total	12,585	347		
Total Dissolved Solids (Calc.)	20,313			
Total Iron, Fe	.15		as Fe	.15
Acidity to Phenolphthalein, CO_2	95		as $CaCO_3$	216

OTHER PROPERTIES	
pH	7.9
Specific Gravity	1.003
Turbidity (JTU)	

$CaCO_3$ STABILITY INDEX
@ 70° F.
@ 120° F.
@ 160° F.
Method of Stiff & Davis

Remarks:

NALCO CHEMICAL COMPANY
VISCO CHEMICALS
P O BOX 87 • SUGAR LAND, TEXAS 77478

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9-26A