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

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 (Address) Paola (City) KS 66071 (State)

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
Jack Beary	58 E	

WELL LOCATION (give footage from section lines)

933.89 ft. from (N) (S) sec. line 1212.25 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: 220 feet

Proposed depth	Drilling contractor, name & address	(Rotary) or Cable Tools	Approx. date work will start
670			see note

Number of acres in lease: 24½

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:

amt.	size	wt /ft.	cem.
650'	4"	10.4	yes
20'	7"	22	yes

Approved casing -- To be filled in by State Geologist

amt	size	wt./ft	cem.
✓	✓	✓	✓
✓	✓	✓	✓

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 Kathy Town

Permit Number: 20103

Approval Date: 12/6/85

Approved By: Wallace B. Howe BW

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

MO. OIL & GAS COUNCIL

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.

3/12/82

MISSOURI OIL AND GAS COUNCIL

Form OGC - 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐

NAME OF COMPANY OR OPERATOR General Energy Inc of Linn Co. DATE 11-25-80

Box 216 (Address) Mound City (City) Kansas 66056 (State)

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
Jack Beary	58-E	

WELL LOCATION 933.89 FNL ~~South~~ (give footage from section lines)
~~165~~ ft. from ~~(N) (S)~~ sec. line 1212.25 FEL ~~165~~ 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: 165 feet

Distance from proposed location to nearest drilling, completed or applied – for well on the same lease: 220 feet

Proposed depth:	Rotary or Cable tools	Approx. date work will start
670	Rotary	12 80

Number of acres in lease: 24½

Number of wells on lease, including this well, completed in or drilling to this reservoir: 1

Number of abandoned wells on lease: _____

If lease, purchased with one or more wells drilled, from whom purchased: Name _____ Address _____

No. of Wells: producing _____ inactive _____ abandoned _____

Status of Bond

Single Well ☐ Amt. _____ Blanket Bond ☒ Amt. 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.

Proposed casing program:

amt.	size	wt./ft.	cem.
650'	4"	10.4	Yes
20'	7¼	22	Yes

Approved casing – To be filled in by State Geologist

amt.	size	wt./ft.	cem.

I, the undersigned, state that I am the VICE PRESIDENT of the GENERAL ENERGY, INC of LINN 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 Doug McDaniel

Permit Number: 20103

Approval Date: December 1, 1980

Approved By: Wallace B. Howe IRS

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

☐ SAMPLES REQUIRED

☒ SAMPLES NOT REQUIRED

DEC 0 1 1980

MO. OIL & GAS COUNCIL

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.

MISSOURI OIL AND GAS COUNCIL

Form OGC-5

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

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

Owner: Emery Energy, Inc.	Address: Box 519, Osawatomie, Kansas 66064
Lease Name: Jack Beary Lease	Well Number: E-58
Location: 933.89 ft. FNL & 1212.25 Ft. FEL	Sec. — TWP-Range or Block & Survey: Sec. 4 Twp. 46N Range 33W
County: Cass	Permit number (OGC3 number): 20103

Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (DF, RKB, RT or Gr.)	Elevation of casing hd. flange
12-18-80	12-22-80	1-21-81	1074.1 feet Gr.	Same as sur. ele. feet

Total depth	P. B. T. D
640 ft.	626.9

Producing interval (s) for this completion	Rotary tools used (interval)	Cable tools used (interval)
580-599	From 0 to T.D. Drilling Fluid used water, air	From ..... to None

Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed
no	no	no	no

Type of electrical or other logs run (list logs filed with the State Geologist): Gamma Ray, Neutron, CCL

Date filed: 5/25/1981

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 in.	7 in.	35	22.5		
producing	6.25 in.	4 in.	10.6	626.90	70	

TUBING RECORD

Size	Depth set	Packer set at
2.375 in.	ft.	none ft.

LINER RECORD

Size	Top	Bottom	Sacks cement	Screen (ft.)
N/A in.	N/A ft.	N/A ft.	N/A	N/A

PERFORATION RECORD

Number per ft.	Size & type	Depth Interval
2	3½ glass	580-582
.50	" "	586-599

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Am't. & kind of material used	Depth Interval
water gel 2	
sand 20-40 20	
sand 10-30 10	

INITIAL PRODUCTION

Date of first production: 2-6-81

Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:): No record-see later production report

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
no			bbls.	MCF	bbls.	API (Corr.)

Tubing pressure	Casing pressure	Cal'ted rate of Production per 24 hrs	Oil	Gas	Water	Gas—oil ratio
			bbls.	MCF	bbls.	

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

Method of disposal of mud pit contents:

CERTIFICATE: I, the undersigned, state that I am the Vice-President of the Emery Energy, 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.

Devon M. Hurst

Signature Devon Hurst

RECEIVED

JUN 25 1981

MO. OIL & GAS COUNCIL

Remit two copies: one will be returned

W00018

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
PENNSYLVANIAN SYSTEM			
KANSAS CITY			
Iola Ls.	0	46	White to light gray limestone
Chanute Sh.	46	120	Gray to green shales with gray limestone beds
Cement City Sh.	75	82	Blue, gray limestone
Belton Ss.	113	120	Sandstone
Cherryvale Sh.	120	171	Gray, blue shales
Dennis Ls.			
Winterset Sh.	171	203	Gray, blue coarse limestone
Stark Sh.	203	206	Black, fissile shale
Swope Ls.			
Bethany Falls Ls.	206	230	Gray, fine to coarse limestone
Hush puckney Sh.	230	233	Black, fissile shale
Hertha Ls.	233	245	Gray to blue limestone
PLEASANTON	245	425	Gray, green shales
Knobtown Ss.			sand
Dawson Coal Hor.	374	378	Black, fissile, slaty shale
HENRIETTA	425	510	
Alamont	425	450	Gray brown, fine grained limestone with gray shale
Pawnee	450	488	Fine grained, light gray limestone
Peru Ss.	463	470	Sand
Myrick Sta. Ls.	476	483	Gray to brown limestone
Anna Sh.	483	488	Coal to black fissile shale
Fort Scott	488	506	Gray to green shales and limestone
Englevale Ss.	488	504	Fine to medium grained channel sandstone
CHEROKEE	506	---	Gray to dark shales
Upper Cherokee			
Upper Squirrel	538	545	Fine to medium grained sandstones
Lower Squirrel	586	599	Fine to medium grained sandstones
Bevier Coal Hor.	----	---	Black coal
Lower Cherokee			
Burbank Ss.			Sandstone, irregular
Bartlesville Ss.	599	640 T.D.	Shale, sandy shale, thin sandstone
Core # 1	456	475	Peru Core # 4 581-601
Core # 2	477	497	
Core # 3	565	581	Lower Squirrel **See core analysis report enclosed

*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.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well if available.

EMERY ENERGY, INC.

225 North State Street
Salt Lake City, Utah 84103
(801) 531-8770

June 14, 1984

Missouri Department of Natural Resources
P.O. Box 250
Rolla, MO. 65401
Attn: Mr. Bruce W, Netzler, Geologist

Dear Mr. Netzler,

I am in receipt of your letter requesting an interpretation of the log reports shbmitted to your office in 1981 by our company covering wells on the Beary Lease, Cass County, Missouri. In 1982-83 we basically shut down our operations in the Kansas/Missouri area and let the people go who were responsible for both the drilling of these wells and the Government reports. I have lookedover the logs and our in-house geologist here in Salt Lake has examined it also but we are unable to come up with the answers. The fact is that no one is around who was there to observe the way the formations lay, so I dont know how we can clear up the matter.

If 3½ years hadnt passed I'd have confidence that maybe we could tack something down, but now I believe it is too late.

I'm sorry I was'nt able to help you in getting this cleared up. Please feel free to call if you have any other questions.

Yours truly,

Ron J. Hollberg, III
Production Dept.

RJH/rh

OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

February 6, 1981

Emery Energy, Inc.
P. O. Box 519
Osawatomie, Kansas 66064

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary cores taken from the Beary Lease, Well No. 58-E, located in Cass County, Missouri and submitted to our laboratory on December 27, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Osawatomie, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Emery Energy, Inc. Lease Beary Well No. 58-E

Location

Section 4 Twp. 46N Rge. 33W County Cass State Missouri

Elevation, Feet

Name of Sand	Labette	Englevale	Squirrel
Top of Core	462.0	486.0	580.0
Bottom of Core	465.0	492.0	600.2
Top of Sand	463.0	486.3	580.0
Bottom of Sand	464.3	492.0	600.2
Total Feet of Permeable Sand	1.3	4.7	11.5
Total Feet of Floodable Sand	1.3	0.0	4.1

Distribution of Permeable Sand:

Permeability Range Millidarcys	Feet	Cum. Ft.
	LABETTE SAND	
0 - 100	0.7	0.7
180 & Above	0.6	1.3
	ENGLEVALE SAND	
0 - 2	2.7	2.7
4 & Above	2.0	4.7
	SQUIRREL SAND	
0 - 15	4.2	4.2
15 - 100	1.1	5.3
150 & Above	6.2	11.5

Average Permeability Millidarcys	134.2	3.3	119.6
Average Percent Porosity	19.3	15.6	19.2
Average Percent Oil Saturation	48.8	47.1	44.5
Average Percent Water Saturation	41.5	45.4	36.5
Average Oil Content, Bbls./A. Ft.	741.	580.	659.
Total Oil Content, Bbls./Acre	963.	3,304.	9,555.
Average Percent Oil Recovery by Laboratory Flooding Tests	7.7	0.	8.6
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	118.	0.	157.
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	154.	0.	645.
Total Calculated Oil Recovery, Bbls./Acre	See "Cal.Rec." Section	0.	See "Cal.Rec." Section

The cores were sampled and the samples sealed in plastic bags by a representative of the client. Air and water were used as a drilling fluid.

Since only the Labette Sand and Squirrel Sand responded to flooding susceptibility tests, a calculated recovery is given for these sands only.

FORMATION CORED

The detailed log of the formation cored is as follows:

Depth Interval, Feet	Description
	LABETTE SAND
462.0 - 463.0	Gray sandy shale.
463.0 - 464.3	Dark brown slightly calcareous sandstone.
464.3 - 465.0	Gray sandy shale.
	ENGLEVALE SAND
486.0 - 486.2	Gray shale.
486.2 - 486.3	Coal.
486.3 - 492.0	Light brown and gray laminated slightly calcareous sandstone and shale.
	SQUIRREL SAND
580.0 - 586.9	Light brown and gray laminated slightly calcareous sandstone and shale.
586.9 - 587.7	Brown slightly calcareous sandstone.
587.7 - 590.7	Hard gray limestone.
590.7 - 600.2	Dark brown slightly calcareous sandstone.

LABORATORY FLOODING TESTS

LABETTE SAND

The sand in this core responded to laboratory flooding tests, as a total recovery of 154 barrels of oil per acre was obtained from 1.3 feet of sand. The weighted average percent oil saturation was reduced from 48.8 to 41.1, or represents an average recovery of 7.7 percent. The weighted average effective permeability of the samples is 16.80 millidarcys, while the average initial fluid production pressure is 15.0 pounds per square inch (See Table V).

By observing the data given in Table IV, you will note that of the 2 samples tested, 2 produced water and oil. This indicates that approximately 100 percent of the sand represented by these samples is floodable pay sand.

SQUIRREL SAND

The sand in this core responded to laboratory flooding tests, as a total recovery of 645 barrels of oil per acre was obtained from 4.1 feet of sand. The weighted average percent oil saturation was reduced from 55.1 to 46.5, or represents an average recovery of 8.6 percent. The weighted average effective permeability of the samples is 11.97 millidarcys, while the average initial fluid production pressure is 17.5 pounds per square inch (See Table V).

By observing the data given in Table IV, you will note that of the 14 samples tested, 4 produced water and oil, and 3 samples produced water only. This indicates that approximately 29 percent of the sand represented by these samples is floodable pay sand.

CALCULATED RECOVERY

It would appear from a study of the core data, that efficient primary and waterflood operations in the vicinity of this well should recover approximately 230 barrels of oil per acre from the Labette Sand, and approximately 1,330 barrels of oil per acre from the Squirrel Sand. This is an average recovery of 176 barrels per acre foot from 1.3 feet of floodable sand from the Labette Sand, and an average recovery of 325 barrels per acre foot from 4.1 feet of floodable sand from the Squirrel Sand.

These recovery values were calculated using the following data and assumptions:

	LABETTE SAND	SQUIRREL SAND
Original formation volume factor, estimated	1.04	1.04
Reservoir water saturation, percent, estimated	35.0	15.0
Average porosity, percent	19.3	23.8
Oil saturation after flooding, percent	41.1	46.5
Performance factor, percent, estimated	55.0	50.0
Net floodable sand, feet	1.3	4.1

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Emery Energy, Inc. Lease Beary Well No. 58-E

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
						LABETTE SAND					
1	463.3	20.7	58	29	87	931	94.	0.7	0.7	652	65.80
2	464.2	17.6	38	56	94	519	181.	0.6	1.3	311	108.60
						ENGLEVALE SAND					
3	486.6	15.0	37	60	97	431	4.0	1.0	1.0	431	4.00
4	487.8	17.4	56	35	91	756	1.8	1.0	2.0	756	1.80
5	488.8	14.2	32	65	97	353	6.5	1.0	3.0	353	6.50
6	490.6	16.1	65	25	90	812	1.8	1.7	4.7	1380	3.06
7	491.8	15.0	33	56	89	384	Imp.	1.0	5.7	384	0.00
						SQUIRREL SAND					
8	580.5	18.1	43	52	95	604	13.	1.0	1.0	604	13.00
9	581.7	15.0	20	76	96	233	Imp.	1.0	2.0	233	0.00
10	582.8	15.9	35	62	97	432	Imp.	1.0	3.0	432	0.00
11	584.8	17.4	36	58	94	486	0.44	1.2	4.2	583	0.53
12	586.5	21.3	52	30	82	859	12.	1.0	5.2	859	12.00
13	587.8	5.6	51	10	61	222	8.2	1.0	6.2	222	8.20
14	590.1	6.0	58	25	83	270	Imp.	1.0	7.2	270	0.00
15	591.2	22.3	58	24	82	1003	181.	1.0	8.2	1003	181.00
16	592.5	24.2	53	24	77	995	247.	1.0	9.2	995	247.00
17	593.4	24.3	51	18	69	962	231.	1.0	10.2	961	231.00
18	594.7	23.9	58	24	82	1075	99.	1.1	11.3	1183	108.90
19	596.5	24.1	39	32	71	729	203.	1.0	12.3	729	203.00
20	598.1	24.8	33	40	73	635	158.	1.2	13.5	762	189.60
21	599.6	24.4	38	32	70	719	181.	1.0	14.5	719	181.00

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Emery Energy, Inc. Lease Beary Well No. 58-E

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
	LABETTE SAND		
463.0 - 464.3	1.3	134.2	174.40
	ENGLEVALE SAND		
486.3 - 492.0	4.7	3.3	15.36
	SQUIRREL SAND		
580.0 - 590.7	4.2	8.0	33.73
590.7 - 600.2	7.3	183.8	1341.50
580.0 - 600.2	11.5	119.6	1375.23

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
			LABETTE SAND			
463.0 - 464.3	1.3	19.3	48.8	41.5	741	963
			ENGLEVALE SAND			
486.3 - 492.0	5.7	15.6	47.1	45.4	580	3,304
			SQUIRREL SAND			
580.0 - 590.7	7.2	14.3	42.0	45.1	445	3,203
590.7 - 600.2	7.3	24.0	46.9	28.0	870	6,352
580.0 - 600.2	14.5	19.2	44.5	36.5	659	9,555

Oilfield Research Laboratories

RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company Emery Energy, Inc. Lease Beary Well No. 58-E

Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation			Volume of Water Recovered cc*	Effective Permeability Millidarcys**	Initial Fluid Production Pressure Lbs./Sq./In.
			%	Bbls./A. Ft.	%	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.			
					LABETTE SAND							
1	463.3	20.9	58	940	10	162	48	43	778	262	17.49	15
2	464.2	17.5	38	516	5	68	33	59	448	240	15.99	15
					ENGLEVALE SAND							
3	486.6	15.1	37	433	0	0	37	60	433	0	Imp.	-
4	487.8	17.9	55	764	0	0	55	36	764	0	Imp.	-
5	488.8	13.8	33	353	0	0	33	64	353	0	Imp.	-
6	490.6	16.2	65	817	0	0	65	26	817	0	Imp.	-
7	491.8	15.0	33	384	0	0	33	60	384	0	Imp.	-
					SQUIRREL SAND							
8	580.5	18.6	42	606	0	0	42	53	606	0	Imp.	-
9	581.7	14.7	21	239	0	0	21	75	239	0	Imp.	-
10	582.8	15.8	35	429	0	0	35	62	429	0	Imp.	-
11	584.8	17.9	35	486	0	0	35	59	486	0	Imp.	-
12	586.5	21.4	52	863	0	0	52	63	863	0	Imp.	-
13	587.8	5.6	51	222	0	0	51	12	222	0	Imp.	-
14	590.1	6.1	58	274	0	0	58	26	274	0	Imp.	-
15	591.2	22.4	58	1008	10	174	48	45	834	232	10.31	20
16	592.5	24.3	53	999	8	151	45	49	848	158	11.14	20
17	593.4	24.3	51	961	4	75	47	44	886	218	14.24	10
18	594.7	24.0	58	1080	12	223	46	47	857	300	12.16	20
19	596.5	24.1	39	729	0	0	39	57	729	216	12.00	15
20	598.1	24.6	33	630	0	0	33	61	630	278	16.49	10
21	599.6	24.3	38	716	0	0	38	58	716	352	17.14	10

Notes: cc—cubic centimeter.

*—Volume of water recovered at the time of maximum oil recovery.

**—Determined by passing water through sample which still contains residual oil.

Oilfield Research Laboratories

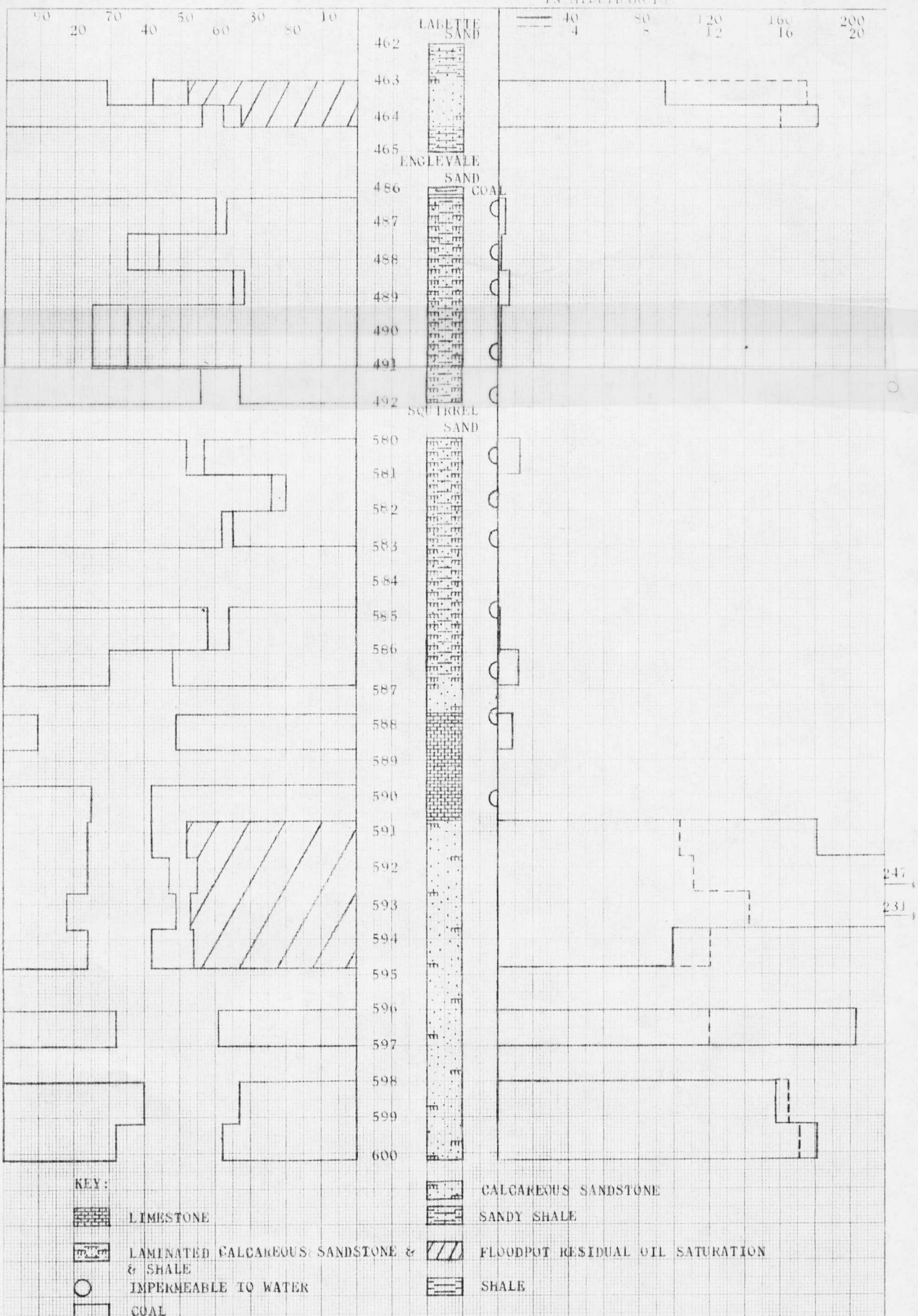
SUMMARY OF LABORATORY FLOODING TESTS

TABLE V

Company Emery Energy, Inc. Lease Beary Well No. 58-E

	LABETTE SAND	SQUIRREL SAND
Depth Interval, Feet	463.0 - 464.3	590.7 - 600.2
Feet of Core Analyzed	1.3	4.1
Average Percent Porosity	19.3	23.8
Average Percent Original Oil Saturation	48.8	55.1
Average Percent Oil Recovery	7.7	8.6
Average Percent Residual Oil Saturation	41.1	46.5
Average Percent Residual Water Saturation	50.4	46.3
Average Percent Total Residual Fluid Saturation	91.5	92.8
Average Original Oil Content, Bbls./A. Ft.	744.	1,013.
Average Oil Recovery, Bbls./A. Ft.	118.	157.
Average Residual Oil Content, Bbls./A. Ft.	626.	856.
Total Original Oil Content, Bbls./Acre	968.	4,156.
Total Oil Recovery, Bbls./Acre	154.	645.
Total Residual Oil Content, Bbls./Acre	814.	3,511.
Average Effective Permeability, Millidarcys	16.80	11.97
Average Initial Fluid Production Pressure, p.s.i.	15.0	17.5

NOTE: Only those samples which recovered oil were used in calculating the above averages.

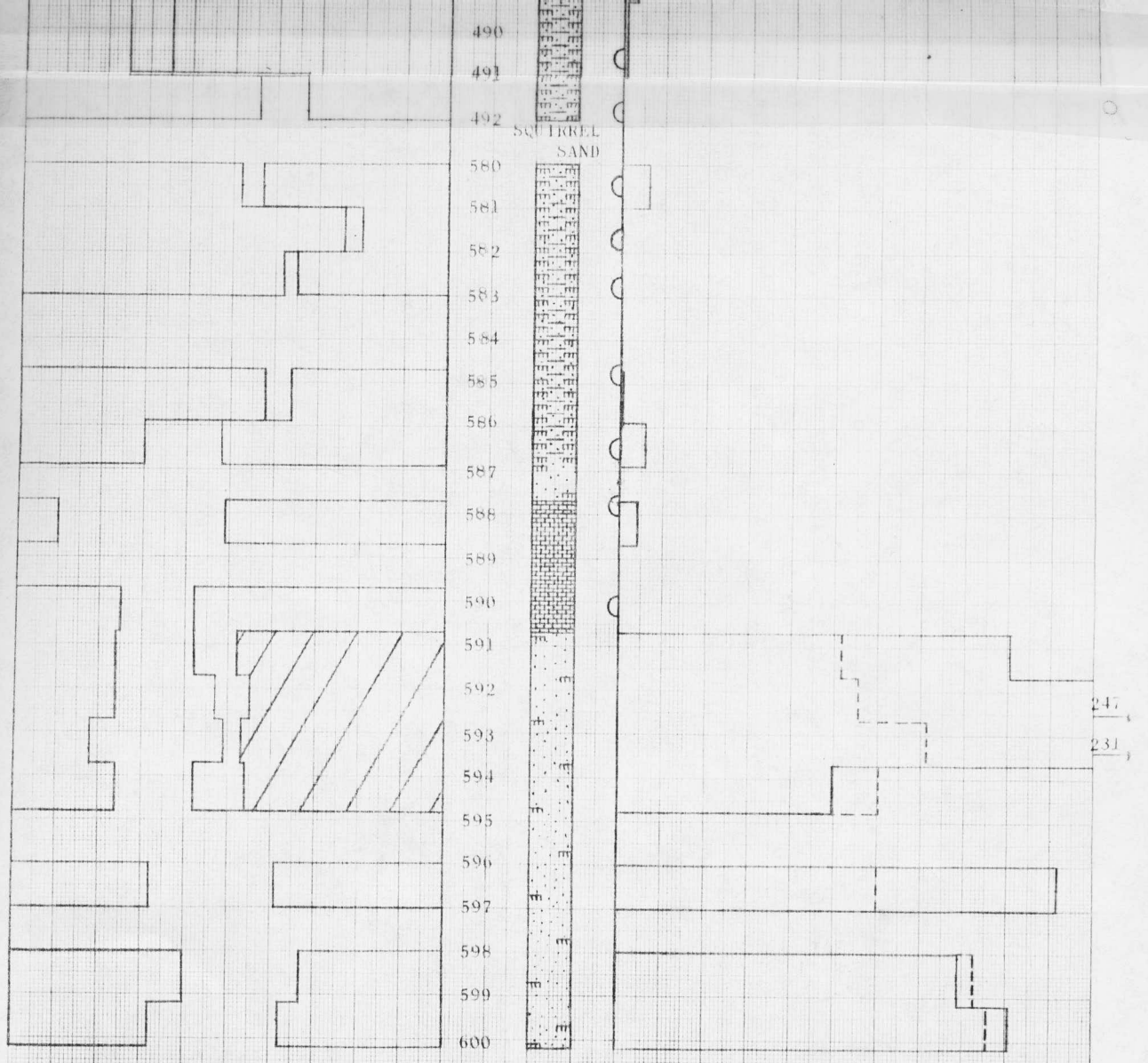


EMERY ENERGY, INC.

BEARY LEASE WELL NO. 58-E

CASS COUNTY, MISSOURI

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY MILLIDARCYS	CALCULATED OIL RECOVERY BBLS./ACRE
LABETTE SAND						



KEY:

- LIMESTONE
- LAMINATED CALCAREOUS SANDSTONE & & SHALE
- IMPERMEABLE TO WATER
- COAL
- CALCAREOUS SANDSTONE
- SANDY SHALE
- FLOODPOT RESIDUAL OIL SATURATION
- SHALE

EMERY ENERGY, INC.

BEARY LEASE WELL NO. 58-E

CASS COUNTY, MISSOURI

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY MILLIDARCYS	CALCULATED OIL RECOVERY BBLS./ACRE
		LABETTE SAND				
463.0 - 464.3	1.3	19.3	48.8	41.5	134.2	230 (PRIMARY & WATERFLOODING)
		ENGLEVALE SAND				
486.3 - 492.0	5.7	15.6	47.1	45.4	3.3	- - -
		SQUIRREL SAND				
580.0 - 590.7	7.2	14.3	42.0	45.1	8.0	
590.7 - 600.2	7.3	24.0	46.9	28.0	183.8	
580.0 - 600.2	14.5	19.2	44.5	36.5	119.6	1,330 (PRIMARY & WATERFLOODING)

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
FEBRUARY, 1981 SO