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

February 22, 1980

Tech American Resources Corporation
c/o L. C. Bodemann, Jr.
P.O. Box 467
Moran, Kansas 66755

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary cores taken from the Evans Lease, Well No. 5, Allen County, Kansas, and submitted to our laboratory on January 27, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas
5 c to Moran, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Tech American Resources Corp. Lease Evans Well No. 5

Location 1200' FNL & 2145' FWL NW¼

Section 12 Twp. 25S Rge. 19E County Allen State Kansas

	Upper Bartlesville	Lower Bartlesville
Elevation, Feet		
Name of Sand		
Top of Core	762.0	820.0
Bottom of Core	773.4	843.0
Top of Sand	762.0	820.0
Bottom of Sand	770.9	841.7
Total Feet of Permeable Sand	8.9	5.5
Total Feet of Floodable Sand	0	0

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
	Upper Bartlesville	
0 – 5	6.9	6.9
5 – 10	2.0	8.9
	Lower Bartlesville	
0 – 10	2.0	2.0
10 – 20	2.5	4.5
20 – 40	1.0	5.5

Average Permeability Millidarcys	3.8	15.4
Average Percent Porosity	15.0	13.2
Average Percent Oil Saturation	38.2	33.7
Average Percent Water Saturation	43.9	53.0
Average Oil Content, Bbls./A. Ft.	441.	362.
Total Oil Content, Bbls./Acre	3,926.	3,583.
Average Percent Oil Recovery by Laboratory Flooding Tests	0	0
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	0	0
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	0	0
Total Calculated Oil Recovery, Bbls./Acre	0	0

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

Since neither the upper nor the lower portion of this core responded to floodpot testing, no calculated recovery is given.

FORMATION CORED

The detailed log of the formation cored is as follows:

Depth Interval, Feet	Description
	UPPER BARTLESVILLE SAND
762.0 - 770.9	Brown and gray laminated sandstone and shale.
770.9 - 773.4	Gray shale.
	LOWER BARTLESVILLE SAND
820.0 - 821.0	Light brown very shaly sandstone.
821.0 - 822.2	Brown sandstone.
822.2 - 822.7	Brown shaly sandstone.
822.7 - 826.6	Brown and gray laminated sandstone and shale.
826.6 - 827.2	Gray sandy shale.
827.2 - 828.8	Gray and brown laminated shale and sandstone.
828.8 - 832.0	Gray sandy shale.
840.0 - 841.3	Dark brown slightly carbonaceous sandstone.
841.3 - 841.7	Brown and gray laminated sandstone and shale.
841.7 - 843.0	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Tech American Resources Corporation **Lease** Evans **Well No.** 5

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.		
					UPPER BARTLESVILLE SAND						
1	762.6	15.0	40	46	86	466	4.5	1.0	1.0	466	4.50
2	763.5	14.7	36	49	85	411	3.6	1.0	2.0	411	3.60
3	764.5	16.0	36	29	65	447	10.	1.0	3.0	447	10.00
4	765.5	15.4	35	50	85	418	2.8	1.0	4.0	418	2.80
5	766.5	15.5	34	51	85	409	2.9	1.0	5.0	409	2.90
6	767.5	16.3	37	44	81	468	3.3	1.0	6.0	468	3.30
7	768.3	15.9	37	35	72	456	6.0	1.0	7.0	456	6.00
8	769.5	11.0	48	48	96	410	0.43	1.0	8.0	410	0.43
9	770.5	15.4	41	43	84	490	0.34	0.9	8.9	441	0.31
					LOWER BARTLESVILLE SAND						
1	820.5	9.9	16	82	98	123	Imp.	1.0	1.0	123	0.00
2	821.5	10.1	28	70	98	219	14.	1.2	2.2	263	16.80
3	822.5	17.3	49	16	65	656	7.5	0.6	2.8	394	4.50
4	823.5	13.3	35	58	93	361	Imp.	1.0	3.8	361	0.00
5	824.5	11.5	32	60	92	286	40.	1.0	4.8	286	40.00
6	825.5	17.2	45	27	72	601	2.9	1.0	5.8	601	2.90
7	826.5	12.4	18	75	93	173	Imp.	0.8	6.6	138	0.00
8	827.5	12.0	42	56	98	391	Imp.	0.8	7.4	313	0.00
9	828.5	11.5	33	65	98	294	Imp.	0.8	8.2	235	0.00
10	840.5	16.9	41	26	67	536	14.	1.3	9.5	697	18.20
11	841.5	15.0	37	33	70	431	5.7	0.4	9.9	172	2.28

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Tech American Resources Corporation Lease Evans Well No. 5

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
	UPPER BARTLESVILLE SAND		
762.0 - 770.9	8.9	3.8	33.84
	LOWER BARTLESVILLE SAND		
820.0 - 841.7	5.5	15.4	84.68

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
		UPPER BARTLESVILLE SAND				
762.0 - 770.9	8.9	15.0	38.2	43.9	441	3,926
		LOWER BARTLESVILLE SAND				
820.0 - 841.7	9.9	13.2	33.7	53.0	362	3,583

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RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company Tech American Resources Corporation Lease Evans Well No. 5

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.			
					UPPER BARTLESVILLE SAND							
1	762.6	15.4	39	466	0	0	39	50	466	0	Imp.	-
2	763.5	15.1	35	410	0	0	35	54	410	0	Imp.	-
3	764.5	15.7	35	426	0	0	35	42	426	0	Imp.	-
4	765.5	15.4	35	418	0	0	35	53	418	0	Imp.	-
5	766.5	15.9	33	407	0	0	33	57	407	0	Imp.	-
6	767.5	16.0	39	484	0	0	39	50	484	0	Imp.	-
7	768.3	15.7	37	451	0	0	37	44	451	0	Imp.	-
8	769.5	11.5	47	419	0	0	47	50	419	0	Imp.	-
9	770.5	15.2	40	472	0	0	40	48	472	0	Imp.	-
					LOWER BARTLESVILLE SAND							
1	820.5	10.0	15	116	0	0	15	83	116	0	Imp.	-
2	821.5	10.0	29	225	0	0	29	69	225	0	Imp.	-
3	822.5	17.8	48	663	0	0	48	40	663	0	Imp.	-
4	823.5	13.0	36	363	0	0	36	58	363	3	0.22	50
5	824.5	12.0	30	279	0	0	30	62	279	0	Imp.	-
6	825.5	16.8	45	587	0	0	45	40	587	0	Imp.	-
7	826.5	12.3	19	181	0	0	19	76	181	0	Imp.	-
8	827.5	12.0	42	391	0	0	42	56	391	0	Imp.	-
9	828.5	11.9	31	286	0	0	31	67	286	0	Imp.	-
10	840.5	16.3	43	544	0	0	43	40	544	0	Imp.	-
11	841.5	15.4	36	430	0	0	36	47	430	0	Imp.	-

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.

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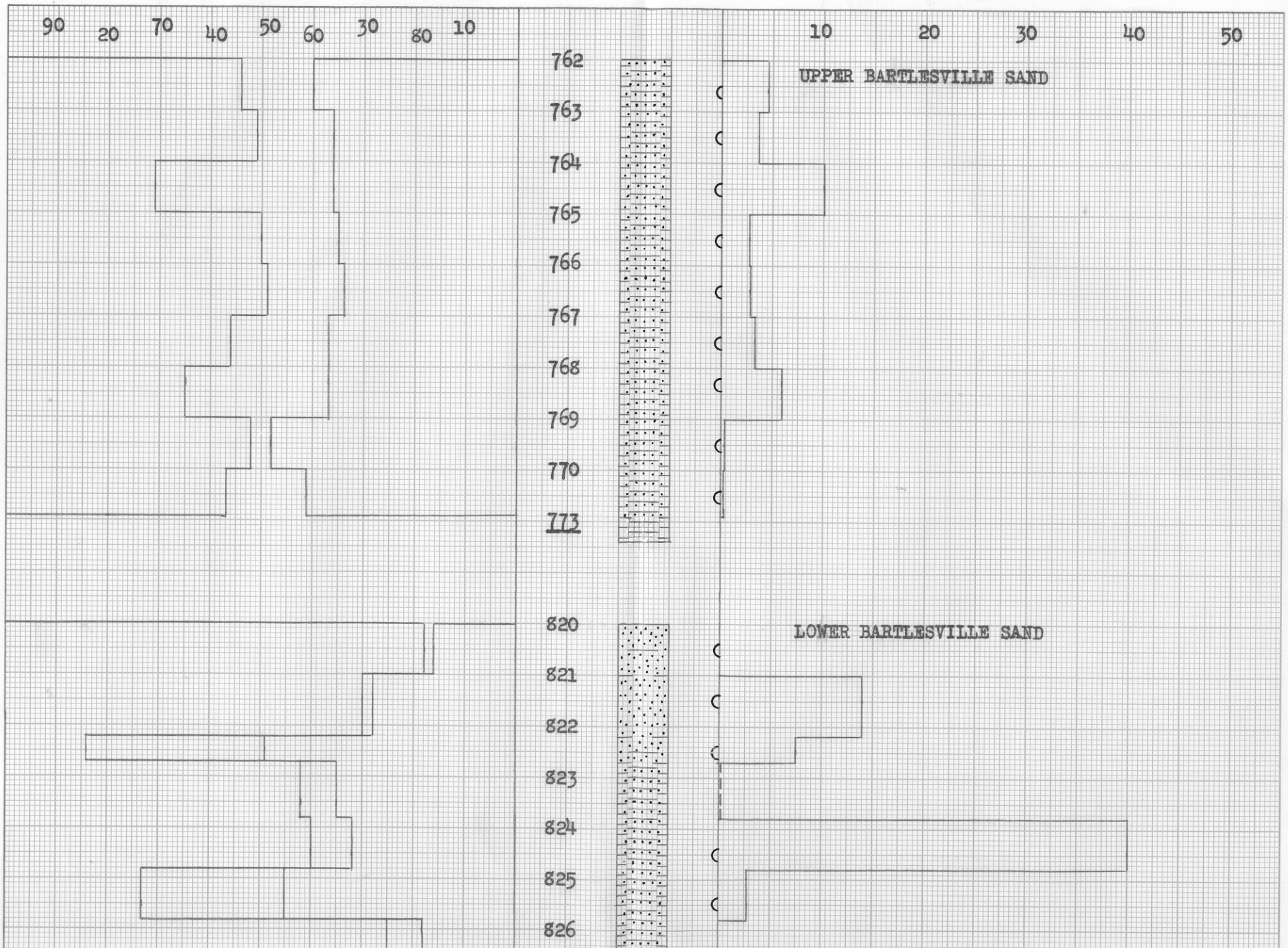
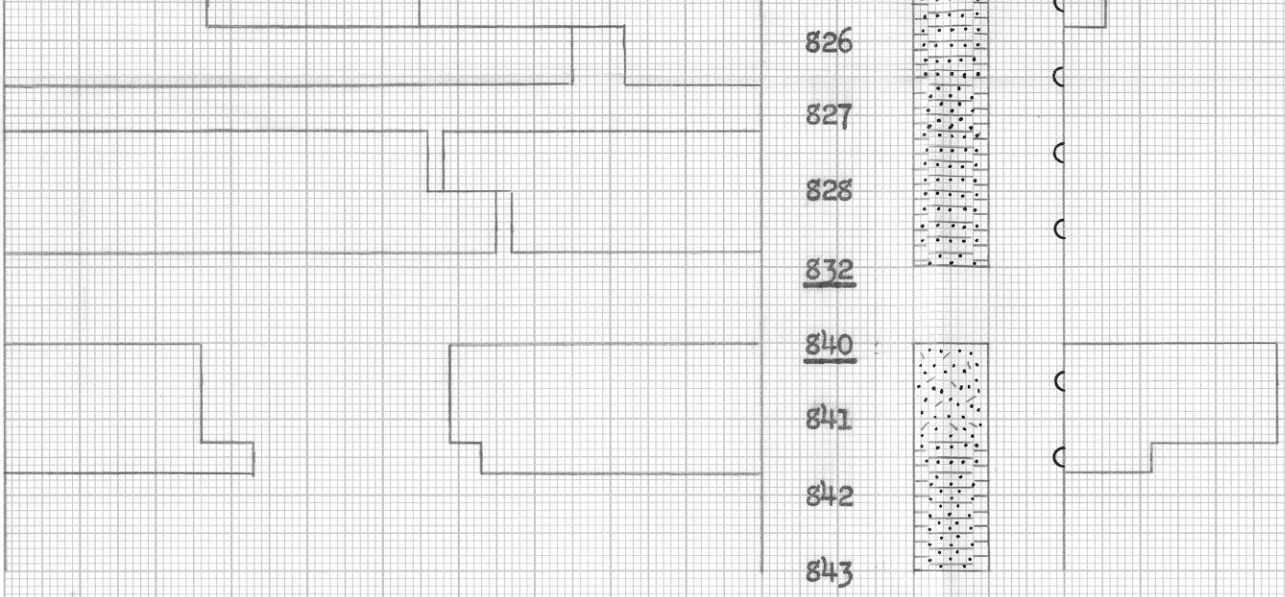
WATER SAT., PERCENT → ← OIL SAT., PERCENT

——— PERMEABILITY, IN MILLIDARCYS

– – – – EFFECTIVE PERMEABILITY TO WATER, IN MILLIDARCYS





KEY:

- SANDSTONE
- CARBONACEOUS SANDSTONE
- SHALE
- IMPERMEABLE TO WATER
- SHALY SANDSTONE
- LAMINATED SANDSTONE AND SHALE
- SANDY SHALE

TECH AMERICAN RESOURCES CORP.

EVANS LEASE — WELL NO. 5

ALLEN COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS	CALCULATED OIL RECOVERY BBLS./ACRE
		UPPER BARTLESVILLE SAND				
762.0 - 770.9	8.9	15.0	38.2	43.9	3.8	---
		LOWER BARTLESVILLE SAND				
820.0 - 841.7	9.9	13.2	33.7	53.0	15.4	---