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

April 20, 1981

Tech-American Resources Corporation
P. O. Box 467
Moran, Kansas 66755

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the Bash Lease, Well No. G-19, located in Allen County, Kansas and submitted to our laboratory on April 2, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Moran, Kansas

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GENERAL INFORMATION & SUMMARY

Company Tech American Resources Corporation Lease Bash Well No. G -19

Location NE¼

Section 15 Twp. 25S Rge. 19E County Allen State Kansas

Elevation, Feet	
Name of Sand	Bartlesville
Top of Core	850.0
Bottom of Core	883.4
Top of Sand	850.0
Bottom of Sand	881.7
Total Feet of Permeable Sand	10.5
Total Feet of Floodable Sand	0.0

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	3.5	3.5
10 - 50	4.3	7.8
50 & Above	2.7	10.5

Average Permeability Millidarcys	45.6
Average Percent Porosity	16.3
Average Percent Oil Saturation	48.9
Average Percent Water Saturation	30.4
Average Oil Content, Bbls./A. Ft.	642.
Total Oil Content, Bbls./Acre	8,789.
Average Percent Oil Recovery by Laboratory Flooding Tests	0.
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	0.
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	0.
Total Calculated Oil Recovery, Bbls./Acre	0.

The core was sampled and the samples sealed in plastic bags by a representative of the client. Fresh water mud was used as a drilling fluid. The core was from a non-virgin area.

Since the core did not respond to flooding susceptibility tests, no calculated recovery is given.

FORMATION CORED

The detailed log of the formation cored is as follows:

Depth Interval, Feet	Description
850.0 - 850.5	Brown and gray laminated sandstone and shale.
850.5 - 855.0	Gray sandy shale.
855.0 - 855.8	Brown and gray laminated sandstone and shale.
855.8 - 856.8	Gray sandy shale.
856.8 - 857.6	Brown and gray laminated sandstone and shale.
857.6 - 860.3	Dark brown sandstone.
860.3 - 862.9	Brown and gray laminated sandstone and shale.
862.9 - 866.0	Gray sandy shale.
866.0 - 875.0	No core.
875.0 - 877.0	Brown and gray laminated sandstone and shale.
877.0 - 878.7	Brown sandstone.
878.7 - 879.1	Brown and gray laminated sandstone and shale.
879.1 - 881.7	Brown sandstone.
881.7 - 883.4	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Tech-American Resources Corporation Lease Bash Well No. G-19

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.		
1	850.3	17.1	50	22	72	663	7.5	0.5	0.5	332	3.75
2	855.3	17.7	35	42	77	481	Imp.	0.8	1.3	385	0.00
3	857.4	12.0	29	67	96	270	Imp.	0.8	2.1	216	0.00
4	858.5	18.1	55	24	79	772	20.	1.0	3.1	772	20.00
5	859.5	19.2	60	15	75	894	39.	1.7	4.8	1520	66.30
6	860.4	11.8	33	57	90	302	Imp.	0.6	5.4	181	0.00
7	861.5	14.7	57	32	89	650	3.4	1.0	6.4	650	3.40
8	862.5	15.7	58	27	85	706	3.3	1.0	7.4	706	3.30
9	875.5	12.0	30	43	73	279	Imp.	1.0	8.4	279	0.00
10	876.6	10.7	31	42	73	257	4.3	1.0	9.4	257	4.30
11	877.5	18.5	53	26	79	761	43.	1.0	10.4	761	43.00
12	878.5	20.8	54	23	77	871	99.	0.7	11.1	610	69.30
13	879.4	17.4	58	20	78	783	84.	1.0	12.1	783	84.00
14	880.4	18.7	54	14	68	783	167.	1.0	13.1	783	167.00
15	881.4	18.6	64	23	87	924	24.	0.6	13.7	554	14.40

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Tech American Resources Corporation Lease Bash Well No. G -19

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
850.0 - 877.0	6.2	16.3	101.05
877.0 - 881.7	4.3	87.8	377.70
850.0 - 881.7	10.5	45.6	478.75

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
850.0 - 877.0	9.4	15.2	45.6	34.7	564	5,298
877.0 - 881.7	4.3	18.7	56.1	20.9	812	3,491
850.0 - 881.7	13.7	16.3	48.9	30.4	642	8,789

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RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company Tech American Resources Corporation Lease Bash Well No. G-19

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.			
1	850.3	17.4	49	661	0	0	49	46	661	0	Imp.	-
2	855.3	17.2	36	480	0	0	36	41	480	0	Imp.	-
3	857.4	12.0	29	270	0	0	29	67	270	0	Imp.	-
4	858.5	17.9	55	764	0	0	55	42	764	44	0.90	40
5	859.5	19.4	59	888	0	0	59	17	888	0	Imp.	-
6	860.4	12.3	32	305	0	0	32	58	305	0	Imp.	-
7	861.5	14.7	57	650	0	0	57	34	650	0	Imp.	-
8	862.5	16.0	57	708	0	0	57	30	708	0	Imp.	-
9	875.5	12.1	30	282	0	0	30	46	282	0	Imp.	-
10	876.6	10.9	30	254	0	0	30	59	254	18	0.67	45
11	877.5	18.4	53	757	0	0	53	42	757	348	9.00	20
12	878.5	20.6	54	863	0	0	54	43	863	102	2.40	30
13	879.4	17.5	58	787	0	0	58	22	787	400	9.15	25
14	880.4	18.4	55	785	0	0	55	16	785	0	Imp.	-
15	881.4	18.5	64	919	0	0	64	25	919	46	1.33	45

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.