

New Mexico Bureau of Mines and Mineral Resources  
Open File Report No. OF-279

ORGANIC GEOCHEMICAL ANALYSES,  
LEA NO. 1 MILBURN WELL,  
TORRANCE COUNTY, NEW MEXICO

by GeoChem Laboratories, Inc.

1987



GEOCHEMICAL ANALYSES  
SOURCE ROCK EVALUATION

CRUDE OIL—SOURCE ROCK CORRELATION

CRUDE OIL CHARACTERIZATION  
GEOCHEMICAL PROSPECTING

1143-C BRITTMORE ROAD • HOUSTON, TEXAS 77043-8004 • 713/487-7011

July 18, 1984

Mr. Jeremy Setter  
TRANS PECOS RESOURCES, INC.  
One Memorial City Plaza  
Suite 790  
800 Gessner  
Houston, Texas 77024

RE: GeoChem Job No. 2879  
Lee #1 Milburn

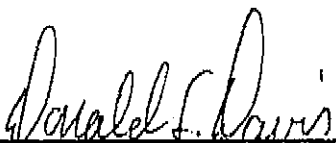
Dear Mr. Setter:

Enclosed are the results of the total organic analyses and the Rock-Eval  
pyrolyses performed on your 16 samples from the Lee #1 Milburn. Also  
included is the invoice for this work.

Please call if we can be of additional assistance.

✓ 36-3N-7E  
Torrance Co

Sincerely,

  
Donald L. Davis  
Manager - Technical Services  
GEOCHEM LABORATORIES, INC.

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Enclosures

TABLE  
RESULTS OF ROCK-EVAL PYROLYSIS

GeoChem Sample No.	Depth Interval (Feet)	Tmax (c)	S <sub>1</sub> (mg/g)	S <sub>2</sub> (mg/g)	S <sub>3</sub> (mg/g)	PI	PC*	T.O.C. (wt. %)	Hydrogen Index	Oxygen Index
2879-001	305-400	388	0.16	0.35	0.29	0.32	0.04	0.50	70	58
2879-002	400-500	319*	0.10	0.10	0.24	0.50	0.01	0.32	31	75
2879-003	500-600	453	0.12	0.66	0.32	0.15	0.06	1.21	54	26
2879-004	600-700	387*	0.10	0.13	0.24	0.45	0.01	0.18	72	133
2879-005	700-800	246*	0.02	0.01	0.22	1.00	0.00	0.10	10	220
2879-006	800-900	369*	0.08	0.11	0.35	0.44	0.01	0.44	25	79
2879-007	900-1000	215*	0.08	0.03	0.25	0.80	0.00	0.21	14	119
2879-008	1000-1100	392*	0.12	0.17	0.31	0.43	0.02	0.38	44	81
2879-009	1100-1200	312*	0.08	0.08	0.43	0.50	0.01	0.30	26	143
2879-010	1200-1300	332	0.11	0.12	0.78	0.50	0.01	0.23	52	339
2879-011	1300-1400	337	0.12	0.17	0.66	0.43	0.02	0.25	68	264
2879-012	1400-1500	335	0.17	0.14	0.77	0.57	0.02	0.34	41	226
2879-013	1500-1600	308	0.16	0.22	1.21	0.42	0.03	0.29	75	555
2879-014	1600-1700	342	0.15	0.15	0.76	0.50	0.02	0.15	100	506
2879-015	1700-1800	300*	0.05	0.06	0.63	0.50	0.00	0.13	46	484
2879-016	1800-1900	212*	0.03	0.01	0.61	0.75	0.00	0.11	9	554

\* The S2 value, or quantity of kerogen pyrolyzed to bitumen, is insufficient to produce a valid Tmax

T.O.C.	= Total organic carbon, wt. %	S <sub>3</sub>	= CO <sub>2</sub> produced from kerogen pyrolysis (mg CO <sub>2</sub> /g of rock)	Oxygen Index	= mg CO <sub>2</sub> /g organic carbon
S <sub>1</sub>	= Free hydrocarbons, mg HC/g of rock	PC*	= 0.083 (S <sub>1</sub> + S <sub>2</sub> )	PI	= S <sub>1</sub> /S <sub>1</sub> + S <sub>2</sub>
S <sub>2</sub>	= Residual hydrocarbon potential (mg HC/g of rock)	Hydrogen Index	= mg HC/g organic carbon	Tmax	= Temperature Index, degrees C.