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BOLETIN DE HISTORIA DE LAS GEOCIENCIAS EN VENEZUELA
Publicación Especial no. 1, mayo 1990

LA INDUSTRIA
PETROLERA VENEZOLANA
EN 1945 - 1947

A través de la correspondencia
del dr. Clemente González de Juana
a la empresa "The Superior Oil. Co."

Ediciones de la Sociedad Venezolana de Historia de las Geociencias
Apartado 47.334, Caracas 1041A, Venezuela

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INTRODUCCION

Recientemente y gracias a la gentileza del dr. Daniel Loureiro, pudimos obtener una copia de una gruesa carpeta de correspondencia que el dr. Clemente González de Juana dirigiera a la empresa "The Superior Oil Co.", fechadas desde el 6 de enero de 1945 hasta el 20 de diciembre de 1947.

Estas cartas enviadas con frecuencia aproximadamente quincenal, presentan información pormenorizada sobre la marcha de la actividad petrolera del país, en todas sus facetas (exploración, perforación, producción, así como aspectos legales de las concesiones, etc.). Se ha querido dar a conocer ésta información, por considerar que es un material documental primario y fundamental para comprender el rápido desarrollo de nuestra principal industria, en estos críticos años de gran expansión que siguieron a la segunda guerra mundial.

La correspondencia se reproduce en forma facsimilar y en ellas se pueden ver muchas notas marginales manuscritas de su mismo autor, así como subrayados indicando la importancia de algunos puntos.

Al leer este interesante material, no cabe la menor duda que el dr. Gonzalez de Juana tenía un conocimiento a fondo de la geología venezolana, por ello no extraña que su obra magistral al fin de su vida profesional, haya sido justamente la *Geología de Venezuela y de sus cuencas petrolíferas*.

La publicación de estas cartas se hace con el propósito de dar a conocer las actividades profesionales del dr. González de Juana, quién es mas conocido como maestro de varias generaciones de geólogos. Quienes fuimos sus alumnos a fines de la década de los años 60 solo lo tuvimos como profesor de la asignatura *Geología de Venezuela*, considerada como difícil y con mucho requerimiento de estudio, usualmente era muy estricto en la corrección de exámenes, pero siempre justo y sobre todo fue un profesor muy respetado por todos.

Es afortunado que la biografía del dr. González de Juana se encuentre en preparación por parte del dr. Aníbal Martínez, conocido historiador de la industria petrolera venezolana. Esto nos llena de satisfacción, ya que una obra de este tipo es lo mínimo que se podía esperar para mantener viva la memoria de *Don Clemente*, para ejemplo de las generaciones venideras de geólogos.

Franco Urbani
Compilador

(Promoción Dr. Clemente González de Juana, 1968)

Letter N° 61.-

Caracas, January 6th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

During the early part of the past year of 1944 the oil companies operating in Venezuela completed the conversion of their holdings to the new Petroleum Law. The last 2/3 of the year were almost enterely spent in obtaining new concessions, and although this process is still unfinished it is already possible to analize its outstanding characteristics.

Never in the oil history of Venezuela were the petroleum interests so eager to obtain land in Venezuela, and never before such prices and royalties were offered, to the point that the obtention of concessions is presenting the characteristics of a "land rush". Following are my comments on some of the foremost oil companies:

The Creole Petroleum Corp. obtained so far two large blocks in the foot-hills of Guárico which are well located as to the amount of sediments and to the structure, with oil possibilities in the basal Miocene-Oligocene and in the Cretaceous. The Creole obtained also a large block in Monagas, east of the Jusepín field and south of Qui-riquire which is very interesting on account of the latest develop-

ments in northern Jusepin.

The Creole obtained some minor lots in Falcón to supplement their holdings in that area. They obtained a rather large exploration block in the western part of Lake Maracaibo and a few exploitation parcels in the center of District Perijá, State of Zulia.

It is interesting to note that the Creole definitively abandoned the Delta, with the only exception of Pedernales, and showed no interest in the Barinas-Apure area.

The prices paid by the Creole are in every case slightly higher than those paid in the neighborhood by other concerns which was natural to happen the Creole being the largest company and the natural leader of the Venezuelan Oil industry.

The Shell group obtained large concessions in northwestern Anzoátegui and northeastern Guárico in an interesting, but untested, territory of the foot-hill belt.

The Shell obtained also a rather large block covered by waters of Lake Maracaibo, west of Lagunillas field, at a very high price. This is the first time the Shell decided in Venezuela to enter in water operations.

Several years ago the Shell obtained a large concession in southwesterⁿ Venezuela, in the states of Táchira, Barinas, and Apure. Although they are still keeping a part of that land they showed no interest in obtaining more concessions in that vicinity.

The Mene Grande Oil Co. concentrated their holdings in the State of Anzoátegui and west-central Monagas, close to their new Travieso-Santa Bárbara field.

The Mene Grande paid the highest figure (about Bs. 2,000.00 per hectare) for the National Reserves of Travieso 2 and 3 but outside

of these concessions they obtained the rest of their land at a remarkable low price.

It seems probable that the Mene Grande and the Creole have some agreement on the above mentioned Travieso lots.

The policy followed by the Mene Grande on central Anzoátegui appears to me very wise and, considering everything, the Mene Grande is perhaps the Company which, as far as land is concerned, obtained most advantages from the present situation.

The Sinclair group, which appeared to be on the aggressive side during the year of 1.943 and the early months of 1944, did obtain a large exploration block in the Barinas-Apure area and only a few parcels in Monagas. They did not improve greatly their land situation which is rather precarious.

The Socony Vacuum showed a very erratic criterium. They obtained a large exploration block in the Barinas area, a rather large block in northern Monagas, and several scattered pieces of land in Anzoátegui and eastern Guárico.

They offered for the Barinas lots the usual Bs. 18.00 as initial exploitation tax to be paid only on those parcels finally selected and at the time of selecting the exploitation acreage.

Their price for the Monagas lots was very high and the value of the land is, in my opinion, very speculative.

The Texas Petroleum Co. obtained a large lot in central Guárico at a fair price (Bs. 50.00 per hectare) located in the southern limb of the basin. After the results of Las Mercedes these concessions appear to be very interesting.

The Texas obtained also a lot in southern Monagas the value of which is more speculative. They obtained this land very cheap.

The Venezuelan Atlantic Refining Co. has been one of the most active concerns. They obtained concessions in the states of Guárico,

Anzoátegui and Monagas, all of them carefully chosen in promising areas; perhaps the more speculative land is the Selva lot located NE. of Maturín. The Atlantic paid the usual high prices for their land.

The Standard of California group (Richmond Pet. and Coro Pet.) was also very active. In addition to a few parcels in the neighbourhood of their central Falcón concessions they obtained a large block in western Zulia (District of Perijá) and another large area in northeastern Monagas and the Delta. Both of these lots have been taken in exploration status and at a rather cheap price because they are not located in very "popular" areas.

The exploration of this blocks will be expensive because it will be a 100% seismograph proposition.

The Caracas Petroleum and the Las Mercedes Co. concentrated in central Guárico near the Las Mercedes field. Due to the vicinity of that oil field their acreage should be considered first class, and was obtained at a moderate price. (Bs. 50.00 per hectare of initial exploitation tax).

The Phillips Petroleum obtained so far four lots, one in northwestern Anzoátegui north of Santa Ana, and another in northern Anzoátegui west of the Quiamare field. In my opinion these two lots are poor prospects.

A third lot in Guárico, just north of the town of Calabozo, which I also consider a rather poor prospect on account of the very shallow basement. In addition to the information already forwarded on this subject please note that seismic reflection shows at the town of Calabozo a basement depth of 1,550 feet.

The fourth lot is also located in Guárico in the Valle de La Pascua region and so far appears to be good.

The Phillips offered in every case a tremendously high royalty.

The Barnsdall concentrated in southern Guárico and southern Anzoátegui, dangerously near the ^{of}tar belt. Their land cannot be considered a very good prospect.

Strange as it is the Pantepec did not obtain any land so far.

Oil discoveries. - During the year of 1.944 the Socony Vacuum found the Guico oilfield, north of the Leona field, in the southern, faulted, zone of the State of Anzoátegui.

The Mene Grande - Creole interests stablished as a commercial producer the Yopales field, west of Oficina, also in the faulted area of southern Anzoátegui.

The Creole extended greatly the Jusepín field toward the northeast by finding deeper productive sands of shore-line type in the northern Jusepín segment.

The Mene Grande found the western extension of the Santa Bárbara field on their Travieso lots. The accumulation, same as in Santa Bárbara, is of shore-line type.

With these two extensions the Jusepín-Mulata-Santa Bárbara producing zone is now nearly 75 miles long.

The S.A.Petrolera Las Mercedes continued the development of Las Mercedes field, in central Guárico, which now may be truly called an oilfield.

The Shell drilled 2 wildcats in District Mara (Western Maracaibo) the results of which are kept confidential.

The reserves of the Bolívar coastal fields (Lake Maracaibo) have been substantially increased by the Eocene production.

Drilling in some of the deep exploratory fields and deep wildcatting has been somewhat restricted ~~from~~ lack of equipment and material, derived from the present war emergency.

Transport and refining. -

The construction of the 16" pipe-line from Mulata to Puerto

La Cruz, of the Creole-Mene Grande interests, is now well advanced.

Sinclair increased the capacity of his pipe-line from Santa Bárbara to Puerto La Cruz by installing some intermediate pump-stations. This line has now a capacity of 70.000 bbls. per day.

Outside of these, only small diameter lines have been constructed, in order to connect some field extensions to the main pipe-lines.

The most outstanding news on the refining side is the obligation of all the new concessions to refine in Venezuela an amount of at least 10% of the oil produced from those concession, or an equivalent amount of oil taken from concessions not subject to this obligation. It is also worthy of note the restriction imposed on all the new concessions, by which none of the oil produced in there can be refined within the bounds of the Caribbean quadrangle.

The Mene Grande Oil Co. celebrated an agreement to construct before 1.951 a refinery with a capacity of 30.000 bbls. per day.

The Shell group and the Creole have also the obligation to construct new refineries in Venezuela. The Shell is advancing some studies to that effect in the west coast of the Paraguaná Peninsula, but the location of the Creole's plant still remains undefined.

The status of the much advertised Sinclair's refinery appears at present rather undefined.

The proposed gas system for the city of Caracas, based on gas manufactured in a plant to be installed near by, which was sponsored by Sinclair, seems to go ahead slowly but it is still very much in a preliminary state.

Very Truly yours,

Clemente González de Juana.

Caracas, January 13th. 1.945.-

The Superior Oil Co
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Applications from the Venezuelan Atlantic accepted.-

The Venezuelan Government accepted the applications of the Venezuelan Atlantic & Refining Co. on lots VARCO-24 and 25, listed and commented on my letter N° 51 of September 30th. The Atlantic will pay an initial exploitation tax of Bs. 50.00 per hectare and the concessions will have the usual refining obligations.

The application of the same Co. on exploration lot SELVA commented in my letter N° 51 has been also accepted for the same amount of Bs. 50.00 of initial exploitation tax, to be paid on those parcels finally selected in the lot. There are also the usual refining obligations.

National Reserves offered.-

The Government will consider applications on the following lots of National Reserves: The National Reserves of concession PEÑAS BLANCAS with 546.015 hectares and the Sobrante of same concession with 17.3 hectares. The National Reserves of AGUA AZUL y CORCOVADO with 3,420.4 hectares. The National Reserves of concession EL MACHO with 2,620.86 hectares and the Sobrante of same concession with 43.28 hectares. The National Reserves of concession LAS VILLAS, with 1,819.6 hectares.

The first three lots are located in District Zaraza, State of Guárico and the fourth lot in District Infante, State of Guárico.

The Government will not considere applications with a total royalty under 20%, unless the applicant raises the initial exploitation tax to a satisfactory figure. The concessions will have the usual refining restrictions.

Comments: Concessions Peñas Blancas and Agua Azul, located sw. of Santa María de Ipire, are rather close to the tar belt to be very interesting. This land being speculative it will, probably, be wiser to offer the 20% royalty rather than any high initial exploitation tax.

Concession El Macho, east of Tucupido, is better located in relation with the basin ~~and~~ as far as the amount of sediments is concerned.

Concession Las Villas, north of Chaguaramas, appears at present the best of them all. You may recall that a water well drilled in the town of Chaguaramas found an oil sand at about 400'. This well could have been a pumper.

The Government will also considere applications on the National Reserves of concession SAN FRANCISCO with 2,839.27 hectares and the Sobrante of same with 258.57 hectares. The National Reserves of concession SAN VICENTE, BRAZO DE CINCO, ETC. with 2,900.76 hectares and the Sobrante of same concession with 641.99 hectares. The National Reserves of concession SIMON with 3,728.77 hectares. The National Reserves of concession MATA DEL DIABLO with 2,844 hectares. The National Reserves of concession SAN JOSE with 5,241 hectares. The National Reserves of concession MEREYAL, HATO NUEVO, ETC, with 2,523.94 hectares, and the Sobrante of same with 437.53 hectares. The National Reserves of concession ROBLE QUEMADO with 436.81 hectares and the Sobrante of same concession with 114.60 hectares. The National Reserves of concession BA-

JO GRANDE with 934.88 hectares and the Sobrante of same concession with 88.5975 hectares.

All these concession are located in District Aragua, State of Anzoátegui. The Government will not considere offers with less than 20% royalty except in case the applicant agrees to raise the initial exploitation tax to a satisfactory figure, and the usual refining restrictions.

Comments: In my opinion lots Roble Quemado and Bajo Grande are rather poor pieces of land for the reasons forwarded when considering the FILVEN-13 and 14 lots, in fact part of Roble Quemado was recently renounced by the Creole. Lot San Francisco in the north flank of El Roble field is also a very questionable piece of land. The rest of them appear to be better located.

The Venezuelan Government will also considere applications on the National Reserves of concession LOS ROBLES with 199.91 hectares. The National Reserves of concession COROZAL y MACO UNARE with 789.11 hectares. The National Reserves of concession SANTA JUANA with 410.1 hectares, and the Sobrante of same concession with 873.5 hectares. The National Reserves of concession PICA PICAL with 950.29.

The above concessions are located in District Miranda, State of Anzoátegui. The conditions, same as above, are a minimum of 20% royalty or a satisfactory raise in the initial exploitation tax. The concession are affected by the usual refining obligations.

Comments: All these lots are, in my opinion, located in a very interesting area (North of Pariaguan) where oil prospects are oil sands in the Oficina formation and accumulations of similar type of the Oficina, Leona and Yopales fields.

The Government will also accept bids on the National Reserves of concession SAN PABLO with 6,120.00 hectares. The National Reserves of concession LA CANDELARIA with 6,016.79 hectares. The National Re-

erves of ONADO N° 1 with 5,000 hectares and the Sobrante of same concession with 526.89 hectares. The National Reserves of ONADO N° 2 with 5,000 hectares and the Sobrante of same concession with 783.59 hectares. The National Reserves of ONADO N° 3 with 5,000 hectares and the Sobrante of same concession with 1,648.92 hectares. The National Reserves of ONADO N° 4 with 5,000 hectares and the Sobrante of same concession with 815.44 hectares. The Sobrante of MARON N° 5 with 7,610.02 hectares. The National Reserves of MARON N° 6 with 4,074.63 hectares. The National Reserves of concession PALMA N° 1 with 5,000 hectares and the Sobrante of same concession with 1,282.86 hectares, and the National Reserves of PALMA N° 4 with 3,000 hectares.

All the above concession are located in District Maturín, State of Monagas. The Government will not considere propositions less than 20% royalty unless the applicant raiser the initial exploitation tax to a satisfactory figure. These lots are subject to the usual refining restrictions.

Comments: The above lots are located in Central Monagas in areas recently renounced by other Companies because they were considered to be located too-deep into the basin. The Sinclair obtained recently some parcels in that area, and according to my information the same Sinclair group is the concern interested in these lots of National Reserves.

The Venezuelan Government will, also, considere applications on the National Reserves of concession CARNE SECA with 3,891.63 hectares and the Sobrante of same concession with 143.49 hectares. The National Reserves of LOTE V-102 with 5,000 hectares and the Sobrante of same concession with 205.58 hectares. The National Reserves of LOTE V-105 with 5,000 hectares and the Sobrante of same with 2,849.51 hec-

tares. The National Reserves of GUERE-1 with 3,500 hectares, and the Sobrante of same, with 139.53 hectares. The National Reserves of GUERE-2 with 4,300 hectares and the Sobrante of same with 538.82 hectares. The National Reserves of GUERE-3 with 4,000 hectares and the Sobrante of same with 182.37 hectares. The National Reserves of GUERE-4 with 4,350 and the Sobrante of same with 45.85 hectares. The National Reserves of GUERE-5 with 3,400 hectares and the Sobrante of same with 154.21 hectares. The National Reserves of ARAGUA N° 2 with 5,000 hectares and the Sobrante of same with 903.45 hectares. The National Reserves of ARAGUA N° 5 with 4,921.64 hectares. The National Reserves of ARAGUA N° 6 with 5,000 hectares and the Sobrante of same concession with 317.01 hectares. The National Reserves of ARAGUA N° 8 with 4,930.05 hectares. The National Reserves of ARAGUA N° 14 with 1,600 hectares, and the Sobrante of same with 530.26 hectares. The National Reserves of concession PUNCHE Y SAN ANTONIO with 1,937.28 hectares.

All these concessions are located in District Aragua, State of Anzoátegui, and the conditions fixed by the Government are, same as above, a minimum royalty of 20% or a satisfactory raise in the initial exploitation tax. All these lots will be subject to the usual refining restrictions.

Comments: Among these lots the reserves of Aragua N° 14 are very interesting due to the vicinity of Las Ollas N° 1 well. Some of the others, as Lote V-105, are fair risks, but the biggest amount of them, located in the north flank of the northern Santa Ana syncline, which extends at least as far as Aragua de Barcelona, are very poor propositions.

The Government opened bids also on the following lots: The National Reserves of LOTE V-54 with 4,254.63 hectares. The National Reserves of LOTE V-59 with 5,000 hectares. The National Reserves of LOTE V-65 with 5,000 hectares. The National Reserves of LOTE V-70 and the Sobrante of same concession with 850.54 hectares. The National Re-

serves of FREITES N° 7 with 4,938.29 hectares. The National Reserves of FREITES N° 19 with 4,000 hectares, and the Sobrante of same with 384.24 hectares. The National Reserves of FREITES N° 20 with 5,000 hectares and the Sobrante of same with 698.74 hectares. The National Reserves of concession FREITES N° 21 with 4,950 hectares and the Sobrante of same with 790.49 hectares. The National Reserves of FREITES N° 22 with 4,937.38 hectares. The National Reserves of FREITES N° 23 with 4,426.68 hectares. The National Reserves of FREITES N° 40 with 4,901.53 hectares. The National Reserves of FREITES N° 41 with 4,885.42 hectares. The National Reserves of FREITES N° 42 with 5,000 hectares and the Sobrante of same with 48.03 hectares. The National Reserves of FREITES N° 43 with 1,750 hectares and the Sobrante of same with 189.13 hectares. The National Reserves of FREITES N° 44 with 2,750 hectares and the Sobrante of same with 4,895.41 hectares. Part of the National Reserves of concession LOTE V-69 with 1,500 hectares.

All the above listed concessions are located in District Freitas, State of Anzoátegui, and the requirements of the Government, same as above, are a minimum royalty of 20% or a raise of the initial exploitation tax to a satisfactory figure.

Comments: The lots located NE of Leona, such as Freitas N° 19, 20, 21, 22, and 23 are in my opinion good concessions. The lots located north of Santa Rosa, in the generally synclinal area between Santa Rosa and the Río Aragua structure, such as Freitas N° 40, 41 and 42 are very poorly located. Of the rest, lots V-54, V-65 and V-70, and Freitas N° 44 are fair pieces of land and the others are not so good.

The Government will consider applications on the National Reserves of concession Santa Rosalía de Zuata with 8,601.53 hectares, District Monagas, State of Anzoátegui, on the same basis of 20% royalty or a satisfactory raise in the initial exploitation tax.

Comments: This land is too-far south in the tar zone.

The Venezuelan Government will consider applications on the following lots of National Reserves. The National Reserves of concession LAS RAICES with 457.56 hectares and the Sobrante of same with 166.69 hectares. The National Reserves of concession SAN ANTONIO with 577.49 hectares and the Sobrante of same concession with 110.88 hectares. The National Reserves of POTREROS DE SABANA GRANDE with 413.9 hectares. The National Reserves of CAGIGAL N° 22 with 1,901.78 hectares. The National Reserves of CAGIGAL N° 2 with 4,005.51 hectares. The National Reserves of concession MONTEVIDEO with 2,078.87 hectares and the Sobrante of same with 384.81 hectares. The National Reserves of CAGIGAL N° 3 with 4,246.01 hectares. The National Reserves of CAGIGAL N° 6 with 2,166.55 hectares.

All the above concessions are located in District Cagigal, State of Anzoátegui. The Government will not accept propositions for less than Bs. 50.00 per hectare unless it is offered a substantial raise of royalty.

Comments: These concessions have a good stratigraphic setting but the value of each lot will depend largely of the very local structure to be found. Some of them San Antonio and Potrero de Sabana Grande- were recently renounced by Socony Vacuum.

The Government will consider applications on the National Reserves of concession ZARAZA N° 5, ZARAZA N° 7, and ZARAZA N° 11 with 5,000 hectares each one, TUCUPIDO N° 2 with 1,777.3 hectares GUARICO N° 20 with 4,995.50 hectares. The National Reserves of GUARICO N° 21 with 4,995 hectares. The National Reserves of concession CHUPONAL with 1,250 hectares and the Sobrante of same with 15.3 hectares. The National Reserves of COGOLLAR with 1,849.48. The National Reserves of LAS CAMAZAS, QUINTALITO, CASTILLERO, ETC., with 2,412. hectares, and the Sobrante of same with 228 hectares. The National Reserves of LA HA-

CIENDA with 2,000 hectares and the Sobrante of same with 1,867. The National Reserves of LA PIEDRA y LA ZAMOREÑA with 774.05 hectares and the Sobrante with 295 with 295.5 hectares. The National Reserves of ZARAZA E with 5,000 hectares and the Sobrante of same with 6,396 hectares. The National Reserves of IPIRE-1 with 5,000 hectares and the Sobrante of same with 242.9 hectares. The National Reserves of IPIRE-2 with 4,4 hectares and the Sobrante of same with 162.44 hectares. The National Reserves of IPIRE-7 with 5,000 hectares and the Sobrante of same with 254.98 hectares. The National Reserves of SAN VICENTE N° 1 with 3,546.63 hectares and the Sobrante of same with 307 hectares. The National Reserves of LA HORQUETA, LOMA TRISTE, ETC., with 3,508 hectares. The National Reserves of SAN GUILLERMO with 257.6 hectares. The National Reserves of EL ALACRAN with 1,441.5 hectares. The National Reserves of VACUM-7 with 5,000 hectares. The National Reserves of GUARICO n° 8 with 3,251.7 hectares. The National Reserves of GUARICO N° 9 with 3,807.20 hectares. The National Reserves of GUARICO N° 17 with 500 hectares. The National Reserves of GUARICO N° 19 with 3,747.5 hectares. The National Reserves of GUARICO N° 30 with 4,965 hectares. The National Reserves of GUARICO N° 31 with 3,383 hectares. The National Reserves of GUARICO N° 32 with 3,878 hectares.

All these concession are located in District Zaraza, State of Guárico. The Government will not consider propositions which do not raise the total royalty to at least 20% unless the initial exploitation tax reaches a satisfactory figure.

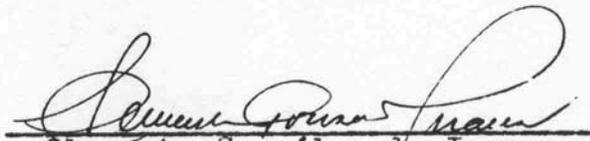
Comments: Most of the lots listed above are located in northern and central Guárico in a very interesting area. Lot Cogollar is located besides 2 parcels recently renounced by the S. A. Petrolera Las Mercedes, and Lots Zaraza-E and Ipire-1 are located near some parcels renounced by Socony-Vacuum. I criticized these renouncements at the time they were made and I still believe that ^{this} land holds good

possibilities.

Some of the other lots are located north and northeast of Santa María de Ipire, I consider this vicinity also interesting because I believe enough thickness of Oficinat formation will be found before reaching the precretaceous Carrizal formation.

Lot Vacuum-7 may not be so favorably located in relation with the depth of the basement, and lots Guárico-19, 20, and 21, are decidedly in the shallow part of the basin dangerously closed to the tar belt.

Very truly yours,


Clemente González de Juana,

cc/W.B.Jayred.-
CGdeJ/cjm.-

Caracas, January 20th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Venezuelan Government continued offering lots of National Reserves in various parts of the Country. Most of these lots were left out by the most powerful Companies and they are offered now at a suggestion of the Sinclair, Phillips, and Atlantic groups. In most cases the Government asked for a high royalty because the lack of initial cash may induce some of the smaller companies to file in their bids. In these speculative areas a high royalty is considered by some more convenient than a high initial exploitation tax because it enables them to hold the land and wait for new developments without heavy cash disbursements.

National Reserves offered.-

The Government will accept bids on the following lots of National Reserves: The National Reserves of concession MELLADO N° 2 with 2,360.00 hectares. The National Reserves of MELLADO N° 3 with 4,245,00 hectares. The National Reserves of MELLADO N° 56 with 5,000.00 hectares. The National Reserves of concession ZONA N° 1 with 4,991.6016 hectares.

The above concessions are located in District Mellado, State of Guárico.

The Government will not consider offers less than 20% of to-

tal Royalty unless the applicant agrees to raise the initial exploitation tax to a satisfactory figure.

Comments: These lots located in northern Guárico, south of the thrust fault separating the Guarumen group from the older Eo-Cretaceous complex, have a good stratigraphic setting. Surface geology is fairly easy in that vicinity and therefore it must be assumed that the selection of parcels made by Pantepec (the former concession holder) was done right; if this assumption is correct the lots offered now will show rather poor structural conditions.

The Government will also accept bids on the following lots of National Reserves: The National Reserves of concessions denominated DAKOA-4 with 5,000 hectares; DAKOA-6 with 5,000 hectares and the Sobrante of same with 5.84 hectares; DAKOA-8 with 5,000 hectares; DAKOA-10 with 5,000 hectares; DAKOA-12 with 5,000 hectares and the Sobrante of same with 2,156.64 hectares; DAKOA-14 with 5,000 hectares and the Sobrante of same with 405 hectares; DAKOA-136 with 4,616.5 hectares; VALLE-3 with 5,000 hectares; VALLE-5 with 5,000 hectares; VALLE-7 with 5,000 hectares and the Sobrante of same with 599.5 hectares; VALLE-9 with 5,000 hectares; VALLE-11 with 4,630.04 hectares; VALLE-15 with 4,968.08 hectares. All the above listed concessions are located in District Infante, State of Guárico.

The Government will not consider propositions less than 20% royalty unless a satisfactory initial exploitation tax is offered.

Comments: With the exception of Dakoa-136 these concessions are located in the most attractive part of the state of Guárico, and judging from the amounts paid for other concessions in that state these lots should be worth around Bs. 60.00 per hectare, and possibly a little more. Whether the Government will be satisfied with this price or will consider more advantageous the 20% royalty is impossible to say, but

chances are that it will not be satisfied with less than Bs. 150.00 per hectare.

In my opinion it will be wiser to offer a high initial tax rather than a high royalty.

After the failure of wildcat Manapire N° 2, concession Dackoa-136 has very little interest.

The Government will also accept propositions on the National Reserves of the following concessions: CONSO-N° 1, N° 2, and N° 3 with 5,000 hectares each; CONSO N° 4 with 3,900 hectares; CONSO N° 5 with 5,000 hectares; CONSO N° 6 with 3,400 hectares; CONSO N° 7 with 2,450 hectares; CONSO N° 8 with 4,375 hectares; CONSO N° 9 with 2,000 hectares; CONSO N° 10 with 4,548.4735 hectares; CONSO N° 11 with 4,025 hectares, and the Sobrante of same with 720.047 hectares; CONSO N° 12 with 2,300 and the Sobrante of same with 40,849 hectares. CONSO N° 13 with 3,000 hectares; SOSA N° 3 with 5,000 hectares, and the Sobrante of same with 727,73 hectares; SOSA N° 4 with 4,882.72 hectares; SOSA N° 5 with 2,946.77 hectares; SOSA N° 6 with 464.43 hectares; SOSA N° 12 with 1,086.68 hectares.

All the above listed concessions are located in District Sosa, State of Barinas.

The National Reserves of concession AGUA LINDA Y CAÑO JESUS with 3,908.98 hectares, located in District Pedraza, State of Barinas.

Part of the National Reserves of concession ZAMOA N° 94 located in District Barinas, State of Barinas with 2,276.14 hectares.

The Government will not accept offers less than 20% royalty unless the applicant raises the initial exploitation tax to a satisfactory figure.

Comments: All the concessions obtained lately in Barinas have the obligation to pay Bs. 18.00 of initial exploitation tax, to become effective at the time when parcels are selected. Comparing this

price with the minimum royalty of 20% now demanded, the later seems entirely out of proportion.

The Government will accept applications on the following lots of National Reserves: The National Reserves of concessions denominated GUARICO N° 5 with 2,712.80 hectares; GUARICO N° 6 with 913.49 hectares; GUARICO N° 7 with 1,817.08 hectares; part of ZARAZA N° 2 with 2,464.84 hectares, and the Sobrante of same with 2,096.89 hectares.

All the above concessions are located in District Zaraza, State of Guárico.

The Government fixed a minimum price of Bs. 60.00 per hectare plus the usual refining obligations.

Comments: The above listed concessions are very well located and the price fixed is more or less in accord with the prices paid in that vicinity, specially around concession Zaraza N° 2.

The Government will accept applications on the following lots: The National Reserves of concession denominated ZARAZA N° 8 with 5,000 hectares, the southern portion of the National Reserves of ZARAZA N° 9 with 2,215.20 hectares. Both are located in District Zaraza, State of Guárico.

The Government fixed a minimum price of Bs. 200.00 per hectare plus the usual refining obligations.

Comments: Some company must be very interested in these two lots to offer such a price. In my opinion these lots, although very attractive, there are not better, not worse than the area around Valle La Pascua, Chaguaramas, etc., which has been offered at a considerably lower price.

I have good reasons to believe that the Venezuela Atlantic & Refining Co. is very interested in the southern part of these lots.

Concerning the land situation in this vicinity the following

comments may help to understand the situation: A few months ago the Barnsdall was negotiating with the Venezuelan Government to obtain some concessions immediately south of the town of El Socorro (Central Guárico) on the basis of Bs. 60.00 per hectare. In the mean time the Phillips came across and offered Bs. 100.00 and 20% royalty on all the land surrounding the town of el Socorro, including the land desired by the Barnsdall. The Phillips offer was accepted and their application has been published. I will comment on it in a few days.

The Atlantic was also interested in this vicinity and decided to push prices up, therefore they offered Bs. 200.00 as initial exploitation tax and obtained two concessions immediately north of the Phillips lots, and adjacent to the southern boundary of lots Zaraza N° 8 and N° 9.

I have been informed that immediately after these applications from the Atlantic were published, Mr. Rafael A. Camejo filed in an opposition to these concessions. It is expected that a similar opposition will be made against part of the Phillips lots.

The reasons for Mr. Camejo's opposition were explained in my letter N° 25 dated February 10th. 1.944, and no further comments are deemed necessary.

National Reserves to Socony-Vacuum.-

Socony Vacuum obtained the National Reserves of concession Lote V-61, District Freites, State of Anzoátegui, listed and commented in my letter N° 46, at the price of Bs. 50.00 per hectare plus the usual refining obligations.

Some comments on the failure of recent wildcats.-

Wildcat La Cruz N° 2 drilled by Creole on the Creole-Atlantic Sinclair pooled area has been abandoned at 5040'. This well was located south of La Cruz N° 1 (See enclosed sketch) and its failure dealt a hard blow on that area.

The La Cruz wells were located in a seismic high located W. of Maturín where a structural accumulation was expected. Same as in the highest part of Jusepín anticline, sands were missing or were found very thin and it is now the question to find whether the flanks present better sands or shore-line conditions, similar to Jusepín field or to Mulata-Santa Bárbara field; ~~the~~ northern flank was explored to a certain extent by Boquerón N° 1 well, drilled in the same pooled acreage which also failed; the southern flank and the eastern plunge? remains untested but the later will be explored by Creole within a short time by drilling near the city of Maturín.

Manapire N° 2, the wildcat of the S. A. Petrolera Las Mercedes in southern Guárico (See enclosed sketch) was also abandoned at 4665'.

This well, located well toward the south from Manapire N° 1, was too-near of the tar belt, in the shallow part of the basin, to have much hope of success. This failure will, probably, cause the renouncement of large areas in southern Guárico and will affect the value of some of the Barnsdall new concessions.

New companies to start operations in Venezuela.-

The Continental oil and the Tide Water have representatives in Caracas considering the possibility of obtaining some concessions in Venezuela.

The preliminary report for these two concerns was made by A.H.Garner (See my letter N° 39) and they are now seriously considering the possibility of getting land to start operations immediately.

Additional information about refineries.-

Representatives of Sinclair and of the Venezuelan Government are now discussing the terms of the agreement to install in Venezuela (Puerto La Cruz) a new refinery. This Plant will have a minimum capa-

city of 35.000 bbls. per day.

Very truly yours,

Clemente González de Juana.

cc/W.B.Jayred.-

CGdeJ/cjm.!

Caracas, January 27th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The land adquisition is still the dominant feature of the oil industry in Venezuela. Following are some of the recent transactions:

Applications from the Venezuelan Oil Concessions Ltd.(Shell) accepted.-

The Government accepted the applications of the v.o.c. on lots LAC-1 to LAC-16 at the price of Bs. 800.00 per hectare, lots LAC-17 to LAC-32 at the price of Bs. 500.00 per hectare, lots LAC-33 to LAC-48 at the price of Bs. 200.00 per hectare, lots LAC-49 to LAC-66 at the price of Bs. 100.00 per hectare, and lots LAC-67 to LAC-123 at the price of Bs. 50.00 per hectare. These lots will be subject to the usual refining restrictions.

The above mentioned concessions, located in the Lake of Maracaibo were listed and commented in my letter N° 45 dated August 5th. 1944.

Applications from the Richmond (Standard of California) accepted.-

The Government accepted the applications of the Richmond Exploration Co. on the following lots located in the Delta area and commented in my letter N° 53 of October 28th. 1.944.

Exploration lots Reco-1 to Reco-44 at the price of Bs. 18.00 per

hectare as initial exploitation tax to be paid on those parcels selected by the Company and at the time of selection. These concessions are affected by the known refining restrictions.

They were also officially accepted the applications on the state of Falcón lots denominated Peras-17 to Peras-27, and Falgo-2 to Falgo-5 also commented in my letter N° 53. These lots of Falcón will not pay anything outside of the taxes provided by the law but will be under the known refining obligations.

Applications from the Sinclair Oil Co. accepted.-

The Government accepted the applications of the Sinclair Oil Co. on exploration lots SINCO N° 1 to SINCO N° 41 located in the State of Barinas, which were described in my letter N° 53 of Oct. 28th. 1.944.

Sinclair will pay for these concessions Bs. 18.00 per hectare as initial exploitation tax only on the selected parcels, and the concessions will have the usual refining restrictions.

Applications from the Creole Pet. Corp. accepted.-

The Government accepted the applications made by Creole on exploration lots denominated: Grupo-63, paying Bs. 12.00 per hectare the first year of exploration and Bs. 150.00 per hectare as initial exploitation tax on the parcels selected at the end of three years. Grupo-64 paying Bs. 12.00 per hectare the first year of exploration and Bs. 100.00 per hectare as initial exploitation tax on the parcels selected. Grupo-65 paying Bs. 12.00 per hectare the first year of exploration and Bs. 81.00 per hectare as initial exploitation tax on the parcels selected. Grupo-66 paying Bs. 12.00 per hectare the first year of exploration and Bs. 50.00 per hectare as initial exploitation tax on the parcels finally selected. Grupo-67 paying Bs. 12.00 per hectare the first year of exploration and Bs. 50.00 per hectare as initial exploitation tax on the parcels finally selected. Grupo-68 paying Bs. 12.00 per hectare the first year of exploration and Bs. 55.25 per hectare as initial exploitation tax on the parcel

selected. Grupo-69 paying Bs. 12.00 per hectare the first year of exploration and Bs. 52 per hectare as initial exploitation tax. Grupo-70 paying Bs. 12.00 per hectare the first year of exploration and Bs. 85.00 per hectare as initial exploitation tax. Grupo-71 paying Bs. 12.00 per hectare the first year of exploration and Bs. 56.40 per hectare as initial exploitation tax. Grupo-72 paying Bs. 22.00 per hectare the first year of exploration and Bs. 250.00 per hectare as initial exploitation tax. Grupo-73 paying Bs. 22.00 per hectare the first year of exploration and Bs. 250.00 per hectare as initial exploitation tax. Grupo-74 paying Bs. 22.00 per hectare the first year of exploration and Bs. 100.00 per hectare as initial exploitation tax. Grupo-75 paying Bs. 22.00 per hectare the first year of exploration and Bs. 250.00 per hectare as initial exploitation tax.

All the above mentioned lots are located in an area covered by the waters of Lake Maracaibo, and were commented in my letter N° 53 dated Oct. 28th. 1.944; the price paid for this land is very stiff.

Applications from the Venezuelan Oil & Transport Ltd. (Shell) accepted.-

The Government accepted the applications from V.O.T. on lots AN-1 to AN-55, located in Anzoátegui at the price of Bs. 50.00 per hectare plus the usual refining restrictions. These lots were commented in my letter N° 52 dated October 7th.

National Reserves to the Mene Grande Oil Co.-

The Mene Grande Oil Co. obtained the National Reserves of concession Travieso N° 3 in the State of Monagas at the price of Bs. 2,250.00 per hectare, and the usual refining restrictions. This is the highest prices ever paid in Venezuela. See my comments on letter N° 52 of Oct. 7th. and N° 59 of Dec. 23th. 1.944.

National Reserves to the S. A. Petrolera Las Mercedes.-

The S.A.Petrolera Las Mercedes obtained the National Reserves

and the Sobrante of concession Oritupano B in the State of Monagas, commented in my letter N° 47 of August 26th., at the price of Bs. 50.00 per hectare and the usual refining obligations.

National Reserves to the Venezuelan Oil & Transport Co.

Ltd. (Shell) .-

The Government accepted the applications of the V.O.T. on part of the National Reserves and Sobrante of concession Comunidad N° 1 and on part of the National Reserves and the Sobrante of Cagigal N° 5, all in the State of Anzoátegui, which were commented in my letter N° 46 at the price of Bs. 50.00 per hectare plus the usual refining restrictions.

National Reserves to the Venezuelan Atlantic & Refining Co.-

The Atlantic obtained the National Reserves and the Sobrante of concession Oritupano A, State of Monagas, listed and commented in my letter N° 47, at the price of Bs. 60.00 per hectare, plus the usual refining obligations, and the National Reserves of Oritupano N° 2 at the price of Bs. 75.00 per hectare, commented in same letter N° 47.

National Reserves to Socony Vacuum.-

The Socony Vacuum obtained the following lots of National Reserves located in the State of Anzoátegui, listed and commented in my letters N° 46 and 47.

Lote V-62, Lote V-66, Freites N° 10, and part of Freites N° 14 at the price of Bs. 50.00 per hectare, Lote V-67, the National Reserves of Freites N° 17, and the Sobrante of Freites N° 17 with a 20% royalty. All these concessions are affected by the known refining restrictions.

National Reserves to the Texas Petroleum Co.-

The Texas Co. obtained the following lots of National Reserves located in the State of Monagas.- Part of Palma N° 4 at the price of Bs. 300.00 per hectare.- Part of El Lirial at the price of Bs. 300.00 per hectare. Part of Versa N° 1 at the price of Bs. 300.00 per hectare.

All of them are subject to the known refining restrictions.

These lots were commented in my letter N° 47 dated August, 26th. 1.944.

National Reserves to the Creole Petroleum Corp.-

The Creole Pet. Corp. obtained the following lots of National Reserves, located in Anzoátegui.

Freites N° 12 and the Sobrante of same at the price of Bs. 65.00 per hectare, see my letter N° 46. Freites N° 15, part of Freites N° 14, and part of Freites N° 18 commented in the same letter N° 46, at the price of Bs. 75.00 per hectare. These lots are subject to the known refining obligations.

Petroleum concession declared extinct.-

The Government declared the extinction of rights of concession denominated EL DESTINO o PURGUEY of Rafael Arturo García Domínguez, based on Art. 78 of the Petroleum Law. This concession was located in District Peñalver, State of Anzoátegui.

The Government declared the extinction of rights of concessions denominated Flores N° 1, Flores N° 2, and Flores N° 3 of the Apure Venezuela Petroleum Corp. based on Art. 78 of the Petroleum Law.

These concessions were located in District Paez, State of Apure.

Exploration-Exploitation concessions to the Barnsdall.-

The following applications for exploration concessions made by the Barnsdall South American Corp. have been published by the Gaceta Oficial.

Lots denominated BARSO-20, BARSO-21, BARSO-22, and BARSO-23, with 10,000 hectares each one, located in District Obispos, State of Barinas, lot Barso-24 with 7,900 hectares, Districts Obispos and Rojas, State of Barinas, lot BARSO-25 with 9,900 hectares, District Rojas, State of Barinas, lots BARSO N° 26, and BARSO-27 with 10,000 hec-

tares, each one located in Districts Rojas and Obispos, State of Barinas, lot BARSO-28 with 8,800 hectares, District Rojas, State of Barinas, and BARSO-29 with 9,700 hectares, located in District Rojas, State of Barinas.

CGdeJ/cjm.-

Very truly yours,

cc/M.B.1911eg.-

cc/W.B.Jayred.-

CGdeJ/cjm.-

Clemente González de Juana.-

cc/W.B.Jayred.-

CGdeJ/cjm.-

Caracas, february 17th., 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Cretaceous production in Venezuela.-

Although the Cretaceous formations have been allways considered as a likely oil source and reservoir rocks in Venezuela, commercial cretaceous oil production did not materialize until 1.944.

The La Paz field, in western Zulia, found recently spectacular production in porous and cavernous limestone of the middle Cretaceous drilled at about 4400' in well N° 62. This well came in with about 8.000 bbls. per day and is now producing about 5.000 bbls. per day. Since then, another well has been completed in the middle Cretaceous with equal success. J.
A

The Cretaceous production of La Paz opens up new possibilities for the western part of Lake Maracaibo, specially for district Maracaibo, in La Concepción field and other untried Eocene structures, and for District of Mara, specially Netick field and similar structures.

It should be expected that at least the northern part of the new concession obtained by the Richmond Petr. (Standard of California) may drill the Cretaceous, thus the value of these concessions being favorably affected. The northern part of East Zulia, i.e. District of Miranda, may also be favorably influenced by the Cretaceous discovery. This area is characterized by Eocene outcrops, or Eocene at

a very shallow depth covered by a thin veneer of quaternary-Pliocene sediments.

Another Cretaceous oil discovery, Las Mercedes N° 8 located in central Guárico may have a great importance for Eastern Venezuela.

The Cretaceous, Temblador formation, was found in southern Monagas, southern Anzoátegui, and southern Guárico to be oil bearing. The oil was always heavy and non-commercial and frequently a dead asphaltic residue.

In the early exploratory stage of Las Mercedes oil field commercial qualities of oil were found in the Cretaceous, but due to mechanical difficulties the oil sands could not be isolated from the water bearing strata and, although the tests ~~on tests~~ on the Cretaceous section were not conclusive, the wells were completed in the overlying oligocene sands. According to reports the well N° 8 was finally completed in the Cretaceous section and it may be classified as a commercial producer.

This Cretaceous production in Guárico is very important for the future prospects of that area, being specially favorable for the new concessions obtained by the S. A. Petrolera Las Mercedes, Creole Pet. Corp. and Venezuelan Atlantic Refining Co. in northwestern Guárico. It will be, also, very important for the concessions located south and southwest of Valle La Pascua.

Agreement between the Venezuelan Government and the Sinclair on the establishment of a refinery.-

The Sinclair Refining Co. and the Venezuelan Government arrived finally at an agreement on the establishment of an oil refining plant in Venezuela.

The terms of the agreement are very similar to those of the contract celebrated with the Mene Grande Oil Co. previously discussed, with the exception of some port and customs facilities extended to the

Sinclair, which the Mene Grande already had.

The minimum capacity of the Refinery will be 35.000 bbls. per day, and it should operate before January 1st. 1.951 unless the project experiences unavoidable delays not to be attributed to the Sinclair Co.

Good prospects of the Socony-Vacuum in the Guico field.-

The Guico wells of the Socony-Vacuum, located in the northwestern corner of Guara oilfield, are developing rather nicely. The ultimate value of this area will depend largely on the way the faults run, but Socony expects to built up a production of 14.000 to 15.000 bbls. per day on that corner.

Guara (eastern and western Guara) are at present one of the best fields of Anzoátegui, its daily production following very closely the daily output of Oficina, the main reason is the good sand development found in that area.

Atlantic to start drilling in Monagas.-

The Venezuelan Atlantic Refining Co., which assumed the obligation to drill in Pantepec acreage, is ready to start the first test in Monagas in one of the A.V.P. parcels, north of the Santa Bárbara oilfield, across the line from the Mene Grande, Travieso N° 3 lot. Considering the present trend of the Santa Bárbara-Travieso field it looks highly probable that the Atlantic will obtain some oilwells in the southeast corner of the concession, but the bulk of their land does not appear so attractive unless some oil horizons different from the ones exploited now in Santa Bárbara are found.

Texas ready to drill wildcat in Tucupita.-

The Texas Co. is getting ready to start a wildcat near the city of Tucupita, the capital of the Federal Territory Delta Amacuro, in the southeastern fringe of the eastern Venezuela basin.

Wildcat Texas-1, drilled about 20 Km. north and 3 Km. west of

Tucupita, was a dry-hole finding the following formations.

- 0 - 4307 feet Quaternary Pliocene
- 4307 - 8150 feet Freites formation (Miocene)
- 8150 - 8396 feet Oficina formation (Mio-Oligocene)
- 8396 - 9243 feet Temblador formation (Cretaceous)

Creole ready to drill fourth test at Maturín.-

The Creole Petroleum Corp. is moving the rig and material used in the abandoned hole La Cruz N° 2 to a new location few hundreds of meters north of the city of Maturín, the Capital of Monagas.

The former Maturín wells drilled in 1.936-1937 a short distance Nw. of the city, found a barren La Pica formation; only a few inches of oil sand were found in test N° 3. Creole is now trying for flanking sands which, same as in Jusepín, may be better developed in the plunges of the uplift.

In case this test fails, a new location slightly s.w. of Maturín is under consideration.

Continental oil and Tide water considering the possibility of obtaining concessions in Venezuela.-

Mr. L. C. Decius, vicepresident of the Tide water Associated Oil Co., Mr. Robert T. Lyons, geologist for the same concern, and Mr. S. K. Clark geologist of the Continental Oil Co. are still in Caracas considering the possibility of obtaining some concessions in Venezuela.

As most of the land has been already given to other concerns, their possibilities to obtain good acreage are rather remote, unless they try for some of the National Reserves still existing in central Guárico.

Very truly yours,

Clemente González de Juana.

Caracas, February 24 th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Dale.-

New exploitation concessions to the Venezuelan Oil & Transport Co.
Ltd. (Shell).-

The following applications for exploitation concessions made by the V.O.T. of the Shell group have been published in the Gaceta Oficial:

Parcels AN-124 with 420 hectares, AN-125 with 430 hectares AN-126 with 375 hectares, AN-127 with 495 hectares, AN-128 with 500 hectares, AN-129 with 460 hectares, AN-130 with 360 hectares, AN-131, 132, 133 with 500 hectares each, AN-134 with 420 hectares, AN-135 with 300 hectares, AN-136 with 400 hectares, AN-137 with 455 hectares, AN-138 with 465 hectares, AN-139 with 470 hectares, AN-140 with 300 hectares, AN-142 with 250 hectares, AN-143 with 350 hectares, AN-144 with 360 hectares, AN-145 with 390 hectares, AN-146 with 360 hectares, AN-147 with 290 hectares, AN-148 with 288 hectares, AN-149 with 410 hectares, AN-150, AN-151, AN-152, AN-153, AN-154, AN-155, and AN-156 with 450 hectares each one, AN-157 with 414 hectares, AN-158 with 20 hectares, AN-159 with 425 hectares, AN-160, AN-161 and AN-162 with 500 hectares each one, AN-163 with 480 hectares, AN-164 with 475 hectares, AN-165 with 485 hectares, AN-166 with 230 hectares, AN-167 with 400 hectares, AN-168 and AN-169 with 500 hectares each, AN-170 with 370 hectares, AN-171 with 470 hectares, AN-172 with 445 hectares, AN-173 with 445 hectares, AN-174 with 475 hectares, AN-175 with 330 hectares, AN-176

with 385 hectares, AN-177 with 130 hectares, AN-178, 179 with 500 hectares each, AN-180 with 340 hectares, AN-181 with 350 hectares, AN-182 and AN-183 with 500 hectares each one, and AN-184 with 480 hectares.

All the above parcels are located in District Cagigal, State of Anzoátegui.

Comments:

This is the result of the Shell's decision to obtain as much land as possible in northwestern Anzoátegui.

Enclosed is an sketch map of these concessions, which together with other free lots already obtained, and with the National Reserves obtained also by the V.O.T. make a very important concession.

The general lay out of northwestern Anzoátegui makes it a rather interesting oil land. The possible oil section is the prolific Oficina formation which should be found more sandy than the Las Ollas. Accumulation of oil is expected chiefly from anticlinal structures.

New exploitation concessions to the Venezuelan Oil & Transport (Shell).

The following applications for exploitation parcels made by the Venezuelan Oil & Transport have been published.

Parcels DZU-D5 with 296.8610 hectares, and DZU-D6 with 318.6956 hectares. Both parcels are located in District Mara, State of Zulia, and the Shell offers to pay for these lots Bs. 30.00 per hectare or fraction.

Comments:

The Shell is doing some exploratory drilling in district Of Mara and they needed those parcels for protection.

The oil possibilities of District Mara (North of the city of Maracaibo) increased with the discovery of Cretaceous oil in La Paz, as it was suggested in my last letter, and some of the negative test holes drilled there before 1930 should be reconsidered now in the light

of this important finding. It should be expected that new applications on land located in this area, are made in a near future.

Exploration-exploitation concessions to the Colon Development Co. Ltd. (Shell).-

The following applications for exploration lots made by the Shell group have been approved.

Concessions TAR-1 with 8,960 hectares, TAR-2 with 8,560 hectares, TAR-3 with 8,160 hectares, TAR-4 with 7,760 hectares, TAR-5 with 7,370 hectares, TAR-6 with 6,980 hectares, TAR-7 with 7,770 hectares, TAR-8 with 7,350 hectares, and TAR-9 with 2,210 hectares.

All these concessions are located in District Colón, State of Zulia.

Comments:

The land under consideration is located west of the Shell concessions covering the Tarra range, to the Colombian border.

Tarra is a prominent anticlinal ridge in the northern part of which the small fields of Las Cruces, Los Manueles, and El Cubo have been found. The Shell group has this ridge covered by concessions as well as the possible northward extension of the anticlinal trend, they are now extending westward in order to cover any parallel folding which may be found in Venezuelan territory. Here again the best prospects seem to be Cretaceous.

New exploration lot to the Venezuelan Oil Development Co Ltd. (Shell).

The V.O.D. made an application on lot D.A.P.-31 Districts San Cristóbal and Uribante, State of Táchira, with 10,000 hectares, at the price of Bs. 18.00 per hectare of initial exploitation tax.

Comments: This lot is located north of lot DAP-1, the first of the big block selected by Shell in 1.936? in the west end of the Barinas basin. The main idea for obtaining this lot is to give Shell enough Coverage in that area.

Exploitation concessions to the Creole Petroleum Corp.-

The Creole Petroleum Corp. filed in applications on the following lots of exploitation concessions.

Parcels 524-17 with 381.25 hectares, 524-18 with 500 hectares, 524-19 with 244.36 hectares, 524-20 and 524-21 with 500 hectares each, 524-22 with 488.72 hectares, 524-23, 524-24, 524-25, 524-26, 524-27, 524-28, and 2003 with 500 hectares each one.

All the above parcels are located in District Piar, State of Monagas.

Comments: These concessions were renounced by the same Creole Petroleum Corp. after the failure of wells Orocuá N° 3 y N° 4 and Monaq-1.

The last one drilled well into the Oligocene Monagas shales but Orocuá-4 and 5, were intended to obtain production from the Pliocene, Quiriquire formation. The log of Monaq-1 was sent to you with my geological report N° 5 as a classic reference for the State of Monagas.

The new developments of northern Jusepin, and the finding of oil in the deeper Carapita (Oligocene) sands, are making advisable for the Creole to obtain again this land in spite of the high price asked this time by the Venezuelan Government.

Exploration-exploitation concessions to the Venezuelan Oil & Transport Co. Ltd. (Shell).-

The following applications for concessions made by the V.O.T. (Shell) have been published.

Lots denominated S.P.-1 with 8,300 hectares, S.P.-2 with 8,215 hectares, S.P.-3 with 9,937 hectares, S.P.-4 with 7,567 hectares, S.P.-5 with 8,150 hectares, S.P.-6 with 8,580 hectares.

All the above lots are located in Districts Peñalver, Bruzual, Cagigal and Aragua of the State of Anzoátegui.

Lots denominated GUAN-1 with 10,000 hectares, GUAN-2 with 9,950

hectares, GUAN-3 with 10.000 hectares, GUAN-4 with 6,475 hectares, GUAN-5 with 10.000 hectares, GUAN-6 and GUAN-7 with 9.800 hectares each, GUAN-8 with 9,900 hectares and GUAN-9 with 8.000 hectares.

These last lots are located in Districts Bruzual and Peñalver, State of Anzoátegui, and partly in District Monagas, State of Guárico.

Comments: Enclosed is a sketch map showing the location of this large tract of land. The comments made above on the exploitation acreage obtained by same Co. in District Cagigal, could be repeated here. This exploration land, located in the foot-hill belt, can be worked by surface geology without much danger of making a costly mistake, therefore the Shell can take the land on exploration basis, being sure that at the end of the exploratory period they will be able to renounce the low areas, leaving only the interesting highs to pay the high taxes of the exploitation period.

Exploitation parcel to the Mene Grande Oil Co.-

The Mene Grande Oil Co. made an application for parcel denominated V-470 with 450 hectares, located in District Aragua, State of Anzoátegui.

This parcel is located between the National Reserves of Concession Güere-7, the National Reserves of concession La Charanga y el Altosano, parcels denominated 234.1 and 234.2 of concession Caico Seco, and National Reserves of concession Caico Seco.

The M.G.O. will pay Bs. 40.00 per hectare or fraction and the known refining obligations.

Exploitation concessions to the Sinclair Oil Co.-

The Sinclair Oil Co. made the following applications for exploitation land.

Parcels denominated S111-1 with 500 hectares, S 111-2 with 434 hectares, S 111-3, S 111-4, S 111-5, S 111-6, S 111-7, and S 111-8 with

500 hectares each one, S 111-9 with 398 hectares, S 111-10 with 490 hectares, S 111-11, and S 111-12 with 500 hectares each and S-111-13 with 478 hectares.

These concessions are located in District Maturín, State of Monagas.

Comments: This is a portion of land renounced recently by others because they felt it was located in the deep part of the basin. Sinclair has been steadily spreading toward the south in Monagas, disregarding the existing fear of the deep basin. In fact that idea of the deep part of the basin is not well supported by facts. First the depth of the basement rocks, probably Cretaceous, has not much bearing on the possibility of obtaining Miocene Oil. Second this area still remains untested and the presence or absence of sand is highly problematic. Therefore the Sinclair decision to spread southward is not to be condemned.

Enclosed is a sketch map of these parcels.

Exploration-Exploitation concessions to the Creole Petroleum Corp.

The Creole Petroleum Corporation made the following applications for exploration land.

Concessions denominated 436 with 3.160 hectares, 437 with 9,395 hectares, 438, 439, and 440 with 10.000 hectares each one. They are located in District Piar, State of Monagas.

Comments: Most of this land had been previously renounced by Creole, the northern part of it on account of shallow Cretaceous beds such as the middle Cretaceous found in old well Monas-1 (See my Geological Report N° 5) and the southern part because of the negative results of the Pliocene west of Quiriquire, as proven by the Monek N° 1 well and the Orocuál wells.

The results of Jusepin are unquestionably influencing the Creole to claim again this area. First of all this land will be a good pro-

tection on northern Jusepín and to the still possible northward extension of that field. There are also good possibilities hereto untested in that area, such as the shore lines of the Carapita formation (Oligocene), and the possible truncation of the upper Eocene below the Pliocene and the Miocene in a similar way as the Eocene producing from truncated beds in the Lagunillas field of western Venezuela.

The Creole is drilling some geological exploration wells north of Jusepín which are carried rather deep (Some to 5,000 feet) and as they are gaining knowledge they are more and more interested in the northern Monagas area.

Very truly yours,

Clemente González de Juana.-

cc/W.B.Jayred.

Enclosures: 3 Sketch maps.-
CGdeJ/cjm.-

Caracas, March 3rd. 1.945.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Exploration-Exploitation concessions to the Venezuelan Atlantic Refining Co.-

The Venezuelan Atlantic Refining Co. filed applications on exploration concessions denominated SABAN-1 with 10,000 hectares and SABAN-2 with 10,000 hectares located in District Zaraza, State of Guárico.

Comments: Enclosed is a sketch map showing the location of these 2 lots. The locality is very interesting from a stratigraphical point of view as well as in relation with the basin, and the Atlantic paid a very high price for this land. See my letter N° 63 pg. 5 on this subject.

The Venezuelan Atlantic Refining Co. also filed applications on exploration lots denominated PLACER-5, PLACER-6, and PLACER-7 with 10,000 hectares each one, located in District Monagas, State of Guárico.

Comments: Please find enclosed a sketch map with the outline of these lots, which are located north of the Placer-1 to 4 concessions obtained by the same company a few months ago. The comments made in my letter N° 44 are valid here with the following additional considerations.

These lots are located nearer of the mountain front on strongly folded strata, the intensity of folding decreasing southward. The theoretical value of these new lots is therefore lower than the theoretical value of the older concessions but they are a necessary protection for the former acreage, specially if oil is obtained in the northernmost structure.

Geological and geophysical work is strongly going on in northern Guárico. The Creole Petroleum has almost all of their available geologists working in northern Guárico, specially around their concessions of the Barbacoas area. The Texas has a geological party and a seismograph crew also in that area. This Company is preparing to drill a test hole in a structure located about 30 Km. south of Taguay, this well will be the northernmost test drilled in the State of Guárico and will yield the most important information about that area. The Venezuelan Atlantic contracted the services of a venezuelan drilling firm to make 10 core test holes in the previously listed SABAN concessions. These tests will be taken down to about 1.000 feet of depth, and surveyed by the Schlumberger system.

Exploration-Exploitation concessions to the Socony Vacuum.-

The Socony filed an application for a concession denominated BARRINAS-147 with an extension of 8,400 hectares, located in Districts Barrinas, Pedraza, Muñoz and Paez of States Barinas and Apure.

This Company will pay for this lot an initial exploitation tax of Bs. 18.00 per hectare, plus the usual refining restrictions.

Exploration parcel to the Texas Petroleum Co.-

The Texas Co. made an application for a very small exploration parcel denominated SOTIL-36 with 10 hectares, located in District Sotillo, State of Monagas.

This parcel is located between parcels Sotil-23 and 25 and concession Sotil-2, all of the Texas Petroleum Co.

The Company will pay the first year an exploration tax of Bs. 7.00 per hectare.

Exploitation concessions to the Venezuelan Oil & Transport Co. Ltd.

The following applications for exploitation concessions made by the Venezuelan Oil & Transport Co. Ltd. have been published in the Gaceta Oficial.

Parcels GU-12, GU-13, GU-14, Gu-15, and GU-16 with 500 hectares each one, GU-17 with 370 hectares and GU-18 with 16 hectares. This parcels are located in District Zaraza, State of Guárico.

Enclosed is an sketch map of these concessions.

Advisabilty of obtaining new concession maps.-

Our concession maps are now almost two years old. During this lapse of thime there were many changes, concessions were renounced and taken back by a different Company, many concessions changed names during the conversion period and many new concessions have been obtained. For these reasons I recommend to buy from the Cartográfica a new set of concession maps as follows:

- a) A new set scale 1:500.000 of eastern Venezuela including Guárico, Anzoátegui, Monagás, and the Delta.
- b) A new set of the Barinas-Apure basin.
- c) A new set of the Maracaibo Lake area with names and designations of parcels.

The price of each sheet amounts to about Bs. 400.00. In case you agree to get these maps please advise how many sets of them do you desire. In the old days we use to buy two sets of each map, one to keep here and the other to be sent to you, but I would like to know if you desire now also a copy to be forwarded to Mr. W. B. Jayred.

Very truly yours,

CGdeJ/cjm.-

Clemente González de Juana.-

Caracas, March 10th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Due to the great importance reached by the various oil-fields of Eastern Venezuela, I expect it will interest you to know a few figures about the potential of the most important among these fields.

State of Monagas and Delta Amacuro.-

QUIRIQUIRE FIELD

Proven acreage to 1944	9,890 acres.
Expected total recovery per acre	58,000 bbls.

JUSEPIN FIELD

Proven acreage to 1944	15,000 acres.
Expected total recovery per acre	18,000 bbls.

MULATA FIELD

Proven acreage to 1944	4,500 acres.
Expected total recovery per acre	18,000 bbls.

STA. BARBARA FIELD

Proven acreage to 1944	2,225 acres.
Expected total recovery per acre	60,000 bbls.

PEDERNALES FIELD

Proven acreage to 1944	988 acres.
Expected total recovery per acre	72,000 bbls.

State of Anzoátegui.-

YOPALES FIELD

Proven acreage to 1944	1,000 acres.
Expected total recovery per acre	2,000 bbls.

OFICINA FIELD

Proven acreage to 1944	12,500 acres.
Expected total recovery per acre	12,000 bbls.

GUARA FIELD

Proven acreage to 1944	3,600 acres.
Expected total recovery per acre	28,000 bbls.

LEONA FIELD

Proven acreage to 1944	3,700 acres.
Expected total recovery per acre	6,000 bbls.

SAN JOAQUIN FIELD

Proven acreage to 1944	7,500 acres.
Expected total recovery per acre	6,000 bbls.

GUARIO FIELD

Proven acreage to 1944	1,970 acres.
Expected total recovery per acre	8,000 bbls.

EL ROBLE FIELD

Proven acreage to 1944	8,500 acres.
Expected total recovery per acre	2,200 bbls.

SANTA ROSA FIELD

Proven acreage to 1944	1,50 ⁰ acres.
Expected total recovery per acre	20,000 bbls.

According to the above and taking into consideration the amount of oil already produced, the proven reserves of Eastern Venezuela are already more than 1.000.000.000 of Carrels.

As you may observe from the above the Guara field in southern Anzoátegui reached a very prominent position with known reserves which amount ot about 100.000.000 barrels.

My geological Report N° 5 refered to the near by fields of Oficina and Leona and enclosures N°s 22, 23, 24, and 25 showed the structure of these two fields, nothing however was said about

Guara, which was comparatively unimportant at the time, and in order to supplement your information on that area I am sending enclosed two structure contour maps of Eastern and western Guara.

The production of Guara, same as in Oficina, and for that matter same as in all the fields of the southern belt, is controlled by faulting and stratigraphy, but Guara is less broken than Oficina, the stratigraphy remaining about the same:

Following are the formations encountered in well G.G.-15 drilled in western Guara, which is a very representative well of this field:

MESA FORMATION (Quaternary)

0 - 649' Unconsolidated sands and gravels

LAS PIEDRAS FORMATION (Pliocene)

649 - 2840 Predominantly sandy shale and laminated shaley saltwater sands.

FREITES FORMATION (Upper Miocene)

2840 - 2860 Sandy shale

2860 - 4194 Shale

4194 - 4444 Sandy shale with some shaley saltwater sands.

OFICINA FORMATION (Middle Miocene to Oligocene)

4444 - 5618 Alternating shaley sands and sandy shales with sandy part predominant. Saltwater.

5618 - 5638 Oil sand.

5638 - 6048 Alternating sands and shales with sandy part predominant. Abundant lignites.

6048 - 6127 Interbedded shale and fine oil sands.

6127 - 6438 Alternating shale and fine micaceous shaley oil sands.

6438 - 6497 Fine shaley oil sand

6497 - 6868 Intercalations of sandstone and sandy shale. Sandy part predominates abundant lignites

6868 - 6917 Intercalations of oil sands and shales.

6917 - 7006 T.D. Alternating shales with salt water lands.

Con Ticker

The lithological characteristics of the formations conform, to the descriptions forwarded in mentioned Geological Report N° 5.

Applications from the Mene Grande Oil Co. accepted.-

The Government accepted the applications made by the Mene Grande Oil Co. on lots denominated V-438 to V-454, State of Anzoátegui listed and commented in my letter N° 52 dated Oct. 7th. 1.944, at the price of Bs. 50,00 per hectare and the usual refining obligations.

Applications from the Creole Petroleum accepted.-

The Government accepted the applications made by the Creole Petroleum Corp. on lots denominated 2050 and 2051 at the price of Bs. 2,000 per hectare, lot 2052 at Bs. 750 per hectare, lot 2053 at Bs. 300,00 per hectare, lots 2054 to and including 2057 at Bs. 100.00 per hectare, lot 2058 at Bs. 95,00 per hectare, lot 2059 at Bs. 75 per hectare, lot 2060 at Bs. 80.00 per hectare, lot 2061 at Bs. 95.00 per hectare, lot 2062 at Bs. 100.00 per hectare, lot 2063 at Bs. 85.00 per hectare, lot 2064 at Bs. 60.00 per hectare, lots 2065 to and including 2069 at Bs. 75.00 per hectare, lot 2070 at Bs. 77.00 per hectare, lot 2071 at Bs. 70.00 per hectare, lots 2072 to and including 2075 at Bs. 40.00 per hectre, lots 2076 to and including 2076 to and including 2095 at the price of Bs. 75.00 per hectare.

These concessions located in the State of Monagas were commented in my letter N° 53 dated Oct. 28th. 1944.-

Applications from the Venezuelan Oil & Transport Co. Ltd. accepted.-

The Venezuelan Government accepted the applications made by the Venezuelan Oil & Transport Co. Ltd. (Shell) on the lots denominated AN-56 to and including AN-123 located in northwestern Anzoátegui, at the price of Bs. 50.00 per hectare.

These lots were described and commented in my letter N° 52
dated Oct. 7th. 1.944.-

Very truly yours,

Clemente González de Juana.

cc/W.B.Jayned.-
2 Enclosures.-

CGdeJ/cjm.-

Letter N° 69.-

Caracas, April 7th., 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Concessions declared extinct.-

The Texas Petroleum Co. renounced the concessions denominated T-1.2 to T-1.4, T-2.4 to T-2.7, T-3.1 to T-3.4, T-4.1 to T-4.4, T-5.1 to T-5.3 and T-6.1 located in the Federal Territory Delta Amacuro.

Comments: This renouncement follows the failure of wildcat denominated Texas-2 near la Horqueta. The results of test Texas N° 1, located immediately N. of Tucupita, will be decisive for the southern tract of concessions held by the Texas Co. in that vicinity.

Extinction of rights of the British Controlled oilfields.-

Following the agreement between the Venezuelan Government and the British Controlled Oil Fields, commented in my letter N° 30 of April 1st. 1.944, by which the mentioned oil company had the right to select 3,063 hectares out of the 364,100 hectares held in exploration status by the British Controlled Oil Fields and the Central Area Exploration Co. in district Buchivacoa, State of Falcón, and as that acreage has been already selected and new titles granted to the mentioned company, the Venezuelan Government declared extinct the rights of the British Controlled and the Central Area on the former concession.

Later on the Government agreed to lower the Royalty on the oil obtained in the fields of El Mene and Hombre Pintado to 4% of the

amount extracted, because the established 16-2/3% royalty will make these fields unprofitable.

National Reserves to the Venezuelan Oil & Transport Co. Ltd.-

The Venezuelan Oil & Transport Co. Ltd. obtained the National Reserves and the Sobrante of concession Cagigal N° 11, the National Reserves of concession Cagigal N° 13 and of Cagigal N° 15 located in District Cagigal, State of Anzoátegui, at the price of Bs. 50.00 per hectare.

These lots were commented in my letter N° 46 dated August 12th. 1.944.

Exploration concessions to the Phillips Petroleum.-

The following applications for exploration concessions have been made by the Phillips Venezuelan Oil Co.

Lots denominated FILVEN-15, FILVEN-16, FILVEN-17, FILVEN-18, FILVEN-19, FILVEN-20, FILVEN-21, and FILVEN-22 with 10,000 hectares each one of them, and located in District Zaraza, State of Guárico.

Comments: This rather large tract of land, centering around the town of El Socorro - see enclosed sketch - is in my opinion the best oil land obtained so far by the Phillips Petroleum. It is favorably located in relation to the sedimentation, deep enough into the basin, and far from the tar belt of southern Guárico.

Applications from the Colon Development Co. Ltd. accepted by the Government.-

The applications made by the Colon Development (Shell) on exploitation parcels denominated CO-1 to and including CO-20, located in District Colon, State of Zulia, which were commented in my letter N° 56 of Nov. 18th. 1.944, have been accepted by the Government.

The Company will pay Bs. 40.00 per hectare or fraction, and the new concessions are subject to the known refining restrictions.

Applications from the Creole Petroleum Corp. accepted by the Government.-

The applications made by the Creole on parcels denominated 822 to and including 830, located in District Perijá, State of Zulia, which were listed and commented in my letter N° 59 of Dec. 23th. 1.944, have been accepted by the Venezuelan Government.

The Creole will pay Bs. 40,00 per hectare or fraction and the lots will be affected by the usual refining obligations.

Applications from the Mene Grande Oil Co. accepted by the Government.-

The applications made by the Mene Grande on exploitation parcels denominated V-455 to and including V-469, located in District Aragua, State of Anzoátegui, which were commented in my letter N° 59, have been accepted by the Government. The Mene Grande will pay Bs. 40,00 per hectare and the parcels will be affected by the usual refining obligations.

Applications from the Phillips Petroleum accepted by the Government.-

The Venezuelan Government accepted the applications made by the Phillips Venezuelan Oil Co. on exploration-exploitation lots denominated FILVEN-1 to FILVEN-14, located in Districts Bolívar, Libertad, and Aragua of the State of Anzoátegui, which were commented in my letter N° 55 of Nov. 11th. 1.944, and the applications on exploration-exploitation lots denominated FILVEN-25 to and including FILVEN-34 located in Districts Mellado and Miranda of the State of Guárico, which were commented in my letter N° 56 dated Nov. 18th., 1.944.

The Phillips will pay an initial exploitation tax of Bs. 60,00 per hectare or fraction, only on those parcels finally selected at the end of the exploratory period, and the concessions are affected

by the usual refining obligations.

Due to the poor outlook of these concessions it is expected that the greatest part will be renounced before reaching the exploitation status, which means that the high tax will not be paid on most of the land. Nevertheless the price offered by the Phillips is very high, and there is little doubt in my mind that the same lots could had been obtained at a much lower price.,

As an example the Texas Co. paid only Bs. 30,00 on the adjacent lots of Guárico, which are better located.

Very Truly yours,

lemente González de Juana.-

cc/W.B.Jayred.-

Enclosures: One sketch map.-

Caracas, April 14th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Amount of the tax to be paid on pipe-lines.-

The Venezuelan Government fixed the amount of the tax to be paid by the Mene Grande Oil Co., Creole Petroleum Corp., and the Venezuelan Oil Concessions on the oil transported through their pipe-lines when used as common-carriers. This tax will amount to $2\frac{1}{2}\%$ of the total sums received from third parties.

Applications from the Atlantic accepted by the Government.-

The Venezuelan Government accepted the applications made by the Venezuelan Atlantic Refining Co. on exploration-exploitation concessions denominated SABAN-1 and SABAN-2, District Zaraza, State of Guárico, which were commented in my letter N° 67 dated March 3rd., 1.945.

The Atlantic will pay for this land an initial exploration tax of Bs. 10.00 per hectare and an initial exploitation tax of Bs. 250,000 per hectare only on those exploitation parcels finally selected. The concessions will have the usual refining restrictions.

Mr. Rafael A. Camejo made oposition to these two concessions (See my letter N° 63 on this subject) based on his assumption of the existence of the previous concessions Zaraza A and B, but the Government disregarded officially the oposition stating that the caducity of

Zaraza A - and B had been officially declared in 1937-1938 as per publications made in the Gaceta Oficial N° 19.347 and N° 19.470.

Please note that the prices paid by the Atlantic are very high.

National Reserves to the Phillips Petroleum.-

The Phillips Venezuelan Oil Co. obtained the National Reserves of concessions TRAVIESO N° 4, LOTE-D, Sobrante of LOTE-D, and TONORO Districts Cedeño y Maturín, State of Monagas, discussed in my letter N° 52 dated October 7th., 1.944.

The Phillips offered 33-1/3% of royalty and the usual refining restrictions.

It is difficult to understand how a serious concern, as the Phillips, offered such a royalty, because most of the Companies would consider unprofitable to operate in Venezuela with 33-1/3% royalty. Nevertheless the Phillips seems strongly inclined to these high royalties. In the case of southern Travieso N° 3, the best free lot of Monagas, the Phillips offered also 33-1/3% royalty but the Government preferred the Bs. Lo.000.000 offered by the Mene Grande on same lot.

National Reserves to the Venezuelan Oil & Transport Co. Ltd.-

The Venezuelan Oil & Transport Co. Ltd. (Shell) obtained the National Reserves and Sobrantes of concessions LA TRINIDAD, ARAGUA N° 1, LOS CONUCOS Y EL CORAZON, and the National Reserves of CAGIGAL N° 14, located in Districts Cagigal, Aragua, and Bruzual, State of Anzoátegui.

These lots were commented in my letter N° 46 dated August 12th. 1.944.

The Company will pay Bs. 50,00 per hectare or fraction and the concessions will be affected by the usual refining obligations.

Application for an exploration concession made by Richmond.-

The Richmond Exploration Co. (Standard of California) presented an application for an exploration - exploitation concession denominated ZULIA-50, with 7,000 hectares located in District Perijá, State of

Zulia, near of the other concessions obtained by the same company in that district.

The Richmond offered to pay an initial exploitation tax of Bs. 18,00 and the usual refining obligations.

Applications from the Venezuelan Oil & Transport Co. Ltd. accepted.-

The Venezuelan Government accepted the applications made by the Venezuelan Oil & Transport Co. Ltd. on exploitation concessions AN-124 to AN-126 at the price of Bs. 50.00 per hectare, AN-137 to AN-143 at the price of Bs. 60,00 per hectare, AN-144 to AN-158 at the price of Bs. 50,00 per hectare, AN-159 to AN-184 at the price of Bs. 60,00 per hectare.

The above mentioned lots were discussed in my letter N° 66 dated February 24th. 1.945.

Applications from the Colon Development Co. Ltd. accepted.-

The Venezuelan Government accepted the applications made by the Colon Development Co. Ltd. (Shell) on exploration-exploitation lots denominated TAR-1 to and including TAR-9 located in District Colon, State of Zulia, which were discussed in my letter N° 66 dated, February 24th. 1.945.

The Company will pay an initial exploitation tax of Bs. 30,00 on those parcels selected for exploitation and the concessions will be subject to the usual refining restrictions.

Applications from Socony Vacuum accepted.-

The Venezuelan Government accepted the applications made by Socony Vacuum on exploitation parcels BAR-1 to and including BAR-6, located in the State of Barinas, at the price of Bs. 20,00 per hectare.

These concessions were commented in my letter N° 59 dated December 23d. 1.944.

Applications from the Barnsdall accepted.-

The applications made by Barnsdall South America Corporation on exploration lots BARSO-20 to BARSO-29, in the State of Barinas, have been accepted by the Venezuelan Government.

The Barnsdall will pay an initial exploitation tax of Bs. 18,00 on the exploitation parcels selected and the concessions will have the usual refining obligations.

These concessions were listed in my letter N° 64 dated January 27th. 1.945.

Officials of the Tide Water left Venezuela.-

Mr. L. C. Decius and Mr. R. T. Lyons, Vicepresidents of the Tide Water Associated Oil Co. left Venezuela after a rather detailed study of the oil possibilities still open in this country. They will make a short stop in Bogota (Colombia) before returning to the States, where they will discuss with the Tide Water and the Continental oil the advisability of entering the Venezuelan field.

The Atlantic obtained production in Monagas.-

It has been reported that the Venezuelan Atlantic Refining Co. obtained a producer in the Avipa wildcat drilled in Pantepec's concessions (see my letter N° 65 pg. 3) north of the Travieso field. Official production figures are not available yet.

The following companies are already obtaining petroleum from the Jusepin-Santa Bárbara trend:

Creole Petroleum Corp. - Jusepin and Mulata fields
Pantepec - part of Jusepin and Mulata (Creole contract)
Pantepec - Avipa (Atlantic contract)
Sinclair - Santa Bárbara and Muri fields
Mene Grande Oil Co. - Travieso field.
Atlantic - Avipa well.

Very truly yours,

Clemente González de Juana.

56

cc/W. B. Jayred.
CGdeJ/cjm.-

Caracas, April 21st. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Applications from the Venezuelan Oil & Transport Co. Ltd.
accepted.-

The applications made by the Venezuelan Oil & Transport (Shell) on exploration-exploitation lots denominated GUAN-1 to GUAN-9, located in northern Anzoátegui, have been accepted by the Government.

The Co. will pay an initial exploitation tax of Bs. 75,00 per hectare on those parcels selected, and the new concessions will be subject to the known refining obligations.

The Venezuelan Government also accepted the applications made on exploration-exploitation lots S.P-1 to S.P-6 located also in northern Anzoátegui, at the same price of Bs. 75,00 per hectare and with the same refining restrictions.

These lots were commented in my letter N° 66 dated Feb. 24th. 1.945.-

The Government also accepted the applications made by the same Co. on exploitation parcels MON-1 and MON-2, District Piar, State of Monagas, at the price of Bs. 600.00 per hectare, plus the refining restrictions.

These two parcels were commented in my letter N° 56 dated November 18th. 1.944.

The Government accepted the applications made by the Venezuelan Oil & Transport Co. Ltd. (Shell) on exploitation lots DZU-D5 and DZU-D6, District Mara, State of Zulia, at the price of Bs. 30.00 per hectare, plus the known refining obligations.

These lots were commented in my letter N° 66 of February 24th. 1.945.

Applications from the Venezuelan Oil & Transport Co. Ltd. accepted.-

The Government accepted the applications made by the Venezuelan Oil & Transport Co. Ltd. (Shell) on parcel AN-152, District Cagigal, State of Anzoátegui, at the price of Bs. 50.00 per hectare, plus the usual refining obligations.

This parcel was commented in my letter N° 66 dated Feb. 24th. 1.945.-

Applications from the Creole Petroleum Corp. accepted.-

The Government accepted the applications made by the Creole Petroleum Corp. on the following concessions:

a) Exploration-Exploitation lots denominated 436, 437, 438, 439, and 440, District Bolívar, Piar, and Cedeño, of the State of Monagas, which were commented in my letter N° 66 dated February 24th. 1.945.-

The Creole offered for these concessions an initial exploration tax of Bs. 10.00 per hectare or fraction, an initial exploitation tax of Bs. 250.00 per hectare or fraction on those exploitation parcels selected by the Company, and the known refining obligations.

b) Exploitation parcels denominated 519-1, 520-3 to 520-5, 521-1, and 521-2, located in District Colina, State of Falcón, which were commented in my letter N° 56 dated Nov. 18th. 1.944.

The Creole will pay for these concessions Bs. 40.00 per hectare or fraction and the known refining obligations.

c) Exploitation parcels denominated "2003", at the price of

Bs. 750.00 per hectare or fraction, parcels 524-17 to and including 524-21 at the price of Bs. 100.00 per hectare or fraction, 524-22 at Bs. 250.00 per hectare, 524-23 at Bs. 100.00 per hectare, 524-24 to and including 524-28 at the price of Bs. 250.00 per hectare. Besides the price these parcels are affected by the known refining obligations.

The above concessions located in District Piar of the State of Monagas, northeast of Jusepín, were commented in my letter N° 66 of February 24th.

d) Exploitation parcels denominated 655-14 to and including 655-19, and parcels 911-9 and 911-10, all of them located in District Perijá, State of Zulia, at the price of Bs. 40.00 per hectare.

These concessions were commented in my letter N° 59 dated December 23th. 1.944.-

Application from the Venezuelan Oil Development Ltd. accepted.-

The application made by the Venezuelan Oil Development (Shell) on exploration-exploitation concession denominated DAP-31, State of Táchira, has been accepted by the Government, The Company will pay an initial exploitation tax of Bs. 18.00 per hectare on those parcels selected as explotación land, plus de usual refining restrictions.

This concession was discussed in my letter N° 66.

Application from Socony Vacuum accepted.-

The Government accepted the application of Socony Vacuum on exploration-exploitation lot BARINAS-147 at the price of Bs. 18.00 per hectare or fraction as initial exploitation tax on those parcels selected by the Co.

This lot was listed in my letter N° 67 of March 3d. 1.945.

National Reserves to the Sinclair Oil Co.-

The Sinclair Oil Co. obtained the National Reserves of concession VARSA N° 2, VARSA N° 3, and VARSA N° 4, State of Monagas, commented in my letter N° 47 of August 25th. 1.944.-

Sinclair will pay 20% royalty plus the usual refining obligations.

The same Company (Sinclair Oil) obtained the National Reserves of MARON-1, MARON-2, MARON-3, MARON-4, and MARON-5, State of Monagas, commented in the above mentioned letter, at the price of 20% royalty plus the known refining restrictions.

National Reserves to the Cía. Consolidada de Petróleo.-

The Cía. Consolidada de Petróleo (Sinclair) obtained the following lots of National Reserves: The northern part of the National Reserves of TRAVIESO N° 3 at the price of Bs. 350,00 per hectare or fraction plus 21-2/3% of royalty and the usual refining restrictions. Part of the National Reserves of VARSA N° 1 at the price of Bs. 400,00 per hectare or fraction plus 26-2/3% royalty and the usual refining restrictions; the northern part of the National Reserves of TRAVIESO N° 2 at the price of Bs. 350.00 per hectare or fraction plus 21-2/3% royalty and the usual refining restrictions. The southern part of the National Reserves of TRAVIESO N° 2 with a royalty of 31% of the crude extracted, plus the usual refining obligations.

These concessions were commented in my letter N° 52 dated October 7th. 1.944.

The vicinity of the Jusepín, Mulata, Travieso fields made these concessions very attractive for some oil companies, a few of the lots offered by the Government were, in my opinion, vital to Sinclair, and two of the lots, i.e. the southern part of Travieso-2 and the southern part of Travieso-3, were almost proven oil fields, but that does not justify the enthusiasm and the prices paid for some of the other lots.

The Santa Bárbara-Travieso oil field is a typical shore-line development in middle miocene sands (La Pica formation) flanking a

northward raising Oligocene mass, composed mostly of dark shales. The middle miocene producing zone is locally subdivided into an upper, Textularia zone, and a lower Sigmolilina zone. The lower producing zone is absent in the northern strip of the fields, where production is only obtained from the upper zone. This is the case of the Muri-Consolidada field.

Therefore the present possibilities of the southern part of the National Reserves of Travieso-2 seem to be restricted to the upper zone and to a narrow strip near the northern edge of the Muri-7 and Muri-8 parcels.

In the northern part of Travieso-2 and of Travieso-3, the producing La Pica formation will be found enterely absent and the Pliocene will be found resting on Oligocene. It is true that Creole found some Oligocene producing sands in northeastern Jusepin, but to try to extend those sands to the northern National Reserves of Travieso 2 and 3 is, at present, very speculative. In any case the finding of Oligocene production in these lots will amount ot the discovery of an enterely new field.

The National Reserves of Varsa-1 appear to be low for production from the La Pica shoreline, nevertheless if the Pirital land mass extends far toward the south it may be a chance for the northern part of the lot.

The southern part of Varsa-1 may reach a different structure of the southern line of folding, such as El Lirial. It is worthy of note that so far only dry gas has been obtained from this line of folding.

The same Company (Cía. Consolidada de Petróleo) obtained the National Reserves of concession PALMA N° 2, part of the National Reserves of PALMA N° 3, the National Reserves of EL HUESO, the National Reserves of LA CONCEPCION DE GUANIPA and the southern part

of EL LIRIAL, all in the State of Monagas which were listed and commented in my letter N° 47 dated Aug. 26th. 1.944.

These concessions are under the obligation to pay 20% royalty plus the usual refining obligations.

National Reserves to the Phillips Petroleum.-

The Phillips Venezuelan Oil Co. obtained the Sobrante of concession Travieso N° 4, State of Monagas at 33-1/3% royalty plus the usual refining obligations.

See my previous letter N° 70 on this subject.

National Reserves to the Atlantic.-

The Venezuelan Atlantic Refining Co. obtained the southern part of the National Reserves and the Sobrante of concession LOTE-E, State of Monagas, which were commented in my letter N° 52 dated October 7th. 1.944.

The Atlantic offered Bs. 800,00 per hectare and the usual refining obligations.

Caducity of concessions.-

The Government declared the caducity of parcels denominated E.B.H. N° 8 to and including E.B.H. N° 19 of concession Zona Guillermo Luque "C", District Sucre, State of Zulia.

The reason for this caducity is lack of exploitation and lack of payment of taxes for more than 3 years.

The Government declared the caducity of concessions SILVA-1 SILVA-2-A, and SILVA-2-B, located in District Silva, State of Falcón held by Pantepec oilfields Corp.

The reason for this caducity is lack of exploitation and lack of payment of taxes for more than 3 years. These parcels do not have interest.

Very truly yours,

Caracas, April 28th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Annual Report of the Creole Pet. Corp.-

The annual report of the Creole Petroleum Corp. brings out the following figures.

The net production of the Creole reached an average of 372,642 barrels per day, or a total of 136,386,997 barrels during the year of 1944.

The net profits reached the figure of \$ 62,020,396.

The new pipe line from Mulata to Puerto La Cruz, which was started early in 1944, was put into service in February of 1945. When all the pumps and equipment will be completely installed this pipe-line will have a capacity of 97,000 barrels per day. The Menne Grande Oil Co. has 1/3 interest in this line.

During the year of 1944 the petroleum reserves of the Creole were increased by 500,000,000 barrels, of which 90% are located in the Lake basin (This increase is mostly due to the finding of Eocene production).

The Creole obtained during 1944 a total of 284,287 hectares of new concessions.

The Creole paid to the Venezuelan Government for taxes, royalties, etc., a figure close to \$ 40,000,000.

The Creole is going ahead with the plans for a new refinery, with a daily capacity of about 40,000 barrels of crude, and a total

cost of about \$ 50,000,000 which will produce, besides the ordinary products, aviation gasoline, and certain types of lubricants. It is proposed to install an up-to-date plant with the latest refining methods such as molecular desintegration by catalytic fluid. (The location of this refinery has not been made public, but almost certainly it will be located at Turiamo, a small port of the Caribbean Sea half distance between La Guaira and Puerto Cabello).

Mr. Proudfit states in the report that he expects a decrease in the Petroleum demand after the collapse of Japan, but he believes that shortly afterwards, when the normal forces of supply and demand rule again the market, the world's demand of petroleum products will reach the mark of the pre-war times, and will continue with an upward trend.

The position of the Venezuelan oil Industry by that time will depend largely on the type of crudes then in demand, and on the possibility of the Venezuelan fields to compete in prices with other producing countries. It should be expected a strong competition from the Middle East, specially in the European markets, but Mr. Proudfit is confident that the Venezuelan Oil Industry will successfully meet the postwar conditions.

Venezuela, which has been long considered a great producer of heavy oils is now in position to supply large amounts of medium and light crudes, and the Creole, following a very selective policy, can supply crudes for high octane aviation gasoline, high cetane Diesel oils, and lubricants.

Mr. Proudfit declined to comment, or to speculate, on the effect of the proposed World's Oil Pact, on the Venezuelan Industry.

Presidential address to Congress.-

On April 21st. general Medina delivered his Presidential address to the Congress. Following are some of the outstanding paragraphs related to the oil industry.

The Venezuelan Oil production during the year of 1944 reached 40.865.766 cubic meters (roughly 342.500.000 bbls), showing an increase of 43% on the previous year production.

The conversion and adaptation of old concessions to the 1943 Petroleum Law was finished during the first half of 1944, reaching the figure of 955.090 hectares of exploration land and 4.511.362 hectares of exploitation concessions which represents 99.8% of the total concessions by then in good standing. By reason of the initial exploration and exploitation taxes, conversion tax and certified copies of maps related to the conversion, the Government obtained a revenue of Bs. 75,601,082.23.

The total area of the concessions which were not converted to the 1943 Petroleum Law reached 9,987 exploitation hectares.

Because no petroleum concessions had been granted in Venezuela from 1937 to 1943, the development of new areas had been somewhat paralyzed. For that reason the existing oilfields had to meet the big demand coming from the Allied Nations for war purposes, resulting in a rather intensive exploitation of the known reservoirs, to the point that the Government considered advisable to encourage the discovery of new oilpools by giving out new concessions to the Oil Companies interested in Venezuela.

The Venezuelan Government asked, rather unofficially, to some Oil companies to present a list with the concessions they were interested on, and the special advantages they were willing to offer in order to obtain those concessions. The Venezuelan Government was, thus, in position to elaborate a plan by which the different and of-

ten conflicting interests could be harmonized with the interest of the Country, and new concerns attracted to the Venezuelan field.

Early in 1944 the Venezuelan Government asked again the interested concerns to submit new and definitive propositions, which were considered by the Government on the light of the following rules:

1°) To give extense exploration concessions in areas of little or no development, or in areas enterely renounced by former concessionaires (Marinas, Portuguesa, Apure, Táchira, Falcón, western and southern coast of Lake Maracaibo, and Federal Territory Delta Amacuro).

2°) To considere with preference, in these exploracion zones, the propositions of new companies and of existing concerns with comparatively small acreage in Venezuela.

3°) To distribute evenly exploitation concessions and National Reserves in the better known areas among all the applicants, trying always the obtain the best terms and conditions.

4°) To try to obtain from the free areas located near the producing zones the best possible advantages.

5°) To stablish, according to the best hypotesis regarding the oil possibilities of each zone, certain relation-ship between the increase of the initial exploitation tax and the subsequent periodic taxes.

6°) To demand in every case, as an essential condition, the stablishement of refineries in Venezuela, or the obligation to refine in Venezuela at least 10% of the crude extracted from the new concessions.

7°) To demand that the oil produced in these new concessions and not refined in Venezuela, should be shipped straight

to the consumption centers, and not refined in the vicinity of the coast of Venezuela.

8°) To maintain a certain proportionality between the areas given to the different groups and the potentialities of those groups, in such a way as to assure to the exploitation companies enough reserves to continue the rithm of their operations, avoiding the concentration of land in a few hads, thus favoring the smaller companies operating in Venezuela, or the new companies willing to enter the Venezuelan field.

All the new concessions will have an initial exploitation tax varying from Bs. 8,00 to Bs. 2,260 per hectare, and royalties ranging from 16-2/3 to 33-1/3%. It is expected that about 50% of the new concessions will pay a high cast initial tax and the other 50% a high royalty.

It is expected that the mentioned initial exploitation taxes will reach the figure of Bs. 209.000,000 of which the amount of 127.000,000 will be paid before the middle of 1946, and the rest during the years of 1947 and 1948. The above figures are not including the ordinary surface taxes which in 1948 are expected to reach Bs. 40.000,000 per year, nor the additional income which may come from higher royalties.

The total income of the Venezuelan Trasury during the year of 1944 reached the amount of Bs. 541.000,000 and the total expenditures were slightly over Bs. 409.000,000. The Balance remaining in the Trasury in April 15th. reached the figure of Bs. 238,499.000 against Bs. 24.952,077.15 of public debt. Based on the solid situation of the National Reasury, the President announced for 1945 a record Budget of proposed expenditures amounting to Bs. 494.900,000.

The President stated that this solid situation has been reached by the application of the income tax and by taxes on the Petro-

leum industry, in spite of certain reductions on custom's taxes and other indirect taxation, which he estimated at about Bs. 41.000,000.00. He mentioned the fact that the custom's duties collected in 1944 represent no more than 41% of the nominal value of the merchandise, while in 1939 they represented 61% of the same value.

He stated that the tendency to higher cost of living has been checked by the various control organisms created during the present emergency, and that the index prices of 1944 show only an increase of 2% on the index prices of 1943.

The direct influence on prices by the increase of circulating money has been checked by the sterilization in the Treasury of a part of the reserve funds. Due to these direct measures the difference in acquisitive power between the Bolivar and other currencies has been decreasing to a satisfactory point, from which the Bolivar may face confidently the probable readjustment of the deflationary post-war period.

I am expecting to be able to write next week about the activities of the Ministerio de Fomento, a summary of which was presented to the Congress, immediately after the President's speech.

Very truly yours.

Clemente González de Juana.-

CC/W.B.Jayred.-

CGdeJ/cjm.-

Caracas, May 19th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Under a separate cover, by ordinary mail, I am sending a copy of the Memoria del Ministerio de Fomento, important document including among others, a summary of the Petroleum activities in Venezuela during 1.944.

Following is a extract of this document:

Conversion of concessions: During the year of 1.944, 100% of the exploration concessions and 99.8% of the exploitation concessions existing in Venezuela were converted, purged, or otherwise incorporated to the 1943 Petroleum Law. These concessions can be subdivided as follows:

a) Converted concessions.

Exploitation concessions	4,299,858.1699 hectares
Exploration-Exploitation	110,602.0600 hectares
Areas to be selected	844,488.7500 hectares

b) Adapted concessions.

Exploitation concessions	208,442.6400 hectares
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c) Purged concessions.

Exploitation concessions	3,062.7133 hectares
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d) Concessions which were not adapted or purged and therefore are not under the 1943 Petroleum Law.-

Exploitation concessions 9,986.7100 hectares

e) Applications for conversion or purge rejected by the Government.-

Exploitation concessions 272,111.0000 hectares

Exploitation concessions 4,081.7107 hectares

f) Total income from conversion etc. in 1943-1944.-

Bs. 75,601,082.00

New concessions: Following the criterium expressed by the President, and commented in my last letter, the Government accepted the applications of several oil Companies on new concessions. The Government expects to grant a total of about 5,147,000.0000 hectares of exploration land and about 1,437,000.0000 hectares of exploitation land with initial exploitation taxes varying from Bs. 8,00 to Bs. 2,260.00 per hectare and royalties from 16-2/3% to 33-1/3% of the crude oil extracted. Following is the distribution of the concessions given to Jan. 1945.

Exploration-exploitation concessions.-

Barnsdall South American Corp.	62,457.00	Hectares
Texas Petroleum Co.	26,270.00	"
S.A. Petrolera Las Mercedes	109,850.00	"
Richmond Explo. Co.	1,145,000.00	"
Caracas Petroleum S. A.	179,500.00	"
Mene Grande Oil Co.	20,000.00	"
Socony Vacuum Oil Co.	1,379,527.00	"
Venezuelan Atlantic Refining Co.	43,200.00	"
Sinclair Oil Co.	361,142.26	"
Creole Petroleum Corp.	437,392.85	"

Total during 1944 3,764.339.11 Hectares

Exploitation concessions.-

Creole Petroleum Corp.	22,295.50	Hectares
Venezuelan Oil & Transport	82,338.00	"
Mene Grande Oil Co.	7,710.00	"
Socony Vacuum Oil Co.	2,147.11	"
Venezuelan Atlantic Refining Co.	19,295.00	"
S. A. Petrolera Las Mercedes	3,242.42	"
Venezuelan Oil concessions	60,410.85	"
Richmond Exploration Co.	149.41	"

Total during 1.944 197,588.29 Hectares

National Reserves and Sobrantes.-

Creole Petroleum Corp.	37,757.83	Hectares
S.A. Petrolera Las Mercedes	111,285.97	"
Socony Vacuum Oil Co.	35,753.70	"
Venezuelan Oil & Transport	39,502.78	"
Caracas Petroleum	15,103.84	"
Richmond Exploration Co.	733.20	"
Texas Petroleum Co.	36,657.04	"
Venezuelan Atlantic Refining	56,187.20	"
Mene Grande Oil Co.	141,665.01	"

Total during 1.944 474,646.57 Hectares

Concessions renounced: During the year of 1944 several companies renounced about 20,276.6809 hectares.

Concessions declared extinct: The Government declared extinct a total of 24,599.5800 hectares of exploitation concessions and 40,000 hectares of exploration land.

Total of concessions existing in Venezuela by the end of 1.944.-

By December 31st. of 1.944 were existing in Venezuela 5,177,466.2970 hectares of exploitation concessions, 3,874,941.1700 hectares of exploration-exploitation concessions, and 835,175.000 hectares in lots to be selected. Following is the discrimination of these concessions by companies:

	Exploitation	Exploration	Lots to be selected
Caracas Petroleum	52,359.5600	226,452.0600	
Cía. Consolidada de Petróleo	275,713.3665	49,150.0000	
Gulf of Maracaibo	3,000.0000		
International Petroleum Co.	6,133.2450		
The Caribbean Petroleum Co.	47,906.0858		
N. V. Nederlandshe Olie Maatsppij	23,936.9490		
The Venezuelan Oil Concessions	472,907.9974		
Coro Petroleum Co.	18,568.9400		
Venezuelan Atlantic Refining Co.	91,299.9052	43,200.0000	
Petroleum Investments (Overseas) Ltd.	29,024.5850		
Pantepec Oil Co. of Venezuela	127,347.9562		
Mene Grande Oil Co.	899,068.4866	20,000.0000	
Socony Vacuum Oil Co. of Venezuela	184,833.4087	1,379,527.0000	
California Petroleum Exploration Co.	11,503.4600		
Seaboard Oil Co. of Delaware	14,881.6000		
Vimax Oil Co.	4,589.93		
Venezuelan Oil & Transport Co. Ltd.	144,060.6692		
Venezuelan Oil Development Co. Ltd.	148,496.4221		
S. A. Petrolera Las Mercedes	424,617.4290	109,850.0000	
Compañía Española de Petróleos S. A.	17,989.2600		
The Colon Development Co. Ltd.	514,329.0766		
Orinoco Oil Co. S. A.	16,593.0000		
Texas Petroleum Co.	94,903.5040	26,270.0000	
North Venezuelan Petroleum Co. Ltd.	2,900.0000		401,962.0000
Sucesión Dolores L. de Bello R.	175.8400		
Mara Oilfields Corp.	3,689.0516		
Esperanza Petroleum Corp.	69,198.2960	14,500.0000	
Creole Petroleum Corp.	1,243,334.3508	437,392.8500	433,213.0000
Richmond Exploration Co.	4,017.8800	1,145,000.0000	
Sun Oil Co.	5,221.1800		
Colonial Beacon Oil Co.	3,371.8000		
Monagas Oil Co.	7,000.0000		
Edward Elvy Robb	800.0000		
Carlos H. Maury	2,186.7100		
British Controlled Oilfields Co. Ltd.	3,062.7133		
C.A. Fomento de Los Llanos	138,200.6700		
C. A. La Pampa	60,371.2800		
Luis Sira	9,871.6900		
Barnsdall South American Corp.		62,457.0000	
Sinclair Oil Co.		361,142.2600	
Totals	5,177,466.2970	3,874,941.1700	835,175.0000

Petroleum production: The total crude production of Venezuela reached the all time record of 40,865.766 cubic meters (342,720,750 U. S. A. bbls.) showing an increase of 43.29% on last year production. This increase is directly related to the increase of ships available and to the decreasing danger of the submarine campaign.

This production figure may be subdivided as follows:

State of Zulia 70.28%.-

Lagunillas	30.99%
Tía Juana	15.94%
Cabimas	11.09%
Mene Grande	4.55%
Bachaquero	2.97%
El Cubo	2.75%
La Paz	1.42%
Others	.57%

State of Monagas 16.08%.-

Quiriquire	4.64%
Jusepín	4.42%
Sta. Bárbara	4.30%
Mulata	2.29%
Others	.43%

State of Anzoátegui 12.64%.-

Oficina	5.67%
Guara	3.20%
San Joaquín	1.46%
Others	2.31%

States of Guárico and Falcon 1%.-

The production by groups and companies may be subdivided as follows:

Esso group 54.86%

Creole Petroleum Corp. 54.86%

Shell group.25.01%

Venezuelan Oil concessions	21.71%
Caribbean Pet. Corp.	4.55%
Colon Development Co.	2.75%

Gulf Group 15.34%

Mene Grande Oil Co. 15.34%

Sinclair group 4.13%

Cía. Consolidada de Petróleo 4.13%

Others .66%

The above percentages are equivalent to the following figures:

Creole Petroleum Corp.	22,419,472	Cubic meters
Venezuelan Oil concessions	7,234,911	" "
Mene Grande Oil Co.	6,260,834	" "
Caribbean Petroleum Corp.	1,860,411	" "
Cía. Consolidada de Petróleo	1,688,518	" "
Colon Development Co.	1,125,163	" "
Socony Vacuum Oil Co.	163,358	" "
Central area Exploitation Co.	45,991	" "
Texas Petroleum Co.	28,250	" "
British Controlled Oilfields	26,797	" "
Orinoco Oil Co.	2,977	" "
S. A. Petrolera Las Mercedes	84	" "
Total	<u>40,865,766</u>	<u>Cubic meters</u>

The Venezuelan Production by fields may be subdivided as follows:

Lagunillas	12,663,890 cu/met.	Cumarebo	333,200 cu/met.
Tía Juana	6,512,252 "	Leona	220,865 "
Cabimas	4,533,241 "	La Concepción	215,869 "
Oficina	2,315,411 "	Temblador	172,782 "
Quiriquire	1,895,092 "	Guario	114,812 "
Mene Grande	1,860,411 "	Sta. Rosa	107,496 "
Jusepín	1,807,034 "	Gúico	48,546 "
Sta. Bárbara	1,757,813 "	Hombre Pintado	45,991 "
Guara	1,307,196 "	Sta. Ana	43,162 "
Bachaquero	1,214,800 "	Mene de Mauroa	26,797 "
El Cubo	1,125,163 "	Rincón Largo	25,061 "
Mulata	936,380 "	Yopales	21,497 "
San Joaquín	596,759 "	Quiamare	21,404 "
La Paz	579,088 "	Pueblo Viejo	12,897 "
El Roble	344,597 "	Los Caritos	3,189 "

Cumarebo (Esso) - 2 wells both abandoned

Jusepín (Esso) - 115 wells - 98 producers - 5 abandoned -
1 gas well, - 1 waiting - 10 drilling

Mulata (Esso) - 17 wells - 13 producers - 2 abandoned - 2 drilling

Temblador (Esso) - 3 wells - 2 producers - 1 abandoned

Boqueron N° 1 (Esso) - dry hole

La Cruz N° 2 (Esso) - suspended - dry hole?

Guara (Esso) - 28 wells - 23 producers - 5 drilling

Guara (Mene Grande) - 37 wells - 32 producers - 1 dry - 4 drilling

Topales (Esso) - 10 wells - 4 producers - 2 abandoned - 1 testing
3 suspended.

Santa Bárbara (Mene Grande) - 23 wells - 17 producers - 6 drilling

Santa Bárbara (Sinclair) - 47 wells - 40 producers - 3 gas wells
4 drilling

Oficina (Mene Grande) - 15 wells - 13 producers - 1 dry - 1 testing

Oficina (Esso) - 1 well - 1 dry

San Joaquín (Mene Grande) - 8 wells - 5 producers - 1 abandoned
2 drilling

Pando N° 1 (Mene Grande) - dry hole

Santa Rosa (Mene Grande) - 1 well drilling

Netick N° 6 (Sun) - testing

Guarico (Socony) - 3 wells - 3 producers

Guico (Socony) - 5 wells - 2 producers - 1 testing-2 drilling

Pericocal N° 1 (Socony) - dry hole

San Vicente N° 1 (Socony) - drilling

Las Mercedes (S.A.P. Las Mercedes) - 3 wells - 1 producer -
1 dry - 1 testing

Manapire N° 2 - drilling

Texas N° 2 (Texas) - dry hole

Rincón N° 3 (Texas) - drilling

Oil reserves.- The known oil reserves of Venezuela at the end of 1943 were estimated at 916,000,000 cubic meters, taking into consideration the discoveries during 1944 it is estimated

now over 1,000,000,000 cubic meters. During the 28 years of oil history Venezuela produced a total of less than 500,000,000 cubic meters.

Comparing the Venezuelan reserves with the total world's reserves, it is believed that Venezuela rates as follows.

U.S.A.	40%	of	the	world's	reserves
Rusia	11.5%	"	"	"	"
Venezuela	11.4%	"	"	"	"
Near East	30	%	"	"	"
Others	7%	"	"	"	"

Agreements on new refineries.-

The Government celebrated an agreement with the Mene Grande Oil Co. to establish in Venezuela a new refinery with a capacity no less than 20,000 bbls. per day, and a similar agreement with Sinclair for a refinery of about 35,000 bbls. per day. Both plants should be in operation before January 1st. of 1.951.

Lower taxes for the British Controlled.-

Taking into consideration the financial situation and the cost of production of the British Controlled oilfields the Venezuelan Government acting by the Authority of Art. 41 - 1° of the Petroleum Law lowered the royalty to be paid by the said Company to 4% of the crude oil extracted instead of the usual 16-2/3%.

Agreements to determine the values of different oils.-

The Government celebrated agreements to determine the value of the oils extracted with the following companies: The Venezuelan Oil Concessions Ltd. The Colon Development Co. Ltd. The Creole Pet. Corp. The Mene Grande Oil Co. The Texas Petroleum Co. and the Orinoco Oil Co.

Exonerations of custom's duties.-

The Government extended some exonerations of custom's duties to certain oil companies as follows:

Socony Vacuum		Bs. 320,989.01
Mene Grande	77	" 361,331.10

Creole Petroleum	Es.	2,633,608.35
Consolidada	"	1,104,728.85
Orinoco Oil Co.	"	30,653.90
S.A.Petrolera Las Mercedes	"	1,841.35
Texas Co.	"	78,420.20

Pipe-line agreements.-

The Government approved the tariffs on oil transportation by pipe-lines of the Mene Grande system (Leona, Guara, Oficina, Santa Ana, San Joaquín, El Roble, Anaco, Sta. Rosa, and Quiamare to Puerto La Cruz) and of the Creole's systems Mulata to Caripito, and Temblador to Boca Uracca.

Very truly yours,

Clemente González de Juana.-

cc/W. B. Jayred.

CGdeJ/cjm.-

Letter N° 74.-

Caracas, June 2nd. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.

Dear Sirs:

You probably noticed that my correspondence has been lately somewhat sporadic. This is due to the fact that, taking advantage of the dry season, I am doing some field work in the interior and I come to Caracas only for urgent office matters, I am writing this letter in one of these trips. I expect the mentioned field work will be completed by the end of June or at the most in the first week of July and from there on I will be able to continue my correspondence as before.

In any case the Petroleum activities, as far as the Government is concerned, have been slowed up and somewhat postponed by the political problems resulting from the Congress sessions, which end in July. The oil companies are very active with their routine work but no outstanding results can be mentioned.

Agreement between the Government and the Creole on evaluation of the Guara crude.

Due to the fact that additional development done in the field of Guara (Anzoátegui) modified substantially the gravity of the crude oil produced by that field, the Government and the Creole Pet. Corp. agreed to modify the basis for evaluation of that crude.

Up to now the Guara crude oil was considered comparable to West Texas Oil of 32.5° API but henceforth the Guara oil produced by Creole will be considered comparable to a fifty fifty mixture of oils

from East Texas 39° API and West Texas 38.5° API, with a resulting gravity of 35.75 API.

National Reserves to the Venezuelan Oil & Transport Co.Ltd.

The V.O.T. (Shell) obtained the National Reserves and the Sobrante of concession "Resguardos de San Pablo", and the National Reserves and the Sobrante of concession "Guscharacas, Los Tanques y Javillar", both located in District Cagigal, State of Anzoátegui, at the price of Bs. 50.00 per hectare. The National Reserves of concession "Cagigal N° 2" in District Cagigal, State of Anzoátegui at Bs. 65,00 per hectare.

National Reserves to Socony Vacuum.-

The Socony obtained the National Reserves of concession "Lote B", District Cedeño, State of Monagas, with a royalty of 20% of the crude oil extracted.

National Reserves to the Mene Grande Oil Co.-

The Mene Grande obtained the National Reserves of concession "Freites N° 23", District Freites, State of Anzoátegui, at the price of Bs. 100,00 per hectare.

National Reserves to the Venezuelan Atlantic Refining Co.-

The Atlantic obtained the norther part of the National Reserves of concession "Zaraza-9", District Zaraza, State of Guárico, at the price of Bs. 150,00 per hectare. The National Reserves of "Zaraza-8", District Zaraza, State of Guárico at the price of Bs. 200,00 per hectare. The National Reserves of "Guarico-9", District Zaraza, State of Guárico, at the price of Bs. 100,00 per hectare. The National Reserves and the Sobrante of "Valle-7" District Infante, State of Guárico, at the price of Bs. 150,00 per hectare. The National Reserves and the Sobrante of concession "Ipire-2", District Zaraza, State of Guárico, at the price of Bs. 100,00 per hectare.

National Reserves to the Phillips Petroleum.-

The Phillips obtained the National Reserves and the Sobrante of concession "Guere-2" and the National Reserves and the Sobrante of concession "Guere-3" and "Guere-5", District Aragua, State of Anzoátegui, at the price of Bs. 10,00 per hectare plus 25% royalty, and the usual refining obligations. The National Reserves and the Sobrante of "Zona Freites N° 43", District Aragua, State of Anzoátegui also at the price of Bs. 10,00 per hectare plus 25% royalty. Part of the National Reserves of "Lote V-102" at Bs. 10,00 per hectare and 25% royalty located also in District Aragua, State of Anzoátegui. The National Reserves and the Sobrante of concession "Bajo Grande" District Aragua, State of Anzoátegui at Bs. 10,00 per hectare and 25% royalty. The National Reserves and the Sobrante of "Roble Quemado", District Aragua, State of Anzoátegui at the price of Bs. 10,00 per hectare plus 25% royalty. The National Reserves and the Sobrante of concession "Guere-4", and of concession "Guere-1", District Aragua, State of Anzoátegui. at the price of Bs. 10,00 per hectare plus 25% royalty. Part of the National Reserves and the Sobrante of concession "Aragua N° 2", District Aragua, State of Anzoátegui, at the price of Bs. 10,00 per hectare plus 25% royalty.

National Reserves to the Sinclair Oil.-

The Sinclair obtained the southern part of the National Reserves and the Sobrante of concession "Zaraza-9" District Zaraza, State of Guárico, paying 20% royalty on the crude extracted.

Applications from the Venezuelan Oil & Transport accepted.-

The Government accepted the applications of the V.O.T. (Shell) on parcels AN-142, and AN-143, commented in my letter N° 66 dated Feb. 24th. The V.O.T. will pay an initial exploitation tax of Bs. 50,00 per hectare.

Applications from the Richmond Exploration Co. accepted.-

The Government accepted the application made by the Richmond

on exploration lot "Zulia-50" commented before on the basis of an initial exploitation tax of \$ 18,00 per hectare and the known refining obligations.

Applications from the Cia. Consolidada de Petr6leos on exploitation concessions.-

The Consolidada de Petr6leos (Sinclair) foled in applications on the following lots of exploitation concessions: parcel C-103-A with 6 hectares, parcel C-104-1 with 339 hectares, parcel C-104-2 with 500 hectares, parcel C-104-3 with 336 hectares, and parcel C-104-4 with 500 hectares. All the above parcels are located in District Maturin, State of Monagas.

Comments: As you may observe in the enclosed sketch these parcels are located near some other Consolidada'S concessions, south-east of Jusepin. Although all that area is a possible oil land the recent failures of La Cruz N° 1 and N° 2 wells, and the still more recent failure of Maturin N° 5 wildcat are rather discouraging for that particular locality. ✓

These parcels are unquestionable out of the Jusepin shore line proper and they fall in the next line of folding southward, which up to now has not materialize in commercial production.

Concessions renounced.-

The S.A.Petrolera Las Mercedes renounced parcels denominated Valle 35-1 to Valle 35-8 of concession VALLE-35, parcels Valle-41-8 to Valle 41-10 of concession VALLE-41, parcels Valle 43-8 to Valle 43-10 of concession VALLE-43, parcels Valle 45-7 to Valle 45-10 of concession VALLE-45, parcels Valle 49-8 to Valle 49-10 of concession VALLE-49, parcels Valle-51-1 to Valle -5110 of concession VALLE-51, parcels Valle 53-1 to Valle 53-10 of concession VALLE-53, parcels Valle-55-1 to Valle 55-10 of concession VALLE-55, parcels Valle 63-1 to Valle 63-4 of concession VALLE-63, parcels Dakoa 52-13 to Dakoa 52-15 of concession DAKOA-52, parcels Dakoa 54-11 and Dakoa 54-12 of concession DAKOA-54,

parcels Valle 37-5 to Valle 37-10 of concession VALLE-37, parcels Valle 57-1 to Valle 57-5 of concession VALLE 57, parcels Vista 1 to Vista 10 of concession BUENA VISTA Y LAS PATOS, parcels Rasti 1 to Rasti 4 of concession LOS RASJUNOS Y EL TIGRE, parcels Abler 1 to Abler 4 of concession POSESION PABLERA, and parcels Testo-1 to Testo-2 of concession LOS TIESTOS, all of them located in District Infante, State of Guárico. *J*

Comments: Some of these parcels are located in the vicinity of dry hole Machate N° 1, and all of them in the tar-oil belt of southern Guárico. Under the actual trend of exploration these parcels should had been renounced long ago, in order to avoid taxes.

Concessions declared extinct.

The Government declared the caducity of parcels Bures N° 1, N° 2 and N° 3 of the National Reserves of concession Zona G de Guillermo Luque, District Sucre, State of Zulia, due to lack of payment of taxes for more than three years.

Very truly yours,

Clemente González de Juana,

cc/ W.B.Jayred.-
Enclosures: 1 Sketch map.-
CGdeJ/cjm.-

Caracas, June 16th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Following are the most recent development/in land acquisition by various Oil Companies:

National Reserves to the Socny Vacuum Oil Co.-

Socony Vacuum obtained a part of the National Reserves of concession ONADO N° 2, District Maturín, State of Monagas, with the obligation to pay 20% royalty.

National Reserves to the Cia. Consolidada de Petróleo.-

The Consolidada (Sinclair) obtained the National Reserves of concession PALMA N° 4, District Maturín, State of Monagas, with the obligation to pay 20% royalty.

National Reserves to the Venezuelan Oil & Transport Co.Ltd.

The V.O.T. (Shell) obtained the Sobrante of concession LAS RAICES and the National Reserves of concession CAGIGAL N° 3, both located in District Cagigal, State of Anzoátegui, at the price of Bs. 65,00 per hectare. The National Reserves of concession ZARAZA-5, District Zaraza, State of Guárico, at the price of Bs. 175,00 per hectare. The National Reserves and the Sobrante of ZARAZA-2 at the price of Bs. 75,00 per hectare.

National Reserves to the S.A. Petrolera Las Mercedes.-

The S.A. Petrolera Las Mercedes obtained the National Reserves of concessions VALLE-3, VALLE-5, DAKOA-4, DAKOA-8, and DAKOA-84 10, located in District Infante, State of Guárico with the obligation

to pay 21-2/3 per cent royalty. The National Reserves and the Sobrante of concession DAKOA-6, District Infante, State of Guárico, with the obligation to pay 21-2/3 per cent royalty.

National Reserves to the Phillips Venezuelan Oil Co.-

The Phillips obtained the Sobrante of concession SAN VICENTE, BRAZO DE CINCO, ETC., in District Aragua, State of Anzoátegui, at the price of Bs. 10,00 per hectare and 25% royalty.

National Reserves to the Creole Petroleum Corp.

The Creole obtained the National Reserves and the Sobrante of concession DAKOA-12, and the National Reserves of LAS VILLAS located in District Infante, State of Guárico, at the price of Bs. 200,00 per hectare. The National Reserves of concession VALLE-11, at the price of Bs. 200,00 per hectare.

National Reserves to the Sinclair Oil Co.-

The Sinclair obtained the National Reserves of concession SAN PABLO, and the National Reserves of concession MARON N° 6, both in District Maturín, State of Monagas with the obligation to pay 20% royalty. The National Reserves of concession PALMA N° 1 and the Sobrante of MARON N° 5, also in District Maturín, State of Monagas, with the obligation to pay 20% royalty. The National Reserves and the Sobrante of concession ONADO N° 5, District Maturín, State of Monagas with the obligation to pay 20% royalty. The National Reserves of LOTE V-59, District Freites, State of Anzoátegui and the National Reserves of LOS ROBLES, District Miranda, State of Anzoátegui with the same 20% royalty. The National Reserves of concession SIMON, District Aragua, State of Anzoátegui, with the obligation to pay 20% royalty. The National Reserves of LA CANDELARIA, District Maturín, State of Monagas, with the obligation to pay 20% royalty. The National Reserves of concessions FREITES-41 and FREITES-42 and the Sobrante of the last one with the obligation to pay 20% royalty. The National Reserves and the Sobrante of SANTA

JUANA, District Miranda, State of Anzoátegui, at 20% royalty. The National Reserves and the Sobrante of ONADO-3, District Maturín, State of Monagas, at 20% royalty. The National Reserves of PICAPICAL, District Miranda, State of Anzoátegui at 20% royalty. The National Reserves of CORZAL & MACO UNARE, District Miranda, State of Anzoátegui at 20% royalty. The National Reserves of concession FREITES N° 14, Districts Freites & Aragua, State of Anzoátegui at 20% Royalty. The National Reserves of ARAGUA N° 14, District Aragua, State of Anzoátegui at 20% royalty, and part of the National Reserves of MEREYAL, HATO NUEVO & SAN FERNANDO, District Aragua, State of Anzoátegui, also at 20% Royalty.

Applications from the Cía. Consolidada de Petróleo on exploitation concessions.

The Consolidada (Sinclair) filed in applications for the following exploitation parcels: C 105-13 with 377,50 hectares, C 110-6 with 500 hectares. C 110-7 with 500 hectares, C 110 with 500 hectares, C 110-9 with 500 hectares, C 110-10 with 321,50 hectares, and C 110-11 with 125 hectares.

All the above parcels are located in District Maturín, State of Monagas.

Comments: You may observe in the enclosed sketch that all these parcels are concessions recently renounced because they were considered to be too-far south into the Monagas basin. The actual tendency of most of the oil companies in the State of Monagas is to look for production in the La Pica shore-line (Jusepín-Sta. Bárbara trend) or to investigate the possibilities of the pre-La Pica formations in the northern area. Only Sinclair is stepping rather strongly toward the south where oil accumulation may be expected from anticlinal structures.

It should be mentioned again that the exploration of these

anticlinal structures brought so far nothing but dry gas wells or total failures. Among them are the following dry holes: La Pica # 1, Maturín # 1 to Maturín # 5, Las Piedras # 1, La Cruz # 1, and La Cruz # 2, and El Lirial # 1, all these are fairly recent, and some of them very recent, tests drilled on geophysical highs.

Applications from the Mene Grande Oil Co. on exploration concessions.

The Mene Grande Oil Co. made the following applications for exploration concessions: "Lote V-534" with 8,550 hectares in Districts Obispos, Rojas and Sosa of the State of Barinas and District Muñoz of State of Apure, "Lote V-535" with 10,000 hectares in Districts Obispos, State of Barinas and Muñoz, State of Apure, "Lote V-536" with 10,000 hectares in Districts Muñoz, State of Apure and Sosa, State of Barinas, "Lote V-537" with 8,544 hectares in District Muñoz, State of Apure, "Lote V-538" with 10,000 hectares in District Muñoz, State of Apure, "Lote V-539" with 10,000 hectares in District Muñoz, State of Apure, "Lote V-540" with 10,000 hectares in Districts Muñoz, State of Apure and Sosa, State of Barinas, "Lote V-541" with 8,950 hectares in Districts Muñoz, State of Apure and Sosa State of Barinas, "Lote V-542" with 8,600 hectares in Districts Muñoz, State of Apure and Sosa, State of Barinas. "Lote V-543" with 6,800 hectares in District Muñoz, State of Apure and Sosa, State of Barinas, "Lote V-544" with 8,560 hectares, District Muñoz, State of Apure, "Lote V-545" with 10,000 hectares in District Muñoz, State of Apure, "Lote V-546" with 7,850 hectares in District Muñoz, State of Apure, "Lote V-547" with 10,000 hectares in District Muñoz, State of Apure, "Lote V-548" with 10,000 hectares in District Muñoz, State of Apure, "Lote V-549" with 5,800 hectares in District Muñoz, State of Apure, "Lote V-550" with 10,000 hectares in District Muñoz, State of Apure, "Lote V-551" with 10,000 hectares in District Paez, State of Apure, "Lote V-552" with 9,500 hectares in Districts Paez and

Muñoz, State of Apure, "Lote V-553" with 10,000 hectares in District Páez, State of Apure, "Lote V-554" with 10,000 hectares in District Páez, State of Apure, "Lote V-555" with 9,900 hectares in District Páez, State of Apure, "Lote V-556" with 9,321 hectares in District Páez, State of Apure, "Lote V-557" with 5,965 hectares in District Páez, State of Apure, "Lote V-558" with 10,000 hectares in District Páez, State of Apure, "Lote V-559" with 10,000 hectares in District Páez, State of Apure, "Lote V-560" with 8,500 hectares in District Páez, State of Apure, "Lote V-561" with 8,000 hectares in District Páez, State of Apure, "Lote V-562" with 7,000 hectares in District Páez, State of Apure, "Lote V-563" with 9,168 hectares in District Páez, State of Apure, "Lote V-564" with 1,047 hectares in Districts Páez, State of Apure, and Pedraza, State of Barinas, "Lote V-565" with 3,880 hectares in District Páez, State of Apure, "Lote V-566" with 10,000 hectares in District Páez, State of Apure, "Lote V-567" with 10,000 hectares in District Páez, State of Apure, "Lote V-568" with 10,000 hectares in District Páez, State of Apure, "Lote V-569" with 9,140 hectares in District Páez, State of Apure, "Lote V-570" with 7,825 hectares in District Páez, State of Apure, "Lote V-571" with 9,900 hectares in District Páez, State of Apure, "Lote V-572" with 9,300 hectares in District Páez, State of Apure, and "Lote V-573" with 7,900 hectares in District Páez, State of Apure.

The Mene Grande offered to pay Bs. 18,00 per hectare as initial exploitation tax on those exploitation parcels selected in these lots, and the usual refining obligations.

Comments: With these concessions the Mene Grande also enters in the Barinas-Apure basin. The Creole is the only big Company which does not show any interest in this area. Up to now no developments have taken place which may influence one way or the other the speculative character of this basin. The price offered by the Mene

Grande is the usual one for this vicinity.

Transference of concessions.-

Parcels denominated Dakoa 136.1 to Dakoa 136.10, located District Infante, State of Guárico have been transferred from the Manapire to the Sinclair Oil Co.

Very truly yours

Clemente González de Juana.

cc/ W.B. Jayred.

Enclosures: 1 Sketch map.-

89

CgdeJ/cjm.-

Caracas, June 30th., 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

National Reserves to Socony-Vacuum.-

The Socony obtained the National Reserves of concession ONADO N° 1, District Maturín, State of Monagas with the obligation to pay 20% royalty. Part of the National Reserves of concession ZAMOA N° 94, District Barinas, State of Barinas at Bs. 20,00 per hectare. The National Reserves of LOTE-F and LOTE-A, District Cedeño, State of Monagas, at 20% royalty. The National Reserves of TRAVIESO N° 1, Districts Piar y Cedeño, State of Monagas at 20% royalty. The National Reserves of FREITES-15 and 16, District Freites, State of Anzoátegui at Bs. 50,00 per hectare, the National Reserves of concession "El Diezmero, Caño Largo y Las Aguaditas" also in District Freites at Bs. 50,00 per hectare and part of the National Reserves of LAS ADJUNTAS, District Freites, State of Anzoátegui at Bs. 75,00 per hectare.

All the above concessions are subject to the known refining obligations.

National Reserves to the Creole Petroleum.-

The Creole obtained part of the National Reserves of concession CONDOR N° 5, District Perijá, State of Zulia at Bs. 40,00 per hectare.

National Reserves to the Venezuelan Oil & Transport Co.Ltd.

The V.O.T. (Shell) obtained the National Reserves and the Sobrante of concession SAN ANTONIO, District Cagigal, State of Anzoátegui, at the price of Bs. 65,00 per hectare. The National Reserves and the Sobrante of concession MONTEVIDEO, District Cagigal, State of Anzoátegui at the price of Bs. 65,00 per hectare. The National Reserves of concession Potrero de Sabana Grande, District Cagigal, State of Anzoátegui at the price of Bs. 65,00 per hectare. The National Reserves of CAGIGAL N° 6, District Cagigal, State of Anzoátegui, at the price of Bs. 65 per hectare. The National Reserves and the Sobrante of LAS RAICES, District Cagigal, Anzoátegui, at the price of Bs. 65,00 per hectare. The National Reserves of CAGIGAL N° 3, District Cagigal, Anzoátegui, at the price of Bs. 65,00 per hectare. The National Reserves of concession CAGIGAL N° 22, District Cagigal, Anzoátegui, at the price of Bs. 65,00 per hectare.

National Reserves to the Phillips Petroleum.-

The Phillips Venezuelan Oil Co., obtained the following lots:

The National Reserves and the Sobrante of concession SAN FRANCISCO, District Aragua, State of Anzoátegui, at the price of Bs. 10,00 per hectare and 25% royalty. Part of the National Reserves of ARAGUA N° 5, District Aragua, Anzoátegui, at the price of Bs. 10,00 per hectare plus 25% royalty. The National Reserves and the Sobrante of concession CARNE SECA, District Aragua, State of Anzoátegui at Bs. 10,00 per hectare plus 25% royalty. The National Reserves and the Sobrante of concession SAN VICENTE, BRAZO DE CINCO, ETC., at the same price.

National Reserves to the Sinclair Oil.-

The Sinclair Oil obtained the Sobrante of concession "Mereyal, Hato Nuevo y San Fernando", the National Reserves and the Sobrante of "Lote V-105" and the National Reserves of "ZONA ARAGUA N° 6

all located in District Aragua, State of Anzoátegui, at 20% royalty.

Agreement between the Venezuelan Government and Socony-Vacuum.-

The Socony Vacuum celebrated an agreement with the Venezuelan Government in order to evaluate the crude oil produced in the fields of Guarío, Anaco, and Güico.

To the effects of Taxation the crude oils of Guarío and Anaco are considered equivalent to East Texas Oil of 39° API and the crude produced in Güico is considered equivalent to a fifty-fifty mixture of East Texas Oil of 39° API and West Texas oil of 32.5° API. These will be considered the "Reference crudes".

The value of the "Reference crudes" will be the monthly average of posted prices for such crudes plus the shipping expenses to the loading station of the Gulf Coast.

The differences in gravity between the Venezuelan crudes and the "reference crudes" will be computed at \$.002 for each 1° API and per barrel of oil.

From the value of the Venezuelan crude in the Venezuelan port thus obtained it shall be deducted the expenses of transporting the oil from the producing field to the shipping terminal, and as the Socony Vacuum has not constructed pipe-lines for transporting his own oil, the deductions for this concept will be equal to the amounts paid by Socony Vacuum to the established pipe-lines. In no case the deduction for transporting the crude shall exceed of Bs. .005 per cubic meter and kilometer (1 barrel equal .158988 cubic meters).

The value of the Venezuelan Oil in the producing field shall not be considered lower than the minimum prices fixed by Art. 50 - 2° - c) of the Petroleum Law.

Applications of the Venezuelan Atlantic accepted by the Government.-

The Venezuelan Government accepted the applications of the Atlantic on exploration lots PLACER-5, 6, and 7 commented in my letter N° 67 of March 3d., 1.945.-

The Atlantic will pay for these lots Bs. 75,00 per hectare of initial exploitation tax and will have the known refining obligations.

Application of the Texas Co. accepted.-

The Venezuelan Government accepted the application of the Texas Petroleum Co. on parcel Sotil-36, District Sotillo, State of Monagas, at the price of Bs. 7,00 per hectare of initial exploitation tax plus the usual refining obligations (See letter N° 67).

Applications of the Venezuelan Oil & Transport Co. (Shell) accepted.-

The Venezuelan Government accepted the applications made by the V.O.T. on exploration lots CAS-1, 2, and 3, District Aragua, State of Anzoátegui commented in my letter N° 56 dated Nov. 18th. 1.944, at the price of Bs. 50,00 per hectare of initial exploitation tax.

There were also accepted the applications on exploitation lots GU-12 to and including GU-18, commented in my letter N° 67, at the price of Bs. 50,00 per hectare plus the usual refining obligations.

Applications from the Sinclair Oil accepted.-

The Government accepted the applications of the Sinclair Oil Co. on exploitation lots denominated S109-1 to and including S109-8, District Maturín, State of Monagas, commented in my letter N° 58, with the obligation to pay 20% royalty.

The Government also accepted the applications of Sinclair

on exploitation lots S111-1 to and including S111-13, commented in my letter N° 66 of Feb. 24th., with the obligation to pay 20% royalty.

Applications from the Cia. Consolidada de Petróleo accepted.-

The Government accepted the applications of the Consolidada (Sinclair) on exploitation lots C105-1 to C105-5, C106-1 to C106-5, C107-1 to C107-5 with the obligation to pay 20% royalty. These lots located in District Maturín, State of Monagas were commented in my letter N° 58 dated Dec. 16th., 1.944.

Applications from the Phillips accepted.-

The Government accepted the applications made by the Phillips Venezuelan Oil Co. on lots denominated FILVEN-15, to FILVEN-22 commented in my letter N° 69 of April 7th., at the price of Bs. 100,00 per hectare of initial exploitation tax plus 20% royalty.

Very truly yours,

Clemente González de Juana.

cc*W. B. Jayred.

CGdeJ/cjm.-

Caracas, July 7th., 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Rates for transportation of crude oil by the Creole-Mene Grande pipe line system and for loading in Puerto La Cruz.-

The Mene Grande Oil Co. and the Creole Petroleum Corp. fixed the following rates for transporting crude oil for outsiders in their pipe line system.

Figures in bolivars per cubic meter (1 cub.met. = ^{6.29 bbls.} 8.3864 bbls)

Oils not to exceed 250" Saybolt Universals at 37.78°C.

Rates to Puerto La Cruz

Loading in Puerto La Cruz

Rates to Puerto La Cruz		Loading in Puerto La Cruz	
From Leona field	Es. 2.35	Loading	Es. 0.60
" Guara field	" 2.15		
" Oficina field	" 2.15		
" Oficina tankfarm	" 1.95		
" Sta. Ana field	" 1.95		
" San Joaquin-El Roble	" 1.75		
" Anaco tank farm	" 1.75		
" Sta. Rosa field	" 1.75		
" Quiamare field	" 1.55		
" Jusepin field	" 2.15		
" Mulata field	" 2.15		
" Travieso tank farm	" 1.95		

The above charges do not include gathering of any oil.

RULES APPLICABLE TO THE TARIFF
AND SERVICE OF TRANSPORTATION.

INTRODUCTION

The Company shall take charge of the transportation of petroleum (as defined herein) of Senders (equally defined herein), from the points in the pipelines of the Company mentioned in the present tariff, up to the Puerto La Cruz Terminal, and of its storage and loading under the following terms and conditions:

1. Definitions:

(a) Petroleum

The term "petroleum" used herein is defined as the direct product of petroleum wells, or a blend of the direct and indirect products of petroleum wells in a proportion in which the direct products or the blend will not have a Reid vaporific pressure of more than 0.914 kilograms per square centimeter at 37.78° C.

(b) Cubic meter:

By cubic meter of petroleum, for the purposes of this tariff, is meant a net cubic meter of petroleum; that is, after making the due deduction for basic sediments, water or other impurities, and corrected at a temperature of 15.56° C.

(c) Senders:

The term "Senders" used herein is applied to private entities: (1) who have no participation as owners in the pipeline and its auxiliary facilities, and (2) those with whom the Company has not contracted the obligation to transport petroleum in compliance with agreements made prior to the promulgation of the Law of Hydrocarbons of March 13th., 1943.

2. Obligation to transport:

The Company is obligated to receive petroleum only in the recei-

ving installations of the pipeline and only when there is an excess of transportation capacity, and only up to a point of covering this excess. By excess of transportation capacity, for the purposes of this rule, is understood the capacity of pipelines, storage facilities, and other existing auxiliary facilities available at the moment in which the Sender solicits transportation; that is to say, the capacity which remains after covering that required for the petroleum belonging to the Company or other enterprises co-owners of the petroleum and of the aforesaid installations, and for the petroleum belonging to entities with whom the Company may have contracted the obligation to transport petroleum, by means of agreements celebrated prior to the promulgation of the Law of Hydrocarbons of March 13., 1943, but only within the limits of that obligations.

3. Quota of available capacity:

When quantities of petroleum greater than the excess of capacity defined in Rule N° 3 are offered to the Company for transportation, said excess shall be proportioned among all the Senders, in proportion to the quantity of petroleum which each one of them may have ready for immediate delivery to the Company on each day on which it may be necessary to effect such quota of the excess.

4. Priorities:

The petroleum belonging to the owners of the pipeline and its auxiliary facilities as well as the oil which the Company may have to transport by virtue of obligations contracted prior to March 13th. 1.943, will at all times have priority for transportation and storage with respect to the petroleum of other interested parties.

5. Refusal of Remittances:

The Company reserves the right to refuse remittances of petroleum:

- a) That contains basic sediments, water or other impurities

which together is in excess of 2%, as may be determined by a centrifugal test or other tests agreed upon between the Sender and this Company.

b) That has a Reid vaporific pressure in excess of 0.914 kilograms per square centimeter at 37.78° C., except it is otherwise specified in special agreements between the Sender and the Company.

c) That has properties which may damage the pipeline or its auxiliary facilities, which, due to contamination in the pipeline or in tanks, may alter the value of other petroleum transported, or which, due to their physical characteristics, may hamper the functioning of the pipeline or its auxiliary facilities.

d) When the Sender or his Consignee may have failed to comply with any of the Laws, Rules and Regulations passed by governmental authorities.

e) That has a temperature greater than 32.22° C.; but petroleum shall be accepted at all events at atmospheric temperature.

f) That contains natural gasoline with a Reid vaporific pressure in excess of 2.11 kilograms per square centimeter at 37.78° C., or which contains natural gasoline in a proportion exceeding 5% of the blend of which it forms part.

6. Connection with Senders' tanks:

Except it is otherwise stipulated in special agreements between Senders and the Company, there shall be requested of the Sender, without expense to the Company, the installation and operation of pipelines and other auxiliary installations which may be necessary for taking his petroleum to the receiving installations of the Company, this last reserving the right to control the operation of such installations of Senders.

7. Facilities at the point of destination.

Petroleum to be transported will be received only when the Sen-

der or the Consignee have available the necessary means for receiving the respective petroleum at the point of destination.

8. Minimum deliveries:

Petitions for the transportation of petroleum must be submitted in writing, using the forms which for the purpose the Company will supply; and each remittance of each Sender shall consist of a quantity of not less than 1,600 cubic meters of petroleum of the same kind and quality, consigned to a same consignee and point of destination; with the understanding, however, that on accepting the petition the Company shall not be obligated to receive and send the petroleum to the point of destination in the event the Company may have to effect changes, alterations or additions to the pipeline or its existing auxiliary facilities on the date on which the respective petroleum may be offered for transportation, by virtue of such acceptance and despatch or through cause of them. In case the Company happens to transport separate remittances of petroleum, the volume and conditions of each remittance shall be subject to special agreements.

9. Identity of petroleum:

Petroleum will be accepted for transportation only under the condition that same will be subject to the changes of gravity or quality which may result during the trip, or of the blend with other petroleums in the pipelines or in the tanks of the Company. This shall not be obligated to make delivery of petroleum identical to that received and, therefore, it reserves the right to make delivery from its ordinary stocks of similar kind and quality.

10. Petroleum in lawsuit:

Petroleum which in any way is implicated in lawsuits, or affected by rights of retention, privileges, charges or liens of any nature, will not be accepted for transportation unless, and not until,

the Sender or the Consignee affords a bond or some other kind of surety, satisfactory to the Company, which will protect it against responsibility or loss which can result from such lawsuit, right of retention, privilege, charge or lien.

11. Payment of Tariffs:

Except in the case of that provided for in Rule N° 14, the Sender of the Consignee must pay all transport charges corresponding to the petroleum accepted and received by the Company for transportation, and in case it is so requested of them they shall pay same before delivery at the point of destination. The petroleum accepted to be transported shall serve as a guarantee to the Company for all corresponding charges. Likewise, all petroleum of a Sender which has not been delivered shall serve as a guarantee to the Company for all unpaid charges corresponding to any remittance or remittances of the same Sender.

12. Unpaid Charges:

In the case of a bill issued in accordance with this tariff remaining unpaid by the Sender for more than ten days after the respective payment is claimed by the Company, in writing, the Company shall have the right to purchase all the petroleum of the Sender, which may be found in its possession, at a price equivalent to 80% of the value of the petroleum in the Venezuelan port of embarkation, determined for the purpose of payment of the exploitation tax as set forth in the agreement with the Federal Executive, which is applicable to the petroleum received from the Sender. From the total of the aforesaid purchase there shall be deducted the sums which the Sender may owe to the Company, and this last shall pay the difference to the Sender.

13. Storage and charges for storing:

The Company shall supply free of charge the storage necessary

and inherent to the transportation of petroleum received from the Sender during ten days, reckoned from the date of receipt of the petroleum by the Company. At the expiration of said ten days, and until the petroleum is delivered to the Consignee at the point of destination, the Company shall charge, on all the Sender's petroleum in its custody, a storage charge of two centimos of the bolivar (Bs. 0.02) per cubic meter per day, for the first 10 days, and from then on six centimos of the bolivar (Bs. 0.06) per cubic meter per day. By day is understood twenty-four hours or fraction thereof, beginning each day at 7:00 a.m. The time of storage and the charges shall be computed as from the date, inclusive, of each separate receipt of the Sender's petroleum up to the date, inclusive, of each separate delivery made to the Consignee; on the basis that the first petroleum received from the Sender shall be the first delivered to him or his Consignee.

14. Company's Responsibility:

During the time the Sender's petroleum is in the Company's possession, the Company shall not be responsible for loss, damage or delay occasioned by unforeseen causes or force majeure, or by any other cause not due to evident negligence of the Company. In case of loss of petroleum through any of said causes, after the petroleum was received to be transported and before it was delivered to the Consignee, the Sender will bear a loss in the proportion which the total of his petroleum already delivered to the Company bears with all the petroleum, of a similar kind and quantity, which is then found in the care of the Company for transportation through pipelines or other facilities at the place where the loss or damage occurred, including petroleum belonging to the owners of the pipeline and its auxiliary facilities, and the sender will have the right of receiving only that part of his remittance or remittances which remains after

making the deduction of the portion which corresponds to him from such loss, but in this event the Sender shall pay only the charges corresponding to the quantity of petroleum delivered at the point of destination.

15. Claims, and time for making them:

Claims for losses or damages occurred to petroleum during the time this is under custody of the Company must be presented by the Sender or Consignee within five days after date of delivery by the Company to the Consignee. In addition, the Company will not accept claims of any kind after a period of six months has elapsed, reckoned from date of delivery to the consignee, or in the case of nondelivery, as from the date on which it is calculated delivery should have been made.

16. Gauges, tests and deductions:

All petroleum which is to be delivered to the Company for transportation must be gauged and tested by a representative of the Company before same is received, but Senders shall have the right to be present or to be represented during gauging and testing operations. For such purposes, the representatives of the Company shall have the right to enter the buildings and installations of the Sender and will have free access to the tanks or any other storage deposits of the Sender. The quantities shall be computed by means of gauging tables of the tanks, correctly made up for the 100% total capacity of the tanks. The volume of the petroleum which fills the required specifications shall be received and delivered, duly corrected at the temperature of 15.56° C., in accordance with the Abbreviated Table for Correction of the Volume of Petroleum contained in the Supplement to Circular C-410 of the National Bureau of Standards issued on April 20th., 1937 (United States Bureau of Standards) A.S.T.M. Designation: D-206-36; A.P.I. Standard N° 5007. To determine the percentage of basis sediment, water or other impurities, a centrifugal machine, or

any other means previously agreed upon between the Company and the Sender, shall be used; and the total quantity of basic sediments, water and other impurities shall be deducted from the total volume corrected at 15.56° C. The net balance shall be the quantity deliverable by the Company and shall serve as a basis for calculating the corresponding charges for transportation.

17. Checking of receipts and deliveries:

The volume of petroleum received from the Sender and delivered to the Consignee shall be supported in each case by means of despatch tickets in which will be stated the initial and final gauges of the tanks, temperature, basic sediments, water and other impurities, and any other essential data. Such Despatch Tickets shall be signed jointly by the representatives of the Company and by those of the Sender or of the Consignee as the case may be, and shall constitute in themselves a receipt for the petroleum received and delivered.

18. Application of tariffs from intermediate points:

Until the time when charges are fixed for transportation between points not named in this tariff, the following rules will be in force:

(a) Any intermediate point of destination shall be considered as if it were Puerto La Cruz, for the purpose of the application of the transportation tariff.

(b) From any intermediate point of origin not mentioned in this tariff, there shall apply the tariff corresponding to transportation from the next point of origin, farther on, mentioned in the tariff.

19. Fiscal Stamps and Sealed Paper:

In addition to the charges which figure in this Tariff, the Sender shall reimburse the Company the value of fiscal stamps and sealed paper used by the Company in connection with transportation, storage and shipping services afforded by the Company to the Sender or to the Consignee.

20. Pump Service:

The additional pump services which the Company may afford at the point of destination in order to deliver the petroleum to storage tanks, which for the purpose the Sender or Consignee may supply, shall be subject to an additional charge of forty-nine centimos of the bolivar (Bs.0.49) per cubic meter.

21. Loading aboard Tankers.-

When the Sender or the Consignee thus requests, the Company shall take charge of loading the petroleum, in bulk only, aboard destined to the transportation of petroleum, which in the judgment of the Company can be accommodated, handle and loaded at the terminal installations, with subjection to the following terms and conditions:

(a) The Company reserves the right to load quantities not less than 1.600 cubic meters at each loading operations.

(b) The Sender or the Consignee shall furnish the Company, sufficiently in advance, complete information as regards the name, loading capacity, draft and dimensions of the ship, date and hour in which its arrival is expected, kind and quantity of petroleum which is to be loaded, and any other pertinent data which the Company may require.

(c) The Company shall afford the berth for mooring and will make the necessary arrangements for the loading of ships in the order of arrival, which shall be determined by virtue of notice of the effect that it is ready to moor, given by the ship's Captain to the Company's representative.

(d) Deliveries of petroleum to ships shall be determined by means of gauges of the tanks on land, certified jointly by representatives of the Sender or Consignee and of the Company. The Captain of the ship which receives the petroleum, or any other adequate representative of the Sender or of the Consignee, shall sign and deliver to the Company's representative a receipt in which is stated the

quantity of petroleum loaded. The quantities of petroleum delivered shall be determined according to the difference between the opening and closing gauges of the tanks on land, fixed in accordance with Rule N° 17.

(e) The tariff prices published herein do not include fees, dues, taxes or charges established, or which may be established, by the National Government, State or Municipal authorities or authorized third parties, applicable to the cargo or to the ship, in connection with the arrival, anchoring, loading, despatch and departure of ships, and other similar operations such as habilitations, pilotage, payment for customhouse despatches and port dues. If the Company incurs in any or several of such expenses, the Sender shall make due reimbursement to the Company. Apart from the loading of ships, any other services afforded by the Company, such as agency, tug, pilotage, etc., shall be charged separately to the Sender or to the Consignee, as may correspond.

(f) The Company shall take charge of the loading of petroleum in ships at a rate of not less than 240 cubic meters per hour. In no case shall the Company be responsible for delays when the loading operation is completed within a period of time calculated at the aforementioned minimum rate of loading plus an additional margin of six hours, nor for additional delays not imputable to evident negligence on its part. The aforesaid period of time shall be reckoned as from the hour in which the Captain notifies that his ship has moored and is ready to load. Sunday and holidays shall not be included in the computations mentioned unless they have been habilitated. In case of delays, the responsibility of the Company shall be limited to Bs. 93.00 per hour in the case of ships of less than 10,000 tons dead weight; Bs. 123.00 per hour for ships of from 10,001 to 14,000 tons dead weight; and Bs. 154.00 per hour for ships of 14,001 tons and more dead weight.

(g) After loading is completed, the Captain shall be obligated to withdraw his ship as soon as possible from the Company's loading installations, and in case he does not do so the Company reserves the right to collect from the Sender the charges per hour indicated in the preceding letter f), for the time during which the ship continues moored after the Company had claimed the berth.

(h) The Company will not be obligated to load any ship in excess of the draft permitted by it for the port in which loading is verified, nor to pay compensation for any empty spaces resulting from incomplete loading due to the aforesaid cause or to any other not imputable to evident negligence on its part.

(i) The Company shall not be responsible for losses of petroleum or damages caused to this or to ships while they are in port, whether before, during or after the time in which loading is effected nor for delays resulting from unforeseen cause or force majeure or from any cause not imputable to evident negligence on its part.

Very truly yours,

Clemente González de Juana.

Caracas: July 14th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Creole Petroleum Corp. obtained an oil well out of wildcat Capacho N° 1 drilled in eastern Anzoátegui, very close to the Monagas boundary, in the recently obtained National Reserves of concession LOTE-V.50. Enclosed is an sketch map showing the location of this well. T

The oficial figures about the completion of this well are as follows: Initial production 150 bbls. per day of 23° API. Total depth 4988 feet. 5½" casing set at 4646 feet was gun perforated in the interval 4410 to 4470 feet.

You may see that this well is located in the trend of Mulata, Santa Bárbara, Travieso and judging from the shallow completion it may be producing from a similar shore-line. The extension of the shore-line flanking the Pirital high westward into the State of Anzoátegui would be of the greatest importance for the oil development of Eastern Venezuela and although the initial production of this well is not very impressive it may mean a continuous oil belt from Travieso to Capacho swinging northwestward to end in the Sta. Inés embayment.

The location of the 2nd. well Capacho # 2 has been made about 2.000 feet north of N° 1.

Exploration concessions to the Mene Grande Oil Co.-

The Mene Grande Oil Co. filed in applications for the following lots of exploration concessions LOTE V-574 and LOTE V-575

with 10,000 hectares each at the price of Bs. 40,00 per hectare of initial exploitation tax, LOTE V-576 with 10,000 hectares at Bs. 30,00 per hectare of initial exploitation tax, LOTE V-577, to and including LOTE V-582 with 10,000 hectares each at Bs. 18,00 per hectare of initial exploitation tax, LOTE V-583 with 9,880 hectares at Bs. 18,00, LOTE V-584 with 10,000 hectares at Bs. 18,00, LOTE V-585 with 9,050 hectares at Bs. 18,00, LOTE V-586 with 10,000 hectares at Bs. 18,00 per hectare, LOTE V-587 with 9,580 hectares at Bs. 18,00 per hectare, LOTE V-588 with 9,190 hectares at Bs. 18,00 per hectare, LOTE V-589 with 7,980 hectares, at Bs. 18,00 per hectare, LOTE V-590 with 8,070 hectares at Bs. 18,00 per hectare, LOTE V-591 with 7,160 hectares at Bs. 18,00 per hectare, LOTE V-592 with 7,488 hectares at Bs. 18,00 per hectare, LOTE V-593 with 7,312 hectares at Bs. 18,00 per hectare, LOTE V-595 with 9,040 hectares at Bs. 18,00 per hectare, LOTE V-596 with 8,370 hectares at Bs. 18,00 per hectare, LOTE V-597 with 8,670 hectares at Bs. 18,00 per hectare, LOTE V-598 with 4,630 hectares at Bs. 18,00 per hectare, and LOTE V-599 with 2,750 hectares at Bs. 18,00 per hectare.

This large tract of land is located in the southern part of Lake Maracaibo, partly covered by waters of the Lake, partly in District Sucre, State of Zulia, Districts Betijoque and Escuque, State of Trujillo and a minor part in the State of Mérida.

Comments: The enclosed sketch map 1:500,000 will enable you to locate these concessions. Some wildcats and several exploratory test holes along the railroad from La Ceiba to Motatan have been drilled in this block. The old Boscan wells (1 to 4) were too-shallow to be considered now very conclusive about the possibilities of the area. The most recent wildcat Motatan N° 1 drilled in 1938, was also a failure and led the Creole to renounce the remainder of their holdings in that vicinity. Motatan N° 1,

at one time the deepest hole of Venezuela, found the Eocene, Pauji shales at about 8,000 feet and was finished in that formation.

The southern part of the Maracaibo Lake basin is generally considered a low, sinking area from Miocene to Recent, where a great thickness of clastic sediments from the mountains have accumulated. It still remains questionable if this thickness of clastics is above the possibilities of modern deep drilling.

The development of pre-Miocene production in the Maracaibo basin is changing the old ideas about the possibilities of various areas, and it is probable that the Mene Grande considers these concessions besides a protection, a fair exploratory proposition where accumulations on the clastics, somewhat of the Quirquire type, may be found, or Eocene production may be eventually reached. It is also possible that any favorable development in the Richmond's acreage of Perijá may reflect here.

In any case the low price paid for this land indicates that it is not considered a good class oil territory.

Exploitation concessions to Socony Vacuum.-

The Socony Vacuum oil Co. filed in applications for the following exploitation lots:

Parcels LONEB, LONEC, LONED, LONEF, LONEG, LONEJ, LONEK, LONEL, LONEM, and LONEN with 500 hectares each one, all located in District Maturín, State of Monagas.

Comments: As you may observe from the enclosed sketch map these concessions were renounced not long ago because they were considered to be located in the deep part of the basin. Nevertheless the Socony and the Sinclair have been taking again some of this land, probably expecting to find some structural accumulation of oil in the middle Miocene La Pica formation. Although all the wells drilled so far south of the Jusepín-Santa Bárbara shore line led to

failures, this land is far enough from El Lirial to be considered -a purely exploratory proposition.

Exploration concessions to Socony Vacuum.-

The Socony Vacuum filed in applications for two exploration lots denominated PASCUA-1 with 6,410 hectares and PASCUA-2 with 8,800 hectares, both located in District Infante, State of Guárico.

Comments: In the enclosed sketch map you may observe that these concessions are located north of the town of Valle La Pascua within the tract of land claimed by Mr. Florent H. Bailey. It is generally believed that Mr. Bailey reached an agreement with Socony and Sinclair before these concessions were granted, thus avoiding the opposition, delay and the possible law-suit derived from the questionable Mr. Bailey's rights.

The vicinity of Valle La Pascua is a very interesting oil territory, the area shows throughout middle Miocene outcrops of the Cucharo formation, below this is the producing Miocene section of Las Mercedes oil field, but I do not expect the Cretaceous to be here at a commercial depth.

The prevailing dip in the town of Valle La Pascua is about 2° toward the S-SE increasing at depth, but northward there are some reverse dips indicative of at least two anticlines; because of the low angle of dip these structures should be checked by geophysics.

Several water wells drilled in the town of Valle La Pascua found oil impregnated sands and gas at 260', the impregnation was very strong for that depth, the oil had a green color and the API gravity was about 30°. The oil impregnation of the sands was related to a small cross-fault occurring there.

In Chaguaramas, about 30 Km. N-NW of Valle La Pascua oil
110 impregnated sands were also found in a water well at about 400'.

Here the impregnation was still stronger than at Valle La Pascua and the hole could have had produced a few barrels of oil had it been pumped.

National Reserves to Socony Vacuum.-

Socony obtained the National Reserves of concession denominated Agua Linda y Caño de Jesús, District Pedraza, State of Barinas at the price of Bs. 20,00 per hectare.

National Reserves to Sinclair Oil.-

The Sinclair Oil obtained the Sobrante of concession denominated ZONA ARAGUA N° 6, District Aragua, State of Anzoátegui, with the obligation to pay 20% royalty. The National Reserves of ZONA FREITES N° 7 and LOTE V-54, District Freites, Anzoátegui, with the obligation to pay 20% royalty.

National Reserves to the Texas Co.-

The Texas Petroleum Co. obtained the National Reserves and the Sobrante of concession "LOTE V-70" and the National Reserves and the Sobrante of concession "ZONA FREITES N° 21" and the National Reserves of "ZONA FREITES N° 22" all in District Freites, State of Anzoátegui, with the obligation to pay 20-2/3% royalty.

Very truly yours,

Clemente González de Juana.

cc/W.B.Jayred.

Enclosures: 4 sketch maps.-

CGdeJ/cjm.-

Caracas, July 22nd. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Exploitation concessions to the Sinclair Oil Co.

Sinclair filed application on the following exploitation lots: S120-1 with 330 hectares, S 120-2, S 120-3, and S 120-4 with 500 hectares each, S 120-5 with 439 hectares, S 120-6, S 120-7, and S 120-8 with 500 hectares each one, S 120-9 with 431 hectares, S 120-10 with 500 hectares, S 120-11 with 387 hectares, S 120-12, and S 120-13 with 500 hectares each.

Parcels S 112-1 and S 112-2 with 465 hectares each one, S 112-3 with 500 hectares, S 112-4 with 285 hectares, S 112-5, S 112-6, S 112-7, and S 112-8 with 500 hectares each one, S 112-9 with 285 hectares, S 112-10, and S 112-11 with 500 hectares each one.

All these parcels are located in District Maturín, State of Monagas.

Comments: As it is shown in the enclosed sketch these parcels form part of the comparatively large tract of land obtained by the Sinclair affiliated companies in north-Central Monagas, south of Jusepin. This area has been discussed in previous letters.

State of Monagas, Sinclair made an application on parcels denominated S 200-1 with 500 hectares and S 200-2 with 440 hectares located in the Municipality of El Chaparro, District Aragua, State of Anzoátegui, an sketch of which is attached to this letter.

Also the Sinclair Oil Co. filed applications on the following parcels, all located in District Zaraza, State of Guárico: S 300-1, S 300-2, S 300-3, S 300-4, S 300-5, S 300-6, S 300-7, S 300-8, S 300-9, and S 300-10, with 500 hectares each one, parcel S 303-1 with 325 hectares, S 303-2 with 500 hectares, S 303-3 with 368 hectares, and S 303-4 with 331 hectares. All in District Zaraza, State of Guárico.

Comments: The above parcels are located in Eastern Guárico and western Anzoátegui not far from Las Ollas well, in a rather interesting oil territory.

You may notice in your map that these concessions are very close to the land renounced in 1943 by Socony Vacuum which I thought at that time to be too-good a land for renouncing.

Exploration concessions to Sinclair.

Sinclair obtained two exploration-exploitation lots near Valle La Pascua (Guárico) lot Sinco-301 with 8.050 hectares and lot Sinco-302 with 8.050 hectares also. These are located in the enclosed sketch and the comments made last week (Letter N° 78) on the Socony lots in this vicinity apply to this land.

Exploitation concessions to the Creole Petroleum Corp.

The Creole filed applications on exploitation lots denominated 1998 with 480 hectares, 1999, 2000, and 2001 with 500 hectares each, and 2002 with 410 hectares. All these concessions in District Maturín, State of Monagas.

Comments: You may observe in the enclosed sketch that these lots are located southeast of Jusepín, out of the actual producing area, ^{in the} low part of the southern flank. In my opinion this

land, more than anything else has been obtained as a protection acreage for Jusepin.

The price paid by Creole has not been made public yet.

Mr. Rafael A. Camejo made oposition to these concessions on the grounds that they were colliding with his old concession MASACUA VILLANUEVERA. The Venezuelan Government disregarded this oposition because the mentioned Masacua concession was declared extinct in 1938.

The situation of Mr. Camejo in relation to this Masacua concession was fully explained in my letter N° 25 dated Feb. 10th. 1944, in reply to your letter dated Jan. 24th. 1944. Please refer to it.

Caducity of concessions.-

The Venezuelan Government declared the caducity of parcels San Pablo N° 5 - N° 6 - N° 7 - N° 8 - N° 9 - N° 11 - N° 12 and N° 13 of concession SAN PABLO, parcels denominated Candelaria N°9- N° 10 - N° 11 - N° 12, and N° 13 of concession LA CANDELARIA, parcels Socorro N° 6 - N° 7, and N° 8 of concession EL SOCORRO DE GUANIPA, and parcels Lancha N° 1 - N° 2 - N° 3 - N° 4 - N° 5 - N° 6 - N° 7 and N° 8 of concession LA LANCHA Y CARATAL.

All these parcels are located in District Maturín, State of Monagas and were held hereto by the Pantepec oilfields Corp.

The reason for this caducity was lack of exploitation of these parcels more than three years and taxes unpaid for more than three years.

The caducity of the following concessions has been also declared: parcels Damoz, Danoz, Dapoz, Daroz, Dasoz, and Datoz of concession ZONA N° 3 de Antonio Martínez Sánchez, District Sucre, State of Zulia, and parcel CVP-246 of concession ZONA N° 2 de Guillermo Luque, District Miranda, State of Zulia.

These parcels were held by the Pantepec Oilfields Corp. and the reason for caducity is the same as above.

Comments: The caducity of these parcels was known a long time ago, but only now it received official Status. Some of the Monagas parcels have been subsequently taken by the Sinclair affiliated companies.

Renouncement of concessions:

The S. A. Petrolera Las Mercedes renounced the parcels denominated Dakoa-38.6 - 38.7 - 38.8 - 38.9 - and 38.10 of concession DAKOA-38, parcels Dakoa 40.8 - 40.9 and 40.10 of concession DAKOA-40, parcels Dakoa 54.1 - 54.2 - 54.3 - 54.4 - 54.5 - 54.6 - 54.7 - 54.8 - 54.9 - and 54.10 of concession DAKOA-54, parcels Dakoa 52.1 - 52.2 - 52.3 - 52.4 - 52.5 - 52.6 - 52.7 - 52.8 - 52.9 - 52.10 and 52.11 of concession DAKOA-52, and parcels Valle-39.8 39.9 - and 39.10 of concession VALLA-38.

All these concessions are located in District Infante, State of Guárico.

Comments: The above listed parcels are located in the tar-oil belt of southern Guafico and some of them around dry-hole Manapire N° 2 - The area has very poor prospects.

Minor installations.-

The Mene Grande Oil Co. installed a 6" branch pipe-line from East Guara to joint the main line Leona to Oficina with a total length of 13.010 meters.

The Cia Consolidada de Petróleo connected his tanks N° 4 & 5 of the Santa Bárbara tank farm to the new Creole - Mene Grande pipe line Jusepín-Pto. La Cruz by means of an 8" branch line.

The Caribbean Petroleum Co. installed a 12" submarine line and a 16" load line at the place called Palmarejo, District

Mara, State of Zulia, in the western shores of Lake Maracaibo.

Very truly yours,

Clemente González de Juana.-

cc/ W.B. Jayred
Enclosures: 3 Sketch maps.

116

Caracas, July 28th., 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

National Reserves to the Texas Petroleum Co.-

The Texas Co. obtained the National Reserves and the Sobrante of concession denominated ZONA FREITES N° 44, the National Reserves and Sobrante of ZONA FREITES N° 19, the National Reserves and the Sobrante of ZONA FREITES N° 20 located in District Freites, State of Anzoátegui, with the obligation to pay 20 $\frac{2}{3}$ royalty.

The same Co. obtained the National Reserves of concessions MATA DEL DIABLO and PUNCHE y SAN ANTONIO, District Aragua, State of Anzoátegui at the price of Bs. 40,00 per hectare plus 20% royalty.

These concessions were considered in my letter N° 62 dated Jan. 13th., 1.945.

National Reserves to the Sinclair Oil Co.

Sinclair obtained part of the National Reserves of concession ARAGUA N° 8, District Aragua, State of Anzoátegui, with the obligation to pay 20% royalty.

The National Reserves of concessions MELLADO N° 2, MELLADO N° 3, ZONA N° 1, and MELLADO N° 56, District Mellado, State of Guárico, at 20% royalty.

The National Reserves and Sobrante of Tucupido N° 2, The National Reserves of ZARAZA N° 7, and ZARAZA N° 11, the National Reserves and the Sobrante of IPIRE N° 7, the National Reserves of

GUARICO N° 32, The National Reserves and Sobrante of PEÑAS BLANCAS, the National Reserves and Sobrante of CHUFONAL, the National Reserves of AGUA AZUL y CORCOVADO, the National Reserves of GUARICO N° 30, the National Reserves and the Sobrante of LA PIEDRA y LA ZAMOREÑA, the National Reserves of DAKOA-18, the National Reserves of COGOLLAR, the National Reserves of GUARICO N° 19, GUARICO N° 21, GUARICO N° 17, and GUARICO N° 20, the National Reserves of SAN GUILLERMO, the National Reserves of VACUM-7, the National Reserves of LA HORQUETA, LOMA TRISTE, ETC., and the National Reserves of concession DAKOA-136. The National Reserves and the Sobrante of concession IPIRE-1, the National Reserves and the Sobrante of concession ZARAZA-E, the National Reserves of concessions GUARICO N° 5, N° 6, N° 7, and N° 8, the National Reserves and the Sobrante of concession LA HACIENDA, the National Reserves and the Sobrante of concession LAS CAMAZAS, QUINTALITO, CASTILLERO, ETC., the National Reserves of concession EL ALACRAN, the National Reserves and the Sobrante of concession EL MACHO, the National Reserves of concession GUARICO N° 31, and the National Reserves and Sobrante of concession SAN VICENTE N° 1. All the above concessions are located in District Zaraza, State of Guárico and the Sinclair offered to pay 20% royalty.

These concessions were commented in my letters N° 62 dated Jan. 13th., 1945 and N° 63 of Jan. 20th. 1945.

Applications from the Mene Grande accepted.-

The Government accepted the applications made by the Mene Grande Oil Co. on exploration lots V-534 to V-573 in the Barinas-Apure basin, listed and commented in my letter N° 75 of June 16th. 1945, and on lots V-574 to V-598 in the southern part of the Maracaibo basin listed in my letter N° 78 of July 14th. 1945.

The Mene Grande offered to pay, in both cases, an initial exploitation tax of Bs. 18,00 per hectare.

Applications from the Sinclair Oil Co. accepted.-

The Venezuelan Government accepted the applications of Sinclair on lots S 112-1 to S 112-11 and S 120-1 to S 120-13 in the State of Monagas, which were commented in my letter N° 79 of last week.

The Sinclair Oil Co. offered to pay 20% royalty.

The Government accepted also the applications on lots denominated S 200-1 and S 200-2, State of Anzoátegui, commented in the same letter at 20% royalty.

The Government accepted the application on lots S 300-1 to S 300-10 and S 303-1 to S 303-4 in the State of Guárico, listed in the same letter N° 79 with 20% royalty.

Applications from the Cia. Consolidada accepted.-

The Venezuelan Government accepted the applications of the Cia. Consolidada de Petróleos (Sinclair) on the following concessions: C 103-A, C 104-1, C 104-2, C 104-3, and C 104-4, commented in my letter N° 74 dated June 2 nd. 1.945.

The Consolidada offered to pay Es. 500,00 per hectare and 22% royalty.

Mr. Rafael A. Camejo made opposition to the concession C 104-2 considering this parcels within the limits of his old concession MASACUA VILLANUEVERA. The Government disregarded this opposition based on the reasons forwarded in my last letter when considering the Creole lots, denominated 1998-2002.

In this case and also in Creole's case, Mr. Camejo still may resort to a law suits against the Government.

The Government accepted also the applications on lots C 105-13, and C 110-6 to C 110-11 commented in my letter N° 75 of June 16th., 1945 with the obligation to pay 20% royalty.

Applications from the Socony Vacuum accepted.-

by Socony-Vacuum on exploitation parcels Loneb to Lonen in the State of Monagas which were commented in my letter N° 78 dated July 14th. 1.945.

The Socony offered to pay 20% royalty.

Applications from the Creole accepted.-

The Government accepted the applications of the Creole on parcels 1998 to 2002 which were commented in my last letter N° 79.

Creole will pay for these lots Bs. 2,260.00 per hectare.

In my last letter I advanced the opinion that these lots were possibly protection acreage for Jusepin, the price however is too-high for protection land and it is enterely possible that Creole expects to find production in the northern strip. To a certain extent it seems reasonable to expect that due to the west plunge of Jusepin anticline, the unbroken monocline of Mulata and Jusepin-Pantepec area, shows a southward swing south of discovery well Jusepin N° 1.

Creole is, of course, in the best position to judge about the value of this land and we must expect that the high figure is well justified.

Minor instalations.-

The Mene Grande added to his loading station of Sta, Rosa field 2 new tanks of 6,667 bbls. each and 2 gas separators, to his pump station of Oficina 2 new pumping units consisting of 2 Caterpillar Diesel Motors 125 HP. and 2 Gardner Denver 6" Pumps.

The Socony installed in his Guico field four 6,667 bbls. storage tanks, two 1996 bbls. tanks, and four gas separators.

Very truly yours,

Clemente González de Juana.-

cc/W.B.Jayred.
CGdeJ/cjm.-

Caracas, August 25th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

During the past months the Venezuelan production of crude increased considerably to reach an all time record. Following are the latest available figures tabulated by fields and companies:

<u>Company</u>	<u>March bbls.</u>	<u>April bbls.</u>	<u>May bbls.</u>
Caribbean Pet Co.	1,256,840.78	1,212,870.92	1,620,465.74
V.O.C.	6,014,066.22	6,403,895.44	7,140,723.70
Colon Development	656,137.24	623,731.78	645,528.16
Creole Pet. Corp.	17,981,049.80	18,113,261.06	19,196,585.56
Mene Grande	5,354,792.20	5,176,284.10	5,188,619.46
British Controlled	47,556.50	46,584.42	45,712.90
Socony Vacuum	326,342.34	344,677.78	408,994.28
Consolidada	1,117,297.02	1,058,150.98	1,178,052.02
Texas Co.	83,096.08	55,014.70	59,958.90
Orinoco Oil Co.	21,561.74	23,489.14	22,885.78
as Mercedes	3,092.22	4,885.54	5,028.00
Atlantic			9,771.08

The above figures represent the following percentages.

<u>Company</u>	<u>March</u>	<u>April</u>	<u>May</u>
Shell group	24.80%	24.92%	26.49%
Creole	54.70%	54.78%	54.05%
Mene Grande	16.30%	15.65%	14.60%
British Controlled		0.15%	0.12%
Socony Vacuum	0.99%	1.04%	1.16%
Sinclair	3.40%	3.20%	3.32%
Texas Co.	0.39%	0.17%	0.16%
Sun Oil		0.07%	0.06%
Las Mercedes		0.02%	0.01%
Atlantic			0.03%

The production by fields was as follows:

<u>Field</u>	<u>March bbls.</u>	<u>April bbls.</u>	<u>May bbls.</u>
Cabimas	3,025,741	2,669,750	2,781,238
Lagunillas	10,392,498	10,606,448	10,989,976
Tia Juana	4,127,258	4,472,154	5,257,980
Bachaquero	1,052,008	1,420,778	1,712,813
Pueblo Viejo	129,001	126,001	136,149
La Concepción	162,530	171,320	170,583
La Paz	661,006	711,369	760,593
Mene Grande	1,256,840	1,211,731	1,555,118
El Cubo	656,137	623,731	645,528
Cumarebo	207,966	199,485	218,156
Mene de Mauroa	19,801	19,290	19,977
Hombre Pintado	27,754	27,293	25,734
Netick	21,561	23,489	22,885
Quiriquire	857,332	937,277	1,213,491
Temblador	252,380	302,224	236,693
Oficina	1,891,139	1,749,668	1,742,503
Jusepin	2,006,892	2,032,434	2,126,609
San Joaquín	427,874	341,309	477,785
El Roble	227,273	172,845	212,273
Guario	175,644	181,477	183,840
Quiamare	10,567	11,539	7,986
Santa Rosa	65,741	61,668	65,188
Los Caritos	8,413		
Santa Bárbara	1,408,610	1,369,149	1,507,386
Santa Ana	27,511	22,994	29,162
Las Mercedes	3,092	4,885	5,028
Leona	198,279	154,468	115,912
Guico	150,697	163,200	225,153
Rincón Largo	74,682	55,014	59,958
Mulata	1,353,018	1,298,422	1,339,174
Guara	1,959,051	1,920,277	1,602,323
Guara		1,139	65,347
Arirital			9,771
TOTAL	32,871,832	33,062,845	35,522,325

The Creole Petroleum added up to the Jusepin pump station 2 new units with a daily capacity of 6360 cubic meters each one and one unit with a daily capacity of 2,226 cubic meters.

National Reserves to the Sinclair Oil Co.-

The Sinclair Oil Co. obtained the National Reserves of concession CONSO N° 1, N° 2, N° 3, N° 4, N° 5, N° 6, N° 7, N° 8, N° 9, N° 10, N° 11, N° 12, and N° 13.

The National Reserves and the Sobrante of concession Sosa N° 3 the National Reserves of Sosa N° 4, Sosa N° 5, Sosa N° 6, and Sosa N° 12.

The above concessions located in District Sosa, State of Barinas were described in my letter N° 63 dated January 20th.

The Sinclair offered to pay 20% royalty.

National Reserves to Socony Vacuum.-

Socony obtained the National Reserves of LOTE V-65, District Freites, State of Anzoátegui, commented in my letter N° 62 of Jan. 13th. 1945, at the price of Bs. 50,00 per hectare plus 18% royalty.

National Reserves to the Texas Company.-

The Texas Petroleum Company obtained the National Reserves of concession SAN JOSE District Aragua, State of Anzoátegui at the price of Bs. 40,00 per hectare plus 20% royalty.

This was commented in my letter N° 62 of Jan. 13th. 1945.

Agreement between the Shell & Mene Grande on oil transportation.- The V.O.C. (Shell) agreed to transport the oil produced by the Mene Grande Oil Co. at the Pueblo Viejo field, and to load it at Bachaquero at the price of Bs. .58 per cubic meter.

The Government fixed a tax on this service equal to $2\frac{1}{2}\%$ of the amount paid by the Mene Grande.

Very truly yours,

Clemente González de Juana.

cc/W.B.Jayred.-

CGdeJ/cjm.-

Caracas, September 1st., 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Drilling activities in Eastern Venezuela.-

During the last few weeks well Q-294 of the Quiriquire field drilled down to 4604' was plugged back to 3861' and completed.

Capacho wildcats.- Wildcat Capacho N° 2 was taken to 5608' and abandoned.

Capacho N° 3 was spudded in at co-ordinates N-239.535; E-588.367 of Barcelona system (Center of Plaza in Barcelona N-300.000 E-500.000), rotary table elevation 858'. 9-5/8" casing was set at 1044' and drilling continues below 4000'.

Capacho N° 4 was spudded in at co-ordinates N-237.963; E-588.067 of Barcelona system. - rotary table elevation 867', and it is drilling at 162'.

Jusepín field.- Well J-253 drilled near the northeast end of the field was drilled down to 4970', 9-5/8" csg. was set at 828' and 5½" csg. at 4956' and the well completed.

Well J-254, located near by (see sketch) was taken down to 5500', 9-5/8" csg. was set at 840' and 5½" csg. at 5499.

Well J-256 was drilled to 5500, 9-5/8" csg. was set at 830' and 5½" csg. at 5500.

Well J-257 drilled near the eastern boundary of Muri (Consolidada) field (See sketch) reached a depth of 4665', 9-5/8" csg. was

set at 524' and 5 $\frac{1}{2}$ " at bottom.

Well J-258 was taken to 4655' and 5 $\frac{1}{2}$ " csg. was set at bottom.

The rest of the wells shown in the enclosed sketch are still drilling.

Mulata field.- Well JP-66 was taken down to 5191', 9-5/8" csg. was set at 750' and 5 $\frac{1}{2}$ " csg. at 5169'.

Well JP-67 was taken down to 4934', 9-5/8" csg. was set at 708' and 5 $\frac{1}{2}$ " csg. at 4696'.

Well MP-67 drilled near the eastern boundary of the Sta. Bárbara (Consolidada) field (See sketch) was taken down to 4720', 9-5/8" csg. was set at 523' and 5 $\frac{1}{2}$ " csg. at 4663'.

The rest of the wells shown in the enclosed sketch are still drilling, out of them the more interesting is well JP-69 which is an edge well.

Applications from the Sinclair accepted.-

The Venezuelan Government accepted the application of the Sinclair Oil Co. on concessions SINCO-301 and SINCO-302 located near Valle de La Pascua, which were listed and commented in my letter N° 79 of July 22-nd.

Sinclair will pay for these lots an initial exploitation tax of Bs. 100,00 per hectare on the selected parcels plus 20% royalty.

Applications from Socony accepted.-

The Venezuelan Government accepted the applications of the Socony Vacuum Oil Co. of Venezuela on lots denominated PASCUA-1 and PASCUA-2 located in the vicinity of Valle La Pascua, which were commented in my letter N° 78 of July 14th.

Socony will pay an initial exploitation tax of Bs. 20,00 per hectare on the selected parcels and 18% royalty.

Mr. Florent H. Bailly made opposition to the concession of these lots, as well as to the Sinclair's lots listed above, on the

basis of his contract with the Venezuelan Government dated June 14th. 1922, by which Mr. Bailly had the right to select three lots within the limits of the present concessions.

The Ministerio de Fomento disregarded Mr. Bailly's opposition and accepted Sinclair's and Socony's applications because Mr. Bailly's contracts were celebrated one day after the 1922 Petroleum Law was published in the Gaceta Oficial, and this law did not admit any longer the contracts on lots to be selected.

Mr. Bailly may appeal to the Supreme Court.

Transference of Pantepec's concessions to the Atlantic.

In compliance with the Pantepec-Atlantic drilling contract the former company transferred to the Venezuelan Atlantic Refining Co. the following concessions:

Parcels SALVA, SADEM, and SADOR, parcels A.V.P. N° 47 to and including A.V.P. N° 53, parcels PEDRO N° 1 to PEDRO N° 3, parcels A.V.P. N° 172 to N° 174, PIEDRAS N° 9, A.V.P. N° 120 to A.V.P. N° 121, JAMIO, JIMIT, JIMOT, JAIMI, A.V.P. N° 2 to A.V.P. N° 5, A.V.P. N° 109 and N° 110, HUESO N° 1, and N° 2, HUESO N° 5 to and including HUESO N° 12, District Maturín, State of Monagas. Parcels T-1 to and including T-6, Districts Maturín and Cedeño, State of Monagas, and parcels LIRAL, LIRIA, A.V.P. N° 175 and A.V.P. N° 176, District Cedeño, State of Monagas.

Minor Installations.- The Creole Petroleum Corp. is building in its terminal of Los Cocos (Puerto La Cruz) two new tanks for fuel oil with a capacity of 107,000 bbls. each and two pumping units moved by two 75HP. Diesel motor.

Very truly yours,

Clemente González de Juana.-

cc/ W.B. Jayred.

126

Enclosures: One sketch map.

Caracas, September 15th. 1.945.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Following are some the most interesting news about the Venezuelan Petroleum industry, in Anzoátegui and Monagas.

Failure of Morichito N° 1 T.

Wildcat Morichito N° 1 drilled by the Venezuelan Atlantic northwest of Santa Bárbara (Monagas) failed to obtain production and was subsequently abandoned. This wildcat penetrated some Paleocene or Cretaceous sands devoid of fossils, and showing in the Schlumberger log a very high resistivity; for this reason this sands were carefully tested but without success.

Morichito has been one of the most interesting exploratory wells of the modern times because it was a serious try for the pre-La Pica formations of northern Monagas, and the Pre-La Pica possibilities are a very important matter for several oil companies, among them the Creole Pet. Corp., the Socony Vacuum, and the Atlantic. T.

In 1934 wildcat Piritital N° 1 found the Paleocene, Santa Anita formation at 400' below a thin quaternary cover. Subsequently the Santa Bárbara shore-line in the Miocene La Pica formation was discovered, but the off-sets of the Consolidada in the Santa Bárbara field, north of La Pica shore-line, found only Oligocene Monagas shales, below the Pliocene Las Piedras, without drilling into any older formation. Eastward the Creole obtained some production

from the Monagas shales in northern Jusepín, but this production so far has not been carried on westward.

The recent discovery of prolific Cretaceous reservoirs in the western part of Lake Maracaibo (La Paz and D. M.) opened new hopes for the Cretaceous of Eastern Venezuela and subsequently several oil companies obtained concessions north of the Jusepín-Santa Bárbara belt, expecting to find oil in some pre-La Pica formation, and more likely in the Cretaceous covered by thin Cuaternary of northern Monagas.

The significance of the Pirital high is not known as yet, in fact this problem, in my opinion, bristles with difficulties but offers many oil possibilities.

The first one is the extension of the Pirital high. Is it an isolated high or else means an extensive masse protruding southward from the mountain belt?

If Pirital is an isolated high there is a possibility of a Miocene ^{trough} ~~through~~ between Pirital and the mountains where ^{the} ~~a~~ marine Miocene stage may have formed another La Pica shore-line. On the contrary if Pirital means the southward extension of the mountains all Miocene production shall be restricted to the area south of the presently known La Pica shore-line.

Another important aspect not yet fully understood is the paleogeographic aspect of this high. Was it a dry land during the Oligocene, Monagas shales stage, or was it covered by the Oligocene seas? In other words were the Monagas shales deposited on top of the Pirital high and subsequently eroded or not?

The answer to this question is very important because it will direct the oil man to look or not to look for Oligocene shore-lines around the Pirital high.

The results of Morichito were kept very confidential but

from the information obtained so far it is sure that La Pica formation was not found in this well and that probably the Monagas shales were not present, or in other words that the well went straight from the Pliocene Las Piedras formation to the high resistivity sands of Paleocene or Cretaceous age. This would add support to the idea of a land mass during the Oligocene and will encourage the exploration for Oligocene shorelines in northwestern Monagas.

The Creole Petroleum Corp. has been carrying on extensive stratigraphic drilling in northern Monagas. The results are confidential but one thing came to light and is the presence of a large Cretaceous fault south of the foot-hill belt in the Quaternary covered area. Some of the exploratory wells found the Cretaceous very shallow whereas others, located only a few hundred feet apart, found several thousand feet of young formations. This fault is important inasmuch as it may explain the occurrence of seepages in the Quaternary such as the Chapapotal seeps and the Monaf # 1 seepages. In case these seepages can be definitively related to these faults this will be another strong argument in favor of the Cretaceous origin of the oil in northern Monagas (Quiriquire field).

Atlantic plans to drill more wildcats in Monagas.-

The Venezuelan Atlantic Refining Co. is ready to start two new tests in Monagas, one in concession El Hueso and the other in concession San Pablo.

Both are located south of the Jusepin-Santa Bárbara belt, aimed to a La Pica structural accumulation.

As it has been emphasized in several oportunities all the previous tests in La Pica structures produced only dry gas, as in La Pica and El Lirial, or were straight dry holes such as Las Piedras N° 1. Nevertheless the oil possibilities of the La Pica structural belt are by no means exhausted and much more drilling

is necessary before that area is sufficiently known. 7

La Ceiba N° 1 probable oil producer.-

The Mene Grande Oil Co. apparently obtained some oil in wildcat La Ceiba N° 1 located in eastern Anzoátegui. This well is officially reported as drilling but the M.G.O. is taking the necessary steps to get all the surface rights in the surrounding areas, which indicates that they expect a producer out of this wildcat.

The Texas Co. will probably step out of Rincon Largo.-

I have been informed that the Texas Co. will, probably, discontinue operations in Rincon Largo - south flank of Santa Ana structure - due to the high cost of drilling and operating that field.

Drilling has been allways difficult and expensive in the Santa Ana-San Joaquín district, because the formations are hard and the wells get frequently off the vertical. The cost of operation and the sporadic results obtained because of the steeply dipping formations are the ^{main} ~~am~~ draw-backs of this area.

On the other hand the Mene Grande Oil Co. is getting ready to test throughly their concessions on the Santa Ana structure. To that effect they are building a new road from San Joaquín to Santa Ana.

The Mene Grande drilled two wells in Santa Ana and obtained, besides a great amount of gas, a high distillate of about 60° API. Operations in Santa Ana were stopped on recommendations from the W.P.A. because of the depth of drilling and the amount of pipe needed, but apparently the Mene Grande now wants to settle, once for all, the commercial value of Santa Ana.

The Mene Grande is in better position than the Texas to develop here a commercial field because they own, not only the top of the structure which so far produced only the distillate, but also the north flank which according to the geological and geophysical

exploration is gentler than the southern flank. The experience of San Joaquín also shows that the north flank is gentler than the southern one, although the San Joaquín north flank is somewhat modified by the El Roble terrace or dome.

The Oficina pipe-line to be duplicated.-

The development of the greater Oficina area, which includes Oficina, Guara, Leona, and Guico, and the possible extension of the Yopales-Agua Clara field, outgrewed the 16" Oficina-Puerto La Cruz pipe line. According to my information tankers are often delayed in the Puerto La Cruz, Mene Grande terminal, waiting on oil.

For this reason the Mene Grande and the Creole are making plans to install a second 16" line along the existing one.

Very truly yours,

Clemente González de Juana.-

Caracas, September 22nd. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Wildcat activity.-

At the present time when the land situation is more or less settled, and new equipment is expected to be obtainable in a comparatively short period, the wilscatting activities are becoming more and more important. T.

In the State of Monagas, following the failure of Punta Gorda N° 1 abandoned at 6015' and of Morichito N° 1 (T.D. 4954) commented last week, the Venezuelan Atlantic Refining Co. is getting ready to drill Morichito N° 2, slightly NE of Morichito N° 1, aimed to obtain production from the Pre-La Pica formations and more specifically from the Cretaceous. T. T.

Rigging up are the locations El Hueso N° 1 and San Pedro N° 1 (See location sketch map) looking for structural accumulation in La Pica, as stated in my last week's letter.

T. In Anzoátegui the wildcatting activity is following two trends, the northern one formed by the Capacho wells of the Creole and the new Tacata N° 1 (See location sketch map enclosed) of the Mene Grande. This trend follows the strike of the Santa Bárbara-Travieso shore-line.

Well Capacho N° 3 failed and was abandoned, whilst N° 4 is still drilling above production depth, Tacata N° 1 is already drilling.

The southern trend formed by wildcat Nipa N° 1 of the Mene Grande Oil Co. and wildcat Tascabaña N° 1 of the Socony Vacuum is aimed to a northern fault zone roughly parallel to the Guara-Guico and Oficina trends. After the good results obtained in Guico and western Guara in relation to the Oficina- Eastern Guara, and Leona trend this exploration line appear enterely justified.

Well Nipa N° 1 is at present drilling below 6.500 feet and Tascabaña N° 1 is ready to start drilling.

In the Delta area the Texas Petroleum Co. is rigging up for wildcat Texas-5 following the limited success of Texas-1 completed near Tucupita. Texas N° 5 (See sketch map) is located in the same trend of old wells Uracoa N° 1 and Tabasca N° 1 which are kept as potential heavy oil producers.

The Texas Co. may still develop in the South some interesting production. In my opinion the fault trends of southern Monagas are slightly oblique to the slope of the basiment so in an easterly direction they cut across thicker sediments; with the increasing thickness of the sedimentary section the oil obtained is lighter, and therefore the heavy oil of Tabasca and Uracoa may Change to commercial oil near Tucupita.

In the State of Guárico, the Las Mercedes field continues in a semi-wildcatting stage with ups and downs as the new wells succeed or fail. It seems now well established that the accumulation of Las Mercedes is to a great extent controlled by block faulting in addition to the unconformity, therefore the field will appear rather scattered. The Texas Co. is getting ready to drill two wildcats in the newly acquired concessions north of Las Mercedes. This wells will be denominated Camaz N° 1 and Camaz N° 2. CT

As you know this northern area shows at surface the Oligo-Miocene, Guarumen sandstone group, folded and thrust. The new detailed geological surveys in this area show that most of the

anticlines, even those with rather gentle limbs, are in fact thrust structures. One of the most striking of cases is the famous Barbacoas structure in Creole's concessions NE of the town of El Sombrero.

Thus Camaz N° 1 and N° 2 (See location map attached) will be 2 tests on faulted structures.

In the State of Falcón the Richmond Pet. (Standard of California) is drilling a test at La Montañita. This is a well developed, closed, anticline in the upper-middle Miocene; prospective horizons are the Miocene formations such as the Socorro, producing in the Cumarebo field and at El Mamon, and the Cerro Pelado formations, generally the more sandy section of the Miocene.

In the State of Zulia, the hottest spot is unquestionably the Cretaceous production of western Maracaibo. As far as Cretaceous drilling is concerned the old field of La Paz is at present in a semi-wildcatting stage, but the results obtained so far are excellent. To further illustrate the importance of the Cretaceous in this field we shall mention that wells P-62, P-73B, and P-79 are producing at a rate above 4,000 barrels per day and well P-68 is producing at rate of more than 6,000 barrels per day.

Well P-83 was recently completed in this field at the depth of 5450' in the Cretaceous but official production figures are not yet available.

Farther north the Shell is drilling wildcat DM-3 now below 5600' and drilling ahead. This well is located near DM-2 in the new Mara field, also looking for Cretaceous production. The record of the Mara field with only two wells drilled is rather impressive as you may see from the figures below.

<u>April bbls.</u>	<u>May bbls.</u>	<u>June bbls.</u>	<u>July bbls.</u>	<u>August bbls.</u>
856	39,049	133,883	158,206	128,847

West of the Mara field the Orinoco Oil Co. (Pure Oil) is drilling wildcat Calentura N° 2, aimed to obtain production from the Eocene and Cretaceous same as La Paz. Operations in Netick are temporarily suspended awaiting on the Calentura well which is drilling below 7.000 feet.

In the eastern part of Lake Maracaibo the only exploratory well is BA-2 of the Shell not far from Lagunillas (Co-ordinates X plus 45,600 Y minus 24,800). Wildcat BA-1 in same area failed and was abandoned at 8546'. In this area there are not many hopes of Miocene production from the known horizons in Lagunillas but the main idea is to test the Eocene, which is badly faulted.

In Barinas the Socony Vacuum continues drilling San Silvestres N° 1 which is now below 7.000 feet.

Exploration plans of Creole for 1946.-

The Creole's staff is elaborating their exploration program for 1946. The preliminary plans include the expenditure of more than \$ 7,000,000 for exploration. It is contemplated to drill about 40 geological exploratory tests in northern Guárico, in the new concessions obtained recently; some of these exploratory tests will be carried below 6,000 feet.

Production figures during March, April, and May.-

In letter N° 81, dated August 25th. I gave some production figures which are mistaken. The official production figures are in cubic meters (metric system) and in doing the conversion of the cubic meters to barrels it was used, by mistake, wrong conversion factor. Following are the corrected figures:

a) Production by companies.-

<u>Company</u>	<u>March bbls.</u>	<u>April bbls.</u>	<u>May bbls.</u>
Caribbean Pet. Co.	443.381	910.377	1,216,316
V. O. C.	4,514.139	4,806.743	5,359,803
Colon Development	492.495	468.171	484,531
Creole Pet.	13,496.516	13,595.754	14,408,893

<u>Company</u>	<u>March bbls.</u>	<u>April bbls.</u>	<u>May bbls.</u>
Mene Grande	4,026,796	3,885,302	3,894,560
British Controlled	35,696	34,967	345,124
Socony Vacuum	244,952	258,714	306,990
Consolidada	838,640	794,245	884,242
Texas Co.	62,372	41,294	45,005
Orinoco Oil	16,185	17,631	17,178
Las Mercedes	2,329	3,668	3,774
Atlantic			7,334

b) Production by fields.-

<u>Fields</u>	<u>March bbls.</u>	<u>April bbls.</u>	<u>May bbls.</u>
Cabimas	2,271,112	2,003,906	2,087,588
Lagunillas	7,800,575	7,961,165	8,249,039
Tia Juana	3,097,907	3,356,785	3,946,623
Bachaquero	789,635	1,066,432	1,285,632
Pueblo Viejo	25,829	94,577	102,194
La Concepción	121,995	128,593	128,039
La Paz	496,149	533,952	570,899
Mene Grande	943,381	909,522	1,167,267
El Cubo	492,495	468,171	484,531
Cumarebo	156,099	149,734	163,748
Mene de Mauroa	14,864	14,480	14,995
Hombre Pintado	20,833	20,487	19,317
Netick	16,185	17,631	17,178
Mara		856	49,049
Quiriquire	643,512	703,518	910,842
Temblador	189,436	226,849	177,661
Oficina	1,419,484	1,313,296	1,307,917
Jusepín	1,506,367	1,525,539	1,596,226
San Joaquín	321,162	256,186	358,624
El Roble	170,592	129,738	159,332
Guario	131,839	136,217	137,990
Quiamare	7,932	8,662	5,994
Santa Rosa	49,346	46,289	48,930
Piritál			7,334
Santa Bárbara	1,057,299	1,027,680	1,131,439
Santa Ana	20,651	17,260	21,890
Las Mercedes	2,322	3,668	3,774
Leona	148,828	115,944	87,003
Guico	113,114	122,498	169,000
Rincón Largo	56,057	41,294	45,005
Mulata	1,015,571	974,592	1,005,180
Guara	1,470,458	1,441,354	1,202,698
Totals	<u>24,642,029</u>	<u>24,816,875</u>	<u>26,662,938</u>

Very truly yours,

Clemente González de Juana.-

Caracas, October 6th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Venezuelan production was still increasing during the months of June and July. Following are the latest official figures.

Company	June bbls.	July bbls.
Caribbean Pet. Co.	1,291,431	1,363,993
V.O.C.	5,065,004	5,359,564
Colon Develop.	451,735	476,078
Creole Pet.	13,703,067	16,030,826
Mene Grande	4,046,671	4,502,193
British Controlled	35,149	35,935
Socony Vacuum	334,735	388,257
Consolidada	827,355	942,066
Texas Co.	42,715	46,816
Orinoco Oil Co.	15,260	14,662
Atlantic	4,202	4,485
Totals	25,817,324	29,164,874

The above figures represent the following percentages:

Company	June	July
Caribbean Pet. Co.	5.00 %	4.64 %
V.O.C.	19.60 %	18.40 %
Colon Develop.	1.76 %	1.60 %
Creole Pet.	53.11 %	55.10 %
Mene Grande	15.64 %	15.40 %
British Controlled	0.14 %	0.12 %
Socony Vacuum	1.29 %	1.30 %
Consolidada	3.21 %	3.20 %
Texas Co.	0.17 %	0.16 %
Orinoco Oil Co.	0.06 %	0.06 %
Atlantic	0.02 %	0.02 %

The production by fields was as follows:

Field	June bbls.	July bbls.
Cabimas	2,002,856	2,044,093
Lagunillas	7,252,747	8,782,557
Tía Juana	3,820,250	4,463,717
Bachaquero	1,170,594	1,266,768
Pueblo Viejo	84,777	81,606
La Concepción	125,234	123,686
La Paz	653,411	711,028
Mene Grande	1,157,549	1,205,787
El Cubo	451,735	476,078
Cumarebo	156,986	160,609
Mene de Mauroa	14,039	14,285
Hombre Pintado	21,109	21,650
Netick	15,260	14,031
Mara	133,883	158,206
Quiriquire	1,422,911	1,514,902
Temblador	226,031	224,389
Oficina	1,267,900	1,258,899
Jusepín	1,556,083	1,690,312
San Joaquín	311,204	393,553
El Roble	123,051	146,060
Guario	148,262	154,149
Quiamare	7,976	8,366
Santa Rosa	48,527	49,647
Pirital	4,202	4,485
Santa Bárbara	1,097,397	1,243,910
Santa Ana	18,266	19,776
Tucupita	2,478	2,088
Leona	2,409	48,427
Güico	186,473	234,107
Rincón Largo	40,237	44,728
Mulata	946,941	945,607
Guara	1,346,544	1,655,113
Capacho		1,623
Totals	25,817,324	29,164,874

Wildcats and exploratory wells.-

The Mene Grande Oil Co. located a new wildcat in Anzoátegui, half way between Santa Ana and Oficina, called Caico N° 1. Enclosed is a location sketch map of this well.

Creole Petroleum is ready to begin Capacho N° 5, located slightly E of dry well Capacho N° 3. The outlook of the Capacho field is not very clear yet, because after the success of well N° 1, two wells, i.e. N° 2 and N° 3 failed, and N° 4 is still drilling. The location of N° 5 is so close to N° 3 that it gives the impression that Creole is

no longer very sure about what they got and they are very carefully feeling their way.

The rest of the wildcats considered in my last letter are going ahead without any interesting developments to report.

Concession maps approved.

The Government approved the map of concession 2086 District Maturín, State of Monagas, presented by the Creole Pet. Corp. Subsequently this oil company obtained the final title on this concession.

The Government approved the maps of concessions denominated C-105 13, C-110-6, C-110-7, C-110-8, C-110-9, C-110-10, and C-110-11, located in District Maturín, State of Monagas, presented by the Compañía Consolidada de Petróleos.

They were also approved the plans of concessions denominated S-300-1, S-300-2, S-300-3, S-300-4, S-300-5, S-300-6, S-300-7, S-300-8, S-300-9, and S-300-10, District Zaraza, State of Guárico, presented by the Sinclair Oil Co.

Permission to Socony to construct crude treating plant.-

The Socony Vacuum was authorized to construct at Anaco a crude treating plant consisting of two, 500 bbls. oil tanks, a 1.500 bbls. water separator tanks, one gas separator and all the necessary accessories.

Very truly yours,

Clemente González de Juana.

cc/W.B.Jayred.

Enclosures: One sketch map.-

Caracas, november 24th. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Well Santa Rosa N° 6 of the Mene Grande's Santa Rosa field blew out while testing at the depth of 10,324 feet. The well was testing the Merecure formation (Eo-Oligocene) and it was estimated good for a production of about 3,000 bbls.

Two specialists from U.S.A. were rushed by special M.G.O. plane to Santa Rosa but shortly after their arrival the well caught fire and both men as well as 8 laborers were injured by the explosion. The Mene Grande is bringing to Venezuela three more specialist, and they expect to control the well by using explosives, without having to resort to drill a relief well. The main difficulty apparently derives from the fact that the well is blowing through the casing and also through the flow line.

The Mene Grande people believes that the blow out was not started in the Merecure sands but came from some higher Oficina sands due to a failure of the 8" casing.

The discovery of commercial oil in the Merecure formation, in the Santa Rosa field is very important. In El Roble and San Joaquin fields only gas has been obtained so far from the Merecure, but in Guaripo the Socony had a commercial well from this

formation. Due to the great depth of the Merecure in the San Joaquín-Santa Rosa area only the uppermost part of this formation has been investigated, the drilling regulations during the was years did not allow any deep exploration in that area and for this reason the Merecure formation possibilities were practically untested, but in everybodies mind was the idea that the Merecure may be one of the most prolific oil producing formations of Anzoátegui. It is probable that the Merecure pinch out, expected between San Joaquín and Oficina, will be thoroughly investigated now. Wildcat Caico N° 1 of the Mere Grande Oil Co. is well located for this investigation.

New wildcat of Standard of California.- The Richmond Petroleum spudded in their first wildcat in the new concessions of the western part of Lake Maracaibo. This test will be denominated Zulia N° 1 and is located at co-ordinates N-178,070 E-193,042.

The Montañita N° 1 wildcat, in Falcón, is fishing again.

New wildcat of Atlantic in Monagas.- The Venezuelan Atlantic Refining Co. spudded in a new wildcat called Tonoro N° 1. This makes the fourth wildcat of this company in the State of Monagas, the others are Morichito N° 2, El Hueso N° 1, and San Pedro N° 1.

Exploratory well of Texas Co.- Following the completion of Texas N° 5, near Tucupita, the Texas Co. spudded in the exploratory well Texas N° 6 at co-ordinates N-201,718 E-198,316 of Tucupita system, slightly NW, and very close to Texas N° 5.

By taking advantage of the experience of Temblador, the Texas here is drilling the wells very close, it is of course too early to advance any opinion but it appears that they got a small field on a fault line.

Exploratory well of Shell.- The Shell group started an exploratory well in the newly obtained acreage in Lake Maracaibo, west and south of Tía Juana field (See enclosed sketch map). This

exploratory well is very important to determine the possible extension lakeward of the Bolívar Coastal field.

Wildcat Capacho N° 5 abandoned.- Capacho N° 5 of the Creole Petroleum Corp. has been abandoned thus justifying the pessimistic impression advanced in my letter N° 87. Capacho N° 4 will be carried down as long as no mechanical difficulties are experienced, but the outlook of this well is also very poor.

Venezuelan production above one million barrels per day.- On the first week of this month of November the Venezuelan production surpassed the long time expected production figure of one million barrels per day. Production trends are still upward.

General items.- The Creole Petroleum Corp. is erecting at La Salina terminal (Cabimas field) three 116,000 bbls. tanks.

The Caribbean Pet. Corp. (Shell) is erecting at the new Mara field a 19,000 bbls. storage tanks.

The Gasoline taxes from Jan. to Oct. 1945 produced a total income of Bs. 16,317,426 showing a decrease of Bs. 1,437,688 on the same period of 1.944. This decrease is unquestionably due to shortage of cars and tires. There is a strong pressure on the Government about lowering the taxes on gasoline but it does not appear probable this decrease for sometime to come.

Very truly yours,

_____⁶
Clemente González de Juana.-

cc/W.B.Jayred

Enclosures: 1 sketch map.-

Letter N° 90.-

Caracas, December 1st. 1.945.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

In a few days I am leaving for the U.S.A. in a short bussines trip. Because of the present Hotel situation I cannot give you an address there although in case of need you may reach me by wire from the 12th. to about the 20th. to the following cable address in New York city: LOSTEQUES New York. As soon as possible I will wire you about any postal address.

On my return I will continue my correspondence.

Very truly yours,

Clemente González de Juana.-

cc/W.B.Jayred.-
CGdeJ/cjm.-

Caracas, January 12th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

On my last letter N° 90 I informed you about a project^{ed}~~ion~~ trip to the United States. During my very short stay in your country I was moving so fast that it was impossible for me to give any postal address where I could have been reached. I returned to Venezuela on Dec. 20 th. 1.945 and was sent immediately to the eastern oilfields where I had a good opportunity to look at the present situation and development of that area. From now on I expect to remain in Caracas as usual.

Eastern Venezuela developments.-

All the oilfields in Eastern Venezuela are now producing at the maximum rate in order to meet the increasing petroleum demand.

In the Quiriquire field, besides two workover crews, there are two rigs engaged in drilling. Well QQ-298 was the most important of the new tests because it had been located well toward the south of the proven area, aiming at a possible extension of the field. The results have been very disappointing because only a small production of oil of 12° API was found and the well was abandoned on Jan. 5th. Creole will drill a new well, located about 7.000 feet south of this test, which is already rigging up.

The Jusepín-Mulata fields are filling in locations without difficulty. The step out exploratory program in this area is usually carried on by means of a portable machine, the tests being usually designated by the initials JGE (Jusepín Geological Exploration). The last exploratory well JGE-16 was abandoned.

The Santa Bárbara field (Sinclair) is almost drilled up to saturation, same as Muri (Sinclair), this will produce an uncomfortable situation for the Cía. Consolidada de Petróleo in the next coming months unless they are able to find something else in the large tract of land recently obtained south and southeast of Santa Bárbara. Preparations are already made to drill a semiwildcat well slightly east of the town of Santa Bárbara, i.e. south of the proven field, but otherwise the Consolidada is not carrying on any strong exploration program. The Sinclair interests in Venezuela were never strongly engaged in original exploration, but favored the policy of waiting for somebody else to make the first move; it is possible that Sinclair is now awaiting the results of the Atlantic's wildcats before stepping out of Santa Bárbara.

The National Reserves obtained by Sinclair north of Muri field do not look very encouraging. The La Pica sands pinch out so near the border line of the Muri lots that unless deeper sands are found in the Carapita formation this land will be a total loss. This is also the case of the Pirital block (Pantepec-Atlantic contract) located westward.

The AVIPA well was drilled just on the edge of the sand and is yielding a very small amount of oil, but conditions are such that there is no more room for La Pica production in the Pantepec-Atlantic controlled acreage.

The Mene Grande Oil Co. (Gulf) is slowly and steadily extending westward the Travieso field following the producing Santa

Bárbara shoreline. Sand conditions in Travieso are less favourable than at Mulata-Santa Bárbara and subsequently the production per well is smaller, the western limit of Travieso has not been reached and as the shore line is expected to turn northwestward this field may continue yet for a considerable distance.

The Venezuelan Atlantic Refining Co. is drilling at present four wildcats in Pantepec's concessions in Monagas. It is remarkable the effort the Atlantic is making to obtain the necessary drilling equipment and materials at the present time.

The Morichito-Punta Gorda area has been abandoned because all efforts to obtain Paleocene-Cretaceous production have failed. I am a strong believer in future Cretaceous production in Eastern Venezuela but at the same time I realize that the many structural complications to be found in these formations require both a careful and detailed study and the drilling of a number of wells, neither of which have been done yet.

The newest of the wildcats started by the Atlantic Tacat N° 1 is an offset to Creole's Capacho area (See enclosed sketch) the other three, i.e. San Pedro, El Hueso, and Tonoro had the drill pipe stuck at the time of my visit. The Atlantic is planning to send one of these rigs to Zaraza, in Guarico, as soon as the tests are completed.

The Capacho area has been definitively abandoned by Creole, every-body complains about "too much faulting" in the pre La Pica formations. The results of the intensive test hole program (GE) carried on north of Jusepin and north of Capacho are disclosing a very complex structural pattern in these pre-La Pica sediments and causing no small discomfort to Creole's officials; some of them are inclined to the opinion that although it is almost certain that oil may be found in these older formations the pools may not be of any great extent, which added to the high cost of exploration will make

exploitation unprofitable. You are aware that the Creole lately obtained a large and expensive tract of land west of Quiriquire field in this particular setting.

My above comments on the Cretaceous of the Morichito Punta Gorda area apply also here. I agree that the pre-La Pica exploration will be very expensive but I am inclined to believe that an oil pool in Cretaceous limestone may be a great field in spite of a possible small lateral extent. The La Paz and D.M. fields west of Maracaibo are indications of the above.

The Tacata N° 1 wildcat of the Mene Grande Oil Co. in Anzoátegui is already drilling in the Merecure formation (Eo-Oligocene) and all the previous tests were negative. La Ceiba N° 1 is at present testing in the Oficina formation.

In the San Joaquín field the important off-set S.J. # 34 may be considered a total failure after 210 drilling days which brings the cost of this well to above \$ 250,000. Well N° 34 is located in the saddle between the two domes of San Joaquín and found throughout very poor sand development. It could had been completed in the deep Colorado A sand with a production of about 150 bbls. but it was deepened and found the Colorado R sand well developed and looking good, the tests however were negative and the Mene Grande is making up their minds as to whether they should acidize the Colorado R sand and test it again or plug the well to the Colorado A to obtain whatever production they can get.

El Roble field is active again drilling N° 11 well after the advice of Mrss. John F. Dodge and Edwin O. Bennett who were appointed sometime ago to make a study of the field after the Creole-Pantepec disagreement on future development of this reservoir.

The Santa Rosa N° 6 well was successfully killed and subsequently brought under control.

The development of Oficina, Guara and Guico fields continues normally but operations in the Yopales field are still suspended.

In the southern belt of Monagas the Tucupita field (Texas 5 & 6 of the Texas Co.) is looking more and more like an oilfield. Wells are producing from 1.000 to 1.500 bbls. per day but the oil is heavy averaging 16° API. Texas # 6 well is so near the eastern boundary of the Creole's concessions that this Company may be obliged to reach a drilling agreement with the Texas Co. or to start again drilling in southern Monagas.

During the last days of December a rather strong earthquake was felt in Eastern Venezuela. Its effects were stronger in the faulted areas such as Federnales where several houses of the Creole's camp were damaged. The Texas # 6 well, mentioned above, was making at the time about 1.500 bbls. of clean oil but after the earthquake it began to make water, the well was squeeze-cemented and clean production restored. The oil production of the northern Monagas oil-fields was apparently undisturbed.

Excess profit tax for 1945 earnings.-

On Dec. 31st. 1945 the Revolutionary Government issued a decree which added an extraordinary income tax on profits exceeding Bs. 800.000 (\$ 240.000) during the year of 1945 in accord with the following scale:

Bs. 800.000 to	Bs. 1.000.000	6 %
" 1.000.000 "	" 1.400.000	10%
" 1.400.000 "	" 2.000.000	15 %
more than	" 2.000.000	20 %

The decree states that this is an extraordinary tax restricted to the year of 1945 and justified by the fact that special marketing conditions permitted many individuals and enterprises to realize extraordinarily high profits during the year.

nies which were taken by surprise. In fact Mr. A. T. Proudfit, the Creole's president, was in New York reassuring his Company about the economic conditions in Venezuela when the decree, affecting Creole by about fifteen millions dollars, was issued. Another interesting feature of this extraordinary tax is that the decree was issued on the last day of the year but affects the profits obtained during the preceding months. After this "excessive profit" taxation it is important to give due consideration to the ideas set forth in my previous letter N° 88 - pg. 3 - dated Nov. 10th. 1945.

Prohibition of strikes.-

Another important decree has been the prohibition of strikes, lock-outs, or any actions resulting in paralization of activities which may be considered essential to the economic life of the country. The measure is temporary, until constitutional guarantees are restored.

I have been talking with several oil men about labor conditions in the east, and they all state that whilst there is not any major trouble with unions or individuals the amount of work put out by laborers has decreased.

Very truly yours,

Clemente González de Juana.-

cc* W.B. Jarred.

CGdeJ/cjm.-

Caracas, January 19th. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Ministerio de Fomento declared the caducity of the following concessions, held by C. A. Fomento de los Llanos:

Parcels	DAKOA - 2.1 to 2.10	of concession	DAKOA - 2
"	DAKOA - 4.1 to 4.10	of concession	DAKOA - 4
"	DAKOA - 6.1 to 6.10	" "	DAKOA - 6
"	DAKOA - 8.1 to 8.10	" "	DAKOA - 8
"	DAKOA - 10.1 to 10.10	" "	DAKOA - 10
"	DAKOA - 12.1 to 12.10	" "	DAKOA - 12
"	DAKOA - 14.1 to 14.11	" "	DAKOA - 14
"	DAKOA - 16.1 to 16.11	" "	DAKOA - 16
"	DAKOA - 18.1 to 18.11	" "	DAKOA - 18
"	DAKOA - 20.1 to 20.10	" "	DAKOA - 20
"	DAKOA - 26.1 to 26.10	" "	DAKOA - 26
"	DAKOA - 28.1 to 28.10	" "	DAKOA - 28
"	DAKOA - 30.1 to 30.10	" "	DAKOA - 30
"	DAKOA - 32.1 to 32.10	" "	DAKOA - 32
"	DAKOA - 34.1 to 34.10	" "	DAKOA - 34
"	DAKOA - 36.1 to 36.10	" "	DAKOA - 36
"	DAKOA - 42.1 to 42.10	" "	DAKOA - 42
"	DAKOA - 44.1 to 44.10	" "	DAKOA - 44
"	DAKOA - 46.1 to 46.10	" "	DAKOA - 46
"	DAKOA - 48.1 to 48.10	" "	DAKOA - 48

Parcels	DAKOA - 50.1 to 50.7	of concession	DAKOA - 50
"	DAKOA - 56.1 to 56.10	"	DAKOA - 56
"	DAKOA - 58.1 to 58.10	"	DAKOA - 58
"	DAKOA - 60.1 to 60.10	"	DAKOA - 60
"	DAKOA - 62.1 to 62.10	"	DAKOA - 62
"	DAKOA - 64.1 to 64.10	"	DAKOA - 64
"	DAKOA - 66.1 to 66.10	"	DAKOA - 66
"	DAKOA - 68.1 to 68.10	"	DAKOA - 68

For similar reasons the Ministerio de Fomento declared the caducity of the following concessions held by the C. A. de Petróleo La Pampa.

Parcels	DAKOA - 50-A.1 to 50-A.3	of concession	DAKOA 50-A
"	DAKOA - 70.1 to 70.10	"	DAKOA 70
"	DAKOA - 72.1 to 72.10	"	DAKOA 70
"	DAKOA - 74.1 to 74.10	"	DAKOA 74
"	DAKOA - 46.1 to 76.10	"	DAKOA 76
"	DAKOA - 84.1 to 84.10	"	DAKOA 84
"	DAKOA - 86.1 to 86.10	"	DAKOA 86
"	DAKOA - 90.1 to 90.11	"	DAKOA 90
"	DAKOA - 92.1 to 92.6	"	DAKOA 92
"	DAKOA - 92-A.1 to 92-A.5	"	DAKOA 92-A
"	DAKOA - 94.1 to 94.9	"	DAKOA 94
"	DAKOA - 98.1 to 98.10	"	DAKOA 98

The following concessions in the name of Luis Sira were also declared in State of caducity for similar reasons:

Parcels	DAKOA - 80.1 to 80.10	of concession	DAKOA - 80
"	DAKOA - 82.1 to 82.10	"	DAKOA - 82

Comments: The C. A. Fomento de los Llanos, and the C. A. de Petróleo La Pampa are interests of the well known free-lancer Luis Sira. From the very beginning the legal status of these con-

cessions was questioned by every oil company in Venezuela, and during the conversion period it was thought that some action could be taken by the Government against these rather large holdings. Mr. Sira did not actually convert his concessions but adapted them to the 1943 Law and apparently the Government did not think it advisable to undertake any drastic action against him at the time. They were nevertheless carefully watching these concessions and as soon as they fell in arrears of payment the caducity was declared according to Art. 75 of the Petroleum Law.

All these lots are located in District Infante, State of Guárico and many of them do not offer at present a great amount of interest because they are located too-far south, in the shallow part of the basin, where only tar-oil has been found; or near unquestionable dry holes such as Machete and Manapire.

Some of the concessions however, such as DAKOA-2, 4, 6, 8, 10, 12, 14, 16, and 18 located in the northern part, not far from Las Mercedes oilfield, around the town of Chaguaramas, and N. of Valle La Pascua are located in a very promising oil territory and undoubtedly several oil companies will be interested in this land. I am sure that if these lots had been free a few months ago, the oil concerns would have paid a high price per hectare and/or a higher royalty. Under the present circumstances it is difficult to forecast what may happen, because possibly the Revolutionary Government does not wish to grant any more concessions under the 1943 Petroleum Law and possibly the oil companies would not be interested in obtaining them until the constitutional and legal situation is entirely clarified. In any case, unless future drilling in Northern Guárico brings about some unknown unfavorable factors, which at present do not appear probable, the mentioned DAKOA-2, 4, 6, 8, 10, 12, 14, 16, and 18, are located in a very attractive area.

Mene Grande Oil Co. succeeds in Nipa N° 1.-

The Mene Grande Oil Co. completed wildcat Nipa N° 1 in a fault trend N. of Oficina-Guara trends. A second well, Nipa N° 2, has been located E. of N° 1.

Creole's refinery site.-

According to a press information released by the Ministro de Fomento it is probable that the projected Creole refinery will be installed in the western coast of Paraguaná, instead of Turiamo.

The Creole selected Turiamo, a deep and well protected harbour half-way distant between La Guayra and Puerto Cabello, after a careful and detailed study of oil reserves, marketing conditions, sanitation, etc. during which several Creole officials and specialists were specially brought to Venezuela. Building the Turiamo refinery meant the outright purchasing of about 6.000 hectares of abandoned National lands, for which the Creole offered a rather high price, plus heavy expenditures in public works, such as a connecting road from Turiamo to Puerto Cabello and a general sanitation of that potentially rich but now malaria ridden territory.

Federal officials of the Ministerio de Fomento were in agreement with Creole's offer but unfortunately the sale of National land had to be approved by Congress, where several conflicting private interests were strongly opposing the Turiamo project. It was, nevertheless, authorized at the last minute; there only remaining to fill various formalities such as the signing and publication of the contract in the Gaceta Oficial.

The revolution broke, in the mean time, and as a result the new Ministro de Fomento stated that since the project had been so much criticized and discussed in the sessions of the previous Congress the Revolutionary Government does not feel justified to

go ahead with the project until it is again properly discussed and duly authorized by the next Congress, still to be elected.

This means at best, a long delay and since the Creole is obliged by the concession's contracts to erect a refining plant before 1951, it seems probable that the plans will be changed and the projected refinery will be erected in the west Coast of Paraguaná or, less likely, at Puerto La Cruz.

Rules to check and examine the books and accounts of companies and employers.-

As you are aware the Venezuelan Labor Law determines a certain percentage of profits to be distributed at the end of the year among the workers of each enterprise. Due to the fact that a number of workers have disagreed on the amount of profits shown by some Companies and also that some Companies have declared that they did not have enough profits to be distributed; the Revolutionary Government has determined the rules to be followed in order to check and examine the books of the employers, at the request of more than 50% of the employees or of any Union representing more than 50% of the workers of a particular enterprise.

The examination of the books will be done by three experts appointed: one by the employer, one by the workers and the third by the Labor Inspector.

The employer shall be obliged to show to the experts all accounting books, documents and any other pertinent data demanded by them.

The expert's report will be finished within a month and presented to the Labor Inspector. This report will have full legal value in case of future Court action.

The Ministry of Labor will determine the fees to be paid to the accounting experts and these fees shall be paid as follows:

1°) By the employer. If the declared profits are found to be smaller than the true profits, or in the event of the books being kept in such a form that the experts are unable to determine the true profits, or no books are kept at all.

2°) By the Government. If the findings are in accordance with the employer's statements.

When the true profits are found to exceed the declared profits, the enterprises shall be obliged to distribute to the employees and additional amount, calculated according to the regulations of the Labor Law, on the difference between the declared and true profits as found by the experts.

If no books are kept or they are kept in bad form so the true profits cannot be determined by the experts the employer shall, in any case, be obliged to pay to the workers one week's salary.

In addition, any employer found guilty shall be subject to a fine from Bs. 500.00 to Bs. 10.000,00 depending upon the nature of the fault, as determined by the Ministry of Labor.

Prohibition of strikes and lock-outs.-

Concerning the information in my last letter N° 91 about prohibition of strikes and lockouts, the following additional information may be of interest.

Whenever any difference arises between workers and employers, the party interested will present in writing his demands to the local labor inspector who will try to negotiate a friendly understanding between the conflicting interests. The above mentioned demands will be signed by the Secretary of the Union representing the workers or by a representative duly authorized and appointed by the majority of the workers when such workers are not affiliated to any Union.

Upon receiving the written demands the Labor Inspector will notify the parties of a conciliatory meeting to take place within the

next 24 hours. This meeting will be presided over by the labor Inspector and attended by as many as three representatives of the workers and as many as three representatives of the employers. All these representatives shall be duly authorized to accept and compromise on any agreement which may be reached.

The labor Inspector will preside over the conciliatory meeting without showing inclination to either side.

If an agreement is not reached within 120 hours of the first conciliatory meeting, the labor Inspector will notify the conflicting parties within 24 hours that they must appoint one representative each to an arbitration Board which shall be presided over by the labor Inspector or by a person designated by the Minister of Labor.

The arbitration board will consider the problem and within 15 days will reach a decision by a majority of votes which shall be accepted by both parties concerned.

The decision of this arbitration board may be revised by another Superior arbitration board duly appointed by the Minister of Labor and formed by a president specially appointed by the Minister of Labor and one representative of each of the parties (employers and laborers) concerned.

The employers may not dismiss any worker or take any action against him for his legal activities in relation to any labor conflict and the workers are specifically forbidden to try to harm or boycott any employer for similar reasons.

The effects of this Decree will last only so long as the Constitutional Guarantees are suspended.

Very truly yours,

Clemente González de Juana.-

Caracas, February 2nd. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Because of the difficulties experienced with the Turiamo refinery site, explained in my last letter N° 92, the Creole Petroleum Corp. requested officially permission to change the location of the refining plant and it is believed that the Government will readily authorize the change. It seems now very definite that the new location will be the west coast of Paraguaná where the Creole owns about 1.200 hectares of land, and in any case could buy some more from private owners. The main difficulty of Paraguaná is lack of water (same as in Aruba) which should be brought from long distances as all the wells drilled in that vicinity yielded brackish to salt water. The Shell group is already working in his refinery site of Punta Cardón (Paraguaná) slightly south of Creole's property. They drilled a water well in the Coro flats about 50 miles southeast of Punta Cardón from where the water will be pumped to the refinery.

The West Coast of Paraguaná, thus will become a great oil shipping center because at present all the Mene Grande (Gulf) production is transhipped at Las Piedras and the two refineries of Shell and of Creole will be erected in that locality.

Strictly from a business standpoint it seems to me that Creole is 100% better in Paraguaná than at Turiamo because Pa-

raguaná is in the route of the shallow draft tankers going from the Lake fields to Aruba, and therefore this shallow drafts boats can be switched from one place to the other, without difficulty or further expenses, as necessity demands.

The construction in Paraguaná will, also be cheaper as no sanitation will be necessary whereas in Turiamo this sanitation item will require very heavy expenditures.

Besides, Paraguaná is the only possible deep water terminal for the much discussed and always delayed pipe-line from the Lake fields. Now with the big three producers (Shell, Creole, and Gulf) having loading terminals in Paraguaná this project appears more feasible as a joint enterprise.

Mr. John W. Brice, head of the foreign production department of the Standard of New Jersey is at present in Venezuela considering this problem of the refinery site as well as the general situation of his company's interests.

New wildcat of the Phillips Petroleum.-

The Phillips Venezuelan Oil Co. is ready to start drilling FT-1 in the National Reserves of concession Travieso N° 4 - State of Monagas, West of the Mene Grande's Travieso field. The Phillips selected, of course, the closest location to the extension of Travieso field and it appears possible that they are able to squeeze in a few locations between their boundary line and edge water. In any case this well will furnish vital information on the westward extension of the Travieso-Santa Bárbara shoreline. (See enclosed sketch).

Exploratory well of Socony Vacuum in Monagas.-

The Socony Vacuum spudded in an exploratory well West of the town of Caicare in northern Monagas (See sketch) called AX-1. This geological exploratory well will be drilled with a special

portable machine and it is the first one of the series of holes projected by Socony in their northern concessions.

New wildcat of the Venezuelan Atlantic.-

The Venezuelan Atlantic Refining Co. is ready to start a new wildcat called San Salvador N° 1 in the State of Monagas (See enclosed sketch) this wildcat was not in the original contract with Pantepic but it was agreed on, as a compensation for the failure to carry to the proposed depths the Morichito tests.

San Salvador N° 1 is located E. of San Pedro N° 1 and will be drilled in similar formations and geological setting as San Pedro.

Wildcat Tascabaña N° 1 completed as a gas well.-

The Socony Vacuum decided to complete wildcat Tascabaña N° 1 in the State of Anzoátegui (See my letter N° 84) as a gas well which was successfully done at 7950'.

Very truly yours,

Clemente González de Juana

cc/W. B. Jayred.-

Enclosures: 1 Sketch map.-

Caracas, February 9th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.A

Attention: Mr. John D. Hale.-

Dear Sirs:

The Barnsdall South America Corp. is ready to start a wildcat in their concessions of southern Guárico. They have selected for the first test a location about 10 kilometers East of Parieguan, slightly N. of the automobile road. As soon as this test is started, both newcomers i.e. Barnsdall and Phillips, will be testing their Venezuelan holdings.

The Barnsdall management has rather unorthodox plans to develop this area, because they are going to drill first and carry the geophysical investigations afterwards. The main reason for this behaviour is because they are afraid of tar oil, and they figure it would not be beneficial to the company to make the heavy expenditures involved in detailed surface geological work and reflection seismograph, to block out a favourable structure which may yield only tar oil. Therefore the future activities of the Barnsdall hinge on the results of this well; if they obtain tar-oil they may abandon all the southern concessions but if they drill a straight dry hole, or better a producer, they will start detailed investigations to block out a favourable structure.

This system is not without criticism because the idea of the southern belt of Anzoátegui and Guárico, being impregnated by tar oil everywhere, highs and lows alike, seems to me much

too-simple, and accordingly I can readily see two dangers, one is that tar oil may be accumulated only in favorable traps and therefore if the Barnsdall well is not structurally well located they may not strike any tar oil there, but after doing their geophysical work and locate a well in a well chosen structure, still find nothing but tar, the second danger is that accumulations of lighter oil occur within the tar belt and if they strike tar in this first test they certainly will be discouraged to thoroughly investigate their concessions.

Barnsdall plans to carry on their drilling with their own crews and equipment without doing any contracting to outsiders, and the greatest part of the equipment is already in Venezuela.

Maps presented by Venezuelan Oil & Transport.

The Ministerio de Fomento aproved the maps presented by the Venezuelan Oil & Transport Co. Ltd. on concessions AN-1 to and including AN-113 located in Districts Bruzual, and Cagigal, State of Anzoátegui.

Wildcat Caico N° 1 successfully completed.-

The Mene Grande's Caico N° 1 wildcat (See my letter N° 85) has been successfully completed at 8515'. A second well is drilling slightly SE of N° 1.

Mene Grande Oil Co. to renew operations at Santa Ana.-

After a long period of inactivity due to the necessity of saving steel, the M.G.O. is ready to start drilling test A.M. N° 4 in the Santa Ana field. The location of this well has been selected very close to the Rincón Largo wells of the Texas Co. which indicates the desire of the Mene Grande to avoid the distillate zone present at the top of the structure. Drilling at Santa Ana is both difficult and expensive not only because of the depth of the wells, but also because the formations are hard and have a tendency to deflect the wells off the vertical, which

requires much reaming and plug-backs.

Many oil men question the commercial value of the Santa Ana field in spite of the high gravity of the oil. The Texas wells are certainly no very commercial but as the Mene Grande owns the best parts of the structure working conditions may be different and results more favorable. T.

Wildcat Tacata N° 1 abandoned.- The Mene Grande Oil Co. abandoned wildcat Tacata N° 1 at the depth of 8629' due to mechanical difficulties. As previously stated this well reached the Mercure formation, but since the Santa Rosa well EG-6 blew out from this formation the Mene Grande feels that it deserves a better test here and a second wildcat will be drilled near by.

New exploratory well of Creole Petroleum.- The Creole spudded in a new exploratory well south of Quiriquire field (see enclosed sketch) denominated QX-1. This test located slightly SE of abandoned well QQ-297 (see my letter N° 91) does not look very promising. Creole needs to prove the recently obtained acreage south of Quiriquire and accordingly some more exploratory holes will be drilled in this area.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.-

Enclosures: One sketch map.-
CGdeJ/cjm.-

Caracas, February 16th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Since my letter N° 85, which included the production figures for the months of June and July, the Venezuelan petroleum production continued an upward trend resulting from the increasing demand. Following are some of the official figures:

<u>Company</u>	<u>August bbls..</u>	<u>September bbls.</u>	<u>October bbls..</u>
Caribbean Pet. Co.	1,309,069	1,246,763	1,303,195
V. O. C.	5,549,045	5,248,822	5,864,083
Colon Develop.	483,626	460,643	486,903
Creole Pet.	15,996,878	14,914,909	16,696,620
Mene Grande	4,525,579	4,214,032	4,362,652
British Controlled	36,179	33,971	33,222
Socony Vacuum	418,275	384,909	427,030
Consolidada	956,366	835,997	805,800
Texas Co.	79,316	75,163	72,213
Orinoco Oil Co.	13,680	12,567	12,101
Atlantic	3,805	3,906	3,925
Totals	29,371,814	27,431,682	30,067,744

The Above figures represent the following percentages:

<u>Company</u>	<u>August</u>	<u>September</u>	<u>October</u>
Caribbean Pet. Co.	4.45 %	4.56 %	4.34 %
V. O. C.	18.89 %	19.10 %	19.51 %
Colon Develop.	1.66 %	1.64 %	1.62 %
Creole Pet.	54.46 %	54.43 %	55.51 %
Mene Grande	15.40 %	15.30 %	14.52 %
British Controlled	.13 %	.12 %	.11 %
Socony Vacuum	1.43 %	1.33 %	1.42 %
Consolidada	3.26 %	3.20 %	2.68 %
Texas Co.	.27 %	.27 %	.24 %
Orinoco Oil Co.	.05 %	.04 %	.04 %
Atlantic	.02 %	.01 %	.01 %

The production by fields as follows:

Fields	August bbls.	September bbls.	October bbls.
Cabimas	2,039,468	2,003,326	2,085,495
Lagunillas	8,680,019	8,173,185	9,133,643
Tía Juana	4,391,246	4,318,373	4,911,724
Bachaquero	1,262,324	1,222,892	1,266,827
Pueblo Viejo	168,213	218,009	201,946
La Concepción	113,492	102,309	93,743
La Paz	840,337	833,821	889,253
Mene Grande	1,180,582	1,120,024	1,135,151
El Cubo	483,626	460,643	486,903
Cumarebo	161,609	157,150	160,074
Mene de Mauroa	15,240	14,165	14,718
Hombre Pintado	20,939	19,806	18,504
Netick	13,680	12,567	12,101
Mara	128,487	126,739	168,044
Quiriquire	1,589,518	1,036,697	1,612,059
Temblador	178,107	165,597	163,823
Oficina	1,321,044	1,192,375	1,196,097
Jusepín	1,699,342	1,580,950	1,706,123
San Joaquín	352,686	365,460	368,410
El Roble	144,784	125,575	154,459
Guario	149,482	133,834	161,615
Quiamare	6,422	7,038	8,850
Santa Rosa	47,142	45,758	50,224
Pirital	3,805	3,906	3,925
Santa Bárbara	685,263	602,471	594,835
Santa Ana	13,102	1,711	1,258
Tucupita	1,786	2,887	2,183
Leona	72,496	15,926	-----
Guico	268,793	251,075	265,415
Rincón Largo	77,528	72,276	70,030
Mulata	926,884	882,208	897,675
Guara	1,702,544	1,552,382	1,591,177
Capacho	1,019	1,761	2,629
Travieso	318,174	335,276	402,079
Muri	271,101	233,526	210,965

During the last two months of the years the production by Companies was as follows:

Company	November bbls.	December bbls.	Total 1945 bbls.
Caribbean Pet. Co.	1,278,815	1,299,376	13,971,483
V. O. C.	5,714,153	5,955,680	61,674,733
Colon Develop.	507,520	530,830	5,806,611
Creole Pet.	16,565,241	16,830,914	176,308,762
Mene Grande	4,478,616	4,450,477	49,768,223
British Controlled	31,443	35,996	417,830
Socony Vacuum	468,323	471,637	4,087,255
Consolidada	939,847	994,739	10,448,467
Texas Co.	55,513	75,911	678,620
Orinoco Oil Co.	10,145	9,252	146,034
Atlantic	3,497	3,308	34,462
Las Mercedes	2,384	3,214	15,851
Totals	30,057,881	30,661,334	323,358,331

which represent the following percentages:

Company	November bbls.	December bbls.	Total 1.945.-
Caribbean Pet. Co.	4.24 %	4.23 %	4.32 %
V. O. C.	19.08 %	19.45 %	19.01 %
Colón Develop.	1.66 %	1.73 %	1.79 %
Creole Pet.	55.18 %	54.86 %	54.60 %
Mene Grande	14.88 %	14.51 %	15.40 %
British Controlled	.09 %	.13 %	.13 %
Socony Vacuum	1.56 %	1.54 %	1.26 %
Consolidada	3.11 %	3.25 %	3.23 %
Texas Co.	.17 %	.25 %	.21 %
Orinoco Oil Co.	.03 %	.03 %	.04 %
Atlantic	.01 %	.01 %	.01 %
Las Mercedes	----	.01 %	----

The percentage of the Shell group in 1945 reached 25.11 % against 25.05 % in 1944.

The production field by field during this lapse was as follows:

Company	November bbls.	December bbls.	Total 1.945
Cabimas	2,314,041	2,399,280	25,676,633
Lagunillas	8,855,907	8,837,100	97,085,806
Tía Juana	4,931,814	5,320,948	48,893,503
Bachaquero	1,215,338	1,207,760	13,604,273
Pueblo Viejo	192,190	198,518	1,600,116
La Concepción	101,164	104,838	1,355,097
La Paz	831,689	836,563	8,048,987
Mene Grande	1,089,663	1,113,319	12,831,023
El Cubo	507,520	530,830	5,806,611
Cumarebo	153,520	152,854	1,884,934
Mene de Mauroa	14,165	14,699	175,605
Hombre Pintado	17,278	21,297	242,225
Netick	10,145	9,252	146,034
Mara	189,152	186,057	1,140,460
Quiriquire	1,525,330	1,588,913	14,457,058
Temblador	166,201	163,351	1,698,004
Oficina	1,194,138	1,149,038	15,259,647
Jusepín	1,719,954	1,583,780	17,944,987
San Joaquín	334,144	321,558	4,035,738
El Koble	136,620	137,689	1,742,636
Guario	152,281	146,507	1,709,235
Quiamare	8,843	8,623	93,596
Santa Rosa	36,808	29,776	548,127
Piritál	3,497	3,308	34,462
Santa Bárbara	714,894	752,218	7,410,318
Santa Ana	1,874	1,487	163,916
Tucupita	1,434	2,220	15,076
Leona	-----	-----	733,047
Guico	316,042	325,130	2,378,020
Rincón Largo	54,060	73,691	657,210
Mulata	776,339	881,177	10,830,067
Guara	1,800,739	1,849,825	18,332,871
Capacho	-----	-----	7.032
Travieso	420,055	420,697	3,347,141
Muri	224,953	242,521	3,038,149
Las Mercedes	2,384	3,214	15,851

Western Venezuela produced about 2/3 of the total and Eastern Venezuela the remaining 1/3.

Almost all the fields show an increase in production resulting from better shipping conditions and more petroleum demand, in the West one of the outstanding fields during 1945 was the Pueblo Viejo field which from August on received a nice increase from the Eocene production obtained by the Mne Grande Oil Co. in parcel Laguin. Another outstanding performance was accomplished by the Mara field, which was put in production during the month of April and produced at the end of the year a total of more than one million barrels from only two wells. La Paz field increased the production from the comparatively new Cretaceous horizons. Lagunillas, as usual, led the production, followed by Tía Juana which showed an important increase through the year.

In Eastern Venezuela an outstanding field was GUICO a new field which yielded more than 50% of Socony's production in Venezuela. Another outstanding new field is Travieso, which was put into production late in 1944 and during 1945 produced more than three million of bbls. Guara showed a nice increase month by month and end up the year of 1945 leading the production of Eastern Venezuela. Las Mercedes and Tucupita produced only the amounts needed for drilling and testing and Capacho and Pirital (Avipa) should be considered total failures.

Very truly yours,

Clemente González de Juana

cc/N.B.Jayred.-
CGdeJ/cjm.-

Caracas, March 9th., 1.946.-

The Superior Oil Co.
#30 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Following the program for developing the recently acquired concessions in northern Guárico, the Creole Petroleum Corp. is drilling two geological exploratory wells in the Barbacoas structure, slightly NE of the town of El Sombrero. These two holes are intended only to obtain geological information and form part of the proposed 30 tests which the Creole plans to drill during the remainder of 1946 in that area; part of these future tests will be drilled with 2 slim hole outfits already ordered, but the present ones are drilling with portable Cardwell rigs.

The Barbacoas structure was known as a big, closed, fairly gentle anticline cut by some cross-faults, but the recent detailed work aided by reflection seismograph disclosed extensive strike faulting to the extent that it is doubtful whether the structure should be called anticlinal or a thrust line. Creole's officials are very pleased with the reflections obtained in that area, and the present tests are, therefore, aimed to obtain stratigraphic information more than to gain a better picture of the structure.

These tests are known as XB-1 and XB-2 and I hope in my next letter to send you a sketch of the location.

Successful completion of well Texas N° 7.-

The Texas Co. successfully completed the well Texas N° 7 in the Tucupita area, in Federal Territory Delta Amacuro. Please

find enclosed a sketch of these wells where you may observe how this field is shaping. Unfortunately we still lack some more wells toward the north in order to have a definite idea about the commercial value of this fault trend.

The experience gained at Temblador on this type of narrow oil accumulations against faults, is rather discouraging. Furthermore the low gravity of the oil would require here a greater width of the producing zone in order to pay for the higher costs of drilling and operating in the swampy Delta Amacuro area.

It is interesting to note that not only the western side of Caño Mánamo, but the island marked 1468 are concessions of the Creole Pet. Corp. which up to now has not shown much concern on Texas operations. This land aspect was commented in my letter N° 91.

New wildcat of Creole Pet. in Lake Maracaibo.-

The Creole Petroleum Corp. started a new test in Lake Maracaibo W. of Tía Juana field (see enclosed sketch).

The last wildcat drilled Lakeward in that vicinity was Icotea N° 1 (1935) which found the following formations

60 - 280'	Recent & Quaternary
280 - 652'	La Puerta series
652 - 1315'	Upper La Rosa
1315 - 1582'	Lower La Rosa
1582 - (T.D.)	Eocene

T.
?

As the new well LGE-1 is located southward of Icotea N° 1 thicker Miocene sediments should be expected. The Icotea well was located in what is known as the lakeward extension of El Mene-Ambrosio nose.

Wildcat of Creole Petroleum in Eastern Venezuela.-

A new wildcat called JX-2 has been started by Creole in Eastern Venezuela, north of Jusepin and West of Orocuai. Prospective formations for this test are the Carapita (Mio-Oligocene), Merecure, and the Paleocene-Cretaceous. Although the Orocuai wells found some

heavy oil in the Pliocene Quiriquire formation, which also covers the location of JX-2, I would not expect commercial production from the Quiriquire beds here.

JX-2 same as the wells Q-297 and QX-1 located south of Quiriquire field are part of Creole's program to test the newly obtained concessions in the Monagas northern belt.

Wildcat of Socony Vacuum in Anzoátegui.-

The Socony Vacuum started a new wildcat in Anzoátegui (see enclosed sketch) north of the Guico oilfield. This test called NV-1 is aimed at a fault trend parallel to Western Guara-Guico, and in general to the Oficina trend. Propective formation is the Oficina although there are possibilities that this well reaches the southern extension of the Merecure pinch out which will be very interesting.

Location map of Manquito N° 1.-

Please find enclosed a location map of Barnsdall's test Manquito N° 1 in eastern Guarico, This wildcat was announced in my letter N° 94 and is at present drilling ahead at 3.297 feet.

Grico N° 1 of Texas Co. succesfully completed.-

Wildcat Grico N° 1 drilled by C.A.Petrolera Las Mercedes has been succesfully completed as a producer according to reliable sources. Details as to production and quality of oil are not yet available.

Finding of oil in Grico N° 1 is of primary importance for the future of northern Guárico which is literally covered by concessions of various oil companies. Las Mercedes production, in the same area, is not enough to give a fair idea of the commercial value of that region, and above all, of the advisability of installing the long and expensive pipeline needed to bring the oil to the sea-port near Puerto La Cruz, because the production at Las Mercedes is lar-

gely controlled by faulting which makes it rather spotty. The oil strike in Grico, well toward the north of Las Mercedes, will greatly encourage operations in northern Guárico.

La Montañita N° 1 wildcat abandoned.-

Another blow to Falcon's oil possibilities was the abandonment of Montañita N° 1 wildcat by the Standard of California. With the exception of El Mamón, drilled in the early days with only very limited success, La Montañita is the best structure in the Richmond's concessions of Falcón. It is not decided yet whether they will drill a second test in that structure or move the rig to further explore the possibilities of the El Mamón field.

Concessions maps aproved by the Government.-

The Ministerio de Fomento aproved the following concessions maps.

Concessions AN-52 to and including AN-123, District Bruzual, State of Anzoátegui by the Venezuelan Oil & Transport Co.Ltd.(Shell)

Concessions Co-2 to Co-4, Co-6, and Co-8 to Co-20 District Colon, State of Zulia, by the Colon Development Co. Ltd. (Shell).

Concessions V-442 to V-452, and V-470, Districts Aragua and Cagigal, State of Anzoátegui by the Mene Grande Oil Co.

Very truly yours,

Clemente González de Juana

Enclosures: 5 sketch maps.-

cc/W.B.Jayred.-
CGdeJ/cjm.-

Caracas, March 23th. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Venezuelan Atlantic Refining Co. is getting ready to drill their first wildcat in Anzoátegui, east of the Leona field (Mene Grande) in the National Reserves of concession Pelayo. Although the Atlantic is experiencing some difficulties in obtaining the necessary surface rights from the land owners, it is believed that the wildcat will be spudded in at an early date.

This Pelayo wildcat is expected to disclose some very important information bearing on a large tract of open acreage located in eastermost Anzoátegui and western Monagas. It is unquestionable that the sand content of the Oficina formation decreases Eastward from Guara to Leona, still farther east the Soledad N° 1 test well, drilled by Socony Vacuum in Monagas, did not find any significant sand in the petroliferous Oficina formation. The sand content of the underlying Cretaceous, Temblador formation was, as usual, very high.

Based on this knowledge the big concerns, Creole and Mene Grande, lost interest in the land located east of the Leona field, assuming that a poor sand development may be expected to occur in that area. Nevertheless the opposite may be true because of the transgressing character of the Oficina formation and in such case

the open land referred to above will have a great value.

The Atlantic's geologists are not impressed by the results of the Soledad N° 1 test because this dry-hole is in fact many miles east of their location, and they hope the poor sand development of Leona is nothing but a local feature. They seem to have great hopes in Pelayo as the outlook of the Monagas wildcats is not any longer very promising. True enough some of these tests had so many fishing jobs and mechanical difficulties that they have not reached yet any great depth, but the general impression of oil men about them is now rather pessimistic.

This pessimism about north-central Monagas reflects on the wildcatting programs of other concerns. The interested parties in the pooled acreage surrounding the mud volcanoes of La Bomba, El Hervidero, etc. east of the town of Maturín, unquestionably the most interesting acreage of this north-central Monagas belt, apparently decided to postpone the test scheduled for the first quarter of 1946.

Phillips' wildcat successfully completed.-

According to a press information the Phillips' wildcat FT-1 struck oil within La Pica formation. More reliable reports are not yet available.

Oil road from El Sombrero to Puerto La Cruz delayed.-

The highway from El Sombrero to Puerto La Cruz, under construction by the five oil concerns interested in Northern Guárico, is experiencing serious delays due to difficulties in obtaining the necessary rights of pass through the privately owned lands. Most of the land owners are demanding exorbitant amounts of money to agree to the pass of oil pipelines alongside the highway. As some oil companies feel they are not getting the strong official support they were promised in order to overcome these difficulties

it has been some talk about the possibility of stopping the highway construction.

Preliminary studies on Creole's refinery at Paraguaná.-

The Creole Petroleum Corp. is conducting a survey to decide the possible water supply of the Paraguaná refinery. As you may recall from my letter N° 93 the Shell group drilled water wells in the flats of Coro, about 50 miles southeast of the refinery site. The Creole could do likewise but they are not well convinced of the advisability of doing it because those water wells were drilled below sea level and they fear a heavy draw of water from that area may produce a salt water intrusion; besides that, it is questionable if the traditionally dry Coro may produce enough refill of the water table to compensate for the heavy water with drawals demanded by the refinery. Up to now Creole is in favor of storing water by constructing a dam on the Mitare river which will require a very heavy expenditure.

The water supply of Paraguaná is a major problem which may easily demand an expenditure of the order of one million of dollars.

Oil transportation agreement.-

As per agreement reached between the Creole Petroleum Corp. and the Shell's interests, the Venezuelan Oil Concessions will transport Creole's oil from the Pueblo Viejo field, store and load it at Bachaquero charging the sum of Bs. .58 per cubic meter (about \$.03 per barrel).

More oil storage tanks at Puerto La Cruz.-

The Creole Petroleum is erecting at the Mene Grande terminal of Puerto La Cruz six 96,750 storage tanks.

Concession maps approved.-

The Ministerio de Fomento approved the following concession

maps presented by the Mene Grande Oil Co.

Concessions V-438 to V-441 in District Aragua, State of Anzoátegui and concessions V-453 to V-456 in District Cagigal of same State of Anzoátegui.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.
CGdeJ/cjm.-

Caracas, March 30th., 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U.S.A.

Attention: Mr. John D. Hale.-

Dear Sirs:

To day it meets in Caracas a Congress of Unions of Petroleum workers, I will keep you informed about the outcoming of this meeting but I may already advance that in this Congress it will be demanded a general raise in salary to the oil workers, shorter working hours, longer vacation periods, free medical care and treatment for the families of the oil workers and education facilities for the same families.

The Revolutionary Government suspended the effects of the special Decree about regulation and prohibition of strikes and lock-outs. (See my letter N° 91 and 92). The labor disputes will henceforth be settled according to the Labor Law.

Successfull completion of Bachaquero well B-2.-

The Creole Petroleum Corp. completed successfully well B-2 in the Bachaquero field, which may amount to another great discovery in the Lake basin. B-2 found the Eocene at the abnormally high elevation of 1600 feet. The Miocene sands were dry but from 1600' to 2600' found several good Eocene sands. The well tested about 1500 barrels of oil.

Tax on Creole's oil transported by Shell.-

As result of the agreement reached between the Shell interest and the Creole Petroleum Corp. by which the former will

transport Creole's Pueblo Viejo oil to Bachaquero where it will be stored and subsequently loaded (see my last letter) the Government fixed the transport tax at 2-1/2 per cent of the total amount received by the Shell for the mentioned oil transportation.

Turiamo refinery site officially abandoned.-

The Creole Pet. Corp. demanded officially from the Government that their offer to buy the National land denominated TURIAMO for the site of the proposed refinery be considered non-existent. The Government granted the petition and made the following comments.

As the completion of the proposed refinery has a fixed lapse which obliges the Company to proceed without delay, as the Revolutionary Government considers that the land in question is located in an area "of vital interest for the future development of the economic activities of the Country", and as the projected contract granted "special privileges" to the Creole Petroleum Corp. which were criticized by public opinion, by order of the Revolutionary Government Creole's petition is granted and the company will be under no obligation whatsoever derived from the offer previously made. The Company is therefore at liberty to install the refinery in any other suitable place of the Venezuela territory.

Gasoline stabilizing plant at Cumarebo.-

The Creole Petroleum Corp. is installing at Cumarebo a new gasoline stabilizing plant to recover the natural gasoline produced in the repressuring process. At the same time they are installing a new 800 HP. compressing unit and a new electric generating unit.

New wildcat of the Richmond Exploration Co.-

The Richmond Exploration Co. (Standard of California) announced in a new wildcat in their large holdings of the western part of Maracaibo basin. This wildcat is located in parcel Zulia N° 7.

New wildcat of the S. A. Petrolera Las Mercedes.-

The S. A. Petrolera Las Mercedes is rigging up for wildcat Grico N° 3 at co-ordinates N-183.486 E-122.689 (Valle de La Pascua origin N-200.000 E-200.000) near the successfully completed Grico N° 1.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.-
CGdeJ/cjn.-

Caracas, April 23 nd. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U.S.A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Please pardon me for not having written for such a long time but I have been sick for about two weeks and on Doctor's orders kept at home for a further week.

The most significant news during this lapse is, in my opinion, the registration of the Carter Oil Co. in Venezuela. This was done by Mr. A.T. Proudfit, Creole's president, as could be expected, the Carter being another subsidiary of New Jersey.

The fact is that the Creole Petroleum Corp. has already 53% of the Venezuelan oil production which makes it one of the bigger, if not actually the biggest, oil producing concern in the world. This leading position is not very enviable during these times of strong nationalistic tendencies and increasingly heavy taxes, not forgetting the so-called extraordinary tax of New Years eve, and I really believe the time has come for the Creole Petroleum to split.

An indication of this tendency was shown several months ago when the International Petroleum sent Mr. J. Holmes, formerly a Standard of Venezuela man, to set up a separate and apparently independent organization. The International Petroleum has some interests in Venezuela which had always been attended to directly by Creole. I did not pay much attention to this move of the International because the Canadian capital involved in this oil company led me to believe that

perhaps only an administrative reorganization was contemplated.

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You may have noticed that the Shell operates in Venezuela through several subsidiaries, and this still seems to be the wiser policy for large concerns.

Following are some figures recently released by Mr. A.T. Proudfit, the Creole's president:

Out of Creole's operation during the past exercise the Venezuelan Government obtained a total income of Bs. 205,182,817 againsts 102,083,577 paid to the stockholders; at the current market price Creole's dividend represents 3.78% of the stock value.

The Creole has now a total of 10,142 employees which represents an increase of 15% during 1945. In addition to salaries the Creole spent, in the past exercise, a total of Bs. 34,807,222 in social welfare such as schools, houses, savings accounts, etc.

The total net utility was Bs. 198,289,998 against Bs. 190,366,643 in 1944. Out of this sum a total of Bs. 69,844,827 was re-invested in Venezuela in new plants and installations and the remainder, i. e. Bs. 26,361,593 will be similarly invested during 1946.

The Company's utilities were considerably affected by the extraordinary tax of December 31st. which amounted to Bs. 57,334,589. This sum had to be taken from the fund earmarked for future investments in new installations in Venezuela in which are included the funds for the new Refinery. If the extraordinary tax had not been made effective, the Government income would still have reached Bs. 147,848,227, a sum considerably in excess of the dividends paid to stockholders.

Creole's production during 1945 reached a total of Barrels 165.329.772 equivalent to a daily average of bbls. 452.958. This production figure shows an increase of 22% on 1944 and 75% on 1943.

The Venezuelan production during 1945 reached 13% of the world production, Russia excluded.

Mr Proudfit also spoke about the new Refinery in Paraguaná and for the first time mentioned in public the advisability of installing a pipe line from the Lake fields to Paraguaná.

One of the resolution of the last Congress of Petroleum workers referred to in my last letter was to demand from the oil companies a collective (group) Labor Contract. Speaking about this topic Mr. Proudfit stated that his Co. had received this request, which would immediately be studied, and he hopes it may have a prompt and favorable solution.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.

CGdeJ/cjm.-

Caracas, April 30th. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Creole Petroleum Corp. started a third stratigraphic test in the State of Guárico near Barbacoas, which forms part of their exploration program. As was stated in one of my previous letters these holes are true stratigraphic tests and not wildcats in the usual sense of the word, as indicated by Mc.Dermond's reports etc., in fact two of these tests are located in an undisturbed monoclinial flank in order to obtain a true stratigraphic section where the seismograph work can be tied in.

Seismograph is being both intensively and extensively used with excellent results, in fact northern Guárico is giving the best reflections ever obtained in Venezuela and exceptionally good correlations. This continuity of sedimentation is also checked by the Schlumberger logs which are in every case surprisingly alike, in fact I could not find any difference in the two logs except the thickening of the formation.

Northern Guárico is an area where surface geology is comparatively clear and fairly easy to do, nevertheless a great problem arises from the fact that most dips reverse at depths below 1.000 feet. This fact has been established by seismograph correlation and dips read in the test holes. The reason for this dip reversals are not well understood as yet but the results are that the whole area should be covered by seismograph in order to obtain an idea of

the underground conditions. As the exploration period lasts only four years, and the exploration acreage to be parcelled and selected is very large geophysical exploration is carried on at top speed.

Another problem found in this area is the underground situation of the Guarúmen group. This Guarúmen group, probably equivalent to the Merecure formation of the East, ^{formed} ~~found~~ by perhaps 50% of medium to coarse grained, clean sands would make an excellent oil reservoir if found under adequate conditions, but so far the Guarúmen group has not been drilled in a well, (perhaps with the exception of Camaz of the Texas Co. the results of which are confidential) but so far the younger Roblecito shales, which is the producing formation of Las Mercedes, are found unconformably overlying the Cretaceous. Both Creole's wells in this area XB-1 and XB-2 are now drilling in the Roblecito formation, and it is hoped to gain more information about this problem.

Due to the land situation the Creole did not attempt any serious test of the Barbacoas structure yet, one of the promising spots of northern Guárico, because it is covered by exploitation concessions and the problem of selecting acreage within the exploration concession is far more pressing than production.

Following the successful completion of Grico N° 1, the S.A. Petrolera Las Mercedes is drilling wildcats Grico N° 2 and N° 3 toward the north and south of N° 1 (See enclosed sketch). As in Grico and Las Mercedes, the prospective formation is the Roblecitos-La Pascua unconformable on the Cretaceous. Grico N° 3 is less than 30 km.W. of dry hole Merst N° 1 which found the Cretaceous at 4170'; due to the [↑] raise of the Cretaceous from Las Mercedes to Merst it seems probable that Grico N° 3 will find the Cretaceous still higher.

Manquito wildcat of Barnsdall, a dry hole.-

ned dry, they started a second test called Caboceras N° 1. In my next letter I will send a sketch map showing the location of this well

La Ceiba N° 1 (CG-1) completed as a producer.- ✓

After a period of testing? of more than 5 months the Mene Grande finally admitted the completion of wildcat CG-1 as an oil producer (See my letter N° 83 dated september 15th. 1945). Location CG-2 in the neighbourhood is scheduled to start immediately. Enclosed is a sketch map of this location.

New wildcat of Socony in Anzoátegui.-

The Socony Vacuum Oil Co. spudded in another wildcat in the State of Anzoátegui northwest of Güico field and south of drilling test NV-1. This hole is called WGV-40 and its location is shown in enclosed map.

Phillips activities in Monagas.-

After the results of wildcat FT-1 the Phillips Venezuelan Oil Co. is ready to push operations in Monagas and accordingly location FT-2 and FT-3 (See enclosed sketch) are scheduled for immediate drilling. ^{at} FT-1 ^{which} is still officially drilling the Schlumberger log shows a section of about 800 feet with many very promising oil sands, in the lower part of La Pica formation. There is the danger of faulting similar to Capacho but my impression is that the Phillips got a very promising oilfield. This concession is subject to the famous 33-1/3 royalty to the Government, the highest figure ever offered in Venezuela. ✓

Activities of Sinclair of Muri.-

The Sinclair interests are also developing recently acquired land north of MURI in the Travieso concession. Wells denominated T-3 and T-4, north of Muri and Es. of Jusepín are now drilling after completion of T-1. This concessions is also subject to a high royalty

the amount in this case being 25%.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.
CGdeJ/cjm.-
4 Enclosures.-

Caracas, May 25th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Please find enclosed a sketch map showing the location of wildcat Cabeceras Nº 2, by Barnsdall, as per my letter Nº 100. This test is now drilling below 5800'.

This well is located in a small concession BARSO Nº 6 in the neighbourhood of several of Creole's concessions. For this reason the Creole is contributing with a large percentage of dry-hole money.

As far as can be deducted from surface observations the well is located in a monoclinal flank dipping SE and spudded in the uppermost Miocene Suata formation equivalent to the uppermost Oficina.

Exploratory wells in Guárico.-

The Creole Petroleum Corp. started a fourth stratigraphic test in Guárico. Enclosed is a sketch map showing the location of the four tests already drilling in this vicinity.

Drilling ahead continues in the four wildcats of the S.A.Petrolera Las Mercedes (Texas & Ultramar) the locations of which have been sent to you in previous letters.

Exploratory wells in Anzoátegui.-

Two wildcats drilling by Mene Grande Oil Co. are at present testing, Nipa # 2 at 8605' and Ca-G-1 at 8003', two other tests of Socony are also testing. SGV-39 which was testing at 6894' and subsequently got a fishing job, and WGV-40 testing at 7245'.

Exploratory wells in Monagas.-

Creole Petroleum Corp. abandoned wildcat QX-1 near the Quiriquire field at 7662' (See my letter N° 94 on this subject) and JX-2 continues drilling ahead.

Socony finished up stratigraphic test AX-1 and the portable rig has been moved to location AX-2.

Atlantic continues drilling wildcats San Pedro N° 1, El Hueso N° 1, Tonoro N° 1 and Tacat N° 1, there is nothing worthy of mention in these wells.

In the south the Texas Co. successfully completed well Texas N° 9 and spudded in well N° 10 slightly E of N° 9.

Exploratory wells in the Lake basin.-

Although this is no longer exploratory the completion of well P-84 in the La Paz field with an initial production of 12,000 bbls. making it one of the biggest produces obtained in Venezuela is worth mentioning. P-84 produces from the Cretaceous limestone (Luna-Cogollo) found in La Paz 2 years ago.

Well Calentura N° 2 of the Orinoco ^{Pure} ~~(Sun)~~ Oil Co. has been suspended at 10,290'. Apparently there is some very large faulting between the Calentura, Netick area and DM field and several geophysicists came specially to Maracaibo to study this problem before continuing operations.

Very favorable reports have been received from well Zulia 1-1 of the Richmond Petroleum (Standard of California) located on the western shores of Lake Maracaibo. No further information is available yet.

The Creole Petroleum spudded in a third test in Lake Maracaibo called LGE-3 (See enclosed sketch) 10 Km. southward of LGE-1 now drilling at 7430'.

Final titles to new concessions.-

The Venezuelan Government issued final titles to the following concessions:

102 - District Zamora, State of Falcón in favor of the Creole Pet. Co AN-107 to and including AN-123 Districts Bruzual and Cagigal, State of Anzoátegui.

MON-1 and MON-2, District Piar, State of Monagas.

DZU-D5 and DZU-D6, District Mara, State of Zulia in favor of the Venezuelan Oil & Transport Co. Ltd. (Shell).

Concessions CO-2, 3, 4, 6, and CO-8 to and including CO-20 in District Colon, State of Zulia in favor of the Colon Development Co. Ltd. (Shell)

Concessions V-442 to and including V-452, V-455 to and including V-464, and V-470, District Aragua, State of Anzoátegui in favor of the Mene Grande Oil Co.

These concessions have been previously commented upon at the time where applications were filed.

Concession maps approved.-

The Government officially approved the maps of concessions: S-111-1 to S.111-13 District Maturín, State of Monagas, presented by the Sindair Oil Co.

C.105-3 to C.105-5, C.106-1 to C.106-5, and C.107-1 to C.107-5, District Maturín, State of Monagas presented by the Cia. Consolidada de Petróleo.

V-470, District Aragua, State of Anzoátegui, presented by the Mene Grande Oil Co.

MON-1 and MON-2, District Piar, State of Monagas; DZU-D5, DZU-D6, District Mara, State of Zulia. and GU-12 to and including GU-18, District Zaraza, State of Guárico, presented by the Venezuelan Oil & Transport Co. Ltd. (Shell).

BAR-1 to and including BAR-6 in the State of Barinas presented by the

Socony Vacuum.

Concession maps rejected and ordered to be corrected.-

The Venezuelan Government rejected the maps presented by the Mene Grande Oil Co. on concessions denominated V-458 to and including V-469, District Aragua, State of Anzoátegui. These maps must be corrected and presented again within a lapse of 3½ months.

Shell increases the Palmarejo storage capacity.-

Resulting from the increasing production of La Paz and DM fields the Shell group is increasing the storage capacity of their Palmarejo terminal by installing one more tank of 13.000 cubic meters and two more tanks of 10.000 cubic meters each.

Very truly yours,

Clemente González de Juana

cc/W.B. Jayred.-

CGdeJ/cjm.-

Enclosures: 4 sketch maps.-

Caracas, June 15th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

For a long time I have not been concerned with the oil production as more significant news of general policy were demanding our attention. Following are the production figures of the first months of 1946.

	Jan. bbls.	Feb. bbls.	March bbls.	April bbls.
Creole Pet.	16,467,994	14,997,565	17,569,219	17,005,167
V.O.C.	6,065,984	5,504,767	6,137,082	6,084,473
Caribbean Pet.Co.	1,318,943	1,190,747	1,322,026	1,300,465
Colon Develop.	553,184	515,691	557,342	506,554
Mene Grande	4,511,453	4,376,132	4,977,326	4,843,596
Consolidada	960,962	867,005	940,052	870,439
Socony Vacuum	415,269	453,385	530,026	563,204
Texas Pet. Co.	72,804	64,508	72,659	75,288
British Contr.	33,996	29,583	31,072	34,335
Orinoco Oil Co.	9,000	7,950	8,692	8,265
Las Mercedes	5,604	3,019	4,648	4,007
Atlantic	2,900	2,378	2,503	226
Totals	30,418,093	27,992,730	32,152,647	31,296,019
Daily Average	981,229	999,740	1,037,182	1,043,201

The above figures represent the following percentages:

Company	January	February	March	April
Creole Pet.	54.12 %	53.46 %	54.65 %	54.32 %
V. O. C.	19.91 %	19.62 %	19.09 %	19.07 %
Caribbean Pet.Co.	4.34 %	4.22 %	4.11 %	4.15 %
Colon Develop.	1.83 %	1.82 %	1.70 %	1.58 %
Mene Grande	14.81 %	15.47 %	15.48 %	15.12 %
Consolidada	3.20 %	3.47 %	2.92 %	2.72 %
Socony Vacuum	1.37 %	1.59 %	1.65 %	1.76 %
Texas Pet. Co.	.24 %	.22 %	.22 %	.23 %
British Contr.	.12 %	.10 %	.10 %	.11 %
Orinoco Oil Co.	.03 %	.02 %	.03 %	.02 %
Las Mercedes	.02 %	.01 %	.01 %	----
Atlantic	.01 %	.01 %	.007 %	

The production by fields was as follows:

	Jan.BBlS.	Dec. - Jan.		Feb.bbIs.	Jan. - Feb.	
		Increase	Decrease		Increase	Decrease
Lagunillas	8.923.529	86.429		8.684.800		238.729
Tía Juana	5.432.334	111.386		4.537.722		894.612
Cabimas	2.168.816		230.464	1.589.611		579.205
Guara	1.852.624	2.799		1.886.871	34.427	
Quiriquire	1.549.734		39.179	1.437.990		111.744
Jusepín	1.487.119		96.661	1.395.062		92.057
Sta. Bárbara	1.405.950		9.513	1.274.783		131.167
Bachaquero	1.999.986		97.374	1.086.299		113.687
Oficina	986.222		162.816	1.023.740	37.518	
Mene Grande	1.128.225	14.906		1.018.860		109.365
Mulata	985.391	4.214		813.901		71.490
La Paz	861.710	25.147		832.538		29.172
El Cubo	553.184	22.354		515.691		37.493
Guico	317.394	7.736		317.778	384	
San Joaquín	311.312		10.246	281.026		30.286
Pueblo Viejo	215.204	106.586		184.359		30.845
Mara	190.718	4.661		171.887		18.831
Temblador	184.762		17.705	180.057		4.705
Cumarebo	151.602		1.252	141.142		10.460
El Roble	128.858		8.831	126.468		2.390
Leona	108.555	108.555		135.073	26.518	
Concepción	98.152		6.686	74.093		24.059
Guarío	97.875		48.632	135.607	37.732	
Rincón	70.445		3.246	63.193		7.252
Sta. Rosa	33.783	8.007		32.845		4.938
-Hombre Pintado	20.448		849	17.624		2.824
El Mene	13.548		1.151	11.959		1.589
Netick	9.000		252	7.950		1.050
Quimare	8.334		289	5.850		2.484
Nipa	8.416	4.227		1.239		7.177
Mercedes	5.604	2.390		3.019		2.585
Piritál	2.900		408	2.378		522
Tucupita	2.359		139	1.315		1.044
Santa Ana	-----		1.478	-----		-----

The production by fields in March and April was as follows:

	March Bbls.	Feb.-March		April bbls.	March - April	
		Increase	Decrease		Increase	Decrease
Lagunillas	9.780.803	1.096.003		9.494.284		286.519
Tía Juana	5.273.882	735.160		5.221.866		51.016
Guara	2,296.144	409.273		2.206.712		89.432
Jusepín	1.893.885	498.823		1.740.207		153.678
Cabimas	1.872.128	282.517		1.791.118		81.010
Quiriquire	1.585.275	147.285		1.523.983		61.342
Bachaquero	1.261.971	175.642		1.257.770		4.201
Oficina	1.155.921	132.181		1.099.940		55.981
Sta. Bárbara	1.349.235	74.452		1.257.102		92.133
Mene Grande	1.134.220	115.360		1.118.032		16.188
Mulata	914.724	100.823		880.139		34.585
La Paz	903.637	71.099		1.005.358	101.721	
El Cubo	557.342	41.651		506.554		50.788
Guico	402.251	84.473	190	398.331		3.920

	March bbls!	Feb.-March		April bbls.!	March - April	
		Increase	Decrease!		Increase	Decrease
San Joaquín	333.310	52.284		309.098		24.212
Pueblo Viejo	205.845	21.486		219.699	13.854	
Temblador	200.069	20.012		189.214		10.855
Mara	187.806	15.919		182.433		5.373
Leona	183.703	48.630		173.333		10.370
Cumarebo	151.174	10.032		139.939		11.235
Guarío	127.775		7.832	164.873	37.098	
El Roble	127.008	540		136.588	9.580	
Concepción	88.132	14.039		98.698		10.566
Rincón	69.684	6.491		67.657		2.327
Santa Rosa	31.096		1.749	36.531		5.435
Hombre Pintado	18.574	950		18.636	62	
El Mene	12.498	539		15.699	3.201	
Travieso 2	11.925	11.925		15.957	4.032	
Netick	8.692	742		8.265		427
Quiamare	4.812		1.308	6.189	1.377	
Mercedes	4.648	1.629		4.007		641
Tucupita	2.975	1.660		2.893		82
Piritál	2.503	125		226		2.277
Caritos				5.038	5.038	

During the month of March the Consolidada put in production the new wells drilled north of Muri in the National Reserves of Travieso N° 2 and in the month of April the Texas Co. produced the Caritos wells east of Temblador.

Very truly yours,

Clemente González de Juana

cc/W. E. Jayred.-

CGdeJ/cjm.-

Caracas, April 23 nd. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U.S.A.

Attention: Mr. John D. Hale.-

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The total net utility was Bs. 198,289,998 against Bs. 190,366,643 in 1944. Out of this sum a total of Bs. 69,844,827 was re-invested in Venezuela in new plants and installations and the remainder, i. e. Bs. 26,361,593 will be similarly invested during 1946.

The Company's utilities were considerably affected by the extraordinary tax of December 31st. which amounted to Bs. 57,334,589. This sum had to be taken from the fund earmarked for future investments in new installations in Venezuela in which are included the funds for the new Refinery. If the extraordinary tax had not been made effective, the Government income would still have reached Bs. 147,848,227, a sum considerably in excess of the dividends paid to stockholders.

Creole's production during 1945 reached a total of Barrels 165.329.772 equivalent to a daily average of bbls. 452.958. This production figure shows an increase of 22% on 1944 and 75% on 1943.

The Venezuelan production during 1945 reached 13% of the world production, Russia excluded.

Mr Proudfit also spoke about the new Refinery in Paraguaná and for the first time mentioned in public the advisability of installing a pipe line from the Lake fields to Paraguaná.

One of the resolution of the last Congress of Petroleum workers referred to in my last letter was to demand from the oil companies a collective (group) Labor Contract. Speaking about this topic Mr. Proudfit stated that his Co. had received this request, which would immediately be studied, and he hopes it may have a prompt and favorable solution.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.

CGdeJ/cjm.-

Caracas, April 30th. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

The Creole Petroleum Corp. started a third stratigraphic test in the State of Guárico near Barbacoas, which forms part of their exploration program. As was stated in one of my previous letters these holes are true stratigraphic tests and not wildcats in the usual sense of the word, as indicated by Mc.Dermond's reports etc., in fact two of these tests are located in an undisturbed monoclinial flank in order to obtain a true stratigraphic section where the seismograph work can be tied in.

Seismograph is being both intensively and extensively used with excellent results, in fact northern Guárico is giving the best reflections ever obtained in Venezuela and exceptionally good correlations. This continuity of sedimentation is also checked by the Schlumberger logs which are in every case surprisingly alike, in fact I could not find any difference in the two logs except the thickening of the formation.

Northern Guárico is an area where surface geology is comparatively clear and fairly easy to do, nevertheless a great problem arises from the fact that most dips reverse at depths below 1.000 feet. This fact has been established by seismograph correlation and dips read in the test holes. The reason for this dip reversals are not well understood as yet but the results are that the whole area should be covered by seismograph in order to obtain an idea of

the underground conditions. As the exploration period lasts only four years, and the exploration acreage to be parcelled and selected is very large geophysical exploration is carried on at top speed.

Another problem found in this area is the underground situation of the Guarúmen group. This Guarúmen group, probably equivalent to the Merecure formation of the East, ^{formed} ~~found~~ by perhaps 50% of medium to coarse grained, clean sands would make an excellent oil reservoir if found under adequate conditions, but so far the Guarúmen group has not been drilled in a well, (perhaps with the exception of Camaz of the Texas Co. the results of which are confidential) but so far the younger Roblecito shales, which is the producing formation of Las Mercedes, are found unconformably overlying the Cretaceous. Both Creole's wells in this area XB-1 and XB-2 are now drilling in the Roblecito formation, and it is hoped to gain more information about this problem.

Due to the land situation the Creole did not attempt any serious test of the Barbacoas structure yet, one of the promising spots of northern Guárico, because it is covered by exploitation concessions and the problem of selecting acreage within the exploration concession is far more pressing than production.

Following the successful completion of Grico N° 1, the S.A. Petrolera Las Mercedes is drilling wildcats Grico N° 2 and N° 3 toward the north and south of N° 1 (See enclosed sketch). As in Grico and Las Mercedes, the prospective formation is the Roblecitos-La Pascua unconformable on the Cretaceous. Grico N° 3 is less than 30 km.W. of dry hole Merst N° 1 which found the Cretaceous at 4170'; due to the [↑] raise of the Cretaceous from Las Mercedes to Merst it seems probable that Grico N° 3 will find the Cretaceous still higher.

Manquito wildcat of Barnsdall, a dry hole.-

ned dry, they started a second test called Caboceras N° 1. In my next letter I will send a sketch map showing the location of this well

La Ceiba N° 1 (CG-1) completed as a producer.-

After a period of testing? of more than 5 months the Mene Grande finally admitted the completion of wildcat CG-1 as an oil producer (See my letter N° 83 dated september 15th. 1945). Location CG-2 in the neighbourhood is scheduled to start immediately. Enclosed is a sketch map of this location.

New wildcat of Socony in Anzoátegui.-

The Socony Vacuum Oil Co. spudded in another wildcat in the State of Anzoátegui northwest of Güico field and south of drilling test NV-1. This hole is called WGV-40 and its location is shown in enclosed map.

Phillips activities in Monagas.-

After the results of wildcat FT-1 the Phillips Venezuelan Oil Co. is ready to push operations in Monagas and accordingly location FT-2 and FT-3 (See enclosed sketch) are scheduled for immediate drilling. ^{at} FT-1 ^{which} is still officially drilling the Schlumberger log shows a section of about 800 feet with many very promising oil sands, in the lower part of La Pica formation. There is the danger of faulting similar to Capacho but my impression is that the Phillips got a very promising oilfield. This concession is subject to the famous 33-1/3 royalty to the Government, the highest figure ever offered in Venezuela.

Activities of Sinclair of Muri.-

The Sinclair interests are also developing recently acquired land north of MURI in the Travieso concession. Wells denominated T-3 and T-4, north of Muri and Es. of Jusepín are now drilling after completion of T-1. This concessions is also subject to a high royalty

the amount in this case being 25%.

Very truly yours,

Clemente González de Juana

cc/W.B.Jayred.
CGdeJ/cjm.-
4 Enclosures.-

Caracas, May 25th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

Please find enclosed a sketch map showing the location of wildcat Cabeceras Nº 2, by Barnsdall, as per my letter Nº 100. This test is now drilling below 5800'.

This well is located in a small concession BARSO Nº 6 in the neighbourhood of several of Creole's concessions. For this reason the Creole is contributing with a large percentage of dry-hole money.

As far as can be deducted from surface observations the well is located in a monoclinal flank dipping SE and spudded in the uppermost Miocene Suata formation equivalent to the uppermost Oficina.

Exploratory wells in Guárico.-

The Creole Petroleum Corp. started a fourth stratigraphic test in Guárico. Enclosed is a sketch map showing the location of the four tests already drilling in this vicinity.

Drilling ahead continues in the four wildcats of the S.A. Petrolera Las Mercedes (Texas & Ultramar) the locations of which have been sent to you in previous letters.

Exploratory wells in Anzoátegui.-

Two wildcats drilling by Mene Grande Oil Co. are at present testing, Nipa # 2 at 8605' and Ca-G-1 at 8003', two other tests of Socony are also testing. SGV-39 which was testing at 6894' and subsequently got a fishing job, and WGV-40 testing at 7245'.

Exploratory wells in Monagas.-

Creole Petroleum Corp. abandoned wildcat QX-1 near the Quiriquire field at 7662' (See my letter N° 94 on this subject) and JX-2 continues drilling ahead.

Socony finished up stratigraphic test AX-1 and the portable rig has been moved to location AX-2.

Atlantic continues drilling wildcats San Pedro N° 1, El Hueso N° 1, Tonoro N° 1 and Tacat N° 1, there is nothing worthy of mention in these wells.

In the south the Texas Co. successfully completed well Texas N° 9 and spudded in well N° 10 slightly E of N° 9.

Exploratory wells in the Lake basin.-

Although this is no longer exploratory the completion of well P-84 in the La Paz field with an initial production of 12,000 bbls. making it one of the biggest produces obtained in Venezuela is worth mentioning. P-84 produces from the Cretaceous limestone (Luna-Cogollo) found in La Paz 2 years ago.

Well Calentura N° 2 of the Orinoco ^{Pure} ~~(Sun)~~ Oil Co. has been suspended at 10,290'. Apparently there is some very large faulting between the Calentura, Netick area and DM field and several geophysicists came specially to Maracaibo to study this problem before continuing operations.

Very favorable reports have been received from well Zulia 1-1 of the Richmond Petroleum (Standard of California) located on the western shores of Lake Maracaibo. No further information is available yet.

The Creole Petroleum spudded in a third test in Lake Maracaibo called LGE-3 (See enclosed sketch) 10 Km. southward of LGE-1 now drilling at 7430'.

Final titles to new concessions.-

The Venezuelan Government issued final titles to the following concessions:

102 - District Zamora, State of Falcón in favor of the Creole Pet. Co AN-107 to and including AN-123 Districts Bruzual and Cagigal, State of Anzoátegui.

MON-1 and MON-2, District Piar, State of Monagas.

DZU-D5 and DZU-D6, District Mara, State of Zulia in favor of the Venezuelan Oil & Transport Co. Ltd. (Shell).

Concessions CO-2, 3, 4, 6, and CO-8 to and including CO-20 in District Colon, State of Zulia in favor of the Colon Development Co. Ltd. (Shell)

Concessions V-442 to and including V-452, V-455 to and including V-464, and V-470, District Aragua, State of Anzoátegui in favor of the Mene Grande Oil Co.

These concessions have been previously commented upon at the time where applications were filed.

Concession maps approved.-

The Government officially approved the maps of concessions: S-111-1 to S.111-13 District Maturín, State of Monagas, presented by the Sindair Oil Co.

C.105-3 to C.105-5, C.106-1 to C.106-5, and C.107-1 to C.107-5, District Maturín, State of Monagas presented by the Cia. Consolidada de Petróleo.

V-470, District Aragua, State of Anzoátegui, presented by the Mene Grande Oil Co.

MON-1 and MON-2, District Piar, State of Monagas; DZU-D5, DZU-D6, District Mara, State of Zulia. and GU-12 to and including GU-18, District Zaraza, State of Guárico, presented by the Venezuelan Oil & Transport Co. Ltd. (Shell).

BAR-1 to and including BAR-6 in the State of Barinas presented by the

Socony Vacuum.

Concession maps rejected and ordered to be corrected.-

The Venezuelan Government rejected the maps presented by the Mene Grande Oil Co. on concessions denominated V-458 to and including V-469, District Aragua, State of Anzoátegui. These maps must be corrected and presented again within a lapse of 3½ months.

Shell increases the Palmarejo storage capacity.-

Resulting from the increasing production of La Paz and DM fields the Shell group is increasing the storage capacity of their Palmarejo terminal by installing one more tank of 13.000 cubic meters and two more tanks of 10.000 cubic meters each.

Very truly yours,

Clemente González de Juana

cc/W.B. Jayred.-

CGdeJ/cjm.-

Enclosures: 4 sketch maps.-

Caracas, June 15th. 1.946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

For a long time I have not been concerned with the oil production as more significant news of general policy were demanding our attention. Following are the production figures of the first months of 1946.

	Jan. bbls.	Feb. bbls.	March bbls.	April bbls.
Creole Pet.	16,467,994	14,997,565	17,569,219	17,005,167
V.O.C.	6,065,984	5,504,767	6,137,082	6,084,473
Caribbean Pet.Co.	1,318,943	1,190,747	1,322,026	1,300,465
Colon Develop.	553,184	515,691	557,342	506,554
Mene Grande	4,511,453	4,376,132	4,977,326	4,843,596
Consolidada	960,962	867,005	940,052	870,439
Socony Vacuum	415,269	453,385	530,026	563,204
Texas Pet. Co.	72,804	64,508	72,659	75,288
British Contr.	33,996	29,583	31,072	34,335
Orinoco Oil Co.	9,000	7,950	8,692	8,265
Las Mercedes	5,604	3,019	4,648	4,007
Atlantic	2,900	2,378	2,503	226
Totals	30,418,093	27,992,730	32,152,647	31,296,019
Daily Average	981,229	999,740	1,037,182	1,043,201

The above figures represent the following percentages:

Company	January	February	March	April
Creole Pet.	54.12 %	53.46 %	54.65 %	54.32 %
V. O. C.	19.91 %	19.62 %	19.09 %	19.07 %
Caribbean Pet.Co.	4.34 %	4.22 %	4.11 %	4.15 %
Colon Develop.	1.83 %	1.82 %	1.70 %	1.58 %
Mene Grande	14.81 %	15.47 %	15.48 %	15.12 %
Consolidada	3.20 %	3.47 %	2.92 %	2.72 %
Socony Vacuum	1.37 %	1.59 %	1.65 %	1.76 %
Texas Pet. Co.	.24 %	.22 %	.22 %	.23 %
British Contr.	.12 %	.10 %	.10 %	.11 %
Orinoco Oil Co.	.03 %	.02 %	.03 %	.02 %
Las Mercedes	.02 %	.01 %	.01 %	----
Atlantic	.01 %	.01 %	.007 %	

The production by fields was as follows:

	Jan.BBlS.	Dec. - Jan.		Feb.bbls.	Jan. - Feb.	
		Increase	Decrease		Increase	Decrease
Lagunillas	8.923.529	86.429		8.684.800		238.729
Tía Juana	5.432.334	111.386		4.537.722		894.612
Cabimas	2.168.816		230.464	1.589.611		579.205
Guara	1.852.624	2.799		1.886.871	34.427	
Quiriquire	1.549.734		39.179	1.437.990		111.744
Jusepín	1.487.119		96.661	1.395.062		92.057
Sta. Bárbara	1.405.950		9.513	1.274.783		131.167
Bachaquero	1.999.986		97.374	1.086.299		113.687
Oficina	986.222		162.816	1.023.740	37.518	
Mene Grande	1.128.225	14.906		1.018.860		109.365
Mulata	985.391	4.214		813.901		71.490
La Paz	861.710	25.147		832.538		29.172
El Cubo	553.184	22.354		515.691		37.493
Guico	317.394	7.736		317.778	384	
San Joaquín	311.312		10.246	281.026		30.286
Pueblo Viejo	215.204	106.586		184.359		30.845
Mara	190.718	4.661		171.887		18.831
Temblador	184.762		17.705	180.057		4.705
Cumarebo	151.602		1.252	141.142		10.460
El Roble	128.858		8.831	126.468		2.390
Leona	108.555	108.555		135.073	26.518	
Concepción	98.152		6.686	74.093		24.059
Guarío	97.875		48.632	135.607	37.732	
Rincón	70.445		3.246	63.193		7.252
Sta. Rosa	33.783	8.007		32.845		4.938
-Hombre Pintado	20.448		849	17.624		2.824
El Mene	13.548		1.151	11.959		1.589
Netick	9.000		252	7.950		1.050
Quimare	8.334		289	5.850		2.484
Nipa	8.416	4.227		1.239		7.177
Mercedes	5.604	2.390		3.019		2.585
Piritál	2.900		408	2.378		522
Tucupita	2.359		139	1.315		1.044
Santa Ana	-----		1.478	-----		-----

The production by fields in March and April was as follows:

	March Bbls.	Feb.-March		April bbls.	March - April	
		Increase	Decrease		Increase	Decrease
Lagunillas	9.780.803	1.096.003		9.494.284		286.519
Tía Juana	5.273.882	735.160		5.221.866		51.016
Guara	2,296.144	409.273		2.206.712		89.432
Jusepín	1.893.885	498.823		1.740.207		153.678
Cabimas	1.872.128	282.517		1.791.118		81.010
Quiriquire	1.585.275	147.285		1.523.983		61.342
Bachaquero	1.261.971	175.642		1.257.770		4.201
Oficina	1.155.921	132.181		1.099.940		55.981
Sta. Bárbara	1.349.235	74.452		1.257.102		92.133
Mene Grande	1.134.220	115.360		1.118.032		16.188
Mulata	914.724	100.823		880.139		34.585
La Paz	903.637	71.099		1.005.358	101.721	
El Cubo	557.342	41.651		506.554		50.788
Guico	402.251	84.473	190	398.331		3.920

	March bbls!	Feb.-March		April bbls.!	March - April	
		Increase	Decrease!		Increase	Decrease
San Joaquín	333.310	52.284		309.098		24.212
Pueblo Viejo	205.845	21.486		219.699	13.854	
Temblador	200.069	20.012		189.214		10.855
Mara	187.806	15.919		182.433		5.373
Leona	183.703	48.630		173.333		10.370
Cumarebo	151.174	10.032		139.939		11.235
Guarío	127.775		7.832	164.873	37.098	
El Roble	127.008	540		136.588	9.580	
Concepción	88.132	14.039		98.698		10.566
Rincón	69.684	6.491		67.657		2.327
Santa Rosa	31.096		1.749	36.531		5.435
Hombre Pintado	18.574	950		18.636	62	
El Mene	12.498	539		15.699	3.201	
Travieso 2	11.925	11.925		15.957	4.032	
Netick	8.692	742		8.265		427
Quiamare	4.812		1.308	6.189	1.377	
Mercedes	4.648	1.629		4.007		641
Tucupita	2.975	1.660		2.893		82
Piritál	2.503	125		226		2.277
Caritos				5.038	5.038	

During the month of March the Consolidada put in production the new wells drilled north of Muri in the National Reserves of Travieso N° 2 and in the month of April the Texas Co. produced the Caritos wells east of Temblador.

Very truly yours,

Clemente González de Juana

cc/W. E. Jayred.-

CGdeJ/cjm.-

Caracas, July 6th. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California
U. S. A.

Attention: Mr. John D. Hale.-

The Mene Grande Oil Co. tried to find the western extension of the Mulata Santa Bárbara trend and to that effect drilled the wildcats BG-60 and BG-70 about 8 Km. West-southwest of the producing area of Travieso-Santa Bárbara (See enclosed map). Both wells reached the Cretaceous but missed the producing La Pica shore-line. *J.*

The success of the Phillip Petroleum well FT-1, indicates that the producing shore-line trends toward the southwest, paralleling the Jusepin structure more than the Mulata E-W swing. This change in the strike of the monocline, which was already suggested by the dry wells SB-47 and SB-19 drilled by Sinclair, BG-20 by the Mene Grande and also by the poor-results of the Pantepec-Atlantic AVI-PA N° 1, has been further confirmed by dry-hole BG-73 recently abandoned by the Mene Grande, shown also in the same map.

Off-setting Phillip's producer FT-1 the Mene Grande is drilling wildcat BG-75 which may yield vital information on the subject.

As the western Santa Bárbara extension stands to-day the prospects of Pirital block of the Atlantic-Pantepec contract are very poor and the large amount recently paid by the Atlantic to Pantepec does not appear well justified. On the other hand the Phillip's territory looks promising although it is still too-early to judge about the commercial value of this land, in this particular case a semi-commercial or even a fairly commercial field may be a total failure for the Phillips because of the high royalty (33-1/3%) on that land.

The Mene Grande field is not as good as Mulata or the Sinclair's field because tighter sand conditions and a steeper flank, the southern limit of the field is not well known yet although dry well BG-48 is a fair indication of the width of the producing area. The southwestern part is still unexplored and a good deal of its value depends on the dip of the La Pica formation.

Extending westward the present trend, it seems that the abandoned Capacho tests of Creole are too-far toward the north whilst the Atlantic's Tonoro wildcat stands a better chance. Tonoro is now drilling at 9550 feet, but nothing significant has been reported.

The Cia. Consolidada de Petróleo (Sinclair) spudded in wildcat SBN-1 shown near the northern edge of enclosed sketch. So far all the wildcatting done north of Jusepín-Santa Bárbara has been a total failure. Dry well SB-20 southeast of SBN-1 entirely missed La Pica formation passing from the Pliocene, Las Piedras to the lower Miocene Oligocene black shales at 2160'. Prospects for this area seems to be restricted to hypothetical Carapita sands or to the pre-Tertiary formations. T.

Jusepín field.-

The Creole Petroleum registered two failures in the Jusepín field, one was well 322, a deep test carried to 10,091' and located southeast and east of the producing area, and the second is well 338 located north of the proven territory (See enclosure N° II.) T.

Well 322 was located in old concession Masacua Villanuevera, recently acquired by Creole at a very high price, which was discussed by me as early as Febr. 10th. 1944 in my letter N° 25 I was then of the opinion that this piece of land was too-far down the flank of the Jusepín structure for commercial production and judging from the results of well 322, my opinions would seem to be correct.

Well 338 was located to define the northern extension of the field.

The results obtained by Sinclair in the Travieso field (T-1 and vicinity) mean a new extension of the Jusepin producing area. Sinclair is doing a very intensive drilling of this northern flank of the Muri nose but its extension, especially toward the west, is not known. This extension may favourably reflect on Creole's acreage of western Jusepin.

Barnsdall test Cabeceras 1 abandoned.-

Wildcat Cabeceras 1 of Barnsdall has been abandoned, and a new test San José N° 1 has been located at co-ordinates N-202.909 E-190.790 of Santa María de Ipire. Thus the new test is located about 10 Km. west of Santa María.

Apparently the Barnsdall is making a quick disposal of their holdings in southern Guárico.

Creole ready to check La Pica structure.-

One of the best established seismic structures of the Maturín basin was La Pica. Test well La Pica N° 1 drilled in 1933 had a gas blow-out but no oil indications were found. The results of Jusepin showing a sand barren anticlinal crest and good sand development in the flanks opened new possibilities for La Pica structure.

The recent gravity meter survey of that area failed to detect the high, in fact the gravity-meter showed a low in place of the anticline. The Laboratory studies have also modified some of the old conceptions inasmuch as wells La Pica N° 1 and Maturín 3, supposed to have reached the lower La Pica, are now considered to have stopped in the upper La Pica formation. Thus the old conception of a prominent regional high around La Pica N° 1 is now weakening to considerable extent.

In order to check the contradictory information available

Creole plans to drill two core holes, down to about 5000 feet each one, north and south of the old La Pico well. Creole is reported to be ready to start these tests but they probably will be somewhat delayed on account of the heavy rainy season.

Exploratory well in Quiriquire.-

Creole spudded in a new exploratory well near Quiriquire called QGE-26. This well is located southeast of Quiriquire field, only 200 m. due East of old abandoned well Crocual N° 6.

Next monday I am leaving for Maracaibo where I will stay about 2 weeks, on my return I will continue this correspondence.

Very truly yours,

Clemente González de Juana

Caracas, August 3rd. 1946.-

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.-

Dear Sirs:

During my trip to the Maracaibo Lake basin I noticed that the greatest attention and activities were being concentrated on the western part of the Lake. The reason is, of course, the increasingly important limestone production of La Paz and D.M. Fields. During my trip well D.M.-4 was testing and although it did not look as good as D.M.-2 it was still an impressive producer. D.M.-4 did not reach the granite basement being stopped in the lower Creta-^{T.}ceous.

A key well is unquestionably P-84 of La Paz field (see my letter N° 103) because it was drilled in the east flank of the ^{T.}structure and in spite of finding the Cogollo limestone about 600 feet structurally lower than any previous well it is still the best producer of the field, good for more than 10,000 bbls. through a one inch choke.

Recent drilling is showing La Paz to be a slightly asymmetrical structure, the axial plane dipping toward the east which is contrary to the structural attitude of the main Sierra de Perijá uplift where the thrusting direction is toward the east. In a way the structural setting of the Sierra de Perijá and the La Paz uplift is somewhat similar to the Barco concession where the Sierra de Perijá is also thrust and pushed toward the east whereas the Petro-

lea anticlinorium is thrust toward the west.

The La Paz uplift continues northeastward to the Mara (DM) field whence it continues and turns more toward the East near the Lake shore. Thus the La Paz-Mara structural trends parallels very nicely the Sierra de Perijá - Manantiales range lines of uplift

In the District of Mara the steeper La Paz west flank seems to pass into an important thrust fault. In fact the Calentura N° 2 well of the Orinoco Oil Co. (Pure oil) found the Eocene and Cretaceous formations about 4,000 feet lower than D.M. The top of the Cogollo limestone was found at 9,936 feet. It is very interesting that Calentura N° 2, drilled in the deepest part of the trough, found the Paleocene Guasare formation (La Paz series) and the Cretaceous Cogollo limestone entirely impregnated by heavy oil. The curves of the Schlumberger log in both intervals show good porosity and high resistivity. Gravity tests were run in each porous section gravities vary from 4° to 16° API but unfortunately the lightest oil were found in the tight parts of the limestone whilst the porous intervals were impregnated only by tar oil.

As the limestone production is an entirely new development in the Maracaibo basin and the results obtained so far are very gratifying the exploration program in Districts Maracaibo and Mara is the biggest in the history. The Shell will start immediately a deep test in the Concepción field which probably will be followed by deep drilling in practically all known Eocene highs of the Maracaibo District such as Sibucara, K-24, etc.

In a similar way the various concerns holding concessions in the District of Mara are getting ready to test the same. During my visit wildcat Amara N° 3 drilled for the Gulf interests by the Drilling and Exploration Co. was on test. The impressions were rather pessimistic and this test may be abandoned very soon.

Amana # 3 has been drilled close to old Amana # 1 where a small amount of oil was obtained. It is located in a V shaped narrow tertiary basin located within the Cretaceous outcrops of northern Zulia.

The drilling activities in Districts Maracaibo and Mara, in the West side of Maracaibo lake, may favourably reflect on the long forgotten District Miranda, north of the Bolivar coastal fields. District Miranda is characterized by a thin cover of younger tertiary sediments and Eocene at shallow depth. The thickness of Eocene to be found and the type of Cretaceous sediments present underneath, are of course unpredictable but as the regional structural setting somewhat resembles the setting of District Mara exploratory concessions may be obtained there as soon as the Government makes them available.

The Creole exploratory tests LGE-1 and LGE-2 on Lake Maracaibo have been abandoned. LGE-1 had some very heavy oil in rather thin sands decidedly non-commercial. LGE-3 was on test at the time of my visit, oil was also heavy and although the sands were somewhat better than at LGE-1 I expect the well is already abandoned. This corrects my former information of Letter N° 106 on the same subject. All three wells drilled into the Eocene.

Another test with the earmarks of a failure is Richmond's (Standard of California) Zulia 1-1 which was also tested during my visit. The lower part of the section drilled, which was the more promising part, produced only water with only very small amounts of Oil, the sands are also very thin. There remain some upper sand to be tested but the enthusiasm of the Richmond's people about this hole is no longer as great as it was one month ago.

The Mene Grande Oil Co. is now building a road preparatory to drill the southern Lake acreage. The most promising spot, which

will probably be selected as the first location, is the Boscan anticline. In the lapse from 1926 to 1928 the Sun Oil Co. drilled 4 wells in this structure all dry. The latest test Boscan N° 4 drilled in 1928-29 went down 5408' and presumably did not reach the Eocene which according to the present knowledge is the most promising formation of the area.

Very truly yours,

ClementeGonzález de Juana

Caracas, August 10th, 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.

Dear Sirs :

The Venezuelan Government issued final titles on the following petroleum concessions :

In favor of Socony Vacuum on lots denominated BAR-1 to and including BAR-6, district Barinas, State of Barinas. In favor of Venezuelan Oil & Transport Co, Ltd. (Shell) on concessions GU-12 to and including GU-18 district Zaraza, State of Guarico, and AN-137, 138, 143, 144, 146, 147, 148 and 157, district Cagigal, State of Anzoategui. In favor of Sinclair Oil Co. on parcels S.111-1 to and including S.111-13, district Maturin, State of Monagas. In favor of Cia. Consolidada de Petroleo (Sinclair) on parcels C.106-1 to and including C.106-5, C.107-1 to and including C.107-5, and C.105-3 to and including C.105-5 district Maturin, State of Monagas. In favor of Creole Petroleum Corp. on concession denominated 102, district Zamora, State of Falcon.

The location of these concessions and the conditions and taxes, as well as the acreage of each one have been listed and commented before.

Maps presented.

The Sinclair Oil Co. presented for approval the maps of the following concessions: S.200-1 and S.200-2 district Aragua,

State of Anzoategui. S.112-1 to and including S.112-11, S.120-1 to and including S.112-13 district Maturin, State of Monagas. S.303-1 to and including S.303-4 district Zaraza, State of Guarico.

Maps approved.

The Government approved maps of concessions V-438 to and including V-441, district Aragua, State of Anzoategui, and V-453 & 454 presented by the Mene Grande Oil Co. and the maps of concessions AN-137, 138, 143, 144, 146, 147, 148 and 157 district Cagigal, State of Anzoategui, presented by the V. O. T. (Shell).

Renuncements.

The Richmond Pet. (Standard of California) renounced concessions denominated Monte n° 1 to and including Monte n° 4 located in the National Reserves and the Sobrante of La Montañita, and parcels denominated Falgo n° 2 to and including Falgo n° 5 and Peras n° 17 to and including Peras n° 27 all located in district Miranda, State of Falcon.

The Colonial Beacon Oil Co. renounced parcels denominated FALOP, FALYT, FALYP, FALYQ, FALYR, FALYS, FALOX, FALOT, FALOC, FALOR, FALOV, FALOW, FALOS also located in district Miranda, State of Falcon.

The Compañía Consolidada de Petroleo (Sinclair) renounced the parcels denominated C.104-1, C.104-2, C.104-3, C.104-3A, and C.104-4 in district Maturin, State of Monagas.

Transference of concessions.

The following transfereces of Petroleum Concessions have taken place :

From the Mene Grande Oil Co. to the Guasare Oil Co. parcels denominated AMBLE, AMEAG, AMBER, AMANA, AMARO, AMELO,

AMSET, AMMON, AMBOY, AMOLI, AMPAC, and AMPOR, all located in district Mara, State of Zulia.

From the Mara oilfields to the Guasare Oil Co. parcels denominated AMEBE, AMEED, AMATE, EMOBA, EMUBE, EMFEO, EMABU, EMOCO, EMCOD, EMADO, EMDUM, EMUFA, EMFAD, EMBEO, EMLAN, EMGAP, EMOLE, EMLIP, EMOIL, EMEMO, EMESA, and EMMAC, district Mara, State of Zulia.

From the Gulf of Maracaibo to the Guasare Oil Co. parcels MAXEL, MAXED, MAXEC, MAXYD, MAXAC and MAXID located in district Paez, State of Zulia.

Comments.

The Gulf interests are concentrating under one management their scattered holdings in District Mara as results of the developments in that territory commented on my last letter.

Creole is also getting ready to start an exhaustive study of the Cretaceous of district Mara.

Wildcats abandoned.

The Venezuelan Atlantic Refining Co. abandoned dry wildcat El Hueso n° 1 in the State of Monagas. After exhaustively testing some very thin sands in La Pica formation the test was completed as a water well flowing about 125 bbls. of fresh water from the 350' - 450' interval.

A new location El Hueso n° 2 has been staked in the neighbourhood where drilling was commenced on July 19th. (see enclosed sketch).

San Pedro n° 1, another Atlantic wildcat in Monagas, abandoned at 8200', dry.

Tenoro n° 1, also by Atlantic Refining Co., has been temporarily abandoned.

Grico n° 2 of Las Mercedes Oil Co. in the State of Guarico also failed and was abandoned.

Yaure n° 1 of Socony Vacuum in the State of Barinas was also abandoned dry.

San José n° 1, Barnsdall test in Guarico, was abandoned at 3937'. Barnsdall is by now running out of concessions where to spud in more dry holes.

Wildcat SBS-126, near Sta. Barbara, by Cia. Consolidada de Petroleo (Sinclair) was also plugged and abandoned.

Socony succeed at NV. 1.

Wildcat NV-1 drilled by Socony Vacuum in Anzoategui was successfully completed at 8626'. This well marks the western extension of the Nipa trend, recently discovered by the Mene Grande.

Socony spuded in the second test, NV-2, in the neighbourhood as shown in enclosed sketch.

Very truly yours,

Clemente Gonzalez de Juana

Enclosures: 2 sketch maps.
cc/W.B.Jayred.-
CGdeJ/pt.

Caracas, August 31st, 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.
U. S. A.

Attention: Mr. John D. Hale.

Dear Sirs :

In my letters nº 102 and 104 I informed you about certain negotiations on the Government's royalty conducted by Mr. Feldman. The possibility of disposing of the royalty oil in some other way than the customary sale to the producing companies was consulted with the National Council of Economy which turned in a series of suggestions and recommendations to the Ministerio de Fomento along the following lines.

The National Council of Economy recommends to undertake the necessary negotiations in order to obtain greater advantages from the royalty oil. Nevertheless it does not think advisable to offer for sale all the royalty oil and recommends to keep enough oil to assure the possibility of future barter for goods, which otherwise may not be obtainable by straight cash purchases.

As to the basis on which the sale of part of the oil could be conducted the said Council considers various cases as follows :

1st.- Sale of the royalty oil to an independent company on the same conditions as it is now sold to the producing companies. This negotiation will lead nowhere because the country is not so much interested in the name of the buyer as in obtaining a higher revenue. This type of negotiation however could be considered in case of barter for essential goods not obtainable by ordinary purchasing.

2nd.- A sales agreement with an independent by which the Government will be able to participate on the possible

higher profits derived from the resale of the oil, is not considered very attractive because it does not offer any assurance of higher profits. In a negotiation of this type the Government may just change the present customer for an occasional one, without a final justification.

3rd.- Another possibility is the sale of the Royalty oil at a price higher than the amount now paid by the operating companies.

4th.- There is a possible combination of systems 2 and 3 by which the purchaser will guarantee a minimum amount above the sums paid by the operating companies and also a percentage of the profits which may be obtained from the resale of oil.

A proposition of this type should be carefully considered because the guaranteed amount plus the possible extra profits do not necessarily mean a higher revenue than a straight higher price as considered in point 3rd.

There is the possibility that two prospective buyers offer the same fixed amount above the prices now paid by the Oil Companies, in that case, of course, the Government should prefer the one which may offer a percentage on the resale of the oil but if two propositions are similar or identical, in fixed amount and percentage the Government should favor that with stronger financial support, better references, and more efficient organization to resale the oil.

Out of the four possibilities considered above, the National Council of Economy recommends systems 3 and 4, because they guarantee a higher revenue and permit to develop new markets for the Venezuelan crude.

Considering the specific points to be stated in a project of Contract, which eventually may be brought up to public bidding, the recommendations of the Council are as follows :

1st.- A penalty clause by which the Government

will be guaranteed against possible defaults from the part of the other contracting party. This guaranty may be of the order of 3 to 5% of the price of the crude oil which the prospective buyer desires to obtain. This guaranty may be obtained :

- a) In cash.
- b) In titles of the Venezuelan Public Debt.
- c) In Bonds or stock of Venezuelan Companies up to 90% of the current market price.
- d) In foreign values up to 80% of the current market price in the New York Stock Exchange.

2nd.- The prospective buyer should open an irrevocable letter of credit for an amount equivalent to the value of the oil he desires to obtain.

3rd.- The payments due to the Government by concept of the Royalty oil, taxes, fiscal revenues, etc., shall be paid in Venezuelan currency and in accordance with the rules and regulations set forth for the petroleum concessionaires.

The negotiations to obtain Venezuelan currency, in order to fulfill the above obligations, shall be conducted only through the Central Bank of Venezuela which shall apply the same rates of exchange agreed on by the Oil Companies.

4th.- The prospective buyer shall advise about the approximate dates of loading of his tankers and vessels in order to prevent interference with the loading of the petroleum concessionaires, as well as to keep an excess of oil in the terminal storages.

5th.- The prospective buyers shall have only those rights and facilities specifically accorded to them by the Ministerio de Fomento in order to fulfill the obligations of the preceding paragraph.

6th.- The prospective buyers shall be subject to the Venezuelan Laws, specially in the matters of taxes, customs, etc.

7th.- The accounting of the prospective buyers shall be carried on in Venezuela and the Venezuelan Government

shall have the right to inspect all the books including those which may be necessary to keep in foreign countries.

8th.- The contracts affecting the Royalty oil should not be sold or transferred to third persons without the written authorization of the Venezuelan Government.

The National Council of Economy believes it is indispensable that any sale of Royalty oil shall be made by means of public bidding. To that effect the Government shall announce the percentages and characteristics of the crudes as well as the loading terminals where the crude may be obtained.

The propositions shall be received in sealed envelopes, they should be cautioned by an amount not less than \$40,000.00, and contain all the necessary information about the financial capacity of the proponent, its experience, and possibilities to carry on the terms of the contract.

In any case the National Council of Economy recommends to draw the contracts in such form as to permit the Venezuelan Government to eventually celebrate barter treatises with that Royalty crude.

Venezuelan oil production.

Official figures of Venezuelan oil production show for the month of June a total of 31,685,308 barrels of crude equivalent to a daily average of 1,056,176 barrels which represents an increase of 4,731 barrels per day on the average of the preceding month of May.

Following are some comparative figures on same months of previous years :

June 1942	12,623,078	bbls.
June 1943	13,287,865	"
June 1944	22,442,836	"
June 1945	25,858,368	"
June 1946	31,685,308	"

The above figures show that the production of June 1946 almost tripled the output of June 1942.

The total production of Venezuela during the first 6 months of 1946 amounted to 186,209,635 barrels.

Similar comparative figures with previous years are as follows :

1st. semester 1942	75,711,201	bbls.
1st. semester 1943	74,288,762	"
1st. semester 1944	113,678,132	"
1st. semester 1945	146,889,080	"
1st. semester 1946	186,209,635	"

here again the total production more than doubled the output of 1942.

Venezuelan oil exports.

Exports of crude oil during the first six months of 1946 amounted to 170,384,986 bbls. with an increase of 37,581,169 bbls. on the exports during the same period of 1945.

Very truly yours,

Clemente González de Juana

Caracas, September 7th, 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California
U. S. A.

Attention: Mr. John D. Hale.

Dear Sirs :

The oil transportation rates for Eastern Venezuela crudes shipped through the Mene Grande - Creole pipeline systems, reported in my letter n° 77 dated July 7th, 1945, have been somewhat changed as follows :

All charges in bolivars per cubic meter (1 cubic meter equal 6.29 U. S. A. bbls.)

Oils not to exceed 250 sec. Saybolt Universals at 37.78° C.

Rates to Puerto la Cruz		Loading at Puerto la Cruz	
From Leona field	Bs. 2.05	Loading	Bs. 0.60
" Guara field	" 1.85		
" Oficina field	" 1.85		
" Nipa field	" 1.85		
" Yopales field	" 1.85		
" Oficina tank farm	" 1.65		
" Santa Ana field	" 1.65		
" San Joaquín field	" 1.45		
" El Roble field	" 1.45		
" Anaco tank farm	" 1.45		
" Quiamare field	" 1.25		
" Jusepin field	" 2.15		
" Mulata field	" 2.15		
" Travieso tank farm	" 1.95		

Gathering of oil may be subject to special agreements as no oil gathering is included in the above tariffs.

The transportation rules set forth in mentioned letter n° 77 remain without change or alteration.

The oil transportation rates through the V. O. C. (Shell) pipelines west of Maracaibo were fixed as follows:

Charges in bolivars per cubic meter (1 cubic meter equal 6.29 U. S. A. barrels).

Oils not to exceed 250 sec. Saybolt Universals at 37.78° C.

Rates to Punta de Piedras or Palmarejo		Loading at Punta de Piedras or Palmarejo	
From La Paz	Bs. 1.35	Loading	Bs. 0.60

This does not include any gathering of oil which may be done by special agreements.

The rules and regulations for transporting the oil are similar to the ones stated in above mentioned letter n° 77 with the following changes:

18. Application of tariffs from intermediate points.

Until such a time when transportation charges be fixed between points not mentioned in this tariff the following rules shall be in force:

(a) Any intermediate destination point shall be considered as Punta de Piedras or Palmarejo to the effects of the transportation tariff.

(b) From any intermediate point of origin not mentioned in the tariff transportation will be charge same as from La Paz.

20. Pump service.

The amount to be charged fro pumping is not fixed. It is only stated that pumping will cause additional charges.

New concession tittles.

The Government issued final concession tittles on lots :

V-438 to and including V-441, district Aragua, State of Anzoategui.

V-453 and V-454, district Cagigal, State of Anzoategui.

V-457 and V-458, district Aragua, State of Anzoategui.

all in favor of the Mene Grande Oil Co.

Final tittles were also issued on concessions :

S.303-3 and S.303-4, district Zaraza, State of Guarico, in favor of the Sinclair Oil Co.

These lots have been commented in previous letters.

Transference of concessions.

The Atlantic and the S. A. Petrolera Las Mercedes (Tex_{as}) arrived at a joint exploitation agreement of Northern Guarico. As a result of this the Venezuelan Atlantic transferred to Las Mercedes concessions denominated Placer-1, Placer-2, Placer-3 and Placer-4, all in district Monagas, State of Guarico.

Another important agreement, unoficial yet, was celebrated by Creole and Pantepec by which Creole will take over practically all the Pantepec's land in the State of Guarico. The basis are somewhat similar to the old Mulata-Jusepin

contract among the same Companies.

Maps approved.

The Government aproved the maps presented by the Mene Grande Oil Co. on the following lots :

V-457 to and including V-462

V-465 to and including V-469

all of them located in district Aragua, State of Anzoategui.

It also aproved the maps presented by Sinclair Oil Co. on lots denominated :

S.200-1 and S.200-2, district Aragua, State of Anzoategui.

S.303-1 and S.303-2, district Zraza, State of Guárico.

The following maps presented by the Venezuelan Oil & Transport (Shell) have been also aproved :

AN-124 to and including AN-136

AN-139, AN-140, AN-142, and AN-145

AN-149 to and including AN-156

AN-158 to and including AN-178

all these concessions are located in district Cagigal, State of Anzoategui.

New oilfield installations.

The Mene Grande is installing at Yopales (Anzoategui) one oil tank of 4,900 bbls., one oil tank of 1,500 bbls. and one gas separator.

The Texas Co. is installing in the Tucupito field two oil tanks of 25,000 bbls., one oil tank of 20,000 bbls. and two small tanks of 5,000 bbls. each, in addition to that they are installing a pipe line 3,220 m. long to interconnect the two tank systems in both sides of the river.

The Mene Grande Oil Co. is installing in the Guara field a de-hidratation plant composed of :

4 storage tanks of 4,500 bbls. each.

6 storage tanks of 2,000 bbls. each.

6 storage tanks of 1,500 bbls. each.

6 oil & gas separator s.

6 oil heaters.

2 groups of pump & motor.

The Cia. Consolidada de Petroleo (Sinclair) put in operation in the Santa Barbara field a natural gasoline plant and a represuring plant.

Very truly yours,

Clemente González de Juana.

CC/W.B.Jayred.

CGdeJ/pt.

Caracas, September 21st, 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention : Mr. John D. Hale.

Dear Sirs :

Following are the outstanding developments in wildcatting and exploration drilling in Venezuela.

During the actual, rather prolonged period of provisional Government, until after election times and possibly well after the elected Congress has established itself and finished the new Constitution, there is no possibility to obtain new concessions in Venezuela; consequently the Oil Companies are mostly devoted to explore the possibilities of the acquired lands, so they are ready at the end of the exploration period to renounce all the undesirable acreage in order to avoid, as much as possible, the payment of the high initial exploitation taxes offered by all of them. Many geological and geophysical parties are now at work, mostly in Eastern Venezuela, and the wildcatting campaign reached an intensity never known before in the Venezuelan Petroleum industry. Only the Shell group which obtained most of his Eastern Venezuela's acreage in exploitation status, and is therefore, not pressed for time, does not participate in this wildcatting contest.

Socony Vacuum is also conducting an intensive drilling campaign in Central Anzoategui, but this Company, in fact, is not

so much pressed for time to select land, as it is for building up production. Socony made a huge investment in Venezuela since 1936 and although it has now an appreciable production, the revenue certainly would not meet expenses as yet, therefore to get out of the red they should build up production which they expect to accomplish by intensive operation in the easy, quick drilling territory north of Oficina.

The Atlantic, another quick wildcatter, has several angles to consider. First it is their contract with Pantepes, which is a rather demanding partner, this phase however, is well advanced by now. Another important job is selecting the acreage of Northern Guarico which they expect to finish in time by means of the new joint exploitation agreement with the Texas, reported on in my last letter. Finally it is the urgency of an oil strike to account for the unsuccessful holes drilled so far.

The main problem of the Texas Co. and S. A. Petrolera las Mercedes is a quick selection of land and toward this end they are drilling the various Grico and Camay wells.

The Barnsdall, following their policy of drill first and explore afterwards, is sinking a hole in each one of their Guarico concessions. From a commercial standpoint this policy has been, so far, a total failure. I have many doubts about the value of these holes from a geological exploration point of view, as all these tests seem to be located at random, giving more consideration to the accessibility and drilling conveniences, than to anything else.

The Phillips is mostly concentrating in Monagas, around their FT-1 discovery well, drilling operations and specially

completion jobs however, are very slow.

As far as exploratory drilling is concerned the Mene Grande Oil Co. has its hands full with the five exploratory or semi-exploratory fields , i.e. Nipa, Caico, La Ceiba, Santa Rosa and Santa Ana.

Sinclair is getting pressed by production as the Santa Barbara field is becoming nearly drilled up. The Travieso production, North of Muri and West of Jusepin, will carry operations and production for the time being but a spread of wildcatting activities is urgently needed.

Richmond (Standard of California) is busy with the large Parija acreage in the State of Zulia where five wildcatting rigs are now in operation. In the large Delta concessions no drilling operations have been started yet.

The Creole is conducting exploratory drilling in various areas. By far the most important is the Guarico area, which yet it is mainly a problem of land selection and seismograph checking. Second to Guarico, is the Lake exploration campaign which is carried down to the upper Eocene. In addition to that there is the exploratory drilling North of Jusepin and West of Quiriquire which may have a great importance in a near future. The Creole is getting ready to start again in Eastern Falcon in joint agreement with the North Venezuelan Petroleum Co., a subsidiary of the Central Africa Mining Co. Ltd. of England.

Wildcatting in the State of Monagas.

The Venezuelan Atlantic Refining Co. spudded in two new wildcats, Salva N° 1, and Jaito N° 1, both located

✓
slightly Southwest of Maturin. Jaito N° 1 is a joint well with the Texas Petroleum Co. because it will be drilled in one of the few parcels of the Texas in North-Central Monagas. (See sketch).

Salva N° 1 is located on the same trend as San Pedro N° 1, a dry hole; Jaito in the same trend of old Las Piedras N° 1. The results obtained so far by Atlantic in North-Central Monagas are very poor, but by no means conclusive. El Hervidero fault trend, which is the most prominent structural line of North-Central Monagas remains untested. Salva N° 1 approaches this trend as much as possible being, in fact, too close to Creole's acreage. The outlook of Jaito is not good as the Las Piedras trend is generally considered low. ↙

The Creole Petroleum Corp. is testing wildcat JGE-27 Northeast of Jusepin field in the Orocuai area. Rumors spread that this well found oil in the Cretaceous but they have not been confirmed yet. ↙

The same Company spudded in two wildcats in this area JGE-28 and QGE-29. The former is located slightly N.W. of JGE-27 mentioned above, whereas QGE-29 is located S.W. of the Quiriquire field. Both tests are aimed at the Cretaceous.

The Cia. Consolidada de Petroleo spudded in wildcat Varsa N° 1 South of Santa Barbara field and very close to the Mene Grande's land. Their other wildcat SBN-127 continues drilling.

The Phillips Petroleum finally completed FT-3 whilst FT-1 continues testing. FT-4 is drilling ahead and the rest of the wells are still rigging up.

Wildcatting in the State of Anzoategui.

The Mene Grande Oil Co. had a failure in Tacata N° 2 which was plugged and abandoned after reaching 10,237'. Tacata N° 2 was drilled near suspended hole Tacata N° 1, (See my letter N° 94 of Feb. 9th., 1946) and a new test called Tacata N° 3 (see enclosed sketch) is being drilled in the neighbourhood.

Well CaM-2 in the Caico field was also a failure; it was plugged from 8038', and a new well called CaM-3 was spudded in this area. The new test CaM-3, is located South of the dry hole and very close to CaG-1 which is a producer. The failure of CaM-2 at this very early stage of the field is somewhat disappointing.

To compensate the two mentioned dry holes, well NS-1 in the Nipa field was successfully completed at 8337'. Two more wells have been spudded in this field, NG-3 which is an off-set of Socony's NV-1 and ENG-4, about 10 Km. East of NG-3 and very close to producers Nipa N° 2 and NS-1. (See sketch map).

The Socony Vacuum successfully completed wells NV-2 and NV-3 in this same area and spudded wells NV-4 and NV-5 in the neighbourhood. In the Guarico area Socony completed exploratory wells MGV-42, SGV-41, and SGV-43. Well WGV-4 which was carried down to 6806' was testing and wells GV-46 and SGV-45 were spudded in. (See sketch map).

The Venezuelan Atlantic Refining Co. spudded in wildcat Pelayo N° 1 (see my letter N° 97 dated March 23rd, 1946) which is also shown in an enclosed sketch map.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred.

Enclosures: 4 sketch maps.

CGdeJ/pt.

Caracas, October 5th, 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention : Mr. John D. Hale.

Dear Sirs :

Wildcat Grico N° 3, drilled by the S. A. Petrolera Las Mercedes (Texas) commented on in my letter N° 100, has been plugged and abandoned. T. D. 4798'. Well MRG - 2 in Las Mercedes field has been completed at 4247'.

Another wildcat in this area - Punzon N° 2 - was carried down to 4123' and was subsequently abandoned. Enclosed is a sketch map showing the location of this well.

The Creole Petroleum Corp. plugged and abandoned test well GXB - 4 in Northwestern Guarico, whilst GXB - 1 is reported to be testing at 6202'.

In Southeastern Guarico the Barnsdall drilled test Cocuiza N° 1 in concession BARSO - 10 which is also located besides the main automobile road to Eastern Venezuela. This test (see enclosed sketch) was carried down to 5150' and abandoned dry. A new location called Lejara N° 1 is rigging up in concession BARSO - 1, Southwest of the town of Pariaguan and South of well Manquito N° 1. Next week I will send a sketch of this location.

In the Barinas basin, the Socony Vacuum, abandoned well Yaure N° 2.

In the Maracaibo basin the Shell group is concentrated in western Maracaibo area. The deep test at La Concepcion field is about 3100' and going very slow. DM - 1, a deepening job intended to reach the basement is drilling below 7300' and DM - 5 is about reaching completion depth at 6714'.

In the Northern area the Drilling & Exploration Co. (Gulf) spudded in Amana N° 4 about 400 m. NE of Amana N° 3.

In the Perijá area the Richmond spudded in Zulia 1-2, a test located in the neighbourhood of still testing Zulia 1-1. Zulia 7-1 in concession ZULIA - 7 began to test.

Well N° VL - 1 drilled in the Shell's Lake concessions, West of Tia Juana, is getting deep (now at 10,022') without any important developments.

Curazao 2-A, East of La Rosa field, is breaking all South American depth records with 15,106' and 6.5/8" casing cemented at 13,170'. T

Concession maps approved by the Gvmt.

The Venezuelan Government approved the maps presented by the Venezuelan Oil & Transport Co. (Shell) on concessions AN - 180 to and including AN - 184 in district Cagigal, State of Anzoategui. The following concession maps presented by Sinclair Oil Co. were also approved: S 112-1 to and including S 112-11, and S 120-1 to and including 120-13. All these concessions are located in district Maturín, State

of Monagas.

Authorization to defer maps.

The Caracas Petroleum Co. obtained authorization to defer until March 22, 1947, the maps of the following concessions located in district Cagigal (Anzoategui) and district Zaraza (Guarico) :

La Morrocoya, la Olla y Arena N° 1

La Morrocoya, la Olla y Arena N° 2

Morrocoy

Río Guaribe

Pescado.

Concession renounced.

The Richmond Exploration Co. (Standard of California) renounced the parcels denominated LAMAB - LAMAC - MIRAB - MIRAC - MIRAD - MIRAF - MIREB - MIREC - MIRED, and MIRUD, state of Falcón, district Miranda.

Comments : These parcels are renounced because of the failure of test La Montañita N° 1. The Richmond is no longer very enthusiastic about Falcón and all drilling operations are suspended in this district. West of the Richmond territory the Creole is conducting extensive geological surveys, partly because they ought to make a selection of the exploratory territory held in district Buchivacoa, and partly because they are considering approaching this territory from a stratigraphic angle rather than continuing considering the small, rather compressed structures characteristic of Western Falcón. These

structures may yield good oil as in Las Palmas, but the amount contained in this small dome is not enough to justify the expenses of the pipeline; a stratigraphic accumulation, in the other hand, may be commercially successful.

The Socony Vacuum renounced the following concessions: Barinas - 1 to and including Barinas - 7, Barinas - 13 to Barinas - 15, Barinas - 60, Barinas - 64 and 65, Barinas - 69, Barinas - 70, Barinas - 73 and 74, Barinas 77 and 78, Barinas - 82 and 83, Barinas - 86 and 87, Barinas - 90 and 91, Barinas - 94 and 95, Barinas - 103, Barinas - 107, Barinas - 111, Barinas - 130 and Barinas - 132.

All these concessions are located in the State of Barinas.

Comments : The renouncement of this large block of land, more than 200,000 hectares, at this early stage of exploration is a heavy blow on the Barinas area. The Socony is the only Company which carried a rather intensive drilling campaign in this territory, they are therefore more qualified than anybody else to judge about the value of this land. Legally they could have had kept this land for another two years at a very low cost, their decision to renounce the land right away indicates that they are absolutely convinced about the low commercial value of the greatest part of Barinas.

Oilfield installations.

The Mene Grande is erecting in the Guara field a discharge station formed by four 5,000 barrels tanks, four

1,750 barrels tanks and six gas separators. In the Travieso field an entirely similar station, and at Nipa four 5,000 barrels tanks, two 1,000 barrels tanks and 3 separators.

In the Anaca tank farm the same Company is erecting five 95,000 barrels tanks and the necessary connecting equipment.

The Socony Vacuum in the Güico field is building up another station composed of four 5,000 barrels tanks, two 1,750 barrels tanks and three gas separators, besides a new line to connect the new WGV area to the Mene Grande pipe line.

The same Company is erecting in Guarico two 1,000 bbls. tanks and one gas separator.

The Cræole Petroleum Co. is enlarging their marketing facilities in Puerto la Cruz by erecting the following units : one 30,000 barrels tanks and one 5,000 bbls. tank for diesel oil, two 5,000 bbls. tanks for fuel oil and various lines and pumps.

The Texas Petroleum Co. in the Tucupita field is erecting a station composed of two 5,000 bbls. tanks and one 10,000 bbls. tanks.

The Shell in the La Paz field is erecting and absorption plant for natural gasoline, this will be completed by one 75,000 bbls. tank and three 20,000 bbls. tanks.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred.
Enclosures: 2 sketch maps.
CGdeJ/pt.

Caracas, October 19th., 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention: Mr. John D. Hale.

Dear Sirs :

Please find enclosed a sketch map showing location of Barnsdall's well Lejara N° 1 as per my last letter, this well is now drilling at 627'.

Creole Petroleum Corp. finished well GXB-1 in Guarico and spudded in another exploratory test called GXB-6 the location of which is shown in enclosed sketch.

The Creole spudded in another slim hole exploratory test in Monagas called JGE-30. Please find enclosed location sketch.

Remarks on sale of Barber's royalty oil.

The Barber Asphalt Corp. was the true pioneer of the Venezuelan oil industry. Starting with the exploitation of the Bermudez pitch lake, in 1912 was in position to take over the so-called Valladares contract which was in fact a broad franchise to obtain concessions over almost the whole Venezuelan territory. Under this franchise they explored a good deal of Venezuelan seepage belts and sized quite a number

of blocks around oil and asphalt seeps but failed to develop production.

In 1913, Barber entered into an agreement with the Caribbean Petroleum Corp. (Shell) by which Barber was reimbursed of all the expenditures made and retained a 25% interest while the Shell group obtained a 75% equity interest. The original contract was modified in 1923 and the Barber surrendered its interest for a royalty consideration. This royalty varies from 12.1/2% in certain areas to 9.3/8% in others. The royalty was to be applied to the existing concessions or to any concession acquired thereafter within the limits of the former Barber's franchise.

The Mene Grande field was put into production and the Barber got their 12.1/2% royalty. At a later date other fields were discovered by different Shell's subsidiaries within the bounds of the Valladares contract but Shell denied the obligation to pay the royalty to Barber's. The matter was settled in England in favor of Shell's.

The 1923 contract was modified in 1939 and again in 1941 and the royalty figures were lowered to 6% and 4% according to the areas.

From 1923 to 1946 the Barber received 34,310,000 barrels of royalty oil almost entirely from the Mene Grande field, the royalty averaged 1,500,000¹¹⁶ per year during the last 10 years. It is expected that during 1946 this average figure

may be increased somewhat but not very much, because Mene Grande field is on decline. Nevertheless the remaining reserves of Mene Grande are roughly calculated at 300,000,000 barrels of which about 30,000,000 will go to Barber.

During 1945 the Mara field was put in production, and during that year Barber received 65,000 barrels which will increase to about 250,000 barrels during 1946. It is still too early to judge about the reserves of Mara, because there are only four wells drilled so far, and limestone reserves are very difficult to estimate without declining curves.

Everybody is inclined to believe that Mara is a major discovery but this is not proved yet. The land held by the Caribbean, subject to royalty, on this area is very nicely located but it is not very large and it is therefore possible that the production boundaries may greatly exceed the Caribbean's holdings.

There are still great undeveloped concessions held by Shell's subsidiaries within the limits of the Valladares contract, but even after London's settlement in favor of Shell there are a good many pieces of land where Barber's right to obtain royalty may be bitterly disputed.

The price agreed on by Shell and Barber's will amount to \$25,000,000 paid in cash.

Alongside the sale of the Venezuelan Royalty the Barber is reported to come to an agreement with the Standard of California on their refinery and terminal of Perth Amboy, N. J., but this is of no concern to us.

Pantepec sales to French Co.

The Venezuelan Pantepec signed a contract with the French Company (Compagnie Française de Combustibles liquides) to sell all the oil obtained by Pantepec from the Mulata field.

Very truly yours,

Clemente González de Juana.

CC/W.B.Jayred

Enclosures: 3 sketch maps.

CGdeJ/pt.

Caracas, October 26th, 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention: Mr. John D. Hale.

Dear Sirs :

The Colon Development Co. had an interesting development in the southwestern part of the Maracaibo basin, as an exploratory test found oil in the Cretaceous - Cogollo group - west of Las Cruces field.

The new strike is located west of the Tarra anti-^{WT-2}
cline and found the Cogollo limestone at about 7,000 feet. It ²⁷
may amount to a major discovery as the Cretaceous limestone production in western Venezuela is becoming increasingly important. Please refer on this subject to my letter N° 108 dated August 3rd, 1946.

The Tarra anticline is the geological and topographic continuation into Venezuela of the Petrolea anticlinorium in the Barco concession of Colombia. Because the regional plunge toward the north the Cretaceous, exposed in the crest of the Colombian domes, is covered by younger Eocene and Miocene formations in Venezuela, the folding pattern in Venezuela is less complicated but the thrusting is more complex.

The Colombian anticlinorium is asymmetrical toward the west, i. e. it has a comparatively gentle East flank where most of the production was obtained and a steep to overturned west flank. In Venezuelan territory this condition is reversed and a few miles North of the international boundary the structure widens up, the West flank becomes gentler and sharp thrusting takes place in the East flank. The thrust plane dips toward the West at a low angle, about 30° , and the East flank dragged by the horizontal movement is, at places, overturned. The fault displacement at Casigua amounts to above 4,500 feet, and production is obtained both in the upthrust and downthrust blocks from Eocene sands.

Toward the West, in the foot-hills of the Perijá range is the Río de Oro anticline, a structure also running into Venezuelan territory from Colombia, where it attains its maximum development. Like Tarra, the Río de Oro anticline plunges North and in Venezuela shows, exposed at the crest, nothing but Eocene beds. Production has been found in the lower Eocene, Barco formation.

The Río de Oro structure is highly compressed and highly asymmetrical toward the East, showing a rather gentle West flank and a very steep to vertical East flank.

In between these two highly thrust and compressed zones lays a flat area, or depression, which corresponds to the Colombian Sardinata depression where the Tres-Bocas Tibú field, the best of the Barco concession, has been found. It is only

natural to think that similar structures as those observed in Colombia could be found in the Venezuelan side of the border with the additional advantage that here the Cretaceous presents a much better cover for oil production, in no case being exposed as happens in many places of the Barco concession.

Geophysical surveys indicate that the Tarra uplift continues northward for many miles, possibly the Río de Oro anticline continues also, although this point has not been substantiated yet lacking geophysical surveys in that hostile territory. In any case the folded depression continues northward in the Northern part of district Colon into district of Perijá, State of Zulia.

Much of the Colon district land is open acreage and it is now unquestionably a fair risk for deep drilling exploration. In district Perijá most of the land has been taken by the Richmond Exploration Co. (Standard of California) on exploration basis, meaning that 50% of it has to be turned back to the Government, as National Reserves, in less than two years time. Although the Richmond is conducting an extensive geophysical survey and a fast exploratory drilling campaign there is a physical impossibility to cover the enormous amount of acreage with any degree of detail and therefore it may be advanced that a good many of the lands returned to the Government will be still good concessions to have.

As you may gather from my letter N° 108, the structural setting of the Western part of districts Maracaibo and Mara is very similar to the setting just discussed, the assime-

trical uplift of La Paz - Mara will play a similar role to the Tarra anticline, limiting to the East the folded structural depression. As stated in that letter well Calentura n° 2 of the Obinoco Oil Co. (Pure oil) found the Cretaceous limestone near the bottom of the trough impregnated by very heavy oil, probably the highest hydrocarbons migrated westward (updip) to form important oil accumulation in any small fold existing between La Paz and the foot-hills. I know the geophysical surveys carried on by the Shell show some of these minor folds west of La Paz, but in any case straight geological thinking leads to believe that a fair amount of deformation should occur in a tectonic block resisting the opposite pressures of the Sierra de Perijá, assymmetric toward the East, and the La Paz - Mara uplift, assymmetric toward the West.

The land west of La Paz is now open and it is a fair risk for Cretaceous oil. North of the Mara field there are some open tracts of land in the upthrust side, these are now very interesting pieces of land and competitive bidding should be expected when, and if, a new concession period is open.

The oil obtained by Shell in W. Tarra is very light and averages 42° A. P. I.

In the northern Maracaibo area the Guasare Oil Co. brought in wildcat Amana N° 3 (see my letter n° 114 pg. 2.) good for about 350 bbls. of oil of 31° A.P.I.

Several years ago the Gulf Oil Co. drilled well Amana n° 1 which flowed something like 30 bbls. daily of very

heavy oil. Following this poor result operations in that area have been suspended since 1929.

In 1943 the second well Amana N° 2 was drilled and resulted dry. Operations here were conducted by the Drilling and Exploration Co. of Dallas (Texas) under agreement with the Mens Grande Oil Co. and Venezuelan Atlantic Refining Co. Later a new oil Company was formed by the Drilling & Exploration Co. (1/4), Lion Oil Rfng. Co. (1/4) and the Atlantic (1/2), apparently the Gulf contributed the land for an override royalty. T

Amana n° 3 was drilled to 5,300 feet and found oil in two Eocene sands. Gravity averages 30° A.P.I. T

The Socuy basin, where Amana n° 3 was drilled, has little or no connection with La Paz line of structures.

Near the headwaters of río Limón a N.-S. trending, prominent horst branches off from the main Perijá trend leaving in between a V shaped basin called the Socuy or the Guasare basin. The main Perijá ridges expose in succession Eocene, Cretaceous, and pre-Cretaceous rocks to the granite basement exposed in Colombia; the eastern horst or Cachirí horst brings up the Cretaceous and possibly some Jurassic, La Quinta formation. In the Socuy basin only Eocene and Oligocene rocks are exposed, the beds are gentle and most of the structures broad and not very disturbed.

Amana n° 3 is located in one of these anticlines and the oil was found in the middle Eocene Mostrencos formation. According to the western Maracaibo known production this is a T

very high oil occurrence, better petroliferous horizons are known in the Guasare formation of Midway (Paleocene) age and of course in the Cretaceous limestones. There is no doubt as to the possibility of reaching the Guasare formation at a commercial depth but the Cretaceous may easily be out of reach for the time being unless the stratigraphic sequence has a reduced thickness in that vicinity.

These two oil strikes are the latest additions to the Maracaibo basin possibilities. They open up new trends of discovery in stratigraphic as well as in structural aspects and prove that a good many concessions in the Maracaibo basin were too-hastily renounced; Maracaibo still retains the first place among the Venezuelan producing areas and it is probable that this place will be retained for many years to come, in spite of the efforts to develop Eastern Venezuela.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred.

CGdeJ/pt.

Caracas, November 23rd., 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention: Mr. John D. Hale.

Dear Sirs :

As the exploration and wildcatting in the State of Guarico is becoming more and more important, I believe it is interesting to summarize the subsurface geology of this region, derived entirely from well sections :

Carrizal - Hato Viejo formation.- Although this formation was somewhat described in my Geological Report n° 5 - Review of the Geology of Northeastern Venezuela - the following additional remarks are considered interesting.

As far as it is known at present the Carrizal sediments extend about 250 Km. from E. to W. with a width of about 80 Km. It seems probable that the Carrizal basin was connected with the Northern seas through a gap located toward the NE.

In earlier Carrizal the basin was apparently restricted to the Western half, by a N.-S trending spur from the Guiana shield. Later the basin extended East of the town of Caicara by some 75 Km.

The Carrizal - Hato Viejo formation presents two distinct facies: an argillite facies and a sandstone facies,

the argillite is distinctly glauconitic and micaceous; the sandy facies is typically red, arkosic and only occasionally glauconitic. Both facies are interfingering and accordingly the sandy facies occur above and below the argillite.

The argillite yielded a rich mineral suite composed of biotite, chlorite, staurolite, glaucophane, garnet, zircon, and opaques.

Drilling has penetrated about 1,000 feet of Carrizal sediments but geophysical investigations revealed a greater thickness which, in the center of the basin, reach about 3,000 feet above the granitic complex.

The structure of the Carrizal has been studied with the aid of seismograph, both reflection and refraction. These investigations reveal several broad open folds with flanks dipping about 15° - 20° but the margins are sharp and suggest gravity faults in the underlying basement.

The Carrizal shows incipient metamorphism and every indication is that its surface was not only eroded but peneplained before deposition of the overlying Cretaceous. Due to this unconformable relationship between the Cretaceous and the Carrizal, the latter is generally considered pre-Cretaceous but a closer age determination must await paleontological evidence.

The strongly arkosic nature of the Carrizal sandstone and the biotite contents suggest a granitic source of sediments. However, detrital minerals such as glaucophane and staurolite indicate the presence of metamorphic rocks among the distributive

rocks. It seems the most reasonable hypothesis to assume that Guiana was this distributive province and the the Guiana shield profile was already near equilibrium when Carrizal deposition was initiated, the erosion and continued peneplanation of the elevated parts of the shield contributing to the Carrizal sedimentation. The sandy facies indicates erosion under arid climatic conditions, both the argillite and sands suggest very limited marine environment.

From a lithological point of view the Carrizal - Hato Viejo formation is comparable with the La Quinta formation of the Venezuelan Andes, H. D. Hedberg made that suggestion in an earlier publication. Because both groups of sediments are considered pro-Cretaceous it is possible that a large percentage of both formations was deposited contemporaneously.

Whenever the wells have penetrated completely the Carrizal formation it has been found resting unconformably on crystalline rocks of the Guiana shield type.

No oil indications have been reported from this formation.

Temblador formation.- This subsurface unit has been described in previous reports such as the already mentioned Geological Report n° 5. The following characteristics apply to Southern and Central Guarico.

In contrast with the highly disturbed Cretaceous of Northern Guarico, the subsurface Cretaceous met in drilling shows very little disturbance, and the sequence lies gently on the foreland region of the North slopping Guiana shield. How-

ever, the Cretaceous section encountered by drilling is incomplete, not only because of erosion of the upper part before the overlapping Oligo - Miocene sediments were deposited, but also because the most complete Cretaceous sequence could only be reached under a thick Tertiary cover where deep drilling has not advanced enough.

The base of the subsurface Cretaceous, or Temblador formation, is characterized by a basal conglomerate composed of quartz grits, generally coarse grained with crystals frequently more than one eighth of an inch in size. These crystals show a great color variation, usually light blue with amethyst tints, a color which gives a characteristic appearance to this quartz grit phase. Smoky and pink crystals are also frequent while honey - colored grains are present near the base.

Episodes of finer clastic sedimentation are represented by carbonaceous clays and silts interbedded with lenticles of fine sands.

The thickness of this quartz-grit zone is about 300 feet.

On top of the basal conglomerate there is a section characterized by the abundance of glauconite. Marine conditions prevail during this phase and the maximum depth of the water was apparently reached near the middle of the interval because this part is lithologically characterized by shales and thin limestones. The sandstones present in this interval are generally fine grained and calcareous because this time was a time of quite deposition on a slowly sinking self.

The thickness of this glauconitic interval is about 600 feet.

On top of these sediments occur a truly marine phase in which shale and limestone are the dominant deposits. Marine conditions, however, were not suitable for reef formations and the limestone horizons were deposited in extensive sheets of surprisingly uniform thickness. Fossils are abundant and frequently from true coquinas. Chert is present but not abundant.

The thickness of this limey zone is about 150 feet.

Near the top of the formation the Cretaceous seas were again shallower and the sedimentation is characterized by fine and medium grained calcareous sandstone. Glauconite is comparatively rare.

Preliminary analysis of the subsurface Cretaceous sequence shows that all four zones carry a heavy mineral suite of zircon, rutile and tourmaline with frequent anatase. Brookite, chlorite and epidote are rare. Garnet and fluorite very rare. The zircons are usually colorless, fractured and worn.

The basal conglomerate is apparently unfossiliferous but the remainder of the formation carries many fossil forms, among the macrofossils are *Ostrea* (*Exogira*), *Inoceramus* and *Ammonites*, among the forams, *Bulimina*, *Gumbelina*, and *Globotruncana*. The glauconitic zone is probably middle Cretaceous Aptian - Albian in age, the remainder is classified as Cenomanian and younger.

The Cretaceous of Southern Guarico is practically

undisturbed showing everywhere a remarkable flat attitude. In the extreme South the Cretaceous appears to have an off-lap relationship to the sloping shield.

The Temblador formation has been found petroliferous in many wells but so far all these wells contain nothing but tar oil with the only exception of well M-7 of Las Mercedes field which is a commercial producer. The production here comes from the limestone zone. It appears that the predominantly sandy facies changes Northward to more limey intervals and, therefore, it is expected that the best prospective areas for Cretaceous production are located N. of Las Mercedes. Only two tests North of this line have been carried down to the Cretaceous and it is too-early to judge about the commercial possibilities but there are great hopes for Cretaceous production in a near future.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred.
Enclosures: 1 columnar section.
CGdeJ/pt.

Caracas, November 30th., 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention: Mr. John D. Hale.

Dear Sirs :

Continuing with the summary of Guarico geology started last week I shall consider now the Tertiary met in drilling.

The outstanding characteristic of the Tertiary sediments laying unconformably on the Cretaceous is the abundance of coarse quartz grits with many blue grains, although blue and smoky crystals are also present. There are also many leaf impressions, carbonaceous sandstones and occasional thin coal seams. A few mollusks have been collected, mostly arcid, dosinid, and tellinid non diagnostic; the general aspect of the faunas suggests a Miocene age but it is possible, from regional consideration that the Oligocene is also represented.

The mineral suite seems to be greatly impoverished.

The thickness of this basal member is about 500 feet.

This is the ^{La Parua} ~~Rebozo~~ formation producing oil at Las Mercedes and Grico, ~~and so far the best oil prospect in Central Guarico.~~

The overlying member is essentially a shale development although sands are known in this shale throughout the

Tertiary basins of central and eastern Venezuela. The shale is typically dark gray and well-bedded after selective reaction to weathering. Apart from true sand developments within the shale there are frequent zones of inwashed sand lenticles whose arrangement suggests current bedding on muddy foreshores.

The shale is fossiliferous, with frequent mollusks, foraminifera, and ostracods. The foraminifera, especially in the lower part of the shale, appear in a characteristic assemblage of Globorotalia and Textularia which can be followed as a biostratigraphic unit along the geosyncline into eastern Venezuela and across to Trinidad. Correlation with Trinidad Brasso faunas suggests that the lower part of the shale may be as young as Middle Miocene. (It is noteworthy that Middle Miocene beds in Trinidad are sometimes transgressive over Oligocene beds). Faunas in the upper part of the shale indicate an increasing frequency of brackish conditions. However, the greater part of the shale deposition was probably associated with a broad coastal plain of mature profile and deposition took place largely in shallow marine water.

It is difficult to obtain heavy minerals from the shale, and sandstone members have not yet been examined.

The dominant feature of the overlying zone is the shallowing of waters as compared with the underlying one. Lignites are pronounced in this zone and as many as twenty lignite cycles may be counted in the deeper parts of the eastern Venezuela geosyncline. Marine episodes are frequent but

the brackish nature of invading waters is attested by persistence and occasional abundance of the Rotalia beccarii group. Sands are usually soft, while greenish tints suggests chemical change under intermittent sub-aerial conditions.

In deeper parts of the geosyncline, the age of these beds may be from upper Middle Miocene to Upper Miocene, but in shallower parts there are indications that the time range for similar conditions was Upper Miocene.

Epidote, chloritoid, and glaucophane have been recorded. These minerals are significant in indicating that intrusion, metamorphism and uplift of the Serrania del Interior had been considerably developed by Lower Miocene times. By the Middle Miocene, the Serrania del Interior was contributing detritus to the Late Tertiary geosyncline.

Marine episodes are still of note in the overlying beds, but faunas indicate an increasing brackishness of waters, while long periods of emergence under tidal conditions are apparent in the dominant mottled clays of this interval. Calcareous sandstones are common and persist to the surface where they are included in the Cucharo formation.

Both in shallower and deeper parts of the late Tertiary geosyncline, it is marked by the appearance of reworked arenaceous foraminifera some of which may be from beds as old as Cretaceous.

Epidote and glaucophane enrich the mineral suites. The Serrania del Interior therefore continued to supply detritus

to the geosyncline in Upper Miocene times. However, uplift had broadened to such an extent that unmetamorphosed sediments ranging in age from Cretaceous to Miocene were also supplying detritus seas.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred.
Enclosures: 1 columnar section.
CGdeJ/pt.

Caracas, December 21st., 1946.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention Mr. John D. Hale.

Dear Sirs :

On my return from Western Venezuela, where I spent a few weeks on an inspection trip in the fields of the Western Maracaibo area, I am continuing my interrupted correspondence.

The outstanding news are two oil strikes by Venezuelan Atlantic Refining Co. in wildcats Pelayo n° 1 (State of Anzoategui) and Tucupido n° 1 (State of Guarico). Thus the string of dry holes, which was becoming a characteristic of Atlantic's operations, has been happily broken, and new possibilities for future exploration open.

As you know from previous letters, Pelayo n° 1 was located in the Northeastern extension of the Oficina fault trend, east of the Leona field. Pelayo n° 1 produces from the prolific Oficina formation and tested about 500 bbls. through 1/4" choke. The crude oil is similar to Leona's.

Pelayo's discovery is very important inasmuch as it extends the oil possibilities of the Oficina trend considerably toward the East, being located about 12 miles East of Leona. Before the successful completion of this well many oil men were

very skeptical about finding a favorable sand development basinward, i. e. Eastward of Oficina, as the sand conditions in Leona are worst than at Oficina and considerably poorer than Guara's. L7
A test drilled by Socony Vacuum in 1938, Soledad n° 1, E. of Leona did not find any sand development in the Oficina formation and this result added considerable weight to the large renouncement of concessions in Southwestern Monagas.

Nevertheless, Soledad n° 1 was located very far (about 60 miles) of Leona to yield any accurate information on sedimentary changes, and the depositional character of the Oficina formation does not justify the assumption of a total and general sand disappearance. The Oficina formation is fundamentally a stratigraphic unit overlapping from North to South, of mixed environment, somewhat continental (lignites) and mostly shallow marine; the sands are lenticular, some of the major units carry throughout considerable acreage although showing important variations in the net sand content, but the thinner porous intervals are true lenses of a very limited lateral extent within the small Oficina field area. There are some indications of channels filled by sand.

Tucupido n° 1 is a smaller producer. It tested 350 bbls. through 3/8" choke, oil of 39.2° API gravity, from 20 feet of net sand found at 6700 feet, the gasoil ratio is low, L7
↓ 960, and the pressure also low. This test is however far more important than Pelayo because it is located in an entirely new territory of East-Central Guarico.

Back in 1937 the Atlantic, on contract with Standard of Venezuela (Creole) drilled Las Ollas n° 1, test located about 45 miles E.-SE. of Tucupido. Las ollas n° 1 found some very light oil but it was not an oil well, in fact it should be called a gas well on account of the very high gas-oil ratio, 5.571 through 3/8" choque. The testing of Las Ollas was by no means conclusive because of many mechanical difficulties; as the gas horizons were found very deep, the work in this area was stopped due to shortage of materials. T.

The next, nearer, producing area, Las Mercedes field, is located about 37 miles W.-SW. of Tucupido n° 1.

This test will favorably reflect on Socony's, Sinclair's and Phillip's acreage, and will greatly bust the prices of some land located North of Valle La Pascua.

Both oil discoveries, Pelayo and Tucupido, are in Pantepec's acreage and therefore subject to the provisions of the Atlantic-Pantepec agreement. The position of Pantepec is thus becoming stronger.

Changes in the income tax law.

The new Congress (see my letter n° 117 of Nov. 9th.) will shortly discuss the reform of the Venezuelan income tax. This will greatly affect the Oil Companies because these concerns will be the only ones to bear the proposed increases.

You may remember how last year, on Dec. 31st., the Revolutionary Government passed a decree taxing by 20% all the profits in excess of Bs. 2.000.000,00. It was said at the time

that this was an extraordinary tax, only for 1945, and that it will not be repeated again. Nevertheless, that New Year's present will be repeated now with the new wrap of the income tax law. (See my letter n° 92, 1/19/46).

The last year's tax caused considerable discomfort on Oil Companies mostly because of its unexpected nature and its retroactive character. This year, on the contrary, the tax will be received, if not with joy, at least without surprise, because the Oil Companies have been informed about it, and the Government officials have had some meetings with oil executives discussing the terms and figures of the proposed raise.

The general lines of the proposed change are as follows. For incomes up to Bs. 500.000 there is a small reduction in the income tax, for higher incomes, above Bs. 1.000.000,00 which are the only ones affecting the Oil Companies, the progressing scale will be as follows :

Bs.	1.000.000	to	1.400.000	9.75%
"	1.400.000	"	2.000.000	10.50%
"	2.000.000	"	2.800.000	11.50%
"	2.800.000	"	3.800.000	12.50%
"	3.800.000	"	5.000.000	13.50%
"	5.000.000	"	6.400.000	14.50%
"	6.400.000	"	8.000.000	16 %
"	8.000.000	"	10.000.000	17.50%
"	10.000.000	"	14.000.000	19 %
"	14.000.000	"	20.000.000	21 %
"	20.000.000	"	28.000.000	23 %
	more than		28.000.000	26 %

The proposed law considers a reduction of 4% on some of the amounts re-invested in Venezuela.

Same as in December 1945, the Government considers now that, following this increase, the tax system of Venezuela is definitively stabilized. It is believed that this income increase will cost the Oil Companies about Bs. 100.000.000 per year.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayre
CGdeJ/pt.

Caracas, December 28th., 1946.

The Superior Oil Co.
930 Edison Building
Los Angeles - California.

Attention: Mr. John D. Hale.

Dear Sirs:

The following land changes have taken place during the last weeks :

The Government issued final titles in favor of the Venezuelan Oil & Transport Co., Ltd. on concessions AN-142, AN-145, AN-149, AN-150, AN-151, AN-152, AN-153, AN-154, AN-155, AN-156, AN-158, AN-159, AN-160, AN-161, AN-162, AN-163, AN-164, AN-165, AN-166, AN-167, AN-168, AN-169, AN-170, AN-171, AN-172, AN-173, AN-174, AN-175, AN-176, AN-177, AN-178, AN-179, AN-180, AN-181, AN-182, AN-183 and AN-184, all located in district Cagigal, State of Anzoategui.

The Government issued final titles in favor of Sinclair Oil Co. on the following concessions : S.112-1, S.112-2, S.112-3, S.112-4, S.112-5, S.112-6 and S.112-7, located in district Maturrín, State of Monagas.

The Cia. Consolidada de Petroleo presented for approval the map of concession SOSA n° 20, districts Sosa and Rojas, State of Barinas.

The Cia. Consolidada de Petroleo renounced concessions SOSA n° 13, SOSA n° 14, SOSA n° 15, SOSA n° 16, SOSA n° 17, SOSA n° 18 and SOSA n° 19, district Sosa, State of Barinas. These

large renouncements of land, following Socony's similar renouncements, indicate a growing doubt about the economic value of the Barinas-Apure basin. None of these concessions have been tested, in fact none of them, neither the ones renounced by Socony, have been thoroughly covered by geophysical surveys.

There is no question in my mind about the oil possibilities of the Barinas area, I believe oilfields will be found at shallow depths. But the problem is the outlet for that oil and the tremendous expenses involved laying a pipe line across the Venezuelan Andes, the economic aspect of the Barinas-Apure basin hinges, not on the existence of oilfields, but on the amount of oil to be obtained from them. If a big production could be built up in that area, the long and expensive outlet will easily pay by itself but as the operating expenses, taxes included, are steadily growing in Venezuela the production required to make out of Barinas a commercial oil territory is increasing to limits to make that exploration a risky adventure.

Oilfield installations.

The work in the Shell's refinery at Punta Cardon is progressing very fast. In the same Paraguaná Península, the Creole just started the work in their refinery of Amuay but they expect to finish ahead of the Shell because the latter will be held up by British manufacturers of refinery equipment. In Eastern Venezuela work on refineries has not started yet.

The Mene Grande Oil Co. is installing in the new Nipa field a discharge station with 4 storage tanks of 5,000 bbls. each, 4 storage tanks of 1,500 bbls. each, 6 gas sepa-

rators and 2 pumps. An exactly similar installation is under construction at the Caico field.

The M. G. O. is installing a 27 kilometers long, 10" pipe line, from Nipa to Oficina pump station.

The Phillips Venezuelan Oil Co. is erecting at Mata Grande (FT Monagas) two storage tanks of 20,000 bbls. each one.

The Texas Co. is erecting in the Tucupita field 3 crude storage tanks of 24,000 bbls. each, 2 crude storage tanks of 30,000 bbls. each, one fuel tank of 24,000 bbls. and one of 20,000 bbls. and 2 smaller gasoline storage tanks.

Drilling activities.

Wildcat VL-1 by Shell on the new water acreage Southwest of Tia Juana has been temporarily suspended at 10,824 feet. This test apparently found the Cretaceous, which is an interesting development in the Eastern part of the Maracaibo Lake basin. ↙ ↗

Recent drilling in Western Lagunillas, by Creole, showed that while the Miocene (Lagunillas and La Rosa formations) are dipping toward the SW. the Eocene was dipping toward the E. thus the "main sand", the most prolific producing horizon of the upper Eocene Potreritos formation, was found higher in the section in a Westward direction until in one of the last wells it was cut out by the post-Eocene unconformity. This "main sand" horizon is probably absent in Shell's acreage, and oil possibilities are thus restricted to middle and lower

Eocene in a comparatively thin section. The possibility of Cretaceous production is at present speculative because finding the top of the Cretaceous at 10,000 feet places the productive Middle Cretaceous formations near the limit of the reach of the bit. The thickness of the Cretaceous is not known in this area and whether the section is fully developed or has a reduced thickness, as in La Paz, is of greatest importance. Another possibility, yet to be explored is drilling the top of the Cretaceous uplift, disregarding the Eocene, in an effort to find the Cretaceous closer to surface.

I am taking advantage of this opportunity to wish you a happy and prosperous year of 1947 and with the Season's usual greetings I remain,

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred
CGdeJ/pt.

Caracas, January 18th, 1947.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention: Mr. John D. Hale.

Dear Sirs :

Following is a resume of wildcatting activities and developments through Venezuela :

Creole plugged and abandoned test hole LGE-5 in Lake Maracaibo at the depth of 8557', bottom in Eocene. The same Company abandoned test hole GXB-3, in Guárico at 6319'. According to my information the Creole did not meet much success in Guárico and up to date only dry gas has been obtained from these exploratory tests. It is, of course, too-early to judge about the value of the whole tract of land.

In Monagas, Creole completed and abandoned some slim hole wells drilled in a line directed Northward from Jusepin toward the mountains. Wildcat JX-2 North of Jusepin was abandoned at 10.181' in the Cretaceous.

One more exploratory hole was started in Guárico named GXB-8 (see enclosed sketch) and another wildcat in Monagas JX-3 also shown in enclosed sketch map.

Shell's Curazao 2-A, East of Cabimas, deepest wildcat well in South America, was abandoned T.D. 15.106', bottom in Eocene. This well failed to reach the Cretaceous thus con-

firming the ideas about the great thickness of Eocene sediments East of the Bolívar coastal fields. The thickness of the Eocene is very important for the future of the Northern areas, i. e. Dto. Miranda, State of Zulia, and Northwestern district Buchivacoa, State of Falcón, which are at present open lands, drawing considerable attention on account of recent development in the Maracaibo basin. ✓

The Texas Co. abandoned wildcat Camaz n° 1 in Northern Guarico in Cretaceous, at 9054', and spudded in wildcats Grico 4 and 6 shown in enclosed sketch.

The Venezuelan Atlantic Refining Co. abandoned wildcat Salva n° 1, in Monagas, at 7799'. Well Jaito n° 1, also in Monagas, blew out and damaged hole, efforts to continue drilling were unsuccessful and the derrick was moved about 150 feet to spud in alternative well Jaito - 1A. ✓

Cia. Consolidada de Petroleo abandoned test hole Varsa - 1 in the State of Monagas, at 8536', and spudded in wildcat SBS-126, South of Santa Barbara field. ✓

Phillips abandoned two holes near its recent Monagas strike; PT-5 at 6581' and PT-6 at 6220'. ✓

Barnsdall spudded in a new wildcat in Guárico, named Pelicano n° 1. Please find enclosed a sketch map of this location. ✓

Mene Grande (Gulf) spudded in Tacata 4 as shown in enclosed map. ✓

Pantepec's - French Co. contract.

There is a certain amount of discomfort about the Pantepec's contract with Cie. Française des Petroles, by which the latter will buy the entire Pantepec output for the coming three years. The fact that Pantepec will sell its oil to the French Co. or to any other concern, at its will, it is unimportant; but the contract provides for the financing of Pantepec's share on drilling 75 wells in the fields of El Roble and Malata and in exchange for these expenditures the French Co. obtains the option to purchase one half of Pantepec's half interest in Pantepec - Creole and Pantepec - Atlantic contracts, it is considered that eventually the French Co. will be as good as co-owner of the Pantepec's interests.

It is said that the French Co. is, at least partly, owned by the French Government and as the Venezuelan law specifically forbids foreign governments to own or to operate oil concessions, it is feared that the Venezuelan Government may take a drastic action against Pantepec holdings, or at least that the Venezuelan Government has legal grounds to undertake such an action.

Review of Venezuelan fields.

Beginning next week I will make a systematic review of all the Venezuelan Oil fields.

Very truly yours,

Clemente González de Juana.

CC/W.B.Jayred
CGdeJ/pt.
Enclosures: 4 sketch maps.

Caracas, January 25th, 1947.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California.

Attention: Mr. John D. Hale

Dear Sirs :

As stated in the last paragraph of letter n° 122 I am beginning a review of the Venezuelan oilfields. This is my first letter on the subject.

The Tarra anticline, briefly discussed in my letter n° 116 dated October 26th. 1946, is located about 240 Km. SW of Maracaibo, in district Colon, which forms the SW. extension of Maracaibo basin, near the border line of Colombia. Three oilfields are producing from this line of uplift, which are described below from South to North.

The Las Cruces field is an anticline thrust toward the East. The thrust fault outcrops East of the producing area, in a N 15° E direction which is also the mean direction of the anticlinal crest, the fault plane dips about 60° W but Westward it becomes much gentler showing only a dip of about 10° W in the producing area, central part of the oilfield, still farther west the fault plane becomes steeper and in general conforms itself to the prevailing dip of the formation thus becoming a true dip-slip fault.

The displacement along the fault plane reaches in places 4,600 feet.

Branching off the main thrust, a second smaller fault runs in a sub-parallel form about 300 feet below it, showing a minor displacement with the lower, under thrust block.

These two major fractures determine three blocks, all of them productive: the overthrust block, the intermediate faulted block and the underthrust block.

The fault pattern is completed by some E - W compensational fractures.

The top of the structure is occupied by outcropping Mirador Sandstone (Eocene) flanked by the Sandy Shale formation (Carbonera formation of Sutton) of upper Eocene age. The Eastern flank above the thrust is very steep, vertical for practical purposes, but the Western flank is gentle showing about 10° W. in the central part of the fields; toward the West it steepens to about $50 - 60^{\circ}$. The downthrust blocks show comparatively gentle dips averaging $25^{\circ} - 30^{\circ}$ E.

The Las Cruces field obtains production, in descending order, from the Mirador sandstone and the Third Coal horizon above the main thrust, from the Sandy shale (Carbonera) formation and the Mirador sandstone in the intermediate faulted block and from the Sandy Shale, Mirador and Third Coal horizon in the underthrust block. The major part of the production, however comes from the Mirador Sandstone, in the underthrust block.

The porosity of the Sands averages 17% in the whole producing section. The permeability shows striking changes

from 16 to 900 millidarcys in the Third Coal horizon and from 40 to 2,000 millidarcys in the Mirador.

About 5 Km. North of Las Cruces, domal closure is again present against a N - S directed, West dipping thrust, at El Cubo.

The stratigraphic sequence and structural characteristics of El Cubo are similar to Las Cruces. Both fields are grouped under the name of Tarra.

The oil of Tarra varies from 24° API to 33° API, only a small production obtained above the fault is heavy and has an average of 19° API. The field average is 30.6° API.

The proven territory of Tarra is about 2,570 acres, production to the end of June 1946 amounted to 61,110,000 bbls. and the calculated reserves are of the order of 22 millions of barrels.

There is little hope to extend the Tarra fields beyond its present limits, and possibilities for deeper production are also slim. Well T-99 was carried down to 8617' where the lower Cretaceous Tomon formation was reached, the middle Cretaceous limestones ~~were barren~~ of oil.

The Los Manueles field is located in the same anticlinal trend about 10 Km. North of El Cubo. It is a thrust anticline somewhat similar to Las Cruces but less complicated. The thrust plane has a mean strike N 30° E and the structure shows a domal closure against the thrust plane. The fault dips about 40° toward the ^{West} East, with a maximum displacement on

the thrust plane of 3,000 feet. Small, compensational, cross faulting directed SE. complete the faulting pattern.

Outcropping in the crest of the uplift is the Miocene Guayabo group followed by the lower Miocene to Oligocene, locally called upper shales. The next formation called Sandy Shales (Carbonera formation) is reached by the wells from 2,300' to about 2,700': only the lower part of this formation, which is reached by wells from 3,000' to 3,500', is productive. Below the Sandy Shales is the main producing formation or Mirador Sandstone. The Mirador presents an upper sand group about 150 feet thick which is productive, followed by a shale interval about 100 feet thick, below the shales is the second sand zone reaching to the base of the formation, of which only the upper third part is productive because of the position of the water table.

The underthrust block is barren of oil.

The Eastern flank of Los Manueles is very steep, practically vertical and affords no oil possibilities, the production is concentrated in the Western flank which is unusually gentle averaging about 10° WNW.

The porosity of the sands averages 17%, the permeability is lower in the upper horizons of the Sandy Shale group where they vary from 9 to 125 millidarcys; in the Mirador sandstone permeability varies from 40 to 2,000 millidarcys.

The gravity of the oil is about 39° API in the Sandy Shale formation, averages about 30° in the upper sand

zone of the Mirador formation and about 34° API in the lower sand group of the Mirador.

The production of Los Manueles to July 1946 reached 36,540,000 bbls. and the proven reserves are about 13,860,000 bbls. There is little hope of extensions.

Production of Tarra - El Cubo group during 1946 has an average production of 15,629 barrels per day and a total cumulative production of 100,425,237 barrels.

Prospective areas.

As stated above, the Las Cruces field has been drilled to the Cretaceous without success. This is probably due to inadequate structural setting due to the very complex thrusting pattern. Westward, in the gentler area corresponding in the North to the Colombian Sardinata depression, conditions are more favorable. The C.D.C. (Shell) is already drilling an important wildcat called WT-2. (See my letter n° 116) which tested the upper part of the Cretaceous section for a production of about 2,000 bbls. of 42°API oil. The well is now being deepened to test the lower Cogollo group and possibly the Tomon formation but considerable difficulty has been found in drilling, and the proposed depth has not been reached yet.

Another fair prospective land is located E. of the Tarra anticlinorium. As the intensity of folding decreases eastward, away from the mountains, better structural conditions should be expected. The main difficulty to be anticipated is

the thickness of the young formations which increases considerably lakeward.

All the fields considered and most of the land of district Colon is owned and operated by the Colon Development Co., a Shell's subsidiary.

Very truly yours,

Clemente González de Juana

CC/W.B.Jayred,
Enclosures: 2 maps and 1 cross-section.
CGdeJ/pt.

Caracas, February 22nd., 1947.

The Superior Oil Co.
930 Edison Bldg.
Los Angeles - California,

Attention: Mr. John D. Hale.

Dear Sirs :

Following is a summary of activities in the Petroleum industry during 1946, taken from Government's records.

a) Concessions.- No petroleum concessions were given by the Venezuelan Government during 1946.- Resulting from previous contracts there was the following land movement, all figures in hectares.

	Areas to be selected.	Explor. & Exploit.	Exploitation	Totals
Total acreage to 31/12/45	835,175	5,242,390	5,669,203	11,746,768
Renouncement & caducity 1946		- 452,065	- 8,560	- 460,625
	835,175	4,790,325	5,660,643	11,286,143
Selections on explor. acreage		- 10,000	↓ 5,000	- 5,000
Totals 31/12/46	835,175	4,780,325	5,665,643	11,281,143

b) Petroleum production.- Total petroleum production during the first 11 months of 1946 amounted to 56.410.357 cubic

meters (354.821.146 bbls.) and the expected total for 1946 amounts to 61,910.357 cubic meters (bbls. 389,416,146) which is about 20.41% higher than 1945 production, and the highest yearly production ever obtained in Venezuela.- The cumulative Venezuelan production from 1917 to the end of 1946 amounts to 570,639,789 cubic meters (Bbls. 3,589,324,373) with a total sales value of Bs. 13,426,205,090.

c) Venezuelan reserves.- The government technicians estimate the Venezuelan oil reserves for the end of 1946 at about 8,500 millions of barrels, which is about 12% of the total world reserves. The relationship between production and reserves during the last three years is shown below :

Years	Production	Estimated reserves	Production/Reserves ratio.
1944	40.7	1,061.4	3.8 %
1945	51.5	1,118.6	4.6 %
1946	61.9	1,250.-	5.0 %

All figures in millions of cubic meters. 1 cub. met. = 6.29 bbls.

Thus the percentage of production to reserves is increasing although the latest figure, 5%, is not only acceptable but considered low for the Venezuelan oil industry.

d) Exports.- The petroleum exports during 11 months reached 50,782,932 cubic meters (bbls. 319,423,642) and the amount of oil exported during the 12 months of 1946 is expected to reach 351 millions of barrels.

The exports of refined products during the same 11

months lapse reached 3,922,469 cubic meters (bbls. 24,672,330) whilst the total exports for 1946 are expected to reach about bbls. 27,500,000, showing an increase of about 2.87% on the previous years.

The distribution of exports was as follows :

Destiny	Crude oil	Refined products
Aruba	40.48 %	7.95 %
Curacao	25.73	34.34
U. S.	25.34	3.46
Canada	1.69	.25
France	1.69	..--
Holland	.61	1.29
England	1.18	13.12
Argentina	1.26	15.95
Sweden	.76	2.45
Canary Islands	.68	1.55
Uruguay	.25	.90
Portugal	.13	.40
Brazil	.02	10.40
Belgium	.04	.79
B. W. I.	.14	.56
Africa	..--	3.89
Norway	..--	.51
Denmark	..--	1.59
Switzerland	..--	.56
Totals	100.00 %	100.00 %

The exports by districts were as follows :

FROM MARACAIBO:

Creole	20,787,245	cubic meters
V. O. C. Ltd.	11,029,132	" "
M. G. O.	2,777,695	" "
Colon Dvp. Co. Ltd.	806,935	" "
British Controlled	56,442	" "
N. V. P.	73,210	" "
Sun Oil	13,415	" "
Caribbean	648,067	" "

Total Maracaibo 36,192,137 cubic meters
 =====

FROM CARIPITO:

Creole	1,676,161	cubic meters
Creole - M. G. O. (Temblador)	341,819	" "
Texas	40,003	" "

Total Maturín 2,057,983 cubic meters
 =====

FROM PUERTO LA CRUZ:

Creole - M. G. O. Socony	11,463,822	cubic meters
Consolidada	1,615,861	" "

Total Puerto La Cruz 13,079,683 cubic meters
 =====

e) Refining.-- The amount of petroleum treated in Venezuela during the first 11 months of 1946 reached 5,147,046 cubic meters (bbls. 32,374,919) and the total figure for 1946 is expected to be about 35,500,000 bbls.

The amount of crude refined in Venezuela is equivalent to 9.1 % of the total production showing a decrease in the proportion of crude refined in 1945 of 1 %. This decrease is due to the great increase of production during 1946 which was not paralleled by the refining.

Following are the statistics of refining in Venezuela.

Refineries	January	February	March	April	May	June
San Lorenzo (Shell)	155.400	139.481	159.816	152.927	159.646	148.384
Cabimas (M.G.O.)	4.088	3.321	4.712	3.911	3.671	3.825
La Salina (Creole)	149.514	43.003	47.506	46.917	47.939	44.553
El Cubo (Shell)	2.459	2.638	3.030	2.762	2.607	2.593
El Mene de Mauroa (B.C.O.)	105	79	83	71	73	75
Caripito (Creole)	190.687	216.494	239.990	202.296	274.675	250.420
Oficina (M.G.O.)	1.824	1.573	1.545	1.510	1.578	1.519
Guarico (Socony)	301	299	366	313	379	377
Totals:	504.378	406.888	457.048	410.707	490.568	451.746

=====
All figures in cubic meters.

Refineries	July	August	Sept.	Oct.	Nov.	11 months
San Lorenzo (Shell)	152.355	147.261	157.965	170.764	166.819	1.710.818
Cañinas (M.G.O.)	3.266	4.967	4.243	3.879	3.920	43.803
La Salina (Creole)	48.289	47.924	46.413	27.134	44.953	594.145
El Cubo (Shell)	2.586	2.652	3.086	2.498	2.789	29.700
El Mene de Mauroa (B.C.O.)	77	90	74	81	72	880
Caripito (Creole)	288.326	240.411	292.642	244.240	306.325	2.746.506
Oficina (M.G.O.)	1.430	1.506	1.456	1.561	1.604	17.106
Guarico (Socony)	386	383	418	408	458	4.088
Totals:	496.715	445.194	506.297	450.565	526.940	5.147.046

All figures in cubic meters.

F) Drilling.- During the first 11 months of 1946, 593 wells were spudded in Venezuela. Among them are of particular significance the Mata Grande wells by the Phillips Venezuelan Oil Co. in Monagas and the La Ceiba wells by M. G. O. in Anzoategui. There are also worthy of mention the Atlantic's wells Tucupido n° 1 and Pelayo n° 1, and the Mene Grande's discoveries Nipa n° 1 and Caico Seco n° 1.

Following is a statistical summary of the drilling activities.

District	Company	Wells started	Wells completed	Wells drilling 1/12/46.	Producers 1/12/46	Wells abandoned 1/12/46
Maracaibo	Creole	73	68	7	1.278	174
	V. O. G.	110	106	14	2.231	110
	M. G. O.	27	24	5	718	35
	C. P. C.	10	11	3	484	27
	C. D. C.	16	15	3	192	32
	O. O. C.	0	1	0	3	5
	R. E. C.	4	1	5	0	0
	Gussare	3	1	2	2	1
	British	0	0	0	225	170
	Others	0	1	0	0	460
	Sub-total	<u>243</u>	<u>228</u>	<u>39</u>	<u>5.133</u>	<u>1.014</u>
Maturín	Creole	140	141	12	909	122
	Consolidada	25	29	3	197	8
	M. G. O.	31	30	6	94	7
	Texas	6	6	1	10	4
	Ven. Atlant.	6	5	2	1	7
	Phillips	9	3	4	3	0
	Others	6	4	0	0	31
		Sub-total	<u>223</u>	<u>218</u>	<u>28</u>	<u>1.214</u>
Barcelona	Creole	28	23	10	120	21
	M. G. O.	44	45	11	428	49
	Socony	32	29	7	59	13
	S. A. M.	16	19	4	25	9
	Texas	0	0	0	4	0
	Car. Pet.	3	3	1	1	3
	Pet. Manap.	0	0	0	1	1
	Others	0	0	4	0	7
		<u>123</u>	<u>119</u>	<u>37</u>	<u>638</u>	<u>103</u>
Guárico		4	0	6	-	-
	TOTAL	<u>593</u>	<u>565</u>	<u>110</u>	<u>6.985</u>	<u>1.296</u>

Very truly yours,

Clemente González de Juana

CC/W.B. Jayred
CGdeJ/pt.

THE SUPERIOR OIL COMPANY

EDISON BUILDING

LOS ANGELES

March 8, 1947

Dr. Clemente Gonzalez de Juana
Apartado No. 1554
Caracas, Venezuela, S. A.

Dear Dr. Gonzalez:

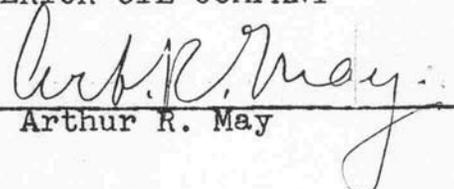
At present you are sending one copy of your report to Mr. Jayred at Houston, and a second copy to Mr. Hale at this office. In the future will you please send a third copy to Mr. J. P. Adoue, The Superior Oil Company of Columbia, Apartado Aereo 4809, Bogota, Columbia, S. A.

Will you please send the copy to this office in care of The Geological Department instead of to the attention of Mr. John D. Hale as in the past. Mr. Hale has been transferred to another office of the company and there may be some confusion if you continue to send the report in care of Mr. Hale.

Sincerely yours,

THE SUPERIOR OIL COMPANY

BY:


Arthur R. May

ARM:EJ

cc:Mr.J.P.Adoue

*Last. No. 124 / 125 - March 15th.
22d Feb. 1947*

THE SUPERIOR OIL COMPANY

OF COLOMBIA
BOGOTA, COLOMBIA

March 12, 1947

Dear Doctor González:

We are in receipt of a submittal for sale to the Superior Oil Company of an oil field, known as "Hombre Pintado", owned by the British Controlled Oil Fields, Ltd.

The following is a portion of the letter of submittal, which describes said property:

"I have before me the report on the Venezuelan oil properties and will give you some of the salient features of the deal herewith as I read it:

"These properties lie Northeast of Lake Maracaibo in the state of Falcon and supposed to be in the same large sedimentary basin. The oil field discussed is known as the Hombre Pintado, and is owned by British Controlled Oil Fields, Ltd. who drilled their first well here in 1926. In 1927 and 1928 the Standard Oil Coy. of Venezuela drilled four wells here, one of which has produced more than 250 thousand barrels of oil. Then in 1937 British resumed drilling and have to date of this report drilled 371 wells, which do not average but 1000 feet in depth. Of these 202 are producers now. These wells have produced a total of 29,205,000 barrels of oil. No deeper wells than 2000 feet have ever been drilled, but the geology of the area indicates that the Cretaceous would produce here around 6000 feet. There is Cretaceous production within a few miles of this property, some of the wells making 5 to 6 thousand barrels each per day.

"The present holdings of this company are for 40 years from January 9, 1945, granted by the Venezuelan Government under the Venezuelan Petroleum Law of 1943, and cover 3,063 hectares. These concessions are called Exploitation Concessions and are subject to a surface tax of 5 bolivars per hectare each year for the first 10 years. 10 Bs for next 5 years, 15 Bs for next 16 years and 39 Bs for the balance of concession. In addition a royalty of 16 2/3 per cent in cash or oil at option of government. (This has been reduced to 4 per cent temporarily by government to aid this company in financial distress). In addition further areas adjacent to the above area, and totalling 55,953 hectares, will be re-granted to these people by the government, from areas surrendered, and will be called Exploration Concessions.

"The Exploration Concessions confer the right for a period of 3 years from the date re-granted, to explore and make geophysical investigations, etc. There will be a tax of 2 Bs per hectare per annum on these concessions. After selection from these Exploration Concessions has been made, they will be known as Exploitation Concessions. The British company will furnish the buyer with all their geophysical findings, et cetera on this 55 thousand hectares.

"General Description: Roads have been built and maintained thru and connecting these concessions, and a railroad to the deep water terminal on Lake Maracaibo (30 miles away) has been built. Here a jetty has been built and tankers are loaded. Pipelines to this terminal and storage tanks, all sorts of administration buildings, etc. warehouses, machine shops, hospitals, electrical installations, houses for employees, commissaries, water and electric lights.

"The appraised value of the improvements, buildings, plant, equipment, rolling stock, machinery, tools, launches, cars, trucks, tractors, railway equipment, instruments (medical, laboratory, survey, geophysical), pipelines, storage tanks, real estate, etc, etc, is \$3, 130, 444, or 784111 British pounds.

"This property has produced more than 29½ million barrels of oil since discovered.

"The present production is about 1100 barrels per day, the wells produced 363,686 barrels for the first 11 months of 1946. Production can be accelerated by cleaning out old wells and drilling new ones. Deepest production is 2000 feet."

I would greatly appreciate it if you would advise me from your general knowledge and information if it would be worth the time expended by myself and the geologists to come to Caracas from Bogotá to study this proposal.

Along these same lines I wish to call to your attention that we plan to come to Venezuela for a general study of the possibilities in the oil business there as soon as we have our organization running smoothly in Colombia.

I would greatly appreciate a reply at your earliest convenience.

Sincerely yours,

THE SUPERIOR OIL COMPANY OF COLOMBIA

BY Walter H. Mengden
Walter H. Mengden
Manager.

Dr. Clemente González de Juana
Apartado No. 1554 . 272
Caracas. Venezuela.

Puerto la Cruz, March 15th., 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

I am staying for a comparatively short period in Eastern Venezuela, but as this absence from Caracas may last slightly longer than planned, I will continue my correspondence from here.

In my last letter I reviewed various activities of the oil companies during 1946, as they are considered in the official circles. In this letter I will treat a few more matters under similar aspect, i. e. from the Government standpoint.

Taxes.

The total of taxes paid by the oil industry during 1946 amounted to about Bs. 517,637,614 (slightly over 155 millions of dollars) as follows :

Exploration taxes	Bs. 9,486,756
Initial Exploitation	" 8,150,858
Surface taxes	" 28,195,019
Exploitation (royalty)	" 244,073,500
Regular income tax	" ± 69,000,000
Extraordinary income tax	" 118,553,481
Various	" ± 40,178,000

Total Bs. 517,637,614

During the year of 1946 the prices of some American crudes, which are the reference for determining the commercial value of the Venezuelan crudes, and henceforth the value of the Venezuelan royalty, experienced three increases. On April 1st., 1946, prices went up \$.10, on July 25th., up \$.25 and on November 15th., up \$.10. As a consequence of the April and July increases totalling \$.35, the price of the fuel oil went up \$.41, favorable to the Venezuelan heavy crudes with high fuel content. Therefore the Oil Companies operating in Venezuela agreed to pay to the Government certain bonuses on crudes below 20° A P I. These bonuses fluctuated from \$.08 for the heaviest crudes to \$.01 for the lightest ones and lasted only to December 1946 when the latest increase in the prices of crude oil compensated the difference in price between crude and fuel oil.

The mean prices of Venezuelan crudes in the producing fields, as agreed upon in order to evaluate the Venezuelan royalty, were as follows :

	1940	Es.17.60	per cubic meter	(1 cub.met.=6.29 U.S.A.bbbls.)
	1941	" 17.70	"	"
	1942	" 17.40	"	"
	1943	" 19.60	"	"
	1944	" 19.40	"	"
	1945	" 19.50	"	"
Jan-Mar.	1946	" 19.50	"	"
Apr-Jun.	1946	" 21.50	"	"
July	1946	" 22.50	"	"
July-Oct.	1946	" 26.50	"	"
Nov.	1946	" 27.50	"	"

It is interesting to discriminate now various components of the Venezuelan oil revenue, in order to foresee the possible trends of Venezuelan oil taxation. To this end I am showing below the total income from oil taxes as compared with the total revenue from surface rights and royalty and with other variable taxes which include the income tax :

	Total revenue	Royalty and surface	Other taxes
1941	118	80	38
1942	90	65	25
1943	146	100	46
1944	225	152	73
1945	380	200	180
1946	517	270	247

Approximate figures in millions of bolivars

The above figures show that non-direct taxation which includes the extraordinary tax (1945) and the increased income tax (1946) jumped from about 30% of the total revenue from taxes, to nearly 50% in 1946. The trend still is decidedly upward.

The above figures referred to the unit of production (cubic meter) are as follows.

	Total revenue	Royalty and surface	Other taxes
1941	3.6	2.2	1.3
1942	3.9	2.9	1.0
1943	5.2	3.5	1.7
1944	5.8	3.6	2.2
1945	7.2	3.7	3.5
1946	8.1	4.3	3.8

All figures in bolivars per cubic meter
(1 cub. met. = 6.29 bbls.)

The following table is very important: it shows, in round figures the relation between producing costs, taxes, and Oil Companies profits, as estimated by the Government technicians.

	Cost of production	Taxes	Co.'s profits	Sales value
1943	270	150	150	570
1944	250	225	325	800
1945	300	290	310	900
1946	360	375	650	1.385

Approximate figures in millions of bolivars

The analysis of the above is interesting. As you know a much talked about desirable arrangement should be the one which, so to speak, splits profits between the Government and the Companies. In such a case the taxes should be equal to the oil companies' profits. The table tends to prove that whereas that

equilibrium was reached in 1943, as result of the petroleum law, the status was destroyed in 1944, and therefore the 1945 extraordinary tax was necessary to bring the profits down to the fifty-fifty basis.

The profits figure for 1946 is not yet affected by the change of the income tax (this will be collected during 1947) but it is clearly aimed to show that, as the equilibrium point should be around 500 millions for taxes and profits, the increase provided by the new income tax law is well justified.

Refined products.

The local consumption of refined products has been increasing considerably in Venezuela, it is therefore interesting to considere some of this figures.

	Gasoline	Kerosene	Diesel	Fuel
1936	90,848 cub.m.	4,361 cub.m.	3,270 m.tons	47,748 m.tons
1937	110,566 " "	4,866 " "	5,554 " "	56,948 " "
1938	151,517 " "	9,390 " "	6,706 " "	61,308 " "
1939	186,727 " "	24,003 " "	18,305 " "	64,188 " "
1940	213,875 " "	32,812 " "	25,783 " "	83,296 " "
1941	210,687 " "	40,288 " "	31,842 " "	111,318 " "
1942	180,474 " "	43,974 " "	31,842 " "	120,339 " "
1943	163,139 " "	54,717 " "	32,838 " "	122,827 " "
1944	184,310 " "	62,022 " "	38,570 " "	144,540 " "
1945	232,191 " "	74,010 " "	53,987 " "	134,806 " "
1946	325,863 " "	89,238 " "	69,587 " "	183,883 " "

The considerable increase experienced during 1946 was mostly due to the increase in automobiles and machinery received from the United States.

The Venezuelan Government received only Bs. 3,600,000 for taxes on refined products which is about 18% of the amount collected

in 1945. This is due to the substantial reduction effected in December 1945. This reduction was so important, both from the part of the Government and from the Oil Companies Creole and Shell, that it is estimated it saved the public about Bs.31,402,56 during 1946.

Government royalty.

The amount of the so-called exploitation tax is nothing but the product of the sale of the Government's royalty to the Oil Companies. This is done at present to the producing Companies, according to regulations provided for the 1943 Petroleum Law.

As a basis to fix the value of the Venezuelan crudes, these are compared to certain base crudes, of similar characteristics, from the Gulf Coast, with certain allowances for chemical characteristics and costs of transportation. The Venezuelan Government now considers that, at times, there is some discrepancy between the prices of the crudes and the prices of certain refined products, such as the case of the fuel oil mentioned above.

Furthermore the present agreements are based on the assumption that the Gulf Coast ports and the Venezuelan ports, are at about the same distance of the world's oil markets. Whilst this is true for the North-Atlantic markets of America, it is not so for the European markets or the Eastern South-American markets which are closer to the Venezuelan oil ports.

The Venezuelan Government is strong on the point that in no case the revenue from the royalty oil should be smaller

than the real values obtained from same oil by the Oil Companies, and therefore they are studying new basis for evaluation of the royalty oil. Among other things they will insist on eliminating the deduction, now allowed, on the price of the Venezuelan crudes, of one sixth of the U. S. import tax.

According to statements of high officials the Venezuelan Government is still considering the possibility of selling the royalty oil to outsiders, and to that effect various propositions are under study.

Very truly yours,

Clemente González de Juana

CC/W. B. Jayred
J. P. Adone
CGdeJ/pt.

Puerto la Cruz, March 15th., 1947

Mr. Arthur R. May
c/o The Superior Oil Co.
930 Edison Building
Los Angeles - California

Dear Sir :

According to your instructions dated March 8th, 1947, I am sending copies of my letters and reports to Mr. J. P. Adone in Bogotá, Colombia.

Up to now I sent to Mr. Jayred copy of the text only. I figured that the difficulty and cost of reproducing and mailing maps and illustrations from here would be higher than doing the same in your office, where Mr. Jayred could easily obtain the reproduction of any desired illustration. However, such is not the case with Mr. Adone and therefore I will try to send my copies to him complete with illustrations.

It may be difficult for Mr. Adone to follow the Venezuelan developments without proper base maps or up-to-date concession maps. In case you think it advisable, and authorize the comparatively small expenditure, I could obtain for him a set of Cartografica's maps. Perhaps your own maps are also outdated and you desire to obtain a similar set.

I cannot give you exactly from here the cost of these maps, but in case you desire these figures before ordering, I will be able to obtain for you the exact amount of money required. I am sure however it will not be a high figure.

Very truly yours,

Clemente González de Juana

cc/J.P. Adone
CGdeJ/pt

Puerto la Cruz, March 21st., 1947.

Mr. Walter H. Mengden
c/o The Superior Oil Co.
Apartado aéreo 4809
Bogotá - Colombia

Dear Mr. Mengden :

Your letter of March 12th was forwarded from my Caracas office to Puerto la Cruz, where I am located for a short time. Although I don't have here enough files to deal with the matter to the extent I would like to, I believe I can offer you a sound reply to your specific question. On April 1st I expect to be back in Caracas, and there I will make for you a detailed report.

The Hombre Pintado field is located Northeast of Lake Maracaibo although it is not located in the prolific Lake Maracaibo trends but in the Falcon trends. The structure and form of accumulation is entirely different from any of the Zulia fields.

Some of the data quoted in your letter does not apply to Hombre Pintado alone, but more to the whole area exploited by British Controlled in Western Falcon, which includes the oilfields of El Mene and Hombre Pintado. This whole area is broken by a very complex fault system, which not only complicates the structure but greatly reduces the size of the oilfields, both El Mene and Hombre Pintado being structural accumulations in faulted anticlines.

Please find enclosed a geological sketch map of the Hombre Pintado field, which is self explanatory, as to the type of structure and size of the field. You may observe that the producing structure is less than one kilometer long and about 1/2 kilometer wide.

Production is obtained from the Agua Clara formation of upper Oligocene age. This formation is not found in the Lake fields except as thin remnants in the bottom of the synclines.

Within the oil zone, marked in the attached cross-section, the net oil sand thickness varies from 20' to 100', the porosity averages 25% and the gravity of the oil 24° A.P.I.

The proven reserves of this field are of the order of 500,000 bbls. and the proven territory is only 40 hectares.

The enclosed cross-section shows at a glance that the statement "No deeper wells than 2,000 feet have ever been drilled...." is not entirely correct although I agree that the field has not been tested deep. On the other hand as the structural complications increase at depth, deep drilling in this particular area is a rather risky affaire.

The reference to the possibilities of Cretaceous production is very misleading. The nearest Cretaceous production is to be found in La Paz field, which is located 115 kilometers West of Hombre Pintado, there not only the structural conditions are entirely different but the stratigraphic sequence has been greatly reduced resulting from the influence of the Maracaibo arch.

There is nothing known in the El Mene-Hombre Pintado area about the possible depth of the Cretaceous, I am

positive it is much deeper than 6,000 feet, although it may still be within the reach of the drill.

The land situation of the British Controlled is very poor. The 3,000 hectares of exploitation concession amount to nothing in the Venezuelan Oil Industry. Whether the Government will re-grant them any exploration land in Western Falcon is entirely up to the Government as it is not any existing agreement on this subject. Any oil company would have just as much right as the British Controlled to claim this land. And considering the actual trend of the Venezuelan Government I am rather skeptical about the possibility of obtaining that, or any other, land for the time being.

As close as I can remember it (I will send final figures from Caracas) the British Controlled produced during 1946 about 400,000 barrels of oil of which Hombre Pintado produced about 230,000 barrels, out of 45 wells.

The pipelines, railroad, loading facilities, houses, storage tanks, materials, machinery, tools, etc. etc. are not only for Hombre Pintado but serve the whole of the British Controlled property, including El Mene field. Practically all this equipment is old, and most of it, obsolete now, should have been written-off years ago.

The financial status of the British Controlled Oilfields Ltd., resulting from the exploitation of the Western Falcon property, may be perfectly summarized by re-quoting one paragraph of your letter:

"In addition it should be paid a royalty of "
"16 2/3 per cent in cash or oil at option of Government. (This"

"has been reduced to 4 per cent temporarily by Government to aid "
"this company in financial distress)". You may judge how bad a
situation is when a Government agrees to reduce a royalty.

According to the above it is my believe that none
of the properties of the British Controlled offers the slightest
interest for the Superior Oil Co. and that you, or any other person
from your office, do not need to come to Venezuela to study this
proposition.

Personally I will be delighted to have you in
Caracas and I hope you can come here at your convenience.

Very truly yours,

Clemente González de Juana

CC/The Superior Oil Co.- Los Angeles
Enclosures: One geological map.
CGdeJ/pt.

THE SUPERIOR OIL COMPANY

OF COLOMBIA
BOGOTA, COLOMBIA

Apartado Aéreo 4809

March 25, 1947.

Dear Dr. González:

With reference to your letter of March 15th, addressed to Mr. Arthur R. May, in which you mention that you could obtain for Mr. Adoue a set of Cartografica maps, I would appreciate your sending one set to the following address:

The Superior Oil Company of Colombia
Apartado Aéreo 4809
Bogotá, Colombia.

We will appreciate your sending us your invoice to cover cost of the set at your earliest convenience.

I would also appreciate your sending the Geological Report addressed to the Company instead of to Mr. Adoue personally.

Very truly yours,

THE SUPERIOR OIL COMPANY OF COLOMBIA



W. Mengden
Manager.

Doctor Clemente González de Juana
Apartado 1554
Caracas, Venezuela.

cc: Mr. Arthur R. May

THE SUPERIOR OIL COMPANY

OF COLOMBIA
BOGOTA, COLOMBIA

March 27, 1947.

Dear Doctor González:

I wish to acknowledge with thanks receipt of your letter of March 21st, in reply to mine of March 12th with reference to Hombre Pintado field.

The geological sketch map which you were kind enough to send me, and which is self-explanatory, is very interesting.

I also appreciate your views concerning this property and your advice regarding our possible trip to Caracas.

Very truly yours,

THE SUPERIOR OIL COMPANY OF COLOMBIA



W. H. Mengden
Manager.

Doctor Clemente González de Juana
Apartado 1554
Caracas, Venezuela.

Barcelona, March 29th, 1947.

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Continuing the study of the Venezuelan oilfields I will consider here two fields located on the Western part of the Lake basin: La Paz and Mara.

La Paz oilfield is located about 45 Km. West of the city of Maracaibo, in district Maracaibo, State of Zulia. The surface is mostly covered by the featureless Miocene, characteristic of the Maracaibo area, with the exception of the crest of the structure where small outcrops of Eocene can be observed. One isolated block of Cytherella limestone was found near the fault zone, probably brought to the surface by "sedimentary volcanism" or drag along some of the faults.

The Eocene anticline and some large oil-seepages on the crestal fault planes, lead to the discovery of this field, very early in the oil history of the Lake basin, but production was for a long time confined to the Eocene and Paleocene formations. In 1944, when the field was already declining, the prolific Cretaceous production was discovered and to-day La Paz is again one of the outstanding Venezuelan oilfields.

Stratigraphy.- The sedimentary sequence begins with the Maracaibo and La Villa formations, grouped under the generalized name of Younger Tertiary. The thickness of this Younger Tertiary varies from 0', in the crestal area to a maximum of 2,600' drilled in well P-56. The Younger Tertiary is barren of oil; in fact all the production obtained so-far in the Western part of the Lake is pre-Miocene.

Unconformably below the La Villa formation is the Eocene, locally known as the La Concepcion series and also by the less specific name of Upper sands. The thickness of this member reaches up to 1900 feet.

The uppermost 600 feet are predominantly clayey although some comparatively thick sands are present. In the underlying 900 feet there is a predominance of thick water sands, although a few thin and irregular gas and oil sands are occasionally found. In the lowest 300 feet there are some erratic oilsands, in the Southern part of the East flank this interval is entirely water bearing, but in the Northern part of the same flank the interval is petroliferous and yields a comparatively small production.

In the Western flank ^{of} the structure, the basal Concepcion sands are also productive.

The specific gravity of the oil varies from .92 to .95 B_e (Shell's determination).

The Eocene rests with an angular unconformity on the Paleocene Guasare formation, locally called the La Paz limestone.

The Guasare formation begins with the Cytherella limestone which presents a variable thickness according to the depth of the erosion in the post-La Paz pre-Concepcion times.

At about the center of the Guasare section is the top of the main limestone development. This point agrees very closely with the top of the Rotalia faunizone usually called the lower La Paz limestone which was the main oil horizon until the Cretaceous production was found.

The initial production of most wells completed in the La Paz limestone reached up to 750 barrels per day. The specific gravity of the oil varies from .905 to .95 Bé (Shell's determination) equivalent to an average of 25° A.P.I. The productivity of this section decreases Northward. It decreases, also, downdip in the Southeastern flank of the structure.

The mean thickness of the Guasare formation is about 900 feet.

Below the lower La Paz limestone is a thickness of about 1,300 feet of shale which corresponds to the Mito Juan and Colon formations, locally called La Paz shales. Near the center of the Mito Juan formation is the top of the Gümbelina-Globotruncana faunizone which almost reaches the base of the Colon shales where the Eponides zone begins. At the base of the Colon formation there is a limestone interval, about 100 feet thick, very glauconitic at the base, it is usually called the Colon limestones and has been found productive in some wells such as P-62 where it tested about 765 barrels through

open lines. The Colon limestone, generally speaking, is not very productive

Immediately below the glauconite is the La Luna limestone with a thickness of about 325 feet. This interval is petroliferous and tested 5,760 bbls. with 3/4" choke in some wells.

Below the La Luna limestone is the Cogollo formation. The upper Cogollo with a thickness of about 500 feet has a very limited porosity, it has not been tested separately but it is probably non-productive throughout the field.

The middle Cogollo, with a thickness of about 700 feet, is by far the most productive interval. In well P-79 it tested 4,800 bbls. through 7/8" choke and in P-84 it reached 10,250 b.ppd. through 1" choke. 7

The lower Cogollo is also a petroliferous interval but, to my knowledge, it has not been tested separately.

Below the Cogollo formation there is a basal sand about 40 feet thick resting unconformably on the igneous and metamorphic complex.

Structure.- La Paz is essentially an anticline faulted along the crest. In the surface the crestal dips reach up to 70°. At depth the structure becomes gentler, the Northwestern flank averaging 45° - 50° and the Southeastern flank 15° - 20°. Thus the structure is asymmetrical toward the W. and subsequently the crestal faults are inclined toward the E.

The crestal fault zone is very complex. There are as many as 5 faults forming steps, horsts, and grabens, all following a general N 45° E direction. The displacement of this faults vary from 150' to 1,200' but in general are not very great.

Near the center of the field there are two E-W directed faults both with the downthrown side toward the South. These faults subdivide the Southeastern flank in two separated segments.

Petroleum development.- The porosity of the Guasare producing horizons, i. e. La Paz series, averages 17%. The Cretaceous limestone produces from cracks and fissures and therefore the porosity cannot be well estimated as yet.

The petroleum obtained from the upper sands and from the La Paz series averages 24° A.P.I., the Cretaceous oil is lighter reaching 33° A.P.I.

The proven reserves of this field, in the La Paz and La Concepcion series are of the order of 59,350,000 bbls. It is too-early to give any figure about the reserves of the Cretaceous section, but unquestionably they are much higher. The production from the Cretaceous alone, in the last three years, already passed all the previous production of La Paz field. Cumulative production to Jan. 1st. 1947 reached 34,617,201 bbls.

The field is owned and operated by the Shell group.

Mara field is located about 40 Km. Northwest of Maracaibo city and about 10 Km. Northeast of La Paz, in district Mara, State of Zulia. Geologically it belongs to the trend of uplift of La Paz - Tetones, described by Sutton.

Mara was discovered in 1944 by well DM-2. Well DM-1, previously drilled Southeast of the discovery well, had been suspended before reaching the Cretaceous but recently it

was deepened and successfully brought into production. It is questionable, as yet, whether DM-1 represents a different oil accumulation or it marks an extension of Mara toward the SW.

Stratigraphy.- The stratigraphic sequence of Mara is very similar to that of La Paz. It begins with about 150' of Younger Tertiary unconformable on the uplifted Eocene. The upper Eocene is predominantly clayey but, same as in La Paz, the base of the La Concepcion series contains some thick sand bodies; in the lowest 200' there are also some lignite beds very useful as local stratigraphic marker beds.

The top of the Guasare formation (Paleocene) or Cytherella limestone is found in Mara at an average depth of 4,500 feet. At about 400' below it is the top of the Rotalia faunizone.

The thickness of the Guasare formation is about 750'.

The La Paz limestones are petroliferous, same as in La Paz oilfield, in well DM-2, they tested from .962 to .985 Bé (Shell's determination) gravity oil but not attempt has been made yet to produce this interval.

Below the Guasare formation is the thick shale interval corresponding to La Paz shales, or in more modern nomenclature, to the Mito Juan and Colon formations, with an average thickness of 1,900 feet. The Marginulina-Verneullina faunizone begins about 400' below the top of the shale interval, and the top of the Gümbelina-Globotruncana faunizone is marked in this field at the top of the Colon formation, i.e. about 1,100' below the top of the shales. The lowest member of the Colon formation is marked by about 120 feet of limestone,

corresponding to the Colon limestone the base of which is marked by a glauconitic interval.

The La Luna formation is found in Mara at an average depth of 7,300 feet. Same as in La Paz the La Luna formation presents a reduced thickness averaging 350 feet.

Below La Luna is the Cogollo formation with an average thickness of 1,350'. The Cogollo is the best petroleum producing formation of the field, specially the middle Cogollo limestones.

The basal Cretaceous is marked by a 20' basal sandstone, barren of oil, resting unconformably upon the Igneous and Metamorphic complex.

Structure.- As far as it is known, from geophysical data and from the few wells drilled to-date, Mara is an asymmetric anticline cut by a slightly arched fault directed from N 45° E in the Southern limit of the producing area to N 65° E in the extreme North.

The Northwestern flank is not well known yet, it apparently dips at an average of 1800 feet per kilometer whereas the Southeastern flank, much gentler, dips about 500 feet per kilometer.

The fault is a thrust toward the Northwest, with a displacement of about 250 feet near well DM-2. Either the throw of this fault increases considerably toward the Southwest or some major thrusting is present West of this fault line, to account for the structural relief to be discussed in my next report in relation with the Netick - Calentura area.

Petroleum development.- Mara is still in a very

exploratory stage and, as it usually happens, in fractured limestone fields, presents some erratic results, but the future of this field looks very promising.

As stated above the La Paz limestone is petroliferous but up to date none of the wells has been completed in this horizon because of the more economic prolific Cretaceous production.

The basal Colon limestone and La Luna limestone, together, were tested in well DM-2 with a potential of 5,500 b.p.d. of .88 Bé gravity oil. This well was completed in those horizons with an initial production of 2,583 b.p.d. through 1/2" choque. Six months afterwards it was producing at the rate of 5,870 b.p.d. through 1" choque.

Well DM-4 was completed in the Cogollo section and presented an initial production of 4,725 b.p.d. through 1" choque, six months afterwards was producing at the rate of 3,685 b.p.d. through the same opening.

It is still too-early to judge about the value of Mara possible extension and reserves. From the date of discovery to the end of 1946 it yielded a total cumulative production of 4,579,509 bbls. out of 5 wells.

This field is owned and operated by the Shell group.

Very truly yours,

Clemente González de Juana

CC/W.B. Jayred
Superior Oil Co. of Colombia
Enclosures:
CGdeJ/pt.

Caracas, April 15th., 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

The outstanding news found on my return to Caracas was the withdrawal of the Barnsdall from the Venezuelan field.

One of their concessions is to be transferred to Creole Petroleum Corp., several others to Atlantic and some are to be renounced or turned back to the Government. The land transfers to the Creole and Atlantic are awaiting the approval from the Venezuelan Government.

The venture costed Barnsdall South American (Barnsdall & Standard of Ohio) the amount of \$ 1,250,000.

Venezuelan royalty oil.

There is still a certain amount of interest, among outsiders, to buy the Venezuelan royalty oil sold now to the producing companies, in spite of the fact that the Government has not officially informed about the sales terms.

The Venezuelan royalty oil may be classified as follows.

Lagunillas (heavy)	16°-18° API	804,500 bbls./mo.
Lagunillas (light)	26°-27° API	10,000 bbls./mo.
Tia Juana (heavy)	13°-17° API	202,000 bbls./mo.
Tia Juana (light)	26°-27° API	1,057,500 bbls./mo.
Bachaquero	14°-15° API	215,000 bbls./mo.
		<u>2,289,000 bbls./mo.</u>

		2,289,000 bbls./mo.
La Rosa	23°-26° API	400,000 bbls./mo.
Cabimas	21°-22° API	127,000 bbls./mo.
Temblador	21°-22° API	22,500 bbls./mo.
Quiriquire	19°-20° API	100,000 bbls./mo.
Jusepin	32°-33° API	432,500 bbls./mo.
San Joaquin	44°-45° API	75,000 bbls./mo.
Oficina (heavy)	26°-27° API	85,000 bbls./mo.
Oficina (light)	32°-33° API	455,000 bbls./mo.
Cumarebo	47°-48° API	17,000 bbls./mo.
Various		380,500 bbls./mo.
		<hr/>
Total		4,384,000 bbls./mo.

which averages 146,130 bbls. daily in a 30-day month.

Land movement.

The Venezuelan Government declared the caducity of concessions denominated Sinco-27, Sinco-28, and from Sinco-31 to and including Sinco-41 formerly hold by Sinclair Oil Co. in district Sosa, State of Barinas, and district Guanarito, State of Portuguesa.

The recent renouncements in the western Llanos basin and the coming abandonment of Barnsdall's land in that vicinity clearly show how the western Llanos basin is steadily losing interest for the oil companies. The two tests now drilling, i. e. Apure-1 by the Mene Grande Oil Co. and Silvestre n° 2 by Socony-Vacuum may be decisive on this respect.

The Phillips Venezuelan Oil Co. renounced concessions denominated Filven-4, 5, and 9 in districts Bolivar and Aragua,

State of Anzoategui. You may refer to my adverse comments to this play when these concessions were obtained by Phillips.

Parcels denominated:

V-247.1 to and including V-247.8

V-248.1 to and including V-248.4

V-235.10 to and including V-235.20

formerly of the Mene Grande Oil Co. and later transferred to the Coro Petroleum Co. and to the Sun Oil Co. have been transferred back to the Mene Grande.

Wildcats and exploratory tests.

In the southwestern part of the Lake basin wildcat WT-2 (West Tarra-2) drilled by the Colon Development Co. (Shell) reached 9173', 4.3/4" csg. cemented at 9061 and is now testing.

As you know from a previous letter this wildcat found production higher in the Cretaceous and tested about 2,000 bbls. through open liner. It was deepened to the basal Cretaceous where is testing now.

If WT-2 materializes, as it seems very probable, it amounts to a major discovery in the Maracaibo basin.

In the westcentral Maracaibo area Richmond's well Zulia 26-1, is testing at 11,540'. This well is also believed to be a producer but no details are available yet.

In northwestern Maracaibo basin the deep test of La Concepción field is drilling ahead. A 9.5/8" string was landed at 7811' and the well is to be deepened to test the prolific Cretaceous section.

The Creole Petroleum Corp. is also searching for Cretaceous production in Northwestern Maracaibo. The first

test is located about 30 Km. NE of Maracaibo and called MA-1. This well is now slightly below 5.000 feet, too-shallow for developments.

The Texas Co. jointed also the search for Cretaceous oil in that area. The first test, Raban-1, was located about 30 Km. NW. of Maracaibo, and is now drilling somewhat below 4.000 feet.

Netick-7, the deep test of the Orinoco Oil Co. which is also directed to the Cretaceous, is still drilling slightly below 6,000 feet.

In Lake Maracaibo wildcat VL-1, west of Tia Juana field, and the first water-test of the Shell group, tested at 11.843 feet and was subsequently deepened to below 12.000 feet where it found Cretaceous production. Depending on the results of this testing, the obtention of Cretaceous oil in the center of Lake Maracaibo may amount to a major discovery of the Venezuelan oil industry.

Later info. is wtr. JKR

Encouraged by the results of the above test, the Shell approved a location on top of the Pueblo Viejo anticline, between Lagunillas and Bachaquero, where the outcropping Eocene is a favorable starting point for reaching the Cretaceous. Location Pueblo Viejo "N" is still rigging up.

A location for a deep test 25 Km. NE. of Cabimas which was announced by Shell was later suspended. This test had been called Zamuro n° 1.

In the Barinas-Apure the outstanding news are the drilling operations started by Mene Grande Oil Co. in their exploration concessions. Wildcat Apure n° 1 located NW. of

San Fernando de Apure, is already drilling below 5.500 feet.

The Socony-Vacuum is also drilling Silvestre-2 below 5.000'.

In the State of Guárico, the Creole Petroleum Corp. abandoned exploratory well GXB-5 at 5275', GXB-6 is on test at 5814', GXB-7 is almost completed below 6500', GXB-8 is testing at 6311' and GXB-9 is drilling ahead below 3000'. So far Creole did not have any luck in their Guárico exploration and only dry gas has been encountered in most tests.

The S. A. Petrolera Las Mercedes (Texas and Caracas Petroleum) completed their test Grico-4 at 5347'. Wildcat Camaz n° 1 is temporarily shut down at 8320'. This Company spudded in two new wildcats Valle-1 and Barbula-1, both drilling ahead.

The Phillips abandoned test GD-1 at 3933' presumably after reaching the basement, and spudded in GD-2 now drilling below 2000'.

The Barnsdall unsuccessfully deepened San José-1 to 5152' and drilled Pelicano-1 to 5176. The decision to leave Venezuela was taken after these tests failed.

The Venezuelan Atlantic Refining Co. following success of Tucupido n° 1 is now drilling below 5.000', Tucupido n° 2.

In Anzoategui the Mene Grande Oil Co. plugged and abandoned well TAG-4 at 6218' in the new Tacata field and CG-2 at 8278' in the new La Ceiba field. These two failures are rather discouraging for both areas.

Pelayo-2 drilled by Atlantic on Pantepec's agreement

reached 6273' was plugged back to 6215' and is already producing oil. Pelayo is already taking shape as a true oilfield in spite of the thin sands encountered.

Socony Vacuum spudded in a new wildcat in Anzoategui denominated Chimire n° 1.

In the State of Monagas, Creole is carrying on their program of wildcatting and stratigraphic test by means of slim hole drills. JX-3 a wildcat is drilling at 4494 in the lower Cretaceous Barranquin formation. JGE-31 a stratigraphic test north of Jusepín was suspended at 5468', and JGE-32 another stratigraphic test in the same area is drilling at 6,000'. Another stratigraphic test in the quiriquire area QGE-33 was abandoned at 3933' and the same drilling equipment was used in QGE-34 now drilling. The Creole is ready to start some structural drilling in La Pica structure, north and south of old La Pica well.

Socony is drilling ahead test AX-6, near Caicara de Maturín. Due to unequal topography and valley filling during the Pliocene, Las Piedras time, this test found an abnormally thick Mesa-Pliocene section, more than 7500 feet. The great amount of boulders made drilling very difficult and slow.

The Venezuelan Atlantic Refining Co. had a gas blow-out in well Jaito-1A, a similar blow-out wrecked Jaito-n° 1, but in this case the gas was controlled and drilling continues below 7,700'. Wildcat El Paso n° 1 is drilling ahead.

Both Sinclair's wells are drilling, SEN-127 landed a string of casing at 10,150 and Varsa-2 is drilling below 6,000 feet.

The Phillips Petroleum abandoned well FT-10 in the new Mata Grande field. This Company is experiencing increasing difficulties to bring their wells in.

Messrs. Mengeden and Adoue, of your Bogotá office, arrived in Caracas. I am collaborating with these gentlemen in every way.

Very truly yours,

Clemente González de Juana

CC/W.B. Jayred
Bogotá office
CGdeJ/pt.

Caracas, May 30th, 1947

Mr. Mengden
c/o The Superior Oil Co. of Colombia
Apartado Aéreo 4809
Bogotá, Colombia.

Dear Mr. Mengden :

On my return from Barcelona my wife informed me about your early departure for Bogotá. She said Mr. Adoue told her nothing new had happened and that you will contact me from Bogotá. I guess Mr. Keks did not come after all, or else he only had time for a hurried visit.

The Anzoategui work is now finished and therefore I expect to be in Caracas all the month of June and possibly the early part of July, as it appears now that the plane tickets to Spain are hard to obtain.

You know I will be glad to be of service here and in case you have something in mind do not hesitate to write me at your convenience.

Best regards to Mr. Adoue and I remain,

Sincerely yours,

Clemente González de Juana

CGdeJ/pt.

Caracas, May 31st, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Upon completion of an assignment on stratigraphy of the Cretaceous section of Eastern Venezuela I am continuing my correspondence from Caracas. During the above mentioned work we discovered 2 new oil seepages east of Barcelona, one at the Querecual - Chimana contact, in the Querecual shales and the other near the Cantil - Barranquín contact in the Barranquín sandstones. In both seepages the Cretaceous oil is heavy, black and asphaltic, very similar to the oil seeping from Cretaceous in the southern foot-hills of Monagas. The extension of the seepage belt, and the stratigraphic position of the lowest oil manifestation are interesting.

Land changes. - The North Venezuelan Petroleum Co. selected the following lots, within the boundaries of the old Jimenez Arraiz concession in Falcón :

- Lote n° 1 with 10.000 hectares - Districts Acosta & Zamora
- Lote n° 2 with 9.000 hectares - Districts Acosta & Zamora
- Lote n° 3 with 8.100 hectares - District Acosta
- Lote n° 4 with 9.800 hectares - District Acosta
- Lote n° 5 with 9.600 hectares - District Acosta
- Lote n° 6 with 10.000 hectares - District Acosta

Lote n° 7 with 10.000 hectares - District Acosta
 Lote n° 8 with 10.000 hectares - District Acosta
 Lote n° 9 with 10.000 hectares - District Acosta
 Lote n° 10 with 10.000 hectares - District Acosta
 Lote n° 12 with 8.000 hectares - District Acosta
 Lote n° 13 with 10.000 hectares - District Acosta
 Lote n° 14 with 10.000 hectares - District Acosta
 Lote n° 15 with 10.000 hectares - District Acosta
 Lote n° 16 with 10.000 hectares - District Acosta
 Lote n° 17 with 10.000 hectares - District Acosta
 Lote n° 18 with 10.000 hectares - District Acosta
 Lote n° 19 with 10.000 hectares - District Acosta
 Lote n° 20 with 10.000 hectares - Districts Acosta & Zamora
 Lote n° 21 with 10.000 hectares - Districts Acosta & Zamora

Final titles of these concessions have been issued in favor of the North Venezuelan Petroleum Co.

Up to now the land situation of the N. V. P. was somewhat different of most oil companies. Out of the old, enormous, Jiménez Arraiz concession only a few blocks, such as the 10.000 hectares Cumarebo lot had been segregated, the rest remaining undivided in the hands of the Co. until 1943. When the new Law was promulgated and the N. V. P. agreed to convert their holdings, the Co. was authorized to keep a block of 401,962 hectares to be subdivided and selected at a later date. The above listed lots are the ones selected so-far by N. V. P. out of their large block "Zona N. V. P. n° 1".

There are only two other blocks in Venezuela under similar agreement, both in the hands of Creole. The first block

located in districts Zamora & Acosta, Falcón, with 116,063 hectares, was formerly N. V. P. land transferred to Creole as a result of a joint exploration and drilling agreement.

The second block with 307.150 hectares is located in district Buchivacoa, Western Falcon, and was obtained by Creole by purchase of the Bernabé Planas contract.

The concessions now obtained by N. V. P. as a result of the selection are exploration - exploitation concessions, later to be parcelled and partly renounced in accord with the provisions of the 1943 Petroleum Law.

The Government refused to accept application on lots 36, 37, 38, 39, 39-A, 39-B and 39-C as requested by the N. V. P. because these lots were in part out of bounds of Block N. V. P. N° 1.

Transference of concessions.

The Venezuelan Atlantic Refining Co. acquired from Fantepec parcels denominated :

Zara 3-A to and including Zara 3-K of concession Zaraza-3
with 4,629.62 hectares.

Z-5-A to and including Z-5-K of concession Zaraza-5
with 5,000 hectares.

334-1 to and including 334-10 of concession Zaraza-7
with 5,000 hectares.

336-1 to and including 336-10 of concession Zaraza-9
with 5,000 hectares.

All the above parcels, located in districts Zaraza and Rivas, State of Guárico, have been obtained by the Atlantic resulting from the option to acquire 50% of the land comprissed

in the 1944 Atlantic-Pantepec Agreement. This option has been exerted following the results of the Tucupido tests.

Renouncement of concessions.

The S. A. Petrolera Las Mercedes renounced the following exploitation concessions:

Ipire 6-4 to and including Ipire-6-10 of concession Ipire-6
Ipire 10-1 to and including Ipire-10-9 of concession Ipire-10
Ipire 11-1 to and including Ipire-11-11 of concession Ipire-11

The above lots are located in district Zaraza, State of Guárico.

Dakoa 40-1 to and including Dakoa 40-7 of concession Dakoa 40
Valle 41-1 to and including Valle 41-7 of concession Valle 41
Valle 43-2 to and including Valle 43-7 of concession Valle 43
Valle 45-3 to and including Valle 45-6 of concession Valle 45
Valle 47-4 to and including Valle 47-10 of concession Valle 47

The above lots are located in district Infante, State of Guárico.

Comments.

Please find enclosed a map showing the location of these parcels. Concessions Ipire, around Santa María de Ipire are within the extension of the tar belt as shown by the results of Pericocal-1 test (Socony) and San José-1 (Barnsdall). The fact that some of the Barso concessions (formerly Barnsdall) have been accepted lately by Atlantic is not argument in favor of that vicinity.

Same location within the tar belt bears in favor of the renouncement of the Dakoa and Valle concessions. In this vicinity the results of well Manapire n° 2 are conclusive.

Please note that the Company is still keeping the northern most parcels Valle 43-1, Valle 45-1 and 45-2, and Valle 47-1, 47-2, and 47-3 where there is a faint doubt about the extension of the tar zone.

Transference of concessions.

The Barnsdall South America transferred to the Venezuelan Atlantic Refining Co. concessions Barso-1 to and including Barso-13 in southern Anzoátegui and southern Guárico, as indicated in my last letter. The Venezuelan Government aproved the transference.

Very truly yours,

Clemente González de Juana

CGdeJ/pt.

CC/W.E.Jayred
Superior Oil Co. of Colombia

Enclosures: One sketch map.

Caracas, June 7th, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Following is a review of the current exploratory drilling in Venezuela.

In the western Lake area wildcat WT-2 in the western Terra anticline is still testing. Total depth 9173.

The deep test of La Concepción field, C-148 is about to penetrate the Cretaceous section. The remaining wildcats aimed to the Cretaceous, i.e., MA-1 of Creole and Raban-1 of Texas Co. are still drilling younger formations. The Mene Grande Oil Co. is also ready to test the Cretaceous and accordingly wildcat Moga-1 has been started in M.G.O. parcel MOGA, district Mara, State of Zulia; Netick n° 7, aimed also at the Cretaceous, in the line of uplift La Paz-Mara, is still above the La Luna limestones.

Wildcat VL-1, in the Lake, west of Tia Juana, reached 12,106', was plugged back to 10,088', gun perforated at 9,875', squeeze-cemented and is now testing. As stated in previous letters this is a very important test as the finding of Cretaceous oil in this vicinity will open entirely new possibilities for the whole Lake basin.

Curacao 2-A, the Shell's deep test east of Cabimas, is re-opening and is now getting ready to be tested. This hole was stopped in Eocene at 15,106'.

In the State of Falcón the Creole Petroleum Corp. spudded Las Pailas n° 1, SE. of Cumarebo. This hole is drilled on contract with the North Venezuelan Petroleum Co. (Central Africa Mining Co. Ltd.) in a fairly well defined dome, at the crest of which Oligocene beds are exposed. Thus the section to be drilled is considerably older than the producing formations of Cumarebo. As stated in previous letters this test is scheduled to be a very deep one.

In the State of Guarico Creole abandoned test GXB-8 at 6311', and GXB-6 at 5814', GXB-7 is still drilling and GXB-9 is testing at 5136'.

Creole is making a change in their exploratory drilling program and most of its force is scheduled to be transferred to the eastern Guárico block, in the neighbourhood of Tamanaco. Most of the concessions obtained by the Creole in 1944 could be grouped into two blocks, the western one or Barbacoas block has been intensively explored and 9 test holes drilled, this exploration was directed to gain a sound knowledge for parcelling and renouncing the 50% required by law. Similar work is required in the eastern Guárico block and because the date of selection is approaching Creole should to move to the eastern block. Surface Geology and seismograph is well advanced there now and it remains to check the results by means of a few exploratory holes.

The results obtained so far in the western Barbacoas block are not condemnatory, although they are not specially encouraging. Only dry gas has been found in the test holes and the basement, in most cases, has been found shallower than expected. Unquestionably the eastern block holes will find

considerably thicker sediments and, generally speaking, more favorable section, but the interpretation of the structural conditions may be much more difficult to make.

The S. A. Petrolera Las Mercedes remains very active in western Guárico. Two new wells have been started, Grico-7 in the south, near dry-holes Grico-3 and Punzon-1, and Placer-1 in the north. (See enclosed sketch map). Older tests, Camaz-1, Valle-1 and Barbula-1 continue drilling.

The Phillips Venezuelan Oil Co. completed core-hole GD-2 and spudded core-holes GD-3 and GD-4 (See enclosed location sketch).

In Eastern Guárico the Venezuelan Atlantic Refining Co. is 100% concentrated in Tucupido which is showing encouraging results.

The Shell group (V.O.T.) after a few core-holes started at Los Conucos (Northwestern Anzoátegui) well VC-1. This is Shell's first attempt in Eastern Venezuela.

In Southwestern Venezuela (Barinas-Apure basin), Socony's Calza n° 1 was abandoned, Silvestre-2 continues drilling and M.G.O. test Apure-1 is fishing. No interesting developments are coming up from this basin.

In Anzoátegui the M.G.O. approved a new location now rigging up (Sketch map of this location will be sent shortly) called Toco-1 and Socony's Chimire-1 continues drilling.

In the State of Monagas, Socony abandoned test-hole AX-6 with poor results. This test was located in the bottom of an old filled-in Pliocene valley where an enormous amount of gravels and Pliocene ? basal conglomerate was drilled practically

to the bottom of the hole. Creole's wells, JX-3 and JGE-32 continue drilling, WGE-34 is ready to abandon at 4398' and a new test-hole has been approved in La Pica. This hole is meant to check the La Pica structure after some contradictory results obtained by reflexion seismograph and stratigraphic tests have been recorded in the western areas. If La Pica structure checks after the two proposed core-holes are finished, it is probable that a new deep wildcat will be drilled in the pooled area. The two Atlantic tests, Jaito 1-A & El Paso-1 are drilling ahead, as well as the Sinclair's tests SEN-127 and Varsa-2.

The Phillips recorded a new failure within the limits of Mata Grande when well FT-7 was plugged and abandoned. This Company is slowly getting the idea that Mata Grande, same as the near-by Capacho is faulted and the oil accumulations are greatly controlled by the fault pattern. A new wildcat south of Mata Grande has been spudded in, called Toro n° 1 (See enclosed sketch).

In southern Monagas Creole started an off-set the Texas Tucupita field. Tucupita is slowly building production and in spite of the low gravity of the crude is becoming an interesting field. Creole has some concessions west of the producing area where the new hole called TC-1 has been located. It seems probable that Creole-Mena Grande will re-open activities in southern Monagas.

Very truly yours,

Clemente González de Juana

CGdeJ/pt.
CC/W.B. Jayred
Superior Oil Co. of Colombia
Enclosures: 2 sketch maps.

Caracas, June 21st., 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Following are some results obtained in wildcats in
Western Venezuela :

Raban - 1 of the Texas Co. topped the Cretaceous
limestones at 5834' and is now drilling into the oil formation.

VL - 1 of the Shell west of Tia Juana field found
the following formations :

}	Top of Cretaceous	10,525'
	Colón limestone	11,570'
	Luna fmt.	11,650'
	Cogollo limestone	12,006'

The Cogollo limestones are flooded. When testing
the well showed enormed presures with water 12 times normal
(sea) salinity. Water flow was estimated at more than 100,000
b. p. d.

The la Luna and Colón limestones were dry and no
fluids were recovered after considerable amount of swabbing.
The well is now testing some higher minor sand intervals within
the Eocene but it is practically condemned.

The finding of the highly saline, high pressure,
Cogollo waters led to establishing 2 new locations in this area,

both to drill the Cogollo. One of them to the NW. of VL-1 and the second to the SE. in Creole's land.

WT- 2 in Colón district (southwestern Lake basin) finished up testing. The history of this important test well, may be summarized as follows.

Location: Structural high discovered by surface geology. North plunging anticlinal nose.

<u>Casing:</u>	13.3/8"	at	2568'
	9.5/8"	at	6690'
	7"	at	8100'
	4.3/4"	at	9061'

<u>Formations:</u>	Luna	at	6685'
	Cogollo	at	6855'
	Tomón (Uribante)	at	7780'
	Basement	at	9160'
	T. D.	at	9173'

In the tests the Luna - Cogollo limestone yielded very small production, less than 300 b.p.d., the Uribante fm. was tested with better results, it came in with about 700 b.p.d. but after acidizing with 8,050' gall. production was established at 1,700 b.p.d. The well has been finally completed in the interval 8810' - 9173' with an initial production of 1700 b.p.d. through 7/8" choke, gravity of the oil .82 Be'

Richmond Exploration Co. The results of various tests drilled by the Richmond (Standard of California) in districts Perijá and Urdaneta are very interesting.

Well Zulia 26-1, in the Macoa nose, is a producer

good for about 800 b.p.d. from the Cogollo limestones. The behavior of this well has been rather erratic, it came in very strongly promising an initial production of about 4,000 b.p.d. but shortly after the tests began it settled down to the present 800 b.p.d. In any case it is very interesting the finding of Cretaceous oil in this place which is far away from the known production of La Paz - Mara and from the southern WT - 2 in the Colón district.

Well Zulia 7-1, is a heavy oil producer, also from Cretaceous limestones. As a heavy oil producer it is a remarkable well because it is believed to be possible pumping about 1,000 b.p.d. out of it. An interesting characteristic of this well is the absence of water in the Cretaceous limestones, which agrees with the results of Calentura n° 2 (Pure oil) previously reported and commented.

Well Zulia 1-1 is structurally low because it did not reach the Guasare limestones (Paleocene) drilling entirely in Eocene. As Zulia 1-1 was drilled in a south plunging structure the Richmond feels confident to be able to reach the Cretaceous limestone in a northern location. From a commercial standpoint the Richmond should not be interested in drilling northward as they may find an oil field for the Shell which is holding the concessions in district Maracaibo.

The drilling done so far by the Richmond proves that in spite of the low position of their land, located in the Machiques trough, the Cretaceous can still be reached in the plunging structures of the foot-hill belt, and in the northern half of district Urdaneta. The Cretaceous limestones are oil bearing, thus considerably extending the Cretaceous prospects. The major part

of the Richmond land is, probably, too-low for Cretaceous production and the prospective oil is therefore limited to the Eocene.

The position of the Richmond (Standard of California) appears now to be strong and although it may take more twelve to fifteen thousand feet wells to discover it, I believe they will be able to develop a worthy production in western Venezuela.

In Eastern Venezuela Mulata deep test, MP.111, was ready to abandon at 10,213'. The correlation of Sta. Barbara-Mulata deep formations is still doubtful because of the slope of the Pirital dry land. This milestone of Jusepin geology is frequently disregarded or not given proper attention by many subsurface men. In the cliffs of Pirital - Punta Gorde outcrop some sandstone of the Merecure formation, well Pirital n° 1 found the Paleocene (Midway) Venericardia limestones at 380' and from this point to the old formations slope toward the south and east. The La Pica shoreline was thus formed in the south flank of the old uplift but the old formations also slope and accordingly formations like Merecure and younger Carapita are found truncated below La Pica away from the uplift.

It will take many more deep holes to define the deep possibilities of this area.

Very truly yours,

Clemente González de Juana

CCdeJ/pt.
CC/W.B.Jayred
Bogotá office

Caracas, July 5th., 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

The Venezuelan Government finally decided to sell 25% of the Royalty oil to outsiders. Forms of bidding and analyses of available oils have been sent to various Legations and Embassys as well as to interested concerns. Negotiations with Italian & French governments are of special interest.

Mixed companies.- Some days ago I received news from New York petroleum circles to the effect that the Venezuelan Government was ready to give some concessions to the British Controlled oilfields. As far as I can say this is not true. The Venezuelan Government still holds the idea of forming mixed capital companies, i. e. American capital plus Venezuelan, probably Government, capital. During Mr. Mengden's visit to Caracas I informed him about the attempt made by the Cities Service to interest the Government in one such a company, this effort still continues from the part of Cities Service but the matter is now "status quo", in fact the Ministerio de Fomento has not shown any great interest in this contract, possibly because it has been introduced through the Corporación de Fomento, an autonomous or semiautonomous organism of no great effectivity.

Strange as it may look, the Creole Petroleum Corporation is showing more than an ordinary amount of interest in these mixed capital possibilities. Long time ago, before the Revolution, the Creole tried to interest Medina's Government in mixed capital companies but the Venezuelan Government was not interested in the matter. Creole is again considering this possibility in relation with the open acreage of Mara district, west to north of the City of Maracaibo, and the also open land in the eastern foot-hill belt of the Sierra de Perijá, in the Urdaneta & Perijá districts. The results of well Zulia 26-1, reported in my last letter, reflect very favorably on this area.

Please keep confidential the above information.

Vacation.- In a very few days I am leaving for a vacation trip to the United States and Europe. During my absence Mr. L. Aguilera, Petroleum Engineer, will be in charge of my office and correspondence. He has instructions to continue this correspondence as usual.

Very truly yours,

Clemente González de Juana

CGdeJ/pt.
CC/W.B. Jayred
The Superior Oil Co. of Bogotá

THE SUPERIOR OIL COMPANY

OF COLOMBIA

BOGOTA, COLOMBIA

July 7, 1947.

Dear Dr. Gonzalez de Juana:

Upon my return to Bogotá I found your kind letter of May 30th.

I trust you are still in Caracas. I plan to be there in about a week or ten days and shall look forward to seeing you again.

With kindest regards, I remain,

Sincerely yours,

W.H. Mengden
am

W. H. Mengden.

Dr. Clemente Gonzalez de Juana
Apartado 1554
Caracas, Venezuela.

Caracas, July 12th, 1947

Mr. Mengden
c/o The Superior Oil Co. of Colombia
Apartado Aéreo 4809
Bogotá, Colombia

Dear Sir :

As you are probably aware by letter n° 231, dated July 5th, Dr. Clemente González de Juana has left Caracas the 8th. on a vacation trip to the United States and Europe, and during his absence Dr. Luis Aguilera will be in charge of the office and correspondence.

Mr. Aguilera will be very pleased to know you and to be useful in everything he can do at your arrival in Caracas. You can contact him, at your convenience, at his private home by phone n° 24049 or through Dr. José María Travieso Paul, who are also connected with him.

Very truly yours,

Clemente González de Juana

CGdeJ/LA/pt

Caracas, July 22nd, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Following González de Juana's notes on the Geology of various oilfields, here is a short description of the Bolívar Coastal area, the most prolific reservoir of Venezuela.

From a regional standpoint the Bolívar Coastal fields are located in the eastern flank of the Maracaibo depression, characterized by a gentle homocline dipping from two to four degrees toward the SW, and cut by a number of faults, most of them directed N-S.

From a more local point of view, all the fields, with the only exception of Bachaquero, are framed within two E-W striking highs i. e. the El Mene - Ambrosio uplift in the North and the Pueblo Viejo anticline in the South. In both bounding highs outcrop rocks of Eocene age.

The oil accumulations are mostly controlled by stratigraphy and, therefore, commercial production has been found in synclinal areas, such as the Ambrosio and Cabimas synclines, as well as in anticlines and domes. In creole's territory oil accumulations against faults are not uncommon.

For practical purposes the Bolívar Coastal fields, are subdivided in three zones: Cabimas - La Rosa to the North,

Tía Juana in the Center and Lagunillas to the South. Bachaquero, the newest development, is still farther South.

The stratigraphy of the Bolívar Coastal fields may be summarized as follows:

	PLEISTOCENE	- <u>Maracaibo fm.</u>	(200'-1000')	Non commercial
	PLIO-MIOCENE	- <u>La Puerta fm.</u>	(300'-2000')	Non commercial gas sds.
Ucf.	<hr/>			
	MIOCENE	- <u>Lagunillas fm.</u>	(1000')	Producing
		Bachaquero sd.	(600')	
		Laguna sd.	(75')	
		Uper Lagunillas sd.	(75')	
		Lower Lagunillas sd.	(300')	
	MIOCENE	- <u>La Rosa fm.</u>	(0-500')	Producing
		La Rosa sd.	(45')	
		Intermediate sd.	(30')	
		Sta. Bárbara sd.	(75')	
Ucf.	<hr/>			
	OLIGOCENE	- <u> Icotea fm.</u>	(av.100')	Only sporadic impregnation
Ucf.	<hr/>			
	EOCENE	- <u>Ambrosio fm.</u>	(75')	Non productive
	EOCENE	- <u>Las Flores fm.</u>	(0 - 1000')	Poorly produc- tive
	EOCENE	- <u>Potreritos fm.</u>		Producing
		Main s. s.	(up to 200')	
		Eocene sds. 1,2,3,4,5, etc.		
	EOCENE	- <u>Misca fm.</u>		Producing only in Pueblo Viejo

Following are some details about these various producing horizons :

Bachaquero sand.- This younger reservoir has been found from Tía Juana southward as far as Bachaquero, but oil production is limited to the fields of Lagunillas & Bachaquero.

In the Lagunillas field the total thickness of this sand reaches up to 700' but the thickness of net impregnated sand rarely exceeds 150'. The oil saturation is generally found in individual sand bodies from 10' to 50' separated by similar intervals of clay and clay-s shale. The porosity of these sands is high reaching an average of 34.5%. The gravity is low, average 12° API., and the oil is very viscous. For these reasons the productivity per acre/feet is low and it is believed not to exceed 100 bbls. acre/feet.

In the Bachaquero field the thickness of this sand averages 475' while the net impregnated oil sand averages 125 feet. The gravity of the oil is slightly higher, reaching 13.5° API. as an average. The productivity is also higher and 300 bbls. per acre/feet is considered a fair average figure for recovery factor.

Laguna sand. - This sand produces only in the southern part of the Lagunillas field. It occupies a stratigraphic interval about 100' thick but the net impregnated sand reaches only about 35'. The lithology of this sand interval and the character of the oil are very similar to the lower Lagunillas sand, to be described below. The gravity of the oil averages 14° - 18° API and the productivity is about 250 bbls. per acre/feet.

Upper Lagunillas sand. - Same as the Laguna sand, this interval produces only in southern Lagunillas where it shows a total thickness of about 60' and a net impregnation about 20'. The characteristics of this sand are similar to the lower Lagunillas sand, and the gravity of the oil varies from 14° to 18° API.

The upper Lagunillas sand was almost ruined by the competitive drilling and production of the past and so, the present commercial value of this reservoir is very low.

Lower Lagunillas sand. - This is the best and most prolific reservoir of the Bolívar Coastal area producing in La Rosa, Punta Benítez, Tía Juana and Lagunillas. It was not deposited in Bachaquero.

The total thickness of this interval decreases from N. to S. In La Rosa field it averages 400', in northern Lagunillas 200' and in southern Lagunillas decreases to about 75'. The amount of net oil impregnated sand changes from place to place within very short distances and do not bear any close relation to the total thickness, thus in the northern fields the net saturation reaches 45' out of a total of 400', and in Central Lagunillas the saturation averages 40' out of a total of 140'. Generally speaking the lowest oil saturation is found in the northern fields, near the Icotea syncline, and the best impregnation occurs in Lagunillas. This is reflected clearly by the average initial production of the wells, which is low north of La Rosa, while in Lagunillas reached in cases up to 6,000 b.p.d.

The sand texture varies from field to field. In the northern areas it is fine grained and shaly whereas in Lagunillas it changes from medium to coarse grained, and is usually clean. As an example, in La Rosa the porosity averages 31% and the shale content reaches 10% while in Lagunillas the porosity averages 34% and the clay content decreases to 2,5%.

The lower Lagunillas sand presents a strong water drive, upward as well as downdip, which favors the high productivity of this reservoir. The combination of the water drive and the sand texture reflects on the recovery figures which are generally accepted as shown below:

Field	Gravity	Recovery factor
La Rosa	14°-18° API	200 bbls./acre foot
Punta Benítez	14°-18° API	650 bbls./acre foot
N. Lagunillas	14°-18° API	1,406 bbls./acre foot
S. Lagunillas	18°-22° API	2,500 bbls./acre foot

Land movement. The Caracas Petroleum Co. has selected the following parcels of exploitation concessions:

Pesca-2-1 to and including Pesca 2-11 with 5.000 hectares of the exploration-exploitation lot "El Pescado n.2", Districts Zaraza & Cagigal, States Guárico and Anzoátegui.

Guari-1 to and including Guari-6 with 2.410 hectares of the exploration-exploitation lot "Río Guaribe", District Cagigal, State Anzoátegui.

Morro-1 to and including Morro-8 with 3.377,53 hectares of the exploration-exploitation lot "La Morrocuya, La Olla y Arena n.1", Districts Ribas & Cagigal, States Guárico and Anzoátegui.

Arena 1-1 to and including Arena 1-9 with 4.197.71 hectares of the exploration-exploitation lot "La Morrocuya, La Olla y Arena n.1", Districts Bruzual, Cagigal & Ribas, States Guárico and Anzoátegui.

Arena 2-1 to and including Arena 2-11 with 4.896,93 hectares of the exploration-exploitation lot "La Morrocuya, La Olla y Arena n.2", Districts Bruzual & Cagigal, State Anzoátegui.

Arena 3-1 to and including Arena 3-8 with 3.593,50 hectares of the exploration-exploitation lot "La Morrocuya, La Olla y Arena n.3", Districts Bruzual, and Cagigal, State Anzoátegui.

The North Venezuelan Petroleum has selected fourteen parcels of exploration-exploitation in the big block "Zona NVP-1"

in State Falcón, within the old Jiménez Arráiz concession. Parcels numbered "22" to "35" comprising approximately 10.000 hectares each one.

Creole Petroleum has selected nine parcels for exploration and exploitation in the State Falcón, within the block "Gueque II" comprising 120.000 hectares and which formerly belonged to the North Venezuelan. Parcels named "103" to and including "111" cover a total of 86.210 hectares.

Transference of concessions. The Venezuelan Atlantic Refining acquired, again, more parcels from the Pantepec Oil Co., in accordance with the 1944 Agreement between those oil companies.

These parcels are listed below:

Ruiz 4-A to and including Ruiz 4-K of concession Lot N° 4 with 5.000 hectares.

Ruiz 5-A to and including Ruiz 5-H of concession Lot N° 5 with 4.000 hectares.

C-1 to and including C-11 of concession Cucharos with 5.000 hectares

N-7 to and including N-11 of concession El Negro with 2.268,40 hectares.

All parcels located in district Infante, State Guárico.

Very truly yours,

Clemente González de Juana

CGdeJ/LA/pt.
CC/W.B.Jayred
The Superior Oil Co. of Colombia

Caracas, July 12th, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Following with the description of the geology of the Bolívar Coastal area I shall consider now the Oligocene and Eocene formations.

La Rosa Sand. - The production in this sand is limited to the Cabimas area and it does not extend south of Punta Benítez. Within these boundaries the sand development is good, showing an average net impregnated thickness of about 30' decreasing to the North and also toward the South.

Wherever present this sand shows a high porosity reaching 33.5%. The recovery factor varies around 680 bbls. per acre/foot.

Intermediate sand. - This is a lenticular sand development presenting only sporadic all accumulations in the northern fields.

Santa Bárbara sand. - This basal sand of La Rosa formation produces light oil in the northern fields, La Rosa & Punta Benítez, and a minor amount of heavy oil in Lagunillas and the central part of Echaquero. Near the shore and in the inland concessions of Punta Benítez the stratigraphic interval is predominantly shale, as it is in Tía Juana and northern Lagunillas. In the

central part of La Rosa the sand is clean with an average porosity about 36%. The oil saturation is good and the recovery factor about 950 bbls. per acre/foot. The mean thickness of net saturated sand averages 25 feet. Lakeward, in western Punta Benítez the productivity of this sand decreases and the recovery factor does not exceed 250 bbls. per acre/foot.

The sand development in Southern Lagunillas is lenticular and sporadic showing a net saturation of only 12 feet. It is remarkable that the very thin sands show higher porosity and saturation than the thicker ones.

In Bachaquero the Santa Bárbara sands flanks the Pueblo Viejo uplift, disappearing eastward, as the whole La Rosa formation is cut out by an unconformity near the actual location of the Lake shore.

The Santa Bárbara sand is thin and lenticular with an average net impregnated thickness about 20'. The sand is clean and of uniform grain, the gravity of the oil averages 17.50° API. The recovery factor is about 450 bbls. per acre/foot.

Icotea formation. - This is only a sporadic development showing the greatest thickness in the Icotea Syncline. It is unimportant as a producing unit and only a few wells yield oil in the Ambrosio field.

Ambrosio formation. - Unconformably below the Oligocene, the Eocene begins with the Ambrosio formation, also called the titanite zone, which in Cabimas averages only 75 feet of thickness, decreasing southwestward in Punta Benítez and being cut out by the unconformity southward, in Tía Juana and Lagunillas.

The titanite zone is non productive.

Las Flores formation. - The upper Eocene Las Flores formation is equivalent to the pebbled garnet mineral zone. It is found below the titanite zone in the northern fields, below the unconformity in Tía Juana and absent in the southern area. In Cabimas reaches a thickness of about 1,000 feet, decreasing to about 700' in Punta Benítez. In Tía Juana the remainder of this formation below the unconformity varies from place to place averaging about 150 feet, and in Lagunillas is almost universally absent. The commercial value of the pebbled garnet zone is very small.

Potreritos formation. - This formation is equivalent to the dodecahedral garnet mineral zone and is the main Eocene producing formation of the Bolívar fields. In the Punta Benítez presents two petroliferous sands i. e. the "main sandstone" found about 700 feet below the top of the formation and the so-called Eocene s.s. located about 70 feet stratigraphically below it. Both these sandstone have an average thickness of 100' each one. In Tía Juana the main sandstone, with a mean thickness of 200 feet, is found about 450 feet below the top of the Potreritos and the Eocene sandstone is subdivided into 4 thinner sands. These sand intervals are cut by the unconformity in northern Lagunillas, in the SW. Lagunillas segment a few feet of Las Flores are found below the unconformity and, therefore, the Potreritos formation presents again the usual commercial sand intervals, same as in Punta Benítez. The main s. s. is found about 700' below the unconformity.

Misosa formation. - The Misosa formation is equivalent to the

Tourmaline-Zircon mineral zone. It is productive only in the Pueblo Viejo uplift and is now on test in wildcat VL-1 where the sand intervals are of very minor importance.

Continuing the description of the Bolívar Coastal fields I will deal here mostly with the structure of the various areas.

The structure of the Cabimas area is the most complex of the whole producing belt. Flanking the El Mene uplift the various Oligo-Miocene formations dip into the prominent Icotea syncline which trending SW. follows very closely the NW. lake shore of Punta Icotea. South of this fold is the Cabimas anticline trending also SW. and plunging toward the west. The Cabimas anticline shows a structural saddle near the coast line and continues in Creole's concessions in the lake, forming a very small but well individualized dome.

South of Cabimas anticline is the Majumba syncline, roughly parallel to the above folds and plunging also toward the S.W. Near the town of Cabimas this fold presents a closed, small basin.

Inland and southeastward of Majumba syncline, there is a monoclinial flank striking almost N-S, dipping W. Lakeward there is the La Salina dome, limited toward the SE. by the La Rosa syncline. The eastern flank of this syncline continues southward in monoclinial form.

Two important faults cut the Cabimas area. The western one is found about 1500 m. west of Punta Icotea trending S-SW. It is a normal fault with the downthrown toward the E. the displacement increases from N. to S. where it reaches 600

feet. This fault limits the production to the W.

The other important fault trends almost N-S, slightly SW, and limits the eastern extension of the field up to near the point where it crosses the coast line, between concessions Michigan & Huron, entering the Punta Benítez field.

Various minor faults striking from S-SW. to S-SE. complete the structural pattern of Cabimas.

Oil production is obtained in Cabimas from the lower Lagunillas sand, the most prolific reservoir of the field, and from the 3 sands of La Rosa formation. Sporadically the Oligocene Icofea produces in Ambrosio. The Eocene production is not important.

South of La Rosa is the Punta Benítez oilfield which has an oil accumulation against the western Cabimas fault described above. This fault continues striking N-S, with the downthrown side toward the E. The monocline, or homocline, has a slightly arched closure against the fault which continues southward into the Tía Juana area.

Another well defined zone of Punta Benítez is located near the Lake shore line, in both sides of the southern extension of Cabimas eastern fault. This fault produces southward a light structural nose, and a very small displacement of the monocline.

The eastern limit of Punta Benítez is determined by pinch out of the sands toward the East.

The V.O.C. estimates its proven acreage at 5,340 hectares with reserves reaching about 60,000,000 bbls. The Mene Grande estimates a proven acreage about 2.471 acres and reserves

about 45,000,000 bbls. The rest is Creole's.

Very truly yours,

Clemente González de Juana

CGdeJ/LA/pt.
CC/W.B.Jayred
The Superior Oil Co. of Colombia

Caracas, September 1st, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Continuing with the summary of Maracaibo Basin Geology I shall consider now the structure of the Tía Juana and Lagunillas areas.

The Tía Juana field is essentially monoclinally segmented by a fault zone which, trending N-S, crosses the Lake shoreline at about 2 Km. SE. of the mouth of the Ulé river. The displacement is small and the downthrown side is toward the E.

East of the fault the monocline dips West about 150' 200' per Km. West of the fault the monocline strikes SE. dipping SW. about 250' per kilometer.

East of Tía Juana, near the small town of Ciudad Ojeda, a small accumulation occurs in a monocline striking SE. and dipping S. about 200' per kilometer.

Oil production has been obtained in Tía Juana from the upper Lagunillas sand in the southern part of the field, and from the lower Lagunillas sand throughout the whole area. This sand decreases in thickness from N. to S. It is a good reservoir in the NE. segment (Shell's land) and slightly poorer in the SE. segment, Lakeward, in Creole's territory, the thickness increases and the value of this reservoir is higher. La Rosa formation is

shaly and poorly developed, although a few, thin sands near the base of the formation carry oil. The Eocene is producing in the southern part, specially west of the fault in Creole's concessions. Near Ciudad Ojeda the lower Lagunillas sand has several shale intervals with a few interbedded thin oil sands, La Rosa formation has better productivity, and the best production is obtained from the Intermediate sand. Some wells completed in this horizon reached an initial production of about 700 b.p.d. but they decline fast and most of them are now pumping.

The Shell estimates their proven reserves of Tía Juana at about 70,000,000 bbls. with an acreage of 2,200 hectares. The M. G. O. estimates an acreage of 1,170 acres and 55,000,000 bbls. of proven reserves. The rest is Creole's.

In the Lagunillas field the monocline shows in the north a strike NW-SE and a general SW dip averaging 200 feet per kilometer. Following the present coast line is a small fault, striking SE. with the downthrown side toward the E. which dies out near Creole's pier. About 2 Km. East of the coast line another fault strikes S-SE. with a displacement of about 70' toward the W. About 4 Km. east runs a third, parallel fault, also down toward the W., which practically limits the eastern extension of the oilfield. East of this fault the monocline is steeper up to the nose of the Lagunillas anticline where the Eocene outcrops. Near the Miocene-Eocene contact are the large seepages which led to the discovery of this field.

The Lagunillas monocline ends against a marginal fault of the Pueblo Viejo uplift. This thrust has a strike from S.-SW. in the North to almost N-S lakeward, the movement is westward and the displacement varies from 300' to 1700'.

Oil production in Lagunillas has been obtained from the upper sands only in Creole's territory but the most prolific horizon is the lower Lagunillas sand. In some places this oil formation is contaminated by water. The origin of this water is not well understood yet.

La Rosa formation was not deposited in Shell's territory but lakeward is better developed reaching up to 200' thickness. The Santa Bárbara sand is a worthy reservoir in Creole's land.

The Eocene has more and more value, specially in Creole's water concessions and in the M.G.O. strip.

The Shell estimates their holdings to have about 7,660 hectares of productive acreage with proven reserves of the order of 225,000,000 bbls. The Mene Grande estimates 2,717 acres productive within their land with proven reserves about 125,000,000 bbls. The rest is Creole's.

The Bachaquero field produces from the south flank of the Pueblo Viejo uplift. The monocline has an average E-W strike and a west dip reaching about 225 feet per kilometer. The monocline is very regular and no faults have been proven within the limits of the producing area.

The Bachaquero sand is very thick and impregnated by heavy oil, about 13° A.P.I. in the lower part of the Lagunillas formation, eastward, the oil is lighter reaching an average of 16° A.P.I. The net sand thickness of the heavy oil zone (Bachaquero sands) averages 100' whereas the same net sand in the light oil zone is only about 20' increasing lakeward. In the eastern part of the field the Lagunillas formation rests unconformably on the Eocene, westward the La Rosa formation is present, reaching

more than 100', with about 25' of net sand. The oil of La Rosa formation has an average of 17° A.P.I.

The Eocene produces from the Potreritos and Pauji formations found comparatively very shallow, at depths from 3500' to 5100'. This Eocene production although steady is not spectacular. Lagunita n° 1 of the M. G. O. had an I. P. about 600 b.p.d. and B-1 of the Creole reached an I. P. of 1300 b.p.d.

The proven reserves of Bachaquero are about 600,000,000 bbls. mostly heavy oil. This figure may be substantially increased by Creole's new drilling program and more Eocene exploration. The Shell estimates its holdings at about 5,630 productive hectares and about 800,000,000 of proven reserves, the M. G. O. estimates their proven acreage at 1,246 acres and 63,000,000 bbls. of proven reserves. The rest is Creole's.

Creole's estimates for their holdings in the whole of the Bolívar coastal area about 95,249 productive acres and 2,907,000,000 bbls. of proven reserves.

Dr. González de Juana has practically finished up for you a set of contour maps and cross-sections of the Bolívar coastal fields. Due to the interpretative character, however, I prefer to keep these maps until Dr. González de Juana's return, when he may be able to add the final touches.

Venezuelan royalty oil.

The Ministerio de Fomento informed about the propositions received for the sale of the 25% of the Royalty oil that the Government can obtain from the oil operating companies during the years 1948 and 1949.

A summary of the eight propositions received, which

cover a total of about 68 millions of barrels are shown below.

<u>Company</u>	<u>Barrels</u>	<u>Crude oil of</u>	<u>Price</u>
Ipiranga S.A. (Brasil)	600.000	Cumarebo	0,51\$/bl. above the price paid now by the Oil Companies.
	380.000	Quiriquire	0,20\$/bl. " "
	350.000	San Joaquín	0,497\$/bl. " "
Raffinerie Belge de Petroles S.A. (Belgium)	700.000	Lagunillas	12% above the price of this crude in West Texas.
S.A. Permolio (Italy)	1.000.000	Anyone not paraffinic	0,025\$/bl. above the highest price offered.
Martin Saia (Portugal)	2.516.000	Oficina (Creole)	5% above the highest price offered or 7,5% above the price now paid by the Oil Companies.
Concesionaria da Refinacao de Petroleo em Portugal, "Sacor S. A."	2.012.800 2.516.000	Lagunillas(2) Oficina (Mene Grande)	5% or 9% respectively. 7,5% above the prices now paid by the Oil Companies.
	1.635.400	Lagunillas (")	9% " "
	377.400	Bachaquero light	9% " "
Dale W. Moore Houston, Texas (U.S.A.)	35.760.000	Oriente de Venezuela	0,15125\$/bl. " "
Petrol Terminal Co. Philadelphia (U.S.A.)	10.800.000	From the State of Anzoátegui	0,11\$/bl. " "
	10.800.000	From the State of Monagas	0,08\$/bl. " "
ANCAP (Uruguay)	107.000	Oficina	0,0377\$/bl. " "

The Ministerio de Fomento is studying all the propositions and the resolutions will be published in two or three weeks.

No propositions of Argentina were received but negotiations are undertaken in order to change royalty oil by merchandises

and food from Argentina.

Very truly yours,

Clemente González de Juana

CGdeJ/LA/pt.
CC/W.B.Jayred
The Superior Oil Co, of Colombia,

Caracas, September 19th, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Following is a summary of the outstanding developments in wildcatting and exploration drilling in the States of Monagas and Anzoátegui during the last months:

In the State of Monagas Creole abandoned definitely the wildcat JX-2 drilled to reach the Cretaceous. This well I located North of Jusepin was suspended in last december and has now reassumed testing without success. In this area Creole has abandoned two other wells JX-3 after testing at 2.807 feet and L 6.026 feet in the lower Cretaceous, and the stratigraphical drilling JGE-32 at 8.419 feet. T.

Another stratigraphic test in the Quiriquire zone T QGE-34 was abandoned at 4.398 feet. Creole is not operating now rigs in exploratory drillings in the States of Monagas and Anzoategui.

T.
The structural drilling La Pica - 2, North of the old La Pica well in the Maturin area, was stopped after to have reached the upper La Pica formation above 5.254 feet. On account of the result of this well some seismographic survey will be carried out over this area before to reassume drillings.

Creole has started to export oil from the old Pedernales field in the eastern Monagas. This field has been closed from 1936 on account to the high content of sulphur of the crude. Production is obtained from Miocene sands that are present from 1550 feet to 2.500 feet with an average thickness of about 250 feet. The gravity of the oil is 21 API; the deeper sands account for the greater part of the production and for the lighter oil. The proven reserves of Pedernales field are about 60.000.000 barrels, mostly heavy oil, and the productive acreage is 972 acres.

In southern Monagas, Creole completed TC-1 at 5.824 feet with initial production of 900 barrels per day, off-set well of the Texas' Tucupita field. The drilling equipment has been moved to other location and will be in operation within this area for some months.

Texas is drilling a wildcat denominated Sotillo-1 in the lot of Exploration and Exploitation SOTIL, in southern Monagas, North to Temblador.

Socony has started a new test-hole AX-7 in Monagas near the abandoned AX-6. (See enclosed sketch). In the State of Anzoategui, Socony abandoned Chimire-1, dry hole at 8.033 feet and suspended temporary Tascabaña-2.

Atlantic has a new failure in Monagas, wildcat Paso-1 abandoned at 7.105 feet. In Anzoategui a new well Pelas-1 was started close to the producer wildcat Pelayo-1, North of this locations (see enclosed sketch) Pelayo-2 was drilled to 8.206 feet; this well is also believed to be a producer. All this

wells are in the acreage subject to the provisions of the Atlantic-Pantepec agreement.

Phillips suspended Toro-1 located South of Mata Grande field. Phillips has completed five wells within the Mata Grande field.

Consolidada's SEN-127, North of Jusepin, and Varsa-2, South of this field, were abandoned. One wildcat T-11 located North of Travieso field, has been started and other location denominated El Lirial is approved. (See enclosed sketch).

In the State of Anzoategui, Mene Grande is drilling ahead the wildcat El Toco-1 at 7.115 feet and two new wells CaM-5 and Fría-1 are located. (See enclosed sketch).

Shell's deep-test in Los Conucos (State of Anzoategui), VC-1 continues drilling at a total depth of 6.983 feet. *LT*

Land movement.

Creole Petroleum Co. has selected eight parcels for exploration and exploitation in the State of Falcón, over the block "Buchivacoa-II", comprising 15.500 hectares and which formerly belonged to Standard Oil Co. of Venezuela. Parcels named "46" to and including "53" cover the total of the old concession. Final titles of these concessions have been issued in favor of the Creole Petroleum Co.

In the block "Buchivacoa-I" in the same State, and also formerly belonging to Standard Oil Co. of Venezuela, Creole has selected twenty four parcels named "54" to and including "76" covering the 231.650 hectares comprised in the block. Final titles have been or will be issued in favor of the Creole Petro-

leum Co.

Venezuelan royalty oil.

The Venezuelan Government has given its approval to the offers made by the firms Ipiranga (Brazil), Permolio (Italy) and Refinerie Belge de Petroles (Belgium) for the sale of 25% of the petroleum royalty during 1948 and 1949.

This propositions cover a total of 3.100.000 barrels as I informed in my last letter No. 134.

The Government declared that the negotiations of the royalty oil for 1948 and 1949 are finished.

Very truly yours,

Clemente González de Juana

CGdeJ/LA/pt
CC/ W.B.Jayred
The Superior Oil Co. of Colombia
Enclosure: 2 sketch maps.

Caracas, October 11th, 1947

The Superior Oil Co.
930 Edison Building
Los Angeles - California

Attention: Geological Department

Dear Sirs :

Following is a summary of the outstandings developments in wildcatting and exploration drilling in the State of Guárico during the last months:

Creole abandoned two more test holes in its Western Guárico block: GXB-7 at 7.754 feet after testing and GXB-9 at 5.233 feet. Another test hole GXB-10 was spudded and is still drilling at 6.065 feet. (See enclosed location sketch).

The results obtained by the Creole in its block of exploration concessions in Western Guárico are not specially interesting. Only dry-gas has been found in one of the nine tests holes drilled (GXB-2), and the basement in the most of the wells has been reached higher than expected.

Three wells abandoned the Texas Petroleum Co., in its concessions of Western Guárico, as dry holes: Grico-7 at 4.283 feet, Grico-9 at 4.050 feet and Barbula-1 at 5.395 feet. (See enclosed sketch).

Texas' Punzon n° 1 continues drilling at 5.286 feet.

In this area the Phillips Venezuelan Oil Co. completed 3 core-holes GD-3, GD-4 and GD-5 at 3.626, 3707 and 3.524 feet, respectively, and spudded two new wells: GD-6 and GD-7. (See enclosed sketch).

In the Northern Guárico the S. A. Petrolera Las Mercedes abandoned wildcat Camaz-1 after ^{failure} to have reached the Cretaceous. Placer-1 continues drilling at 5.051 feet and Valle-1 is testing at 7.025 feet.

Socony-Vacuum has started drilling activity in the State Guárico and well La Pascua-1 has been spudded in the Central Guárico.

In Central Guárico Mercedes-33 well, located 15 kilometers south Las Mercedes field, opened a new producing area in the Chain Lots of S. A. Petrolera Las Mercedes. This field has been denominated Palacio and up to date seven wells have been completed at an average depth about 3.500 feet. One rig is in continuous operation in the field.

The Venezuelan Atlantic Refining Co, remains very active in Eastern Guárico. Two new exploratory wells have been spudded: Saban-2.1 South to Tucupido field, (see enclosed sketch) and Tucupido-7 North to the field within the parcels transferred from the Pantepec Oil Co. Both continues drilling at 4.805 feet and 5.452 feet.

In the Tucupido field Atlantic has two wells with small production, Tucupido-1 and -2 completed at 6.700 and 5.600 feet, respectively. Tucupido-3 is testing at 5.587 feet. (see enclosed location sketch).

South of the Atlantic concessions, Phillips started a test-hole denominated Socorro-1 shown in enclosed sketch.

The well continues drilling at a depth of 6.009 feet.

Concessions maps.

The Venezuelan Government approved the general map presented by the Esperanza Petroleum Co. of the parcels of exploitation selected in the following lots of exploration and exploitation:

Cagigal-16. Selected nine parcels, denominated Cagigal-16.1 to and including Cagigal-16.9, covering a total of 3.400 hectares. District Cagigal, State Anzoátegui.

Cagigal-19. Selected seven parcels, denominated Cagigal-19.1 to and including Cagigal-19.7, covering 3.250 hectares. Districts of Monagas and Cagigal, States Guárico and Anzoátegui.

Cagigal-21. Selected one parcel, denominated Cagigal-21.1 with 474,64 hectares. Districts of Zaraza and Cagigal, States Guárico and Anzoátegui.

The Government will issued the final titles of these concessions.

The Caracas Petroleum Co. presented for approval the general map of the parcels of exploitation selected in the exploration and exploitation concessions: Grico-1, Grico-2, Grico-3 and Grico-13. All located in the State of Guárico, Districts of Mellado, Urdaneta and Miranda.

The Socony-Vacuum Oil Co. obtained an extension on the time limit of six months for the presentation of the plans of the exploitation parcels selected within the lots: Barinas 8 to and including 12, 16 to and including 59, 61, 62, 63, 66, 67, 68, 71, 72, 75, 76, 79, 80, 81, 84, 85, 88, 89, 92, 93, 96 to and including 102, 104, 105, 106, 108, 109, 110, 112 to and including 129, 131, 133 to and including 146, located in the States of Barinas, Apure and Táchira.

The Richmond Exploration Co. also obtained a six months extension for the presentation of the maps of parcels selected in concessions: Zulia-1 to and including 49, 51 to and including 75, located in the State of Zulia.

Venezuelan royalty oil.

A contract has been signed between the Venezuelan Government and the S. A. Concessionaria de Refinacao em Portugal for the purchase of part of the petroleum royalty during 1948 and 1949.

The negotiation covers the following amounts:

Quiriquire crude, (19° API) 1.800.000 bbls.
Oficina crude (34,8 API) 2.600.000 bbls.
Bachaquero crude (14,5 API) 130.000 bbls.

The purchaser will paid a premium of \$0,205, \$0,18 and \$0,12 per barrel for the quiriquire, Oficina and Bachaquero crudes, respectively, above the price would be paid by the oil concessionaries.

The execution of this contract will be subject to

an agreement with the Portuguese Government for the supply of certain colonial products.

Very truly yours,

Clemente González de Juena

CGdeJ/LA/pt
CC/ W.B.Jayred
The Superior Oil Co. of Colombia
Enclosures: 2 sketch maps.

THE SUPERIOR OIL COMPANY

OF COLOMBIA

APARTADO AEREO No. 4809

BOGOTA, COLOMBIA

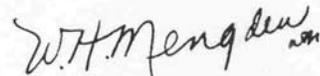
October 21, 1947.

Dear Dr. González de Juana:

Kindly be advised that, in the future, when sending copies of your News Letter to our Houston Office, you may address same as follows:

Mr. Jacques P. Adoue
The Superior Oil Company
400 Oil & Gas Building
Houston, Texas.

Very truly yours,



W.H. Mengden.

Dr. Clemente González de Juana
Apartado No. 1554
Caracas, Venezuela.

Caracas, Venezuela
November 1st, 1947

Mr. W. H. Mengden
P.O. Box 4809
Bogotá (Colombia)

Dear Mr. Mengden:

The attached letter will bring you the happy? news of my return to Caracas. Mr. Aguilera has informed me about you having been here during my absence and I am really sorry ~~it~~ missed you. I hope you may be able to spare sometime in the future to come here, where I will certainly be glad to see you.-

I understand some of your people is at present in Caracas.

During my absence my home telephone number has been changed to 51130. I can be reached at Fomento by 22622 only during the afternoon hours 3 to 5.30 p.m. in case you may need it. The postal address remains unchanged.

Hoping to see you soon and with my very best regards I remain,

Sincerely

Clemente González de Juana

Encl.
1 copy

CGJ/ctm.--

THE SUPERIOR OIL COMPANY

OF COLOMBIA

APARTADO AEREO NO. 4809

BOGOTA, COLOMBIA

November 8, 1947.

Dear Dr. González:

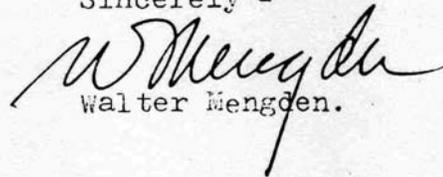
I received your letter of November 1st, enclosing copy of Letter No. 137, and am sorry to know that I missed seeing you in Caracas - but am looking forward to our get-together when I return in about a week or so.

Our offices are on the sixth floor of the Edificio Ambos Mundos, Conde a Principal, and our telephone number is 91461. Two of our geologists are there now, Messrs. Samuel C. Johnson and John R. Davis.

Mr. H. M. Horton, at present in Bogotá, will be in charge of the Geological Department in Venezuela, and as soon as he returns to Caracas he will be glad to contact you.

With all good wishes, I remain,

Sincerely -



Walter Mengden.

Dr. Clemente González de Juana
Apartado No. 1554
Caracas, Venezuela.

Caracas, November, 15th. 1.947

The Superior Oil C°.
930 Edison Building
LOS ANGELES (CALIFORNIA)

Attention: Geological Department

Dear Sirs:

Reviewing the wildcatting activities of the various Venezuelan Oil Companies , the following information is considered of interest:

After completion of West Tarra well, WT-2, now *shown*
established as a Cretaceous producer at a rate of about 1.600
b.p.d., the Colon Development (Shell) is drilling WT-3 and
planning to drill WT-IA, a twin to WT-1 which was suspended
above the producing zone. The outlook of West Tarra remains
very promising.

No much more can be added to my information, letter
n° 130, on Richmond's activities in districts Perijá and Ur-
daneta, State of Zulia, apparently well Zulia 2-1 found the
Cretaceous limestones flushed which is only interesting for
the water drive problem of the Northern fields.

On the hot Cretaceous territory of districts Mara-
caibo and Mara the most interesting news came from La Concep-

ción deep test C-148 which topped the Cretaceous prospective section (Colon limestone) at 10.040 feet. The well is now drilling into elsewhere producing limestones.

Netick
Orinoco well Netick-7 found the Colon limestone at 8.208 and drilled the whole Cretaceous section until the basement complex was reached. The well is now ready to be acidized. Netick-7 is generally considered a potential producer but some doubts have been cast by the high degree of consolidation found in the limestone.

Texas Co. Raban-1 made an splendid producer, good for *on T.* about 6.000 b.p.d. keeping in line with the good wells of La Paz and Mara.- You may have noticed in my former reports (letter n° 126) that the choques used so far in all the Cretaceous wells are very large, most of them one inch in diameter. Although the gas oil ratio is low and so far both in Mara and La Paz fields this G.O.R. is more or less constant, I still have some doubts about the ^{ultimate} effect of these large choques on the reservoir. The pressures in La Paz are steadily decreasing, they are still above the saturation pressure, but they are dangerously approaching this point, and there trouble may start to develop. Very little is known about the type of drive in the fields, it is felt that some water drive is present but nothing can be said yet to prove or to disprove this theory.

The Sibucara well (Shell) and the two Creole's tests MA-2 and 3 are still too shallow for important developments.

Creole is very interested in this area and two of their geological field parties are working in the Cretaceous section of the Parijá foot-hills.

An important event, not reported to you as yet, was the discovery of oil in the Barinas area by wildcat Silvestre n° 2 of the Socony Vacuum.- This well reached at the bottom the basement complex in the form of pink, coarsed grained, granite (TD. 9763). The oil was found in the Cretaceous in hard, very compact and tight, green sandstones.

on ticket

The interval 9325'- 9335' was tested and produced at the rate of 900 bbls. through 1/4" choke oil of 29.2° API gravity with a very low gas-oil ratio (36). The interval 9390'- 9400' was also tested and produced 600 bbls. through 1/4" choke, oil of 30.2° API gravity also with a very low gas-oil ratio.

The data on Silvestre n° 2 should be kept confidential for the time being.

Finding oil in the Barinas basin is unquestionably of major importance, bearing strongly on the future of the Venezuelan oil industry. The productions recorded in the tests mentioned above are not very impressive; in favor of it may be considered the small choke and the very low gas-oil ratios indicative of strong water drive, probably from the Andean structures. Unfavorable factors are the depth and the lightness of the oil sands.

Silvestre n° 2 is only a discovery well in a very large

and unknown basin, unfavorably affected by the lack of a suitable outlet for oil. It is, therefore, too early to speculate about the commercial possibilities of the territory, the well may mark the birth of a new great oil province, or may be just a white elephant leading to extensive and expensive drilling in a non-commercial territory, so far it marks a forward step in the oil exploration of the vast Barinas-Apure basin.

The exploration of Western Guarico, experienced during my absence, a heavy blow from Creole's total failure in the Barbacoas block. You have been already informed about Creole's finding nothing but subordinate amounts of dry gas, so I will not comment it further. I only want to stress the point that, in my opinion, the failure has been due to the lack of thickness of the sedimentary column, some of Creole's wells found granite less than 7,000 feet deep. There is, of course, no basic objection to have commercial oil pools in the rims of large sedimentary basins, such as the Eastern Venezuela basin, however all drilling ventures in the shallow areas of Eastern Venezuela led to failure with the only exception of Tucupita which, after all, is nothing but a slightly higher gravity accumulation within the large, Southern, tar-belt.

The general rising of the basement Westward was a well known fact and I emphasized this point in previous letters and reports, specially when considering the oil possibilities of Phillips' Westernmore acreage. This fact was also known to Creole's and I believe the exploration of the Barbacoas block had been suspended at an earlier date, had not been by some basic mis-

conceptions of the relationship of the basement with the Northern metamorphic ranges.

Creole is now ready to move Eastward, to explore the Tamana-co block, where thicker sediments will be found.

Wildcat Placer-1 of Mercedes Oil C^o. with ^{over}some dry-hole money by Creole, had a dry gas blow-out, which has been already controlled.

The oil field of Las Mercedes continues, as before, obtaining spotty results without defining any large area of accumulation. The ever increasing number of small faults, highs and lows, makes every well a wildcat, and so, the commercial value of the field is never established.

More exploration drilling is needed before Western Guarico is finally defined as an oil province.

The outlook of Anzoategui remains unchanged, the greatest drilling activity being concentrated in the Nipa area in order to build up production.

In Monagas, the exploration of the Cretaceous under the Pliocene cover, in the North, and of the Miocene, in the Central part, did not yield any results. In the south, Creole is extending Westward the Texas' Tucupita field.

Very truly yours,

Clemente González de Juana

CCdeJ/ml
CC/Houston Office
Bogota Office

Letter N°. 139

Caracas, December 20th. 1.947

The Superior Oil C°.
930, Edison Building
LOS ANGELES - CALIFORNIA

Attention: Geological Department.-

Dear Sirs:

In my last letter there was some information about the Socony well, Silvestre n°. 2. Because of the interest awakened by this discovery, it is considered advisable to review the known facts about the Barinas Basin, although the information in hand is still very scanty and the results of the very few tests drilled to-date are kept confidential by the interested concerns.

GENERAL SETTING OF THE AREA.-

The Barinas-Apure basin extends south of the Venezuelan Andes, west of El Baul uplift, and north of the igneous and metamorphic masses characteristic of the Guiana complex; its western extension is to be found in the Colombian Llanos. Within these boundaries are the major part of the Venezuelan states of Portuguesa, Barinas and Apure, and, a minor part of the state of Táchira.

The total extension of the lowland is about 100,000 sq.

kilometers, but the possible oil territory would be greatly reduced because of the shallow Basement to be found in the Southern and Western rims of the Basin.

The Northern and Southern boundaries are natural, geologically, well defined barriers, whereas the Western one, outside of the small extension of the hills of El Baul, is covered by young sediments and relies on geophysical observations indicative of a general rise of the Basement south El Baul in a zone directed towards San Fernando de Apure. East of this postulated barrier extends the Eastern Venezuela basin, westward the Barinas basin.

It is very difficult to state, at present, how complete was the separation of both basins during the various geological periods but, probably, the sedimentation was affected since the Cretaceous.

(A)

THE NORTHERN RIM OF GULIANA.-

Several exposures of granites and metamorphic rocks are known NW. of the Orinoco river, from the ^vmouth of the Apure to the mouth of the Meta.- These exposures are in general of small extent, surrounded by Quaternary. Perhaps the more conspicuous of them is the metamorphic mass exposed at Galeras de ^{Ginaruco}Giranuco.

The Basement complex drops Northward and successive younger formations overlap onto the old, peneplained, surface of erosion. General conditions do not appear to be very different of those found Eastward in the South areas of the States of Guarico, Anzoátegui and Monagas.

THE EL BAUL HILLS.-

The oldest rocks exposed at El Baul are schists, ^{some of them} ~~remarkably~~

determined recently as of Cambrian age.
~~similar to the ones found in the Venezuelan coast ranges.~~ Intruding the schistose mass are some extrusive igneous in the form of necks and sheets, and laccolitic granites.. The extrusives do not show metamorphism and are unquestionably younger than the schists and granites.

The structure of El Baul hills appears to conform itself more to the general pattern of the ^{Andean} ~~Coast~~ Ranges than to the masses of Guiana, ^{and} accordingly the general trend of the uplift is about E. NE. *but the whole mass is probably more related to the Guiana complex than to the northern rocks.* -

THE SOUTHERN FOOT-HILLS OF THE ANDES AND THE BASIN.-

The foot-hill belt is characterized by a series of parallel trends directed E. NE. in the general direction of the Venezuelan Andes. Formations from Paleozoic to Young Tertiary are known to outcrop there, but as this report is directed to consider the petroleum possibilities of the Basin, the stratigraphic considerations will be restricted to the Cretaceous and younger sediments. 2

The Cretaceous sedimentation followed a period of uplift and denudation of the preceding sediments. A result of this previous uplift was the huge Colorado massive which certainly influenced the character of the sediments from the Cretaceous up, producing an East-West change of facies which should be considered here.

The typical subdivision of the Cretaceous in the Venezuelan Andes, i.e. Tomon, Cogollo-Luna, Colón, can still be recognized in the Northeastern Barinas area (Barinas-Barinitas vicinity) although the respective thickness is greatly reduced.

The lower formation, equivalent to Tomon, ^(or to the basal Cogollo,) is represented by a thin conglomerate and / or coarse, angular quartz sandstone,

generally less than 100 feet thick.

The equivalent of the Cogollo-Luna group begins with a massive limestone member, representative of the Cogollo facies, followed by an upper member of interbedded limestones, calcareous piritic and carbonaceous shales and rare sandstones, representative of La Luna facies. The total thickness of the group is about 300 feet.

The relationship between the lower sandy formation and the Cogollo seem to be conformable. There is, however, an overlap of the limey facies onto the older rocks and, subsequently, near the rim of the old Cretaceous sedimentary basin, the Cogollo limestone rests in many places on the Jurassic?, La Quinta formation, or on older rocks of the Colorado complex

The Colon-Mito Juan equivalent is also a predominantly shaley section, with thin, interbedded limestone and sandstone beds. This section rarely reaches a thickness over 1000 feet.

These lithologic characteristics are rather local and the whole Cretaceous section Westward, towards the Southern foot hills of Táchira, and Southward, towards the center of the Basin, undergoes a remarkable change of facies.

The lower member is mostly composed of white quartz sandstone with subordinate amount of interbedded dark gray to black carbonaceous shale.

The Cogollo-Luna equivalent becomes sandy, typically glauconitic, with only a few layers of sandy to glauconitic limestone and some calcareous glauconitic sandstones. This is the producing formation in Silvestre N°. 2.

The upper member, Colon equivalent, changes to siltstones and black piritic shales, with fish scales.

The Eocene exposed in the Barinas-Barinitas area shows decided resemblance to the well known formation Misoa and Paují. The former, predominantly sandy, with a thickness of about 500' and the later, predominantly shaley, with a thickness of about 1500 feet.

Westward, both formations change either to a predominantly sandstone interval or into a sequence of interbedded sandstone and shale. In this Eocene formation are found all the prominent oil seepages so conspicuous in the Barinas mountain front.

Southward, i. e., in the Basin, the Eocene is represented by quartzose, sugary sandstone, with occasional shaley intervals, streaks of sandy siltstone and hard limonitic material. No oil shows have been, so far, reported from this formation.

The Eocene is overlain by a thick blanket of Younger Tertiary of brackish water to continental origin, utterly different from the Oligo-Miocene formations of the Western Venezuela basin.

This young cover is very thick in the foot-hill belt where it may exceed 10000 feet, but it is reduced southward to about 400-500 feet, including the Quaternary. The lithology of this formation, as found in some wells, shows mottled clays, gray clay-shales, layers of coarse micaceous sandstones, and, occasional lignites.

The structure of the foot-hill belt is very complex in its details. In a simplified way we may state that the high Andes are thrust over the foot-hills, and South of this line of pressure relief, normal faults are the distinctive characteristic. The normal faults

have two well defined directions: one, trending about N60E, roughly parallel to the Andean trend, and, another, directed about N35W, almost to right angle to the above.

The structure within the Basin is obliterated by a thick cover of Younger Tertiary and Quaternary sediments, and, therefore, its interpretation depends entirely on geophysical observations. Following is a summary of the facts known by the writer:

Seismic contours in Eastern Barinas shows a N.NW-S.SE. strike, roughly parallel to the course of the Guanare river, with a drop of regional dip directed Westward. Branching out from this general monocline are, at least, two well defined noses, both plunging West. The Northern one, points towards the town of Libertad, and the Southern one, towards Nutrias. No seismic maps or general character, have been studied in the Western part of the Basin.

Magnetic isonomalies present a very complex pattern. A noticeable increase of value is present between Libertad and Dolores, trending NE-SW, and many other highs and lows have been recorded from there on to South of the town of Santa Inés.

Gravity Surveys
~~Torsion Balance~~ in Eastern Barinas show^e a great flank directed N-S, with a drop towards the W. This general direction of the isogamas bends in the south to form a decidedly E-W. trend located South of the Apure river, and, specially noticeable, in the vicinity of the Arauca. This trend is assumed to conform with the general direction of the Northern rim of the Guiana shield.

In the Northern areas, the ^{gravity} F.B. trends run W-SW. paralleling the mountain front from Barinas to Santa Bárbara. Thus the three

general trends described above form a trapezoidal shaped basin plunging Westward. Within its limits are many interesting highs and lows.

A conspicuous \downarrow has been found some 30 Km. E.NE. of Puerto Nutrias and several smaller ones near Nutrias and Puerto Nutrias. This zone would roughly correspond with the seismograph nose noted above.

Another important \downarrow is found some 35 Km. of Libertad and NE. of Dolores. A large positive nose trends SW. near Santa Inés to culminate in a closed positive high about 30 Km. SW. of Dolores.

A large positive structure trending E.NE.-W-SW. is located from Palmarito to Guasdalito. This uplift shows several smaller culminations

Various large and significant negative areas are located along the mountain front from Barinas towards Barrancas (NE) and from Barinas towards Pedraza (SW).

In the San Silvestre area, the place where petroleum has been found, detailed reflexion seismograph work disclosed two highs; the Northern one, in concession BAR-4, continues Northwestward into a narrow nose plunging N.W. The Southern culmination located about 1 1/2 Km. South of the border line of BAR-3 is domal in shape. A generally low area trends SW. from the center of concession BAR-10 Southwestward and South of the Southern culmination.

ANALYSIS OF WILDCATS.-

San Vicente N°. 1 the Southermost test drilled by Socony Vacuum, found the top of the Eocene at about 5380' with the

70' Eocene

typical sandstone development but barren of oil. The top of the Cretaceous was found at 5699 feet and some typical, hard crystalline limestones were recorded at 5980'. The basement, quartz mica-schists, was found at 6870'.

The wildcat did not yield any oil indications.

W. Wildcat
Calzada N° 1 North of the above, found the top of the Cretaceous at about 7750', and, the basement, micaschists, at about 9170'. The Cretaceous yielded some oil indications as follows: At 8225' some 12.5° API gravity oil and fresh water was recovered, again at 8238' some drops of tar were observed, and, at 8350' some dead oil (12 to 15° API) and fresh water, was recovered.

Silvestre N° 1 found the top of the ^{Eocene (1950)} Cretaceous at 8030' some typical crystalline limestones were recorded in the interval ^{bits-dul} 9530-9557 feet. The well was stopped at 10153' without reaching the basement. A few shows were recorded as follows:

- 9965 - 9985' (swabbing) brackish water & gas.
- 9865 - 9880' (") fresh water & gas.
- 9843 - 9855' (") small blow-out, no oil.
- 9760 - 9786' (") fresh water & gas.
- 9570 - 9585' (") fresh water & some heavy oil.

Silvestre N° 2 discovery well found the basement, pink granite, at 9760'. The depth of the ^{top of the} Cretaceous is not available.

W. Wildcat
The producing horizons are unquestionably middle Cretaceous sands, tight and compact, poorly sorted and glauconitic.

One test from 9325 - 9335' interval produced 897 B.P.D. of 29.1° API gravity oil through 1/4" choke. The gas oil ratio was very low (about 36). Another test from the 9390 - 9400'

interval produced 603 EPD of 30°.2 API gravity oil through 1/4" choque with a very low gas oil ratio.

The presence of fresh water in Silvestre 1 and the low G.O.R. in Silvestre 2 indicate water drive. In any case, it seems feasible to increase the production by using much larger choque openings without damage to the reservoir.

In Northwestern Barinas, Socony Vacuum drilled 2 wells without result.

No Parangula fm (1950)
Yaure n° 1 found the top of the Eocene? at 5260' and was suspended at 9000' ^{same fm.} without entering into Cretaceous formations. No oil or gas shows were recorded.

on tickets
Yaure n° 2 crossed a large fault at about 5000' and found the typical middle Cretaceous sandy glauconitic limestones and calcareous, glauconitic sandstones from 51000' to the T.D. 5933' where it was suspended. *Eocene at 4225'*

No oil or gas shows were reported.

SUMMARY OF GEOLOGICAL FACTS RELATED TO PETROLEUM.-

1) The large Barinas Basin represents a sedimentary trough from the Cretaceous to the Younger Tertiary. The older sediments are adequate for genesis of petroleum. Many oil-seeps are known in the Northern foot-hill belt and wildcat Silvestre n° 2, drilled recently near the axis of the Basin, found oil in commercial quantities.

Throughout most of the extension the Basin has enough thickness of sediments to justify drilling for oil.

This statement requires further comment. There is not, of 6

course, any basic objection to find oil accumulations in the rims or shallow parts of large, fundamentally marine, sedimentary basins. Nevertheless, the Southern rim, or shallow part of the large Eastern Venezuela Basin, has been disappointing throughout, because wherever a thin sedimentary sequence has been penetrated by the drill, nothing but tar oil has been found; thus the generally called Tar Oil belt became well established in the Southern areas of Monagas, Anzoátegui and Guarico. Both, Oligo-Miocene formations and Cretaceous formations, have been penetrated within this tar belt with similar results. ~~However, in the opinion of the writer,~~ the idea of the tar oil connected with thin sedimentary sections should not be extended ^{as} yet to the Barinas basin, because:

a) The search for oil in the Southern part of the Eastern Venezuela basin was basically directed to the Oligo-Miocene formations (Oficina equivalent) which is not the case in the Barinas basin.

b) The water drive found in Silvestre has no equivalent in the Cretaceous of the Eastern Venezuela basin.

c) Not enough wells have been drilled in Southern Barinas to support any theory relating the depth of the basement to the petroleum prospects of the area.

Nevertheless, ^{and taking} ~~to take~~ into consideration the reluctance of most of the Venezuelan Oil operators to deal with areas of shallow basements, ~~the above statement about the thickness of the sedimentary sequence was made.~~ It is ^{our} ~~the writer's~~ opinion that all the land located North of the Apure river and West of San Vicente should not be objectionable on this respect.

2) The limestone development observed in the Cretaceous in the Barinas vicinity changes laterally West and Southward to more clastic deposits. The shaly Eocene Pauji changes also basinward to sands and sandstones.

Resulting from these changes of facies there are in the Basin many sands which are as many good potential reservoirs for oil.

3) Almost all the oil indications found in the foot-hills are in ^{upper Cretaceous} ~~Eocene~~ sandstones. All the oil indications and productions obtained so far in the basin were found in sandstones of ^{middle} Cretaceous age ~~whether the oil seepages result from migration from the Cretaceous or represented autochthonous Eocene oil, both formations alike~~, are possible petroleum producers.

4) The sediments of the basin are gently disturbed to form suitable traps for oil accumulation. In the Northern areas, large, normal faults should be expected whereas in the central part of the basin, gentle folding seems to be prevailing.

The Eastern part of the basin, i.e., the general monoclinial zone near the Guanare river, should be taken into consideration for possible stratigraphic traps on the rising basement.

5) The commercial value of the Barinas basin still depends on the amount of production, which can be obtained, as the lack of a suitable and economic outlet for the oil production is still the biggest draw-back of the area. Thus, if production can be built up to figures to match the expenses of the outlet, the basin would be commercial, otherwise, as the local consumption is practically nihil, oil would not be of commercial value.

Very truly yours

Clemente González de Juana

CGdeJ/ml
cc/Houston office
Caracas office
Enclosures: One map.