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GEOLOGY OF LOCO HILLS SAND, LOCO HILLS FIELD EDDY COUNTY, NEW MEXICO

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PREFACE

This section on the *Implementation of Tertiary Recovery of Oil in the Loco Hills Field, Eddy County, New Mexico* (Project No. 149) covers geologic studies of the Loco Hills sand. Also included are sections on field development, production, and reserves. A summary of the results of the investigation are presented first to provide the basic geologic data needed to evaluate the tertiary recovery potential of the Loco Hills sand.

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SUMMARY

The Loco Hills field is located in the northeastern part of Eddy County, New Mexico about 16 mi east of Artesia (fig. 1). The field covers all or part of 36 sections in T's. 17 and 18 S., R's. 29 and 30 E. The total designated area is about 18,410 acres of which 12,880 acres have established oil production (fig. 2). The discovery well was the Yates et al. 1 Yates in 1980S 660W, sec. 6, T. 18 S., R. 30 E., completed on February 14, 1939, for 560 BOPD (barrels of oil per day). To the end of 1975, 459 wells had been drilled into the upper Permian pay zones consisting of sandstone and dolomite in the Seven Rivers, Queen, Grayburg, and San Andres Formations. Within this sequence of rocks there are at least 14 separate pay zones, the most important of which is the Loco Hills sand in the upper part of the Grayburg. This relatively thin sandstone interval has yielded 88 percent of the oil produced from the Loco Hills field with slightly over 36 million of the 41 million barrels produced since 1939. The producing area of the Loco Hills sand and for pay zones other than this interval are shown in figs. 3 and 4.

The Loco Hills sand consists of light gray to white, and light-brown, very fine grained, silty sandstone, sandy dolomite, and minor shale. Cementation varies from friable to tightly cemented with dolomite. Calculated porosities from geophysical logs and cores indicate a range of from less than one percent to as high as 27 percent. The average porosity in the main producing trend in the northeastern part of the field is from 15 to 16 percent. Permeability from core analyses, mostly from marginally productive areas, is from less than 0.1 md (millidarcies) to 140 md. The average for sandstone intervals

in the Loco Hills sand is 20.6 md. The Loco Hills zone is from 14 to 61 ft thick in the Loco Hills field, thickening in general from west to east. The net pay averages 18 ft and ranges from about 5 to 35 ft thick, again increasing from west to east with local variations. The top of the Loco Hills sand is at a depth of from 2,366 to 2,880 ft. Structurally the dip is from west to east at about 85 ft per mi.

The oil in the Loco Hills sand is confined in a stratigraphic trap on the south flank of an east-west anticlinal structure known as the Artesia-Vacuum trend. The oil is a relatively sweet crude with a paraffin base, a gravity of from 36 to 38° A.P.I. (American Petroleum Institute), and a sulfur content of about one percent. Gas produced with oil contains about 72 percent methane, 14 percent ethane, and 7 percent propane; some hydrogen sulfide is present. The field is a solution-gas drive reservoir with minor local gas caps on structural highs. The oil-water contact on the east side of the field appears to be at an elevation of from 700 to 720 ft above sea level.

As of January 1, 1976, 36,006,765 barrels of oil had been produced from the Loco Hills sand. Of this 15,211,263 barrels or 42 percent is considered to be primary recovery and 20,795,502 barrels or 58 percent the result of waterflood operations in the main producing trend.

In the Loco Hills sand, the original oil in place is estimated to have been from 91 to 104 million stock-tank barrels with from 88 to 98 million barrels of this occurring in the main producing trend. Recovery to January 1, 1976, has amounted to 35 to 39 percent of the stock-tank barrels, leaving from 55 to 68 million barrels of oil in the reservoir. The waterflooded area is estimated to contain an additional 52 to 63 million barrels of oil.

Apparently there is little potential for additional development of the Loco Hills sand. Recovery from waterflood operations is estimated to be 895,000 barrels over the next 5 years including 1976. However, this interval appears to be a favorable zone for various tertiary recovery methods. A considerable potential for the development of additional primary oil exists in the largely untested but known pay zones in the Permian section both above and below the Loco Hills sand.

GEOLOGY OF THE LOCO HILLS SAND

Geology

Stratigraphy

The stratigraphic section for the Loco Hills field (fig. 5) is restricted to the sediments between the surface and the upper part of the San Andres Formation. Within this 3,500 ft of section the oil-bearing intervals, or pay zones, that have been designated as part of the Loco Hills field occur.

The upper part of the section consists of 200 ft of Holocene alluvial deposits of caliche, sand, gravel, and clay. Included in this interval but not shown separately are red sandstone and shale of the Chinle Formation (Triassic) and Santa Rosa Sandstone (Triassic) and similar deposits of the Dewey Lake Formation (Permian). Rocks of Permian Ochoan age include the Rustler and Salado Formations. Rustler beds consist of about 300 ft of dolomite, anhydrite, and red sandstone. The underlying Salado is about 575 ft thick and is mostly salt with lesser amounts of clay, red shale, anhydrite, and polyhalite. The Cowden Anhydrite near the base is an excellent marker bed for this part of the section.

Guadalupian sediments are represented by the Artesia Group (Tait and others, 1962). In descending order these include the Tansill, Yates, Seven Rivers, Queen, and Grayburg Formations. Beds assigned to the Tansill are almost

entirely anhydrite. Within the area of the Loco Hills field this interval is from 80 to 105 ft thick. The Yates (320 to 465 ft) contains a prominent sandstone unit at the top underlain by alternating beds of anhydrite and red sandstone and shale. Sediments of the Seven Rivers Formation are mostly anhydrite but include dolomite, red shale, and some important sandstone intervals. The sequence is from 585 to 695 ft thick. The upper part of the Queen Formation is a red sandstone that is readily recognized in well cuttings and geophysical logs. This interval is known as the "Artesia red sand" and appears to be correlative with the Shattuck Member at the type locality in Dark Canyon west of Carlsbad (Newell and others, 1953). The remainder of the Queen contains dolomite, anhydrite, red shale and additional beds of red sandstone. One of the sandstones, near the middle of the interval, is correlated with the Penrose sand. Locally, at the base, there are distinctive green and purple shale beds. The total interval is from 305 to 405 ft thick. The Grayburg consists of 345 to 585 ft of light-colored dolomite; red, brown, and white sandstone; and red and green shale. Informal names have been given by operators to three of the sandstone units. These are the Loco Hills, Metex, and Premier sands. These also have been referred to as zones 4, 5, and 6 as established by the U.S. Geological Survey in the Maljamar field to the east.

The San Andres Formation (Leonardian and Guadalupian) is about 1,500 ft thick in this area. The upper part is

dolomite with an interval of sandstone and black shale, known as the Lovington sand, about 150 ft below the top.

Drilling of the Loco Hills field has established the presence of oil in many parts of the stratigraphic section. A number of wells particularly in the western and north-easternmost part of the field have been completed in two or more of these zones. In wells drilled below the Loco Hills sand completion methods have involved perforating and treating all zones that appear to have favorable porosity on geophysical logs. The produced oil is commingled, making it impossible to determine the contribution from individual zones. Based on this type of completion information, pay zones include a sandstone in the Seven Rivers; the Artesia red sand, Penrose, and basal sand of the Queen; Loco Hills, Metex, and Premier sands of the Grayburg, plus dolomites above and below the Loco Hills sand and a thin sandstone locally developed above this interval; and dolomites and the Lovington sand in the San Andres. As many as 14 zones have been perforated and treated in a single well in the Loco Hills field.

From the standpoint of the amount of oil produced and the potential for enhanced recovery of oil, the Loco Hills sand is the most important reservoir in the field. Because of this, detailed geological work was limited to this unit. Data on the lithology of the Loco Hills sand was obtained by examination of well cuttings from 14 wells and several hundred geophysical logs from wells drilled in and adjacent

to the Loco Hills field. To supply adequate control, an area including a one mile wide strip outside the boundary of the field constituted the study area. Reported scout tops for formations and pay zones vary considerably. Certain tops, such as the Artesia red sand, are consistently chosen at the same place. Others, such as the Grayburg, may vary 100 ft or more from one operator to the next. After numerous comparisons between reported tops and geophysical logs, it is felt that the top and base of the Loco Hills sand as used in this report reflects the interpretation of the majority of operators.

Log Interpretations

The depth to each formation and pay zone was correlated from one log to another on a section by section basis throughout the study area. For each section one to four key logs were then selected and recorrelated working in both east-west and north-south directions. Errors were then corrected for each log, based on determinations for the key logs in each section. All tops used in this report are from geophysical logs; this was done to obtain a more consistent data base. Results from examination of cuttings, core reports, driller's logs, and scout tickets were used only as an aid in interpreting the geophysical logs, and in the case of well cuttings to obtain more specific data on the composition of the Loco Hills sand. Most logs run through the Loco Hills sand were in open-hole completions;

thus, fairly reliable comparisons could be made from well to well. Sandstone beds containing only small amounts of dolomite cement commonly have a high gamma-ray response of from 70 to 100 A.P.I. units. This deflection is generally higher than that of the few shale beds identified from the logs and causes some problem in determination of shale content in the sandstones and, thus, interpretation of porosity from other curves. Shales in the Grayburg Formation and overlying units examined in well cuttings are impure, containing considerable silt-size quartz and dolomite cement. Microscopic examination of sand grains from the Loco Hills zone indicated the presence of feldspar. X-ray analysis of a friable sandstone from the eastern part of the field gave a K_2O content of 3.8 percent. Average shales, according to F.W. Clarke and A.B. Ronov and others in Blatt and others (1972, p. 397-399), range from 2.6 to 3.7% K_2O. This may in part account for the relatively high gamma-ray response.

Lithology of the Loco Hills sand

Three cross sections of the Loco Hills sand were prepared to show lithologic variations, log characteristics, and structural features (figs. 7 and 8). The location of these sections is shown in fig. 6. The sections indicate a dominant lithology of sandstone varied by amount of dolomite cement and clay content, and beds of sandy dolomite and minor shale. Sandy dolomite usually occurs

at the top of the interval, but, locally, uppermost beds are sandstone and dolomite is found near the middle of the unit. Dolomite cement appears to be the dominant factor in controlling porosity. Higher porosity sandstones are normally friable, containing only small amounts of dolomite. These friable sandstones grade into tightly cemented sandstone where the total dolomite present may even exceed 50 percent of the rock unit. The amount of clay or very fine silt present in the sandstone intervals also limits porosity and permeability, but appears to be less of a factor than dolomite cement in defining the limits of producible oil over most of the Loco Hills field. In cross section *A-A'* *it* can be seen that dolomite cement and the amount of sandy dolomite increases to the southwest. This is not as apparent in the north-south sections that are more restricted to the main producing trend; however, dolomite content does increase to the north and south of these sections.

The 50 A.P.I. gamma-ray units marked on the cross sections give an indication of the degree of dolomitization of the sandstone intervals. In some wells such as the Depco 6 Wright (cross section *A-A')* and the Anadarko **4** FWLH-8 (cross section *B-B')* low A.P.I. values are in part the result of the log being run in a cased hole. Where gamma-ray curves were run in uncased holes through the Loco Hills sand this curve appears to give a good indication of the degree of dolomitization present and, thus, the development

potential. A cursory examination of other sandstone pay zones in the Grayburg suggests similar characteristics for the gamma-ray curve.

From microscopic examination of well cuttings from cable tool holes, sandstones in the Loco Hills sand are white to medium gray, and where oil-stained, light brown. Suitable material for analysis of grains was limited to well cuttings from three wells. These are the Price 2 Massie (2310N 2310W, sec. 22, T. 18 S., R. 29 E.), Flynn, Welch, and Yates 1 State (Newmont 1 WLH-26, 990S 2310W, ***sec.*** 1, T. 18 S., R. 29 E.) and the Dickson 6 Saunders (Newmont 6 WLH-13, 1650N 2310W, sec. 12, T. 18 S., R. 29 E.).

The Price well is located outside the boundary of the Loco Hills field but is near the southwestern detached oil-producing area. Cuttings from a depth of 2,485 to 2,498 ft in the lower part of the Loco Hills sand were examined. There is some oil-staining in the sandstone and in an overlying interval. The test was drilled to the San Andres and abandoned.

Screen analyses (fig. 9) indicate a median diameter of 87p (very fine sand) and a sorting coefficient of 1.40. Less than one percent of the grains are in the medium size range, 14 percent are fine grained, 55 percent very fine grained, and 30 percent fall in the silt-size fraction. As in the other intervals analyzed, grains are mostly equant and subrounded. However, the degree of rounding is from subangular to well rounded (fig. 10). Feldspar grains are

angular to subangular and platy. Almost all grains show some surface frosting.

In the Dickson well in the main producing trend of the Loco Hills sand, the median diameter is the same as in the Price well. No grains coarser than fine were present, and the silt fraction was less, at 17 percent. The sorting coefficient is 1.29. The sample was from near the middle of the Loco Hills sand at a depth of 2,662 to 2,672 ft. A small amount of pyrite cementation of the sand grains was present in these cuttings.

The third section examined consisted of two samples from the Flynn, Welch, and Yates well also located in the main producing trend. The first, from a depth of 2,696 to 2,706 ft, is from the middle of the unit. This sample contains about one percent medium-size grains, 16 percent in the fine fraction, 71 percent very fine, and 12 percent silt. Median diameter is 94p (very fine sand), and the sorting coefficient is 1.25. The second sample was from the lower part of the Loco Hills at a depth of 2,713 to 2,720 ft. This sample had a median diameter of 82p and a sorting coefficient of 1.41. The sample consisted of 35 percent silt, 51 percent very fine sand, 13 percent fine sand, and 2 percent medium-grained sand.

An average of the four samples results in one percent medium-size grains, 12 percent fine, 61 percent very fine, and 26 percent silt. The median diameter is 88p, and the sorting coefficient is 1.35 (well sorted).

Microscopic measurements of the silt fraction passing 63p indicates that almost all of these grains are in the coarse silt size, ranging between 31 and 63p. If any clay-size material was present it was lost in the drilling and sample collection process. Heavy minerals, including opaque grains, make up a very small fraction of the samples examined.

Cuttings from a thin green shale bed were present in samples from the Ressler 5 Miller well (990N 1650E, sec. 4, T. 18 S., R. 29 E.). These cuttings were analyzed by x-ray diffraction. Clay minerals consisted of nonexpandable illite with a minor amount of expandable clays, apparently vermiculite, and mixed-layer illite/smectite. Quartz and feldspar, probably orthoclase, also were identified.

Thickness and Structure

The Loco Hills sand is from 14 to 61 ft thick in the Loco Hills field (fig. 11), generally thickening to the east and to a lesser extent to the south. Variations in thickness within the field, particularly the main producing trend, have had a significant effect on well productivity and waterflood operations. Thicker deposits of sandstone in the eastern part of the field form an embayment-like area that narrows to the west. This feature extends from sec. 6, T. 18 S., R. 30 E. across sections 1, 2 and 3 into the northern part of sec. 9, all in T. 18 S., R. 29 E. The Loco Hills sand thins to the north and south of this feature.

Regional tilting downward to the south has only partly obscured this on the structural contour map (fig. 12); the embayment still being evident across secs. 1, 2, and 3. Areas of thicker sand deposits correspond with the structurally low areas, while thinner intervals are located on the structural highs. Apparently the structural contours on top of the Loco Hills sand reflect both pre-Loco Hills topography and the topography at the close of deposition of these sediments; only to a minor extent are these the result of later tectonic events.

The steeper southeast dips on the south side of the Artesia-Vacuum trend (Ronald K. DeFord in Bates, 1942, p. 160-163) are seen only in the northeastern part of the Loco Hills field. Just north of the map area, contours on top of the Loco Hills sand dip to the southeast at about 200 ft per mi. Within the field the dip is generally to the east at an overall average of 85 ft per mi. The maximum structural relief is 640 ft, ranging from 1,260 ft above sea level in the west to 620 ft above sea level in the east.

There are only a few areas where closure can be demonstrated even at the 10-ft contour interval, shown on the map by dashed lines. The most prominent closed features are the small domes in sections 11 and 12 and the small basin in sec. 11. The small domes are on the crest of one of the major positive "structural" features of the field, a northeast plunging nose that continues

to the southwest through sec. 15. The Loco Hills sand thins over this high.

Porosity and Permeability

Porosity determinations for the Loco Hills sand were made from 182 geophysical logs of wells drilled in the field and adjacent area. Except for the detached producing area in the southwestern part of the field, there were only a few logs available to compare with primary oil production data. Most of the logs in the main producing trend were from production and injection wells drilled for the waterflood program, or wells where oil production was combined from two wells in the same unit. Types of logs available were mostly a combination of gamma ray with either a neutron or velocity log. Where there were questions as to the reliability of the log, porosity values were not used in preparation of the maps covering this subject.

Core data was not available prior to the completion of the log calculations. Later evaluation of this data indicates that the log porosity determinations are comparable to that of the core data. Comparisons are given for five wells in a west-east direction from sec. 9 to sec. 12, T. 18 S., R. 29 E. (fig. 13). The only well with an average porosity that varies appreciably is the well in sec. 9 where core porosity is considerably lower. This is probably the result of increase in the amount of shaly sandstones in this area.

In attempting to determine the effective porosity, a comparison was made between porosities calculated from logs and both the primary and secondary oil production data. It was found that there were only three wells completed in the Loco Hills sand in areas where porosities were or should be less than 8 percent. Two of these wells, the Anadarko 1 Ambassador (330S 330E, sec. 29, T. 17 S., R.30 E.) and the Anadarko 12 FWLH (1650N 330W, sec. 9, T. 18 S., R. 29 E.) also were completed in other zones. The highest calculated porosity for the well in sec. 9 was 4 percent. This was based on interpretation of a sonic log using a higher matrix velocity because of the indication of dolomite cement from the gamma-ray curve. This results in a higher value for porosity than if a matrix velocity for clean sand had been used. This well also was completed in the Metex zone with calculated porosities on the order of 8 percent. A log was not available for the Ambassador well; the porosity may be 8 percent or higher, although the well is in an area of lower porosity values. Oil produced has amounted to less than 6,000 barrels for each well over a period of 17 years for the Ambassador well, and 11 years for the FWLH well before it was abandoned in 1964. Test data for the two pay zones in each well was not available; any possible contribution from the Loco Hills sand could not be determined.

The third well is the Fair 5 State A (2310N 330E, sec. 36, T. 17 S., R. 29 E.). This well was originally

drilled and abandoned in 1940 and reentered and completed in 1964. Based on proximity to water injection wells, part of the oil produced was credited to secondary recovery. Before being abandoned in 1969, 15,373 barrels of oil had been produced. The highest calculated porosity from a density log was 7 percent.

In addition to the secondary oil attributed to the Fair well, oil has been produced by waterflooding low-porosity areas at the Anadarko 8 FWLH (1170S 2490W, sec. 4, T. 18 S., R. 29 E.). This well was originally drilled by Brookover in 1948 to the Metex zone and abandoned in 1950. In 1970 it was recompleted by Anadarko as part of their waterflood program in the Far West Loco Hills unit. The maximum porosity, determined from a sonic log, was five percent. This would seem to indicate that some oil can be produced by waterflooding low-porosity zones. However, through 1975, less than 6,000 barrels of oil had been produced from this well. Naturally, the majority of injection wells are located in the area of best primary production, so it is not possible to evaluate the amount of oil that might be produced from the low-porosity zone that nearly surrounds the main producing trend.

Porosity calculations from logs are subject to a certain amount of error, and an 8 percent cutoff must be considered arbitrary. Apparently, from the history of production, a minimum porosity on the order of 8 percent is necessary for the successful completion of a well

in the Loco Hills sand in this area. Based on this interpretation, three maps were prepared to aid in determining the productive limits of the Loco Hills sand. The first shows the thickness of sandstone with greater than 8 percent porosity (fig. 14). The detached producing area in the southwest part of the field is separated from the main trend by an area of low-porosity sandstones. Along the northwestern side of the main trend the zero contours show the productive limits for this part of the field. This does not appear as a continuous barrier, but when combined with other factors, a continuous barrier is indicated. Combination maps showing this are presented in the discussion of the Loco Hills trap.

The main producing trend is fairly well defined by the 10-ft contour line. In the eastern part of this area wells that have produced over 100,000 barrels of oil are within the 20-ft contour line. In the detached producing area to the southwest, the net pay is from 5 to 25 ft with the more productive wells having net pays of from 15 to 25 ft. The isopach map (fig. 11) indicates that the Loco Hills sand thickens to the south and east. The net pay thickness follows this pattern in general but with greater variations and not at the same rate of increase. In the more productive parts of the field, the ratio of net pay to total thickness is close to one. In the more marginal producing areas the ratio is on the order of 0.2. The rather rapid thinning of the net pay in all directions

away from the main producing trend only in part follows the total isopach map, where abrupt thinning is evident only in the northeastern part of the field. Particularly to the east, but in part in the western portion of the field, reduction in net pay appears to be the result of increase in the amount of shaly sandstone. To the north and south, reduction is caused by increasing dolomite cement.

The second map shows average porosity of 8 percent or more (fig. 15). The bulk of the oil produced falls within the 12 percent average porosity line. The log calculated porosity values from the two control points inside the 26 percent contour in the eastern part of sec. 9 are probably high, from comparison with core data for one of the wells. Based on the amount of primary oil produced, the most highly productive wells have average porosities of from 12 to 24 percent and a net pay of from 20 to 40 ft. The average porosity from all log calculations in the main producing trend is almost 16 percent, and the average net pay is about 18 ft. From available data the highest average porosities occur in Sec's. 1, 2, 3, 9, and 10, T. 18 S., R. 29 E.

The third map combines porosity and net pay to obtain total pore space (fig. 16). In the main producing trend the total pore space amounts to from 1 to 7 ft of the net pay. Most producing wells are within the area bounded by the 2-ft contour, and major producing areas have greater than 3 ft of void space.

Permeability data was limited to core reports for 20 wells. Most of the core data is from water injection wells drilled in areas marginal to the main producing trend. The amount and distribution of the data made preparation of a detailed map impossible. However, the general trend in average permeabilities is evident from the smaller-scale map of the northeast side of the field (fig. 17). The average permeability increases to the east and north, closely following the trend of the porosity maps. This is further shown in the histogram comparing porosity with average permeability (fig. 18). There is a marked increase in permeability at 15 percent porosity and again at 20 percent. The variation in permeability within any porosity value is considerable. Based on 26 analyses at 15 percent porosity, permeabilities vary from 0.1 to 124 md. The maximum reported permeability is from a well in sec. 12, T. 18 S., R. 29 E. with 140 md at 16 percent porosity. From 314 core analyses the average permeability of the Loco Hills sand is 20.6 md. In the main producing trend the average permeability should be from 30 to 40 md, and the more productive wells probably have permeability zones of over 100 md.

Fluids

Oil from the Loco Hills field is reported to have an average gravity of 36° A.P.I. Gravities were reported for 26 wells completed in the Loco Hills sand. For this

pay zone the average gravity is 37° A.P.I. It is of interest that when plotted and contoured, the reported gravities to some extent follow the structural features of the Loco Hills sand (fig. 19). The variation is small and measurements may not be accurate, but higher reported gravities are from wells located on the structurally higher parts of the field.

As noted in the report on the Loco Hills field by Charles A. Aston (Bates, 1942, p. 185-187), water was encountered on the south and east edges of the field. Specific data for abandoned edge wells is limited as is early data on the amount of water produced with oil. The driller's log for the Nelson test (228N 550W, sec. 4, T. 18 S., R. 20 E.) notes a water-bearing sand at a depth of 2,906 ft. From the structural contour map this should be the Loco Hills sand. In the report on the Loco Hills field (1949) other wells that produced little or no oil included the Franklin 1 Coppedge (1650N 330W, sec. 5, T. 18 S., R. 30 E.),Franklin 1 Masteller (330N 2310E, sec. 7, T. 18 S., R. 30 E.), Aston and Fair 1-B State (1650S 1650W, sec. 32, T. 17 S., R. 30 E.), Aston, Lucas, and Aston 7-B State (990S 2310E, sec. 32, T. 17 S., R. 30 E.), and Tallmadge 1 State (2310N 990E, sec. 32, T. 17 S., R. 30 E.). Based on these wells, the oil-water contact is approximately 670 ft above sea level. Further, there had been little encroachment of water at the time of the 1944 report, although small percentages of water had been noted in a

few wells originally producing pipeline oil. The Aston 7-B well had produced less than 7,000 barrels of oil before being abandoned in 1943. The others have no record of any oil production. Based on these wells, the current structural interpretation, and the limits of primary oil production, the oil-water contact would appear to be somewhere between 700 and 720 ft above sea level along the eastern margin of the field, becoming deeper to the northeast.

Wells in the field that have encountered water at higher elevations are the Bright and Gordon 1 State (330S 990W, sec. 2, T. 18 S., R. 29 E.), Bassett and Birney 1 State (330S, 2310W, sec. 2, T. 18 S., R. 29 E.), Yates 5 Brainard (2310S 990W, sec. 11, T. 18 S., R. 29 E.), and the Dixon 3 Saunders-A (1650N 330W, sec. 12, T. 18 S., R. 29 E.). The Bright well produced over 46,000 barrels of oil, and the Bassett almost 120,000 barrels under primary and 166,000 barrels under secondary recovery. The Yates and Dixon wells were abandoned. The Yates well is in the structural depression in the western part of sec. 11. The Bright and Bassett wells could be on the north flank of this depression accounting for the higher water yields. The Dixon well is located within the structurally low reentrant west of the closed structure near the center of sec. 12.

The southwestern corner of sec. 2 and adjacent areas in secs. 3, 10, and 11 have had comparatively low oil production under both primary and secondary recovery.

The depression in sec. 11 may therefore be more extensive than indicated on the structural contour map. Reported water/oil ratios from initial potential tests are limited. These tests do not support higher ratios in secs. 10 and 11, but do indicate higher amounts of water in the structurally lower area along the axis of the main producing trend through secs. 1, 2, 3, 9, and 10, and the southeast extension across sec. 12. These ratios also indicate decrease in the amount of water updip.

Gas/oil ratios were kept in 1940 and reported in the 1944 Engineering Report. This was prior to the initiation of the gas-pressure maintenance program that began in October 1941. This data was contoured at a smaller interval for this report (fig. 20). Ratios of 470 cu ft/barrel are consistent throughout most of the main producing trend. Ratios increase rapidly updip to the north, and to the south onto the high across secs. 15, 11, and 12. Initial potential data supports this trend. Two wells, shown by gas well symbols, in secs. 10 and 11 encountered only gas in the Loco Hills sand. The well in sec. 11 is the Bassett and Birney 6-B State. This well had an I.P. (initial potential) of 7,300 MCFPD (thousand cu ft per day) and is located on a closed structural high. The Fair 6 Brainard in sec. 10, located on a small north plunging nose, had a reported I.P. of 4 MCFPD. In cuttings from the Flynn, Welch, and Yates 1 State (990S 2310W, sec. 1, T. 18 S., R. 29 E.) and the Conoco 5 Brainard (2310N 2310E, sec. 3,

T. 18 S., R. 19 E.) in what appears to be a uniform sand interval, oil-staining is limited to the lower part of the sand. These two wells are marginal to structural highs that may of course be more extensive than indicated on the structural contour map. The data tends to support previous interpretations of local gas caps in different parts of the field. At the present time no reportable gas is being produced from the Loco Hills sand in the main producing trend.

Oil and water saturation data is limited and for the most part is from areas marginal to the main producing trend. In addition many of the cores were taken in areas where waterflooding had already been initiated. The contours showing residual oil saturation (fig. 21) indicate an increase toward the main producing trend. This data closely follows the structural map with lower values to the south and west onto structurally high areas. Water saturation data is less definitive (fig. 22) and is influenced by the waterflood operations. Fluid saturation data is presented here to emphasize the relationship to the Loco Hills trap. The average oil saturation in the more productive parts of the main producing trend is thought to be from 35 to 45 percent at the present time.

Asphalt was observed in cuttings from sandstones in the lower part of the Conoco 1 and 5 Brainard wells in the eastern part of sec. 3. It is not known how extensive asphalt might be in the Loco Hills sand or how this might influence estimates of oil reserves.

Loco Hills Trap

The general features of the Loco Hills trap have been fairly well known since shortly after the discovery of the field in 1939. Aston (Bates, 1942) described the accumulation of oil as follows: "The Loco Hills pool lies on the south flank of a structurally high limestone trend plunging eastward into Lea County. Accumulation has occurred in a stratigraphic trap with local structural conditions determining productivity. The regional dip of the beds is to the south and east at about 60 feet per mile. On the north edge of the pool the porosity of the main pay decreases due to cementation." In the 1944 report on the Loco Hills field it is stated that the "oil productive sands of the Grayburg Formation are located in a minor syncline on the flank of the Grayburg-Jackson high and form a stratigraphic trap in which there is now an accumulation of oil and gas."

The present study supports these earlier conclusions and further defines the producing limits of the Loco Hills sand within the current boundaries of the field. Several factors control well productivity and distribution of oil, gas, and water. These include the amount of dolomite and in particular the degree of dolomitic cementation of the sandstones, average porosity, thickness of net pay, total pore volume, "shaliness" of the sandstones, and local depositionally controlled structural features.

The percent dolomite was interpreted from geophysical

logs (fig. 23), and is based on the thickness of dolomitic material compared with the total thickness of the Loco Hills sand. On the map the main producing trend lies primarily within the area of the less than 30 percent dolomite line. This line establishes a well defined boundary for oil production on the north and south sides of the main producing trend. It does not define the limits of the trap to the east or west. The 30 percent-plus dolomite content across secs. lland 12 correspond to an area of generally low oil productivity during both primary and secondary recovery.

Examination of the average porosity map (fig. 15) and comparison with the production maps (figs. 28 and 30) suggest a rapid decrease in the amount of oil produced where average porosity falls below 12 percent. This contour line closely defines the northern and southeastern extent of the main trend. It also aids in determining the western limits of producible oil and to a lesser degree the eastern limits.

The 2-ft contour line on the map showing total void space (fig. 16) closely follows the limits of producible oil on the north, south, and west sides of the main trend and the detached areas elsewhere in the field.

Structural features indicate a close relationship with the amount of oil produced in the main trap (figs. 12, 28, and 30). Oil apparently moved into the trap from the east along the synclinal axis and possibly from the

south through the barrier gap in sec. 14. The oil continued to migrate updip to the north, south, and west and into local highs until trapped by the reduction in porosity that coincides with the structural highs. In the producing area in the southwest part of the field oil obtained exclusively from the Loco Hills sand also comes from the flanks of a structural high. In wells on the structural high in this area oil is produced from the Loco Hills sand and from a sandstone and dolomites above the Loco Hills.

An attempt was made to determine from geophysical logs the percent of shale plus shaly sandstone in the Loco Hills zone. This proved less than satisfactory but indicated an increase in percent of shale to the east and west with lower values along the main producing trend and in the southwest detached producing area.

The three parameters that best define the oil producing limits of the Loco Hills sand are the maps showing percent of dolomite, average porosity, and total pore volume. These parameters were combined using the 2-ft void space, 12 percent porosity, and 30 percent dolomite contours to show the limits of producible oil (figs. 24 and 25). Producing wells for both primary and secondary recovery are plotted on the maps as well as the amount of oil produced in each area. Also shown is the 8 percent average porosity contour that,as discussed previously, approximates the lower limit of recoverable oil from the Loco Hills sand.

Less than one percent of the primary oil produced has come from Area D where all three limiting factors are present. Average oil produced per well in this area is just slightly over 17,000 barrels. In Area C with two limiting factors the average oil production per well is almost 29,000 barrels and the primary recovery two percent of the total. Area B with one limiting factor has accounted for 12 percent of the total oil produced with average production per well of about 69,000 barrels. Eighty-four percent of the total primary oil has come from Area A with values above or below the limiting factors as defined. Average production per well has been almost 92,000 barrels.

The same area classification is shown on the map for secondary oil production. The percent recovery for each area is essentially the same as that for primary recovery. Although partly influenced by location of water injection wells, it is doubtful that appreciable amounts of oil can be recovered from Areas C and D under the waterflood program or any other enhanced recovery method.

Field Development

A total of 459 wells have been drilled into the shallow Permian pay zones in the Loco Hills field. Forty percent of these wells were completed in 1939 and 1940 (fig. 26). Drilling in what is now the Loco Hills field began in 1925 with the Ramage 2 Walker test (1750S 250W, sec. 31, T. 17 S.

R. 29 E.). This well had a reported I.P. of 8 BOPD. Apparently it was deepened and completed at a later date as the General American 2 Green-B. The first well to find oil in the Loco Hills sand was the Franklin 1 Nelson (228N 550W, sec. 4, T. 18 S., R. 30 E.). Commercial quantities of oil were not present, and the well was abandoned in 1937. The first successful completion in the Loco Hills sand was the Yates et al. 1 Yates (1980S 660W, sec. 6, T. 18 S., R. 30 E.). This well was completed February 14, 1939 for 560 BOPD after being shot with 140 quarts of nitroglycerine. Oil in the Grayburg from deeper pay zones was discovered in the Yates 1 Travis (660S 330E, sec. 6, T. 18 S., R. 29 E.), completed in June 1939. The detached area in the southwest part of the field was discovered in the Black 1 Wright well (660N 660W, sec. 20, T. 18 S., R. 29 E.) completed October 1, 1955.

Early wells to the Loco Hills sand were drilled with cable tools and shot with varying amounts of nitroglycerine. More recent completion practices involve setting pipe, perforating, acidizing, and fracturing with either oil or water with sand as a propping agent.

There has been at least one well completed in the field every year since discovery, with the exception of 1968. Following the 97 wells completed in 1940, drilling dropped to generally below 10 wells per year. In 1962 during development of the West Loco Hills waterflood unit,

35 wells were completed. The average depth for all wells drilled to the Permian pay zones is 2,753 ft. The total footage drilled through 1975 amounted to 1,263,564 ft.

Oil Production: Loco Hills Sand

The well status at the end of 1975 was 191 producing oil wells, 96 water injection wells, 131 abandoned or shut-in oil or injection wells, and 45 wells that were dry or temporarily abandoned and for which there has been no oil production recorded (fig. 27). Of the producing oil wells 134 were recovering oil from the Loco Hills sand, in part commingled from other zones. Only seven of the 466 wells drilled in the field area have tested deeper Permian and older pay zones. These include three gas wells designated as part of the South Empire-Morrow field.

Individual well production data for the Loco Hills sand is given in table 1. Sources for this data were annual reports of the New Mexico Oil and Gas Engineering Committee, Lea County Operators Committee, Artesia Area Operators, Engineering Reports prepared for the Loco Hills Pressure Maintenance Association, and publications of the Roswell Geological Society. Pay-zone determinations were made by comparison of intervals shot or perforated with geophysical and lithologic logs, where available, or from structure and isopach maps. There is some disagreement concerning the amount of oil produced as recorded by the various sources listed above. Because of this there is a

small variation in the data presented in different parts of this report (see tables 1 and 6 and fig. 29). In addition some error was introduced in obtaining yearly production and the total production for each well. The total error amounts to less than 2×10^{-3} percent and was not considered significant enough to warrant further refinement.

During early stages of field development and again during waterflood operations, two or more wells were completed in a single drilling unit. Oil produced from some of these units was combined for two of the wells making it impossible to determine the production from each well. These conditions are indicated in the table and by different symbol on the map of primary production (fig. 28).

Of the 459 wells drilled into the shallow Permian pay zones, 251 have produced oil for part or all of their productive history exclusively from the Loco Hills sand. Primary and secondary oil were separated based on an evaluation of each well. This evaluation involved proximity to injection wells and the time of increased oil production. This was done on a yearly basis and therefore is not completely accurate. However, primary production for most wells had declined to only 2 or 3 barrels per day or less at the time waterflood operations were initiated.

Within the currently defined area of the field, primary oil production was established in a large area in the

northeast and in several small tracts to the west, southwest, south, and east. Based on well units of 40 acres each, the area of primary oil production from the Loco Hills sand is about 7,480 acres of which 6,968 acres lies in the main producing trend. Primary oil recovered from the main trend amounted to 14,978,849 barrels or 2,150 barrels per acre, 651 barrels per acre-ft, and an average production per well of 81,407 barrels. In the outlying areas oil produced has been 252,527 barrels or 442 barrels per acre, 185 barrels per acre-ft, and 15,102 barrels per well. Wells that produced over 150,000 barrels of primary oil are located along the eastern margin of the field. The highest production was from a well in the northwest corner of sec. 7, T. 18 S., R. 30 E. with 219,002 barrels. Wells that produced over 100,000 barrels of primary oil have 12 percent or more porosity and a net pay thickness of 10 ft or more.

The production curve for primary oil (fig. 29) shows a peak in 1941 of 2,061,998 barrels. Production had declined to less than 300,000 barrels by 1954. Workovers and development of the southwest detached area increased oil production to 350,000 barrels from 1955 through 1957. This was then followed by a decline at a rate similar to that preceding 1955, until the injection of water began in 1958.

There have been 173 producing oil wells involved in the waterflood program in the Loco Hills sand. Oil

produced from these wells through 1975 (table 6) amounted to 20,864,044 barrels for an average per well of 120,601 barrels, or 2,994 barrels per acre and 906 barrels per acre-ft. The curve for secondary oil (fig. 29) shows a rapid increase of oil produced from 1959 to the peak production of 2,095,631 barrels in 1965. From 1967 to 1969 a sharp decline was followed by a moderate increase to 1971, then the current rapid rate of decline through 1975.

The map showing secondary oil production (fig. 30) closely follows the map of primary oil. Areas with high yield wells of over 300,000 barrels of oil occur in secs. 1, 2, 9, 10, and 12, T. 18 S., R. 29 E., in sec. 31, T. 17 S., R. 30 E., and secs. 6 and 7, T. 18 S., R. 30 E. In the four waterflood units indicated on the map of cumulative water injected (fig. 31), there have been 112 wells used for the injection of water into the Loco Hills sand (New Mexico Oil Conservation Commission, 1958 to 1975). These wells were either drilled for this purpose, were converted from producing oil wells, or were recompleted dry holes. In addition there are seven other injection wells for which data was not available. The total amount of water injected up to January 1, 1976 was 157,244,131 barrels (tables 2-5) for an average of 1,403,965 barrels per well. By using averages to include the seven wells cited above, approximately 167 million barrels of water have been injected into the Loco Hills sand,

amounting to about eight barrels of water injected for each barrel of oil recovered.

The greatest amount of water, up to four million barrels per well, has been injected along the eastern margin of the main producing trend. Within this area wells have produced from 200,000 to 400,000 barrels of oil under the waterflood program. The most prolific well is in the northwestern part of sec. 10, T. 18 S., R. 29 E. with 538,918 barrels of secondary oil produced between 1965 and the end of 1975. The average amount of water injected around this well has been 1.5 million barrels.

Areas that have not responded as well to waterflooding mostly duplicate areas of lower primary oil production. Some of these areas, such as parts of secs. 11 and 12, would appear to have a potential for greater recovery of oil. In part there has been less water injected, but it is also possible that original oil saturations were lower.

Cumulative production for the field is shown in Figure 32. Based on the total of 237 wells that have produced oil from the Loco Hills sand in the main producing trend and the total production of oil, the average production has been 151,236 barrels pel well, 5,144 barrels per acre, and 1,557 barrels per acre-ft.

Oil Reserves: Loco Hills Sand

Calculations of the original oil in place were done

by the sand-volume method using a water saturation of 0.3, an oil saturation of 0.7, and a formation volume factor of 1.27. Two approaches were used in estimating original oil in place for the main producing trend and separate tracts (tables 6-9). The first method is based on the contour map, showing total pore volume. The oil productive area for each section and the area within the Oh values was determined with a planimeter. The boundary of the oil-productive area was based on well units of 40 acres (±). The second method involved average porosity (greater than 8 percent) and net thickness. The available control points in each section were used in determining averages. Again, a planimeter was used to calculate the producing area. The outer boundary was established by plotting a uniform distance from each producing well and connecting the points. This boundary is shown on the cumulative production map (fig. 32).

From the first method the total area is 6,968 acres containing a pore volume of 23,025 acre-ft. The original oil in place, in the main producing trend, was 125,432,249 barrels or 98,454,900 stock-tank barrels. Primary oil production amounted to 14,978,849 barrels or 15 percent of the stock-tank barrels, and secondary recovery has been 20,864,044 barrels or 21 percent. The oil remaining in the reservoir is estimated to be 62,612,007 barrels. Recovery by section varies from 14 percent in sec. 13, T. 18 S., R. 29 E. to 53 percent for sec. 36, T. 17 S.,

R. 29 E. Sections with over four million barrels of oil remaining are 1, 2, 9, 10, 11, and 12 in T. 18 S., R. 29 E.; sec. 6, T. 18 S., R. 30 E.; and secs. 31 and 32, T. 17 S., R. 30 E.

Calculations based on average porosity and net pay are somewhat lower with the total original oil in place estimated at 111,906,884 barrels and 87,838,177 stock-tank barrels. Total production has amounted to 41 percent (17 percent primary and 24 percent secondary) of the stock-tank barrels. Oil remaining in the reservoir is estimated to be 51,996,083 barrels. For the most part, variations in estimates are the result of the calculated productive area. Examples are secs. 11 and 12, T. 18 S., R. 29 E. and sec. 32, T. 17 S., R. 30 E. In other areas, such as sec. 31, T. 17 S., R. 30 E., variations are the result of contouring and available data. In some sections geologic conditions indicate less oil originally in place than the estimates given in tables 6 and 7. This is probably true in secs. 11 and 12 where the oil remaining is calculated to be from 10 to 12 million barrels but the percent of oil recovery is in general less than that of the field average.

For other areas in the field where oil has been produced from the Loco Hills sand, recovery of stock-tank barrels has been only 4 to 6 percent. The estimates of the original oil in place are considered too high, probably because the oil saturation is much lower than that used in the calculations.

Commingled Oil Production

Thirty-seven wells have been completed in the Loco Hills and other zones (figs. 27 and 28). Production data for these wells is given in table 10 and yearly production in fig. 33. In about half of these wells, oil from the Loco Hills sand is commingled with oil from pay zones in the Queen Formation, Metex and Premier sands of the Grayburg Formation, or various zones in the San Andres Formation. In the remainder of the wells, oil is recovered from local porosity zones developed in dolomite immediately above or below the Loco Hills zone or a thin sandstone above the Loco Hills. Most of the secondary oil probably comes from the Loco Hills sand, at least for wells in the Loco Hills and West Loco Hills units. The increase in secondary oil production in 1974 and 1975 is the result of water injection into the Metex, Premier, and upper part of the San Andres in the Ballard unit.

The total amount of oil produced up to the end of 1975 from commingled wells is 1,353,629 barrels or about three percent of the oil that has been produced from the Loco Hills field. The average yield per well under primary recovery has been 25,784 barrels. Secondary oil recovery averages 45,121 barrels per well.

Miscellaneous Oil Production

In addition to oil produced from or commingled with the Loco Hills sand, numerous othe2- zones have yielded

commercial quantities of oil. These include a sandstone in the Seven Rivers Formation, several sandstone intervals in the Queen Formation, the Metex and Premier sands and two or more dolomite intervals in the Grayburg Formation, and the Lovington sand and several dolomite zones above and below this interval in the upper part of the San Andres Formation. Most of the development of these other zones has been in the western part of the field where the Loco Hills sand is generally barren. Scattered wells are now producing or have produced oil from one or more of these zones in areas marginal to the main producing trend of the Loco Hills sand (fig. 3).

Eighty-nine wells have been completed in zones other than the Loco Hills (table 11). Through 1975 the cumulative production was 3,552,897 barrels of oil, most of which is designated as primary oil. The average yield per well including secondary oil is 39,920 barrels. Peak production was reached in 1950 when 148,920 barrels were produced. The production curve (fig. 34) reflects the sporadic development of these zones. In 1975 primary production had declined to 32,142 barrels of oil for an average per well production of about 2 BOPD.

Since 1972 a minor amount of water has been injected into the San Andres and perhaps other zones in the Far West Loco Hills unit. The only significant project in pay zones other than the Loco Hills sand is at the Ballard unit. This unit, located in secs. 5 and 8, T. 18 S.,

R. 29 E., was initiated in 1973. Through 1975, 1,955,682 barrels of water had been injected into the Metex, Premier, and Lovington zones in 12 wells (table 12). From just over 4,000 barrels of secondary oil produced in 1973, production increased to about 11,000 barrels in 1974, and exceeded 60,000 barrels in 1975. To January 1, 1976 injection had been 24 barrels of water per barrel of oil produced.

Development Potential

The potential for finding additional oil in the Loco Hills sand within the present boundaries of the field are limited. The main producing trend and the southwest area have been for the most part drilled. The southern half of sec. 18, T. 18 S., R. 30 E. and secs. 13 to 16, T. 18 S., R. 29 E. represents the only fairly large area that has not been tested. From geological data favorable conditions appear to be present in the southwest corner of sec. 18, the south half of sec. 13, and the southeast part of sec. 14. Pore volume decreases to the north suggesting a possible trap, and from limited data the area appears to lie on the south flank of a small southeast-trending high.

The area east of the main producing trend in parts of secs. 5, 6, 7, and 17, T. 18 S., R. 30 E. has not been tested. If the interpretation of the oil-water contact in the Loco Hills sand is correct, prospects for developing this area appear doubtful.

Additional oil from expansion of current waterflood operations in the Loco Hills sand is somewhat limited. Increased injection in some areas may result in increases in oil produced. In comparing secondary oil produced with water injection on a field-wide basis, there appears to be a preferential movement of fluids parallel to the dip. Wells with high oil production in almost all cases have injection wells located either downdip or updip. Parts of secs. 11 and 12 would appear to have added potential from additional injection and producing wells.

At the present time conditions do not appear to justify a waterflood operation in the southwest area. This conclusion is based on the relatively low primary production for the wells in this area.

As stated in the 1944 report of the Loco Hills Pressure Maintenance Association "...before abandoning a well an operator is justified in making the expenditure necessary to deepen most any Zone 4 (Loco Hills sand) producer in the Loco Hills field." So few wells penetrate deeper pay zones in the main producing trend that evaluating the potential for these zones is difficult. However, the additional drilling needed to evaluate the established deeper pay zones is so minor that some testing certainly is warranted. There is opportunity for additional development in the western part of the field and for some expansion of waterflood operations.

Oil remaining in the Loco Hills sand in the area of the

main producing trend is considered to be substantial. The present steep decline in oil production from waterflood operations and the extent of these operations suggests little potential for a significant upward change in the amount of oil produced under current conditions. The Loco Hills sand appears to be a favorable reservoir for testing other enhanced recovery methods, in particular microemulsion flooding or miscible fluid displacement. If estimates of the remaining oil in the Loco Hills sand are reasonably accurate, a recovery of 40 percent would mean an additional 20 to 25 million barrels of oil.

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TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND
Barrels of Oil

Year	Newmont 3 Ballard B(+5B) 330N 990E Sec. 1, T.18S., R.29E.	Newmont 5 Ballard B(w/3B) 990N 330E Sec. 1, T18S., R.29E.	Newmont 1 Ballard B(w/4B) 330N 2310E Sec. 1, T.18S., R.29E.	Newmont 4 Ballard B(w/1B) 990N 1650E Sec. 1, T.18S., R.29E.	Newmont 2 WLHU-15 330N 2310W Sec. 1, T.18S., R.29E.
1939	5,484	-	7,081	-	7,832
1940	18,194	-	18,202	-	17,006
1941	17,972	-	15,978	-	16,005
1942	16,929	-	-	-	11,315
1943	14,398	-	-	-	10,234
1944	9,822	-	-	-	8,665
1945	8,280	-	-	-	8,085
1946	6,748	-	-	2,758	5,936
1947	*11,760	*	-	6,574	6,197
1948	* 8,037	*	-	4,017	3,384
1949	* 5,572	*	-	2,783	2,948
1950	* 4,564	*	-	2,281	2,423
1951	* 3,663	*	-	1,811	1,971
1952	* 3,300	*	1,498*	*	2,900
1953	* 3,840	*	1,565*	*	2,266
1954	* 3,512	*	1,388*	*	1,606
1955	* 2,380	*	1,412*	*	1,308
1956	* 2,517	*	1,198*	*	1,013
1957	* 2,432	*	1,216*	*	617
1958	2,158	-	-	1,025	666
1959	S 651	-	-	803	744
1960	9,975 S	-	1,343	-	737
1961	53,767	-	S 657	-	881
1962	32,808	-	717 S	-	S 522
1963	21,735	-	3,009	-	23,143 S
1964	3,894	-	-	-	30,310
1965	1,579	-	-	-	3,935
1966	646	-	-	-	3,941
1967	-	-	-	-	-
1968	-	-	-	-	-
1969	-	-	-	-	-
1970	-	-	-	-	-
1971	-	-	-	-	-
1972	-	-	-	-	-
1973	-	-	-	-	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Primary	152,213	-	51,538	22,052	115,261
Secondary	124,404	-	3,726	-	61,329
Total	276,617	-	55,264	22,052	176,590

* Oil production combined with another well

S———S Secondary oil recovery

** Producing from other zone(s)

LH Recompleted to Loco Hills sand

\# Commingled Loco Hills plus other pay zone(s)

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 3 WLHU-15 990N 1650W Sec. 1, T.18S., R.29E.	Newmont 1 WLHU-16 660N 990W Sec. 1, T.18S., R.29E.	Newmont 2 WLHU-16 2310N 990W Sec. 1, T.18S., R.29E.	Newmont 1 WLHU-15 2310N 2310W Sec. 1, T.18S., R.29E.	Newmont 2 Ballard B 2310N 2310E Sec. 1, T.18S., R.29E.
1939	-	5,782	-	925	1,349
1940	-	17,715	11,844	19,494	18,197
1941	-	16,298	16,354	16,587	17,971
1942	-	12,263	12,267	12,377	16,924
1943	-	9,948	10,103	9,811	14,403
1944	-	7,807	9,541	8,060	9,822
1945	-	8,201	8,389	7,837	8,286
1946	-	5,520	6,407	5,039	6,750
1947	-	5,415	5,512	5,704	7,691
1948	-	3,330	3,336	3,563	4,020
1949	-	2,370	2,374	2,755	2,785
1950	-	1,868	1,871	2,274	2,284
1951	-	1,466	1,469	1,675	2,308
1952	-	1,379	1,381	1,414	2,166
1953	-	1,072	1,071	1,578	1,753
1954	-	1,063	1,068	1,407	1,387
1955	-	1,113	1,118	1,082	1,444
1956	-	4,145	4,147	1,017	1,419
1957	-	3,320	3,326	2,670	1,421
1958	-	3,038	2,038	2,506	1,307
1959	-	2,068	2,072	2,124	1,198
1960	-	1,378	1,378	1,836	S 999 S
1961	-	1,236	1,240	1,650	17,704
1962	S - S	482	488	S 1,183 S	13,697
1963	43	S 467 S	341	2,139	5,805
1964	15,836	26,596	-	-	16,403
1965	55,982	115,880	-	-	9,725
1966	78,055	90,055	-	-	2,016
1967	73,174	27,623	-	-	2,376
1968	47,615	19,315	-	-	1,137
1969	11,536	3,338	-	-	5,959
1970	10,161	639	-	-	8,843
1971	3,591	250	-	-	3,001
1972	1,924	552	-	-	1,457
1973	150	5,839	-	-	1,759
1974	-	4,102	-	-	2,056
1975	-	3,747	-	-	1,687
Primary	-	118,744	109,235	114,568	126,154
Secondary	298,067	297,936	-	2,139	93,625
Total	298,067	416,680	109,235	116,707	219,779

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 7 Ballard B 1650N 2310E Sec. 1, T.18S., R.29E.	Newmont 3 Ballard A 1650N 990E Sec. 1, T.18S., R.29E.	Newmont 1 Ballard A 2310S 330E Sec. 1, T.18S., R.29E.	Newmont 5 Ballard A 1980S 990E Sec. 1, T.18S., R.29E.	Newmont 2 Ballard A 2310S 2310E Sec. 1, T.18S., R.29E.
1939	-	5,309	19,377	-	6,730
1940	-	17,895	17,899	-	17,896
1941	-	18,059	18,052	-	18,053
1942	-	11,171	11,081	-	11,168
1943	-	10,202	10,201	-	10,201
1944	-	8,907	8,910	-	8,909
1945	-	8,524	8,526	-	8,524
1946	-	6,896	6,895	-	6,895
1947	-	7,848	7,852	-	12,709*
1948	-	4,778	4,785	-	9,559*
1949	-	3,481	3,484	-	6,963*
1950	-	3,204	3,206	-	6,407*
1951	-	1,809	2,476	-	5,291*
1952	-	1,013	1,829	-	4,228*
1953	-	1,019	2,844	-	4,302*
1954	-	876	2,293	-	2,891*
1955	-	787	2,928	-	2,291*
1956	-	922	2,416	-	2,416*
1957	-	838	2,199	-	2,198*
1958	-	663	1,528	-	1,750*
1959	-	457	1,780	-	1,524*
1960	-	10,394	24,242	-	3,696*
1961	-	95,616	26,605	9,645	4,693*
1962	11,796	55,044	8,629	91,999	5,887
1963	11,662	15,234	5,526	81,935	19,418
1964	29,179	10,453	1,534	30,683	49,667
1965	30,901	2,519	719	15,148	69,530
1966	31,678	6,079	176	15,433	46,296
1967	20,214	-	-	4,772	38,619
1968	14,039	-	-	3,860	24,522
1969	4,180	-	-	4,185	7,332
1970	-	358	-	2,753	8,330
1971	-	475	*	2,808	6,823
1972	-	-	*	3,095	5,506
1973	-	-	*	2,472	3,457
1974	-	-	*	2,086	3,547
1975	-	-	*	2,082	3,333
Primary	-	114,658	138,781	-	150,905
Secondary	153,649	196,172	69,211	272,956	300,656
Total	153,649	310,830	207,992	272,956	451,561

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 4 Ballard A 1650S 1650E Sec. 1, T.18S., R.29E.	Newmont 1 WLHU-25 2310S 2310W Sec. 1, T.18S., R.29E.	Newmont 2 WLHU-25 1650S 1980W Sec. 1, T.18S., R.29E.	Newmont 1 WLHU-27 1650S 990W Sec. 1, T.18S., R.29E.	Newmont 2 WLHU-27 2310S 990W Sec. 1, T.18S., R.29E.
1939	-	10,917	-	-	-
1940	-	17,890	-	12,811	-
1941	-	17,847	-	17,867	-
1942	-	11,084	-	11,275	-
1943	-	10,184	-	10,154	-
1944	-	10,762	-	9,983	-
1945	-	9,484	-	7,372	-
1946	-	6,457	-	5,585	-
1947	*	5,458	-	1,958	-
1948	*	3,693	-	4,530	-
1949	*	3,076	-	2,070	-
1950	*	1,656	-	1,722	-
1951	*	1,288	-	1,479	-
1952	*	1,055	-	1,566	-
1953	*	1,068	-	889	-
1954	*	933	-	762	-
1955	*	1,513	-	2,478	-
1956	*	4,117	-	1,855	-
1957	*	2,576	-	1,326	-
1958	*	1,939	-	1,158	-
1959	*	1,583	-	806	-
1960	*	1,296	-	893	-
1961	*	1,112	-	631	-
1962	S 9,882 S	S 1,044 S	-	S 509 S	-
1963	27,836	11,284	S - S	3,961	S - S
1964	113,945	37,747	27,969	-	36,953
1965	122,115	53,486	69,173	-	12,183
1966	44,209	35,588	70,787	-	-
1967	33,126	12,253	63,542	-	-
1968	24,507	13,534	30,390	-	-
1969	6,258	22,438	6,854	-	-
1970	*	7,782	-	-	-
1971	*	1,833	-	-	-
1972	*	3,394	-	-	-
1973	*	2,783	-	-	-
1974	*	2,056	-	-	-
1975	*	1,630	-	-	-
Primary	-	128,032	-	99,679	-
Secondary	381,878	205,808	268,715	3,961	49,136
Total	381,878	333,840	268,715	103,640	49,136

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLHU-40 990S 990W Sec. 1, T.18S., R.29E.	Newmont 2 WLHU-40 660S 330W Sec. 1, T.18S., R.29E.	Newmont 1 WLHU-26 990S 2310W Sec. 1, T.18S., R.29E.	Newmont 2 WLHU-26 330S 1650W Sec. 1, T.18S., R.29E.	Newmont 1 WLHU-14 990S 2310E Sec. 1, T.18S., R.29E.
1939	967	-	5,308	-	-
1940	20,457	-	19,595	-	17,951
1941	16,124	-	16,068	-	16,357
1942	12,307	-	12,379	-	12,321
1943	10,185	-	9,959	-	10,135
1944	10,440	-	10,731	-	10,753
1945	10,352	-	9,525	-	10,722
1946	9,631	-	7,535	-	9,701
1947	10,664	-	7,636	-	10,248
1948	6,234	-	7,670	-	7,445
1949	4,729	-	5,355	-	5,481
1950	3,647	-	4,050	-	3,833
1951	3,209	-	4,887*	*	3,216
1952	2,050	-	3,112*	*	2,398
1953	1,706	-	3,000*	*	2,295
1954	1,449	-	2,665*	*	2,098
1955	1,455	-	2,200*	*	2,494
1956	1,319	-	4,788*	*	2,244
1957	959	-	4,404*	*	1,645
1958	1,004	-	2,473*	*	1,297
1959	1,004	-	2,386*	*	1,260
1960	610	-	852*	*	1,062
1961	592	-	2,305*	*	763
1962	648	-	713	606	8,333
1963	583	-	730	3,191	6,480
1964	34,469	2,708	68,597	2,569	-
1965	44,372	34,310	80,879	-	-
1966	28,428	18,776	33,030	-	-
1967	25,001	21,499	21,706	-	-
1968	16,501	13,406	12,812	-	-
1969	10,423	5,575	13,945	-	-
1970	10,699	-	7,293	-	-
1971	4,536	-	4,158	-	-
1972	10,516	-	407	-	-
1973	8,903	-	-	-	-
1974	8,871	-	-	-	-
1975	7,067	*	-	-	-
Primary	132,325	-	150,326	-	135,719
Secondary	209,786	96,272	242,827	6,366	14,813
Total	342,111	96,272	393,153	6,366	150,532

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 2 WLHU-14 990S 990E Sec. 1, T.18S., R.29E.	Newmont 3 WLHU-38 1220N 330E Sec. 2, T.18S., R.29E.	Newmont 4 WLHU-38 1220N 1420E Sec. 2, T.18S., R.29E.	Newmont 1 WLHU-33 990N 1650W Sec. 2, T.18S., R.29E.	Newmont 4 WLHU-34 2310N 990W Sec. 2, T.18S., R.29E.
1939	-	-	-	-	-
1940	10,079	9,268	-	-	15,314
1941	16,367	16,372	4,469	*	17,382
1942	12,325	15,303	1,377	*	12,030
1943	10,140	13,277	-	-	11,082
1944	10,759	8,152	-	-	8,994
1945	10,729	9,493	-	-	6,716
1946	9,704	8,864	-	-	6,304
1947	10,257	6,422	-	-	4,939
1948	7,549	4,263	-	-	3,690
1949	5,483	3,361	-	-	3,259
1950	3,826	2,561	-	-	2,668
1951	3,224	2,111	-	-	2,019
1952	2,407	1,938	-	-	1,769
1953	2,300	1,643	-	-	1,593
1954	2,104	1,170	-	-	2,453
1955	2,501	2,555	-	-	2,453
1956	2,245	4,092	-	-	2,273
1957	1,648	2,519	-	1,471	1,667
1958	1,303	1,839	-	1,482	907
1959	1,264	1,459	-	1,420	682
1960	1,068	1,262	-	1,213	405
1961	S 769 S	1,206	-	1,306	310
1962	8,387	783	-	986	391
1963	23,629	761	-	742	249
1964	86,591	-	S 2,888 S	501	S 451 S
1965	84,263	-	36,197	-	5,917
1966	74,742	-	41,791	-	29,002
1967	58,318	-	12,965	-	59,637
1968	48,198	-	6,535	-	30,592
1969	24,038	-	1,115	-	10,214
1970	10,109	-	302	-	4,625
1971	8,865	-	792	-	1,526
1972	13,612	-	-	-	712
1973	10,225	-	-	-	405
1974	7,510	-	-	-	-
1975	6,023	-	-	-	-
Primary	128,051	120,674	5,846	9,121	110,000
Secondary	464,460	-	102,585	-	142,630
Total	592,511	120,674	108,431	9,121	252,630

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 2 WLHU-36 2310N 2310W Sec. 2, T.18S., R.29E.	Newmont 1 WLHU-38 2310N 1650E Sec. 2, T.18S., R.29E.	Newmont 2 WLHU-38 2310N 330E Sec. 2, T.18S., R.29E.	Newmont 4 WLHU-39 1650S 330E Sec. 2, T.18S., R.29E.	Newmont 6 WLHU-39 2310S 990E Sec. 2, T.18S., R.29E.
1939	-	-	-	-	-
1940	18,224	18,069	13,974	10,274	-
1941	16,743	16,374	16,373	17,515	-
1942	11,068	14,198	14,203	16,209	-
1943	10,153	12,596	13,550	11,702	-
1944	9,073	8,650	9,234	8,046	-
1945	9,127	7,993	9,133	6,223	-
1946	6,591	4,141	6,690	4,927	-
1947	4,906	4,855	5,697	4,423	-
1948	3,186	4,255	4,261	3,678	-
1949	2,217	3,356	3,357	2,488	-
1950	2,939	2,558	2,558	1,548	-
1951	2,436	2,106	2,111	890	-
1952	1,904	1,931	1,937	787	-
1953	1,737	1,637	1,638	450	-
1954	1,970	2,705	1,168	282	-
1955	2,700	4,540	1,562	883	-
1956	2,503	4,089	9,033	875	-
1957	2,141	2,520	5,866	949	-
1958	1,807	1,862	4,146	754	-
1959	1,587	1,480	3,076	726	-
1960	1,213	1,260	2,551	617	-
1961	1,005	1,198	2,412	429	-
1962	870	782	1,375	333	-
1963	1,009	875	870	470	-
1964	S 883 S	-	S 20,017 S	-	-
1965	11,523	-	159,833	-	-
1966	35,923	-	107,269	-	-
1967	10,444	-	49,040	-	-
1968	17,627	-	41,017	-	-
1969	36,023	-	9,764	-	-
1970	12,004	-	15,258	-	-
1971	9,004	-	18,706	-	-
1972	5,702	-	11,628	-	-
1973	4,130	-	4,062	-	S 3,028 S
1974	4,716	-	4,725	-	2,238
1975	3,740	-	4,334	-	1,768
Primary	117,992	124,030	136,775	95,478	-
Secondary	150,836	-	445,653	-	7,034
Total	268,828	124,030	582,428	95,478	7,034

TABLE 1 'VELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 3 WLHU-39 1650S 1650E Sec. 2, T.18S., R.29E.	Newmont 2 WLHU-29 2310S 2310W Sec. 2, T.18S., R.29E.	Newmont 1 WLHU-41 2310S 330W Sec. 2, T.18S., R.29E.	Bright-Gordon 1 State 330S 990W Sec. 2, T.18S., R.29E.	Newmont 3 WLHU-31 990S 1270W Sec. 2, T.18S., R.29E.
1939	-	807	-	2,587	-
1940	13,962	17,626	10,822	15,546	-
1941	18,967	17,534	18,102	13,636	-
1942	15,947	13,104	11,658	6,225	-
1943	12,861	11,788	9,671	3,325	-
1944	8,860	7,088	10,055	2,142	-
1945	8,013	5,075	6,681	1,717	-
1946	5,720	4,282	9,962	882	-
1947	4,423	3,974	7,753	492	-
1948	4,564	2,547	5,686	-	-
1949	3,782	1,687	4,229	-	-
1950	3,628	697	3,506	-	-
1951	3,008	1,219	2,957	-	-
1952	2,798	1,274	2,828	-	-
1953	1,357	971	1,600	-	-
1954	676	1,694	626	-	-
1955	1,147	3,666	1,882	-	-
1956	1,116	861	1,847	-	-
1957	955	829	1,596	-	-
1958	752	937	1,391	-	-
1959	723	635	1,234	-	-
1960	615	427	1,118	-	-
1961	431	272	1,002	-	-
1962	333	215	916	-	-
1963	512	177	886	-	-
1964	S 856 S	-	S 880 S	-	-
1965	38,837	-	1,070	-	S - S
1966	137,001	-	85	-	2,446
1967	123,185	-	-	-	48,140
1968	85,646	-	-	-	10,372
1969	36,331	-	-	-	3,633
1970	12,670	-	-	-	1,534
1971	7,046	-	-	-	3,630
1972	2,910	-	-	-	8,297
1973	2,508	-	-	-	8,537
1974	5,074	-	-	-	7,535
1975	7,576	-	-	-	8,879
Primary	116,006	99,386	118,888	46,552	-
Secondary	459,144	-	1,155	-	103,003
Total	575,150	99,386	120,043	46,552	103,003

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLHU-29 330S 2310W Sec. 2, T.18S., R.29E.	Newmont 3 WLHU-29 990S 2245W Sec. 2, T.18S., R.29E.	Newmont 1 WLHU-39 330S 2310E Sec. 2, T.18S., R.29E.	Newmont 2 WLHU-39 330S 330E Sec. 2, T.18S., R.29E.	Newmont 5 WLHU-39 660S 990E Sec. 2, T.18S., R.29E.
1939	8,079	-	2,687	-	-
1940	19,104	-	18,220	17,213	-
1941	17,364	-	18,784	15,213	-
1942	13,103	-	17,081	-	-
1943	11,859	-	12,136	-	-
1944	10,048	-	11,047	-	-
1945	7,298	-	7,323	-	-
1946	6,661	-	5,691	-	-
1947	4,922	-	4,243	-	-
1948	3,364	-	3,571	-	-
1949	2,308	-	3,138	-	-
1950	2,006	-	1,970	-	-
1951	1,627	-	1,070	-	-
1952	1,699	-	873	-	-
1953	1,292	-	451	-	-
1954	631	-	293	-	-
1955	3,558	-	636	-	-
1956	1,742	-	1,115	-	-
1957	620	-	960	-	-
1958	704	-	748	-	-
1959	519	-	721	-	-
1960	419	-	615	-	-
1961	267	-	433	-	-
1962	196	-	335	-	-
1963	221	-	399	-	-
1964	S 1,096 S	-	-	-	-
1965	2,253	-	-	-	S 832 S
1966	15,640	-	-	-	12,525
1967	80,356	-	-	-	36,300
1968	31,246	-	-	-	31,533
1969	8,627	-	-	-	7,322
1970	2,790	-	-	-	6,764
1971	590	-	-	-	15,904
1972	4,544	*	-	-	9,549
1973	8,097	*	-	-	10,767
1974	5,336	*	-	-	15,398
1975	5,463	-	-	-	13,068
Primary	119,611	-	114,540	32,426	-
Secondary	166,038	-	-	-	159,962
Total	285,649	-	114,540	32,426	159,962

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 5 WLHU-10A 2310N 990W Sec. 3, T.18S., R.29E.	Newmont 6 WLHU-10A 2310N 2310W Sec. 3, T.18S., R.29E.	Newmont 5 WLHU-10B 2310N 2310E Sec. 3, T.18S., R.29E.	Newmont 3 WLHU-10B 2310N 330E Sec. 3, T.18S., R.29E.	Newmont 7 WLHU-10B 1980N 990E Sec. 3, T.18S., R.29E.
1939	-	-	-	-	-
1940	11,205	9,372	4,050	8,732	-
1941	16,002	16,003	14,399	14,679	-
1942	5,516	5,520	7,637	8,784	-
1943	3,096	3,416	3,852	5,738	-
1944	1,935	2,051	1,974	2,850	-
1945	1,279	1,100	2,210	2,048	-
1946	2,111	2,112	1,991	1,779	-
1947	1,662	1,662	2,001	1,229	-
1948	1,179	1,183	1,048	910	-
1949	847	857	967	967	-
1950	699	702	744	746	-
1951	636	636	490	489	-
1952	407	337	362	362	-
1953	683	688	92	92	-
1954	629	635	339	338	-
1955	631	638	806	804	-
1956	536	541	1,096	1,092	-
1957	528	526	915	914	-
1958	503	504	533	529	-
1959	480	480	391	393	-
1960	423	426	358	359	-
1961	320	316	320	298	-
1962	199	198	289	238	-
1963	271	76	381	383	-
1964	312	-	S 370 S	447	-
1965	253	-	414	S 458 S	S - S
1966	23	-	7,648	1,471	98
1967	-	-	6,326	20,887	268
1968	-	-	5,126	38,590	625
1969	-	-	2,789	21,981	2,280
1970	-	-	3,715	18,102	-
1971	-	-	4,442	8,221	-
1972	-	-	2,384	3,839	-
1973	-	-	206	8,170	-
1974	-	-	-	8,516	-
1975	-	-	-	8,723	*
Primary	52,365	49,979	47,615	55,658	-
Secondary	-	-	33,050	138,500	3,271
Total	52,365	49,979	80,665	194,158	3,271

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 3 WLHU-10B 1650S 990E Sec. 3, T.18S., R.29E.	Newmont 1 WLHU-10B 1650S 2310E Sec. 3, T.18S., R.29E.	Newmont 3 WLHU-10A 1650S 1650W Sec. 3, T.18S., R.29E.	Newmont 4 WLHU-10A 1650S 660W Sec. 3, T.18S., R.29E.	Newmont 7 WLHU-10A 1330S 330W Sec. 3, T.18S., R.29E.
1939	-	-	-	-	-
1940	9,397	13,709	19,047	16,043	-
1941	13,181	14,799	16,003	16,000	-
1942	-	10,019	-	13,847	-
1943	3,523	6,528	-	10,156	-
1944	3,441	3,907	-	6,150	-
1945	5,068	3,731	-	5,568	-
1946	4,691	3,406	-	4,856	-
1947	2,971	2,199	-	3,500	-
1948	2,697	2,003	-	3,101	-
1949	1,936	1,291	-	2,439	-
1950	1,630	1,484	-	1,831	-
1951	1,241	1,483	-	1,416	-
1952	821	999	-	1,583	-
1953	107	128	-	990	-
1954	335	329	-	2,602	-
1955	803	4,409	-	2,093	-
1956	6,979	5,487	-	1,908	-
1957	6,301	4,512	-	1,827	-
1958	3,655	2,597	-	1,151	-
1959	2,683	1,906	-	439	-
1960	2,153	1,485	-	465	-
1961	1,853	1,272	-	392	-
1962	1,203	912	-	187	-
1963	903	783	-	271	-
1964	738	850	-	440	-
1965	S 744 S	93	S 31 S	S 153 S	-
1966	4,558	-	375	2,553	-
1967	73,042	-	2,503	369	-
1968	41,132	-	1,931	2,326	-
1969	14,150	-	6,896	12,600	S 257 S
1970	6,097	-	18,837	19,926	*
1971	2,330	-	9,223	21,326	*
1972	277	-	9,107	18,907	*
1973	3,627	-	2,631	14,839	*
1974	3,217	-	-	12,707	*
1975	2,844	-	-	13,083	*
Primary	19,054	90,321	35,050	99,408	-
Secondary	151,274	-	51,534	118,636	257
Total	230,328	90,321	86,584	218,044	257

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLHU-10A 330S 330W Sec. 3, T.18S., R.29E.	Newmont 2 WLHU-10A 330S 1650W Sec. 3, T.18S., R.29E.	Newmont 2 WLHU-9 330S 2310E Sec. 3, T.18S., R.29E.	Newmont 1 WLHU-9 330S 330E Sec. 3, T.18S., R.29E.	Newmont 3 WLHU-9 990S 1310E Sec. 3, T.18S., R.29E.
1939	3,951	3,953	-	3,080	-
1940	19,451	19,213	17,509	12,538	-
1941	16,001	16,000	15,803	7,096	-
1942	13,842	13,844	11,066	806	-
1943	10,715	8,966	8,164	81	-
1944	8,220	6,707	6,632	-	-
1945	5,866	5,743	4,703	-	-
1946	4,854	4,857	4,193	-	-
1947	3,497	3,497	2,908	-	-
1948	3,099	3,100	2,018	-	-
1949	2,430	2,432	1,606	-	-
1950	1,828	1,830	1,107	-	-
1951	1,416	1,419	736	-	-
1952	1,585	1,569	577	-	-
1953	985	988	195	-	-
1954	1,292	1,990	1,544	-	-
1955	2,866	1,962	6,113	-	-
1956	1,903	1,904	4,539	-	-
1957	1,825	1,829	2,735	-	-
1958	1,148	1,147	3,414	-	-
1959	450	455	3,114	-	-
1960	458	462	2,187	-	-
1961	386	389	1,928	-	-
1962	263	263	1,346	-	-
1963	244	77	1,434	-	-
1964	444	184	765	2	-
1965	S 244 S	246	S 862 S	5	-
1966	471	23	863	-	-
1967	10,401	-	39,385	-	-
1968	16,513	-	46,732	-	-
1969	36,626	-	39,036	-	-
1970	69,671	-	34,418	-	-
1971	57,567	-	14,775	-	-
1972	50,129	-	7,754	-	-
1973	12,140	-	6,698	-	S 2,262 S
1974	6,231	-	3,932	-	2,554
1975	5,421	-	3,505	-	3,586
Primary	109,263	105,049	106,336	23,608	-
Secondary	265,170	-	197,960	-	8,402
Total	374,433	105,049	304,296	23,608	8,402

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 2 Ballard-10 990N 330W Sec. 4, T.18S., R.29E.	Anadarko 2 FWLH-1 2310N 1650E Sec. 4, T.18S., R.29E.	Resler 1 Bay-Miller 2310N 330E Sec. 4, T.18S., R.29E.	Newmont 2 WLH-43 1650S 330E Sec. 4, T.18S., R.29E.	Brookover 4 Watson 1650S 1650E Sec. 4, T.18S., R.29E.
1939	1,740	-	-	-	-
1940	4,893	*	5,405	18,122	12,617
1941	1,922	**	3,148	15,110	12,291
1942	1,300	**	1,332	7,937	5,058
1943	1,547	**	1,069	4,122	2,950
1944	1,435	**	696	3,188	2,411
1945	1,315	**	656	2,571	1,657
1946	1,345	**	762	2,037	1,424
1947	1,264	-	-	2,859	16
1948	1,570	-	-	1,903	584
1949	1,281	-	-	1,430	621
1950	1,393	-	-	1,252	1,280
1951	1,108	-	-	813	372
1952	1,025	-	-	-	-
1953	915	-	-	-	-
1954	818	-	-	-	-
1955	723	-	-	-	-
1956	656	-	-	-	-
1957	583	-	-	-	-
1958	613	-	-	-	-
1959	559	-	-	-	-
1960	524	-	-	-	-
1961	425	-	-	-	-
1962	273	-	-	-	-
1963	218	-	-	-	-
1964	296	-	-	-	-
1965	75	-	-	-	-
1966	-	-	-	-	-
1967	-	-	-	-	-
1968	-	-	-	-	-
1969	-	-	-	-	-
1970	-	S 6,080 S	-	-	-
1971	-	4,362	-	-	-
1972	-	3,270	-	-	-
1973	-	1,702	-	-	-
1974	-	2,777	-	-	-
1975	-	3,229	-	-	-
Primary	29,816	-	13,068	61,344	41,281
Secondary	-	21,420	-	-	-
Total	29,816	21,420	13,068	61,344	41,281

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 31 FWLH-8 2310S 1980W Sec. 4, T.18S., R.29E.	Anadarko 1 Ballard-26 2310S 330W Sec. 4, T.18S., R.29E.	Brookover 3 Watson 330S 2310W Sec. 4, T.18S., R.29E.	Anadarko 8 FWLH-8 1170S 2490W Sec. 4, T.18S., R.29E.	Brookover 2 Watson 330S 1650E Sec. 4, T.28S., R.29E.
1939	-	3,072	-	-	2,115
1940	-	2,065	15,477	-	18,517
1941	-	1,083	11,913	-	11,919
1942	-	1,109	5,173	-	4,990
1943	-	711	3,313	-	2,829
1944	-	526	2,429	-	2,422
1945	-	83	1,672	-	1,613
1946	-	548	1,626	-	1,371
1947	-	553	1,445	-	1,659
1948	-	524	973	-	970
1949	-	286	926	-	838
1950	-	247	276	-	901
1951	-	257	-	-	257
1952	-	252	-	-	-
1953	-	210	-	-	-
1954	-	184	-	-	-
1955	-	151	-	-	-
1956	-	148	-	-	-
1957	-	121	-	-	-
1958	-	191	-	-	-
1959	-	112	-	-	-
1960	-	111	-	-	-
1961	-	95	-	-	-
1962	-	100	-	-	-
1963	-	97	-	-	-
1964	-	77	-	-	-
1965	-	87	-	-	-
1966	-	55	-	-	-
1967	-	75	-	-	-
1968	-	74	-	-	-
1969	-	45	-	-	-
1970	-	47	-	S 1,020 S	-
1971	-	S 147 S	-	725	-
1972	-	110	-	702	-
1973	S 529 S	67	-	1,959	-
1974	391	-	-	1,118	-
1975	37	-	-	156	-
Primary	-	13,296	45,223	-	50,401
Secondary	957	324	-	5,680	-
Total	957	13,620	45,223	5,680	50,401

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-43 330S 330E Sec. 4, T.18S., R.29E.	Newmont 1 WLH-19B 660N 660E Sec. 9, T.18S., R.29E.	Newmont 2 WLH-19B 990N 1650E Sec. 9, T.18S., R.29E.	Anadarko 11 FWLH-9 990N 1650W Sec. 9, T.18S., R.29E.	Anadarko 10 FWLH-9 330N 2310W Sec. 9, T.18S., R.29E.
1939	2,052	9,041	3,965	-	-
1940	19,062	19,578	18,145	-	20,199
1941	15,110	15,134	16,449	-	14,759
1942	10,132	-	13,474	-	5,982
1943	4,119	-	7,782	-	4,264
1944	3,183	-	5,188	-	3,677
1945	2,568	-	2,049	-	3,284
1946	2,032	-	3,875	-	3,310
1947	2,858	-	3,166	-	3,436
1948	1,899	-	2,038	-	2,519
1949	1,425	-	1,516	-	1,738
1950	1,344	-	1,509	-	1,550
1951	1,625	-	1,209	-	843
1952	2,166	-	1,306	-	979
1953	2,042	-	1,359	-	855
1954	2,012	-	998	-	845
1955	3,023	-	1,141	-	782
1956	3,070	-	915	-	932
1957	1,958	-	374	1,247	1,695
1958	1,887	-	126	839	843
1959	2,085	-	319	584	588
1960	2,041	-	432	390	394
1961	2,205	-	264	609	613
1962	2,145	-	76	366	363
1963	1,639	-	60	285	277
1964	1,444	-	-	282	281
1965	1,453	S 4 S	-	302	264
1966	1,021	335	65	246	241
1967	S 793 S	349	S 402 S	332	223
1968	10,393	397	762	-	S 213 S
1969	16,866	524	1,260	-	792
1970	122,065	3,222	7,776	-	1,130
1971	76,559	25,574	91,450	-	1,698
1972	18,394	6,816	37,471	-	2,963
1973	6,293	2,412	2,093	-	4,826
1974	5,229	1,602	-	-	9,550
1975	6,134	1,476	407	S - S 3,350	8,381
Primary	98,393	43,753	88,202	5,482	75,949
Secondary	261,933	42,711	141,219	3,350	29,340
Total	36,032	86,464	229,421	8,832	105,289

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Welch 3 Langford 2310N 990W Sec. 9, T.18S., R.29E.	Anadarko 14 FWLH-9 2310N 2310W Sec. 9, T.18S., R.29E.	Anadarko 32 FWLH-9 1980N 1650W Sec. 9, T.18S., R.29E.	Newmont 4 WLH-19B 2310N 2310E Sec. 9, T.18S., R.29E.	Newmont 3 WLH-19B 1650N 330E Sec. 9, T.18S., R.29E.
1939	-	-	-	-	2,990
1940	11,471	15,051	-	18,143	18,145
1941	14,762	14,759	-	16,458	16,450
1942	5,792	6,003	-	13,478	13,477
1943	813	4,264	-	7,789	7,785
1944	-	3,687	-	5,198	5,193
1945	-	3,288	-	2,057	2,052
1946	-	3,316	-	3,866	3,877
1947	-	3,426	-	3,161	3,165
1948	-	2,511	-	2,032	2,036
1949	-	1,732	-	1,509	1,514
1950	-	1,551	-	1,506	1,508
1951	-	849	-	1,216	1,038
1952	-	976	-	1,336	-
1953	-	856	-	1,361	-
1954	-	851	-	1,006	-
1955	-	788	-	1,145	-
1956	-	939	-	917	-
1957	-	1,695	-	573	-
1958	-	840	-	1,386	-
1959	-	588	-	876	-
1960	-	391	-	516	-
1961	-	612	-	470	-
1962	-	365	-	218	-
1963	-	282	-	546	-
1964	-	277	-	454	-
1965	-	259	-	353	-
1966	-	211	-	340	-
1967	-	223	-	S 702 S	-
1968	-	226	-	858	-
1969	-	140	-	175	-
1970	-	S 8,728 S	-	-	-
1971	-	17,702	S 5,788 S	-	-
1972	-	132,239	*	-	-
1973	-	80,485	*	-	-
1974	-	14,510	*	-	-
1975	-	239	280	-	-
Primary	32,838	70,956	-	87,910	79,230
Secondary	-	253,903	6,068	1,735	-
Total	32,838	324,859	6,068	89,645	79,230

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 5 WLH-19B 1650N 990E Sec. 9, T.18S., R.29E.	Newmont 2 WLH-12 2310S 330E Sec. 9, T.18S., R.29E.	Newmont 1 WLH-12 2310S 1650E Sec. 9, T.18S., R.29E.	Newmont 4 WLH-12 1650S 1750E Sec. 9, T.18S., R.29E.	Anadarko 15 FWLH-10 1650S 2310W Sec. 9, T.18S., R.29E.
1939	-	-	-	-	3,469
1940	-	15,414	17,520	-	19,073
1941	-	16,001	15,774	-	12,711
1942	-	10,926	11,060	-	10,324
1943	-	7,098	7,398	-	6,245
1944	-	4,848	7,161	-	4,613
1945	-	4,014	1,937	-	3,403
1946	-	4,729	2,550	-	3,592
1947	-	3,284	3,277	-	2,687
1948	-	3,614	3,611	-	1,818
1949	-	2,607	2,693	-	1,445
1950	-	1,901	1,896	-	1,161
1951	-	1,277	1,274	-	712
1952	-	1,663	1,662	-	941
1953	-	1,319	1,315	-	587
1954	-	1,157	1,158	-	594
1955	-	1,139	1,139	-	772
1956	-	766	766	-	588
1957	-	1,320	1,493	-	494
1958	-	976	2,416	-	339
1959	-	662	1,730	-	375
1960	-	368	1,653	-	361
1961	-	513	1,329	-	267
1962	-	410	800	-	350
1963	-	627	767	-	268
1964	-	612	616	-	175
1965	-	709	576	-	67
1966	S 61 S	23	S 541 S	-	231
1967	1,542	-	731	-	296
1968	882	-	953	-	270
1969	2,726	-	2,183	*	25
1970	41,403	-	25,071	*	-
1971	145,553	-	171,320	*	-
1972	147,222	-	123,749	*	-
1973	19,373	-	11,906	*	-
1974	11,102	-	5,009	*	-
1975	7,351	-	5,018	-	-
Primary	-	87,977	94,112	-	78,253
Secondary	377,215	-	345,940	-	-
Total	377,215	87,977	440,052	-	78,253

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 16 FWLH-10 1980S 660W Sec. 9, T.18S., R.29E.	Anadarko 33 FWLH-10 1980S 1310W Sec. 9, T.18S., R.29E.	Anadarko 17 FWLH-11 660S 660W Sec. 9, T.18S., R.29E.	Thompson 2 Langford 990S 1650W Sec. 9, T.18S., R.29E.	Anadarko 30 FWLH-11 330S 1650W Sec. 9, T.18S., R.29E.
1939	3,782	-	11,545	8,573	-
1940	19,076	-	18,045	18,026	-
1941	11,296	-	14,672	14,671	-
1942	-	-	8,032	8,033	-
1943	-	-	4,673	4,680	-
1944	-	-	2,365	2,371	-
1945	-	-	1,278	1,282	-
1946	-	-	1,166	1,165	-
1947	-	-	908	906	-
1948	-	-	670	**	-
1949	-	-	900	**	-
1950	-	-	386	**	-
1951	-	-	135	**	-
1952	-	-	160	-	-
1953	-	-	42	-	-
1954	-	-	29	-	-
1955	-	-	33	-	-
1956	-	-	26	-	-
1957	-	-	42	-	-
1958	-	-	119	-	-
1959	-	-	60	-	-
1960	-	-	33	-	-
1961	-	-	30	-	-
1962	-	-	36	-	-
1963	-	-	88	-	-
1964	-	-	24	-	-
1965	-	-	45	-	-
1966	-	-	82	-	-
1967	-	-	76	-	-
1968	-	-	171	-	-
1969	-	-	19	-	-
1970	-	-	S 363 S	-	S 367 S
1971	S 73 S	-	2,227	-	55,271
1972	234	-	33,863	-	54,684
1973	-	S 15,169 S	5,477	-	5,305
1974	-	1,415	2,899	-	10,335
1975	-	836	3,038	-	8,699
Primary	34,154	-	65,890	59,707	-
Secondary	307	17,420	47,867	-	134,661
Total	34,461	17,420	113,757	59,707	134,661

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-19A 990S 2310E Sec. 9, T.18S., R.29E.	Newmont 2 WLH-19A 880S 1480E Sec. 9, T.18S., R.28E.	Newmont 3 WLH-12 990S 330E Sec. 9, T.18S., R.29E.	Newmont 5 WLH-12 330S 330E Sec. 9, T.18S., R.29E.	Newmont 8 WLH-17 990N 330E Sec. 10, T.18S., R.29E.
1939	-	-	-	-	-
1940	18,206	-	15,390	-	10,860
1941	16,843	-	15,997	-	16,349
1942	11,182	-	10,931	-	6,943
1943	7,333	-	7,103	-	3,685
1944	3,646	-	4,851	-	2,953
1945	1,160	-	4,017	-	3,374
1946	2,814	-	4,833	-	2,717
1947	3,156	-	3,285	-	1,504
1948	3,564	-	3,617	-	1,086
1949	2,762	-	2,699	-	963
1950	2,243	-	1,902	-	987
1951	2,610	-	1,283	-	1,280
1952	2,087	-	1,669	-	1,241
1953	1,915	-	1,323	-	1,324
1954	1,408	-	1,164	-	1,173
1955	1,629	-	2,929	-	547
1956	1,558	-	2,271	-	308
1957	1,269	-	3,190	-	2,694
1958	1,076	-	976	-	911
1959	1,046	-	666	-	390
1960	1,079	-	372	-	231
1961	1,075	-	514	-	241
1962	957	-	653	-	271
1963	968	-	632	-	148
1964	960	-	852	-	S 52 S
1965	834	-	569	-	280
1966	S 634 S	-	S 343 S	-	3,822
1967	2,938	-	469	-	6,716
1968	875	-	575	-	13,292
1969	978	-	2,030	-	33,864
1970	8,612	-	19,990	-	6,313
1971	85,733	-	98,475	-	7,852
1972	30,298	-	125,693	-	5,268
1973	7,062	-	72,285	*	4,998
1974	5,410	*	65,301	*	5,221
1975	3,610	-	35,480	-	6,053
Primary	94,014	-	94,031	-	62,232
Secondary	145,516	-	420,298	-	93,679
Total	239,530	-	514,329	-	155,911

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-17 990N 2310E Sec. 10, T.18S., R.29E.	Newmont 1 WLH-5 990N 1650W Sec. 10, T.18S., R.29E.	Newmont 3 WLH-5 330N 2310W Sec. 10, T.18S., R.29E.	Newmont 1 WLH-20 990N 330W Sec. 10, T.18S., R.29E.	Newmont 1 WLH-8A 1650N 330W Sec. 10, T.18S., R.29E.
1939	5,666	4,011	-	10,756	6,969
1940	18,551	18,555	-	18,107	18,069
1941	16,350	17,884	-	16,587	18,303
1942	10,492	11,333	-	10,920	10,697
1943	5,132	8,942	-	7,091	7,177
1944	2,942	5,165	-	3,143	4,858
1945	3,364	4,382	-	1,530	4,123
1946	3,148	4,416	-	2,212	3,823
1947	4,125	4,670	-	2,777	4,231
1948	2,977	4,151	-	2,236	2,542
1949	2,636	2,674*	*	1,902	1,990
1950	1,922	1,348*	*	1,699	1,586
1951	1,600	1,323*	*	1,234	1,433
1952	1,547	1,074*	*	1,395	1,509
1953	1,709	892*	*	1,122	1,232
1954	5,230	1,018*	*	970	938
1955	5,533	1,016*	*	1,200	669
1956	3,163	2,078*	*	959	817
1957	2,330	1,800*	*	358	755
1958	1,942	84	783	295	916
1959	1,158	304	37	251	644
1960	830	-	-	346	395
1961	1,230	-	-	430	258
1962	1,147	-	-	392	209
1963	956	-	-	303	369
1964	819	-	-	209	299
1965	583	S 462 S	-	162	S 703 S
1966	28	4,021	S 5,007 S	-	4,743
1967	-	94,167	51,863	-	351
1968	-	51,351	18,441	-	2,349
1969	-	30,532	2,471	-	38,324
1970	-	28,816	*	-	68,222
1971	-	30,123	*	-	78,081
1972	-	27,362	*	-	113,552
1973	-	14,048	*	-	103,165
1974	-	10,142	*	-	76,746
1975	-	8,099	*	-	52,682
Primary	107,110	97,120	820	88,586	94,811
Secondary	-	299,123	77,782	-	538,918
Total	107,110	396,243	78,602	88,586	633,729

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 3 WLH-8A 2600N 1200W Sec. 10, T.18S., R.29E.	Newmont 2 WLH-5 1650N 2310W Sec. 10, T.18S., R.29E.	Newmont 2 WLH-17 6150N 2310E Sec. 10, T.18S., R.29E.	Newmont 9 WLH-17 2310N 1650E Sec. 10, T.18S., R.29E.	Newmont 5 WLH-17 1650N 990E Sec. 10, T.18S., R.29E.
1939	-	-	3,005	-	-
1940	-	18,550	18,630	-	15,653
1941	-	16,141	16,349	-	16,345
1942	-	11,390	10,493	-	9,075
1943	-	8,945	5,132	-	5,132
1944	-	5,165	2,944	-	2,951
1945	-	4,384	3,367	-	3,373
1946	-	4,412	3,150	-	2,446
1947	-	3,124	4,124	-	-
1948	-	2,073	2,975	-	-
1949	-	1,336	2,637	-	-
1950	-	675	1,920	-	-
1951	-	661	1,600	-	-
1952	-	538	1,547	-	-
1953	-	505	1,712	-	-
1954	-	643	1,607	-	-
1955	-	429	5,347	-	-
1956	-	238	3,751	-	-
1957	-	512	2,630	-	-
1958	-	461	2,360*	*	-
1959	-	602	2,356*	*	-
1960	-	846	2,922*	*	-
1961	-	586	2,528*	*	-
1962	-	418	563	1,480	-
1963	-	97	1,232	161	-
1964	-	-	818	-	S — 53 — S
1965	-	-	S — 419 — S	S — 83 — S	282
1966	-	-	12,187	608	28
1967	S — 466 — S	-	61,742	29,273	-
1968	17,704	-	23,559	17,930	-
1969	6,291	-	9,317	2,268	-
1970	*	-	6,206	*	-
1971	*	-	14,069	*	-
1972	*	-	12,141	*	*
1973	*	-	5,177	*	-
1974	*	-	3,168	*	-
1975	*	-	4,248	*	-
Primary	-	82,731	106,118	1,724	55,285
Secondary	24,461	-	151,814	50,079	53
Total	24,461	82,731	257,932	51,803	55,338

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 10 WLH-17 2310S 990E Sec. 10, T.18S., R.29E.	Newmont 3 WLH-17 2310S 2310E Sec. 10, T.18S., R.29E.	Newmont 3 WLH-28 2310S 1650W Sec. 10, T.18S., R.29E.	Newmont 7 WLH-17 1650S 330E Sec. 10, T.18S., R.29E.	Newmont 2 WLH-8A 2310S 330W Sec. 10, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	18,478	18,861	10,766	13,301
1941	-	16,632	17,338	16,632	18,303
1942	-	1,773	12,954	5,341	10,702
1943	-	4,553	10,253	4,132	6,191
1944	-	2,945	5,046	3,487	4,515
1945	-	3,369	3,266	4,030	4,124
1946	-	2,636	4,626	3,100	3,823
1947	-	1,116	5,019	3,042	4,228
1948	-	808	3,250	2,186	2,537
1949	-	716	3,863	1,894	1,985
1950	-	862	3,428	1,549	1,581
1951	-	958	3,602	1,280	1,431
1952	-	932	2,943	1,251	1,513
1953	-	993	2,981	1,323	1,233
1954	-	1,074	3,465	1,194	910
1955	-	1,154	5,308	1,047	1,637
1956	-	1,524	2,867	914	819
1957	-	1,317	2,675	791	755
1958	-	1,309	2,435	655	881
1959	-	670	2,085	637	646
1960	-	232	2,382	311	394
1961	-	245	2,055	245	257
1962	-	271	2,270	271	209
1963	-	485	2,207	486	84
1964	-	630	1,316	316	-
1965	-	21	2,043	973	173
1966	1,348	-	1,274	1,577	10,856
1967	23,999	-	26,099	4,579	4,829
1968	27,903	-	57,000	1,528	1,100
1969	9,087	-	116,814	6,392	2,663
1970	*	-	69,250	6,305	605
1971	*	-	49,874	11,556	*
1972	*	-	33,514	16,113	*
1973	*	-	12,149	3,258	*
1974	*	-	10,513	1,864	-
1975	24	-	7,239	3,053	653
Primary	-	65,703	126,495	66,880	82,059
Secondary	62,361	-	385,769	57,198	20,879
Total	62,361	65,703	512,264	124,078	102,938

S — S

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-18 960S 330W Sec. 10. T.18S., R.29E.	Newmont 1 WLH-42 990S 1650W Sec. 10, T.18S., R.29E.	Newmont 4 WLH-17 990S 2310E Sec. 10, T.18S., R.29E.	Newmont 2 WLH-37 330N 990E Sec. 11, T.18S., R.29E.	Newmont 3 WLH-37 1190N 150E Sec. 11, T.18S., R.29E.
1939	2,056	-	-	2,724	-
1940	19,537	15,577	15,577	17,885	-
1941	15,992	16,085	15,167	15,007	-
1942	10,452	10,956	9,447	9,242	-
1943	5,024	7,804	4,673	5,859	-
1944	461	4,775	2,947	5,327	-
1945	-	4,194	3,372	3,976	-
1946	-	7,068	2,961	2,940	-
1947	-	5,643	3,009	2,763	-
1948	-	3,986	2,174	1,987	-
1949	-	3,240	1,925	1,533	-
1950	-	1,851	1,579	1,234	-
1951	-	1,997	1,461	595	-
1952	-	1,540	1,238	-	-
1953	-	979	1,324	-	-
1954	-	464	1,213	-	-
1955	-	609	2,817	-	-
1956	-	1,296	2,642	-	-
1957	-	1,071	1,864	-	-
1958	-	912	1,309	-	-
1959	-	771	988	-	-
1960	-	779	812	-	-
1961	-	610	988	-	-
1962	-	464	681	-	-
1963	-	511	663	-	-
1964	-	410	475	-	-
1965	S - S	419	S 798 S	-	-
1966	64	23	1,816	-	-
1967	780	-	22,802	-	S 185 S
1968	3,205	-	49,326	-	2,646
1969	8,637	-	37,455	-	4,747
1970	15,299	-	34,372	-	668
1971	23,806	-	25,801	-	367
1972	23,491	-	27,014	-	279
1973	5,596	-	7,009	-	103
1974	4,600	-	5,181	-	-
1975	4,251	-	3,110	-	-
Primary	53,522	94,034	81,306	71,072	-
Secondary	89,729	-	214,684	-	8,995
Total	143,251	94,034	295,990	71,072	8,995

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-37 330N 2310E Sec. 11, T.18S., R.29E.	Newmont 1 WLH-11 330N 2310W Sec. 11, T.18S., R:29E.	Newmont 2 WLH-11 990N 990W Sec. 11, T.18S., R.29E.	Newmont 3 WLH-11 1650N 330W Sec. 11, T.18S., R.29E.	Newmont 4 WLH-11 1650N 2310W Sec. 11, T.18S., R.29E.
1939	6,485	7,201	-	-	-
1940	17,665	14,690	13,537	12,220	11,635
1941	15,004	16,033	16,036	16,035	16,036
1942	10,037	12,347	12,351	12,352	12,355
1943	5,855	8,997	9,329	9,330	9,331
1944	5,319	6,637	4,332	4,961	4,084
1945	3,971	5,833	3,432	2,746	3,432
1946	2,934	5,352	3,149	2,552	3,149
1947	2,765	4,387	2,727	2,174	2,727
1948	1,985	3,214	2,555	2,200	2,555
1949	1,531	2,940	2,680	-	2,670
1950	1,450	1,999	2,000	-	2,003
1951	1,353	1,687	1,692	-	1,696
1952	1,767	1,329	1,331	-	1,335
1953	1,705	1,066	1,070	-	1,073
1954	1,512	1,064	1,067	-	1,069
1955	1,430	1,127	1,133	-	1,198
1956	1,191	802	2,307	-	3,439
1957	1,005	687	7,871	90	2,679
1958	884	381	5,035	-	1,852
1959	780	332	4,404	-	1,638
1960	676	259	3,553	-	1,343
1961	553	300	3,197	-	1,342
1962	536	326	2,915	-	1,186
1963	460	475	1,676	-	767
1964	S 649 S	S 481 S	942	S 39 S	S 649 S
1965	634	1,208	-	355	1,839
1966	764	1,004	-	612	1,613
1967	1,591	-	-	4,620	64,524
1968	13,253	-	-	2,441	31,684
1969	14,764	-	-	9,212	7,893
1970	20,239	-	-	19,458	2,644
1971	23,323	-	-	13,682	391
1972	19,654	-	-	2,540	1,772
1973	8,732	-	-	1,366	367
1974	6,944	-	-	1,158	3,782
1975	4,554	-	-	2,838	3,256
Primary	88,853	99,465	110,321	64,660	91,243
Secondary	115,101	2,693	-	58,321	119,765
Total	203,954	102,158	110,321	122,981	211,008

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-35 1650N 2310E Sec. 11, T.18S., R.29E.	Newmont 2 WLH-35 1650N 990E Sec. 11, T.18S., R.29E.	Newmont 7 WLH-32A 2310S 1270E Sec. 11, T.18S., R.29E.	Newmont 8 WLH-32A 1560S 1480E Sec. 11, T.18S., R.29E.	Newmont 7 WLH-11 1980S 1980W Sec. 11, T.18S., R.29E.
1939	-	-	-	-	-
1940	12,521	-	-	-	-
1941	17,664	16,310	-	-	-
1942	11,228	11,234	9,674	-	-
1943	10,142	10,139	8,250	-	-
1944	10,766	10,760	5,897	-	-
1945	8,413	8,408	3,788	-	-
1946	6,606	6,600	3,958	-	-
1947	6,160	6,155	3,616	-	-
1948	4,479	4,473	2,848	-	-
1949	5,271	5,266	2,672	-	-
1950	3,459	3,453	2,093	-	-
1951	2,652	2,368	1,802	-	-
1952	3,099	1,152	1,701	-	-
1953	2,829	895	1,447	-	-
1954	2,877	515	1,117	-	-
1955	4,720	350	8,195	-	-
1956	5,525	-	8,080	-	-
1957	4,660	-	5,859	-	-
1958	4,315	-	5,607	-	-
1959	3,088	-	4,345	-	-
1960	2,238	-	3,567	-	-
1961	1,812	-	2,720	-	-
1962	1,633	-	2,722	-	-
1963	1,169	-	1,697	-	-
1964	S 1,044 S	S - S	S 1,250 S	-	S - S
1965	1,893	914	3,893	-	141
1966	3,704	611	19,185	-	287
1967	46,323	19	35,904	-	3,920
1968	60,719	-	31,421	-	3,274
1969	27,197	-	15,818	-	510
1970	12,400	-	15,279	-	408
1971	9,302	-	6,388	-	2,332
1972	4,340	-	1,993	-	4,350
1973	1,686	-	4,625	-	4,981
1974	2,126	-	9,749	S - S	5,409
1975	3,198	-	2,495	3,005 4,775	7,390
Primary	138,470	88,078	92,905	-	-
Secondary	172,888	1,766	146,750	7,780	33,002
Total	311,358	89,844	239,655	7,780	33,002

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 8 WLH-11 1980S 660W Sec. 11, T.18S., R.29E.	Newmont 9 WLH-11 660S 660W Sec. 11, T.18S., R.29E.	Newmont 1 WLH-30 660S 1980E Sec. 11, T.18S., R.29E.	Newmont 1 WLH-13 330N 330E Sec. 12, T.18S., R.29E.	Newmont 7 WLH-13 990N 990E Sec. 12, T.18S., R.29E.
1939	-	-	-	-	4,641
1940	-	-	-	-	8,899
1941	-	-	-	-	6,810
1942	-	-	-	-	8,276
1943	-	-	-	-	7,557
1944	-	-	-	-	6,762
1945	-	-	-	-	3,756
1946	-	-	-	-	2,660
1947	-	-	-	-	6,186
1948	-	-	-	-	7,486
1949	-	-	-	-	4,014
1950	-	-	-	-	2,721
1951	-	-	-	-	1,593
1952	-	-	-	-	1,208
1953	-	-	-	-	959
1954	-	-	-	-	942
1955	-	-	-	-	906
1956	-	-	-	-	941
1957	-	-	-	-	868
1958	-	-	-	-	890
1959	-	-	-	-	868
1960	-	-	-	-	577
1961	-	-	-	-	554
1962	-	-	-	-	68
1963	-	-	-	S — 2 — S	S — 247 — S
1964	-	-	-	-	28,598
1965	S — 193 — S	S — 139 — S	S — 253 — S	-	40,635
1966	28	285	368	-	21,827
1967	-	3,766	1,662	-	14,914
1968	-	7,265	2,146	-	2,917
1969	-	5,737	658	-	517
1970	-	5,008	548	-	9,212
1971	-	3,105	8,581	-	6,289
1972	-	3,890	11,813	-	3,204
1973	-	3,057	12,965	-	6,854
1974	-	3,404	6,636	-	6,399
1975	-	3,946	4,553	-	7,040
Primary	-	-	-	-	80,142
Secondary	221	39,602	50,183	2	148,653
Total	221	39,602	50,183	2	228,795

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 2 WLH-13 330N 2310E Sec. 12, T.18S., R.29E.	Newmont 1 WLH-3 330N 1650W Sec. 12, T.18S., R.29E.	Newmont 3 WLH-3 660N 2310W Sec. 12, T.18S., R.29E.	Newmont 4 WLH-3 990N 1650W Sec. 12, T.18S., R.29E.	Newmont 2 WLH-3 330N 330W Sec. 12, T.18S., R.29E.
1939	-	-	-	-	-
1940	9,995	17,029	-	-	14,411
1941	16,156	13,845	-	-	13,844
1942	12,285	7,801	-	-	7,802
1943	10,138	6,419	-	-	5,865
1944	10,779	5,350	-	-	5,347
1945	10,472	3,802	-	-	3,799
1946	10,632	2,598	-	-	2,611
1947	10,703	2,071	-	-	2,072
1948	9,448	1,382	-	-	1,382
1949	6,572	1,880	-	-	1,879
1950	4,299	1,171	-	-	1,354
1951	3,041	446	-	-	1,279
1952	2,421	773	-	-	774
1953	2,017	599	-	-	604
1954	1,828	490	120	-	471
1955	1,737	4,273*	*	-	169
1956	1,724	2,644*	*	-	110
1957	1,302	1,663*	*	-	405
1958	1,196	1,664*	*	-	69
1959	916	1,158*	*	-	49
1960	994	1,693*	*	-	71
1961	761	1,320*	*	-	57
1962	648	399	708	-	56
1963	192	S 392 S	S 668 S	-	18
1964	-	3,782	23,217	-	-
1965	-	5,624	58,468	S 5,465 S	-
1966	-	1,041	32,398	23,682	-
1967	-	-	19,336	14,553	-
1968	-	-	7,857	9,933	-
1969	-	-	9,703	4,818	-
1970	-	-	9,682	*	-
1971	-	2,775	253	*	-
1972	-	857	-	-	-
1973	-	5,355	-	-	-
1974	-	7,391	-	-	-
1975	-	8,469	*	*	-
Primary	130,256	80,862	1,496	-	64,498
Secondary	-	35,294	160,914	58,451	-
Total	130,256	116,156	162,410	58,451	64,498

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 6 WLH-13 1650N 2310W Sec. 12, T.18S., R.29E.	Newmont 4 WLH-13 1650N 330E Sec. 12, T.18S., R.29E.	Newmont 1 WLH-6 1980S 660E Sec. 12, T.18S., R.29E.	Newmont 2 WLH-6 1980S 1980E Sec. 12, T.18S., R.29E.	Newmont 5 WLH-13 1650N 1670E Sec. 12, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	2,502	-	-	-
1942	5,993	12,361	8,373	7,137	10,279
1943	10,141	10,124	10,290	10,294	10,140
1944	790	9,819	10,684	10,682	10,786
1945	-	10,605	10,587	10,583	10,475
1946	-	9,043	10,192	10,192	10,635
1947	2,164	7,418	10,830	10,830	10,707
1948	5,110	5,319	10,824	10,824	8,275
1949	3,609	3,888	7,303	7,304	5,488
1950	2,866	2,722	5,061	5,061	4,298
1951	2,026	1,598	3,465	3,465	3,040
1952	1,613	1,210	2,910	2,910	2,421
1953	1,548	961	2,145	2,145	2,018
1954	3,992	819	3,044	3,911	1,829
1955	7,413	814	2,858	6,387	1,943
1956	7,972	633	1,943	5,643	2,439
1957	6,357	604	1,610	4,368	1,353
1958	4,565	266	1,471	3,246	1,196
1959	3,111	-	1,373	2,983	916
1960	2,661	-	1,147	2,541	993
1961	1,896	-	938	2,188	761
1962	1,256	-	727	1,636	649
1963	630	S 117 S	923	S 1,326 S	247
1964	S 628 S	9,141	-	28,454	-
1965	23,785	48,711	-	55,297	-
1966	21,713	34,226	-	25,471	-
1967	13,086	22,270	-	12,378	-
1968	3,957	44,950	-	12,936	-
1969	1,052	34,238	-	15,092	-
1970	469	25,134	-	5,996	-
1971	1,136	31,679	-	12,448	-
1972	6,846	18,851	-	9,882	-
1973	5,238	14,981	-	7,998	-
1974	4,962	12,302	-	6,711	-
1975	4,992	10,385	-	5,030	-
Primary	76,341	80,706	108,698	125,656	100,888
Secondary	87,236	306,985	-	197,693	-
Total	163,577	387,691	108,698	323,349	100,888

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 8 WLH-13 2310S 990W Sec. 12, T.18S., R.29E.	Newmont 10 WLH-13 1800S 990W Sec. 12, T.18S., R.29E.	Newmont 2 WLH-4 990S 2310W Sec. 12, T.18S., R.29E.	Newmont 3 WLH-6 660S 1980E Sec. 12, T.18S., R.29E.	Newmont 4 WLH-6 660S 660E Sec. 12, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	2,163	1,223
1944	-	-	-	5,778	10,682
1945	-	-	-	5,686	10,590
1946	-	-	-	5,430	10,191
1947	-	-	-	5,779	10,830
1948	-	-	-	5,774	10,829
1949	-	-	-	4,012	7,300
1950	-	-	-	2,808	5,060
1951	-	-	-	1,926	3,464
1952	-	-	-	1,619	2,909
1953	-	-	-	1,451	2,148
1954	-	-	-	3,048	3,049
1955	-	-	-	2,857	2,855
1956	-	-	-	1,944	1,944
1957	-	-	-	1,426	1,426
1958	-	-	-	1,196	1,196
1959	-	-	-	1,145	1,145
1960	-	-	-	1,042	1,042
1961	-	-	-	938	939
1962	-	-	-	728	727
1963	-	-	-	780	403
1964	S 34 S	-	S 34 S	240	S 3,747 S
1965	2,114	-	472	-	29,215
1966	511	S 1,653 S	241	-	32,468
1967	2,348	2,683	-	-	30,957
1968	2,962	4,120	-	-	19,527
1969	3,642	1,789	-	-	18,585
1970	6,941	*	-	-	11,598
1971	12,329	*	-	-	8,010
1972	16,371	-	-	-	6,775
1973	15,990	-	-	-	5,057
1974	9,237	-	-	-	5,550
1975	8,070	-	-	-	4,364
Primary	-	-	-	57,770	89,952
Secondary	80,549	10,245	747	-	174,853
Total	80,549	10,245	747	57,770	264,805

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-7 660N 660E Sec. 13, T.18S., R.29E.	Newmont 1 WLH 330N 330E Sec. 15, T.18S., R.29E.	Newmont 5 WLH-8D 990N 2310E Sec. 15, T.18S., R.29E.	Newmont 3 WLH-8B 330N 2310W Sec. 15, T.18S., R.29E.	Newmont 4 WLH-8B 330N 990W Sec. 15, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	#	-	10,947	7,004
1941	-	#	-	11,531	6,589
1942	-	#	-	7,485	4,990
1943	-	#	-	4,865	3,244
1944	3,821	#	-	3,145	2,484
1945	3,346	#	-	2,532	2,530
1946	3,366	-	-	2,082	2,080
1947	3,474	-	-	1,737	1,733
1948	3,678	-	-	1,431	1,428
1949	3,116	-	-	1,490	1,277
1950	2,536	-	-	1,132	1,125
1951	2,681	-	-	937	932
1952	1,990	-	-	884	887
1953	1,904	-	-	718	720
1954	1,653	-	-	1,031	531
1955	1,623	-	-	2,520	274
1956	1,331	-	-	1,545	767
1957	1,145	-	5,161	1,591	761
1958	991	-	3,309	708	701
1959	951	-	2,220	910	765
1960	914	-	1,637	626	613
1961	932	-	1,372	583	583
1962	937	-	1,166	489	492
1963	930	-	1,026	369	346
1964	574	-	865	440	432
1965	-	-	23	349	124
1966	-	S 172 S	-	S 436 S	-
1967	-	268	-	981	-
1968	-	997	-	14,297	-
1969	-	281	-	15,933	-
1970	-	303	-	22,785	-
1971	-	290	-	20,197	-
1972	-	278	-	17,548	-
1973	-	160	-	10,849	-
1974	-	283	-	14,620	-
1975	-	282	-	11,073	-
Primary	41,893	-	16,779	62,077	43,412
Secondary	-	3,314	-	128,719	-
Total	41,893	3,314	16,779	190,796	43,412

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 19 FWLH-6 330N 330E Sec. 16, T.18S., R.29E.	Anadarko 34 FWLH-8 1310N 1980E Sec. 16, T.18S., R.29E.	Anadarko 21 FWLH-3 330N 2310W Sec. 16, T.18S., R.29E.	Anadarko 23 FWLH-2 1650N 990W Sec. 16, T.18S., R.29E.	Anadarko 26 FWLH-7 1650N 990E Sec. 16, T.18S., R.29E.
1939	-	-	3,007	-	-
1940	-	-	19,168	-	866
1941	-	-	16,365	452	2,420
1942	-	-	10,086	-	1,995
1943	-	-	5,600	-	1,667
1944	-	-	2,137	-	1,296
1945	-	-	2,622	-	1,229
1946	-	-	2,716	-	951
1947	-	-	2,598	-	572
1948	-	-	4,379	-	1,022
1949	-	-	2,200	-	849
1950	-	-	1,853	-	182
1951	-	-	1,606	-	404
1952	-	-	1,447	-	251
1953	-	-	1,969	-	374
1954	-	-	1,506	-	298
1955	-	-	1,360	-	107
1956	-	-	1,319	-	63
1957	#	-	1,312	-	256
1958	#	-	1,208	-	74
1959	#	-	1,192	-	47
1960	#	-	1,142	-	32
1961	#	-	1,043	-	217
1962	#	-	958	-	163
1963	#	-	863	-	142
1964	#	-	806	-	159
1965	#	-	782	-	127
1966	#	-	675	-	143
1967	#	-	672	-	139
1968	#	-	673	-	118
1969	S 1,685 S	-	S 172 S	-	S 139 S
1970	2,298	-	734	-	364
1971	4,869	-	47,491	-	383
1972	8,765	S 89 S	94,096	S 11,479 S	2,175
1973	7,203	7,800	62,834	10,100	1,151
1974	4,342	5,205	17,975	7,656	865
1975	3,182	5,813	11,188	5,453	887
Primary	-	-	94,436	452	16,302
Secondary	32,344	18,907	234,318	34,688	5,825
Total	32,344	18,907	328,754	35,140	22,127

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 5 Alscott 660S 660W Sec. 19, T.18S., R.29E.	Depco 2 Wright 660N 1980W Sec. 20, T.18S., R.29E.	Depco 1 Wright 660N 660W Sec. 20, T.18S., R.29E.	Depco 5 Wright 1980N 1980W Sec. 20, T.18S., R.29E.	Yates 1 Hey 660S 660W Sec. 20, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	-	-	-	-
1951	-	-	-	-	-
1952	-	-	-	-	-
1953	-	-	-	-	-
1954	-	-	-	-	-
1955	-	1,246	1,280	-	-
1956	-	1,107	1,102	-	-
1957	-	571	568	-	-
1958	-	526	521	-	-
1959	-	379	378	**	-
1960	-	354	348	-	-
1961	-	312	310	-	7,627
1962	3,599	348	344	-	12,305
1963	2,618	265	263	-	10,649
1964	1,667	202	201	2,115	8,396
1965	924	124	23	26	6,295
1966	282	-	-	-	4,285
1967	22	-	-	-	3,664
1968	-	-	-	-	3,223
1969	1,757	-	-	-	2,992
1970	434	-	-	-	2,152
1971	338	-	-	-	1,732
1972	209	-	-	-	1,454
1973	255	-	-	-	1,307
1974	373	1,244	496	-	1,046
1975	306	533	242	-	1,042
Primary	12,784	7,211	6,076	2,141	68,169
Secondary	-	-	-	-	-
Total	12,784	7,211	6,076	2,141	68,169

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Yates 1 Western 660S 1980W Sec. 20, T.18S., R.29E.	Yates 1 Laguna 660N 660E Sec. 23, T.18S., R.29E.	Snow 4 Sivley 660N 1980W Sec. 29, T.18S., R.29E.	Snow 3 Sivley 660N 660W Sec. 29, T.18S., R.29E.	Yates 1 Alscott 660N 660E Sec. 30, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	-	-	-	-
1951	-	-	-	-	-
1952	-	-	-	-	-
1953	-	-	-	-	-
1954	-	-	-	-	-
1955	-	-	-	-	-
1956	-	-	-	-	-
1957	-	-	-	-	-
1958	-	-	-	-	-
1959	-	-	-	-	-
1960	-	-	-	-	-
1961	4,003	-	-	-	3,450
1962	7,224	-	2,643	4,487	2,798
1963	4,847	-	927	3,158	2,001
1964	2,402	-	652	1,915	999
1965	3,272	-	624	1,465	628
1966	2,289	-	660	1,017	629
1967	1,574	-	491	838	647
1968	1,908	-	378	792	636
1969	1,215	-	314	479	491
1970	959	-	390	548	522
1971	869	-	292	463	443
1972	738	-	389	348	376
1973	634	-	340	273	244
1974	580	747	330	245	439
1975	507	570	127	319	341
Primary	33,021	1,317	8,557	16,347	14,644
Secondary	-	-	-	-	-
Total	33,021	1,317	8,557	16,347	14,644

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 3 Alscott 660N 1980E Sec. 30, T.18S., R.29E.	Gen. Amer. 7 Beeson F 990N 330E Sec. 31, T.17S., R.30E.	Anadarko 6 Fed. L 1650N 750W Sec. 31, T.17S., R.30E.	Anadarko 4 Fed. L 1650N 1650W Sec. 31, T.17S., R.30E.	Anadarko 1 Fed. L 2310N 2310W Sec. 31, T.17S., R.30E.
1939	-	-	-	-	-
1940	-	6,583	-	-	11,511
1941	-	15,860	-	-	16,205
1942	-	5,440	-	-	11,329
1943	-	1,035	-	-	9,867
1944	-	-	-	-	6,694
1945	-	-	-	-	5,161
1946	-	-	-	-	3,961
1947	-	-	-	-	4,277
1948	-	-	-	-	2,896
1949	-	-	-	-	1,419
1950	-	-	-	-	1,257
1951	-	-	-	-	131
1952	-	3,734	-	-	4,224
1953	-	2,399	-	-	3,568
1954	-	1,785	-	**	*
1955	-	1,137	-	**	*
1956	-	986	-	**	*
1957	-	1,008	-	**	*
1958	-	610	-	**	*
1959	-	545	-	**	*
1960	-	536	-	**	*
1961	-	462	-	**	*
1962	4,100	169	S - S	S 789 S	203
1963	2,621	397	243	980	-
1964	1,669	41	354	6,450	-
1965	924	-	39	8,336	-
1966	278	-	-	3,569	-
1967	1,058	-	-	7,366	-
1968	793	-	-	8,120	-
1969	645	-	-	11,231	-
1970	329	-	-	6,738	-
1971	290	-	-	4,026	-
1972	234	-	-	3,450	-
1973	310	-	-	2,223	-
1974	540	-	-	10,406	-
1975	508	S 405 S	-	7,146	-
Primary	14,299	42,727	-	-	82,703
Secondary	-	405	636	80,830	-
Total	14,299	43,132	636	80,830	82,703

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Gen. Amer. 5 Beeson F 2310N 1650E Sec. 31, T.17S., R.30E.	Gen. Amer. 14 Beeson F 2310N 2310E Sec. 31, T.17S., R.30E.	Gen. Amer. 15 Beeson F 1660N 1480E Sec. 31, T.17S., R.30E.	Gen. Amer. 6 Beeson F 2310N 330E Sec. 31, T.17S., R.30E.	Newmont 2 Brigham 2310S 990E Sec. 31, T.17S., R.30E.
1939	-	-	-	-	-
1940	10,710	-	-	8,713	4,051
1941	11,806	-	-	16,798	16,520
1942	12,865	-	-	13,644	11,143
1943	12,812	-	-	12,951	9,750
1944	7,547	-	-	7,508	8,807
1945	4,974	-	-	4,908	5,344
1946	3,630	-	-	3,628	4,475
1947	3,877	-	-	4,000	6,663
1948	3,113	-	-	3,099	4,280
1949	2,308	-	-	2,195	2,973
1950	1,867	-	-	1,873	2,357
1951	772	-	-	1,423	1,872
1952	**	-	-	#	3,161
1953	**	-	-	#	3,195
1954	**	-	-	#	6,892
1955	**	-	-	#	3,569
1956	**	-	-	#	2,882
1957	**	-	-	#	4,093
1958	**	-	-	#	3,402
1959	**	-	-	#	3,144
1960	**	-	-	#	2,294
1961	**	-	-	S 727 S	1,823
1962	-	S 297 S	S 287 S	4,110	176
1963	-	78,697	18,698	16,132	-
1964	-	13,174	31,498	2,547	-
1965	-	5,771	12,290	-	-
1966	-	1,153	7,407	-	-
1967	-	205	6,120	-	-
1968	-	-	6,124	-	-
1969	-	-	2,428	-	-
1970	-	-	1,739	-	-
1971	-	-	1,440	-	-
1972	-	-	565	-	-
1973	-	-	274	-	-
1974	-	-	635	-	-
1975	-	-	#	-	-
Primary	76,281	-	-	80,740	112,866
Secondary	-	99,297	89,502	23,516	-
Total	76,281	99,297	89,502	104,256	112,866

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 5 Brigham 1325S 990E Sec. 31, T.17S., R.30E.	Anadarko 4 Fed. M 2257S 1703E Sec. 31, T.17S., R.30E.	Anadarko 2 Fed. M 1650S 2310E Sec. 31, T.17S., R.30E.	Anadarko 5 Fed. M 2310S 2310E Sec. 31, T.17S., R.30E.	Gen. Amer. 4 Beeson F 1650S 2310W Sec. 31, T.17S., R.30E.
1939	-	-	3,992	-	-
1940	-	-	18,525	-	14,270
1941	-	-	17,337	-	18,055
1942	-	-	11,329	-	14,522
1943	-	-	10,389	-	12,044
1944	-	-	9,632	-	11,098
1945	-	-	9,266	-	8,330
1946	-	-	7,779	-	6,604
1947	-	-	9,316*	-	5,768
1948	-	*	9,462*	-	3,719
1949	-	*	9,042*	-	2,632
1950	-	*	6,616*	-	1,778
1951	-	*	5,895*	-	2,227
1952	-	*	#*	-	2,100
1953	-	*	#*	-	1,539
1954	-	*	#*	-	1,181
1955	-	*	#*	-	1,071
1956	-	*	#*	-	960
1957	-	#*	#*	-	943
1958	-	#*	4,109	-	620
1959	-	#*	3,002	#*	567
1960	-	#*	2,274	#*	669
1961	S 265 S	#*	S 2,562 S	#*	625
1962	12,694	S 7,112 S	19,971	S 2,186 S	14
1963	66,070	78,866	101,822	102,572	-
1964	38,491	8,114	23,842	14,647	-
1965	14,571	3,481	8,699	2,660	-
1966	2,216	2,458	3,434	844	-
1967	1,578	1,779	1,969	-	-
1968	1,731	1,867	1,792	-	-
1969	887	703	2,384	-	-
1970	162	*	2,084	-	-
1971	**	22	353	373	-
1972	**	*	-	*	-
1973	**	*	-	*	-
1974	**	-	2,241	*	-
1975	**	-	5,492	*	-
Primary	-	-	137,965	-	111,336
Secondary	138,665	104,402	176,645	123,282	-
Total	138,665	104,402	314,610	123,282	111,336

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Gen. Amer. 13 Beeson F 2310S 2232W Sec. 31, T.17S., R.30E.	Gen. Amer. 1 Beeson F 1650S 330W Sec. 31, T.17S., R.30E.	Gen. Amer. 2 Beeson F 330S 330W Sec. 31, T.17S., R.30E.	Gen. Amer. 3 Beeson F 330S 2310W Sec. 31, T.17S., R.30E.	Anadarko 1 Fed. M 330S 2310E Sec. 31, T.17S., R.30E.
1939	-	12,869	7,859	2,030	7,915
1940	-	18,128	18,128	18,128	18,525
1941	-	17,871	17,663	16,141	17,340
1942	-	13,762	13,111	-	11,332
1943	-	10,790	10,665	9,880	10,390
1944	-	11,742	11,531	10,585	9,868
1945	-	8,349	8,272	8,098	9,372
1946	-	5,393	5,358	6,642	6,646
1947	-	4,927	4,859	6,309	9,551*
1948	-	3,533	3,195	#*	9,494*
1949	-	2,528	2,186	#*	8,788*
1950	-	1,688	1,698	#*	7,825*
1951	-	1,764	1,329	#*	6,391*
1952	-	1,634	1,060	#*	5,293*
1953	-	1,228	1,028	#*	3,983*
1954	-	932	928	#*	6,627*
1955	-	744	743	#*	6,607*
1956	-	618	634	#*	7,995*
1957	-	456	464	#*	6,078*
1958	-	329	330	#*	7,918*
1959	-	356	S 201 S	#*	5,361*
1960	-	353	449	#*	5,529*
1961	-	S 345 S	14,516	S 19,624 S	S 6,973* S
1962	S 4,470 S	16,301	99,891	31,164	5,999
1963	8,040	139,066	-	71,046	-
1964	-	20,538	-	28,188	-
1965	-	6,727	-	7,682	-
1966	-	2,171	-	806	-
1967	-	264	-	-	-
1968	-	974	-	-	-
1969	-	353	-	-	-
1970	-	88	-	-	-
1971	-	-	-	-	-
1972	-	-	-	-	-
1973	-	-	-	-	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Primary	-	120,339	111,248	77,813	195,001
Secondary	12,510	186,482	114,856	158,510	5,999
Total	12,510	306,821	226,104	236,323	201,800

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Anadarko 3 Fed. M 990S 1650E Sec. 31, T.17S., R.30.	Newmont 3 Brigham 250S 250E Sec. 31, T.17S., R.30E.	Newmont 1 Brigham 330S 990E Sec. 31, T.17S., R.30E.	Newmont 7 Scheurich 1650N 333W Sec. 32, T.17S., R.30E.	Newmont 1 Scheurich A 2310N 330W Sec. 32, T.17S., R.30E.
1939	-	-	-	-	-
1940	-	-	11,963	-	-
1941	-	-	16,514	-	16,119
1942	-	-	11,139	-	11,324
1943	-	-	9,753	-	10,647
1944	-	-	8,826	-	10,194
1945	-	-	5,347	-	7,703
1946	-	-	4,482	-	6,963
1947	-	-	6,666	-	7,893
1948	-	-	4,280	-	6,105
1949	-	-	2,978	-	8,676*
1950	-	-	2,363	-	8,484*
1951	-	-	1,874	-	9,845*
1952	-	-	1,710	**	6,251*
1953	-	-	1,688	**	4,357*
1954	-	-	1,480	**	5,246*
1955	-	-	2,085	**	5,078*
1956	-	-	2,426	**	#*
1957	-	8,883	2,603	**	#*
1958	-	7,002	1,598	**	#*
1959	*	*	8,959*	**	#*
1960	*	*	8,238*	**	#*
1961	*	*	60,062*	**	#*
1962	44,157	45,096	12,957	3,857	959
1963	167,561	14,801	-	32,300	-
1964	59,785	5,043	-	6,854	-
1965	35,919	4,014	-	7,966	-
1966	14,403	2,715	-	6,512	-
1967	9,910	1,834	-	5,069	-
1968	10,037	554	-	4,313	-
1969	6,987	87	-	1,620	-
1970	5,505	-	-	-	173
1971	-	4,554	-	-	**
1972	3,936	-	-	-	**
1973	2,977	-	-	-	**
1974	2,712	-	-	-	**
1975	2,697	-	-	-	**
Primary	-	15,885	116,972	-	125,844
Secondary	371,140	74,144	73,019	68,491	173
Total	371,140	90,029	189,991	68,491	126,017

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 5 Scheurich-A 2310N 1260W Sec. 32, T.17S., R.30E.	Newmont 6 Scheurich-B 2310N 2310W Sec. 32, T.17S., R.30E.	Newmont 2 Tallmadge 2310N 2310E Sec. 32, T.17S., R.30E.	Newmont 4 Scheurich 2525S 1435W Sec. 32, T.17S., R.30E.	Newmont 3 Scheurich 2310S 330W Sec. 32, T.17S., R.30E.
1939	-	-	-	-	-
1940	-	10,405	15,114	-	2,687
1941	-	16,441	16,022	9,265	17,613
1942	-	10,438	10,609	-	22,559
1943	-	13,625	10,153	-	13,826
1944	-	11,959	10,457	-	10,110
1945	-	10,920	8,967	-	10,361
1946	-	10,563	6,048	-	7,635
1947	443	10,206	3,689	-	8,626
1948	6,101	11,502	1,831	-	5,393
1949	*	6,938	871	-	3,796
1950	*	4,534	614	381	2,997
1951	*	3,746	492	1,970	2,548
1952	*	1,159	318	2,143	3,217
1953	*	817	220	407	3,212
1954	*	476	102	-	3,004
1955	*	268	57	-	6,096
1956	#*	94	73	-	7,214
1957	#*	-	64	-	5,430
1958	5,427	-	324	-	7,341
1959	3,609	-	41	-	7,631
1960	3,438	-	-	-	6,590
1961	2,586	-	-	-	S 8,407 S
1962	2,541	-	-	S 158 S	26,003
1963	S 53,230 S	S 744 S	S 65 S	4,863	83,891
1964	30,465	7,654	-	369	30,826
1965	10,385	18,610	-	-	30,223
1966	1,396	6,501	-	-	20,634
1967	546	3,457	-	-	15,488
1968	304	2,139	-	-	11,743
1969	2,137	990	-	-	7,109
1970	3,947	72	-	-	6,111
1971	3,790	*	-	-	5,120
1972	1,460	*	-	-	4,388
1973	*	*	-	-	4,170
1974	-	-	-	-	3,660
1975	-	-	-	-	3,327
Primary	24,145	124,091	86,066	14,166	157,886
Secondary	107,660	40,167	65	5,390	261,100
Total	131,805	164,258	86,131	19,556	418,986

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 5 State B 990S 330W Sec. 32, T.17S., R.30E.	Newmont 5-X State B 330S 990W Sec. 32, T.17S., R.30E.	Newmont 1 Tallmadge 990S 1650W Sec. 32, T.17S., R.30E.	Aston 7 State B 990S 2310E Sec. 32, T.17S., R.30E.	F.A.F. 4 Coppedge 330N 2310E Sec. 5, T.18S., R.30E.
1939	-	-	-	-	-
1940	9,648	-	16,615	-	-
1941	7,082	-	16,245	4,448	2,629
1942	2,701	-	11,250	1,840	10,419
1943	1,188	-	9,911	474	1,683
1944	363	-	8,557	-	-
1945	-	7,805	10,009	-	-
1946	-	10,918	7,018	-	2,133
1947	-	10,928	6,841	-	8,433
1948	-	10,956	4,021	-	6,552
1949	-	10,896	2,197	-	4,780
1950	-	10,898	1,038	-	3,042
1951	-	10,909	779	-	921
1952	-	10,818	312	-	-
1953	-	11,030	214	-	-
1954	-	10,719	7	-	-
1955	-	10,798	-	-	-
1956	-	11,326	-	-	-
1957	-	11,453	-	-	-
1958	-	11,863	-	-	-
1959	-	12,185	-	-	-
1960	-	S 17,158 S	-	-	-
1961	-	30,315	S 174 S	-	-
1962	-	111,619	1,083	-	-
1963	-	56,758	855	-	-
1964	-	29,966	132	-	-
1965	-	15,325	22	-	-
1966	-	5,006	-	-	-
1967	-	3,693	-	-	-
1968	-	2,180	-	-	-
1969	-	507	-	-	-
1970	-	202	-	-	-
1971	-	*	-	-	-
1972	-	*	-	-	-
1973	-	*	-	-	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Primary	20,982	163,502	95,014	6,762	40,592
Secondary	-	272,729	2,266	-	-
Total	20,982	436,231	97,280	6,762	40,592

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 3 Coppedge 330N 1980W Sec. 5, T.18S., R.30E.	Newmont 2 Coppedge 330N 330W Sec. 5, T.18S., R.30E.	Newmont 4 Yates-A 330N 990E Sec. 6, T.18S., R.30E.	Newmont 12 Yates-A 990N 330E Sec. 6, T.18S., R.30E.	Newmont 3 Yates-A 330N 2310E Sec. 6, T.18S., R.30E.
1939	-	-	-	-	7,695
1940	-	17,848	18,086	-	18,088
1941	7,057	17,589	17,194	-	17,189
1942	10,935	10,934	12,967	-	12,966
1943	13,241	13,247	12,264	-	12,264
1944	11,644	11,651	10,871	-	10,871
1945	10,861	10,865	8,724	-	8,724
1946	7,785	7,785	7,877	-	7,877
1947	8,430	8,431	7,547	-	7,545
1948	6,550	6,551	5,865	-	5,866
1949	4,779	4,780	4,741	-	4,740
1950	3,040	3,040	3,962	-	5,531*
1951	1,764	1,769	3,317	-	7,610*
1952	1,142	1,125	3,426	-	5,233*
1953	975	778	2,739	-	4,150*
1954	670	402	2,592	-	6,505*
1955	817	221	3,054	-	11,090*
1956	656	-	5,806	-	9,062*
1957	370	-	9,266	473	8,700*
1958	746	-	S 6,615* S	*	7,391*
1959	428	-	9,202*	*	2,872*
1960	S 378 S	-	28,024*	*	S 2,501* S
1961	493	-	82,336		42,973
1962	362	-	72,499	-	58,504
1963	174	-	17,221	-	60,855
1964	148	-	13,461	-	17,687
1965	75	-	7,048	-	4,218
1966	121	-	4,027	-	3,116
1967	33	-	4,390	-	7,014
1968	33	-	6,523	-	2,434
1969	20	-	4,640	-	903
1970	-	-	4,023	-	*
1971	-	-	4,217	-	*
1972	-	-	3,484	-	*
1973	-	-	1,021	-	*
1974	-	-	852	-	-
1975	-	-	179	-	-
Primary	92,268	117,016	146,913	473	184,470
Secondary	1,459	-	263,147	-	197,704
Total	93,727	117,016	410,060	473	382,174

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 11 Yates-A 990N 1605E Sec. 6, T.18S., R.30E.	Newmont 2 Yates-A 330N 1650W Sec. 6, T.18S., R.30E.	Newmont 8 Yates-A 990N 2231W Sec. 6, T.18S., R.30E.	Newmont 1 Yates-A 330N 330W Sec. 6, T.18S., R.30E.	Newmont 9 Yates-A 990N 911W Sec. 6, T.18S., R.30E.
1939	-	7,694	-	8,579	-
1940	-	18,090	-	18,094	-
1941	-	17,190	-	17,188	-
1942	-	12,964	-	12,962	-
1943	-	12,263	-	12,264	-
1944	-	10,873	-	10,873	-
1945	-	8,725	-	8,725	-
1946	-	7,877	1,407	7,878	-
1947	-	13,731	1,341	11,034*	*
1948	-	11,729	*	11,728*	*
1949	-	9,480*	*	9,483*	*
1950	*	7,926*	*	7,931*	*
1951	*	4,607*	*	5,424*	*
1952	*	2,362*	*	3,430*	*
1953	*	2,534*	*	4,494*	*
1954	*	2,182*	*	4,347*	*
1955	*	2,546*	*	4,849	*
1956	*	2,387*	*	3,404*	*
1957	*	2,257*	*	3,009*	*
1958	*	1,968*	*	2,791*	*
1959	*	-	1,471	2,110*	*
1960	*	-	18,728	S 126,714* S	*
1961	-	-	67,508	164,287*	*
1962	-	-	32,725	64,313	S 22,470 S
1963	-	-	39,230	22,258	10,619
1964	-	-	33,573	2,548	2,463
1965	-	-	6,952	1,770	1,537
1966	-	-	3,224	1,527	170
1967	-	-	4,097	363	-
1968	-	-	4,561	-	-
1969	-	-	2,393	-	-
1970	-	-	222	899	-
1971	-	-	*	1,054	-
1972	-	-	*	*	-
1973	-	-	*	*	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Primary	-	163,604	2,748	170,598	-
Secondary	-	-	213,213	385,733	37,259
Total	-	163,604	215,961	556,331	37,259

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 2 Yates-A 1650N 330N Sec. 6, T.18S., R.30E.	Newmont 6 Yates-A 2310N 990W Sec. 6, T.18S., R.30E.	Newmont 3 Yates 1650N 1650W Sec. 6, T.18S., R.30E.	Newmont 6 Yates-A 1650N 2310E Sec. 6, T.18S., R.30E.	Newmont 14 Yates-A 1980N 1310E Sec. 6, T.18S., R.30E.
1939	5,438	-	1,317	-	-
1940	19,715	-	17,591	7,966	-
1941	15,255	-	17,275	17,196	-
1942	15,339	-	16,954	1,409	-
1943	12,332	-	13,165	-	-
1944	10,528	-	11,278	-	-
1945	10,230	-	10,682	-	-
1946	7,859	-	10,478	-	-
1947	9,079*	*	10,973	-	-
1948	9,636*	*	8,375	-	-
1949	10,673*	*	6,460	-	-
1950	7,624*	*	5,504	1,566	-
1951	5,828*	*	3,847	2,892	-
1952	4,937*	*	3,290	1,426	-
1953	5,360*	*	3,149	1,189	-
1954	8,385*	*	3,217	1,178	-
1955	10,998*	*	4,922	5,838	-
1956	7,796*	*	3,589	5,157	-
1957	7,006*	*	2,863	2,843	-
1958	-	4,669	2,006	S 2,714 S	-
1959	-	S 4,157 S	-	4,360	-
1960	-	135,287	-	26,243	S - S
1961	-	113,450	-	69,669	22,745
1962	-	21,696	-	31,998	13,748
1963	-	13,930	-	29,512	-
1964	-	14,490	-	21,869	-
1965	-	5,318	-	20,051	-
1966	-	5,775	-	5,136	-
1967	-	1,651	-	1,796	-
1968	-	1,904	-	5,660	-
1969	-	2,115	-	5,973	-
1970	28	531	-	7,249	-
1971	-	*	-	6,142	-
1972	-	*	-	5,716	-
1973	-	*	-	1,600	-
1974	-	-	-	348	-
1975	-	-	-	384	-
Primary	184,018	8,826	156,935	51,374	-
Secondary	28	316,147	-	243,706	36,493
Total	184,046	324,973	156,935	295,080	36,493

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 4 Yates 2310S 1650W Sec. 6, T.18S., R.30E.	Newmont 1 Yates Fed. 1980S 660W Sec. 6, T.18S., R.30E.	Newmont 5 Yates Fed. 2310S 330W Sec. 6, T.18S., R.30E.	Newmont 5 Yates Fed.-A 990S 330W Sec. 6, T.18S., R.30E.	Newmont 10 Yates Fed.-A 330S 990W Sec. 6, T.18S., R.30E.
1939	-	22,334	-	-	-
1940	18,271	19,596	-	14,488	-
1941	16,534	13,509	-	17,194	-
1942	16,935	-	-	14,062	-
1943	15,114	-	-	12,264	-
1944	10,685	-	-	10,870	-
1945	10,468	-	-	8,726	-
1946	10,834	-	483	7,876	-
1947	11,103	-	5,547	7,546	-
1948	10,244	-	9,467	5,864	-
1949	6,406	-	11,120	7,136*	*
1950	7,777	-	7,742	7,927*	*
1951	4,240	-	4,236	9,125*	*
1952	2,494	2,492	*	10,049*	*
1953	2,759	2,759*	*	6,921*	*
1954	1,695	1,689*	*	6,894*	*
1955	2,108	2,103*	*	10,174*	*
1956	1,520	1,519*	*	8,577*	*
1957	1,002	1,196*	*	7,497*	*
1958	854	1,100	-	6,971*	*
1959	402	4,624	-	5,693*	*
1960	5,034	9,121	-	2,341*	*
1961	57,373	981	-	63,062*	*
1962	59,311	-	-	112,700	1,430
1963	30,920	-	-	31,549	3,886
1964	14,247	-	-	22,609	2,536
1965	9,714	-	-	10,767	1,812
1966	7,131	-	-	10,594	110
1967	4,533	-	-	5,769	-
1968	5,154	-	-	4,895	-
1969	3,929	-	-	4,176	-
1970	5,516	-	-	2,887	-
1971	6,153	-	-	1,060	-
1972	5,019	-	-	*	-
1973	3,431	-	-	*	-
1974	3,033	-	-	-	-
1975	3,137	-	-	-	-
Primary	151,445	68,297	38,595	188,195	-
Secondary	223,635	14,726	-	270,068	9,774
Total	375,080	83,023	38,595	458,263	9,774

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 15 Yates Fed.-A 330S 330W Sec. 6, T.18S., R.30E.	Newmont 7 Yates Fed.-A 990S 1650W Sec. 6, T.18S., R.30E.	Newmont 7 WLH-1 1270N 1370W Sec. 7, T.18S., R.30E.	Newmont 1 WLH-1 330N 330W Sec. 7, T.18S., R.30E.	Newmont 2 WLH-1 1650N 330W Sec. 7, T.18S., R.30E.
1939	-	-	-	5,496	-
1940	-	-	-	17,038	-
1941	-	-	-	17,764	4,531
1942	-	-	-	11,299	11,296
1943	-	-	-	10,247	10,246
1944	-	10,869	-	10,805	10,804
1945	-	8,724	-	10,914	10,914
1946	-	7,877	-	10,929	10,928
1947	-	7,526	-	11,019	11,019
1948	-	5,863	-	10,987	10,986
1949	-	4,740	6,435	10,963	10,963
1950	-	3,963	9,274	9,277	9,277
1951	-	1,622	6,666	7,529	5,919
1952	-	-	4,235	5,858	4,299
1953	-	-	866	5,234	4,703
1954	-	-	41	5,105	5,105
1955	-	-	-	5,033	6,830
1956	-	-	-	7,974	5,445
1957	-	-	-	9,504	3,874
1958	-	-	-	11,011	3,074
1959	-	-	-	10,164	2,788
1960	-	-	-	9,969	5,712
1961	-	-	-	4,883	4,003
1962	S - S	-	-	S 9,720 S	S 2,933 S
1963	17,060	-	-	20,846	9,243
1964	39,860	-	-	-	114,478
1965	38,640	-	-	-	62,555
1966	34,370	-	-	-	38,138
1967	27,563	-	-	-	31,314
1968	14,102	-	-	41,656	7,986
1969	2,589	-	-	36,741	5,733
1970	*	-	-	19,405	2,508
1971	*	-	-	16,698	1,451
1972	*	-	-	14,681	611
1973	*	-	-	7,057	*
1974	-	-	-	5,267	-
Primary	-	51,184	27,517	219,002	155,649
Secondary	174,184	-	-	175,749	274,017
Total	174,184	51,184	27,517	394,751	429,666

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 8 WLH-1 2310N 330W Sec. 7, T.18S., R.30E.	Newmont 6 WLH-1 2590N 1370W Sec. 7, T.18S., R.30E.	Boyd 1 Masteller A 2310N 2310E Sec. 7, T.18S., R.30E.	Newmont 5 WLH-2A 1650S 2310E Sec. 7, T.18S., R.30E.	Newmont 5 WLH-1 1650S 1650W Sec. 7, T.18S., R.30E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	9,977
1946	-	-	-	-	10,927
1947	-	-	-	-	11,015
1948	-	-	-	-	10,983
1949	-	10,964	-	-	10,963
1950	-	9,277	-	-	9,279
1951	-	7,568	-	-	5,096
1952	-	6,163	-	-	3,159
1953	-	5,114	-	-	2,755
1954	-	5,897	-	-	2,614
1955	-	8,684	-	-	5,362
1956	3,155	8,819	-	-	6,239
1957	7,649	8,644	-	-	5,500
1958	4,720	7,178	-	-	5,703
1959	4,816	3,607	-	-	3,124
1960	249	3,136	-	-	1,500
1961	775	2,901	-	-	1,549
1962	402	3,568	-	1,317	3,335
1963	S 512 S	S 9,857 S	-	1,335	2,779
1964	-	92,281	S 4,153 S	-	-
1965	-	71,036	3,736	-	-
1966	-	43,361	1,260	-	-
1967	-	21,729	-	-	-
1968	-	3,564	-	-	-
1969	-	2,566	-	-	-
1970	-	1,254	-	-	-
1971	-	1,172	-	-	-
1972	-	664	-	-	-
1973	-	4,401	-	-	-
1974	-	3,093	-	-	-
1975	-	2,544	-	-	-
Primary	21,766	91,520	-	2,652	111,859
Secondary	512	257,522	9,149	-	-
Total	22,278	349,042	9,149	2,652	111,859

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 3 WLH-1 1980S 660W Sec. 7, T.18S., R.30E.	Newmont 4 WLH-1 660S 660W Sec. 7, T.18S., R.30E.	Newmont 1 WLH-22 660S 1980W Sec. 7, T.18S., R.30E.	Newmont 2 WLH-2A 330S 2310E Sec. 7, T.18S., R.30E.	F.A.F. 2 Masteller 330S 1650E Sec. 8, T.18S., R.30E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	936	-	-	-	-
1943	10,242	-	-	-	-
1944	10,800	9,143	4,357	-	-
1945	10,914	10,911	10,107	1,199	-
1946	10,929	10,929	11,030	10,804	-
1947	11,015	11,016	10,978	10,966	-
1948	10,987	10,986	11,017	10,997	-
1949	10,963	10,962	10,934	10,949	-
1950	9,277	9,277	7,881	10,809	-
1951	6,703	5,918	4,883	10,691	-
1952	5,757	3,380	2,369	10,444	-
1953	5,234	2,797	2,340	8,683	-
1954	5,938	2,614	2,097	6,115	-
1955	8,709	5,845	6,761	4,747	-
1956	6,666	6,239	6,775	8,438	-
1957	5,439	5,071	6,333	13,759	-
1958	4,181	2,146	4,656	10,680	-
1959	3,796	1,095	4,658	9,341	3,242
1960	3,988	744	3,481	8,102	974
1961	3,424	72	2,321	6,779	492
1962	4,036	-	2,242	6,601	351
1963	2,749 S	207	2,263 S	2,993 S	318
1964	66,807 S	-	17,354 S	13,208 S	259
1965	81,630	-	53,952	43,029	238
1966	30,607	-	57,984	52,109	21
1967	23,698	-	29,363	37,638	-
1968	12,844	-	14,534	31,771	-
1969	18,021	-	5,175	34,727	-
1970	8,616	-	5,634	44,458	-
1971	7,326	-	-	26,929	-
1972	10,877	-	-	17,992	-
1973	10,638	-	-	17,061	-
1974	9,988	-	-	9,758	288
1975	9,056	-	-	7,462	-
Primary	152,683	109,352	117,483	163,097	6,183
Secondary	290,108	-	183,996	336,142	-
Total	442,791	109,352	301,479	449,239	6,183

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	F.A.F. 1 Masteller-B 330N 990E Sec. 17, T.18S. R.30E.	Daniels 1 So. Union 330N 990E Sec. 18, T.18S., R.30E.	Newmont 3 WLH-2B 330N 2310E Sec. 18, T.18S., R.30E.	Newmont 3 WLH-21A 660N 1980W Sec. 18, T.18S., R.30E.	Newmont 2 WLH-21A 660N 660W Sec. 18, T.18S., R.30E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	941	2,407
1945	-	-	-	10,255	10,260
1946	-	-	2,995	8,139	8,192
1947	-	-	7,130	7,339	7,347
1948	-	-	5,558	6,306	6,311
1949	-	-	4,522	5,089	5,095
1950	-	-	3,437	4,954	4,958
1951	-	-	3,280	4,765	3,364
1952	-	-	3,858	4,408	1,786
1953	-	-	4,654	3,501	1,548
1954	-	-	3,908	2,864	1,535
1955	-	-	3,441	6,967	2,594
1956	-	-	2,735	5,498	4,716
1957	-	-	4,312	5,168	4,568
1958	919	-	5,198	5,119	2,704
1959	9,047	-	4,421	3,249	2,669
1960	3,533	-	2,594	2,758	2,502
1961	1,251	-	2,430	2,099	2,200
1962	586	345	1,902	2,398	2,217
1963	587	810	1,791	2,480	1,821
1964	558	S 2,244 S	S 2,602 S	S 4,655 S	S 6,660 S
1965	2,986	1,865	13,242	22,227	27,240
1966	3,323	2,284	5,880	12,117	22,883
1967	2,381	1,783	21	11,932	9,530
1968	1,939	1,324	-	12,408	7,911
1969	1,703	383	-	3,992	3,675
1970	1,568	-	-	6,443	5,058
1971	1,281	-	-	4,110	6,735
1972	1,114	-	-	5,654	3,981
1973	1,270	-	-	2,765	1,674
1974	1,045	-	-	2,541	2,847
1975	687	-	-	2,401	2,484
Primary	35,778	1,155	68,166	94,297	78,794
Secondary	-	9,883	21,745	91,245	100,678
Total	35,778	11,038	89,911	185,542	179,472

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Fair 5 State A 2310N 330E Sec. 36, T.17S., R.29E.	Fair 5 State A 1650S 330E Sec. 36, T.17S., R.29E.	Fair 7 State A 2310S 990E Sec. 36, T.17S., R.29E.	Fair 3 State A 1650S 1650E Sec. 36, T.17S., R.29E.	Newmont 2 WLH-24 330S 990W Sec. 36, T.17S., R.29E.
1939	-	12,328	-	2,990	8,134
1940	-	17,435	-	17,227	17,585
1941	-	15,909	-	15,912	15,911
1942	-	11,102	-	9,464	11,103
1943	-	7,632	-	7,641	7,633
1944	-	6,183	-	6,193	6,184
1945	-	3,998	-	4,008	4,002
1946	-	2,555	-	2,562	2,556
1947	-	2,084	-	2,085	2,083
1948	-	1,381	-	1,389	1,381
1949	-	846	-	849	847
1950	-	1,110	-	1,160	1,071
1951	-	776	-	1,032	284
1952	-	991	-	993	-
1953	-	1,023	-	1,030	-
1954	-	1,118	-	602	-
1955	-	1,641	-	607	-
1956	-	1,071	-	551	-
1957	-	1,070	-	501	-
1958	-	767	-	563	-
1959	-	645	-	528	-
1960	-	1,035	-	-	-
1961	-	557	-	-	-
1962	-	S 23,592 S	S - S	S 4,865 S	-
1963	-	41,954	3,122	37,149	-
1964	5,429	13,173	3,749	17,717	-
1965	4,634	2,097	2,995	9,358	-
1966	3,153	-	1,846	5,122	-
1967	1,173	-	140	3,166	-
1968	925	-	-	2,296	-
1969	59	-	-	147	-
1970	-	-	-	*	-
1971	-	-	-	*	-
1972	-	-	-	-	-
1973	-	-	-	-	-
1974	-	-	-	-	-
1974	-	-	-	-	-
Primary	5,429	93,257	-	77,887	78,774
Secondary	9,944	80,816	11,852	79,820	-
Total	15,373	174,073	11,852	157,707	78,774

TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Newmont 1 WLH-23 330S 2310W Sec. 36, T.17S., R.29E.	F.A.F. 1 State-A 330S 1650E Sec. 36, T.17S., R.29E.	Newmont 2 State-A 725S 2100E Sec. 36, T.17S., R.29E.	Gen. Amer. 1 State B 990S 330E Sec. 36, T.17S., R.29E.	Gen. Amer. 2 State B 1295S 990E Sec. 36, T.17S., R.29E.
1939	10,494	-	-	5,957	-
1940	18,163	12,467	-	18,499	-
1941	17,481	17,927	-	17,138	-
1942	11,136	11,233	-	11,252	-
1943	10,178	9,578	-	10,323	-
1944	9,170	7,869	-	8,960	-
1945	9,403	8,010	-	9,022	-
1946	6,830	5,657	-	5,346	-
1947	4,961	5,655	-	4,584	-
1948	3,234	3,318	-	8,771*	-
1949	2,210	2,246	-	4,639*	-
1950	1,496	1,868	-	2,813*	-
1951	1,723	2,248	-	2,466*	-
1952	2,695	1,900	-	2,892*	-
1953	2,426	1,454	-	3,194*	-
1954	2,318	1,266	-	2,272*	-
1955	1,960	1,369	-	2,002*	-
1956	1,472	939	-	2,121*	-
1957	1,837	857	-	2,232*	-
1958	1,288	922	-	1,338*	-
1959	1,183	805	-	1,068*	-
1960	1,295	948	-	731*	-
1961	1,067	1,960	-	8,471	-
1962	1,037	2,589	5,637	45,332	-
1963	22,705	-	38,324	124,423	3,087
1964	65,421	-	15,599	14,063	-
1965	44,722	-	3,258	966	-
1966	22,301	-	1,619	-	-
1967	3,029	-	607	-	-
1968	117	**	-	-	-
1969	1,332	**	-	-	-
1970	4,813	**	-	-	-
1971	4,840	**	-	-	-
1972	4,459	**	-	-	-
1973	5,290	**	-	-	-
1974	6,072	**	-	-	-
1974	5,548	**	-	-	-
Primary	125,057	101,125	-	127,620	-
Secondary	190,649	1,960	65,044	193,255	3,087
Total	315,706	103,085	65,044	320,875	3,087

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TABLE 1 - WELL PRODUCTION DATA: LOCO HILLS SAND (cont.)

Year	Gen. Amer. 3 State B 330S 990E Sec. 36, T.17., R.29E.	Primary Oil (totals) Yearly	Primary Oil (totals) Cumulative	Secondary Oil (totals) Yearly	Secondary Oil (totals) Cumulative
1939	-	344,191	344,191	-	-
1940	-	1,946,142	2,290,333	-	-
1941	-	2,061,998	4,352,331	-	-
1942	-	1,391,953	5,744,284	-	-
1943	-	1,121,179	6,865,463	-	-
1944	-	942,244	7,807,707	-	-
1945	-	846,399	8,654,106	-	-
1946	-	762,494	9,416,600	-	-
1947	-	773,631	10,190,231	-	-
1948	*	647,503	10,837,734	-	-
1949	*	533,270	11,371,004	-	-
1950	*	436,427	11,807,431	-	-
1951	*	347,324	12,154,755	-	-
1952	*	288,200	12,442,955	-	-
1953	*	248,926	12,691,881	-	-
1954	*	251,653	12,943,534	-	-
1955	*	346,218	13,289,752	-	-
1956	*	348,286	13,638,038	-	-
1957	*	342,279	13,980,317	-	-
1958	*	290,175	14,270,492	-	-
1959	*	234,859	14,505,351	19,966	19,966
1960	*	171,543	14,676,894	415,065	435,031
1961	S 2,137 S	138,600	14,815,494	1,042,127	1,477,158
1962	70,563	132,854	14,948,348	1,345,544	2,822,702
1963	84,553	91,949	15,040,297	2,004,385	4,827,087
1964	11,487	54,351	15,094,648	1,751,780	6,578,867
1965	3,281	28,692	15,123,340	2,095,631	8,674,498
1966	510	17,760	15,141,100	1,702,803	10,377,301
1967	-	13,906	15,155,006	1,892,695	12,269,996
1968	-	11,414	15,166,420	1,487,231	13,757,227
1969	-	10,136	15,176,556	1,076,317	14,833,544
1970	-	6,949	15,183,505	1,093,428	15,926,972
1971	-	5,708	15,189,213	1,557,413	17,484,385
1972	-	4,862	15,194,075	1,487,149	18,971,543
1973	-	4,633	15,198,708	784,445	19,755,979
1974	-	7,373	15,206,081	575,654	20,331,633
1975	-	5,182	15,211,263	463,845	20,795,478
Primary	-				
Secondary	172,531				
Total	172,531				

Total Oil Produced - 36,006,741 bbls

TABLE 2 - WATER INJECTION: LOCO HILLS UNIT
Operator: Newmont
( ) Aver. Inj. Pressure

Year	1-Ballard B 330N 2310E Sec. 1, T.18S., R.29E.	3-Ballard B 330N 990E Sec. 1, T.18S., R.29E.	4-Ballard B 990N 1650E Sec. 1, T.18S., R.29E.	5-Ballard B 990N 330E Sec. 1, T.18S., R.29E.	6-Ballard B 2310N 1650E Sec. 1, T.18S., R.29E.
1958	-	-	-	16,205(220)	-
1959	-	-	-	135,660(1,000)	-
1960	-	-	25,967(480)	320,524(1,130)	167,794(1,300)
1961	-	-	301,826(1,200)	182,250(1,400)	247,365(1,200)
1962	-	-	193,841(1,200)	208,095(1,000)	236,603(1,160)
1963	106,214(1,400)	-	204,662(1,300)	232,942(1,300)	185,515(1,000)
1964	288,625(1,500)	-	193,444(1,150)	156,552(1,100)	177,830(1,150)
1965	199,625(1,325)	-	100,815(750)	90,804(875)	172,512(1,075)
1966	216,772(-)	-	15,510(0)	51,531(0)	200,237(1,200)
1967	-	-	-	503(950)	109,013(950)
1968	-	-	-	-	46,119(1,125)
1969	-	-	-	-	47,502(1,200)
1970	-	99,801(1,175)	-	-	14,727(0)
1971	-	124,373(1,300)	-	-	-
1972	-	1,201(0)	-	-	-
1973	-	-	-	-	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Total	811,237	225,375	1,036,065	1,395,066	1,605,217

Year	7-Ballard B 1650N 2310E Sec. 1, T.18S., R.29E.	2-Coppedge 330N 330W Sec. 5, T.18S., R.30E.	2-Yates 1650N 330W Sec. 6, T.18S., R.30E.	3-Yates 1650N 1650W Sec. 6, T.18S., R.30E.	5-Yates 2310S 330W Sec. 6, T.18S., R.30E.
1958	-	-	12,147(185)	11,886(200)	22,823(160)
1959	-	-	94,511(1,000)	147,517(1,050)	234,492(1,000)
1960	-	-	374,533(1,200)	345,452(1,200)	437,737(1,130)
1961	-	260,902(1,240)	289,879(1,200)	368,165(1,200)	465,175(1,200)
1962	-	232,283(1,400)	416,332(1,450)	497,038(1,400)	342,380(1,400)
1963	-	152,783(1,400)	396,423(1,450)	403,494(1,400)	329,728(1,100)
1964	-	173,635(1,525)	230,611(1,350)	283,680(1,350)	319,697(1,150)
1965	-	76,360(1,425)	122,332(1,300)	183,386(1,000)	183,445(925)
1966	-	26,233(1,400)	257,356(1,300)	197,951(1,125)	190,072(975)
1967	-	-	252,464(1,350)	189,388(1,175)	113,029(1,025)
1968	-	10,266(1,375)	110,026(1,200)	179,540(1,000)	47,857(950)
1969	-	4,378(1,200)	135,520(1,200)	146,487(1,200)	110,239(1,200)
1970	-	28(0)	27,870(0)	163,824(1,125)	134,169(900)
1971	114,000(0)	-	-	192,747(1,150)	106,575(1,000)
1972	-	-	-	284,718(1,225)	208,287(1,075)
1973	-	-	-	62,215(0)	364,879(1,175)
1974	-	-	-	-	413,150(1,150)
1975	-	-	-	-	373,172(1,100)
Total	114,000	937,149	2,720,004	3,668,488	4,406,906

TABLE 2 - WATER INJECTION: LOCO HILLS UNIT (cont.)

Year	2-Yates A 330N 1650W Sec. 6, T.18S., R.30E.	7-Yates A 990S 1650W Sec. 6, T.18S., R.30E.	9-Yates A 990N 911W Sec. 6, T.18S., R.30E.	11-Yates A 990N 1605E Sec. 6, T.18S., R.30E.	12-Yates A 990N 330E Sec. 6, T.18S., R.30E.
1958	11,127(230)	-	-	20,990(220)	-
1959	74,933(900)	-	-	106,787(1,000)	-
1960	278,456(1,100)	232,249(1,200)	-	220,066(1,200)	164,304(1,400)
1961	196,215(1,200)	201,391(1,200)	-	235,982(1,200)	193,420(1,340)
1962	257,889(1,400)	113,324(1,480)	-	261,537(1,350)	95,623(1,500)
1963	301,883(1,000)	115,461(1,450)	-	157,839(1,350)	33,645(1,500)
1964	270,560(1,550)	191,136(1,550)	-	160,286(1,525)	61,143(1,525)
1965	225,763(1,350)	125,514(1,425)	-	126,866(1,350)	63,912(1,425)
1966	144,742(810)	73,743(1,450)	-	143,806(1,450)	3,311(1,400)
1967	81,834(1,050)	90,536(875)	-	118,648(1,250)	2,476(1,450)
1968	89,911(675)	70,614(350)	-	122,059(675)	718(1,400)
1969	97,837(1,200)	87,738(0)	-	104,270(1,200)	1,868(0)
1970	112,721(900)	-	-	128,063(1,150)	-
1971	71,884(0)	-	104,815(1,300)	88,204(1,250)	-
1972	-	-	12,575(0)	84,557(1,225)	-
1973	-	-	-	86,509(1,375)	-
1974	-	-	-	74,652(1,325)	-
1975	-	-	-	76,442(1,350)	-
Total	2,215,673	1,301,706	117,390	2,317,563	620,420

Year	13-Yates A 2310S 2310E Sec. 6, T.18S., R.30E.	14-Yates A 1980N 1310E Sec. 6, T.18S., R.30E.	1-Brigham 330S 990E Sec. 31, T.17S., R.30E.	4-Brigham 1320S 5E Sec. 31, T.17S., R.30E.	2-Brigham 2310S 990E Sec. 31, T.17S., R.30E.
1958	-	-	-	-	-
1959	-	-	-	-	-
1960	200,745(1,400)	-	-	-	-
1961	531,452(1,120)	-	123,865(940)	172,391(1,000)	-
1962	437,350(1,300)	8,172(1,200)	96,454(1,450)	226,584(1,440)	171,947(1,200)
1963	493,896(1,450)	245,693(1,500)	72,021(1,450)	180,436(1,200)	313,749(1,400)
1964	426,107(1,525)	172,115(1,550)	63,813(1,550)	152,336(1,350)	296,295(1,400)
1965	295,356(1,225)	58,153(1,250)	55,317(1,425)	79,138(1,200)	188,995(1,300)
1966	369,434(1,290)	546,766(1,370)	36,753(1,250)	89,727(1,225)	149,524(350)
1967	385,551(1,350)	61,987(1,450)	43,925(1,425)	196,958(1,450)	43,753(0)
1968	212,544(900)	82,433(1,375)	50,129(1,400)	71,648(1,350)	-
1969	102,064(0)	35,260(1,200)	20,818(1,200)	32,920(1,200)	-
1970	-	43,363(1,150)	27,188(1,150)	33,862(1,125)	-
1971	-	39,528(1,250)	28,349(1,225)	32,580(1,200)	-
1972	-	37,254(1,225)	22,814(1,225)	32,063(1,200)	-
1973	-	51,859(1,375)	21,168(1,350)	31,260(1,350)	-
1974	-	49,848(1,325)	24,611(1,300)	28,708(1,275)	-
1975	-	42,587(1,350)	20,181(1,325)	29,279(1,300)	-
Total	3,481,499	990,885	707,406	1,449,687	1,104,466

TABLE 2 - WATER INJECTION: LOCO HILLS UNIT (cont.)

Year	2-Tallmadge 2310N 2310E Sec. 32, T.17S., R.30E.	4-Tallmadge 330S 2310W Sec. 32, T.17S., R.30E.	1-Scheurich A 2310N 330W Sec. 32, T.17S., R.30E.	4-Scheurich A 2525S 1435W Sec. 32, T.17S., R.30E.	8-Scheurich A 1650N 1650W Sec. 32, T.17S., R.30E.
1958	-	-	-	-	-
1959	-	-	-	-	-
1960	-	-	-	-	-
1961	-	360,182(990)	-	-	-
1962	-	500,991(1,300)	171,343(1,100)	-	3,846(1,000)
1963	11,415(1,350)	290,899(1,350)	164,366(1,300)	-	285,757(1,100)
1964	170,509(1,500)	350,210(1,325)	127,975(1,525)	-	268,504(1,400)
1965	138,350(1,375)	267,906(1,000)	62,037(850)	4,799(1,400)	190,447(1,375)
1966	122,689(1,375)	202,140(1,150)	11,546(0)	53,577(1,360)	25,212(1,375)
1967	77,223(1,425)	147,602(0)	142(0)	25,269(1,42)	3,914(1,425)
1968	86,380(1,325)	-	-	5,173(0)	3,377(1,375)
1969	62,591(1,200)	-	-	-	-
1970	8,821(0)	-	-	-	-
1971	-	-	-	-	-
1972	-	-	-	-	-
1973	-	-	-	-	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Total	677,978	2,119,930	537,409	88,818	781,057

Year	9-Scheurich A 1650S 990W Sec. 32, T.17S., R.30E.	1-State A 330S 1650E Sec. 36, T.17S., R.29E.	3-State A 1295S 2615E Sec. 36, T.17S., R.29E.	Water Injected bbls (totals)	Cumulative bbls (totals)
1958	-	-	-	106,178	106,178
1959	-	-	-	793,900	900,078
1960	-	-	-	2,767,827	3,667,905
1961	-	-	-	4,130,460	7,798,365
1962	27,561(1,000)	199,271(1,250)	68,367(1,500)	4,777,231	12,575,596
1963	337,524(1,200)	305,186(1,500)	63,726(1,500)	5,384,857	17,960,453
1964	285,285(1,400)	222,110(1,400)	49,241(1,550)	5,091,699	23,052,152
1965	176,398(975)	97,527(750)	17,835(1,425)	3,304,092	26,356,244
1966	165,143(1,250)	14,383(0)	7,332(0)	2,858,376	29,214,620
1967	178,023(1,350)	-	53(0)	2,122,572	31,337,192
1968	185,537(1,150)	-	-	1,374,231	32,711,423
1969	128,656(1,200)	-	-	1,118,148	33,829,571
1970	154,191(1,100)	-	-	948,628	34,778,199
1971	165,386(1,200)	-	-	1,068,441	35,846,640
1972	159,972(1,200)	-	-	843,441	36,690,081
1973	180,699(1,325)	-	-	798,589	37,488,670
1974	179,819(1,275)	-	-	770,788	38,259,458
1975	207,327(1,300)	-	-	748,988	39,008,446
Total	2,531,521	838,477	207,054		

TABLE 2 - WATER INJECTION: LOCO HILLS UNIT (cont.)

MISCELLANEOUS
Operator: Dixon & Yates
( ) Aver. Inj. Pressure

3 Boulter
660N 660W
Sec. 14, T.18S., R.29E.

Year		Cumulative
1965	73,040(1,087)	73,040
1966	140,499(958)	213,539
1967	133,675(999)	347,214
1968	69,796(1,083)	417,010
1969	9,781(-)	426,791
1970	-	426,791
1971	-	426,791
1972	-	426,791
1973	73,231(1,150)	500,022
1974	134,851(1,150)	634,873
1975	144,591(912)	779,464

TABLE 3 - WATER INJECTION: AMBASSADOR UNIT
Operator: Anadarko
( ) Aver. Inj. Pressure

Year	1-Fed L 2310N 2310W Sec. 31, T.17S., R.30E.	1-Fed M 330S 2310E Sec. 31, T.17S., R.30E.	6-Fed M 1650S 1650E Sec. 31, T.17S., R.30E.	5-Fed L 1320N 2537W Sec. 31, T.17S., R.30E.	6-Fed L 1650N 750W Sec. 31, T.17S., R.30E.
1962	90,982(1,320)	139,782(1,225)	106,772(1,330)	22,948(1,330)	-
1963	229,187(1,650)	280,455(1,650)	156,599(1,700)	217,760(1,650)	-
1964	169,354(1,660)	247,044(1,425)	74,207(1,655)	259,273(1,650)	-
1965	95,157(1,450)	268,137(1,420)	89,067(1,650)	220,346(-)	82,547(1,450)
1966	94,005(1,480)	142,708(1,425)	136,315(1,650)	148,016(1,480)	91,347(1,590)
1967	49,337(1,600)	71,074(1,400)	71,894(1,550)	43,884(1,600)	32,187(1,600)
1968	64,281(1,525)	228,348(1,400)	118,960(1,400)	196,803(1,500)	47,378(1,525)
1969	40,713(-)	80,955(1,500)	-	16,686	91,014(1,500)
1970	-	31,092(600)	-	-	135,107(600)
1971	-	3,255(-)	45,836(1,600)	-	49,655(-)
1972	-	9,945(-)	63,462(600)	-	-
1973	-	-	80,242(600)	-	-
1974	-	-	67,307(600)	-	-
1975	-	-	37,950(100)	-	-
Total	833,016	1,502,795	1,048,665	1,125,716	529,235

Year	Water Injected bbls (totals)	Cumulative bbls (totals)
1962	360,484	360,484
1963	884,001	1,244,485
1964	749,878	1,994,363
1965	755,254	2,749,617
1966	612,391	3,362,008
1967	268,376	3,630,384
1968	655,770	4,286,154
1969	229,368	4,515,522
1970	166,199	4,681,721
1971	98,746	4,780,467
1972	73,407	4,853,874
1973	80,242	4,934,116
1974	67,307	5,001,423
1975	37,950	5,039,373

TABLE 4 - WEST LOCO HILLS UNIT
Operator: Newmont
( ) Aver. Inj. Pressure

Year	1-Tract 14 990S 2310E Sec. 1, T.18S., R.29E.	1-Tract 15 2310N 2310W Sec. 1, T.18S., R.29E.	2-Tract 15 330N 2310W Sec. 1, T.18S., R.29E.	2-Tract 16 2310N 990W Sec. 1, T.18S., R.29E.	2-Tract 26 330S 1650W Sec. 1, T.18S., R.29E.
1963	187,474(1,200)	186,917(1,250)	-	131,098(1,250)	127,621(1,100)
1964	371,751(1,375)	233,167(1,300)	-	369,662(1,350)	546,100(1,350)
1965	310,211(1,175)	162,630(1,025)	-	214,700(1,225)	467,175(1,225)
1966	217,700(1,200)	191,400(1,200)	93,575(1,125)	137,825(1,225)	257,100(1,275)
1967	216,329(1,350)	187,748(1,175)	144,934(1,200)	142,060(1,225)	262,812(1,275)
1968	212,809(1,250)	241,838(1,600)	142,243(1,175)	134,734(1,175)	315,070(1,150)
1969	199,946(1,400)	178,411(750)	127,875(1,225)	118,486(1,275)	379,269(1,325)
1970	203,742(1,400)	189,896(825)	148,513(1,250)	124,180(1,275)	741,691(1,275)
1971	166,715(1,375)	173,623(600)	109,990(1,275)	112,168(1,300)	372,044(1,325)
1972	148,629(1,350)	177,061(600)	108,831(1,275)	106,843(1,175)	371,806(1,325)
1973	156,965(1,250)	189,931(625)	107,482(1,200)	100,154(1,175)	303,559(1,200)
1974	146,774(1,225)	150,738(750)	104,188(1,000)	106,589(650)	256,043(1,275)
1975	159,420(1,325)	155,353(-)	84,132(1,250)	111,115(1,200)	101,370(1,350)
Total	2,698,465	2,428,413	1,171,763	1,909,617	4,122,391

Year	1-Tract 27 1650S 990W Sec. 1, T.18S., R.29E.	2-Tract 27 2310S 990W Sec. 1, T.18S., R.29E.	2-Tract 29 2310S 2310W Sec. 2, T.18S., R.29E.	1-Tract 33 990N 1650W Sec. 2, T.18S., R.29E.	1-Tract 38 2310N 1650E Sec. 2, T.18S., R.29E.
1963	136,384(1,150)	-	-	-	-
1964	518,529(1,350)	-	40,200(175)	73,750(800)	414,265(1,450)
1965	383,770(1,200)	-	341,580(1,100)	456,095(1,075)	309,380(1,125)
1966	142,350(1,200)	179,850(1,300)	405,225(1,150)	386,400(1,025)	230,770(1,200)
1967	18,375(0)	176,524(1,275)	368,614(1,200)	302,214(1,200)	126,538(1,225)
1968	-	220,177(1,225)	222,490(1,150)	234,178(1,150)	156,576(1,200)
1969	-	193,413(1,325)	273,674(1,200)	175,068(1,200)	110,591(1,225)
1970	-	359,035(1,325)	499,646(1,175)	125,127(1,175)	79,437(1,250)
1971	-	155,861(1,325)	210,481(1,150)	105,841(1,200)	71,446(1,300)
1972	-	158,467(1,275)	242,881(1,200)	106,220(1,250)	96,897(1,225)
1973	-	174,658(1,250)	235,031(1,125)	169,960(1,275)	110,955(1,150)
1974	64(800)	148,723(1,225)	187,531(1,020)	86,152(1,250)	111,689(1,200)
1975	19,610(900)	150,682(1,275)	224,529(1,275)	66,873(1,325)	69,659(1,250)
Total	1,219,082	1,723,977	2,978,208	2,181,658	1,888,203

TABLE 4 - WEST LOCO HILLS UNIT (cont.)

Year	3-Tract 38 1220N 330E Sec. 2, T.18S., R.29E.	1-Tract 39 330S 2310E Sec. 2, T.18S., R.29E.	4-Tract 39 1650S 330E Sec. 2, T.18S., R.29E.	1-Tract 41 2310S 330W Sec. 2, T.18S., R.29E.	1-Tract 9 330S 330E Sec. 3, T.18S., R.29E.
1963	-	-	-	-	-
1964	365,048(1,275)	268,848(1,325)	384,401(1,350)	-	-
1965	214,350(1,125)	118,125(1,200)	199,380(1,250)	-	234,550(1,125)
1966	167,575(1,200)	68,400(1,350)	145,500(1,300)	164,925(1,250)	336,375(1,225)
1967	126,837(1,200)	40,619(1,300)	131,344(1,250)	71,603(1,250)	221,804(1,075)
1968	143,305(1,175)	49,215(1,250)	233,158(1,225)	90,355(1,175)	97,135(1,050)
1969	157,132(1,225)	45,331(1,275)	221,542(1,275)	124,829(1,200)	79,844(1,300)
1970	195,686(1,225)	58,989(1,250)	239,232(1,275)	137,153(1,200)	18,791(1,250)
1971	200,562(1,250)	55,081(1,225)	227,435(1,275)	185,175(1,200)	90,521(1,250)
1972	189,043(1,225)	50,165(1,250)	261,246(1,225)	108,857(1,250)	284,603(1,175)
1973	162,710(1,150)	48,988(1,125)	256,785(1,150)	87,817(1,100)	199,219(1,200)
1974	172,202(1,080)	44,421(1,200)	249,349(1,000)	140,458(1,200)	174,527(1,200)
1975	188,075(1,125)	76,522(1,300)	269,196(1,050)	126,005(1,150)	196,892(1,250)
Total	2,282,525	924,707	2,818,568	1,237,177	1,934,261

Year	2-Tract 10A 330S 1650N Sec. 3, T.18S., R.29E.	4-Tract 10A 1650S 660W Sec. 3, T.18S., R.29E.	5-Tract 10A 2310N 990W Sec. 3, T.18S., R.29E.	6-Tract 10A 2310N 2310W Sec. 3, T.18S., R.29E.	1-Tract 10B 1650S 2310E Sec. 3, T.18S., R.29E.
1963	-	-	-	-	-
1964	-	-	-	-	-
1965	-	43,900(0)	-	116,400(1,150)	267,225(1,125)
1966	244,200(1,200)	-	260,225(1,175)	222,950(1,225)	283,300(1,225)
1967	182,752(1,250)	-	144,348(950)	115,885(1,200)	149,379(1,150)
1968	55,061(300)	-	40,682(0)	97,066(900)	99,943(800)
1969	105,018(1,250)	-	3,680(0)	81,222(1,150)	81,786(950)
1970	137,362(1,225)	-	-	85,951(1,100)	87,030(1,025)
1971	114,921(1,200)	-	-	89,878(1,125)	88,041(1,150)
1972	104,698(1,225)	-	-	110,114(1,200)	91,421(1,175)
1973	143,729(1,200)	-	-	129,192(1,075)	127,813(1,250)
1974	153,749(1,200)	-	318(650)	140,504(1,100)	115,123(1,250)
1975	137,067(1,325)	-	16,838(1,050)	140,319(1,075)	89,316(1,325)
Total	1,378,557	43,900	466,091	1,329,481	1,480,407

TABLE 4 - WEST LOCO HILLS UNIT (cont.)

Year	6-Tract 10B 660N 660E Sec. 3, T.18S., R.29E.	3-Tract 43 1968S 1310E Sec. 4, T.18S., R.29E.	4-Tract 1 660S 660W Sec. 7, T.18S., R.30E.	5-Tract 1 1650S 1650W Sec. 7, T.18S., R.30E.	7-Tract 1 1270N 1370W Sec. 7, T.18S., R.30E.
1963	-	-	-	-	195,831(1,250)
1964	-	-	438,272(1,325)	422,246(1,325)	315,835(1,325)
1965	31,002(1,150)	-	165,600(1,125)	245,175(1,250)	157,425(1,225)
1966	19,150(1,225)	-	99,675(1,300)	184,300(1,300)	132,250(1,325)
1967	20,386(1,250)	-	59,134(1,275)	111,949(1,275)	69,750(1,300)
1968	19,932(1,175)	-	58,298(1,250)	168,727(1,225)	130,667(1,250)
1969	159,995(1,225)	149,315(975)	73,390(1,350)	137,143(1,300)	179,573(1,350)
1970	17,096(1,200)	233,738(1,075)	77,674(1,275)	184,068(1,250)	188,774(1,275)
1971	47,140(1,200)	218,602(1,125)	67,787(1,300)	108,256(1,300)	189,485(1,300)
1972	76,249(1,250)	193,070(1,300)	51,129(1,225)	90,327(1,100)	152,263(1,300)
1973	295,685(1,200)	136,129(1,225)	56,673(1,300)	89,734(1,250)	143,908(1,250)
1974	43,199(1,275)	121,956(1,225)	79,801(1,150)	86,320(1,225)	131,192(1,200)
1975	45,369(1,250)	178,812(1,200)	64,555(1,250)	100,217(1,325)	135,625(1,300)
Total	384,253	1,231,622	1,291,988	1,928,462	2,122,528

Year	8-Tract 1 2310N 330W Sec. 7, T.18S., R.30E.	4-Tract 2A 330S 990E Sec. 7, T.18S., R.30E.	5-Tract 2A 1650S 2310E Sec. 7, T.18S., R.30E.	1-Tract 22 660S 1980W Sec. 7, T.18S., R.30E.	2-Tract 12 2310S 330E Sec. 9, T.18S., R.29E.
1963	107,460(1,200)	-	-	-	-
1964	300,529(1,350)	162,711(1,275)	265,539(1,450)	-	-
1965	160,125(1,250)	95,270(1,250)	175,500(1,250)	-	-
1966	126,775(1,300)	134,175(1,275)	100,750(1,300)	-	171,350(975)
1967	66,567(1,300)	58,808(1,275)	60,221(1,275)	-	192,321(1,250)
1968	97,211(1,250)	53,762(1,150)	72,387(1,225)	-	42,446(-0)
1969	102,854(1,325)	72,167(1,175)	81,368(1,325)	-	118,832(900)
1970	104,986(1,300)	223,061(975)	94,956(1,300)	-	155,578(995)
1971	58,888(1,325)	161,349(1,000)	64,095(1,300)	163,213(1,250)	177,166(1,125)
1972	59,587(1,325)	79,226(850)	58,454(1,125)	48,885(-)	232,521(1,250)
1973	74,986(1,250)	106,921(1,150)	75,587(1,250)	-	194,656(850)
1974	80,832(1,200)	129,361(1,050)	69,682(1,225)	467(850)	218,290(1,100)
1975	56,210(1,300)	142,449(1,100)	82,465(1,250)	9,024(800)	231,127(1,150)
Total	1,397,010	1,419,260	1,201,004	221,589	1,734,391

TABLE 4 - WEST LOCO HILLS UNIT (cont.)

Year	4-Tract 19B 2310N 2310E Sec. 9, T.18S., R.29E.	6-Tract 19B 150N 1240E Sec. 9, T.18S., R.29E.	7-Tract 19B 10N 1325E Sec. 9, T.18S., R.29E.	2-Tract 5 1650N 2310W Sec. 10, T.18S., R.29E.	1-Tract 17A 990N 2310E Sec. 10, T.18S., R.29E.
1963	-	-	-	-	-
1964	-	-	-	-	-
1965	-	-	-	82,825(1,200)	-
1966	-	-	-	137,500(1,200)	240,300(1,300)
1967	-	-	-	120,568(1,300)	166,575(1,275)
1968	-	-	-	79,077(1,150)	120,144(1,250)
1969	49,315(600)	140,295(800)	-	69,843(1,250)	112,588(975)
1970	281,079(950)	267,147(875)	-	66,736(1,225)	129,394(1,200)
1971	301,805(975)	44,923(0)	147,935(1,075)	57,111(1,200)	156,217(1,225)
1972	294,779(1,000)	-	270,836(1,075)	52,629(1,250)	162,953(1,200)
1973	193,995(960)	-	264,568(1,250)	77,177(1,225)	147,870(1,175)
1974	195,387(1,100)	-	217,353(1,150)	92,011(1,250)	112,781(1,100)
1975	218,365(1,075)	-	222,700(1,150)	99,000(1,325)	128,755(1,350)
Total	1,634,725	452,365	1,123,392	934,477	1,477,577

Year	3-Tract 17A 2310S 2310E Sec. 10, T.18S., R.29E.	5-Tract 17A 1650N 990E Sec. 10, T.18S., R.29E.	6-Tract 17A 990S 330E Sec. 10, T.18S., R.29E.	11-Tract 17A 175S 1500E Sec. 10, T.18S., R.29E.	1-Tract 20 990N 330W Sec. 10, T.18S., R.29E.
1963	-	-	-	-	-
1964	-	-	-	-	-
1965	171,500(1,250)	-	104,575(1,000)	-	104,025(1,100)
1966	191,300(1,300)	277,700(1,350)	150,900(1,325)	-	289,325(1,175)
1967	137,151(1,300)	182,467(1,250)	103,330(1,275)	19,522(1,300)	196,243(700)
1968	112,276(1,225)	142,667(1,225)	163,325(1,200)	18,302(0)	46,020(150)
1969	100,462(1,275)	170,946(1,275)	173,107(1,225)	19,865(1,325)	104,429(475)
1970	90,428(1,225)	172,803(1,225)	149,857(1,225)	17,098(1,250)	126,938(1,000)
1971	79,907(1,200)	157,817(1,225)	156,248(1,225)	6,764(1,225)	150,625(1,150)
1972	96,002(1,250)	160,120(1,250)	137,573(1,175)	40,437(1,350)	218,920(1,150)
1973	109,462(950)	101,871(1,300)	147,106(1,275)	65,446(1,325)	199,512(1,175)
1974	95,954(1,000)	112,629(1,300)	129,587(1,125)	86,992(1,375)	173,952(1,200)
1975	101,664(1,350)	150,673(1,200)	137,645(1,350)	72,374(1,400)	154,660(1,325)
Total	1,286,106	1,629,693	1,553,253	346,800	1,764,659

TABLE 4 - WEST LOCO HILLS UNIT (cont.)

Year	1-Tract 42 990S 1650W Sec. 10, T.18S., R.29E.	1-Tract 11A 330N 2310W Sec. 11, T.18S., R.29E.	2-Tract 11A 990N 990W Sec. 11, T.18S., R.29E.	8-Tract 11A 1980S 660W Sec. 11, T.18S., R.29E.	10-Tract 11A 660S 1980W Sec. 11, T.18S., R.29E.
1963	-	-	-	-	-
1964	-	-	39,900(50)	-	-
1965	-	-	257,030(1,150)	-	47,750(1,225)
1966	111,475(1,325)	-	350,350(1,275)	113,250(1,300)	60,850(1,300)
1967	81,195(1,300)	342,513(1,300)	299,685(1,225)	32,946(1,300)	22,042(1,250)
1968	72,128(1,225)	211,607(1,100)	158,660(1,225)	20,219(1,225)	20,605(1,125)
1969	56,274(1,275)	229,230(1,125)	134,686(1,150)	26,565(1,275)	44,108(1,250)
1970	71,516(1,225)	212,454(1,225)	172,920(1,250)	20,232(1,225)	34,810(1,250)
1971	77,048(1,225)	292,423(1,175)	162,425(1,250)	17,258(1,200)	40,876(1,250)
1972	73,151(1,250)	282,829(1,250)	120,789(1,250)	74,350(1,275)	20,394(1,225)
1973	94,786(1,250)	201,487(1,250)	101,923(1,250)	101,574(1,250)	14,898(-)
1974	126,261(1,300)	181,462(1,200)	126,824(1,175)	84,725(1,150)	31,382(1,200)
1975	104,426(1,250)	186,987(1,150)	110,456(1,200)	94,432(1,350)	17,639(1,225)
Total	868,260	2,140,992	2,035,648	585,551	355,354

Year	11-Tract 11A 2310N 1650W Sec. 11, T.18S., R.29E.	2-Tract 30 660S 660E Sec. 11, T.18S., R.29E.	6-Tract 32A 2310S 2310E Sec. 11, T.18S., R.29E.	2-Tract 35 1650N 990E Sec. 11, T.18S., R.29E.	2-Tract 37 330N 990E Sec. 11, T.18S., R.29E.
1963	-	-	-	-	-
1964	-	9,500(1,225)	21,400(1,450)	-	-
1965	-	310,550(1,200)	179,825(1,200)	-	438,787(1,250)
1966	165,850(1,250)	182,475(1,200)	184,350(1,300)	-	103,350(1,350)
1967	149,761(1,275)	182,688(1,200)	116,530(1,250)	15,781(1,250)	17,954(1,300)
1968	157,970(0)	100,025(1,150)	101,627(1,200)	29,569(2,500)	40,781(1,200)
1969	160,037(1,175)	55,346(1,225)	146,048(1,200)	49,922(1,225)	39,724(1,275)
1970	220,892(1,225)	57,113(1,250)	188,184(1,225)	43,838(1,250)	72,664(1,350)
1971	84,852(1,200)	124,709(1,250)	258,309(1,250)	34,918(1,250)	80,945(1,250)
1972	67,892(1,200)	138,540(1,175)	250,659(1,175)	17,489(1,175)	66,198(1,300)
1973	165,853(1,050)	89,158(1,300)	198,823(825)	93,760(1,250)	60,099(1,300)
1974	159,051(1,020)	67,200(1,200)	34,654(1,225)	103,408(1,225)	72,366(1,225)
1975	176,467(1,000)	132,859(1,275)	52,773(1,275)	67,301(1,150)	72,816(1,250)
Total	1,508,625	1,450,163	1,733,182	455,986	1,065,684

TABLE 4 - WEST LOCO HILLS UNIT (cont.)

Year	2-Tract 3 330N 330W Sec. 12, T.18S., R.29E.	1-Tract 4A 2310S 2310W Sec. 12, T.18S., R.29E.	2-Tract 4A 990S 2310W Sec. 12, T.18S., R.29E.	1-Tract 6 1980S 660E Sec. 12, T.18S., R.29E.	3-Tract 6 660S 1980E Sec. 12, T.18S., R.29E.
1963	117,380(1,150)	-	-	-	-
1964	442,431(1,350)	201,800(1,375)	-	413,671(1,400)	68,850(1,325)
1965	160,250(1,250)	428,286(1,200)	-	238,375(1,250)	175,175(1,250)
1966	50,175(1,350)	313,994(1,300)	32,875(1,300)	177,075(1,325)	43,275(0)
1967	46,037(1,300)	279,884(1,275)	69,131(1,300)	86,748(1,300)	110,442(1,275)
1968	71,530(1,200)	275,433(975)	89,902(1,225)	112,802(1,250)	257,650(1,125)
1969	79,401(1,300)	229,935(1,250)	77,670(1,325)	93,559(1,350)	340,143(1,250)
1970	56,900(1,325)	249,267(1,300)	105,454(1,350)	77,332(1,350)	320,717(1,275)
1971	34,014(1,300)	208,104(1,300)	79,756(1,350)	60,950(1,325)	274,859(1,275)
1972	49,482(1,300)	164,038(1,300)	81,562(1,300)	65,872(1,250)	258,626(1,225)
1973	74,055(1,300)	108,731(1,000)	99,596(1,275)	66,989(1,300)	239,118(1,125)
1974	74,749(1,175)	30,741(-)	91,064(1,275)	74,020(1,225)	242,589(1,250)
1975	74,103(1,350)	7,814(1,325)	85,390(1,325)	71,849(1,325)	270,250(1,300)
Total	1,330,502	2,498,027	812,400	1,539,242	2,601,694

Year	1-Tract 13A 330N 330E Sec. 12, T.18S., R.29E.	2-Tract 13A 330N 2310E Sec. 12, T.18S., R.29E.	5-Tract 13A 1650N 1670E Sec. 12, T.18S., R.29E.	9-Tract 13B 1980N 660W Sec. 12, T.18S., R.29E.	1-Tract 7A 660N 660E Sec. 13, T.18S., R.29E.
1963	205,225(1,150)	179,414(1,250)	124,131(1,150)	-	-
1964	527,818(1,350)	357,752(1,350)	338,974(1,300)	96,500(1,275)	103,550(1,250)
1965	505,045(1,075)	273,033(1,250)	122,535(1,250)	160,450(1,225)	106,626(1,000)
1966	363,875(1,150)	174,800(1,225)	89,500(1,200)	120,575(1,325)	188,452(1,300)
1967	373,933(1,200)	176,596(1,250)	54,367(1,350)	76,940(1,300)	118,009(1,275)
1968	401,662(1,100)	392,804(1,150)	82,483(1,275)	31,467(1,225)	123,986(1,250)
1969	378,160(1,150)	383,775(1,250)	63,097(1,400)	38,309(1,300)	224,642(1,225)
1970	336,532(1,175)	328,140(1,260)	57,743(1,375)	37,374(1,325)	243,824(1,250)
1971	291,063(1,225)	359,718(1,300)	41,467(1,400)	106,599(1,300)	260,055(1,250)
1972	273,335(1,200)	309,204(1,300)	173,575(1,200)	157,287(1,275)	211,006(1,300)
1973	243,624(1,025)	243,569(1,300)	195,492(1,175)	152,494(1,300)	211,521(1,250)
1974	213,819(1,225)	174,293(1,275)	150,025(1,150)	62,629(1,275)	200,278(1,225)
1975	326,267(1,275)	195,616(1,325)	189,337(1,200)	59,346(1,350)	202,446(1,275)
Total	4,440,058	3,548,714	1,682,726	1,099,970	2,194,395

TABLE 4 - WEST LOCO HILLS UNIT (cont.)

Year	4-Tract 8B 330N 990W Sec. 15, T.18S., R.29E.	6-Tract 8B 1310N 10W Sec. 15, T.18S., R.29E.	5-Tract 8D 990N 2310E Sec. 15, T.18S., R.29E.	3-Tract 2B 330N 2310E Sec. 18, T.18S., R.30E.	5-Tract 21B 1980N 1980W Sec. 18, T.18S., R.30E.
1963	-	-	-	-	-
1964	-	-	-	-	1,000(1,325)
1965	72,450(1,125)	-	316,000(1,200)	-	1,975(1,000)
1966	257,100(1,225)	-	257,200(1,275)	-	4,700(1,200)
1967	192,587(1,100)	-	205,345(1,300)	87,650(1,100)	8,375(1,225)
1968	107,701(1,075)	-	145,229(1,225)	138,498(1,050)	32,408(950)
1969	139,679(1,250)	36,169(1,275)	163,075(1,275)	162,911(1,300)	61,089(1,325)
1970	136,993(1,225)	82,207(1,225)	115,553(1,225)	159,876(1,200)	80,348(1,300)
1971	114,428(1,225)	78,743(1,200)	102,448(1,225)	184,256(1,125)	117,948(975)
1972	96,388(1,225)	63,600(1,250)	108,118(1,250)	123,487(825)	127,264(-)
1973	123,302(1,250)	100,327(1,225)	135,436(1,275)	116,647(1,075)	-
1974	124,408(1,000)	13,504(400)	95,194(1,250)	132,434(975)	467(150)
1975	122,603(-)	13,749(300)	111,305(1,200)	111,119(950)	9,024(150)
Total	1,487,639	388,299	1,754,903	1,216,698	1,316,509

Year	6-Tract 21B 1650N 924W Sec. 18, T.18S., R.30E.	2-Tract 24 330S 990W Sec. 36, T.17S., R.29E.	Water Injected bbls (totals)	Cumulative bbls (totals)
1963	-	123,685(1,225)	1,822,620	1,822,620
1964	82,500(1,075)	284,047(1,375)	8,852,458	10,675,078
1965	164,675(975)	113,750(1,225)	9,316,344	19,991,422
1966	204,575(1,225)	139,360(1,225)	10,260,380	30,251,802
1967	230,168(1,250)	85,811(1,225)	8,378,909	38,630,711
1968	239,121(1,100)	100,020(1,175)	7,777,163	46,407,874
1969	159,434(1,150)	98,841(1,250)	8,410,383	54,818,257
1970	353,060(1,225)	194,717(1,275)	8,877,842	63,696,099
1971	188,332(1,250)	74,374(1,275)	8,795,993	72,492,092
1972	235,540(1,225)	63,861(1,225)	8,868,286	81,360,378
1973	230,347(1,250)	74,207(1,175)	8,370,420	89,730,798
1974	211,617(1,250)	71,529(1,000)	7,617,585	97,348,383
1975	210,358(1,300)	72,841(1,175)	7,863,935	105,212,318
Total	2,350,293	1,398,202		

TABLE 5 - WATER INJECTION: FAR WEST LOCO HILLS UNIT
Operator: Anadarko
( ) Aver. Inj. Pressure

Year	29-Tract 7 2460N 180E Sec. 4, T.18S., R.29E.	4-Tract 8 2310S 2310E Sec. 4, T.18S., R.29E.	27-Tract 8 10S 2630E Sec. 4, T.18S., R.29E.	31-Tract 8 2310S 1980W Sec. 4, T.18S., R.29E.	10-Tract 9 330N 2310W Sec. 9, T.18S., R.29E.
1969	55,599(1,020)	-	128,696(520)	-	-
1970	119,712(1,150)	-	108,396(-)	15,034(-)	-
1971	116,103(1,260)	-	40,415(1,200)	-	-
1972	122,758(1,360)	-	33,603(1,250)	-	-
1973	120,534(1,210)	250,952(1,170)	83,836(1,100)	-	-
1974	106,500(1,320)	216,707(1,310)	114,723(1,260)	-	-
1975	138,268(1,350)	112,946(1,280)	82,255(-)	-	33,039(1,370)
Total	779,474	580,605	591,924	15,034	33,039

Year	12-Tract 9 1650N 330W Sec. 9, T.18S., R.29E.	14-Tract 9 2310N 2310W Sec. 9, T.18S., R.29E.	15-Tract 10 1650S 2310W Sec. 9, T.18S., R.29E.	16-Tract 10 1980S 660W Sec. 9, T.18S., R.29E.	28-Tract 2 330N 1980E Sec. 16, T.18S., R.29E.
1969	-	-	129,928(512)	-	136,065(1,040)
1970	62,026(1,100)	-	205,495(1,040)	90,088(1,060)	207,508(970)
1971	25,996(-)	-	267,421(1,020)	24,934(-)	262,784(840)
1972	-	-	297,458(1,200)	-	304,537(1,360)
1973	-	-	304,436(1,370)	-	277,505(1,420)
1974	-	-	276,588(1,420)	-	169,942(1,460)
1975	-	10,351(1,480)	278,568(1,440)	22,574(1,280)	222,892(1,490)
Total	88,022	10,351	1,759,894	137,516	1,581,233

Year	24-Tract 4 1650N 2310W Sec. 16, T.18S., R.29E.	22-Tract 5 660N 660W Sec. 16, T.18S., R.29E.	Water Injected bbls (totals)	Cumulative bbls (totals)
1969	-	-	450,288	450,288
1970	95,664(900)	91,990(930)	995,833	1,446,121
1971	227,642(1,010)	208,463(1,160)	1,173,758	2,619,879
1972	275,826(1,380)	211,204(1,420)	1,243,386	3,865,265
1973	257,256(1,420)	177,826(1,480)	1,472,345	5,337,610
1974	251,074(1,420)	142,804(1,460)	1,278,338	6,615,948
1975	260,565(1,470)	206,588(1,490)	1,368,046	7,983,994
Total	1,368,027	1,038,875		

TABLE 6 - RESERVE ESTIMATES: LOCO HILLS SAND (Total Pore Volume)

Main Producing Area

Location	Øh Range (ft.)	Area (Acres)	Acre feet	Original Oil	S.T.B.	Primary	% of S.T.B.	Secondary	% of S.T.B.	Total	% of S.T.B.	Remaining
Sec. 1, T.18S., R.29E.	2.5-7.0	640	3,240	17,650,302	13,854,240	1,988,241	14	3,817,892	28	5,806,133	42	8,048,107
Sec. 2, T.18S., R.29E.	0.5-4.5	560	1,876	10,220,448	8,021,776	1,367,325	17	1,738,040	22	3,105,365	39	4,916,411
Sec. 3, T.18S., R.29E.	0 -4.5	520	1,279	6,967,511	5,469,004	853,706	16	968,054	18	1,821,760	34	3,647,244
Sec. 4, T.18S., R.29E.	0 -3.5	360	524	2,854,555	2,240,624	352,822	16	290,314	13	643,136	29	1,597,488
Sec. 9, T.18S., R.29E.	0 -5.5	600	1,841	10,029,076	7,872,116	1,092,458	14	1,967,550	25	3,060,008	39	4,812,108
Sec. 10, T.18S., R.29E.	2.5-4.5	640	2,068	11,265,686	8,842,768	1,266,536	14	2,066,529	23	3,333,065	37	5,509,703
Sec. 11, T.18S., R.29E.	2.5-7.5	360	1,856	10,110,790	7,936,256	845,067	11	757,067	10	1,602,134	21	6,334,122
Sec. 12, T.18S., R.29E.	1.5-5.5	440	1,476	8,040,693	6,311,376	997,265	16	1,261,622	20	2,258,887	36	4,052,489
Sec. 13, T.18S., R.29E.	1.5-2.5	40	68	370,438	290,768	41,893	14	-	-	41,893	14	248,875
Sec. 15, T.18S., R.29E.	0.5-2.5	160	264	1,438,173	1,128,864	122,268	11	132,033	12	254,301	23	874,563
Sec. 16, T.18S., R.29E.	0.5-2.5	320	356	1,939,354	1,522,256	111,190	7	326,082	21	437,272	28	1,084,984
Sec. 5, T.18S., R.30E.	2.5-3.5	112	336	1,830,402	1,436,736	249,876	17	1,459	1	251,335	18	1,185,401
Sec. 6, T.18S., R.30E.	3.5-6.5	440	2,304	12,551,326	9,851,904	1,564,927	16	2,385,817	24	3,950,744	40	5,901,160
Sec. 7, T.18S., R.30E.	2.5-4.5	400	1,440	7,844,579	6,157,440	1,172,580	19	1,527,195	25	2,699,775	44	3,457,665
Sec. 18, T.18S., R.30E.	1.5-3.5	160	400	2,179,050	1,710,400	242,412	14	223,551	13	465,963	27	1,244,437
Sec. 36, T.17S., R.29E.	0 -5.5	280	625	3,404,765	2,672,500	609,149	23	808,958	30	1,418,107	53	1,254,393
Sec. 31, T.17S., R.30E.	0.5-5.5	480	1,725	9,397,151	7,376,100	1,282,676	17	1,833,840	25	3,116,516	42	4,259,584
Sec. 32, T.17S., R.30E.	0 -5.5	456	1,347	7,337,950	5,759,772	818,458	14	758,041	13	1,576,499	27	4,183,273
	Totals	6,968	23,025	125,432,249	98,454,900	14,978,849	15%	20,864,044	21%	35,842,893	36%	62,612,007

TABLE 7 - RESERVE ESTIMATES: LOCO HILLS SAND (Average Porosity and Net Pay)

Main Producing Area

Location	Area (Acres)	Aver. Thickness (ft.)	Aver. Porosity (%)	Original Oil	S.T.B.	Primary	% of S.T.B.	Secondary	% of S.T.B.	Total	% of S.T.B.	Remaining
Sec. 1, T.18S., R.29E.	632	30	18	18,533,552	14,547,529	1,988,241	14	3,817,892	26	5,806,133	40	8,741,396
Sec. 2, T.18S., R.29E.	496	22	18	10,666,567	8,372,502	1,367,325	16	1,738,040	21	3,105,365	37	5,267,137
Sec. 3, T.18S., R.29E.	464	16	17	6,853,852	5,379,790	853,706	16	968,054	18	1,821,760	34	3,558,029
Sec. 4, T.18S., R.29E.	408	8	12	2,127,057	1,669,590	352,822	21	290,314	17	643,136	38	1,026,454
Sec. 9, T.18S., R.29E.	584	14	21	9,324,123	7,318,778	1,092,458	15	1,967,550	27	3,060,008	42	4,258,770
Sec. 10, T.18S., R.29E.	592	14	19	8,551,674	6,712,460	1,266,536	19	2,066,529	31	3,333,065	50	3,379,395
Sec. 11, T.18S., R.29E.	544	26	14	10,753,457	8,440,704	845,067	10	757,067	9	1,602,134	19	6,838,570
Sec. 12, T.18S., R.29E.	584	22	15	10,465,852	8,214,955	997,265	12	1,261,622	15	2,258,887	27	5,956,068
Sec. 13, T.18S., R.29E.	48	15	11	430,104	337,601	41,893	12	-	-	41,893	12	295,708
Sec. 15, T.18S., R.29E.	96	11	15	860,207	675,202	122,268	18	132,033	20	254,301	38	420,901
Sec. 16, T.18S., R.29E.	208	7	13	1,027,934	806,832	111,190	14	326,082	40	437,272	54	369,560
Sec. 5, T.18S., R.30E.	96	29	13	1,965,443	1,542,734	249,876	16	1,459	<1	251,335	16	1,291,399
Sec. 6, T.18S., R.30E.	464	32	16	12,901,368	10,126,662	1,564,927	15	2,385,817	23	3,950,744	38	6,175,918
Sec. 7, T.18S., R.30E.	352	20	13	4,970,085	3,901,166	1,172,580	30	1,527,195	39	2,699,775	69	1,201,391
Sec. 18, T.18S., R.30E.	136	20	11	1,624,836	1,275,381	242,412	19	223,551	18	465,963	37	809,418
Sec. 36, T.17S., R.29E.	224	18	14	3,065,465	2,406,174	609,149	25	808,958	34	1,418,107	59	988,067
Sec. 31, T.17S., R.30E.	512	14	13	5,060,450	3,972,096	1,282,676	32	1,833,840	46	3,116,516	78	855,580
Sec. 32, T.17S., R.30E.	256	14	14	2,724,858	2,138,021	818,458	38	758,041	35	1,576,499	73	562,322
Totals	6,696	18 ft.	15%	111,906,884	87,838,177	14,978,849	17%	20,864,044	24%	35,842,893	41%	51,996,083

TABLE 8 - RESERVE ESTIMATES: LOCO HILLS SAND (Total Pore Volume)

Miscellaneous Producing Areas

Location	Øh Range (ft.)	Area (Acres)	Acre Feet	Original Oil	S.T.B.	Primary	% of S.T.B.	Remaining
Sec. 19, T.18S., R.29E.	1.5-2.5	40	92	501,181	393,392	12,784	3	380,608
Sec. 20, T.18S., R.29E.	0.5-2.5	200	228	1,242,058	974,928	116,618	12	858,310
Sec. 23, T.18S., R.29E.	3.5-4.5	40	172	936,991	735,472	1,317	<1	734,155
Sec. 29, T.18S., R.29E.	1.5-2.5	80	184	1,002,363	786,784	24,904	3	761,880
Sec. 30, T.18S., R.29E.	1.5-2.5	80	184	1,002,363	786,784	28,943	4	757,841
Sec. 8, T.18S., R.30E.	4.5-5.5	32	154	871,620	684,160	6,183	1	677,977
Sec. 17, T.18S., R.30E.	4.5-5.5	40	212	1,154,896	906,512	35,778	4	870,734
	Totals	512	1,226	6,711,472	5,268,032	226,527	4%	5,041,505

TABLE 9 - RESERVE ESTIMATES: LOCO HILLS SAND (Average porosity and net pay)

Miscellaneous Producing Areas

Location	Area (Acres)	Aver. Thickness (ft.)	Aver. Porosity (%)	Original Oil	S.T.B.	Primary	% of S.T.B.	Remaining
Sec. 19, T.18S., R.29E.	32	20	14	486,582	381,932	12,784	3	369,148
Sec. 20, T.18S., R.29E.	176	12	10	1,147,027	900,335	116,618	13	783,717
Sec. 23, T.18S., R.29E.	24	21	20	547,404	429,673	1,317	<1	428,356
Sec. 29, T.18S., R.29E.	80	21	10	912,340	716,123	24,904	3	691,219
Sec. 30, T.18S., R.29E.	48	18	13	610,010	478,815	28,943	6	449,872
Sec. 8, T.18S., R.30E.	24	48	13	816,117	640,594	6,183	1	634,411
Sec. 17, T.18S., R.30E.	24	45	8	469,204	368,292	35,778	10	332,515
Totals	408	26 ft.	13%	4,988,684	3,915,764	226,527	6%	3,689,237

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED

Barrels of Oil

Year	Anadarko 1 Ambassador 330S 330E Sec. 29, T.17S., R.30E.	General American 12 Beeson 990S 1650W Sec. 31, T.17S., R.30E.	Newmont 3 Tallmadge 990N 2310E Sec. 32, T.17S., R.30E.	Collier 1 State 990N 330W Sec. 32, T.17S., R.30E.	McKee 1 State 660N 660W Sec. 32, T.17S., R.30E.
1939	-	-	-	-	-
1940	-	-	12,643	-	-
1941	-	-	16,017	-	-
1942	-	-	10,156	-	-
1943	-	-	10,156	-	3,987
1944	-	-	8,313	-	7,480
1945	-	-	5,533	-	5,627
1946	-	-	3,389	-	4,596
1947	-	-	3,532	-	4,071
1948	-	*	1,849	-	2,468
1949	-	*	870	-	1,357
1950	-	*	612	-	946
1951	-	*	490	-	1,599
1952	-	*	337	-	334
1953	-	*	219	-	-
1954	-	*	105	-	1,512
1955	-	*	57	-	1,200
1956	-	*	71	-	3,854
1957	-	*	64	-	2,584
1958	-	*	325	-	1,891
1959	757	*	1,093	-	1,133
1960	537	*	1,073	-	1,300
1961	453	S 425 S	889	-	821
1962	367	57,609	S 581 S	-	-
1963	413	138,303	1,526	-	S 4,718 S
1964	352	76,337	8,799	-	3,227
1965	347	23,349	5,945	S 113 S	-
1966	313	12,229	4,893	1,245	-
1967	288	5,972	4,626	2,415	-
1968	282	4,889	4,069	2,369	-
1969	271	1,746	3,036	1,402	7,945
1970	220	250	2,597	1,160	-
1971	271	-	2,203	1,169	-
1972	248	-	2,320	1,069	-
1973	233	-	2,485	440	-
1974	233	-	2,613	289	-
1975	234	-	2,714	202	-
Primary	5,819	-	78,374	-	46,760
Secondary	-	321,109	47,826	11,873	15,890
Total	5,819	321,109	126,200	11,873	62,650

* Oil production combined with another well

LH Recompleted to Loco Hills sand

S ———— S Secondary oil recovery

\# Commingled Loco Hills plus other pay zone(s)

** Producing from other zone(s)

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Yates 4 Brainard 990N 330E Sec. 3, T.18S., R.29E.	Anadarko 4 FWLH 2310S 2310E Sec. 4, T.18S., R.29E.	Brookover 1 Watson 2310S 1650W Sec. 4, T.18S., R.29E.	Anadarko 6 FWLH 660S 1980E Sec. 4, T.18S., R.29E.	Anadarko 2 Ballard 660N 660W Sec. 5, T.18S., R.29E.
1939	-	-	4,735	-	-
1940	6,053	-	19,637	-	-
1941	14,197	-	12,114	-	-
1942	4,315	-	5,093	-	-
1943	1,725	-	3,126	-	-
1944	591	-	2,609	-	3,158
1945	694	-	1,681	-	2,161
1946	567	-	1,166	-	2,753
1947	-	-	932	-	2,163
1948	-	-	798	-	2,138
1949	-	-	748	-	1,803
1950	-	-	872	-	1,510
1951	-	-	154	-	1,538
1952	-	-	-	-	1,511
1953	-	-	-	-	1,366
1954	-	-	-	-	1,266
1955	-	-	-	-	1,097
1956	-	-	-	-	1,012
1957	-	-	-	-	1,095
1958	-	-	-	-	1,061
1959	-	4,578	-	1,439	855
1960	-	2,506	-	2,500	159
1961	-	1,624	-	1,631	853
1962	-	1,108	-	1,114	817
1963	-	1,198	-	1,202	1,798
1964	-	1,181	-	1,086	2,594
1965	-	1,331	-	507	2,116
1966	-	1,242	-	769	2,734
1967	-	876	-	717	1,784
1968	-	S 139 S	-	S 490 S	814
1969	-	718	-	6,347	2,241
1970	-	1,199	-	21,733	713
1971	-	890	-	2,296	-
1972	-	720	-	2,913	-
1973	-	-	-	1,733	-
1974	-	-	-	1,089	-
1975	-	-	-	962	S - S 2,760
Primary	28,142	15,783	53,665	11,455	43,110
Secondary	-	3,527	-	37,073	2,760
Total	28,142	19,310	53,665	48,528	45,870

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Anadarko 3 Ballard 990N 2310W Sec. 5, T.18S., R.29E.	Anadarko 1 Ballard 1980N 1980E Sec. 5, T.18S., R.29E.	Anadarko 3-25 Ballard 1980S 198E Sec. 5, T.18S., R.29E.	Anadarko 12 FWLH 1650N 330W Sec. 9, T.18S., R.29E.	Newmont 1 WLH 330N 330E Sec. 15, T.18S., R.29E.
1939	-	**	**	-	-
1940	1,618	**	**	-	1,945
1941	3,217	**	**	-	1,440
1942	2,230	**	**	-	867
1943	1,639	**	-	-	1,066
1944	1,482	**	-	-	629
1945	1,245	**	-	-	299
1946	1,194	**	-	-	-
1947	1,288	**	-	-	-
1948	1,039	**	-	-	-
1949	830	**	-	-	-
1950	894	**	-	-	-
1951	854	**	-	-	-
1952	802	**	-	-	-
1953	594	**	-	-	-
1954	541	**	-	-	-
1955	461	**	-	-	-
1956	442	**	-	-	-
1957	501	**	-	1,696	-
1958	543	**	-	839	-
1959	562	**	-	584	-
1960	1,340	**	-	390	-
1961	840	**	-	609	-
1962	586	**	-	366	-
1963	6,509	**	-	285	-
1964	4,594	4,994	2,732	297	-
1965	3,096	2,444	1,214	250	-
1966	2,271	1,388	732	231	LH
1967	1,232	1,863	801	2	LH
1968	1,208	1,660	635	-	LH
1969	1,158	1,087	502	-	LH
1970	1,209	1,130	672	I	LH
1971	1,359	1,104	317	I	LH
1972	1,747	955	346	-	LH
1973	S 1,902 S	630	406	-	LH
1974	3,210	S 730 S	33	S - S	LH
1975	4,617	3,220	-	101	LH
Primary	51,018	17,985	8,390	5,549	6,246
Secondary	7,827	3,220	-	101	-
Total	58,845	21,205	8,390	5,650	6,246

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Donnell 1 State 330N 1650E Sec. 16, T.18S., R.29E.	Anadarko 22 FWLH 660N 660W Sec. 16, T.18S., R.29E.	Texas Trading 1 State 1650N 2310E Sec. 16, T.18S., R.29E.	Anadarko 24 FWLH 1650N 2310W Sec. 16, T.18S., R.29E.	Hardendorf 1 Yates 990N 1980E Sec. 19, T.18S., R.29E.
1939	-	2,891	-	-	-
1940	18,450	14,688	5,223	7,542	-
1941	12,998	7,399	5,652	3,541	-
1942	5,449	4,467	3,688	2,580	-
1943	3,915	3,823	2,538	2,067	-
1944	2,516	2,887	1,706	1,564	-
1945	2,035	2,515	1,324	1,289	-
1946	1,675	2,244	1,136	973	-
1947	1,376	1,965	772	869	-
1948	1,026	1,635	385	1,121	-
1949	881	1,476	148	965	-
1950	447	1,226	182	789	-
1951	258	926	-	663	-
1952	436	1,331	-	754	-
1953	179	1,030	-	634	-
1954	3	476	-	596	-
1955	-	1,014	-	489	-
1956	-	833	-	527	-
1957	-	823	-	527	-
1958	-	768	-	464	-
1959	-	726	-	474	-
1960	-	652	-	499	-
1961	-	647	-	393	-
1962	-	-	-	495	-
1963	-	-	-	468	44
1964	-	-	-	387	2,453
1965	-	510	-	398	474
1966	-	487	-	398	443
1967	-	429	-	339	203
1968	-	493	-	345	-
1969	-	420	-	316	-
1970	-	1,691	-	48	-
1971	-	-	-	-	-
1972	-	-	-	-	-
1973	-	-	-	-	-
1974	-	-	-	-	-
1975	-	-	-	-	-
Primary	51,644	60,472	22,754	32,514	3,617
Secondary	-	-	-	-	-
Total	51,644	60,472	22,754	32,514	3,617

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Anadarko 1 McCaw 990N 2040W Sec. 19, T.18S., R.29E.	Anadarko 16 Travis 2310N 1650W Sec. 19, T.18S., R.29E.	Anadarko 15 Travis 2310N 660E Sec. 19, T.18S., R.29E.	Anadarko 13 Travis 1980S 660E Sec. 19, T.18S., R.29E.	Anadarko 14 Travis 1980S 1980E Sec. 19, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	-	-	-	-
1951	-	-	-	-	-
1952	-	-	-	-	-
1953	-	-	-	-	-
1954	-	-	-	-	-
1955	-	-	-	-	-
1956	-	-	-	-	-
1957	-	-	-	-	-
1958	-	-	-	-	-
1959	-	-	-	-	-
1960	-	-	-	-	-
1961	-	-	-	-	-
1962	-	4,576	6,007	7,024	6,661
1963	2,695	4,018	4,419	4,025	4,019
1964	3,026	2,274	2,280	2,281	2,280
1965	1,322	1,374	1,373	1,378	1,376
1966	1,166	842	841	839	840
1967	998	923	923	923	921
1968	931	759	734	811	739
1969	709	574	540	812	544
1970	491	413	405	839	428
1971	480	419	346	614	423
1972	447	188	398	518	121
1973	408	-	300	343	45
1974	385	355	319	508	608
1975	376	280	273	340	421
Primary	13,434	16,995	19,158	21,255	19,426
Secondary	-	-	-	-	-
Total	13,434	16,995	19,158	21,255	19,426

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Anadarko 1 Alscott 1980S 1980W Sec. 19, T.18S., R.29E.	Simms 1 Pure 1650S 715W Sec. 19, T.18S., R.29E.	Anadarko 2 Alscott 660S 2310W Sec. 19, T.18S., R.29E.	Yates 2 Travis 660S 1970E Sec. 19, T.18S., R.29E.	Yates 1 Travis 660S 660E Sec. 19, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	-	-	-	-
1951	-	-	-	-	-
1952	-	-	-	-	-
1953	-	-	-	-	-
1954	-	-	-	-	-
1955	-	-	-	-	-
1956	-	-	-	-	-
1957	-	-	-	-	-
1958	-	-	-	-	-
1959	-	-	-	-	-
1960	-	-	-	-	-
1961	-	-	-	-	-
1962	-	111	4,100	9,775	12,130
1963	2,627	517	2,622	8,956	8,951
1964	1,673	-	1,673	4,824	4,817
1965	923	-	923	3,189	3,183
1966	-	277	2,688	2,681	463
1967	20	-	1,145	2,182	2,175
1968	198	-	1,560	2,352	2,349
1969	1,163	-	1,043	2,001	1,920
1970	361	-	429	1,522	1,515
1971	172	-	353	1,208	1,204
1972	233	-	173	1,105	1,102
1973	290	-	254	939	931
1974	362	-	748	893	887
1975	99	-	586	746	738
Primary	8,398	628	15,886	42,380	44,583
Secondary	-	-	-	-	-
Total	8,398	628	15,886	42,380	44,583

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Denton 1 Massie 330N 2310E Sec. 20, T.18S., R.29E.	Depco 6 Wright 2310N 660W Sec. 20, T.18S., R.29E.	Depco 4 Wright 1980S 1980W Sec. 20, T.18S., R.29E.	Depco 3 Wright 1980S 660W Sec. 20, T.18S., R.29E.	Anadarko 4 Alscott 660N 1980W Sec. 30, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	-	-	-	-
1951	-	-	-	-	-
1952	-	-	-	-	-
1953	-	-	-	-	-
1954	-	-	-	-	-
1955	1,835	-	-	-	-
1956	1,195	-	-	-	-
1957	877	-	-	-	-
1958	795	-	-	-	-
1959	578	-	-	-	-
1960	494	-	-	-	-
1961	508	-	-	-	-
1962	497	-	9,797	10,568	3,600
1963	768	11,325	11,324	11,324	2,621
1964	605	4,819	6,711	6,712	1,668
1965	526	4,140	4,296	4,296	924
1966	463	2,310	2,536	3,681	283
1967	493	1,201	1,291	3,710	-
1968	417	953	1,141	2,832	21
1969	459	751	964	2,752	-
1970	488	627	626	2,515	409
1971	488	553	550	1,920	313
1972	422	616	617	1,469	30
1973	403	556	553	1,387	137
1974	370	439	439	1,093	203
1975	366	452	451	1,129	-
Primary	13,047	28,742	41,296	55,388	10,209
Secondary	-	-	-	-	-
Total	13,047	28,742	41,296	55,388	10,209

TABLE 10 - WELL PRODUCTION DATA: LOCO HILLS SAND COMMINGLED (cont.)

Year	Anadarko 1 Garrett 660N 660W Sec. 30, T.18S., R.29E.	FAF 1 Masteller 660N 660E Sec. 18, T.18S., R.30E.	Primary Oil (totals) Yearly	Primary Oil (totals) Cumulative	Secondary Oil (totals) Yearly	Secondary Oil (totals) Cumulative
1939	-	-	7,626	7,626	-	-
1940	-	-	87,799	95,425	-	-
1941	-	-	76,575	172,000	-	-
1942	-	-	38,845	210,845	-	-
1943	-	-	34,042	244,887	-	-
1944	-	-	32,935	277,822	-	-
1945	-	3,316	27,719	305,541	-	-
1946	-	1,361	21,054	326,595	-	-
1947	-	500	17,468	344,063	-	-
1948	-	231	12,690	356,753	-	-
1949	-	-	9,078	365,831	-	-
1950	-	-	7,478	373,309	-	-
1951	-	-	6,482	379,791	-	-
1952	-	-	5,505	385,296	-	-
1953	-	-	4,022	389,318	-	-
1954	-	-	4,499	393,817	-	-
1955	-	-	6,153	399,970	-	-
1956	-	-	7,934	407,904	-	-
1957	-	-	8,167	416,071	-	-
1958	-	-	6,677	422,748	-	-
1959	-	-	12,779	435,527	-	-
1960	-	-	11,450	446,977	-	-
1961	-	-	9,268	456,245	425	425
1962	-	-	80,280	536,525	57,609	58,034
1963	543	-	92,671	629,196	144,547	202,581
1964	402	-	66,715	695,911	88,363	290,944
1965	338	-	42,248	738,159	29,407	320,351
1966	276	-	31,008	769,167	18,367	338,718
1967	231	-	25,670	794,837	13,013	351,731
1968	249	-	22,112	816,949	11,327	363,058
1969	220	-	20,447	837,396	21,194	384,252
1970	134	-	16,885	854,281	26,939	411,191
1971	120	-	12,214	866,495	6,558	417,749
1972	100	-	10,835	877,330	7,022	424,771
1973	131	-	9,848	887,178	4,658	429,429
1974	107	-	8,712	895,890	7,201	436,630
1975	42	-	6,533	902,423	14,576	451,206
Primary	2,893	5,408				
Secondary	-	-				
Total	2,893	5,408				

Total Oil Produced - 1,353,629 bbls

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND
Barrels of Oil

Year	General Amer. 2 Green 1970S 250W Sec. 31, T.17S., R.29E.	Kersey 1 Leonard 990S 990W Sec. 33, T.17S., R.29E.	Kersey 2 Leonard 990S 2310W Sec. 33, T.17S., R.29E.	Yates 1 Robinson 330S 990W Sec. 35, T.17S., R.29E.	F.A.F. 1 State A 330S 1650E Sec. 36, T.17S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	2,063	-
1941	-	-	-	2,204	-
1942	-	-	-	870	-
1943	-	-	-	405	-
1944	-	3,056	1,944	-	-
1945	-	3,857	2,673	-	-
1946	-	3,113	2,669	-	-
1947	-	3,022	2,147	-	-
1948	-	2,652	1,993	-	-
1949	-	2,769	1,474	-	-
1950	-	2,616	1,532	-	-
1951	-	2,642	1,583	189	-
1952	-	2,435	1,392	496	-
1953	-	2,200	1,258	306	-
1954	-	1,810	1,091	360	-
1955	2,546	6,626	2,433	751	-
1956	1,761	4,829	3,726	1,221	-
1957	1,512	3,548	2,709	651	-
1958	1,159	2,972	1,960	476	-
1959	1,037	2,607	1,348	369	-
1960	995	1,486	836	350	-
1961	1,039	941	678	339	-
1962	1,049	699	511	288	-
1963	934	469	443	266	-
1964	874	522	522	233	-
1965	806	432	431	223	-
1966	797	358	357	1,491	-
1967	677	370	347	4,324	-
1968	532	288	288	9,742	1,617
1969	542	740	733	9,912	2,970
1970	483	1,039	1,034	5,725	1,346
1971	500	2,311	2,306	3,074	1,062
1972	322	2,709	2,701	1,829	1,096
1973	-	1,313	1,304	990	907
1974	-	421	416	741	812
1975	-	292	288	469	763
Primary	17,565	65,144	45,127	50,357	10,573
Secondary	-	-	-	-	-
Total	17,565	65,144	45,127	50,357	10,573

* Oil production combined with another well

S ———— S Secondary oil recovery

** Producing from other zone(s)

LH Recompleted to Loco Hills sand

Commingled Loco Hills plus other pay zone(s)

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Wooley 7 Wooley 1650S 990W Sec. 29, T.17S., R.30E.	Gen. Amer. 9 Beeson F 330S 2310W Sec. 29, T.17S., R.30E.	Gen. Amer. 8 Beeson F 330S 1650E Sec. 29, T.17S., R.30E.	Gen. Amer. 10 Beeson F 990N 1650E Sec. 31, T.17S., R.30E.	Anadarko 3 Fed. L 2310N 330W Sec. 31, T.17S., R.30E
1939	-	-	-	-	-
1940	-	-	60	-	-
1941	-	-	5,181	-	-
1942	-	7,758	8,183	-	-
1943	-	4,080	4,589	-	-
1944	-	4,408	4,412	-	-
1945	-	3,934	3,941	-	-
1946	-	3,080	3,507	-	-
1947	-	2,517	3,194	-	-
1948	-	2,257	4,237	-	-
1949	2,246	1,793	2,897	-	*
1950	565	1,652	2,130	-	*
1951	625	1,343	1,649	-	*
1952	-	1,104	1,691	-	*
1953	-	940	1,657	-	*
1954	-	504	2,876	-	*
1955	-	1,461	1,754	-	*
1956	-	859	1,504	-	*
1957	-	935	1,468	-	*
1958	-	468	1,054	-	*
1959	-	463	1,038	-	*
1960	-	70	862	-	*
1961	-	-	926	-	*
1962	-	19	671	-	1,558
1963	-	1,230	711	-	5,817
1964	-	402	564	-	7,497
1965	-	-	633	-	7,542
1966	-	-	2,864	-	3,946
1967	-	-	886	-	1,442
1968	-	-	1,096	-	-
1969	-	-	930	-	1,429
1970	-	-	770	-	693
1971	-	-	802	-	-
1972	-	-	1,828	-	160
1973	-	-	1,042	-	48
1974	-	-	1,058	-	-
1975	-	-	967	-	*
Primary	3,436	41,277	73,632	-	30,132
Secondary	-	-	-	-	-
Total	3,436	41,277	73,632	-	30,132

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Newmont 7 Scheurich 1650N 330W Sec. 32, T.17S., R.30E.	Newmont 8 Scheurich 1650N 1650W Sec. 32, T.17S., R.30E.	Newmont 1 Scheurich A 2310N 330W Sec. 32, T.17S., R.30E.	McKee 6 State 330S 990E Sec. 32, T.17S., R.30E.	Newmont 1 Ballard NH 370N 1750E Sec. 1, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	175	-
1946	-	-	-	1,525	-
1947	-	-	-	1,230	-
1948	-	-	-	880	-
1949	-	-	-	931	-
1950	-	-	-	946	-
1951	-	-	-	1,599	-
1952	9,347	6,831	-	991	-
1953	6,377	4,264	-	508	-
1954	6,740	7,964	-	503	-
1955	6,694	4,594	-	448	-
1956	4,735	2,700	-	765	-
1957	3,067	6,991	-	409	-
1958	*	11,295	-	480	-
1959	*	9,613	-	499	-
1960	*	6,813	-	498	-
1961	*	6,144	-	436	-
1962	LH	5,526	-	444	-
1963	LH	-	-	520	-
1964	LH	-	-	491	-
1965	LH	-	-	456	-
1966	LH	-	-	423	-
1967	LH	-	-	445	-
1968	LH	-	-	459	-
1969	LH	-	-	139	-
1970	LH	-	-	-	8,085
1971	LH	-	-	-	2,560
1972	LH	-	2,418	-	2,030
1973	LH	-	3,030	-	1,825
1974	LH	-	2,081	-	1,398
1975	LH	-	442	-	-
Primary	36,960	72,735	7,971	16,200	15,898
Secondary	-	-	-	-	-
Total	36,960	72,735	7,971	16,200	15,898

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Bassett 5 State B 990N 990W Sec. 2, T.18S., R.29E.	Thompson 3 Miller 2310N 990W Sec. 4, T.18S., R.29E.	Thompson 4 Miller 990N 660E Sec. 5, T.18S., R.29E.	Anadarko 4 Ballard-8 660N 1980E Sec. 5, T.18S., R.29E.	Anadarko 5 Ballard-8 20N 1500E Sec. 5, T.18S., R.29E.
1939	-	5,692	1,336	3,095	-
1940	12,541	4,893	4,892	4,504	-
1941	17,358	1,921	1,922	2,881	-
1942	12,361	1,301	620	2,234	-
1943	10,651	1,550	-	1,642	-
1944	4,474	1,442	-	1,483	-
1945	2,904	1,317	-	1,249	-
1946	2,848	1,345	-	1,198	-
1947	3,283	1,263	-	1,290	-
1948	2,857	61	-	933	-
1949	2,480	-	-	835	-
1950	2,613	-	-	897	-
1951	2,000	-	-	856	-
1952	3,511	-	-	808	-
1953	2,736	-	-	598	-
1954	1,879	-	-	548	-
1955	1,960	-	-	464	-
1956	1,958	-	-	447	-
1957	1,867	-	-	502	-
1958	1,189	-	-	537	-
1959	949	-	-	567	-
1960	689	-	-	400	-
1961	652	-	-	409	-
1962	623	-	-	389	-
1963	598	-	-	6,847	-
1964	560	-	-	4,596	-
1965	1,606	-	-	3,098	-
1966	499	-	-	2,530	-
1967	46	-	-	2,639	-
1968	-	-	-	2,116	-
1969	-	-	-	2,381	-
1970	-	-	-	2,410	-
1971	-	-	-	2,471	-
1972	-	-	-	2,793	-
1973	-	-	-	S 2,390 S	-
1974	-	-	-	5,087	-
1975	-	-	-	8,390	-
Primary	97,692	20,785	8,770	63,037	-
Secondary	-	-	-	13,477	-
Total	97,692	20,785	8,770	76,514	-

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 3 Ballard-13 20N 1200W Sec. 5, T.18S., R.29E.	Anadarko 1 Ballard-13 1980N 660W Sec. 5, T.18S., R.29E.	Anadarko 2 Ballard-9 1980N 1980W Sec. 5, T.18S., R.29E.	Anadarko 1 Ballard-10 1980N 660E Sec. 5, T.18S., R.29E.	Anadarko 2 Ballard-25 1980S 660E Sec. 5, T.18S., R.29E.
1939	-	-	-	9,030	7,462
1940	-	-	12,803	4,893	12,467
1941	-	-	8,147	2,306	4,420
1942	-	-	5,677	1,300	3,431
1943	-	839	5,631	1,545	2,595
1944	-	3,591	4,624	1,434	2,220
1945	-	2,162	3,659	1,312	2,064
1946	-	2,747	3,580	1,344	2,134
1947	-	2,161	3,342	1,265	1,807
1948	-	2,138	3,215	1,575	1,226
1949	-	1,810	2,393	1,290	1,217
1950	1	1,510	991	1,398	1,491
1951	-	1,533	2,116	1,103	1,844
1952	-	1,506	1,139	1,021	1,547
1953	-	1,362	1,204	912	1,368
1954	-	1,263	961	815	1,135
1955	-	1,090	862	723	955
1956	-	1,007	835	651	705
1957	-	850	683	584	367
1958	-	706	616	611	588
1959	-	571	694	562	519
1960	-	92	475	526	300
1961	-	571	354	302	563
1962	-	547	323	180	612
1963	-	4,152	1,961	323	564
1964	-	4,756	1,987	3,521	1,117
1965	-	3,352	1,409	1,998	3,312
1966	-	1,710	931	1,864	2,070
1967	-	1,254	896	1,465	1,370
1968	-	742	784	1,230	1,246
1969	-	863	678	1,312	762
1970	-	876	380	1,179	670
1971	-	1,309	329	1,122	362
1972	-	1,167	331	1,155	633
1973	-	998	401	301	657
1974	-	1,045	S 507	S 918	S 760
1975	-	1,630	4,382 S	10,266 S	1,823 S
Primary	-	51,910	74,918	53,070	66,560
Secondary	-	-	4,382	10,266	1,823
Total	-	51,910	79,300	63,336	68,383

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 3 Ballard-23 1900S 890W Sec. 5, T.18S., R.29E.	Anadarko 1 Ballard 2310S 990W Sec. 5, T.18S., R.29E.	Anadarko 1 Ballard-25 660S 660W Sec. 5, T.18S., R.29E.	Anadarko 2 Ballard-23 990S 2310W Sec. 5, T.18S., R.29E.	Anadarko 2 Ballard-11 990N 990E Sec. 6, T.18S., R.29E.
1939	-	-	11,295	-	-
1940	-	-	12,760	-	8,423
1941	-	-	6,515	-	9,913
1942	-	-	5,278	-	6,488
1943	-	1,689	4,933	-	5,090
1944	-	3,622	4,450	2,982	4,271
1945	-	2,527	4,029	2,530	3,064
1946	-	2,169	4,270	2,175	2,668
1947	-	1,837	3,342	1,837	2,953
1948	-	2,819	3,128	2,824	2,618
1949	-	1,782	3,023	1,787	2,057
1950	-	1,465	2,832	1,464	1,570
1951	-	1,396	2,291	1,400	1,600
1952	-	1,280	2,220	1,289	1,587
1953	-	1,061	2,258	1,065	1,300
1954	-	968	2,101	966	1,207
1955	-	939	1,892	941	1,116
1956	-	879	1,838	883	1,027
1957	-	738	1,794	740	991
1958	-	742	1,762	745	966
1959	-	634	1,662	639	1,015
1960	-	1,037	2,139	1,040	934
1961	-	857	1,572	857	751
1962	-	789	1,306	795	678
1963	-	751	1,277	752	551
1964	-	2,559	1,258	2,561	448
1965	-	2,431	1,435	2,431	420
1966	-	1,301	687	2,081	327
1967	-	798	1,581	2,175	281
1968	-	874	1,923	1,251	207
1969	-	922	1,623	929	158
1970	-	771	1,581	770	213
1971	-	965	1,305	1,019	168
1972	-	693	1,287	695	201
1973	-	53	1,017	582	462
1974	-	-	S 873 S	S 654 S	685
1975	-	-	4,149	938	808
Primary	-	41,348	104,537	42,859	67,216
Secondary	-	-	4,149	938	-
Total	-	41,348	108,686	43,797	67,216

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 3 Ballard-17 660N 1980E Sec. 6, T.18S., R.29E.	Anadarko 1 Ballard-11 2310N 330E Sec. 6, T.18S., R.29E.	Anadarko 2 Ballard-6 2310S 990E Sec. 6, T.18S., R.29E.	Anadarko 17 Ballard 660S 1980W Sec. 6, T.18S., R.29E.	Anadarko 7 Ballard 660S 1980E Sec. 6, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	15,288	1,856	-	-
1941	398	9,668	4,854	-	-
1942	1,548	6,485	3,163	-	-
1943	977	5,085	2,679	-	-
1944	938	4,269	1,935	-	-
1945	962	3,060	1,620	-	-
1946	765	2,661	1,961	-	-
1947	605	2,848	2,222	-	-
1948	754	2,511	2,270	-	-
1949	562	2,052	1,687	-	-
1950	665	1,566	1,263	-	-
1951	573	1,595	752	-	-
1952	631	1,577	1,131	-	1,469
1953	709	1,297	996	-	1,983
1954	515	1,199	984	-	1,481
1955	486	1,112	999	-	1,313
1956	506	1,021	936	-	1,444
1957	420	971	864	-	1,344
1958	396	959	1,755	-	1,239
1959	391	1,007	1,400	-	1,104
1960	372	1,097	966	-	993
1961	390	1,171	723	-	773
1962	340	1,097	1,568	364	763
1963	319	1,179	1,062	6,529	933
1964	399	1,132	381	4,925	894
1965	414	963	638	2,231	1,366
1966	366	1,097	664	1,534	1,266
1967	360	1,058	760	1,267	1,094
1968	340	883	674	861	869
1969	301	766	580	1,292	919
1970	301	725	589	1,174	789
1971	275	757	496	812	700
1972	274	759	494	727	648
1973	263	426	466	576	566
1974	353	748	668	766	687
1975	500	2,839	642	925	823
Primary	18,368	82,928	46,698	23,983	25,460
Secondary	-	-	-	-	-
Total	18,368	82,928	46,698	23,983	25,460

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 1 Ballard 660S 330E Sec. 6, T.18S., R.29E.	Anadarko 1 Ballard-2 660N 660E Sec. 7, T.18S., R.29E.	Anadarko 3 Ballard 660N 1980E Sec. 7, T.18S., R.29E.	Anadarko 5 Ballard-1 660N 1655W Sec. 7, T.18S., R.29E.	Anadarko 6 Ballard 990N 330W Sec. 7, T.18S., R.29E.
1939	2,910	-	-	-	-
1940	5,330	-	-	-	-
1941	2,962	-	-	-	-
1942	2,629	-	-	-	-
1943	1,782	378	-	-	-
1944	2,339	1,905	-	-	-
1945	2,275	1,645	-	-	-
1946	1,600	1,584	-	-	-
1947	1,251	1,474	-	-	-
1948	3,342	1,357	-	-	-
1949	5,266	1,113	-	-	-
1950	4,153	1,193	-	-	-
1951	3,220	1,065	-	-	-
1952	2,745	896	-	-	-
1953	1,983	746	-	-	-
1954	1,481	661	-	-	-
1955	1,313	593	-	-	-
1956	1,448	549	-	-	-
1957	1,344	541	-	-	-
1958	1,241	502	-	-	-
1959	1,098	499	-	-	-
1960	989	475	-	-	-
1961	769	476	-	-	-
1962	702	444	-	-	-
1963	317	401	-	-	-
1964	84	499	1,162	4,169	-
1965	1,408	2,806	8,112	4,718	-
1966	1,262	2,412	4,182	2,205	-
1967	1,093	1,669	2,977	1,496	1,727
1968	662	1,389	1,925	1,263	1,289
1969	390	968	1,873	927	878
1970	-	773	1,529	854	576
1971	-	684	1,201	806	466
1972	-	-	-	636	383
1973	-	591	830	351	216
1974	-	597	678	577	-
1975	30	962	753	650	-
Primary	56,789	31,847	25,222	18,652	5,535
Secondary	-	-	-	-	-
Total	56,789	31,847	25,222	18,652	5,535

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 4 Ballard 1810N 500W Sec. 7, T.18S., R.29E.	Anadarko 1 Ballard-19 2310S 330E Sec. 7, T.18S., R.29E.	Yates 1 Dunn 990S 330E Sec. 7, T.18S., R.29E.	Anadarko 10 Ballard-5 990N 990E Sec. 8, T.18S., R.29E.	Anadarko 6 Ballard 990N 2310E Sec. 8, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	636	4,270	-	-
1943	-	3,281	5,691	-	-
1944	-	2,378	2,986	-	-
1945	-	2,144	1,304	-	-
1946	-	2,136	940	-	-
1947	-	1,877	225	-	-
1948	-	1,911	507	-	-
1949	-	1,549	330	-	-
1950	-	2,416	861	-	-
1951	-	1,879	221	-	-
1952	-	1,757	-	-	-
1953	-	1,712	-	-	-
1954	-	1,512	-	-	-
1955	-	1,382	-	-	144
1956	-	1,342	-	1,119	4,377
1957	-	1,196	-	3,760	3,759
1958	-	1,138	-	2,988	2,989
1959	-	1,274	-	2,284	2,283
1960	-	1,270	-	1,635	1,654
1961	-	1,163	-	1,895	1,894
1962	-	1,108	-	2,175	2,256
1963	-	1,015	-	1,556	1,557
1964	4,482	1,006	-	1,511	1,297
1965	2,416	913	-	1,236	1,098
1966	2,013	739	-	693	730
1967	1,538	864	-	1,435	418
1968	1,201	701	-	1,156	256
1969	979	683	-	752	3,009
1970	740	672	-	628	2,994
1971	693	691	-	550	2,802
1972	608	735	-	525	2,171
1973	549	700	-	592	1,536
1974	476	522	-	803	181
1975	672	590	-	695	-
Primary	16,367	44,892	17,335	27,988	37,405
Secondary	-	-	-	-	-
Total	16,367	44,892	17,335	27,988	37,405

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 12 Ballard 330N 1650E Sec. 8, T.18S., R.29E.	Anadarko 2 Ballard-15 660N 1980W Sec. 8, T.18S., R.29E.	Anadarko 2 Ballard-12 990N 990W Sec. 8, T.18S., R.29E.	Anadarko 5 Ballard-15 1750N 990W Sec. 8, T.18S., R.29E.	Anadarko 3 Ballard 1650N 990W Sec. 8, T.18S., R.29E.
1939	-	-	2,586	-	*
1940	-	-	9,706	-	*
1941	-	-	2,733	-	*
1942	-	-	2,130	-	-
1943	-	-	1,080	795	-
1944	-	3,670	-	6,750	-
1945	-	2,503	-	2,465	-
1946	-	2,218	1,393	2,235*	-
1947	-	1,973	831	1,556*	-
1948	-	1,609	994	1,507*	-
1949	-	10,141	516	4,389*	-
1950	-	10,267	379	7,607*	-
1951	-	6,873	-	6,898*	-
1952	-	5,528	476	6,453*	-
1953	-	4,611	-	4,789*	-
1954	-	3,857	-	3,862*	-
1955	-	3,531	-	3,530*	-
1956	-	3,148	-	3,156*	-
1957	-	2,837	-	2,840*	-
1958	-	2,385	-	2,386	-
1959	-	2,050	-	2,055	-
1960	-	1,798	-	1,802	-
1961	-	1,552	-	1,576	-
1962	2,012	1,428	-	1,431	-
1963	1,556	1,224	-	1,223	-
1964	1,590	1,063	2,997	1,065	-
1965	1,766	1,895	2,002	1,896	-
1966	1,817	1,631	1,481	1,636	-
1967	1,477	1,468	1,339	1,475	-
1968	1,291	1,360	1,142	1,364	-
1969	731	1,202	954	1,203	-
1970	-	1,100	858	1,091	-
1971	-	1,006	723	995	-
1972	-	786	647	829	-
1973	-	741	657	886	-
1974	S 505 S	S 818 S	-	S 936 S	-
1975	9,905	14,954	-	1,094	*
Primary	12,240	85,455	35,624	81,745	-
Secondary	10,410	15,772	-	2,030	-
Total	22,650	101,227	35,624	83,775	-

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 4 Ballard 1650N 2310W Sec. 8, T.18S., R.29E.	Anadarko 6 Ballard 1980N 1980W Sec. 8, T.18S., R.29E.	Anadarko 5 Ballard-5 2310N 2290E Sec. 8, T.18S., R.29E.	Anadarko 9 Ballard-5 1880N 990E Sec. 8, T.18S., R.29E.	Anadarko 7 Ballard 2310S 990E Sec. 8, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	2,994	-	-	-	-
1945	2,468	-	-	-	-
1946	2,241	-	-	-	-
1947	1,556	-	-	-	-
1948	1,512	-	-	-	-
1949	3,911	-	1,461	-	-
1950	7,421	-	3,375	-	-
1951	6,190	-	2,926	-	-
1952	4,950	-	2,401	-	-
1953	4,787	-	1,997	-	-
1954	3,860	-	1,730	-	-
1955	3,530	-	1,408	-	-
1956	3,151	-	4,375	3,137	3,865
1957	2,839	-	3,760	3,760	3,760
1958	2,386	-	2,989	2,988	2,988
1959	2,053	-	2,285	2,284	2,284
1960	1,803	-	1,653	1,655	1,655
1961	1,554	-	1,895	1,895	1,895
1962	1,429	-	2,175	2,175	2,175
1963	1,225	-	1,557	1,556	1,556
1964	1,065	-	1,386	1,609	1,331
1965	1,896	-	1,206	1,631	1,178
1966	1,632	-	873	1,153	842
1967	1,469	-	611	1,705	219
1968	1,362	-	1,192	2,015	818
1969	1,201	-	1,010	1,941	701
1970	1,102	-	948	1,491	661
1971	1,013	-	879	1,344	506
1972	869	-	771	1,094	433
1973	888	-	609	1,140	513
1974	S 930 S	-	726	1,153	729
1975	2,229	S 699 S	S 898 S	1,365	673
Primary	74,357	-	46,198	37,091	28,782
Secondary	3,159	699	898	-	-
Total	77,516	699	47,096	37,091	28,782

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Welch 2 Travis 2310S 2310E Sec. 8, T.18S., R.29E.	Anadarko 4 Ballard-5 1650S 2310E Sec. 8, T.18S., R.29E.	Anadarko 8 Ballard-5 2310S 1980E Sec. 8, T.18S., R.29E.	Anadarko 1 Ballard-14 2310S 2310W Sec. 8, T.18S., R.29E.	Anadarko 4 Ballard 1980S 1980W Sec. 8, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	1,429	-	-	10,782	-
1942	492	-	-	-	-
1943	1,124	-	-	4,728	-
1944	1,005	-	-	4,092	-
1945	941	-	-	2,934	-
1946	752	-	-	2,169	-
1947	888	-	-	1,788	-
1948	786	-	-	2,165	-
1949	3,188	2,973	-	3,060	-
1950	3,378	3,277	-	5,345	4,808
1951	2,920	2,924	-	3,532	11,915
1952	*	4,807*	-	*	11,683*
1953	*	3,995*	-	*	10,103*
1954	*	3,459*	-	*	8,873*
1955	*	2,818*	-	*	5,790*
1956	*	11,882*	*	*	4,476*
1957	*	10,185*	*	*	4,612*
1958	-	5,974*	*	*	4,148*
1959	-	4,569*	*	*	4,316*
1960	-	3,305*	*	*	3,109*
1961	-	3,790*	*	*	2,697*
1962	-	2,257	1,849	324	3,942
1963	-	1,556	1,556	2,122	2,709
1964	-	372	1,290	-	4,411
1965	-	1,255	1,385	298	3,376
1966	-	1,076	1,226	-	2,548
1967	-	1,123	1,374	-	2,413
1968	-	1,158	1,776	-	2,057
1969	-	2,168	53	-	2,354
1970	-	2,995	-	-	2,216
1971	-	3,041	-	-	1,879
1972	-	2,564	-	-	1,766
1973	-	1,719	-	-	1,528
1974	-	711	-	-	1,314
1975	-	596	-	-	1,066
Primary	17,203	86,549	10,509	43,339	110,109
Secondary	-	-	-	-	-
Total	17,203	86,549	10,509	43,339	110,109

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 1 Ballard-21 2310S 990W Sec. 8, T.18S., R.29E.	Anadarko 3 Ballard-14 990S 990W Sec. 8, T.18S., R.29E.	Anadarko 2 Ballard 990S 2310W Sec. 8, T.18S., R.29E.	Anadarko 5 Ballard 990S 1650W Sec. 8, T.18S., R.29E.	Anadarko 3 Ballard-5 330S 2310E Sec. 8, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	8,362	11,161	-	901
1942	-	12,363	12,361	-	1,654
1943	1,374	5,541	5,541	-	1,180
1944	5,227	4,095	4,194	-	1,010
1945	2,502	2,430	2,937	-	944
1946	2,212	2,168	2,169	-	754
1947	1,974	1,789	1,788	-	885
1948	1,601	2,165	1,818	-	781
1949	2,084	7,323	13,184	-	3,185
1950	8,918	12,875	12,874	-	3,377
1951	6,868	13,855	13,855	-	2,921
1952	5,526	11,684	11,684	-	2,404
1953	4,610	10,103	10,103*	*	1,997
1954	3,852	8,873	8,873*	*	1,730
1955	3,542	7,662	9,535*	*	1,408
1956	3,145	6,713	8,952*	*	4,375
1957	2,838	6,916	9,221*	*	3,760
1958	2,385	6,222	8,295*	*	2,984
1959	2,050	6,423	8,647*	*	2,284
1960	1,798	4,652	9,076*	*	1,648
1961	1,550	3,567	8,011*	*	1,896
1962	1,430	3,356	3,305	4,998	2,097
1963	1,224	4,842	2,415	3,273	1,557
1964	1,424	3,834	-	4,454	1,504
1965	1,927	2,714	-	4,936	1,027
1966	1,628	1,194	-	8,327	905
1967	1,466	734	-	8,094	1,082
1968	1,358	1,214	1,366	4,463	1,102
1969	1,198	1,609	3,364	968	1,028
1970	1,126	1,293	4,298	-	968
1971	1,036	1,406	3,616	-	833
1972	1,173	1,144	3,519	-	676
1973	717	799	3,001	-	221
1974	-	-	1,685	859	-
1975	-	-	1,985	*	-
Primary	79,763	169,920	202,833	40,372	55,078
Secondary	-	-	-	-	-
Total	79,763	169,920	202,833	40,372	55,078

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Welch 1 Travis 660S 660E Sec. 8, T.18S., R.29E.	Welch 11 Travis 990S 990E Sec. 8, T.18S., R.29E.	Anadarko 4 Ballard-22 990N 330W Sec. 9, T.18S., R.29E.	Dixon 2 Brooks 660N 1980E Sec. 13, T.18S., R.29E.	Bassett 10 State 330N 2100E Sec. 14, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	1,423	-	-	-	-
1942	2,448	-	-	-	-
1943	1,128	-	-	-	-
1944	1,013	-	-	-	-
1945	941	-	-	95	-
1946	752	-	-	-	-
1947	890	-	-	-	-
1948	788	-	-	-	-
1949	3,190	-	-	-	-
1950	3,383	-	-	-	-
1951	2,918	-	-	-	-
1952	2,405	-	-	-	-
1953	1,997	-	-	-	-
1954	1,728	-	-	-	-
1955	1,409	-	-	-	-
1956	4,019	-	-	-	-
1957	-	2,234	1,696	-	-
1958	-	2,722	839	-	-
1959	-	-	584	-	-
1960	-	-	389	-	-
1961	-	-	609	-	-
1962	-	-	366	-	-
1963	-	-	285	-	-
1964	-	-	263	-	-
1965	-	-	261	-	3,130
1966	-	-	281	-	2,240
1967	-	-	359	-	1,396
1968	-	-	232	-	1,683
1969	-	-	178	-	1,136
1970	-	-	953	-	1,158
1971	-	-	283	-	1,024
1972	-	-	-	-	938
1973	-	-	-	-	744
1974	-	-	-	-	1,276
1975	-	-	-	-	1,035
Primary	30,432	4,956	7,579	95	15,760
Secondary	-	-	-	-	-
Total	30,432	4,956	7,579	95	15,760

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Dixon 1 Boulter 330N 2310W Sec. 14, T.18S., R.29E.	Thompson 1 Travis 330N 330E Sec. 17, T.18S., R.29E.	Anadarko 1 Ballard-7 330N 1650E Sec. 17, T.18S., R.29E.	Anadarko 11 Ballard 990N 1650W Sec. 17, T.18S., R.29E.	Anadarko 4 Ballard-20 330N 1980W Sec. 17, T.18S., R.29E.
1939	-	4,748	1,033	-	-
1940	-	6,071	6,072	-	-
1941	-	5,249	5,248	-	1,337
1942	-	2,896	2,897	-	3,325
1943	-	1,891	2,326	-	-
1944	467	1,098	1,402	-	-
1945	863	759	845	-	-
1946	609	538	1,310	-	-
1947	583	904	1,046	-	-
1948	577	848	688	-	-
1949	394	551	787	-	1,529
1950	404	664	359	-	2,099
1951	387	515	174	-	1,622
1952	319	549	-	-	1,371
1953	321	473	-	-	1,029
1954	297	444	-	-	1,949
1955	279	392	-	-	1,364
1956	259	372	-	-	945
1957	237	330	-	-	853
1958	269	300	-	371	914
1959	230	370	-	1,519	867
1960	201	283	-	488	483
1961	191	307	-	369	342
1962	160	295	-	441	439
1963	156	236	-	106	94
1964	259	242	-	38	40
1965	1,438	213	-	-	-
1966	1,180	152	-	-	-
1967	922	173	-	-	-
1968	863	159	-	-	-
1969	803	151	-	-	91
1970	782	148	-	-	397
1971	804	498	-	-	321
1972	913	S 5,775 S	-	-	427
1973	943	4,438	-	-	348
1974	830	2,867	-	-	333
1975	735	1,730	165	-	347
Primary	17,675	32,819	24,352	3,332	22,866
Secondary	-	14,810	-	-	-
Total	17,675	47,629	24,352	3,332	22,866

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Anadarko 3 Ballard 330N 990W Sec. 17, T.18S., R.29E.	Anadarko 5 Ballard 1650N 990W Sec. 17, T.18S., R.29E.	Anadarko 2 Ballard-7 1800N 1950E Sec. 17, T.18S., R.29E.	Anadarko 12 Travis 1980S 1980E Sec. 17, T.18S., R.29E.	Anadarko 1 Ballard-16 330N 330E Sec. 18, T.18S., R.29E.
1939	-	-	1,033	-	-
1940	-	-	6,072	-	-
1941	5,205	-	5,248	-	-
1942	8,375	5,997	2,897	-	-
1943	5,003	5,008	2,326	-	-
1944	2,755	2,759	1,402	-	2,347
1945	1,739	1,741	845	-	1,834
1946	1,559	1,562	1,310	-	1,650
1947	801	803	1,046	-	1,242
1948	844	844	688	-	680
1949	1,117	1,731	787	-	1,060
1950	-	2,099	359	-	1,067
1951	-	1,622	174	-	780
1952	1,371	1,236	-	-	1,450
1953	1,029	1,029	249	-	1,336
1954	1,934	1,949	274	-	1,277
1955	1,364	1,364	278	-	1,198
1956	946	946	281	-	1,261
1957	854	853	251	-	1,143
1958	912	912	260	-	1,166
1959	894	1,076	292	-	1,291
1960	485	484	295	-	1,192
1961	342	341	322	-	1,308
1962	512	277	412	-	1,164
1963	154	149	314	-	1,116
1964	42	-	290	-	1,040
1965	-	-	247	-	1,045
1966	-	-	262	-	954
1967	-	-	260	-	922
1968	-	-	211	-	884
1969	-	-	194	-	819
1970	-	-	212	-	502
1971	-	-	199	-	338
1972	-	-	266	-	227
1973	-	-	250	-	132
1974	-	-	243	495	354
1975	-	-	579	1,382	772
Primary	38,237	34,764	30,628	1,877	33,551
Secondary	-	-	-	-	-
Total	38,237	34,764	30,628	1,877	33,551

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Harris 4 Travis 2310N 686W Sec. 18, T.18S., R.29E.	Harris 3 Travis 1988S 512W Sec. 18, T.18S., R.29E.	Jones 1 Wright 990S 330W Sec. 18, T.18S., R.29E.	Anadarko 8 Travis 660N 660E Sec. 19, T.18S., R.29E.	Yates 9 Travis 1980N 660E Sec. 19, T.18S., R.29E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	1,290	-	-	-
1950	557	1,410	4,365	-	-
1951	-	568	987	-	-
1952	-	-	913	-	-
1953	-	-	468	-	-
1954	-	-	-	-	-
1955	-	-	-	-	-
1956	-	-	-	9,643	-
1957	-	-	-	6,200	-
1958	-	-	-	3,048*	*
1959	-	-	-	844	847
1960	-	-	-	498	500
1961	-	-	-	440	446
1962	-	-	-	1,106	613
1963	-	-	-	1,464	-
1964	-	-	-	453	-
1965	-	-	-	369	-
1966	-	-	-	373	-
1967	-	-	-	655	-
1968	-	-	-	743	-
1969	-	-	-	608	-
1970	-	-	-	508	-
1971	-	-	-	326	-
1972	-	-	-	312	-
1973	-	-	-	287	-
1974	-	-	-	387	-
1975	-	-	-	268	-
Primary	557	3,268	6,733	28,532	2,406
Secondary	-	-	-	-	-
Total	557	3,268	6,733	28,532	2,406

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Trigg 1 Sivley 660S 660E Sec. 20, T.18S., R.29E.	F.A.F. 2 Nelson 2310N 330W Sec. 4, T.18S., R.30E.	F.A.F. 3 Nelson 2310N 1650W Sec. 4, T.18S., R.30E.	F.A.F. 1 Coppedge 1980N 660E Sec. 5, T.18S., R.30E.	Newmont 4 WLH-2 330S 990E Sec. 7, T.18S., R.30E.
1939	-	-	-	-	-
1940	-	-	-	-	-
1941	-	-	-	-	-
1942	-	-	-	-	-
1943	-	-	-	-	-
1944	-	-	-	-	-
1945	-	-	-	-	-
1946	-	-	-	-	-
1947	-	-	-	-	-
1948	-	-	-	-	-
1949	-	-	-	-	-
1950	-	1,500	-	-	-
1951	-	2,543	-	-	-
1952	-	1,943	-	-	-
1953	-	1,651	-	-	-
1954	-	1,478	-	-	-
1955	-	1,200	-	-	-
1956	-	1,087	-	-	-
1957	-	979	-	-	-
1958	-	823	-	-	1,113
1959	-	845	-	-	457
1960	-	842	-	-	744
1961	-	800	-	-	255
1962	-	494	3,283	-	236
1963	-	965	953	-	298
1964	-	682	1,426	-	-
1965	4,570	359	3,501	-	-
1966	4,141	183	1,130	-	-
1967	3,114	-	1,281	-	-
1968	10,696	-	960	-	-
1969	9,109	-	859	-	-
1970	6,558	-	739	-	-
1971	100	-	696	446	-
1972	-	-	572	-	-
1973	-	-	598	-	-
1974	-	-	370	-	-
1975	-	-	314	-	LH WIW
Primary	38,288	18,444	16,682	446	3,103
Secondary	-	-	-	-	-
Total	38,288	18,444	16,682	446	3,103

TABLE 11 - WELL PRODUCTION DATA: ZONES OTHER THAN LOCO HILLS SAND (cont.)

Year	Welch 1 Aston 1980S 660E Sec. 7, T.18S., R.30E.	Daniels 1 Canfield 1980S 660W Sec. 17, T.18S., R.30E.	Primary Oil (totals) Yearly	Primary Oil (totals) Cumulative	Secondary Oil (totals) Yearly	Secondary Oil (totals) Cumulative
1939	-	-	44,439	44,439	-	-
1940	-	-	130,694	175,133	-	-
1941	-	-	146,568	321,701	-	-
1942	-	-	143,397	465,098	-	-
1943	-	-	116,099	581,197	-	-
1944	-	-	127,049	708,246	-	-
1945	-	-	94,224	802,470	-	-
1946	-	-	87,405	889,875	-	-
1947	-	-	77,176	967,051	-	-
1948	-	-	76,127	1,043,178	-	-
1949	-	-	119,693	1,162,871	-	-
1950	-	-	148,920	1,311,791	-	-
1951	-	-	136,853	1,448,644	-	-
1952	-	-	136,554	1,585,198	-	-
1953	-	-	113,015	1,698,213	-	-
1954	-	-	106,741	1,804,954	-	-
1955	-	-	100,617	1,905,571	-	-
1956	-	-	128,475	2,034,046	-	-
1957	-	-	120,879	2,154,925	-	-
1958	-	-	103,803	2,258,728	-	-
1959	-	-	90,787	2,349,515	-	-
1960	-	-	71,942	2,421,457	-	-
1961	-	1,541	68,142	2,489,599	-	-
1962	-	427	75,960	2,565,559	-	-
1963	-	1,053	81,882	2,647,441	-	-
1964	-	5,468	96,392	2,743,833	-	-
1965	-	2,594	108,504	2,852,337	-	-
1966	-	494	82,758	2,935,095	-	-
1967	-	56	74,363	3,009,458	-	-
1968	-	-	81,649	3,091,107	-	-
1969	-	-	80,700	3,171,807	-	-
1970	-	-	75,707	3,247,514	-	-
1971	-	-	56,923	3,304,437	-	-
1972	881	-	54,614	3,359,051	5,775	5,775
1973	869	-	45,595	3,404,646	4,438	10,213
1974	768	-	33,296	3,437,942	11,143	21,356
1975	739	-	32,142	3,470,084	61,457	82,813
Primary	3,257	11,633				
Secondary	-	-				
Total	3,257	11,633				

Total Oil Produced - 3,552,897 bbls

TABLE 12 - WATER INJECTION: BALLARD GRAYBURG/SAN ANDRES UNIT
Operator: Anadarko
( ) Aver. Inj. Pressure

Year	5-Tract 8 20N 1500E Sec. 5, T.18S., R.29E.	3-Tract 13 20N 1200W Sec. 5, T.18S., R.29E.	3-Tract 23 1900S 890W Sec. 5, T.18S., R.29E.
1973	-	-	-
1974	50,145(1,100)	50,006(1,250)	101,086(1,250)
1975	101,224(1,350)	87,128(1,450)	167,472(1,150)
Total	151,369	137,134	268,558

Year	4-Tract 25 1980S 1780E Sec. 5, T.18S., R.29E.	3-Tract 5 330S 2310E Sec. 8, T.18S., R.29E.	6-Tract 5 990N 2310E Sec. 8, T.18S., R.29E.
1973	-	-	-
1974	93,707(1,300)	13,531(1,450)	58,121(1,400)
1975	152,471(1,400)	30,613(1,450	75,995(1,450)
Total	246,178	44,144	134,116

Year	6-Tract 5 990N 2310E Sec. 8, T.18S., R.29E.	8-Tract 5 2310S 1980E Sec. 8, T.18S., R.29E.	2-Tract 12 990N 990W Sec. 8, T.18S., R.29E.
1973	-	624(490)	-
1974	58,121(1,400)	63,132(1,450)	77,583(1,420)
1975	75,955(1,450)	42,111(1,450)	98,104(1,450)
Total	134,116	105,867	175,687

Year	2-Tract 12 990N 990W Sec. 8, T.18S., R.29E.	3-Tract 14 990S 990W Sec. 8, T.18S., R.29E.	1-Tract 21 2310S 990W Sec. 8, T.18S., R.29E.
1973	-	632(180)	938(290)
1974	77,583(1,420)	68,528(1,450)	128,153(1,400)
1975	98,104(1,450)	46,036(1,450)	138,539(1,450)
Total	175,687	115,196	267,630

Year	Water Injected bbls (totals)	Cumulative bbls (totals)
1973	2,194	2,194
1974	839,696	841,890
1975	1,113,792	1,955,682

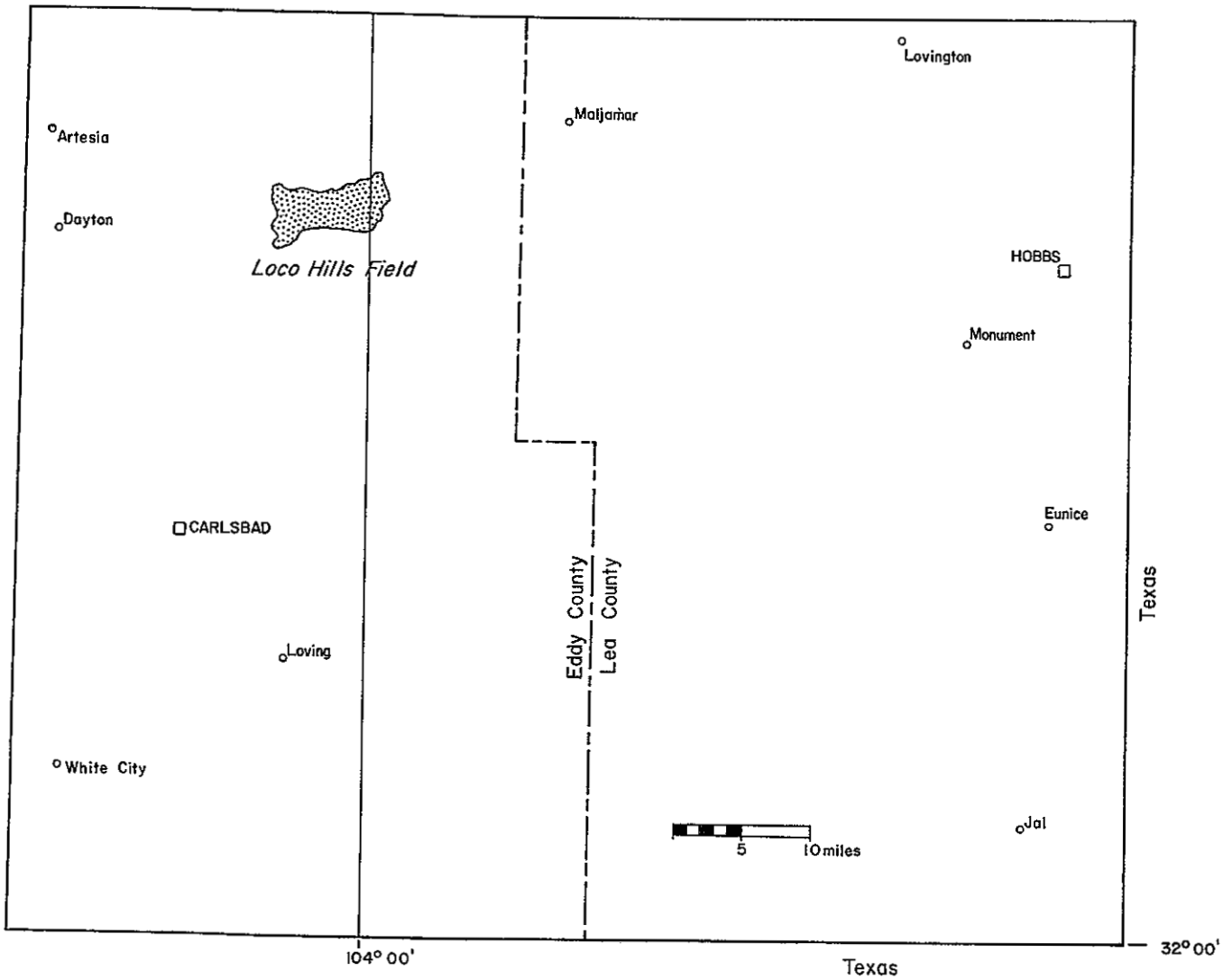

Figure 1 — Location Map

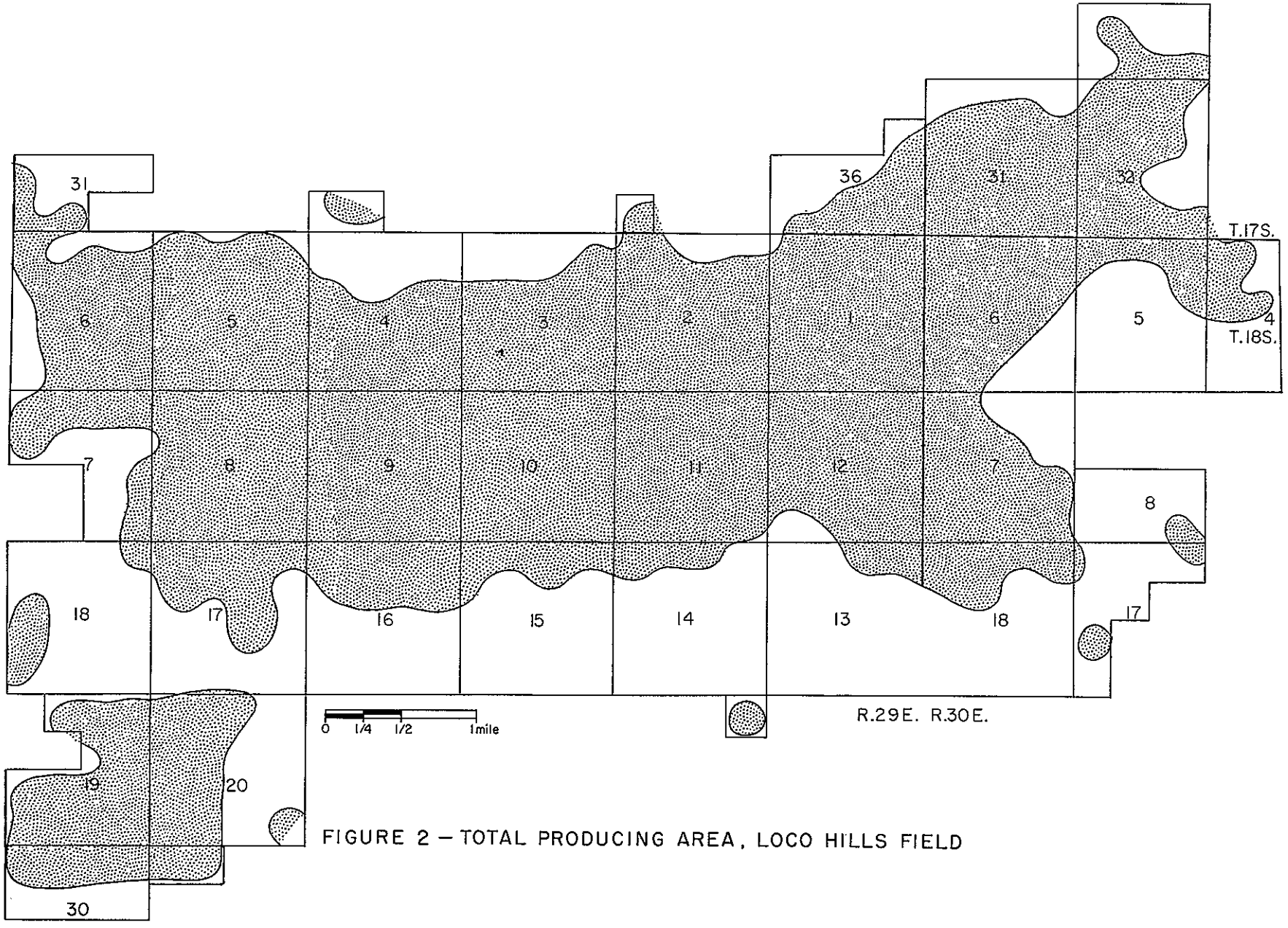

FIGURE 2 — TOTAL PRODUCING AREA, LOCO HILLS FIELD

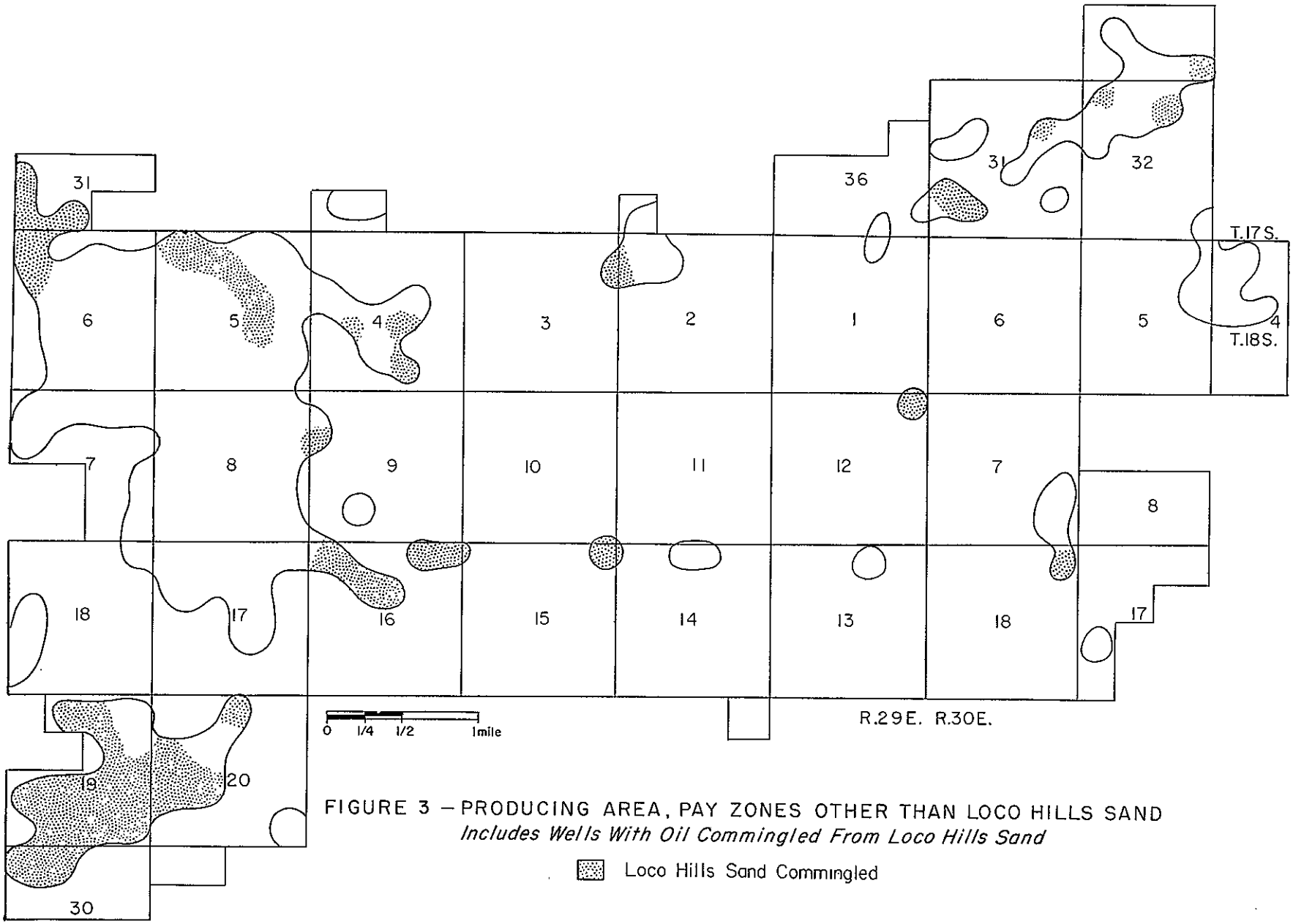

FIGURE 3 — PRODUCING AREA, PAY ZONES OTHER THAN LOCO HILLS SAND
Includes Wells With Oil Commingled From Loco Hills Sand

Loco Hills Sand Commingled

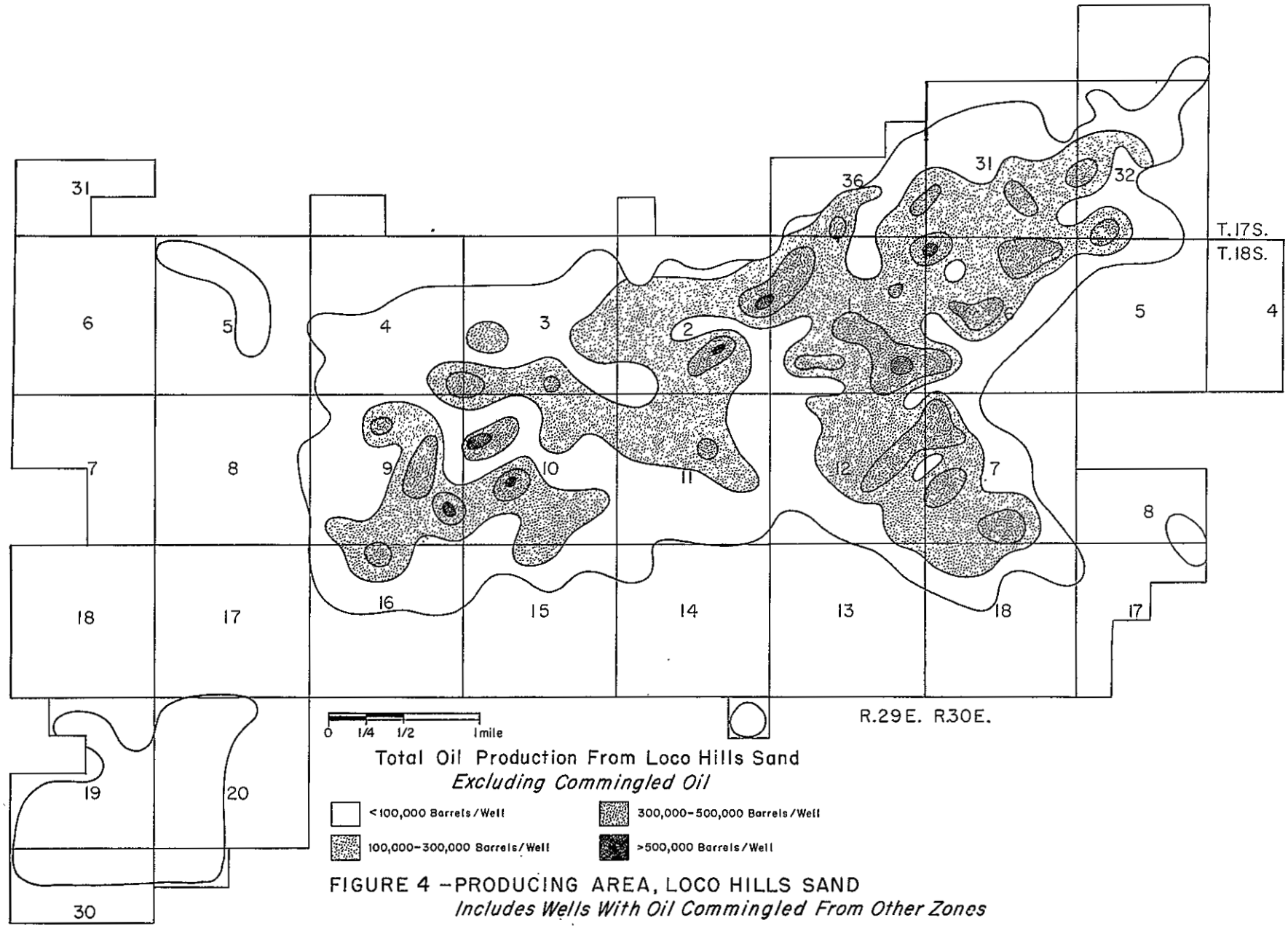

FIGURE 4 – PRODUCING AREA, LOCO HILLS SAND
Includes Wells With Oil Commingled From Other Zones

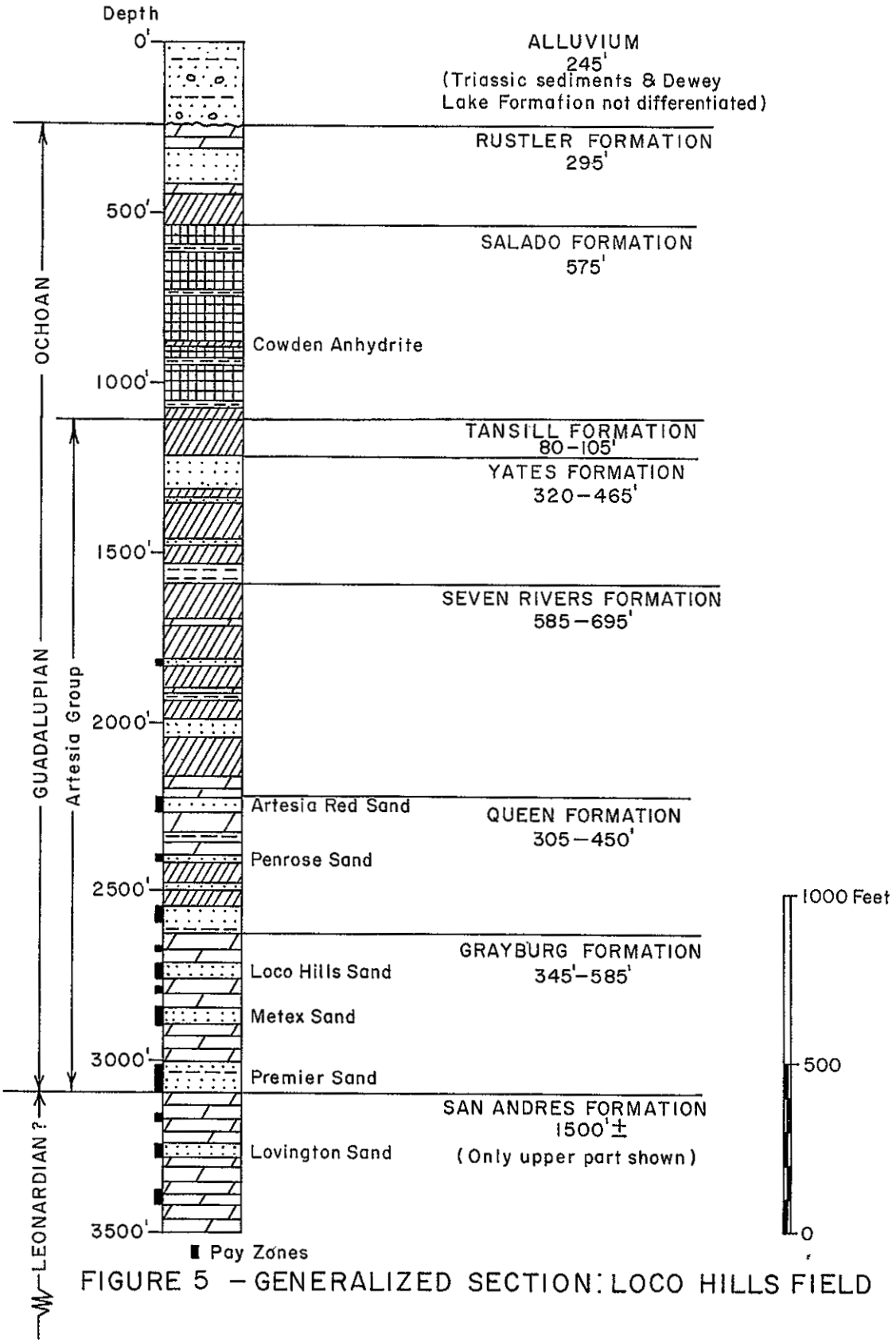

FIGURE 5 – GENERALIZED SECTION: LOCO HILLS FIELD

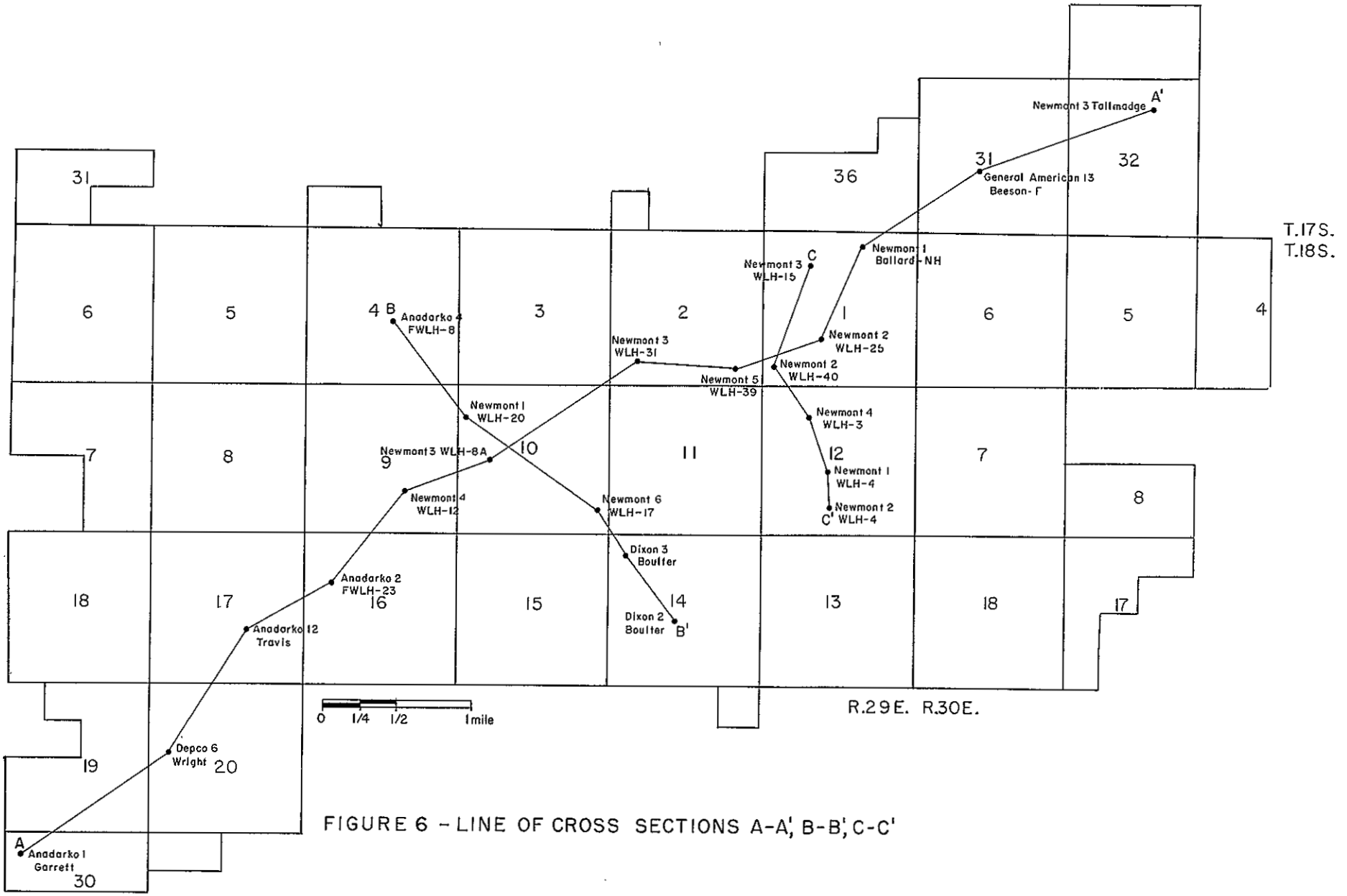

FIGURE 6 - LINE OF CROSS SECTIONS A-A', B-B', C-C'

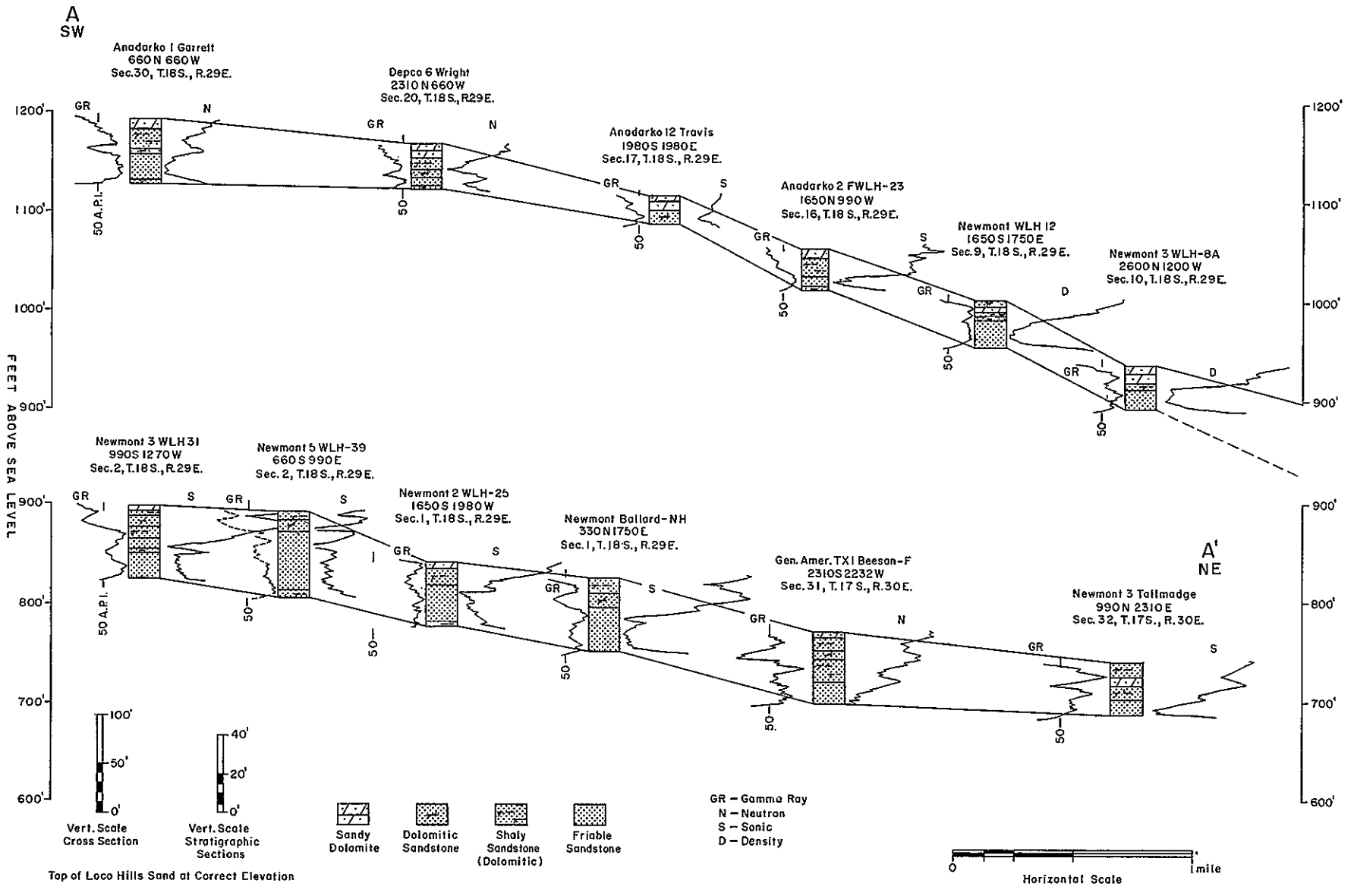

FIGURE 7 – SECTION A-A', LOCO HILLS SAND

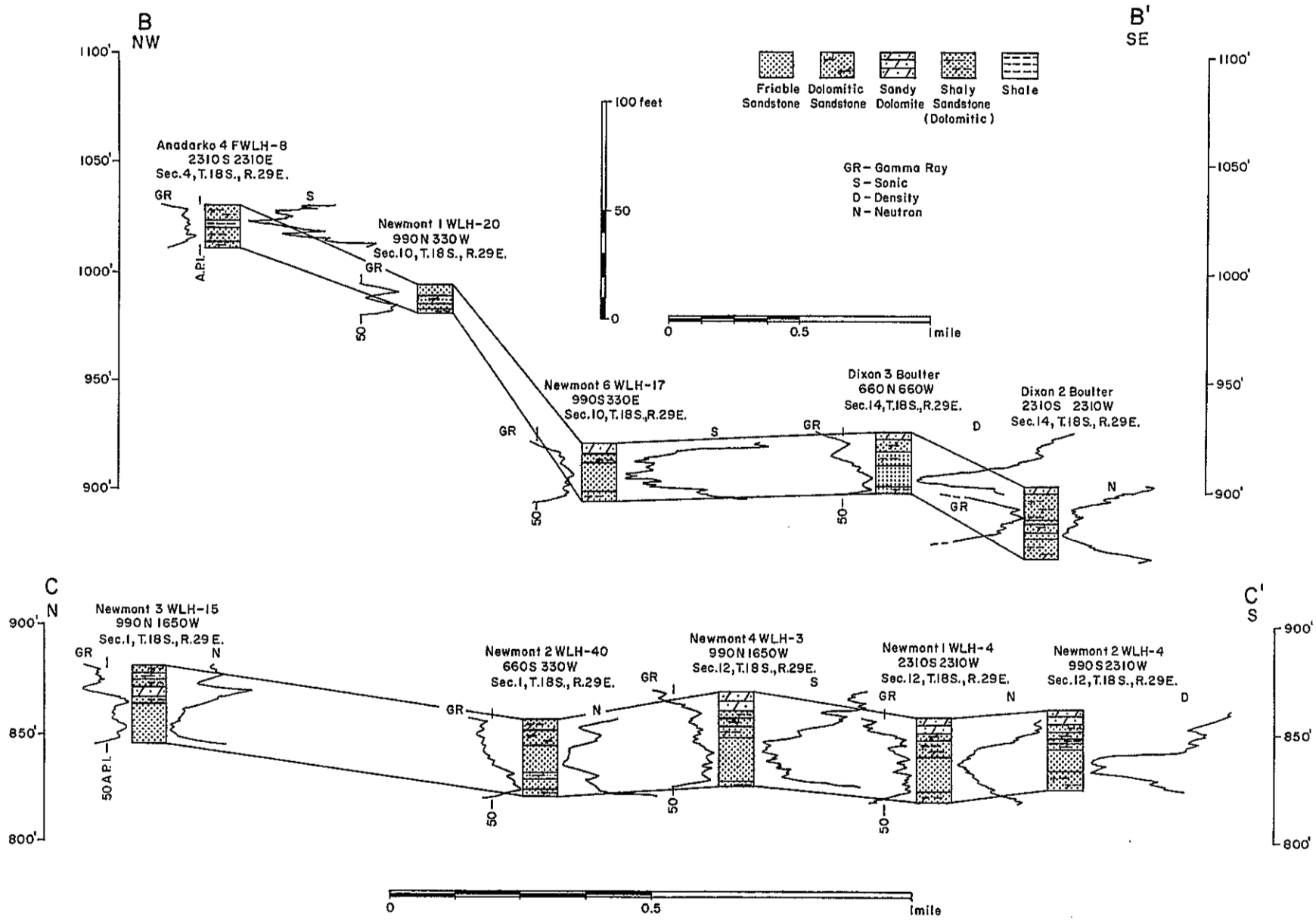

FIGURE 8 – SECTIONS B-B', C-C', LOCO HILLS SAND

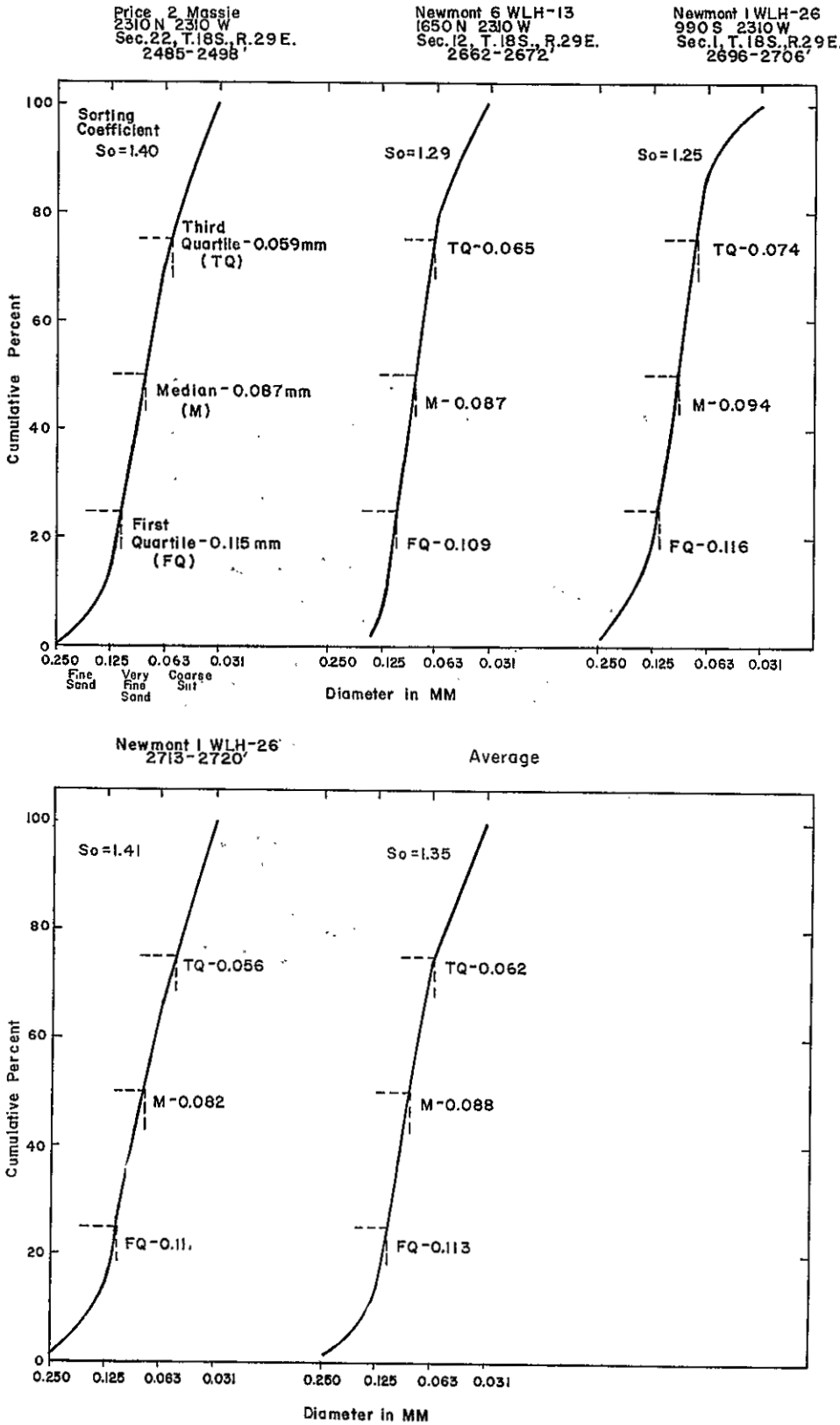

FIGURE 9 – Average Grain Size and Sorting Coefficient
Loco Hills Sand

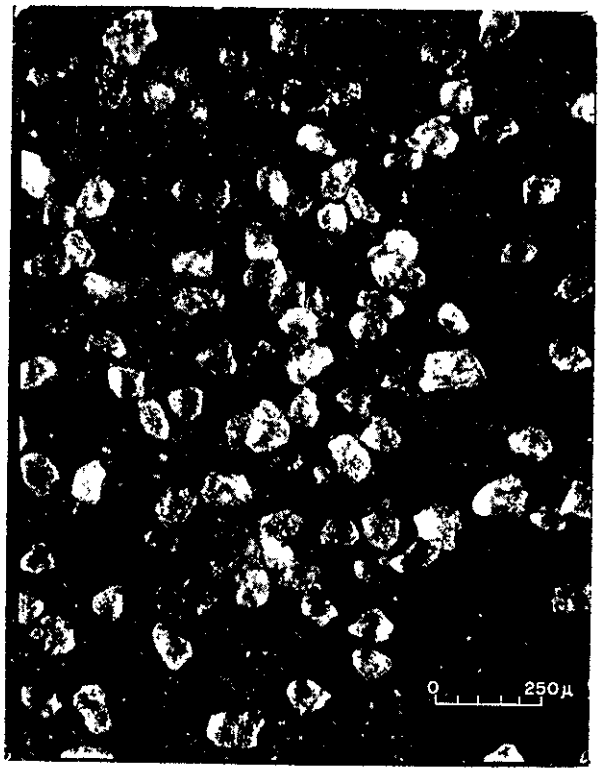

FIGURE 10-VERY FINE SAND FRACTION
Flynn, Welch, & Yates 1 State
990S 2310W sec. 1 T. 18 S., R. 29 E.

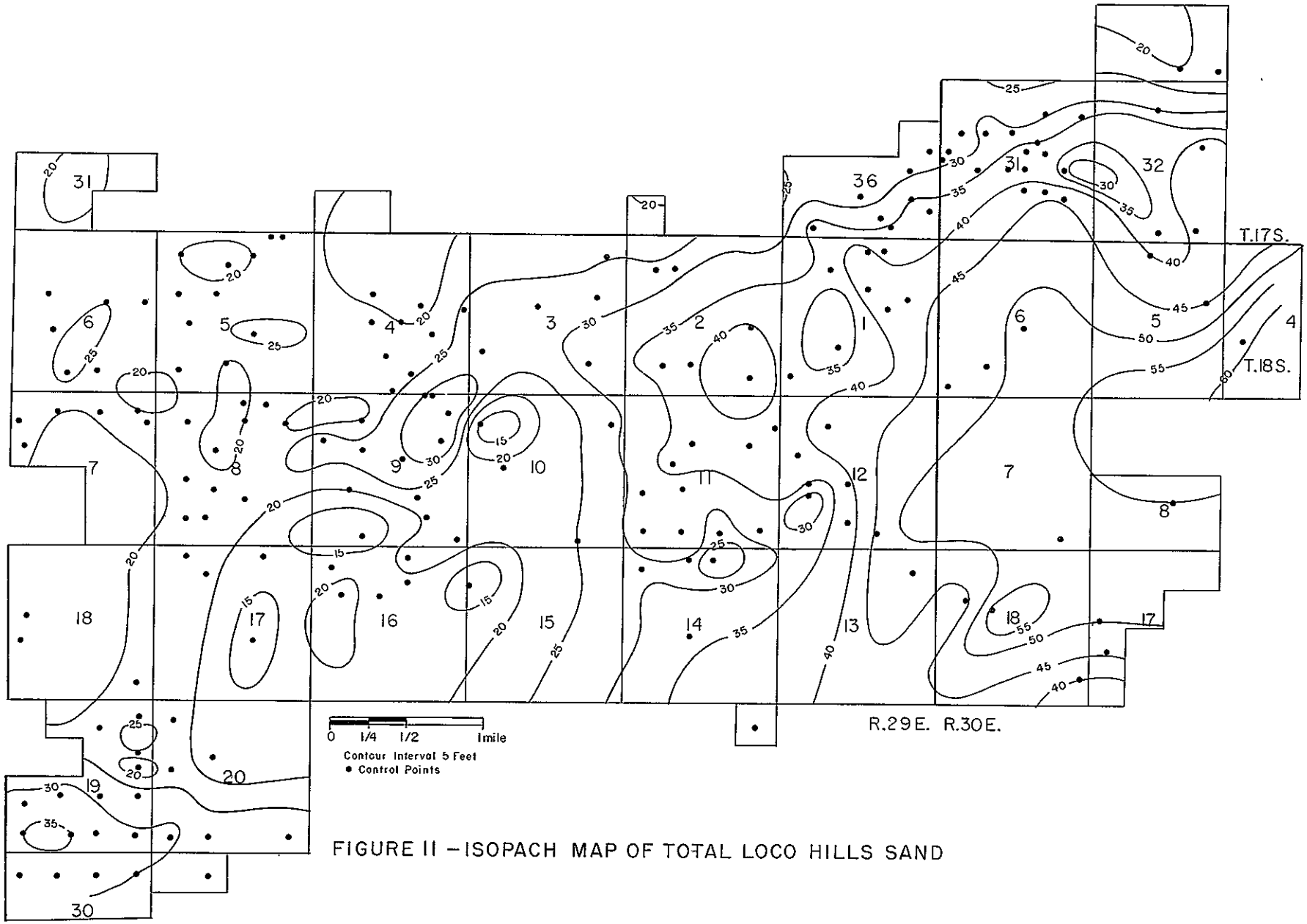

FIGURE II – ISOPACH MAP OF TOTAL LOCO HILLS SAND

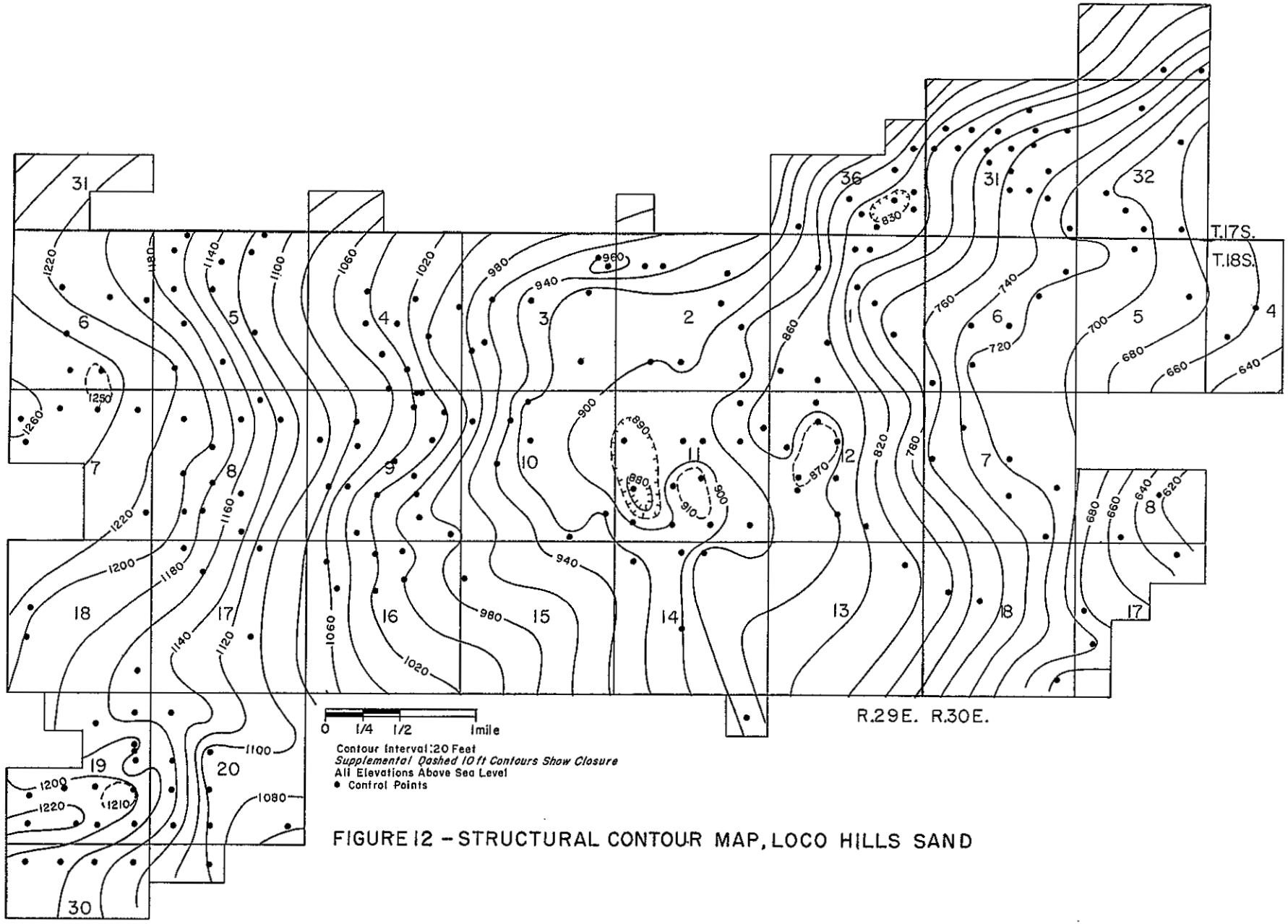

FIGURE 12 – STRUCTURAL CONTOUR MAP, LOCO HILLS SAND

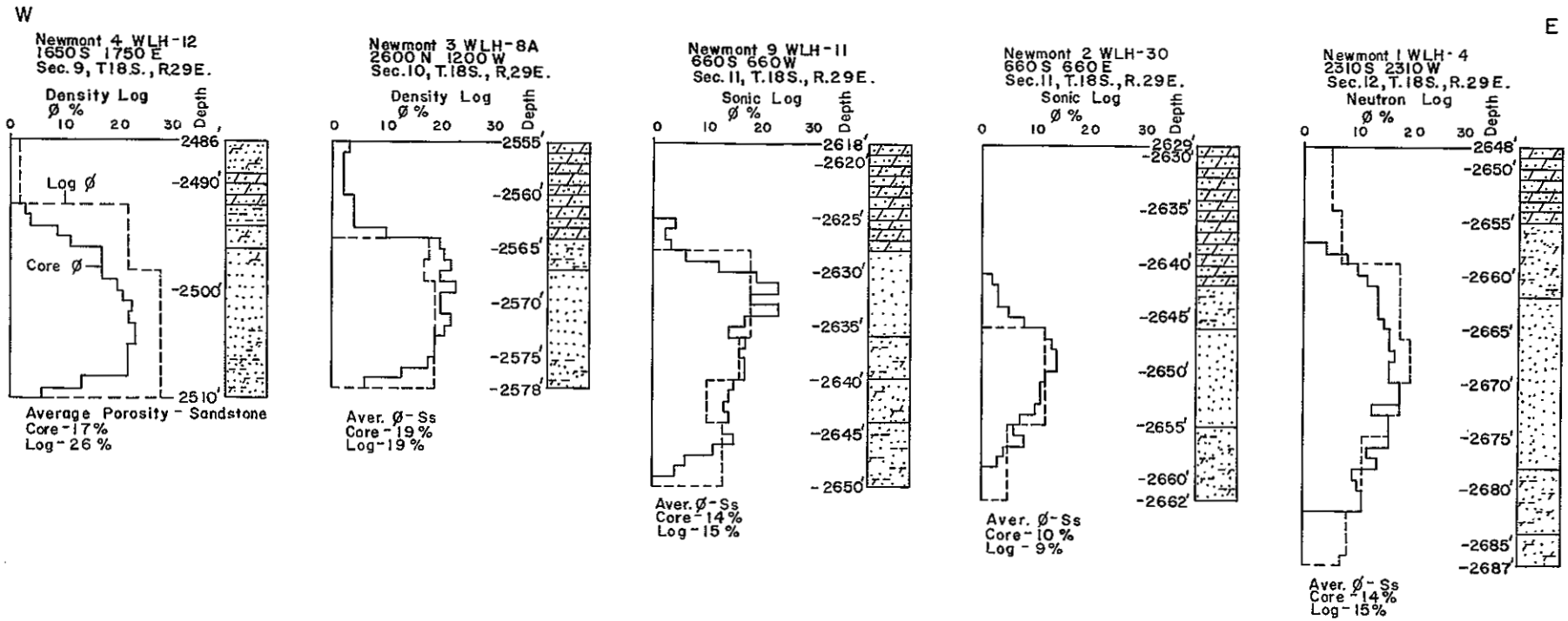

FIGURE 13 - CALCULATED POROSITIES FROM CORES AND LOGS

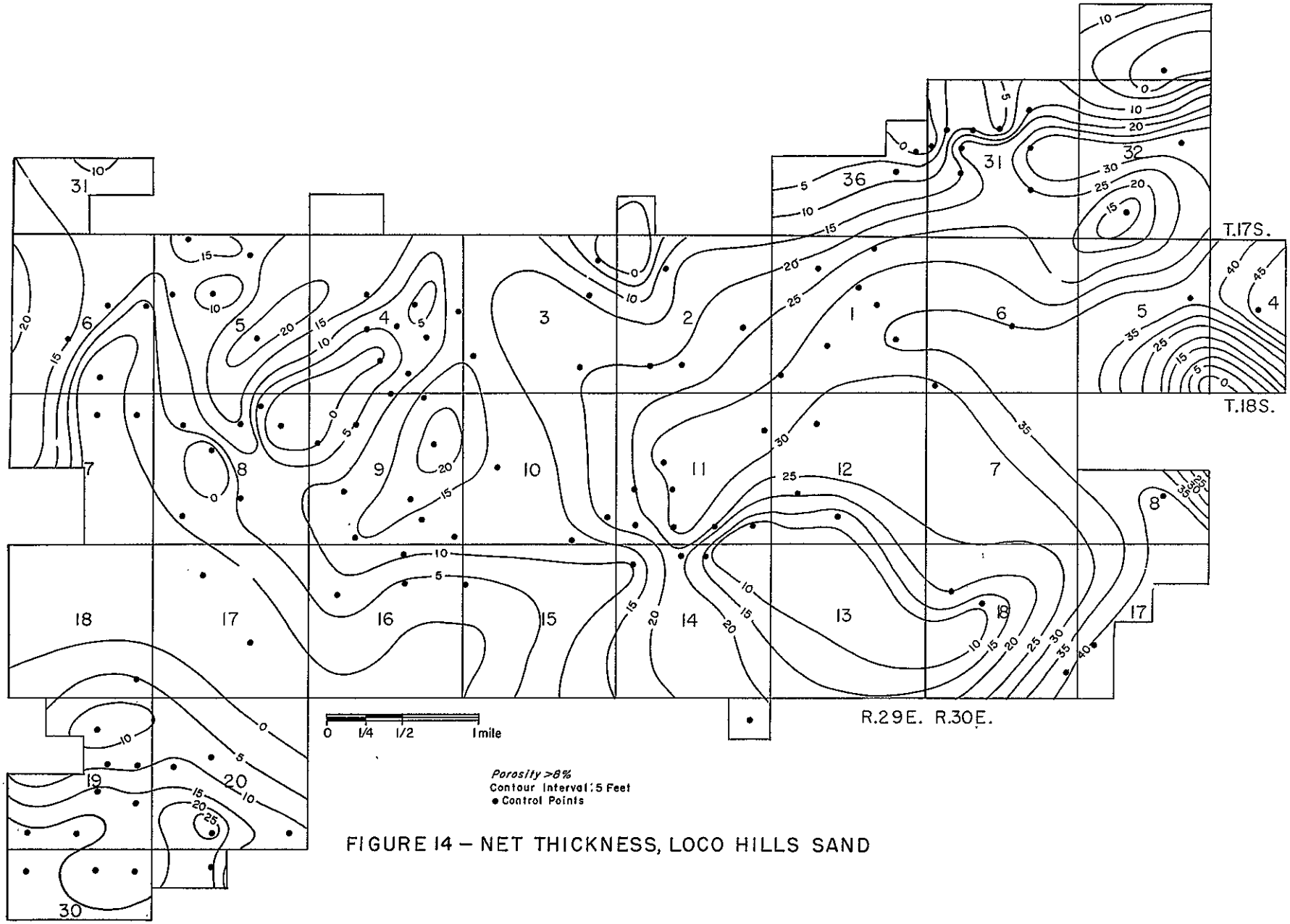

FIGURE 14 – NET THICKNESS, LOCO HILLS SAND

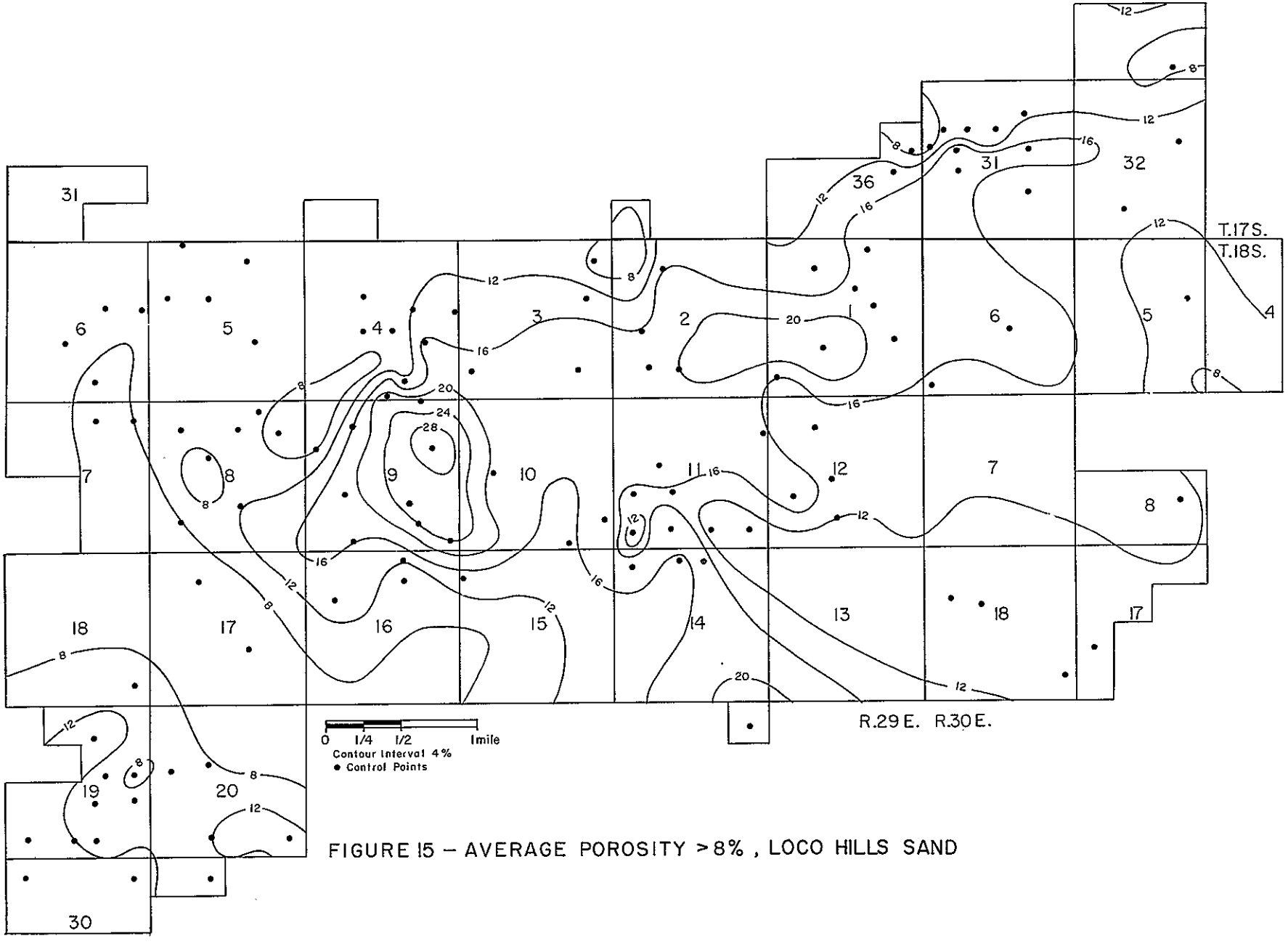

FIGURE 15 – AVERAGE POROSITY >8% , LOCO HILLS SAND

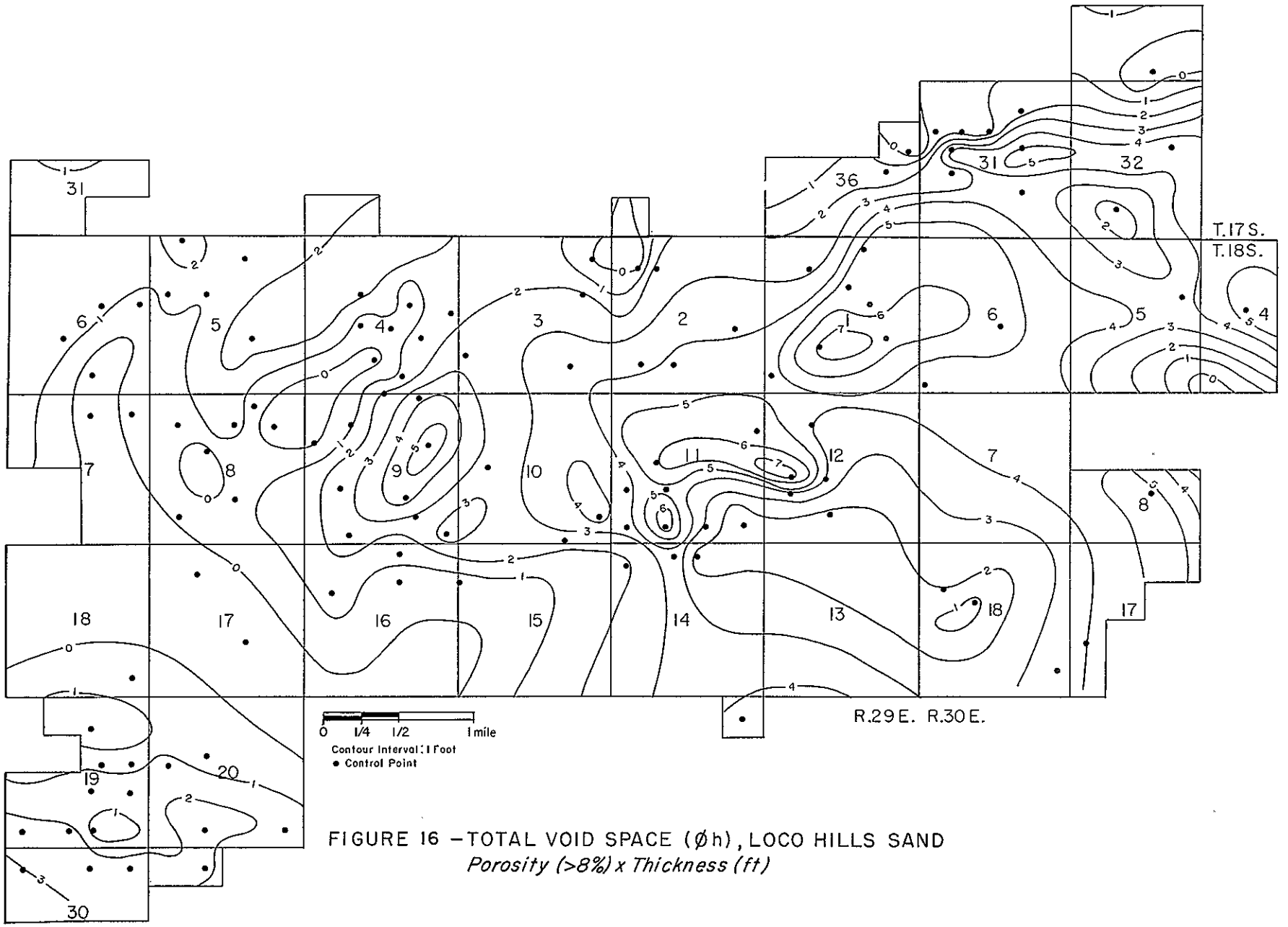

FIGURE 16 – TOTAL VOID SPACE (Øh), LOCO HILLS SAND
Porosity (>8%) x Thickness (ft)

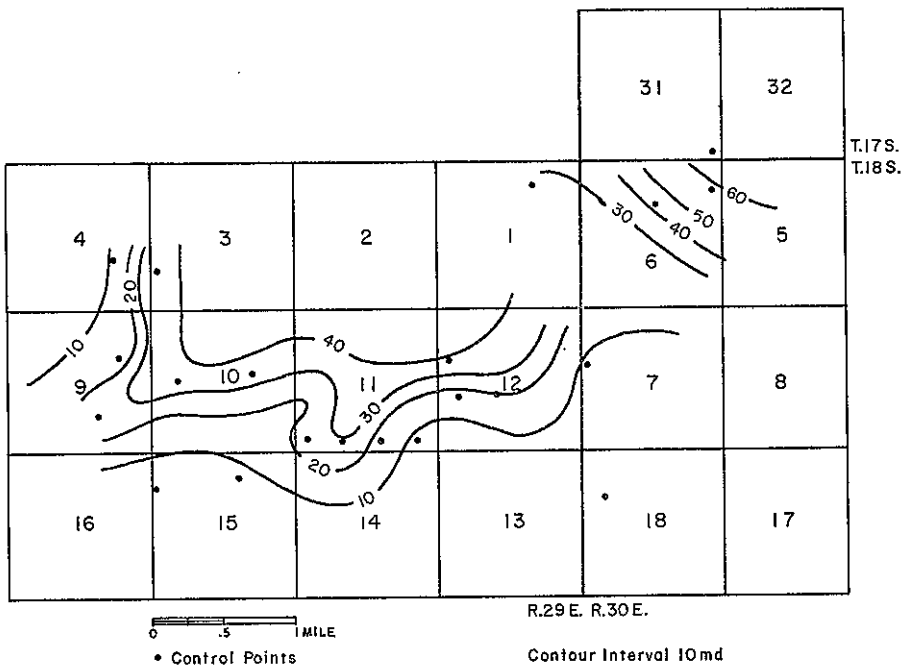

FIGURE 17 –AVERAGE PERMEABILITY
Core Data: Loco Hills Sand

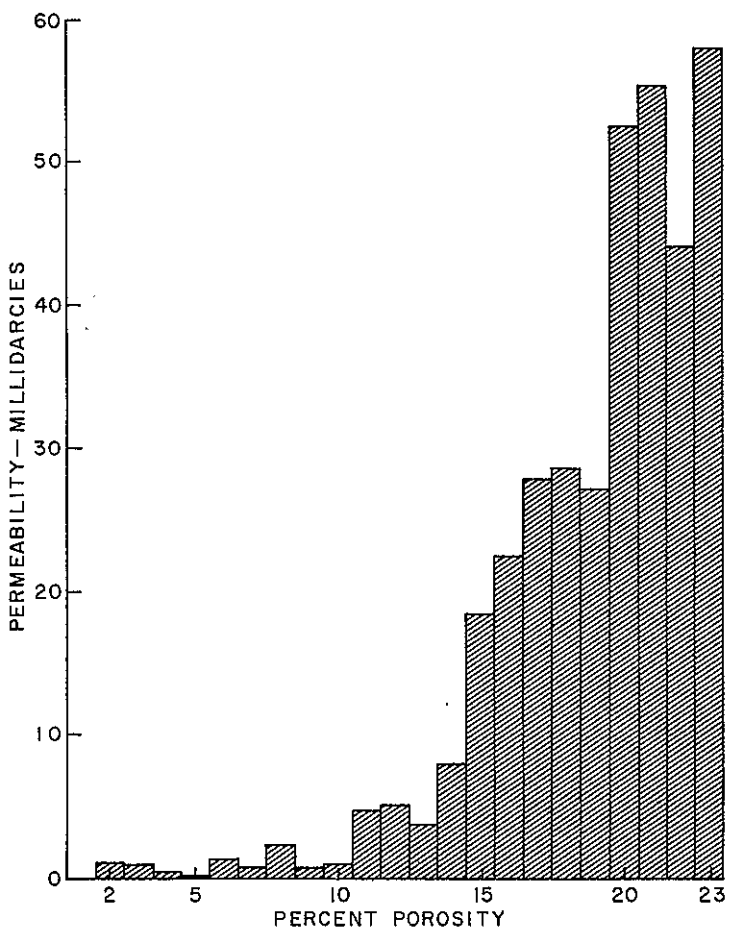

FIGURE 18 –COMPARISON OF AVERAGE PERMEABILITY VS. POROSITY
(314 Analyses)

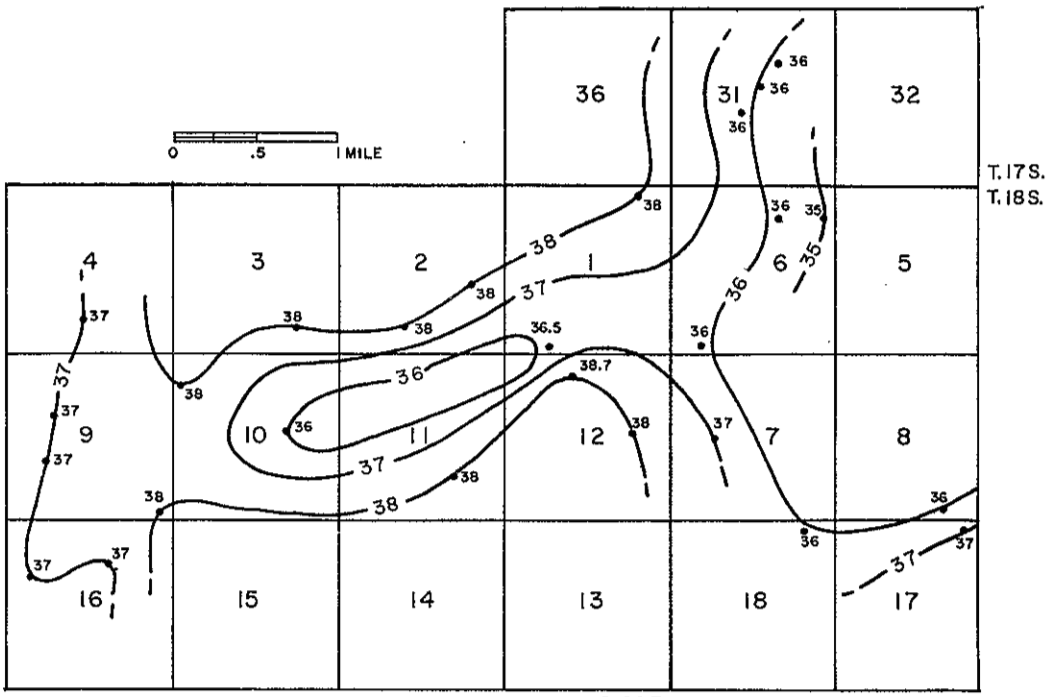

FIGURE 19 - OIL GRAVITY : LOCO HILLS SAND

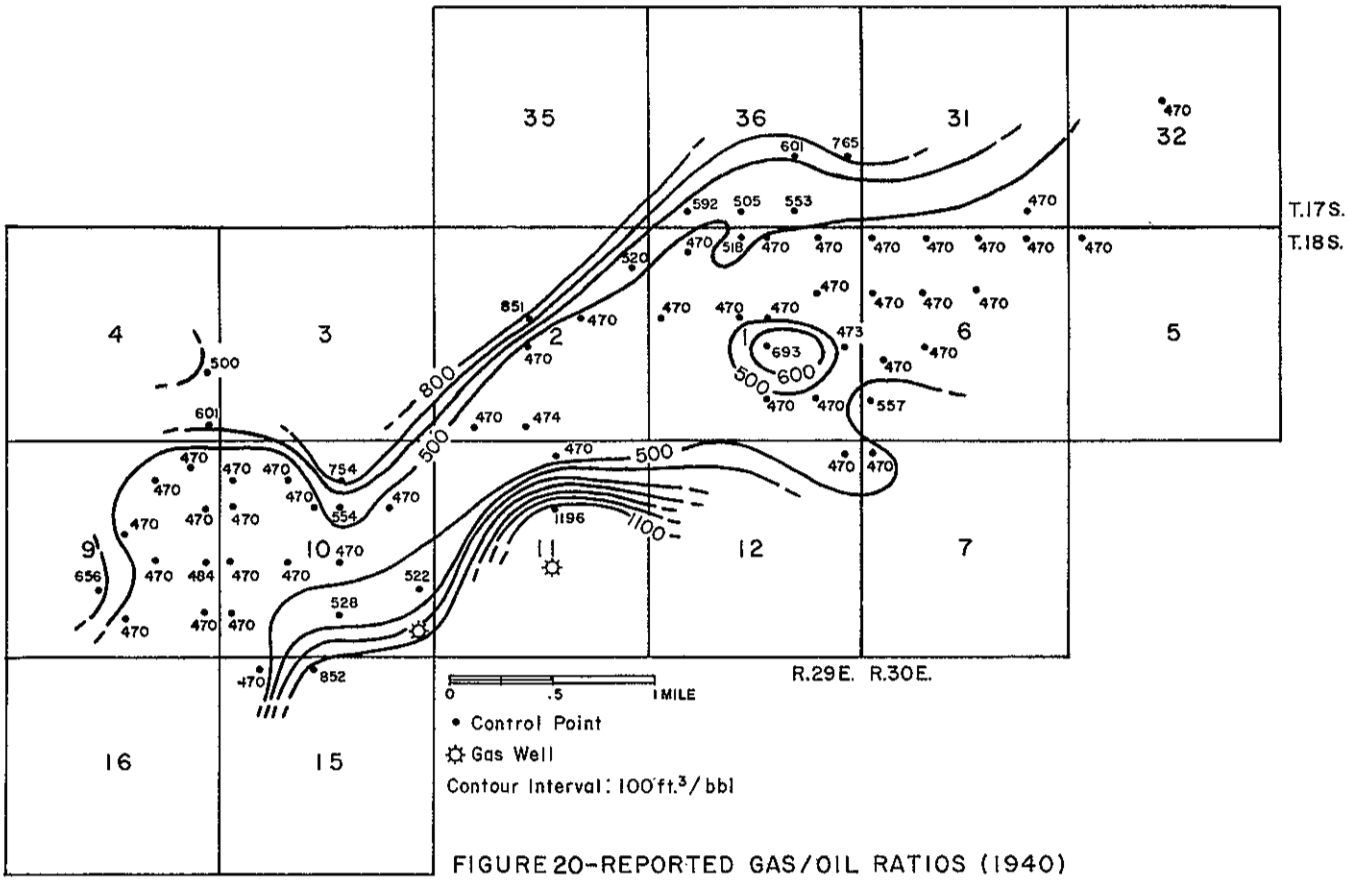

FIGURE 20 - REPORTED GAS/OIL RATIOS (1940)
Loco Hills Sand

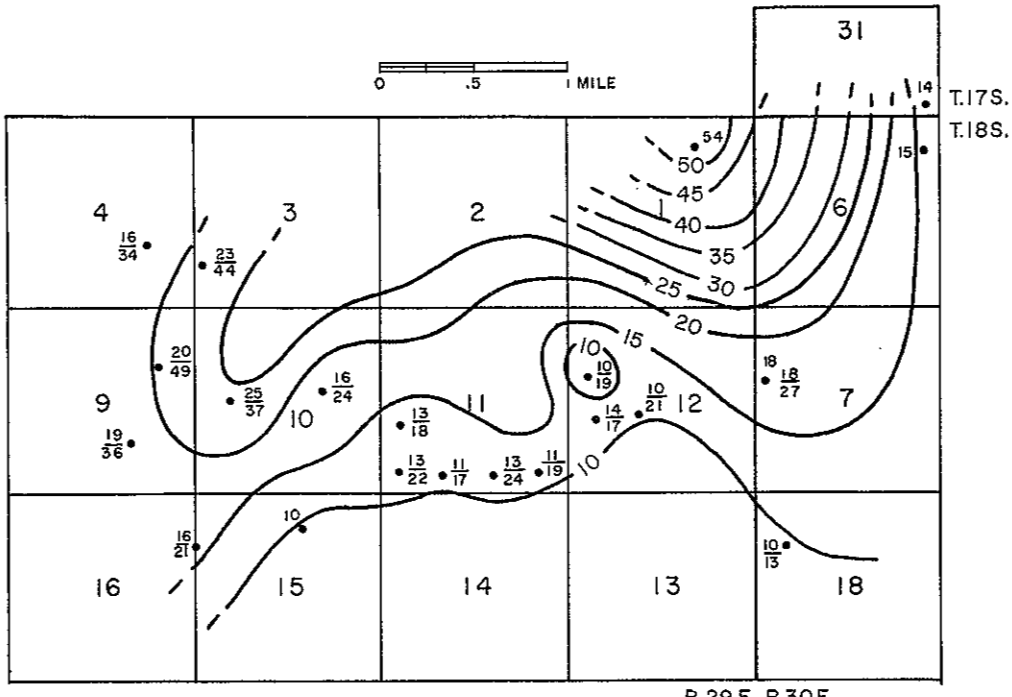

FIGURE 21 – RESIDUAL OIL SATURATION
Core Data: Loco Hills Sand

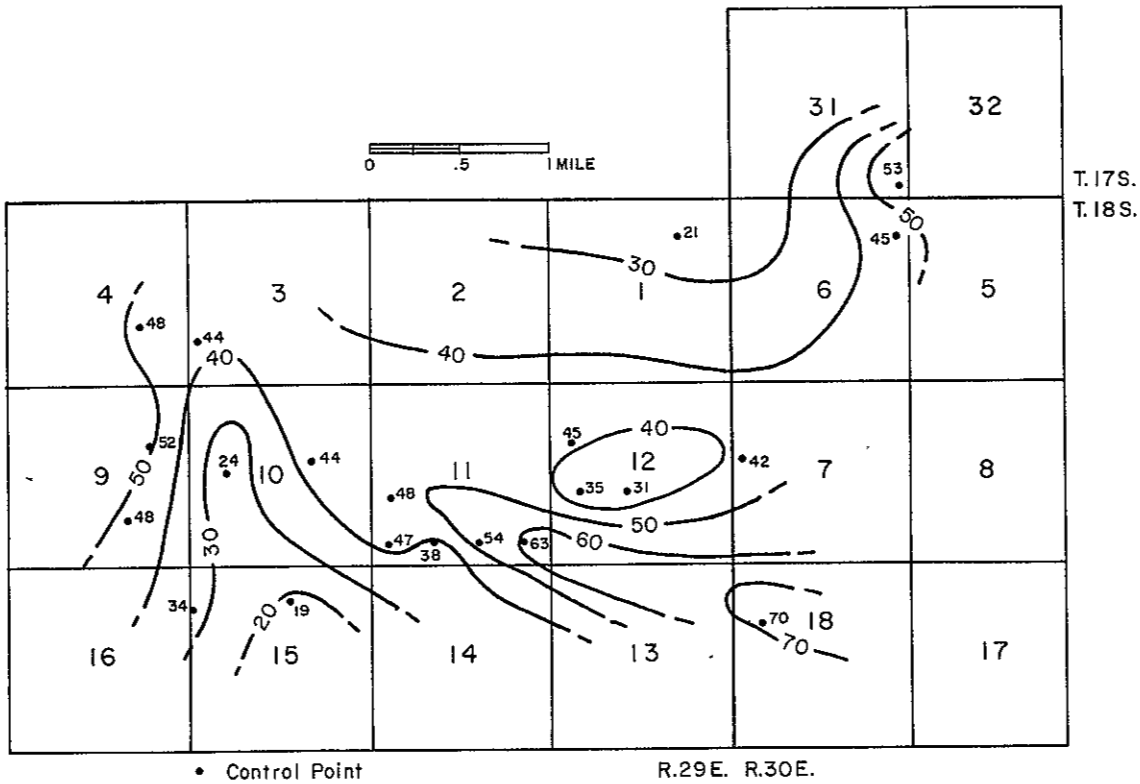

FIGURE 22 – RESIDUAL WATER SATURATION
Core Data: Loco Hills Sand
Contour Interval 10 %

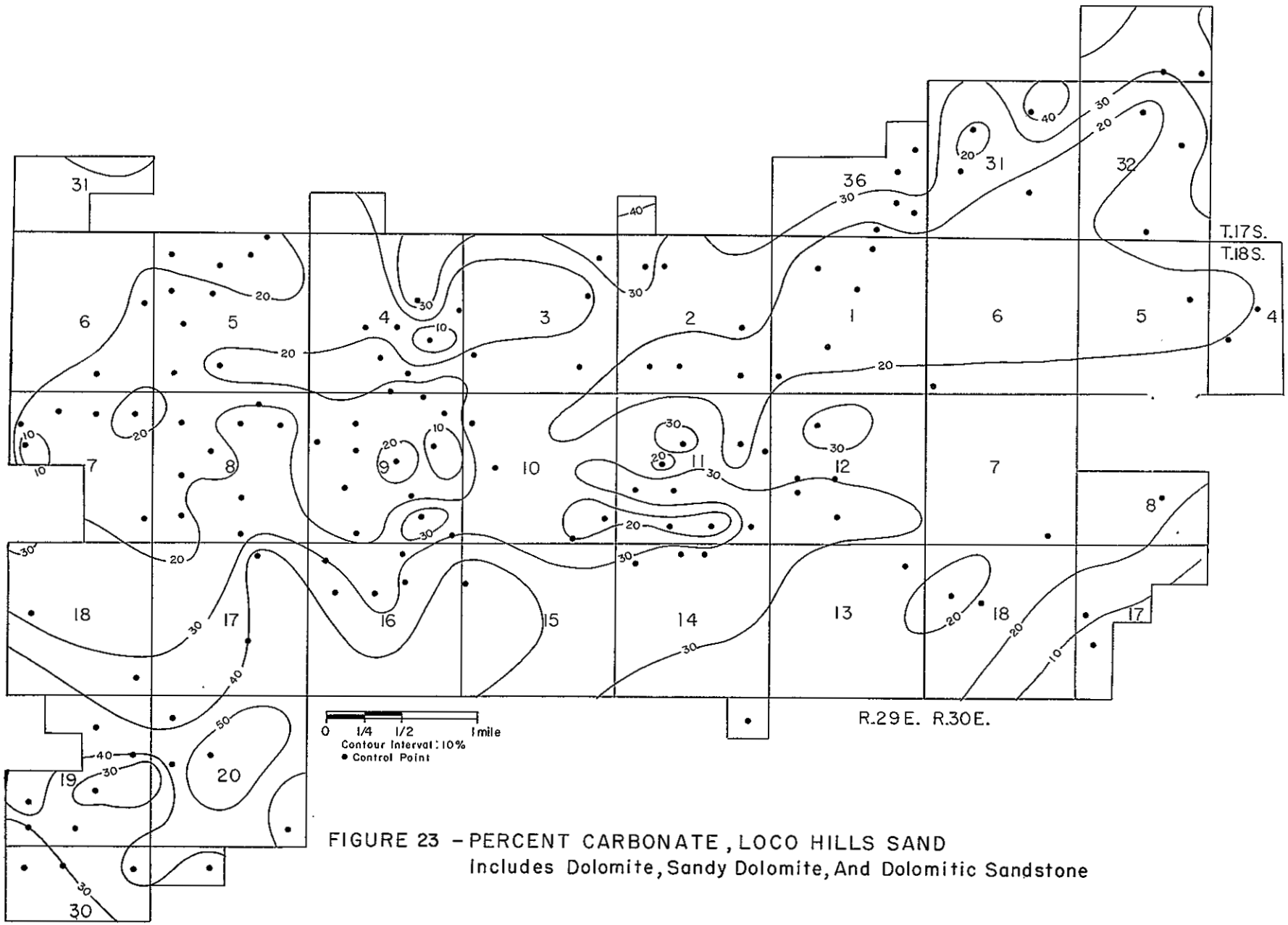

FIGURE 23 – PERCENT CARBONATE, LOCO HILLS SAND
Includes Dolomite, Sandy Dolomite, And Dolomitic Sandstone

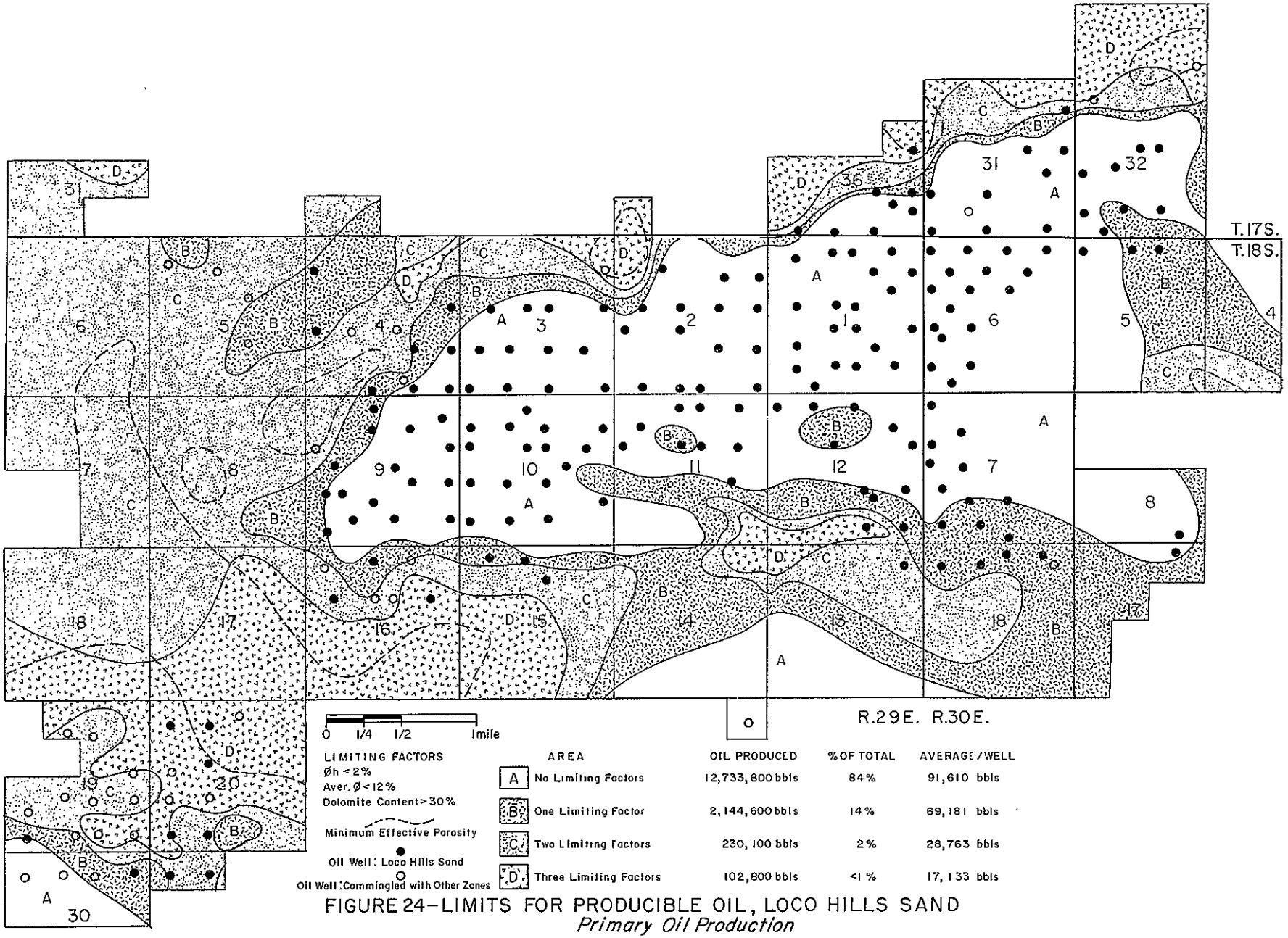

FIGURE 24—LIMITS FOR PRODUCIBLE OIL, LOCO HILLS SAND
Primary Oil Production

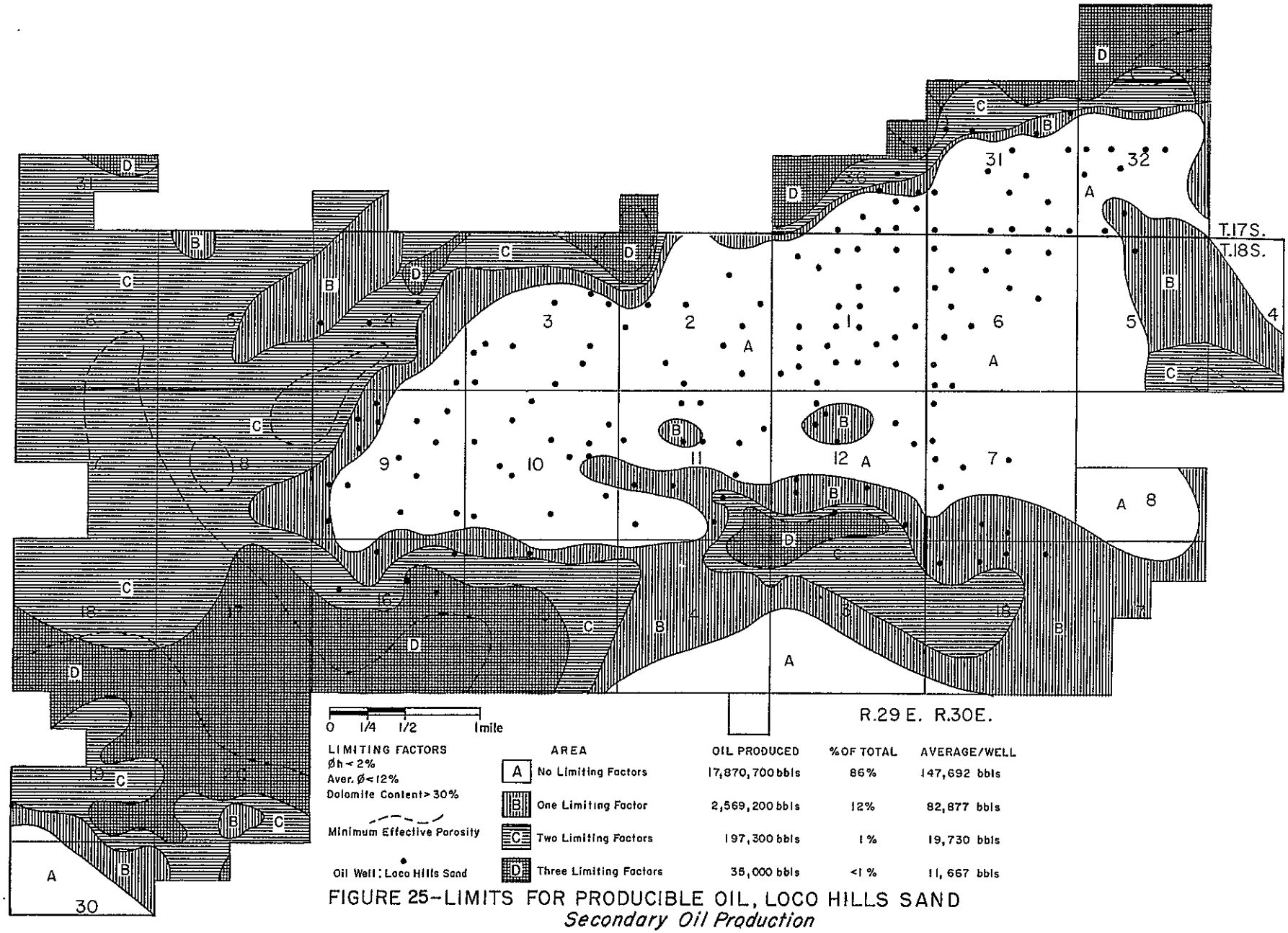

FIGURE 25–LIMITS FOR PRODUCIBLE OIL, LOCO HILLS SAND
Secondary Oil Production

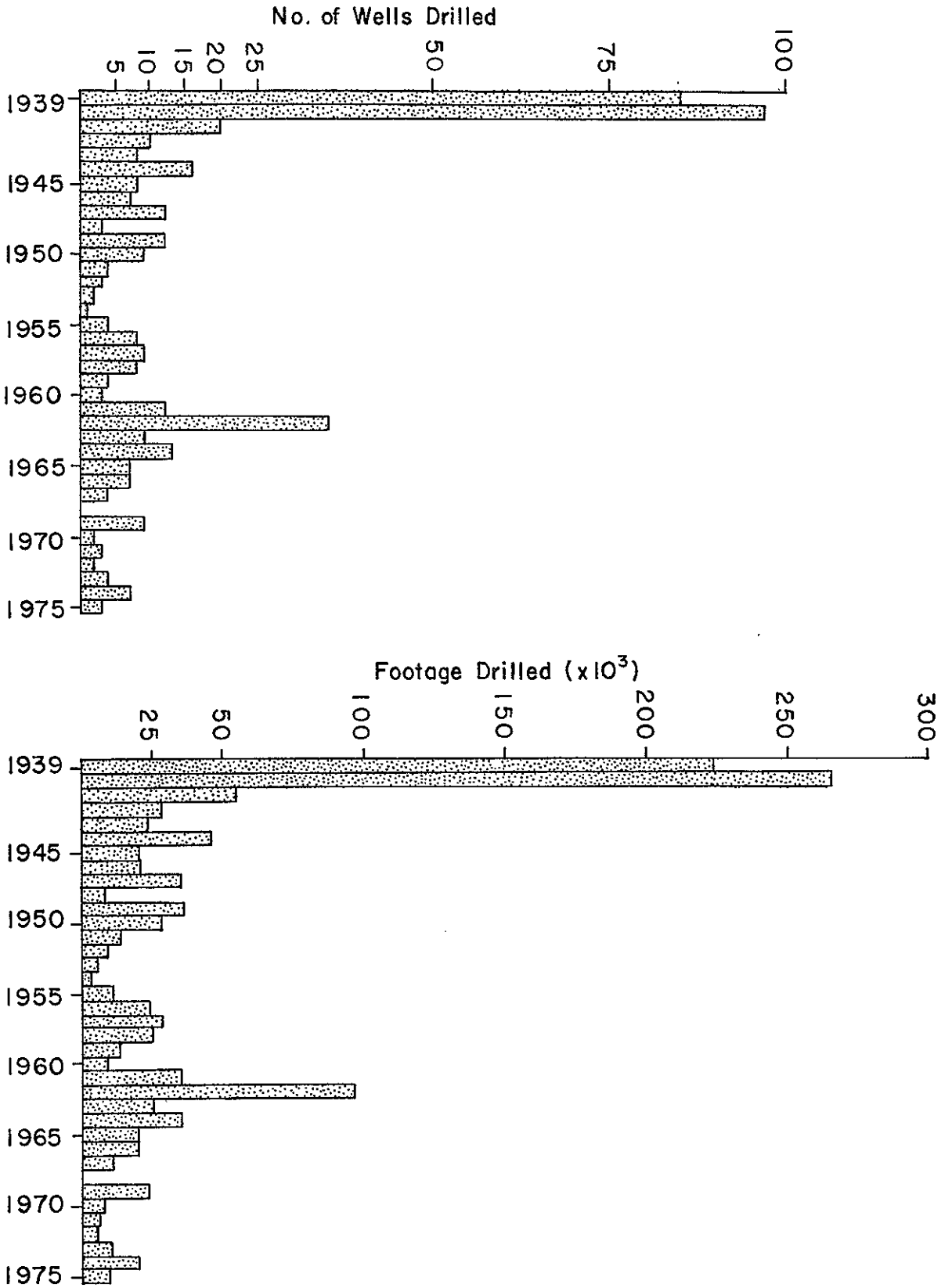

Figure 26—Wells and Footage Drilled : Queen - Grayburg - San Andres
Average depth / Well — 2,753'

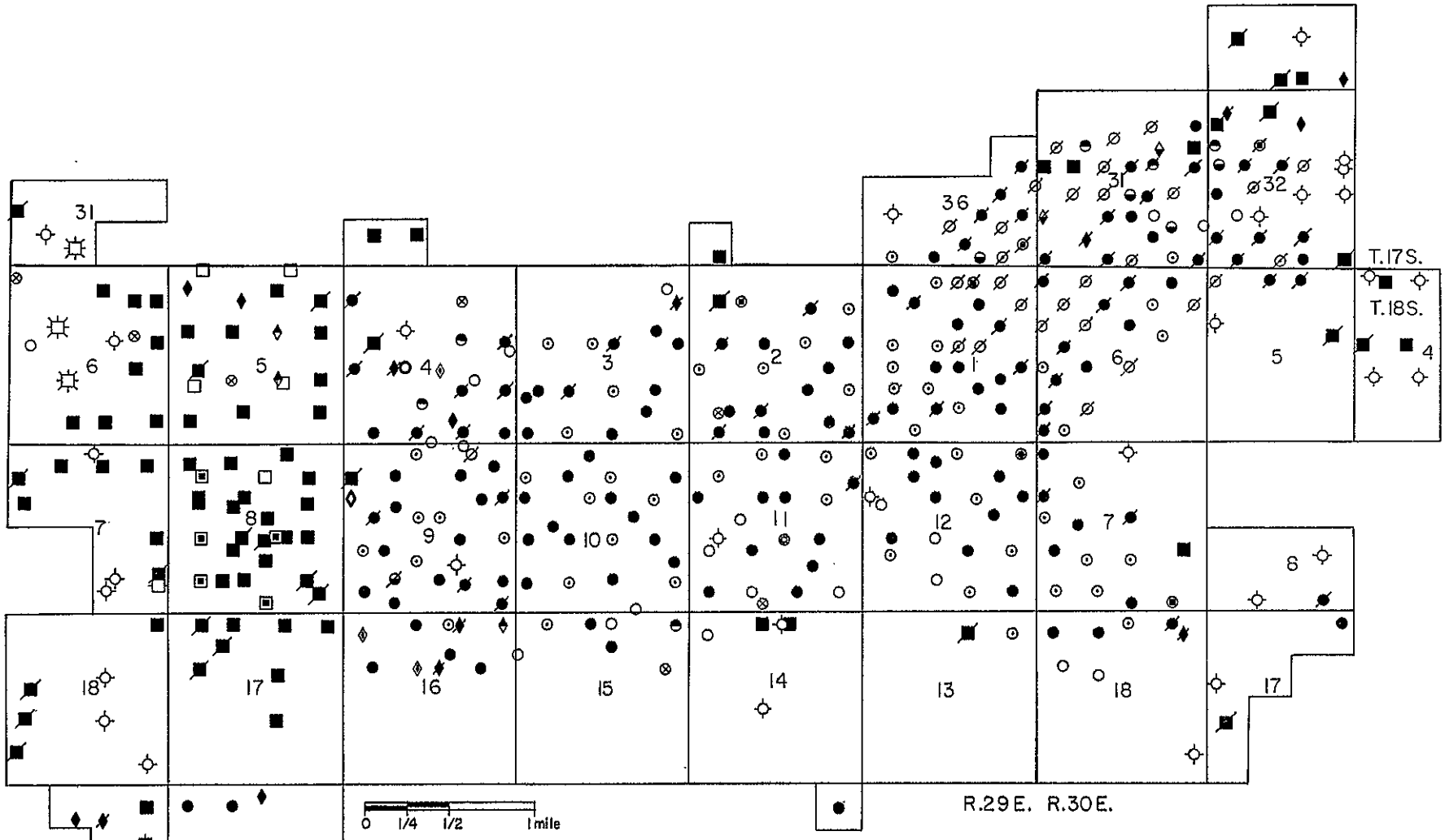

FIGURE 27—1975 WELL STATUS, LOCO HILLS FIELD

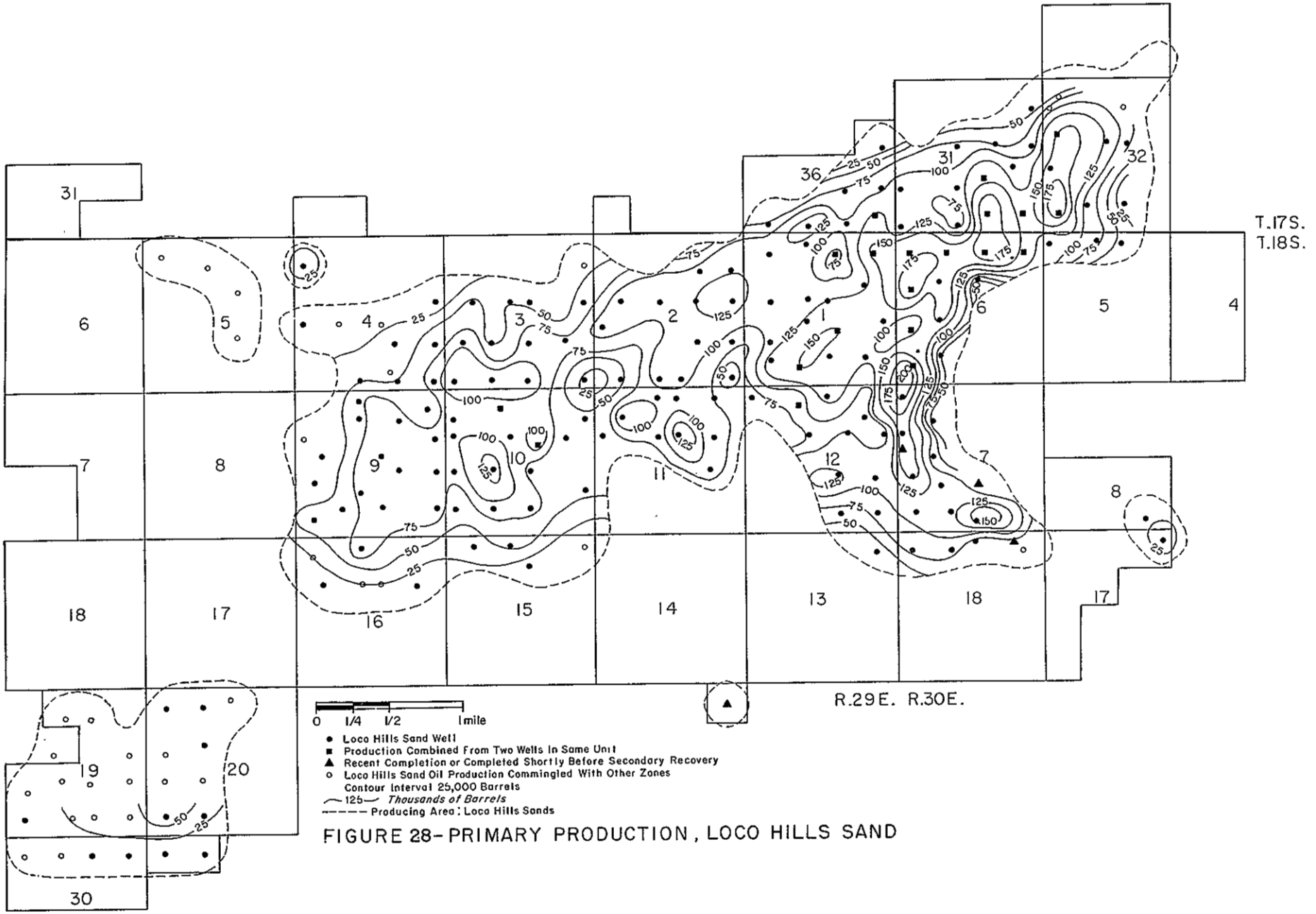

FIGURE 28- PRIMARY PRODUCTION, LOCO HILLS SAND

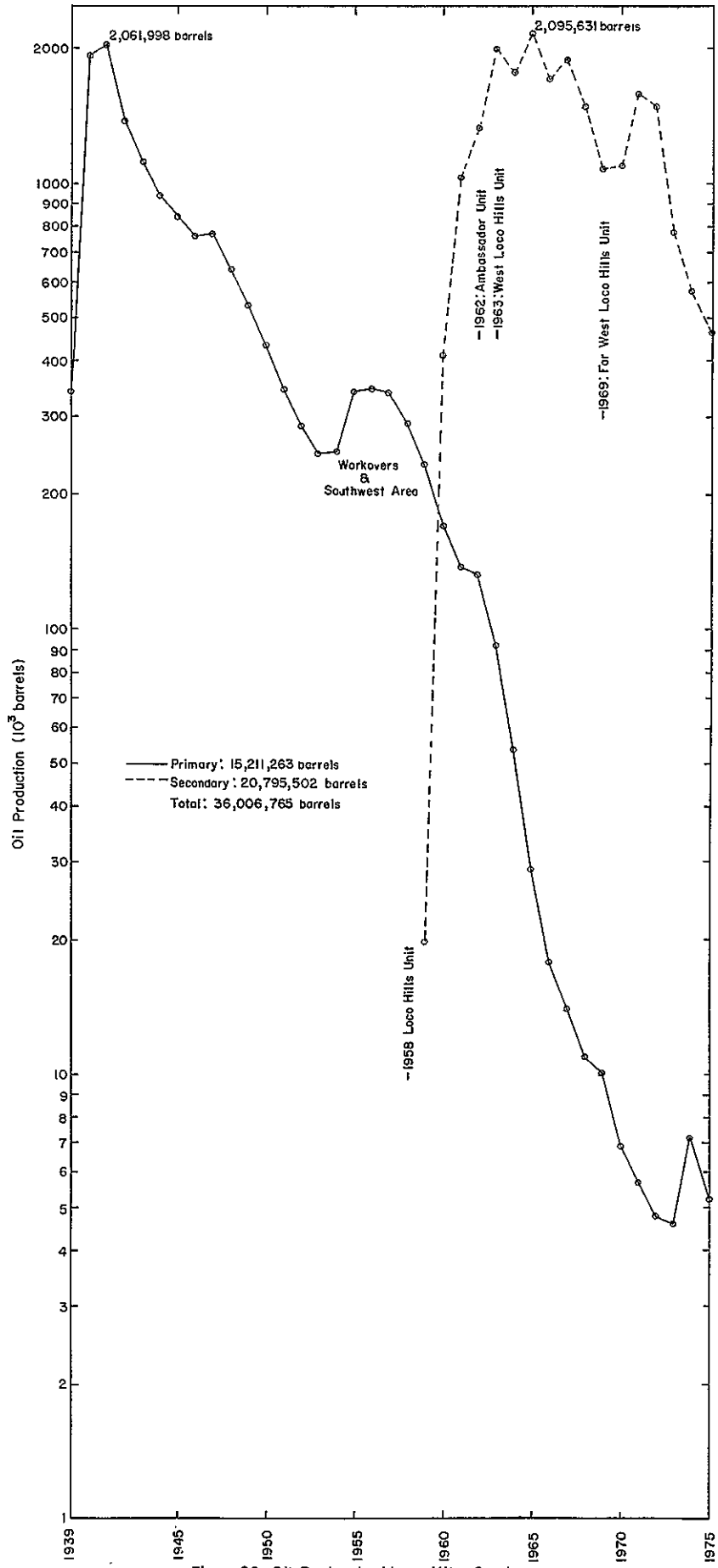

Figure 29- Oil Production: Loco Hills Sand

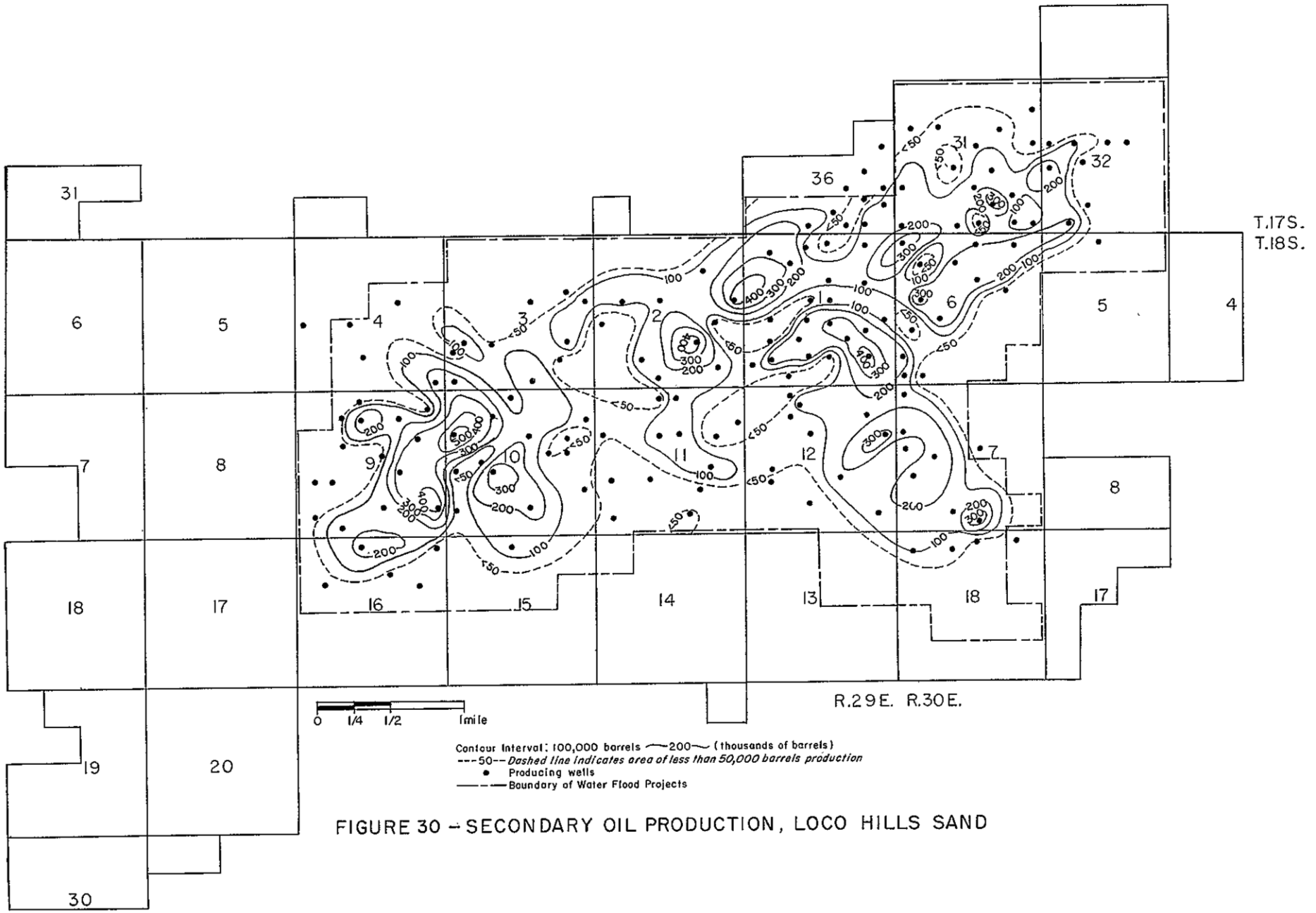

FIGURE 30 – SECONDARY OIL PRODUCTION, LOCO HILLS SAND

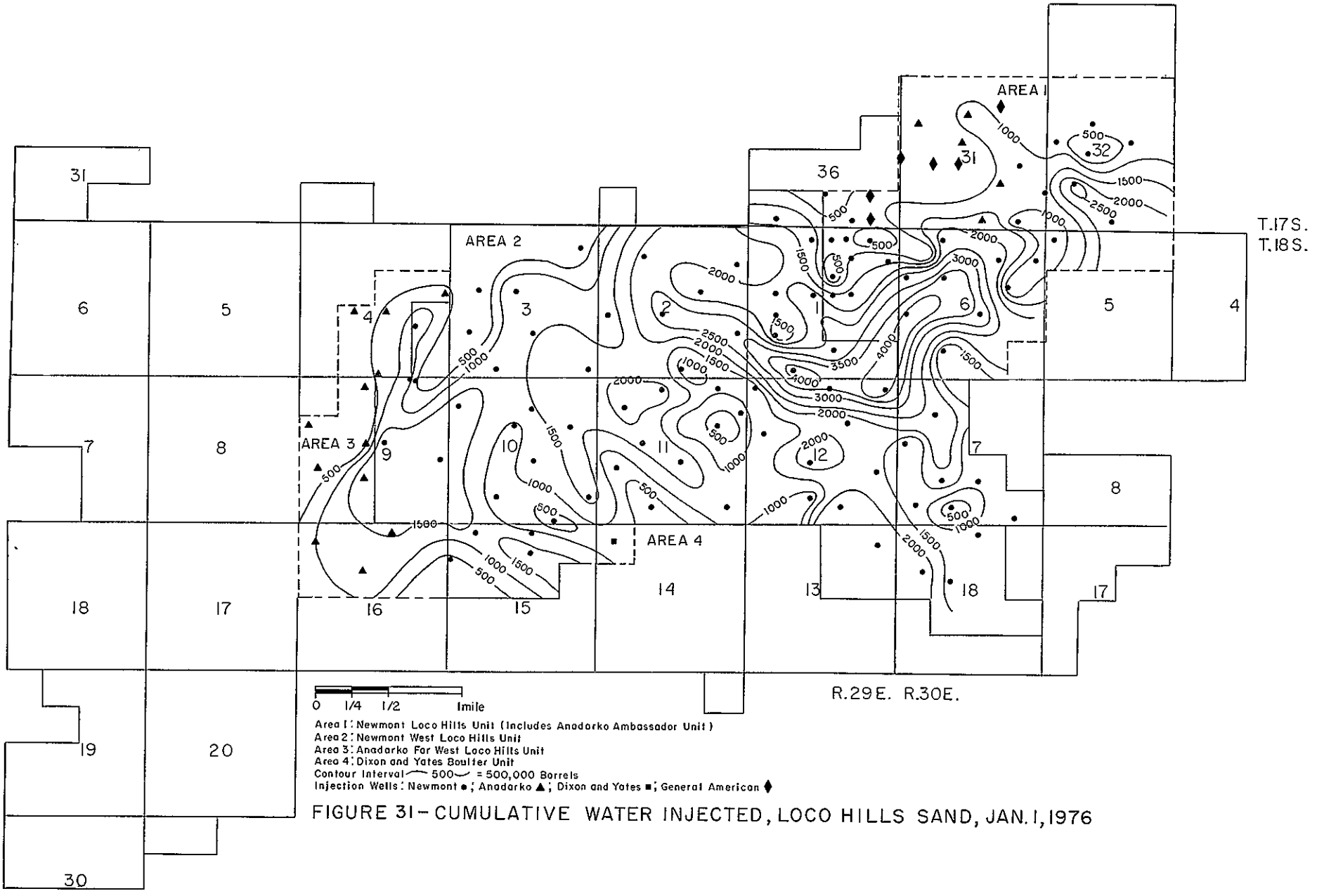

FIGURE 31 – CUMULATIVE WATER INJECTED, LOCO HILLS SAND, JAN. 1, 1976

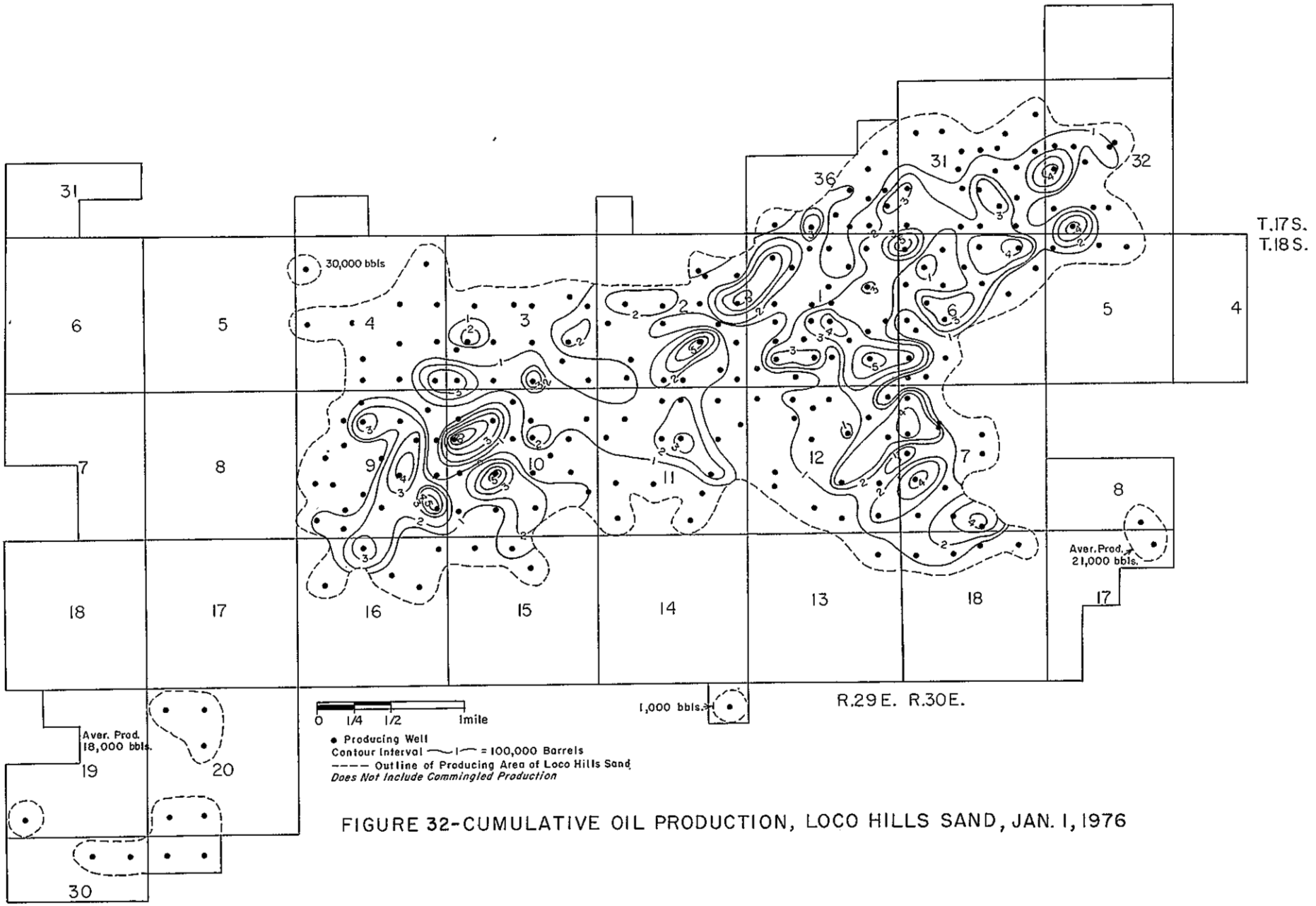

FIGURE 32-CUMULATIVE OIL PRODUCTION, LOCO HILLS SAND, JAN. 1, 1976

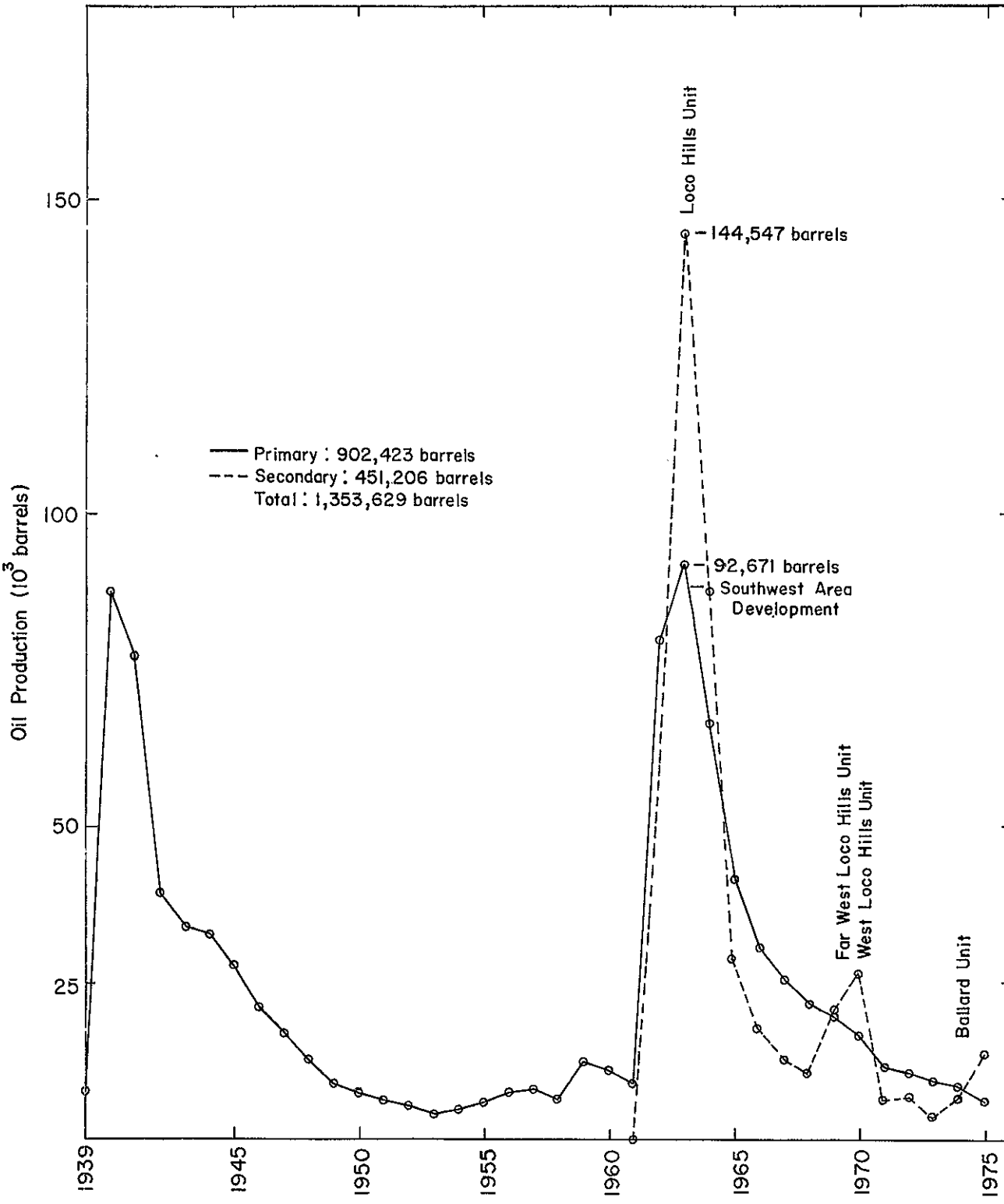

Figure 33 – Oil Production, Loco Hills Sand Commingled

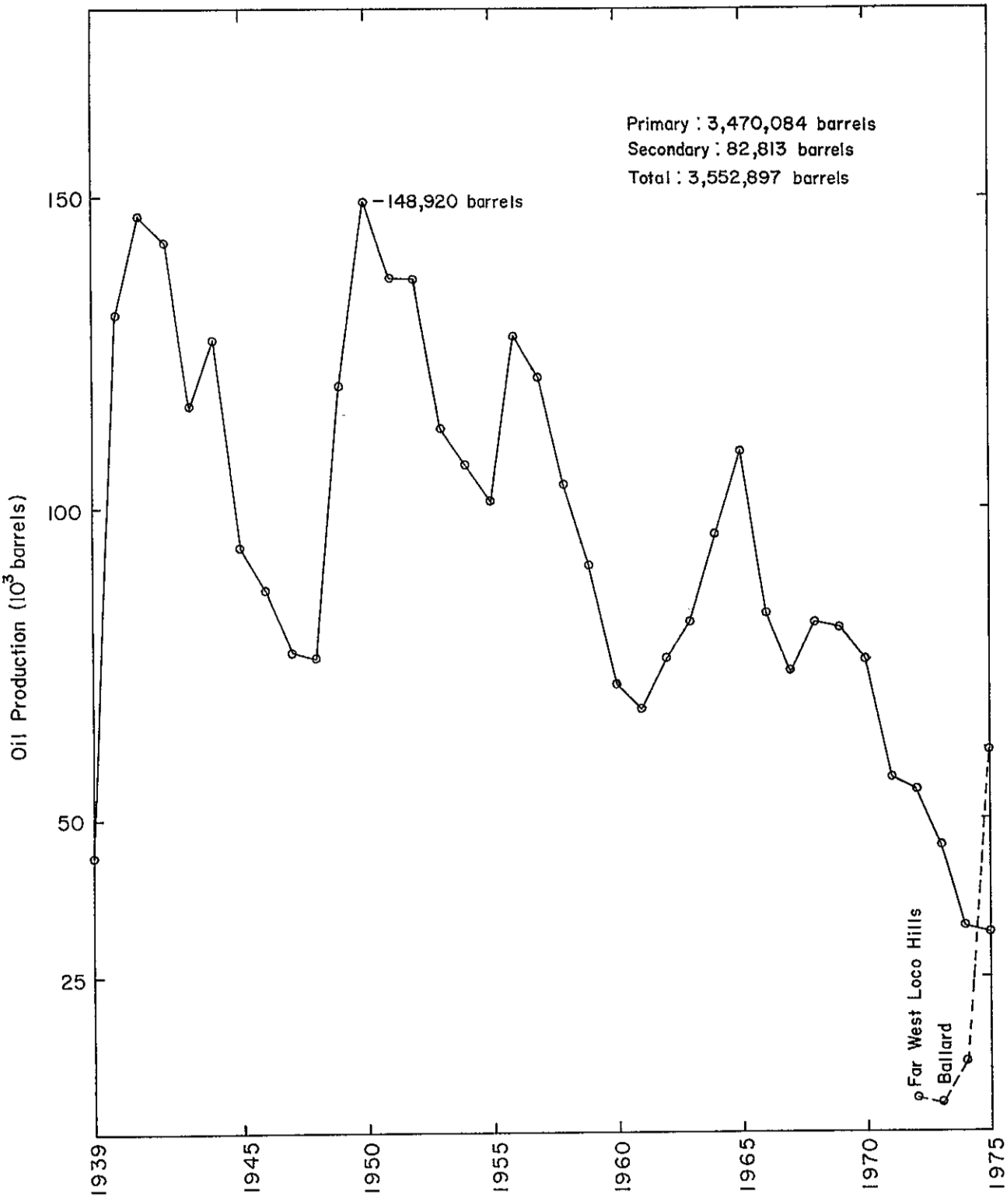

Figure 34 — Oil Produced From Pay Zones Other Than Loco Hills Sand