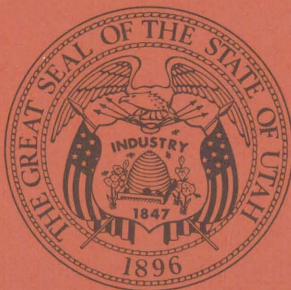


OIL AND GAS PRODUCTION IN UTAH TO 1970

compiled by Carlton Stowe

UTAH GEOLOGICAL AND MINERALOGICAL SURVEY
affiliated with
THE COLLEGE OF MINES AND MINERAL INDUSTRIES
University of Utah, Salt Lake City, Utah



*Prepared by Utah Geological and Mineralogical Survey
in cooperation with the State of Utah
Department of Natural Resources
Division of Oil & Gas Conservation*

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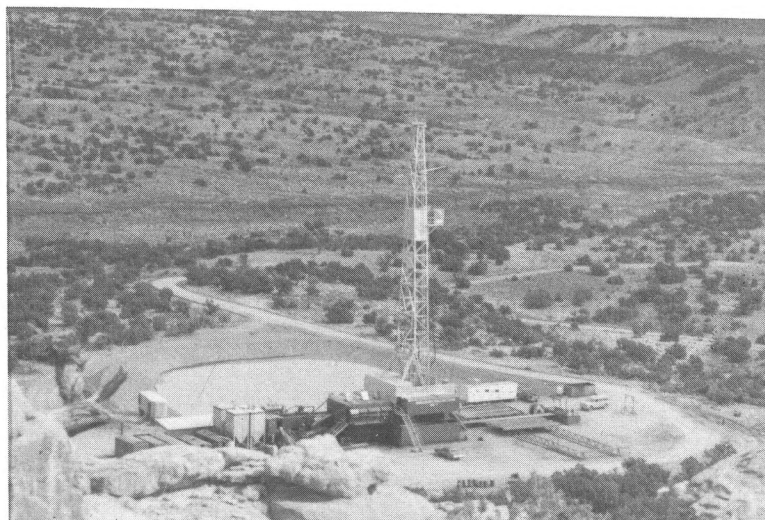
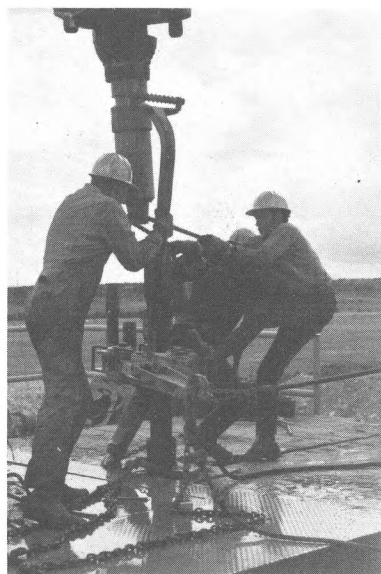
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Left: Crew prepares to make a connection on oil-well drilling rig. Above: A wildcat well in Uinta Basin near the town of Duchesne, Utah (photos courtesy Western Oil Reporter).

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University of Utah, Salt Lake City, Utah



PREFACE

This study was undertaken to accumulate production statistics on each oil and gas field in Utah. It is designed to be an immediate reference of reliable and complete information on each field, to make available accurate information on past Utah production. The data date back to the discovery of each field from the time of the first recorded production.

Field outlines, as defined by the State Field Names Advisory Committee, locate oil, gas, water input, injection and drilling wells and dry holes within each field. Production data are presented for each year. Crude oil analyses, as well as gas and water analyses, are also included.

The report was assembled in cooperation with the Utah Oil and Gas Conservation Commission, the U. S. Geological Survey Oil and Gas Conservation Division, Salt Lake City, the U. S. Geological Survey Southern Rocky Mountain Regional office, Roswell, New Mexico, and the U. S. Bureau of Mines.

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OIL AND GAS PRODUCTION IN UTAH TO 1970

compiled by Carlton H. Stowe¹

INTRODUCTION

The United States depends on oil and gas to meet 75 percent of its energy needs. Many vital segments of our economy simply are unable to function without petroleum. The petroleum industry today faces one of the most severe challenges in its history; the future pattern of supply must be of concern. By 1985 only about 25 percent of the supply will come from already proved reserves in the United States. The remainder must come from domestic reserves yet to be discovered, from synthetics (the technology for which is not yet economically feasible) and from foreign oil coming from the volatile Middle East.

U.S. Department of the Interior studies indicate only about one-fifth of the oil and gas thought to exist in America has been located. Whether oilmen continue to look for the remaining petroleum depends on whether they are willing and able to invest sufficient money in exploration programs.

If the challenge posed by growing energy demands is to be met now and in the future, the understanding of the government, the consumer and the general public is necessary. From government must come a stable regulatory climate to permit industry to invest the capital and planning needed for proper development of the oil and gas reserve energy resource; the consumer must be willing to pay the price for cleaner fuel; the oil industry must operate in a way that does not offend either the senses or sensibilities of the public. And it must be ready to adjust its plans and operations to respond to genuine needs and concerns.

UTAH'S OIL PRODUCTION

Utah's oil producing industry continues to expand at a steady pace. For many years it has been in fourth position in the Rocky Mountain Region states, surpassed by Wyoming, Montana and Colorado. In 1963, Utah ranked third in the region. And much of Utah's oil remains to be discovered. Commercial quantities of oil produced in 1948 established the oil busi-

ness in Utah. At the close of 1970, Utah's oil production reached an all-time high of *391,335,318 barrels*. In 22 years, a comparatively short time, Utah has:

- more than 1,260 oil producers completed and placed on record,
- production of almost two million barrels of oil monthly,
- approximately six billion cubic feet of gas monthly,
- 21 oil fields with oil production surpassing a million barrels each,
- five gas fields with gas production in excess of 100 billion cubic feet,
- field producing limits far from being defined and
- stimulated exploration in this relatively lightly drilled portion of the western Rockies.

UTAH'S PETROLEUM AND NATURAL GAS HISTORY

The search for petroleum began in Utah as early as 1847; the first discovery was in San Juan County soon after the arrival of the pioneers. Subsequently some oil-seep products were substituted for butter, lard and tallow in greasing wagons. The first real drilling venture for oil, however, occurred in 1891, five years before Utah became a state. This exploratory well was drilled to a depth of 1,000 feet near the town of Green River, Grand County. The second recorded drilling for oil was in the Farmington area of Davis County in 1892 where gas previously was discovered in 1891. In 1892 a well drilled to 850 feet recorded an initial gauge of nearly five million cubic feet of gas per day. Virtually all the wells drilled in the Farmington area blew out when the gas sands were struck. In some instances 10-pound rocks were hurled some 200 feet into the air. One well burned for three days before being controlled and special excursion trains from Salt Lake City were operated to the well site.

No commercial application was made of the Farmington gas until 1895 when a pipeline was built to Salt Lake City. The city was supplied with gas for 19 months before the wells sanded-up and reserves dwindled, forcing abandonment.

¹Mineral information specialist, Utah Geological and Mineralogical Survey, Salt Lake City, Utah.

Three other wells were drilled before the turn of the twentieth century in Emery, Grand and San Juan counties. No production resulted from any of the three wells.

Utah's production history began in 1907 and in 1908. Small quantities of oil were discovered in the Virgin area in Washington County and in San Juan County, which led to increased leasing and drilling activity. Oil was discovered in southern Utah's Mexican Hat oil field in 1908, and oil seeps were noticed in the canyon of the San Juan River in 1879. Minor success was experienced commencing in 1923 in exploring the Boundary Butte anticline near the Arizona State line where small quantities of oil were found. At Farnham Dome field, Carbon County, drilling dates back to 1921. In the early 1930's, gas was used at a small plant constructed at Wellington, Utah. Natural gas was found at Cisco Dome, Grand County, in 1925; by the end of 1929, the field furnished gas for use at a carbon black plant.

In the period from 1891 to 1948 more than 630 wells were drilled in 135 different areas of the state. With practically no exceptions, all were exploratory wells and again, with few exceptions, all were dry. Almost all of the early wells were shallow—all but five less than 2,000 feet deep. In a few instances, water, carbon dioxide and natural gas were discovered and produced.

Drilling for oil in the Uinta Basin began in 1897. Results were, until 1948, in the form of natural gas which was distributed in the Vernal area for a few years. Beginning in September 1948, however, in the Ashley field and, also in 1948, in the Roosevelt field, production easily over-shadowed earlier discouraging records.

The turning point of Utah's petroleum industry came in 1948 when the first commercial producer was completed in the Ashley Valley field near Vernal. At the end of this year more than 550 wells had been drilled in Utah. This accelerated the search for oil in many areas. The next major discovery in the Aneth field of San Juan County in 1956 began major production in 1958 with completion of crude oil pipelines to Texas and to California from the Greater Aneth and related fields of southeast Utah.

Well-log data and surface geologic investigations are largely responsible for success of drilling in Utah. Since the twenties the focus has been on the central and north part of the San Juan Basin, especially near the salt anticlines. Oil was encountered at the north end of Salt Valley anticline, but sustained production could not be established. Later, oil and gas in the Big Flat and Cane Creek areas further stimulated exploration.

As oilmen drilled more wells and accumulated more geologic data, it became apparent that a great potential of oil and gas could be developed throughout south Utah. Additional knowledge led to the discovery of Lisbon and Salt Wash fields. The biggest success in the oil business was made in 1959 by an exploratory well in the Paradox Basin at the northwest end of the Lisbon Valley anticline in San Juan County. It found Mississippian gas and Devonian oil and flowed as much as 587 barrels of oil per day on early tests. No exploratory well offered as much potential for development up to that time, both in area and apparent reserve possibilities, as the Northwest Lisbon success.

It became apparent in late 1959 that much additional drilling would be necessary through the entire north Paradox Basin to define the potential of the Mississippian and Devonian in the area. Consequently, leases through the area were much in demand. Prices multiplied on the evidence developed from the Lisbon success and several new wells were scheduled; 19 oil producers were added. Northeast Utah's Red Wash field, Uintah County, also was undergoing development.

In 1958, Red Wash increased its size with 22 oil producers; production at the field was averaging more than 9,700 barrels per day. Today Red Wash averages slightly more than 10,100 barrels of oil per day. The field has had the most significant development in Utah outside the Paradox Basin.

A review of recent years shows some of the more important developments occurring in Utah took place in the Paradox Basin. Highlights of this period include development of the Greater Aneth area which started in 1960. During that year, south of the San Juan River and within the White Mesa-south McElmo Creek area, 38 wells were completed. Across the river, to the north in the Aneth-McElmo Creek-Recapture Creek areas, 29 wells were drilled. Thirteen oil producers were completed at Ismay, the most easterly in the Utah portion of the Paradox Basin.

Northeast Utah's Uinta Basin has steadily progressed; about half of 1961's drilling was done in the northeast area of the state. During that year completion of and plans for substantial new outlets for natural gas were announced. Mountain Fuel Supply and Utah Natural Gas combined to move gas from Ute Trail and Uintah units westward to existing facilities of Utah Natural Gas. The 94-mile, 20-inch line was completed late in 1961 at an estimated cost of about \$10 million. In 1962, a 55-mile line provided an outlet from the San Arroyo area in Grand County to the mainline across the Uinta Basin with junction in the Island Unit area.

Utah's exploratory success ratio was the highest in the Rocky Mountain region in 1963. Fourteen discoveries out of 91 exploratory wells drilled were completed. In 1964, thirteen discoveries were completed and the Upper Valley field, Garfield County, was discovered. Upper Valley field to date is the first and only commercial production in the Kaiparowits Basin of southern Utah. The high success ratio was repeated in 1966 when a little more than 26 percent of all exploratory wells drilled were completed as producers. Bridger Lake field, Summit County, also was discovered that year. The discovery well flowed more than 2,700 barrels of oil daily from a zone in the Dakota below 15,504 feet. It was one of the Rocky Mountain's foremost discoveries then and now.

Production in Utah in 1966 averaged 65,991 barrels of oil per day and totaled nearly three million barrels more than in 1965. Sixty-three fields produced during the year with four producing more than a million barrels of oil. Then, in 1967, a flowing oil well producing 1,080 barrels daily was completed at Bluebell field, Duchesne County. It sparked what was to become a significant field in Utah's Uinta Basin. Today Bluebell field has 30 wells—fifteen, located on 320-acre spacing, produce more than 62,200 barrels monthly; the others, on 640-acre spacing, produce some 55,000 barrels monthly. In 1968, a significant development program was carried on at Wonsits Valley field in the Uinta Basin. Twenty-six oil producers were completed making it the second largest in the Red Wash complex in total production.

In 1969 Utah's active rotaries ranged from 7 to 19, averaged 12 operating. The high of 19 was recorded three times during the year. New fields were established, but the most significant was an 888-barrel flowing well at Cedar Rim field. It was completed from the Wasatch below 8,580 feet. Four additional zones indicated production.

Drilling declined somewhat in 1970; operators completed 96 wells in Utah. Of these, 28 were oil wells, 11 gas wells and 45 were dry holes. Also, 12 service wells were drilled. Prolific wells marked work along Utah's newest Tertiary trend, extending more than 45 miles across the deepest portion of the Uinta Basin from Bluebell and Roosevelt fields on the northeast through the Cedar Rim-Sink Draw area on the southwest.

Lease interest continued to be high in the state in 1970 as evidenced by the Uintah and Ouray Indian agency lease sales. A number of exploratory outposts and new exploratory wells were active throughout the year. In overall exploration, Utah posted another best success ratio in the Rockies. The success percentage was 26.19, a little better than one in four.

UTAH'S LARGEST FIELDS

Development of the larger oil fields in Utah has been phenomenal. Of the 21 million-barrel oil fields (see below), 12 are located in San Juan County, 6 in Uintah County and one each in Duchesne, Garfield and Summit counties. Earliest first recorded production of the million-barrel fields was in 1948 and the latest in 1967.

Utah's 21 most productive oil fields – 1970

Rank	Oil Field and Date of First Production	Cumulative production (bbls)
1.	McElmo Creek ¹ , San Juan, 1957	78,580,679
2.	Aneth ¹ , San Juan, 1956	73,095,920
3.	Ratherford ¹ , San Juan, 1956	54,221,678
4.	Red Wash ² , Uintah, 1951	48,308,683
5.	Lisbon, San Juan, 1960	29,449,503
6.	White Mesa ¹ , San Juan, 1957	24,230,952
7.	Wonsits Wonsits Valley ² , Uintah, 1959	20,234,934
8.	Ashley Valley, Uintah, 1948	16,641,858
9.	Ismay, San Juan, 1956	8,067,079
10.	Walker Hollow ² , Uintah	5,877,689
11.	Upper Valley, Garfield, 1964	4,896,485
12.	Bridger Lake, Summit, 1966	4,346,891
13.	Bluebell, Duchesne, 1967	3,267,917
14.	Roosevelt, Uintah, 1949	2,627,567
15.	Boundary Butte, San Juan, 1948	1,987,138
16.	McElmo Mesa, San Juan, 1964	1,916,737
17.	White River ² , Uintah, 1962	1,441,196
18.	Tohonadla, San Juan, 1958	1,423,499
19.	Gothic Mesa, San Juan, 1957	1,283,670
20.	Recapture Creek, San Juan, 1958	1,202,908
21.	Bluff, San Juan, 1958	1,080,728

Five gas fields in Utah with gas production exceeding 100 billion cubic feet are:

	(cfg)
Greater Aneth area	226,929,092,000
Red Wash	176,750,428,000
Lisbon	136,832,692,000
Clear Creek	132,345,101,000
Clay Basin	112,988,868,000

All-time cumulative production totals for the oil and gas fields in Utah, up to and including 1970, are oil, 391,335,318 (bbls); gas, 1,039,578,048 (mcf) and water, 666,651,316 (bbls).

PRESENT-DAY OIL AND GAS INDUSTRY

Oil and gas production is one of Utah's fastest growing industries; total drilling has reached a peak of over 3,970 wells scattered throughout the state. The

¹ Field included in a group known as the Greater Aneth area; production for the area amounts to 230,197,206 bbls.

² Field included in a group known as the Greater Red Wash area; production for the area amounts to 75,242,106 bbls.

number of people involved directly or indirectly in Utah's oil and gas industries exceeds 3,000 with an annual payroll exceeding \$15 million.

By 1970 oil and gas fields totaled 139 in Utah. This compares with 41 oil fields in 1963, 11 at the end of 1955 and none before September 1948. All of the oil fields and four of the gas fields produced petroleum in 1963 although eighty-four of the oil wells were not in production. Some had no pipeline-collecting facilities for transportation of the oil to major pipelines and all were far removed from Utah's oil refineries. Of the 139 oil and gas fields today, 81 fields produce both gas and oil, 23 produce oil only and 23 produce gas only. Twelve fields have been depleted or shut-in.

Most of Utah's crude oil production moves out of the state to south California or to the East. Approximately 80 percent of the crude oil used in Utah refineries is imported from Colorado and Wyoming. This is primarily a function of geographical distance from refineries to oil fields. Most of the oil produced in Uintah and Duchesne counties moves by pipeline to the refineries in the Salt Lake City area. Other production moves east or west from southeast Utah.

From a plant that processed seven barrels of crude oil per day in 1909 has grown a major industry of five refineries which process an average of 70,000 barrels of crude per day and have a capacity of more than 112,500 barrels daily. The five Utah refineries are the Utah Oil Refining Company (a subsidiary of Standard Oil of Indiana), Salt Lake Refining Company (a subsidiary of Standard of California), Phillips Petroleum Company, Western States Refining Company and Uintah Oil Refining Company.

The U. S. Bureau of Mines reports Utah's five oil refineries processed 39.3 million barrels of crude oil in 1969. Utah fields provided 10.1 million barrels; 29.2 million barrels came from out of state. Colorado and Wyoming were the principal sources of out-of-state crude oil, with 16.8 million and 12.2 million barrels, respectively; out-of-state shipments were chiefly to California (11.0 million barrels) and to Texas (2.5 million barrels).

Proved crude oil reserves are a little more than 195.3 million barrels in Utah. Additional reserves of 35.3 million barrels are considered available by fluid injection. Total gas reserves are estimated at more than 1.09 trillion cubic feet.

State and federal government agencies report that at the end of the fiscal year 1969, a total of \$8,530,712 in royalties on crude oil production were paid. This came from Indian lands (\$5,171,354), from

public domain (\$2,959,485) and from state land (\$399,873). Royalty receipts from state and federal government agencies for natural gas production totaled \$851,832 during 1969. Of this amount, \$336,111 was from production on Indian lands, \$462,294 from public domain and \$53,427 from state lands. The state receives 37.5 percent of the royalties paid on production from public domain under the provisions of the Mineral Leasing Act of 1920. Royalties paid on production from privately owned lands are not included in the preceding figures.

CONCLUSIONS

If the challenge posed by our growing energy demands is to be met now and in the future, exploration for petroleum and natural gas must be increased and intensified. Unlike other areas in the United States where some deposits already have been exhausted, the possibilities of additional reserves in Utah are great.

Because the production of oil and gas is relatively new in Utah, their development is more important now than ever before. Utah annually increases its production of hydrocarbons; the future should see even greater increases, if new deposits are located.

Energy demands, particularly for oil, gas and gas liquids, will continue to increase steadily for at least the next quarter century. The search will be conducted particularly in lightly explored regions and basins where conditions conducive to entrapment of large amounts of petroleum exist. Utah meets most of the demands of petroleum prospectors with conditions that are conducive to exploration.

As the search for petroleum and natural gas continues, new uses are being developed for them either as finished products or as raw materials for other industries. With new uses come increased demands for these minerals. The search for and development of these resources are of major importance in the entire economic development of Utah and its neighboring states in the Rocky Mountain Region.

The Utah Geological and Mineralogical Survey has played a key role in developing Utah's resources. When the Utah Legislature authorized establishment of UGMS in 1931 and formally activated it in 1941, oil production was not significant. In 1970, Utah's assessed value of oil and gas properties amounted to \$51,840,000.

The publication of "Oil and Gas Possibilities of Utah" by UGMS in 1949 stimulated exploration efforts which resulted in today's production. In 1963,

"Oil and Gas Possibilities of Utah, Re-Evaluated" was published. Its 44 papers presented a new appraisal of Utah's hydrocarbon potential. This study is an invaluable aid to those interested in the extensive petroleum program in Utah.

The work of Utah Geological and Mineralogical Survey in locating, identifying, defining and mapping Utah's vast mineral wealth is critically important to the state.

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Jan Weyman, oil and gas statistical secretary, Division of Oil and Gas Conservation, contributed personal time and effort in compilation of data as well as contributing suggestions for improvement of the manuscript. Sherrie DeRose, secretary, Division of Oil and Gas Conservation, assisted in the accumulation and preparation of information.

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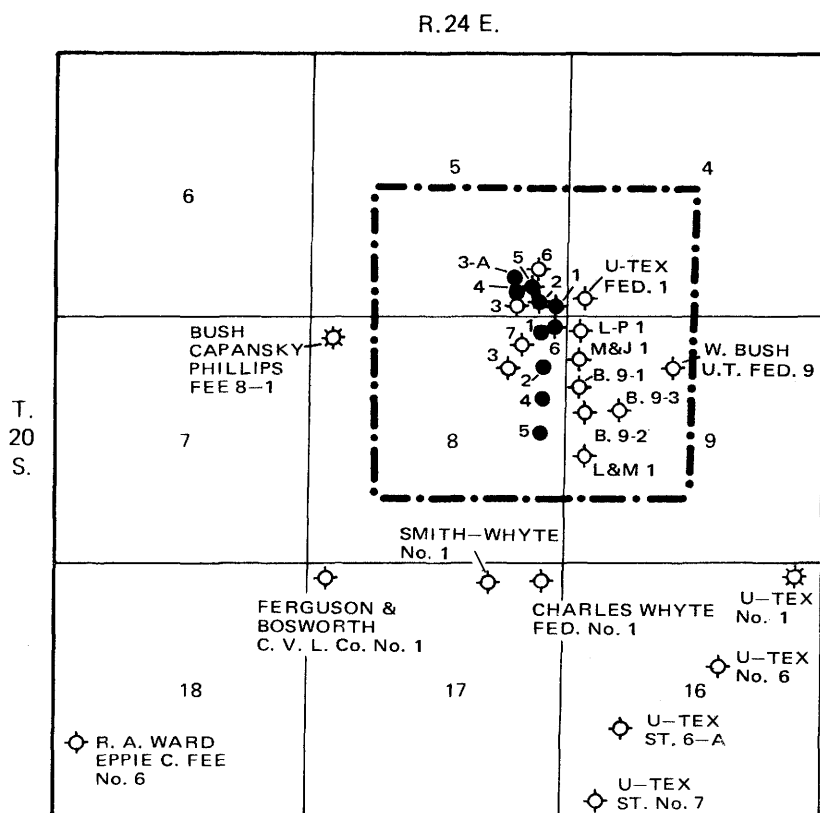
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REFERENCES

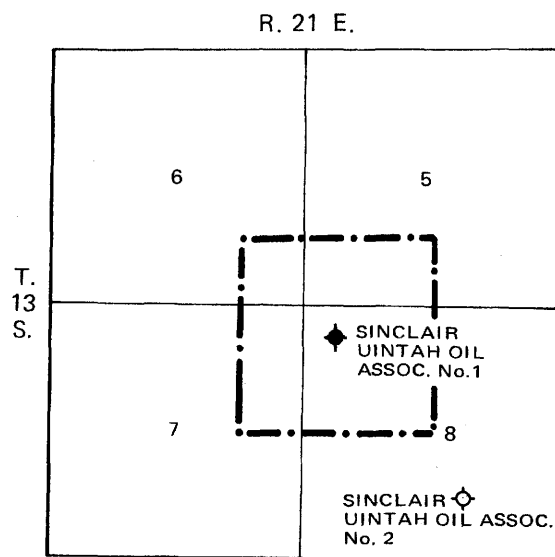
- Bullock, K. C., 1967, Minerals of Utah: Utah Geol. and Mineralog. Survey Bull. 76.
- Crawford, A. L., 1963, Oil and gas, re-evaluated: Utah Geol. and Mineralog. Survey Bull. 54.
- Doelling, H. H. and H. R. Ritzma, 1969, Mineral resources, San Juan County, Utah and adjacent areas, pt. 1: Utah Geol. and Mineralog. Survey Special Studies 24.
- Eardley, A. J., 1963, Oil seeps at Rozel Point: Utah Geol. and Mineralog. Survey Special Studies 5.
- Goode, H. D. and R. A. Robison, eds., 1965, Geology and resources of south central Utah: Utah Geol. Soc. Guidebook 19.
- Hansen, G. H. and H. C. Scoville, 1955, Drilling records for oil and gas in Utah: Utah Geol. and Mineralog. Survey Bull. 50.
- Heylman, E. B., ed., 1963, Guidebook to the geology of southwestern Utah: Intermtn. Assoc. Geologists Guidebook.
- , 1964, Shallow oil and gas possibilities in east and south-central Utah: Utah Geol. and Mineralog. Survey Special Studies 8.
- Heylman, E. B., R. E. Cohenour and R. B. Kayser, 1965, Drilling records for oil and gas in Utah: Utah Geol. and Mineralog. Survey Bull. 74.
- Hilpert, L. S., ed., 1969 (reprinted), Mineral and water resources of Utah: Utah Geol. and Mineralog. Survey Bull. 73.
- Pratt, A. R. and Eugene Callaghan, 1970, Land and mineral resources of Sanpete County, Utah: Utah Geol. and Mineralog. Survey Bull. 85.
- Preston, D., ed., 1961, A symposium of the oil and gas fields of Utah: Intermtn. Assoc. Geologists Guidebook.
- Pruitt, R. G., Jr., 1961, The mineral resources of Uintah County: Utah Geol. and Mineralog. Survey Bull. 71.
- Sabatha, E. F., ed., 1964, Guidebook to the geology and mineral resources of the Uinta Basin—Utah's hydrocarbon storehouse: Intermtn. Assoc. Geologists Guidebook.
- Untermann, G. E. and B. R. Untermann, 1968, Geology of Uintah County, revised: Utah Geol. and Mineralog. Survey Bull. 72.

NOTE: Production figures are reported in barrels for water and oil, and MCF (thousand cubic feet) for gas.

Field plats are posted with standard map symbols.



Agate Field, Grand County, Morrison Pool
(Scale 1" = 4000')



Agency Draw Field, Uintah County
(Scale 1" = 4000')

AGATE FIELD, GRAND COUNTY

Area designation (latest): March 1962

Discovery year: 1961

First recorded production: 1961

Producing formation (s): Morrison

Disposition of products sold: K. E. McDougald

CRUDE OIL ANALYSIS

Year	Oil	Gas	Water	Prod. Wells
1961	9159			2
1962	Raphael Pumpelly, Capansky-Phillips undes. in 1962.			
	34674			4
1963	18878		240	4
1964	18816			4
1965	14838			4
1966	13833	1444		6
1967	10770	2546		6
1968	13478	2764		6
1969	10725	2606		6
1970	9442	1139		4
Cumulative production				
	154613	10499	240	

Gravity, specific 0.823
 Gravity, °A.P.I. 40.4
 Pour point, °F Below 5
 Sulfur, percent 0.61
 Color Greenish black
 Viscosity @ 100° F, 38 sec.
 Nitrogen, percent 0.034
 Sample identification: NE NE 8-20S-24E, Brushy
 Basin Ss-Sh (Jurassic) @ 1562-1580'

Gravity, specific 0.8343
 Gravity, °A.P.I. 38.1
 Pour point, °F Below 5° F
 Sulfur, percent 0.82
 Color Brownish green (dark)
 Viscosity @ 70° F, 50.5 sec.; @ 100°
 F, 40.2 sec.
 Nitrogen, percent
 Sample identification: W. Broadhead No. 3-A,
 5-20S-24E, January 10, 1967, Morrison
 @ 1660-1670'

AGENCY DRAW FIELD, UINTAH COUNTY

Area designation (latest): November 1962

Discovery year: April 10, 1962

First recorded production: 1962

Producing formation (s):

Year	Oil	Gas	Water	Prod. Wells
1962	913	740	3773	1
1963	Shut in			
1964	Shut in			
1965	P&A			
Cumulative production				
	913	740	3773	

AKAH FIELD, SAN JUAN COUNTY

Area designation (latest): May 1959

Discovery year: May 6, 1955

First recorded production: 1955

Producing formation (s): Ismay-Akah

Disposition of products sold: Caribou Four Corners
Oil, Inc.

Year	Oil	Gas	Water	Prod. Wells
1955	68617	89859	2194	
1956	49035	27214	10319	
1957	Shut in			
1958	37844	26664	21998	
1959	54653	28705	87596	2
1960	37890	25123	243672	2
1961	24581	23053	402883	2
1962	26691	11312	533925	2
1963	25904	21797	686109	1
1964	18349	14953	848644	1
1965	15971	35088	1011746	1

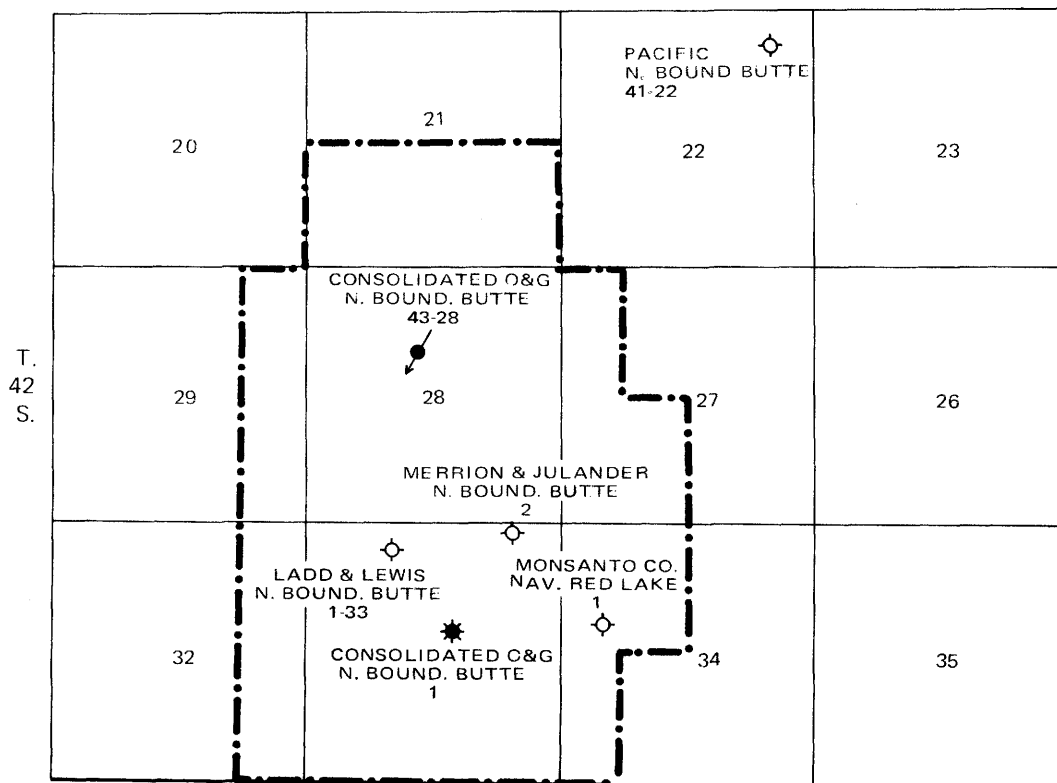
Year	Oil	Gas	Water	Prod. Wells
1966	12271	21099	1205290	2
1967	11751	19727	1409856	1
1968	15199	19454	1672903	1
1969	8847	10636	1910153	1
1970	8388	6529	122072	1
Cumulative production				
	415991	381213	10169360	

CRUDE OIL ANALYSIS

Gravity, specific	0.830
Gravity, °A.P.I.	39.0
Pour point, °F	5
Sulfur, percent	.16
Color	Brownish green
Viscosity	@ 100° F, 36 sec.
Nitrogen, percent	0.062

Sample identification: SW NE 33-42S-22E, Paradox
Ls (Pennsylvanian) @ 4688-4750'

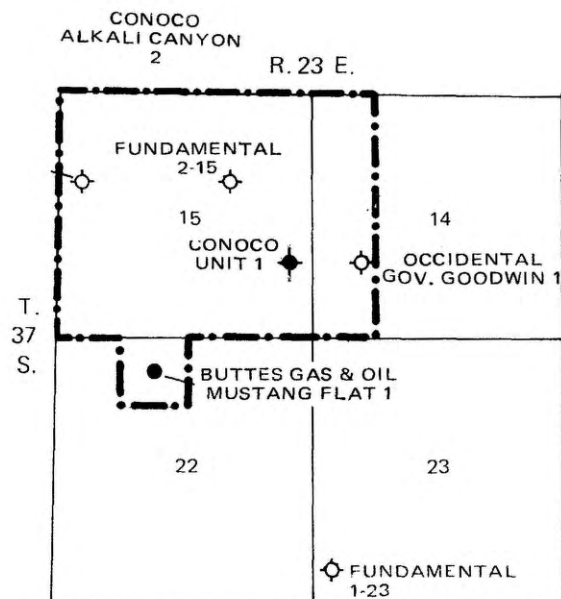
R.22 E.

Akah Field, San Juan County, Ismay and Akah Pools
(Scale 1" = 4000')

ALKALI CANYON FIELD, SAN JUAN COUNTY

Area designation (latest): June 1970
 Discovery year: November 12, 1965
 First recorded production: 1965
 Producing formation (s): Desert Creek

Year	Oil	Gas	Water	Prod. Wells
1965	659	1194	195	1
1966	888	3108	533	1
1967 P&A				
1968 P&A				
1969 P&A				
1970	2287	35310	533	1
Cumulative production	3834	39612	1261	



Alkali Canyon Field, San Juan County, Desert Creek Pool
 (Scale 1" = 4000')

ALTAMONT FIELD, DUCHESE COUNTY

Area designation (latest): June 1970
 Discovery year: May 13, 1970
 First recorded production: 1970
 Producing formation (s): Basal Green River-
 Wasatch transition zone
 Disposition of products sold: Cowboy Oil Co.

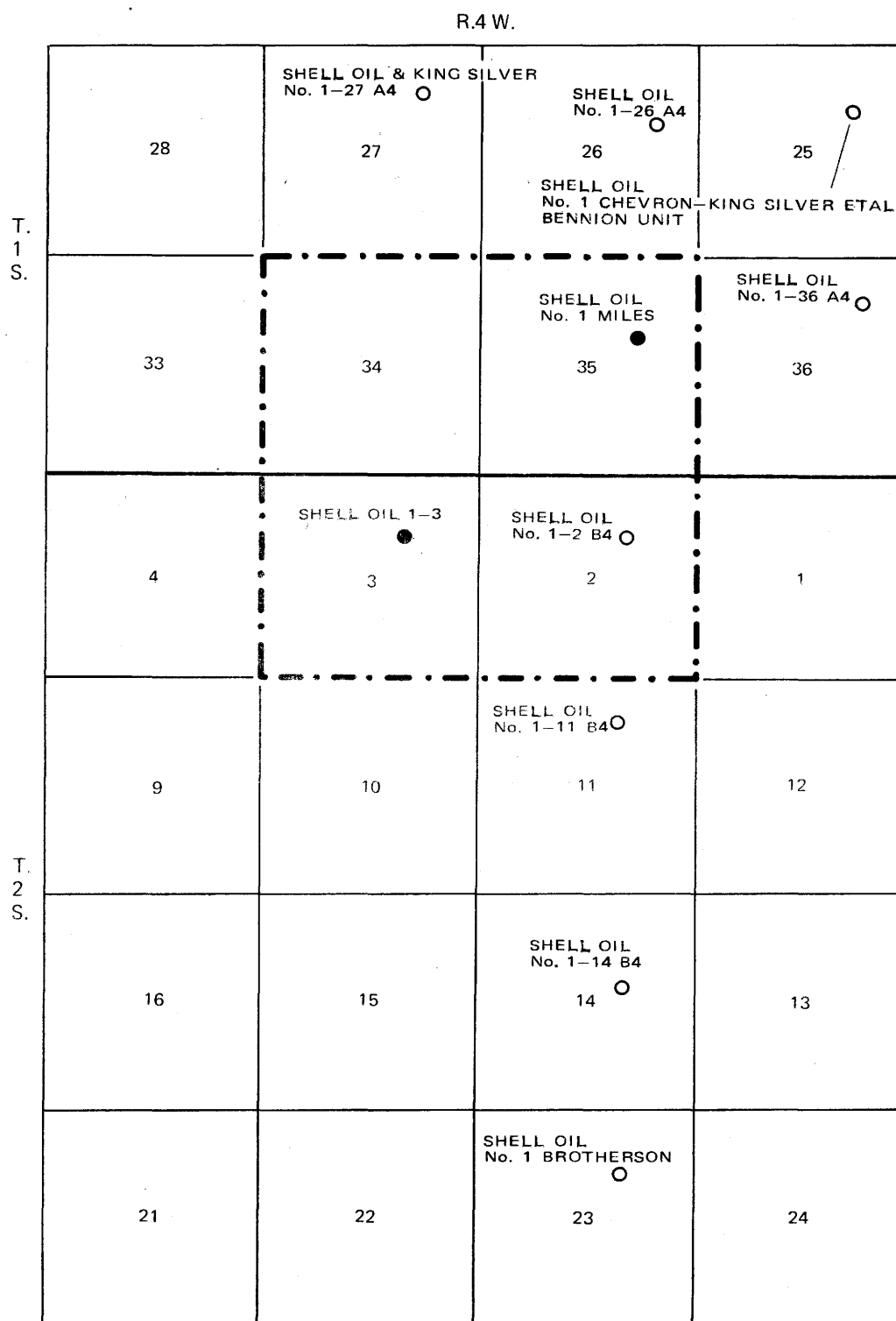
Year	Oil	Gas	Water	Prod. Wells
1970	238939	166599		1
Cumulative production	238939	166599		1

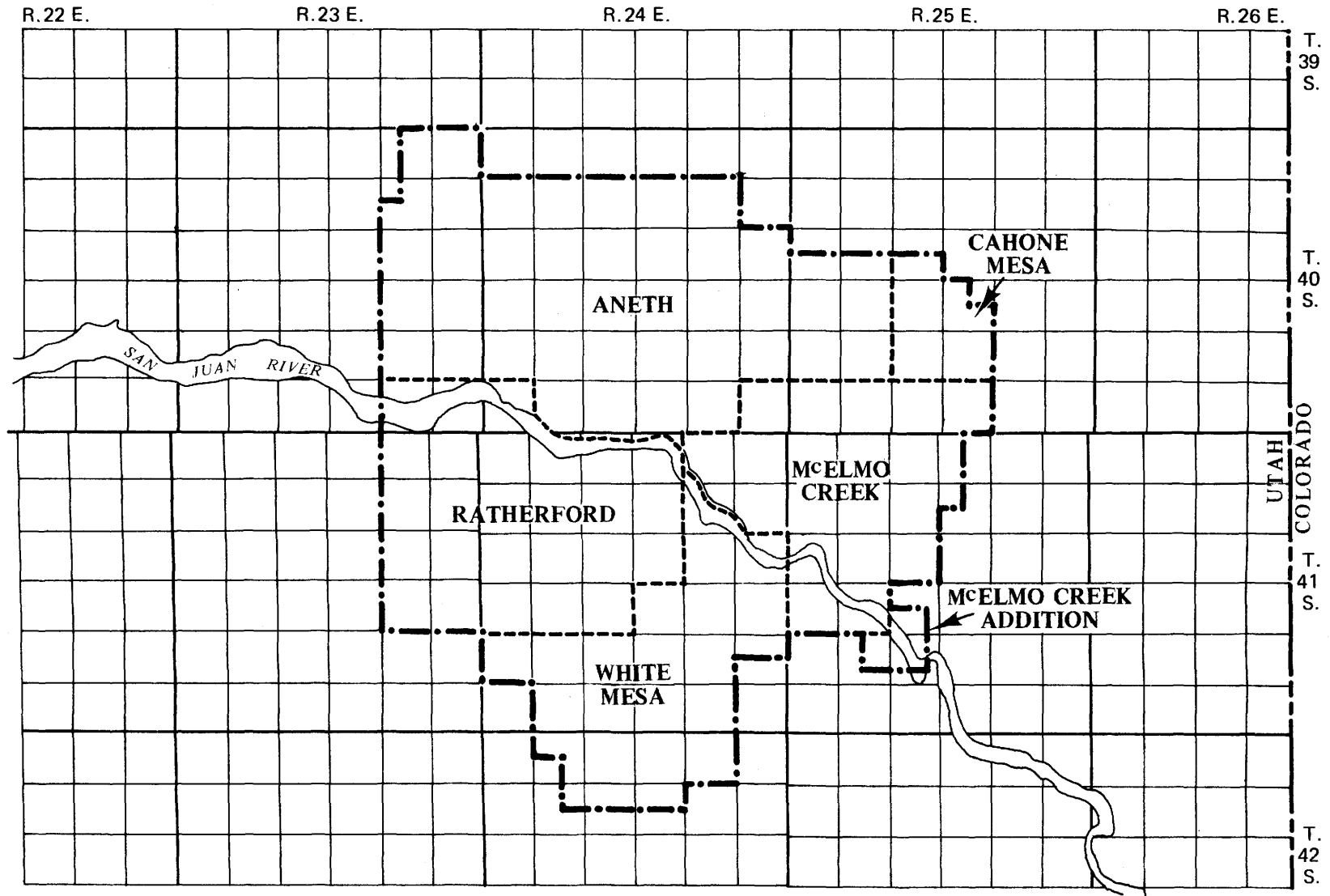
(ANETH AREA, GREATER) ANETH FIELD, SAN JUAN COUNTY

Area designation (latest): May 1967,
 unitized September 1, 1961
 Discovery year: 1956
 First recorded production: 1956
 Producing formation (s): Desert Creek-Ismay
 Disposition of products sold: Union Oil of California,
 Four Corners Pipeline, El Paso Natural Gas Co.

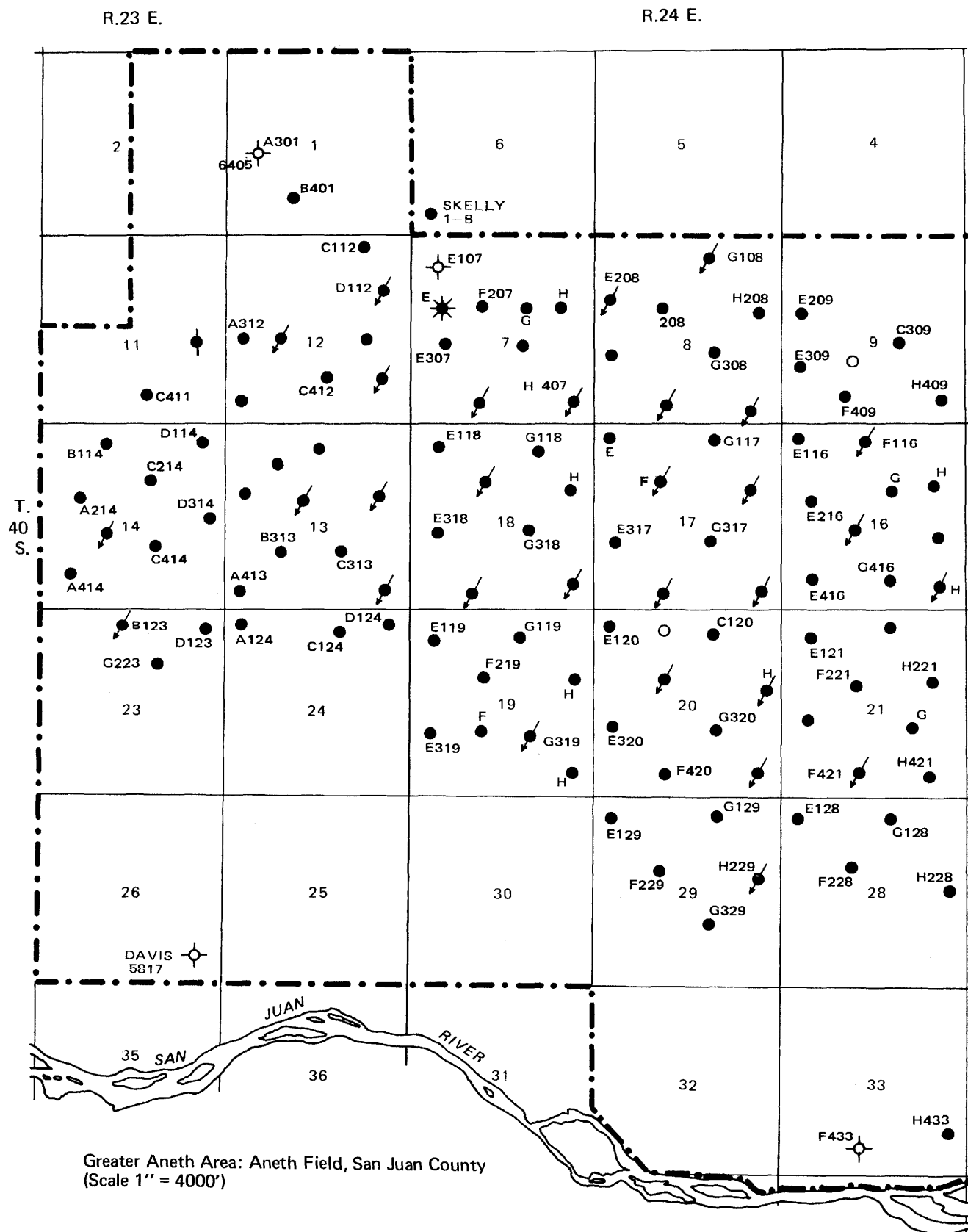
Year	Oil	Gas	Water	Prod. Wells
1956	496328	345795	1427	
1957	1233373	789002	5257	
1958	9849086	6620257	52732	

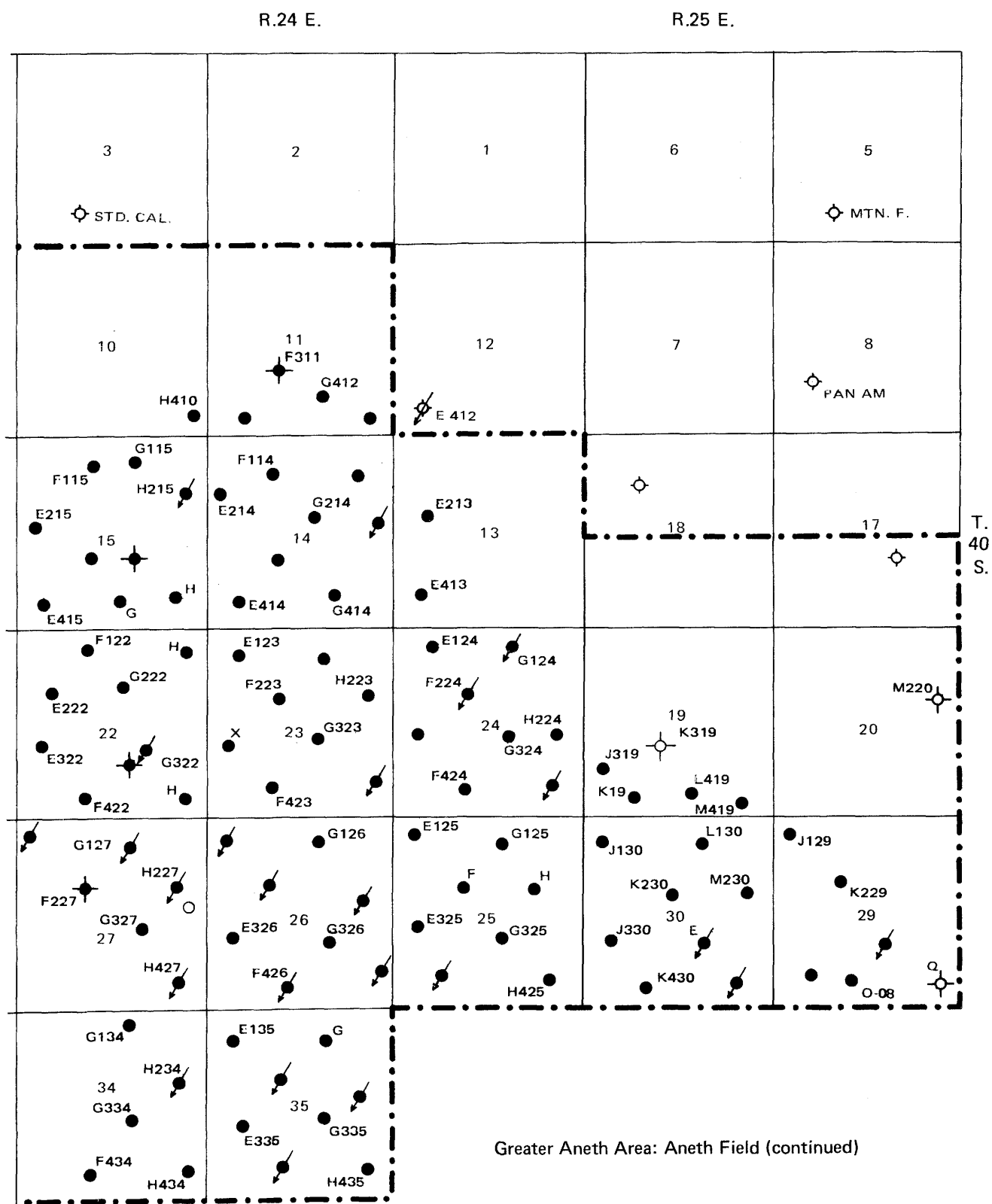
Year	Oil	Gas	Water	Prod. Wells
1959	10228349	8650456	205669	188
1960	8150543	8991666	293087	196
1961	7085804	9795882	402710	208
1962	Includes: 458 BO; 14,350 BW; for Alco O&G Cottonwood CK A-1; undes. in 1962 426 BO; 124 BW; for Tenneco Oil USA-Harris 3268 BO; 548 MCF; 5305 BW; for Texaco Nav. Tribal "AE" 6222214 9835199 851894 159			
1963	Includes: 1500 BO; for Tenneco Oil USA-Harris; undes. in 1963			





Greater Aneth Area, San Juan County
(Scale 1" = 15840')





Greater Aneth Area: Aneth Field (continued)

Year	Oil	Gas	Water	Prod. Wells
	5149561	6622273	1651940	154
1964	Includes: 153 BO; 13473 BW; for Shell Oil 42-12 Burton; undes. in 1964 161 BO; for Tenneco U.S.A.-Harris undes. in 1964 and P&A in 1964			
	4458744	5328874	3115415	150
1965	4176091	4076450	3862939	147
1966	3796487	3417490	4656610	147
1967	3472857	3010116	5168107	127
1968	3053436	2383502	5620190	120
1969	2849002	2073471	5905027	80
1970	2874045	2072464	5746918	139
Cumulative production:				
	73,095,920	74012897	37539922	
Total Greater Aneth area (includes Cahone Mesa, McElmo Creek, Rutherford, White Mesa, Aneth):				
	230197206	226929092	210742864	

CRUDE OIL ANALYSIS

Gravity, specific	0.818
Gravity, °A.P.I.	41.5
Pour point, °F	10
Sulfur, percent	.03
Color	Green
Viscosity	@ 100° F, 37 sec.
Nitrogen, percent	0.035
Sample identification: NW NW 21-40S-24E, Paradox Ls (Pennsylvanian) @ 5384-5550'	

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	63.8	80.0	62.9
Ethane	16.8	13.0	19.4
Higher fractions	18.8	5.1	17.3
Hydrogen sulfide	.0	.0	.0
Carbon dioxide	.1	.1	.2
Helium (nearest 0.01%; less than 0.05%)			

(ANETH AREA, GREATER)
CAHONE MESA FIELD,
SAN JUAN COUNTY

Area designation (latest): May 1967
Discovery year: April 14, 1957
First recorded production: May 25, 1957
Producing formation (s): Paradox
Disposition of products sold: Permian Corp.

No. 1 No. 2 No. 3

denoted as "trace")
BTU value/ft³
(standard T&P)

trace trace trace
1527 1189 1506

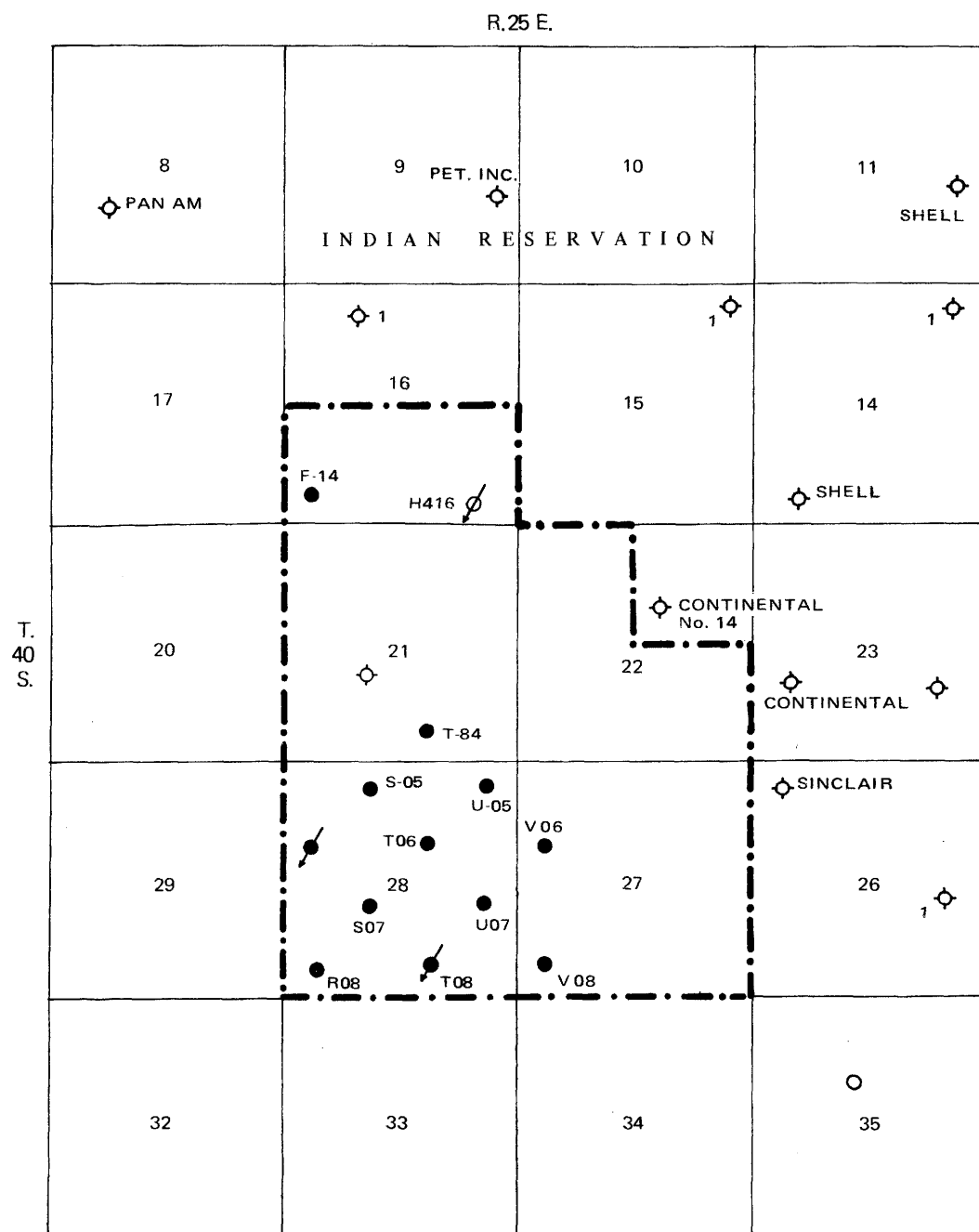
No. 4 No. 5 No. 6

Methane 55.2 70.6 68.0
Ethane 24.0 4.2 19.3
Higher fractions 14.8 8.4 11.7
Hydrogen sulfide .0 0.0 0.0
Carbon dioxide 2.1 2.6 0.2
Helium (nearest 0.01%; less than 0.05%)
denoted as "trace") trace trace 0.07
BTU value/ft³
(standard T&P) 1460 1026 1366

Sample identification:

- No. 1 Carter Oil No. 1 Hickman Fed., 1-40S-23E, completed May 11, 1957, sampled August 9, 1957, Hermosa @ 6130', index 1109
No. 2 Texas Co. 4 Nav.-C, 26-40S-24E, completed November 3, 1956, sampled February 7, 1957, Hermosa @ 6292', index 1111
No. 3 Three States Nat. Gas No. 2 Rice, 23-40S-23E, completed December 11, 1957, sampled January 8, 1958, Paradox @ 6250', index 1112
No. 4 Three States Nat. Gas No. 1 Fed. Arrowhead, 14-40S-23E, completed November 19, 1956, sampled December 13, 1958, Paradox @ 6630', index 1113
No. 5 Texas Co. Navajo E No. 3, 9-40S-24E, completed November 25, 1956, sampled February 7, 1957, Hermosa @ 5468', sample 6246, index 389
No. 6 El Paso Natural Gas Co., sampled February 11, 1959, sample 6968, index 390

Year	Oil	Gas	Water	Prod. Wells
1957	2476			
1958	9809	928		



Greater Aneth Area: Cahone Mesa Field, San Juan County
(Scale 1" = 4000')

Greater Aneth Area: Cahone Mesa Field (continued)

GAS ANALYSIS

Year	Oil	Gas	Water	Prod. Wells
1959	11500	13220	57	1
1960	4607	5640	36	1
1961	9846	14798	22	1
1962	6801	14491		1
1963	5300	12828		1
1964	3603	9261		1
1965	2473	5176		1
1966	2679	1213		1
1967	2527	690	41236	2
1968	2303	885		1
1969	2212	805		1
1970	1841	670		1
Cumulative production				
	67977	80605	41351	

Components: (nearest 0.1%)

Methane	53.6
Ethane	20.9
Higher fractions	24.1
Hydrogen sulfide	.0
Carbon dioxide	.7
Helium (nearest 0.01%;	
less than 0.05%	
denoted as "trace")	trace
BTU value/ft ³	
(standard T&P)	1681

Sample identification: Continental Oil No. 1 Nav.,
21-40S-25E, completed April 24, 1957,
sampled September 15, 1957, Paradox
@ 5930', index 1122

(ANETH AREA, GREATER)
McELMO CREEK FIELD,
SAN JUAN COUNTY

Area designation (latest): January 1963,
unitized September 1, 1961

Discovery year: January 1957

First recorded production: 1957

Producing formation (s): Desert Creek

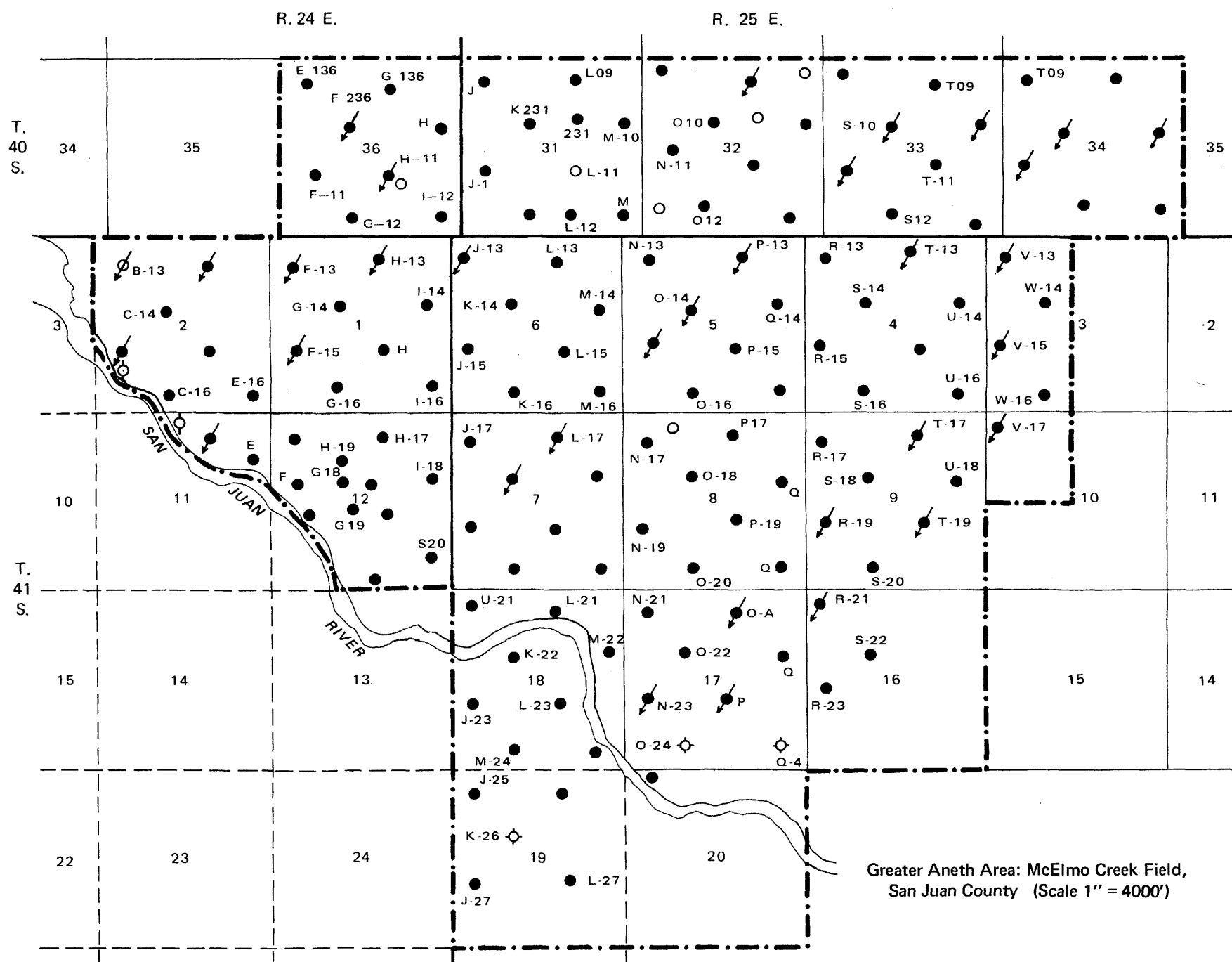
Disposition of products sold: oil to Standard Oil Co.
of California; gas to El Paso Natural Gas Co.

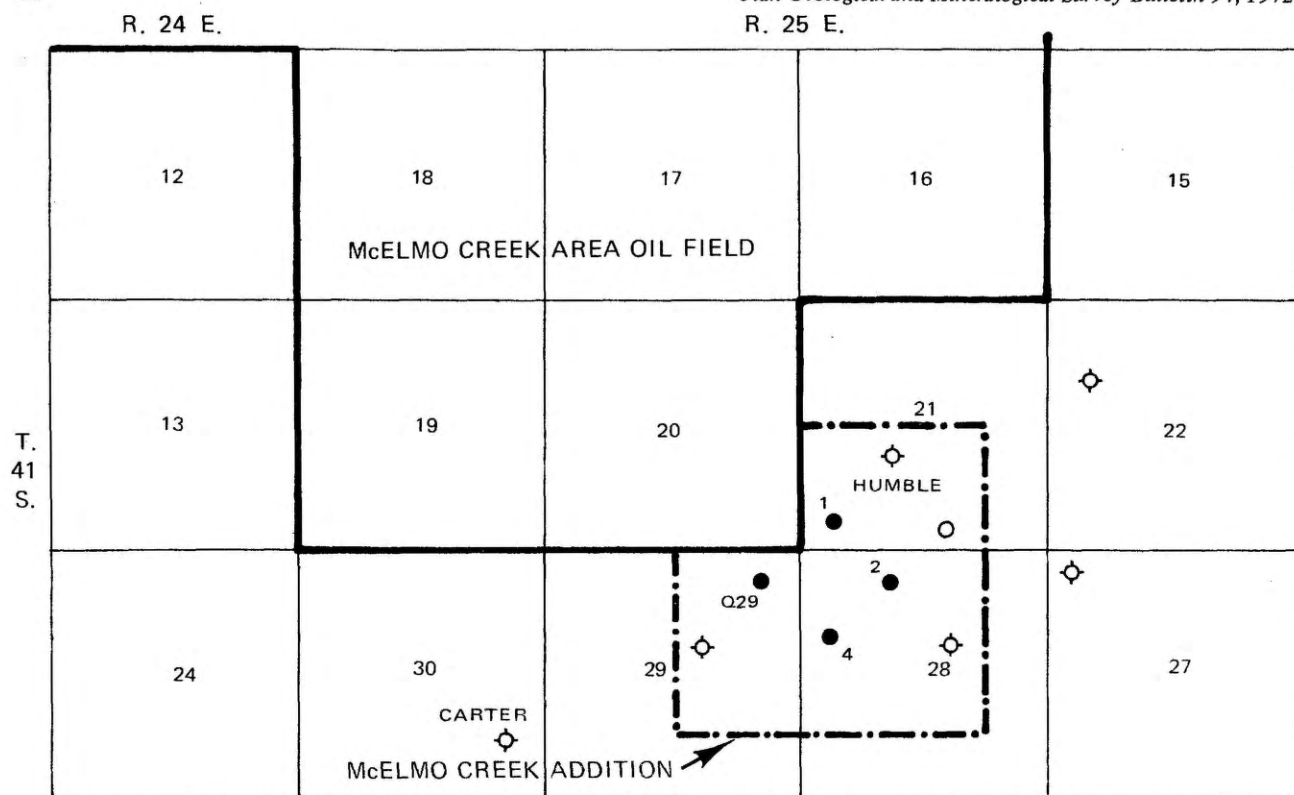
Year	Oil	Gas	Water	Prod. Wells
1957	83969	26368	2231	
1958	3624536	1818982	49804	
1959	9619307	5483195	148112	97
1960	10157406	6767368	259064	117
1961	7892226	7573276	278857	151
1962	Includes: 54496 BO; 28669 MCF; 174 BW; for Superior Oil Q-29; undes. in 1962 180947 BO; 82372 MCF; for Humble O&R Nav. tract 125-1; undes. in 1922 7947654 8871399 186617 163			
1963	Includes: 496590 BO; 258453 MCF; for Humble O&R Nav. #125; undes. in 1963 176199 BO; 87921 MCF; 194 BW; for Humble-Superior Nav. #115; undes. in 1963 9694034 9900863 1362943 126			
1964	Includes: 371037 BO; 628611 MCF; for			

Year	Oil	Gas	Water	Prod. Wells
	Humble O&R Nav. #125; undes. in 1964 184086 BO; 263782 MCF; for Humble O&R and Superior Q-29 #115; undes. in 1964			
	6281504	8834523	3858522	135
1965	4627803	5708722	7420823	122
1966	3848318	3995872	10373210	109
1967	3709888	3386388	11760611	110
1968	3741379	3406020	12626495	113
1969	3749347	3196492	13842505	115
1970	3603308	2980057	13913382	109
Cumulative production				
	78580679	71949525	76083176	

CRUDE OIL ANALYSIS

Gravity, specific	0.825
Gravity, °A.P.I.	40.0
Pour point, °F	20
Sulfur, percent	.09
Color	Dark green
Viscosity	@ 100° F, 37 sec.
Nitrogen, percent	0.041
Sample identification: SE NW 17-41S-25E Paradox @ 5350-5484'	





Greater Aneth Area: McElmo Creek Field Addition, San Juan County (Scale 1" = 4000')

(ANETH AREA, GREATER)
RATHERFORD FIELD,
SAN JUAN COUNTY

Area designation (latest): May 1967

Discovery year: September 1956

First recorded production: 1956

Producing formation (s): Desert Creek

Disposition of products sold: Phillips Petroleum,
Standard Oil of California, El Paso Natural Gas Co.

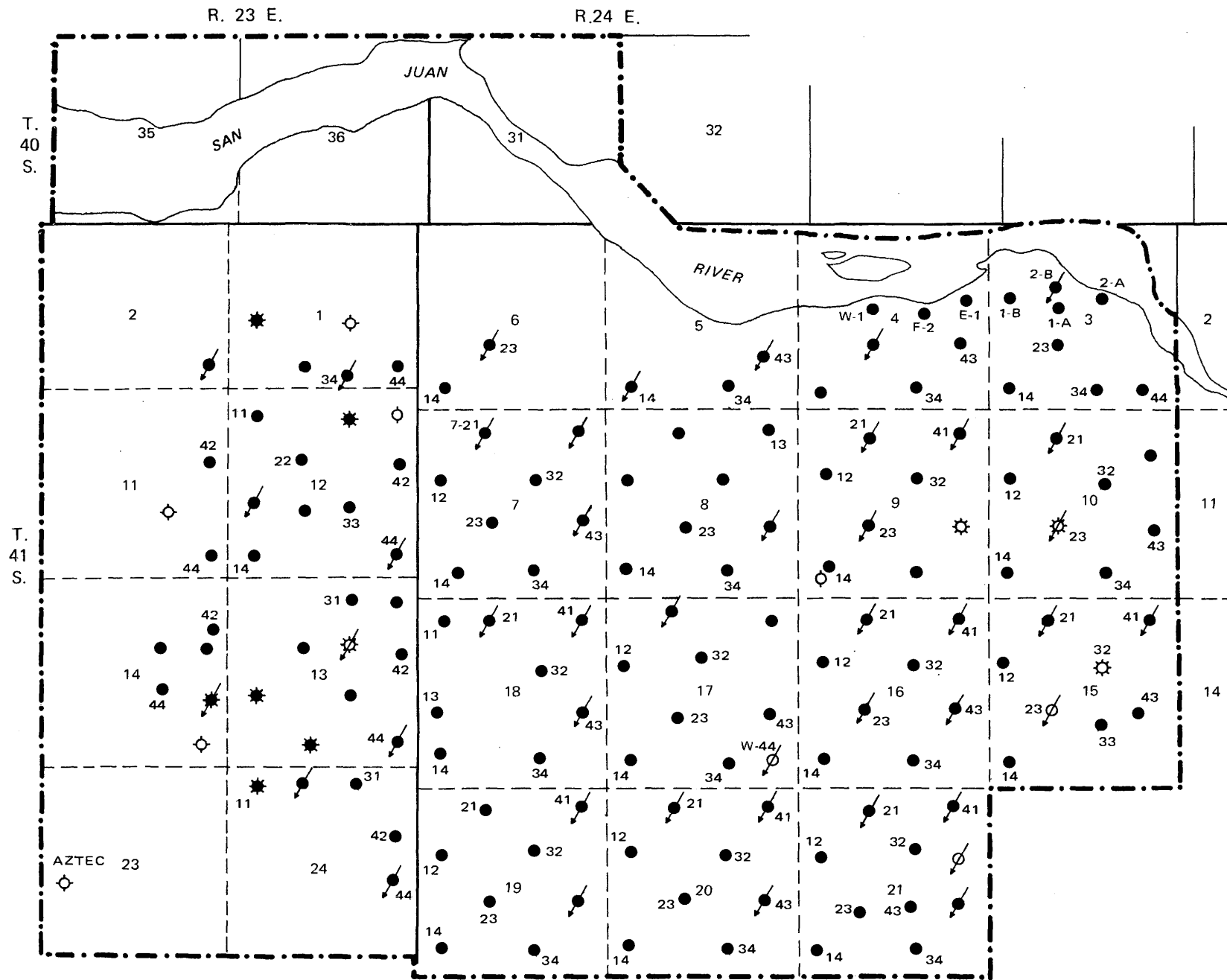
Year	Oil	Gas	Water	Prod. Wells
1956	2668	1468	3	
1957	117395	58421	7521	
1958	5789705	2888010	30837	
1959	8443790	5264055	456727	115
1960	8106803	5890860	916829	121
1961	5874088	6843487	1109659	157
1962	6098049	8034095	1195582	159
1963	4886393	7492432	2415081	134
1964	3319098	4341329	4145780	121
1965	2495029	2791254	7369027	116
1966	2118695	2262351	10310504	116
1967	2002028	1852570	12132007	116
1968	1725333	1585880	13251084	116
1969	1694452	1498503	15359040	111
1970	1548152	1423701	14435329	111
Cumulative production				
	54221678	52228416	83135010	

CRUDE OIL ANALYSIS

Gravity, specific	0.819
Gravity, °A.P.I.	41.3
Pour point, °F	10
Sulfur, percent	.11
Color	Green
Viscosity	@ 100° F, 36 sec.
Nitrogen, percent	0.038
Sample identification:	SW NE NW 7-41S-24E Desert Creek (Paradox) @5772-5915'

GAS ANALYSIS

Components: (nearest 0.1%)	
Methane	65.5
Ethane	16.6
Higher fractions	15.9
Hydrogen sulfide	0.0
Carbon dioxide	0.1
Helium (nearest 0.1%; less than 0.05% denoted as "trace")	0.1
BTU value/ft ³ (standard T&P)	1456



Greater Aneth Area: Ratherford Field, San Juan County
(Scale 1" = 4000')

Greater Aneth Area: Ratherford Field (continued)

Sample identification:

Shell Oil Co. North Desert Creek 43-14,

14-41S-23E, completed April 16, 1961,
sampled July 7, 1961, Bluff and Desert
Creek @ 5310', sample 8069, index 307

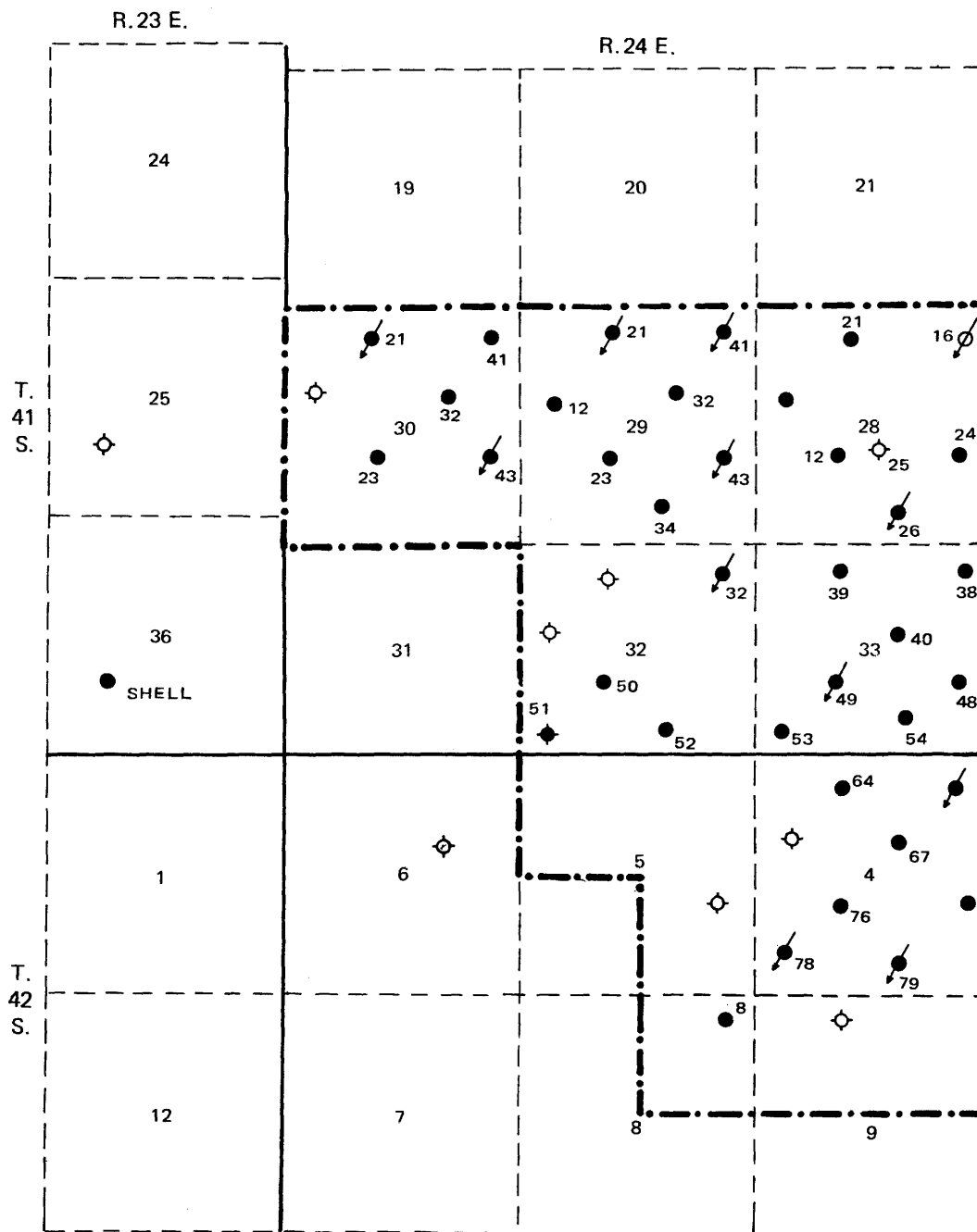
(ANETH AREA, GREATER)

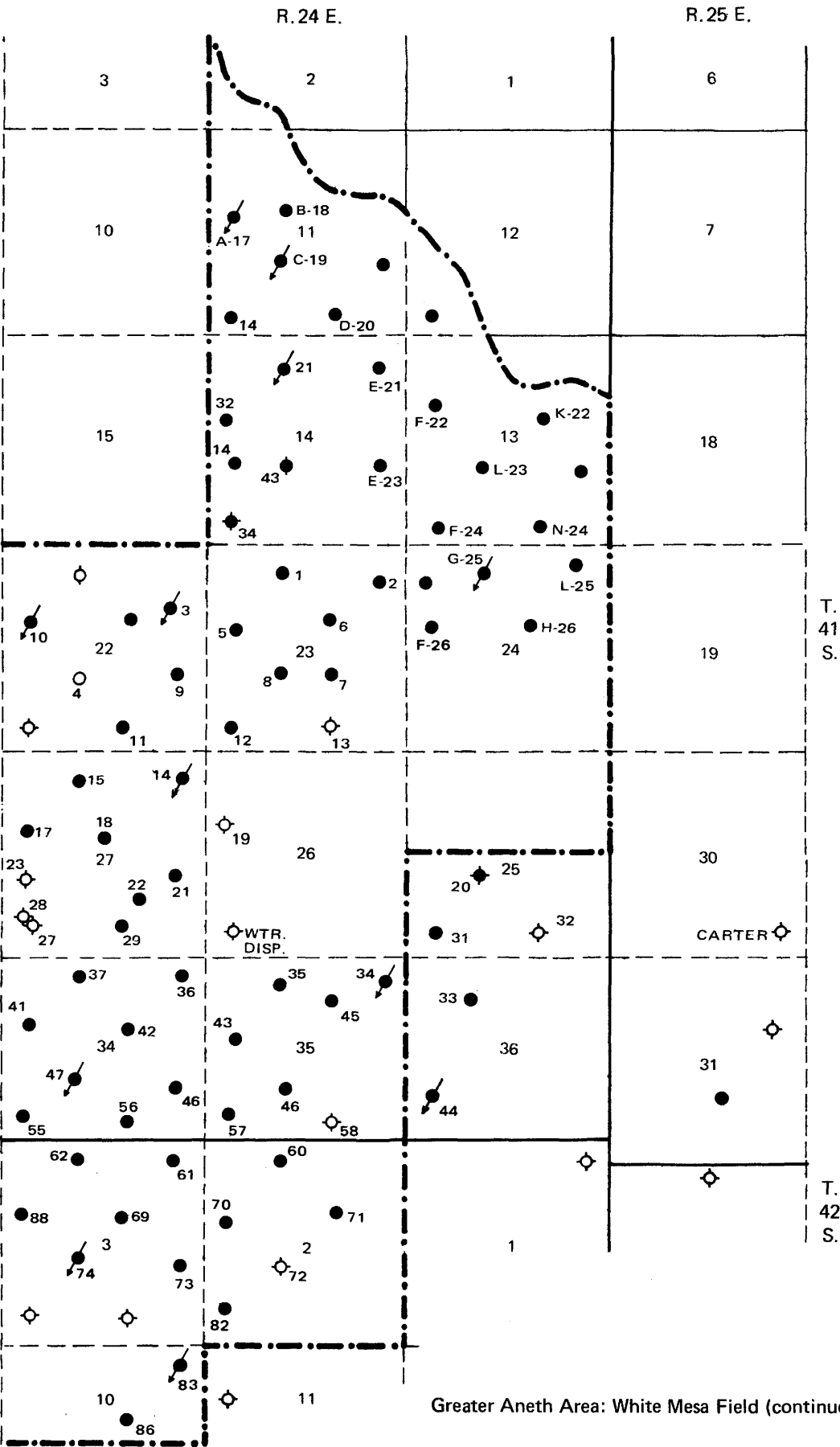
WHITE MESA FIELD,
SAN JUAN COUNTYArea designation (latest): May 1967,
unitized October 1, 1961

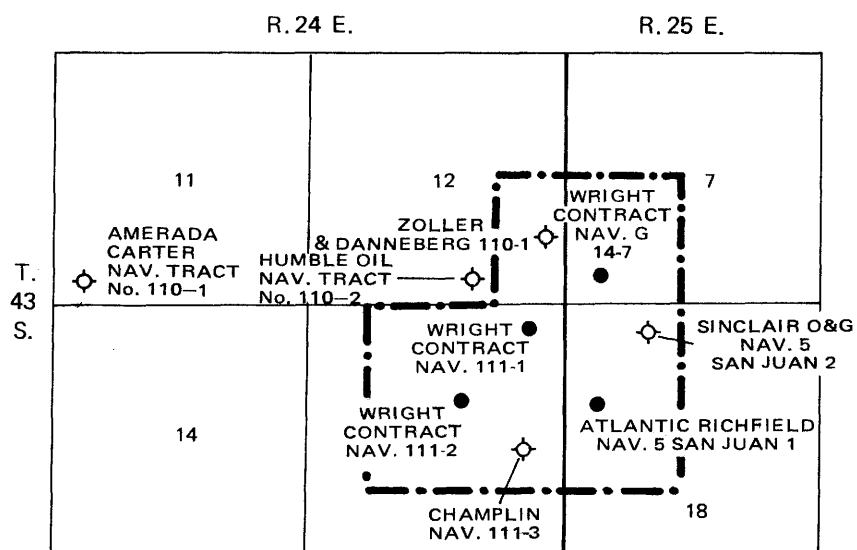
Discovery year: March 17, 1957

First recorded production: 1957

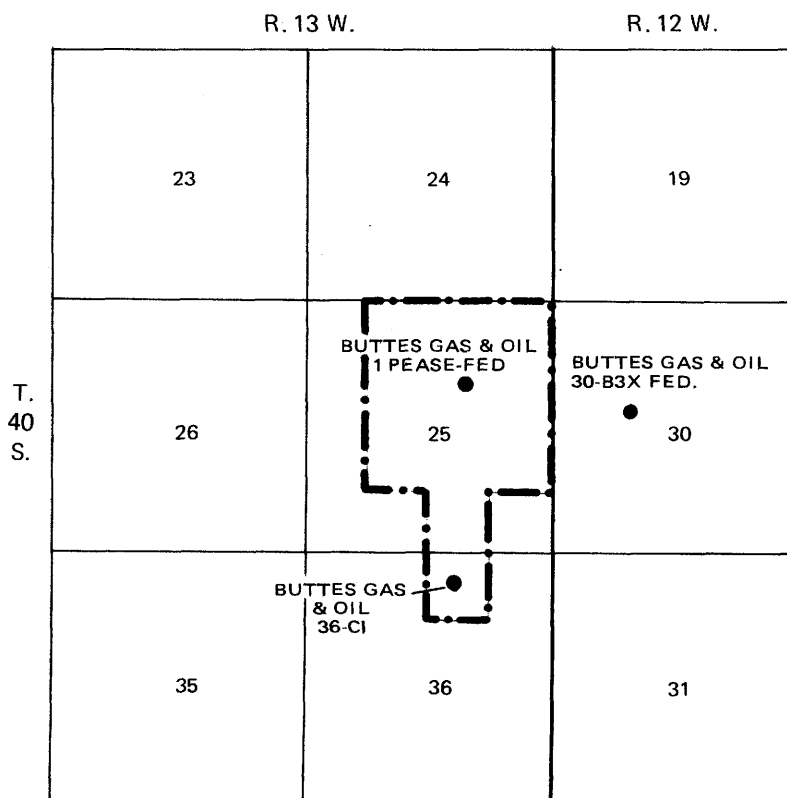
Producing formation (s): Desert Creek

Disposition of products sold: oil to Four Corners Pipe-
line Co., Standard Oil Co. of California; gas to El Paso
Natural Gas Co.Greater Aneth Area: White Mesa Field, San Juan County
(Scale 1" = 4000')





Anderson Junction Field, Washington County, Callville Pool
(Scale 1" = 4000')



Anido Creek Field, San Juan County
(Scale 1" = 4000')

Greater Aneth Area: White Mesa Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1957	70274	44276	104	
1958	2699650	1548765	480	
1959	5619098	3856808	5743	84
1960	5119636	4512797	8053	100
1961	3470882	4262009	4667	69
1962	2044619	3588585	20371	69
1963	1454429	3258747	286083	59
1964	1009225	2345062	1569866	53
1965	648333	1526254	1747336	52
1966	464097	1067275	1982835	51
1967	469568	902477	1956451	50
1968	377650	789559	2280932	50
1969	358417	449168	2480934	48

Year	Oil	Gas	Water	Prod. Wells
1970	425074	505867	1599550	49
Cumulative production				
	24230952	28657649	13943405	

CRUDE OIL ANALYSIS

Gravity, specific	0.820
Gravity, °A.P.I.	41.1
Pour point, °F	15
Sulfur, percent	.10
Color	Green
Viscosity	@ 100° F, 36 sec.
Nitrogen, percent	0.039
Sample identification: SW SW 23-41S-24E, Desert Creek, Paradox @ 5445-5518'	

ANDERSON JUNCTION FIELD,
WASHINGTON COUNTY

Area designation (latest): June 1969,
unitized December 23, 1968

Discovery year: February 21, 1968

First recorded production: May 21, 1968

Producing formation (s): Callville

Disposition of products sold: Phillips Petroleum

Year	Oil	Gas	Water	Prod. Wells
1968	Buttes Gas & Oil, Anderson Jct., undes. in 1968.			
	369	—	2095	1
1969	686	—		2
1970	325	—	115	2
Cumulative production				
	1380	—	2210	

CRUDE OIL ANALYSIS

Gravity, specific	0.893
Gravity, °A.P.I.	27.0
Pour point, °F.	40
Sulfur, percent	.75
Color	Brownish black
Viscosity	@ 100° F, 150 sec.; @ 130° F, 76 sec.
Nitrogen, percent	0.090

Sample identification: SW NE 25-40S-13W, Lower Pakoon Ls (Permian), Upper Callville Ls (Pennsylvanian) @ 4100-4200'

ANIDO CREEK FIELD,
SAN JUAN COUNTY

Area designation (latest): March 1962

Discovery year: December 28, 1960

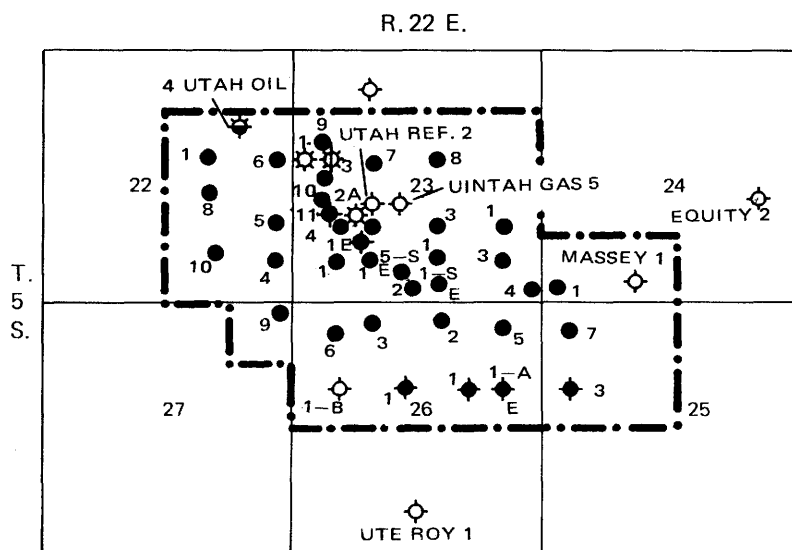
First recorded production: 1961

Producing Formation (s): Ismay-Desert Creek

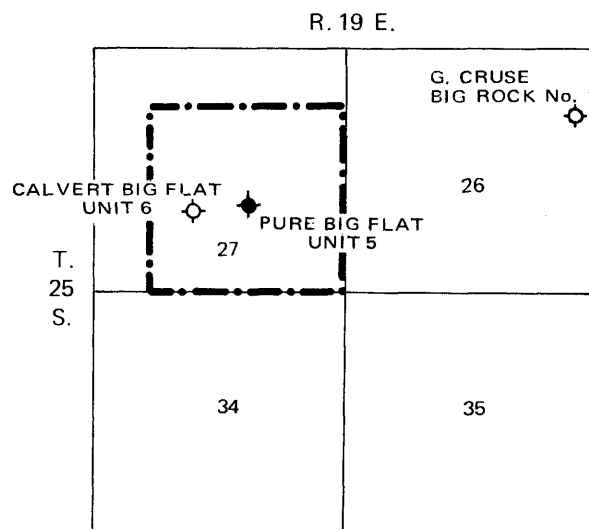
Disposition of products sold: Permian Corp.,
Four Corners Pipeline

Year	Oil	Gas	Water	Prod. Wells
1961	Includes: 197261 BO; 182421 MCF; 43640 BW; for Champlin Anido Nav.; undes. in 1961			
	55654 BO; 31039 MCF; 2041 BW; for Sinclair Anido Nav.; undes. in 1961			
	46454 BO; 40219 MCF; 92 BW; for			

Year	Oil	Gas	Water	Prod. Wells
	Superior Nav.—G; undes. in 1961			
	299369	253679	46824	4
1962	83192	97876	136933	4
1963	65047	63521	87182	4
1964	44124	54752	84238	4
1965	31996	30533	70094	3
1966	20409	8045	71539	4
1967	19624	—	8557	4
1968	19562	—	5364	4
1969	15435	—	195	4
1970	14094	—	—	3
Cumulative production				
	612852	508406	510926	



Ashley Valley Field, Uintah County, Entrada, Morrison, Weber-
Phosphoria Pools (Scale 1" = 4000')



Bartlett Flat Field, Grand County, Paradox
Pool (Scale 1" = 4000')

ASHLEY VALLEY FIELD, UINTAH COUNTY

Area designation (latest): January 1967

Discovery year: 1929

First recorded production: 1948

Producing formation (s): Morrison, Entrada, Weber-
PhosphoriaDisposition of products sold: Pan American Pet.
(AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1948	17218			
1949	486131		730	
1950	851749		47963	
1951	910708		280968	
1952	942333		650786	
1953	1003244		1222383	
1954	1001626		1927645	
1955	1008223		2319898	
1956	828991		2357443	
1957	732569		2818758	
1958	771345		6260981	
1959	846183		8335951	25
1960	1388219		15404724	27
1961	1147369		15922993	27
1962	893064		28579359	26
1963	727163		28867599	28
1964	674753		36463631	28
1965	545769		37058043	30
1966	481391		37732818	30
1967	427682		34189766	31
1968	362851		33433481	30
1969	308352		34082123	30
1970	284925		33525926	28
Cumulative production				
16641858				361483969

CRUDE OIL ANALYSIS

Gravity, specific	0.868
Gravity, °A.P.I.	31.5
Pour point, °F	45
Sulfur, percent	.12
Color	Greenish black
Viscosity	@ 100° F, 52 sec.; @ 77° F, 74 sec.
Nitrogen, percent	0.012
Sample identification:	NW SW 23-5S-22E Entrada Ss (Jurassic) @ 2003'

Gravity, specific	0.876
Gravity, °A.P.I.	30.0
Pour point, °F	15
Sulfur, percent	.89
Color	Brownish black
Viscosity	@ 100° F, 66 sec.; @ 77° F, 93 sec.
Nitrogen, percent	0.13
Sample identification:	S W S E 2 2 - 5 S - 2 2 E Phosphoria Ls (Permian) @ 4212-4228'

Gravity, specific	0.872
Gravity, °A.P.I.	30.8
Pour point, °F	15
Sulfur, percent	0.83
Color	Brownish black
Viscosity	@ 100° F, 61 sec.; @ 77° F, 89 sec.
Nitrogen, percent	0.134
Sample identification:	NE SW 22-5S-22E Weber Ss (Pennsylvanian) @ 4181-4308'

BARTLETT FLAT FIELD, GRAND COUNTY

Area designation (latest): November 1962

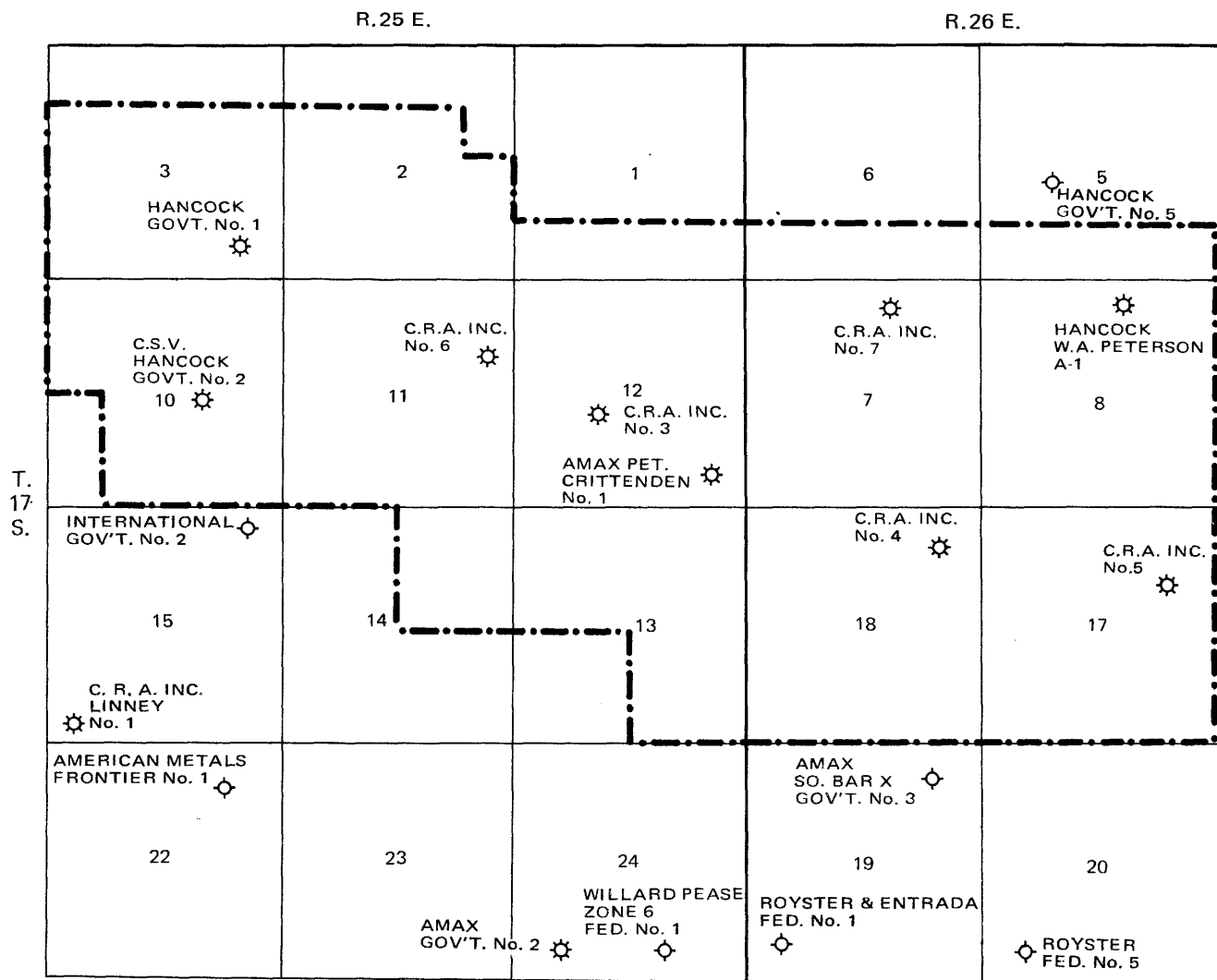
Discovery year: November 28, 1961

First recorded production: December 3, 1961

Producing formation (s): Paradox

Year	Oil	Gas	Water	Prod. Wells
1961	1418	693		1

Year	Oil	Gas	Water	Prod. Wells
1962	36160	20509		1
1963	1754	849		1
1964	61			1
1965 P&A				
Cumulative production:		39393	22051	



Bar-X Field, Grand County
(Scale 1" = 4000')

BAR-X FIELD, GRAND COUNTY

Area designation (latest): January 1960,
unitized September 30, 1952

Discovery year: August 28, 1948

First recorded production: 1956

Producing formation (s): Entrada, Morrison,
Dakota, Buckhorn, Dakota, Salt Wash

Disposition of products sold: El Paso Natural Gas Co.

Year	Oil	Gas	Water	Prod. Wells
1948-1955	Shut in			
1956		200270		
1957		1316519		
1958		1682273		
1959		1353816		
1960		1101056		6
1961		1167330		13

Bar-X Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1962		573639		12
1963		388157		9
1964		586328		10
1965		711969		14
1966		684758		10
1967		907151		9
1968		753375		9
1969		740124		9
1970		659655		8
Cumulative production		12826420		

CRUDE OIL ANALYSIS

Gravity, specific	0.821
Gravity, °A.P.I.	40.9
Pour point, ° F	55
Sulfur, percent	.12
Color	Brownish green
Viscosity	@ 100° F, 40 sec.
Nitrogen, percent	0.013
Sample identification: SE SW 24-17S-25E Morrison	
(Upper Jurassic)@ 2714-2747'	

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	91.6	49.6	45.0
Ethane	4.1	2.1	.9
Higher fractions	1.9	.8	2.0
Hydrogen sulfide	.0	.0	.0
Carbon dioxide	.3	9.6	24.3

No. 1 No. 2 No. 3

Helium (nearest 0.01% less than 0.05% denoted as "trace")	.1	.5	.8
BTU value/ft ³ (standard T&P)	1060	589	530
	No. 4	No. 5	
Methane	88.8	83.5	
Ethane	4.7	3.6	
Higher fractions	2.1	2.1	
Hydrogen sulfide	.0	.0	
Carbon dioxide	.5	.3	
Helium (nearest 0.1%; less than 0.05% denoted as "trace")	.3	5	
BTU value/ft ³ (standard T&P)	1049	980	

Sample identification:

- No. 1 American Metal Co. Ltd. No. 3 Bar-X,
12-17S-25E, completed December 19,
1955, sampled August 4, 1957, Dakota
@ 2919', index 1078
- No. 2 American Metal Co. Ltd. No. 4 Bar-X,
18-17S-26E, completed January 17, 1956,
sampled August 14, 1957, Entrada
@ 3503', index 1079
- No. 3 American Climax Pet. No. 4 unit,
18-17S-26E, sampled April 29, 1959,
Entrada @ 3550', index 1080
- No. 4 American Climax Pet. No. 7 unit,
7-17S-26E, completed October 18, 1958,
sampled November 14, 1958, Buckhorn
@ 3345', index 1081
- No. 5 Tennessee Gas Trans. No. 1 U.S.A.-Peter-
son, 8-17S-26E, completed October 16,
1958, Morrison @ 3611', index 1082

BEND FIELD,
UINTAH COUNTY

Area designation (latest): terminated March 1965,
unitized October 31, 1957
Discovery year: 1959
First recorded production: Shut in
Producing formation (s): Uinta, Green River

Year	Oil	Gas	Water	Prod. Wells
1959-1970	Shut in			
Cumulative production				
Shut in				

Bend Field (continued)

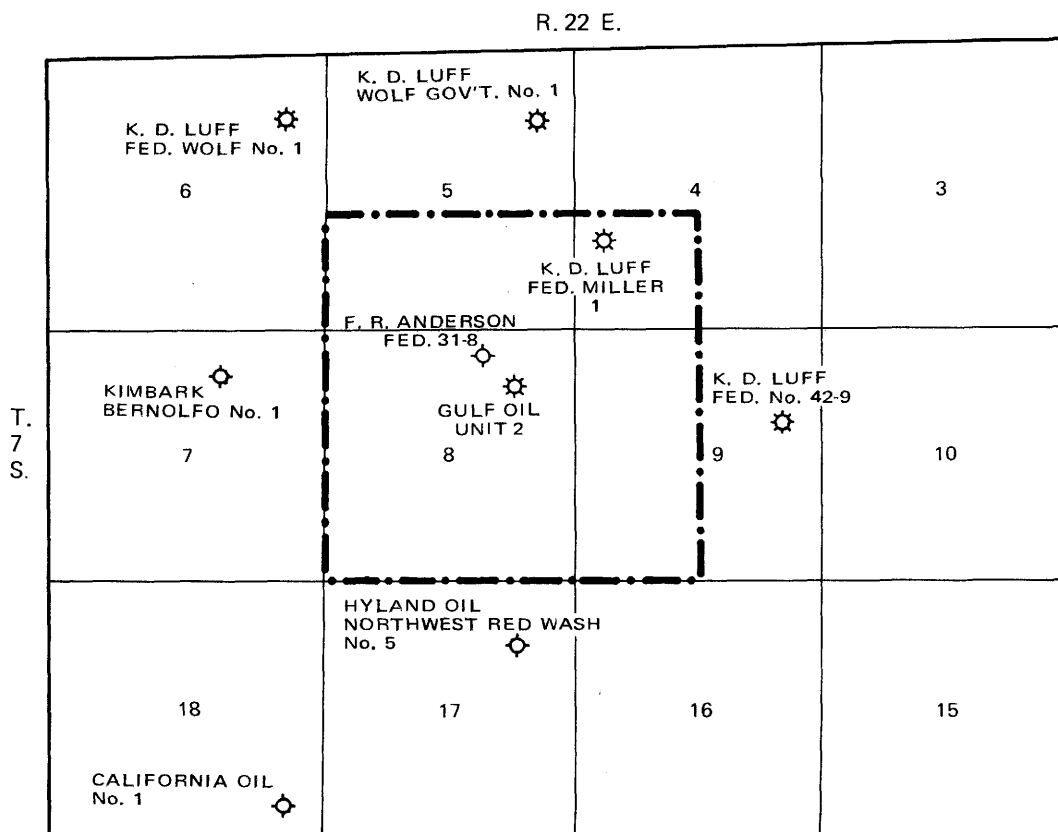
GAS ANALYSIS

Components: (nearest 0.1%)

Methane	96.4
Ethane	0.6
Higher fractions	0.4
Hydrogen sulfide	0.0
Carbon dioxide	0.1
Helium (nearest 0.01%;	

less than 0.05%
denoted as "trace"
BTU value/ft³ (standard T&P) 843

Sample identification: H. P. McLish No. 1 Pan Am
State, 32-6S-23E, completed January 3,
1964, sampled June 13, 1964, Uinta
@ 3170', sample 9397, index 205



Bend Field, Uintah County, Uinta, Green River Pools
(Scale 1" = 4000')

BIG FLAT FIELD, GRAND COUNTY

Area designation (latest): May 1959,
unitized October 24, 1951

Discovery year: 1957

First recorded production: 1957

Producing formation (s): Mississippian

Year	Oil	Gas	Water	Prod. Wells
1957	12802			2
1958	9699	4501		2

Big Flat Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1959	8543	5030	756	2
1960	12138	11631	8408	3
1961	17636	14730	15074	3
1962	14227	11242	12123	3
1963	4921	3743	3713	2
1964	2056	1518	905	2
1965	22		30	3
1966	316		940	3
1967	1109			2
1968	Shut in			
1969	Shut in			
1970	Shut in			
Cumulative production	83469	52395	41949	

CRUDE OIL ANALYSIS

Gravity, specific	0.861
Gravity, °A.P.I.	32.8
Pour point, °F	Below 5
Sulfur, percent	.16
Color	Brownish green
Viscosity	@ 100° F, 79 sec.; @ 77° F, 115 sec.
Nitrogen, percent	0.069
Sample identification:	NE NE 23-26S-19E, Paradox Salt (Pennsylvanian) @ 5730-6372'

Gravity, specific	0.8212
Gravity, °A.P.I.	40.8
Pour point, °F	85
Sulfur, percent	0.32
Color	Brownish green
Viscosity	@ 100° F, 54.6 sec.
Nitrogen, percent	
Sample identification:	King Oil No. 1 Ruby, 11-26S-19E, sampled February 10, 1955, (Mississippian) @ 7780-7856'

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	7.1	6.3	20.7
Ethane	1.9	1.1	8.8
Higher fractions	11.8	6.5	18.1

BIG INDIAN FIELD,
SAN JUAN COUNTY

Area designation (latest): January 1967,
unitized July 6, 1962
Discovery year: 1961

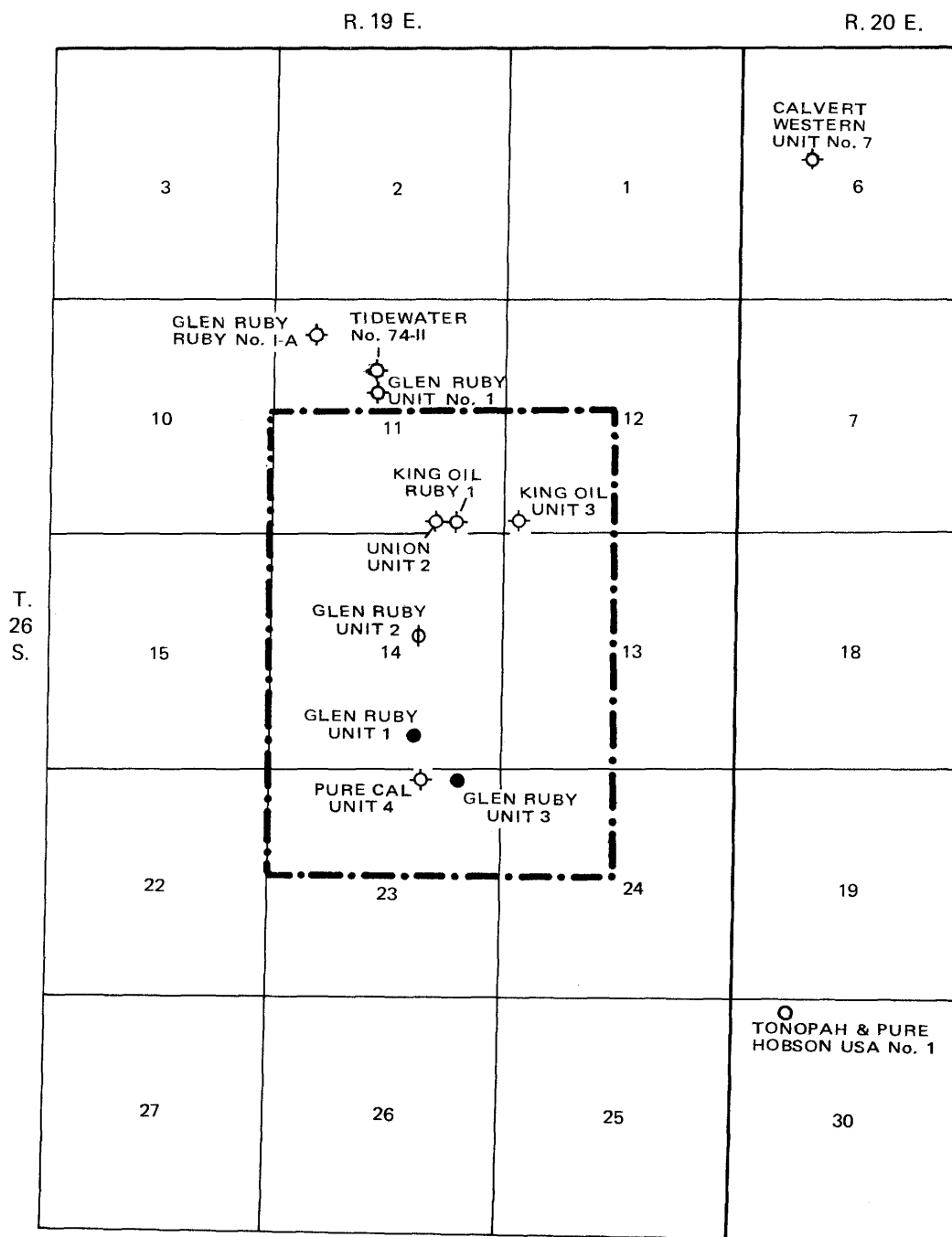
	No. 1	No. 2	No. 3
Hydrogen sulfide	1.2	.0	1.4
Carbon dioxide	2.8	2.0	5.7
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.4	1.7	.3
BTU value/ft ³ (standard T&P)	581	318	950

	No. 4	No. 5	No. 6	No. 7
Methane	.7	60.3	12.3	11.9
Ethane	.1	16.9	2.0	2.1
Higher fractions	.3	20.3	2.6	2.1
Hydrogen sulfide	.0	0.0	0.0	0.0
Carbon dioxide	.3	0.1	2.3	7.4
Helium (nearest 0.01%; less than 0.05 % denoted as "trace")	trace	0.1	1.4	1.4
BTU value/ft ³ (standard T&P)	17	1544	247	226

Sample identification:

- No. 1 Pure Oil No. 1 Unit, 14-26S-19E, sampled October 24, 1957, Mississippian @ 7694', index 1083
- No. 2 Pure Oil No. 1 Unit, 14-26S-19E, sampled April 29, 1959, Leadville @ 7954', index 1084
- No. 3 Pure Oil No. 2 Unit, 14-26S-19E, completed September 4, 1958, Leadville @ 7768', index 1085
- No. 4 Pure Oil No. 3 Unit, 23-26S-19E, sampled July 29, 1960, Pennsylvanian @ 7547', index 1089
- No. 5 Pure Oil No. 5 Unit, 27-25S-19E, completed December 4, 1961, sampled January 23, 1962, Paradox @ 7202', sample 8378, index 284
- No. 6 Pure Oil No. 5 Unit, 27-25S-19E, completed July 7, 1962, sampled July 7, 1962, Mississippian @ 7400', sample 8601, index 285
- No. 7 Pure Oil No. 5 Unit, 27-25S-19E, completed July 7, 1962, sampled July 4, 1962, Mississippian @ 7441', sample 8602, index 286

First recorded production: 1961
Producing formation (s): Hermosa
Disposition of products sold: Union Oil of California



Big Flat Field, Grand County, Mississippian Pool
(Scale 1" = 4000')

Big Indian Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1961	Pure Oil USA — Big Indian; undes. in 1961			
	1124	62666		1
1962	Shut in			
1963	3706	224334		2
1964		108015		1
1965	Shut in			
1966		40002		1
1967	Shut in			
1968	Shut in			
1969	27469	2128318		3
1970	11477	1544557		3
Cumulative production				
	43776	4107892		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	80.8	59.1	77.2
Ethane	8.8	21.0	8.9
Higher fractions	6.2	17.0	4.9
Hydrogen sulfide	0.0	0.0	0.0
Carbon dioxide	0.8	0.1	0.1
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	trace	0.1
BTU value /ft ³ (standard T&P)	1164	1140	1093

	No. 4	No. 5	No. 6
Methane	81.4	49.1	56.1
Ethane	7.8	13.3	6.5
Higher fractions	5.6	8.3	3.7
Hydrogen sulfide	0.0	0.7	0.4
Carbon dioxide	0.1	23.5	15.7
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	0.1	0.7
BTU value/ft ³ (standard T&P)	1140	986	805

Sample identification:

No. 1 Pure Oil No. 4, 14-30S-25E, completed February 5, 1964, sampled May 11, 1964, Hermosa @ 3552', sample 9345, index 199

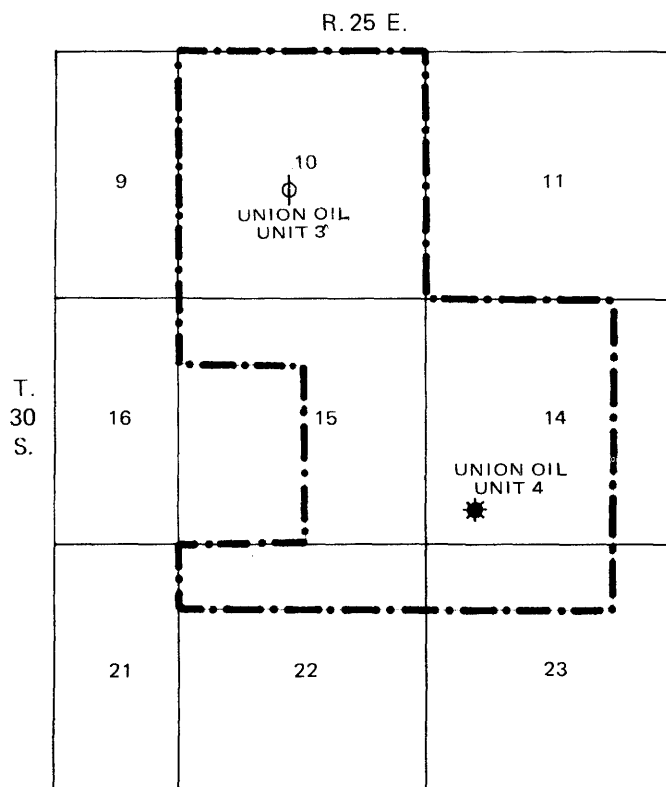
No. 2 The Pure Oil Co. Big Indian No. 3, 10-30S-25E, sampled November 20, 1962, Hermosa @ 4222', sample 8775, index 293

No. 3 The Pure Oil Co. Big Indian No. 3, 10-30S-25E, sampled November 24, 1962, Hermosa @ 4617', sample 8770, index 294

No. 4 The Pure Oil Co. Big Indian No. 3, 10-30S-26E, sampled November 30, 1962, Hermosa, sample 8789, index 295

No. 5 The Pure Oil Co. Big Indian U.S.A. No. 1, 33-29S-24E, sampled November 10, 1961, Mississippian @ 9800', sample 8273, index 289

No. 6 The Pure Oil Co. Well No. 1, 33-29S-24E, completed August 1, 1961, sampled November 11, 1961, Mississippian @ 9800', sample 8274, index 290

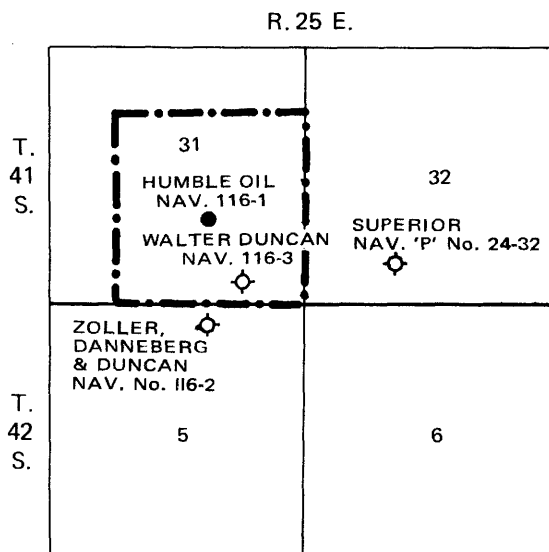


Big Indian Field, San Juan County, Hermosa Pool
(Scale 1" = 4000')

BIG WASH FIELD, SAN JUAN COUNTY

Area designation (latest): April 1965
 Discovery year: 1963
 First recorded production: 1963
 Producing formation (s): Desert Creek

Year	Oil	Gas	Water	Prod. Wells
1963	13000			1
1964	43008			1
1965	43700			1
1966	53538			1
1967	74224			1
1968	Terminated; transferred Greater Aneth area.			
	76442			1
Cumulative production				
303912				



Big Wash Field, San Juan County, Desert Creek Pool
 (Scale 1" = 4000')

(BITTER CREEK AREA) BITTER CREEK FIELD, UINTAH COUNTY

Area designation (latest): August 1970
 Discovery year: 1958
 First recorded production: 1958
 Producing formation (s): Wasatch, Mesaverde
 Disposition of products sold: gas to Mountain Fuel
 Supply; other to Cowboy Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1958		33818		
1959	Shut in			
1960	Shut in			
1961		29513		3
1962	Includes: 102010 MCF; for Dekalb. Agri. #1 Bitter Creek; undes. in 1962			
	14595 MCF; for Sharples Oil 1 Texaco State; undes. in 1962			
	262957			4
1963	Includes: 9377 MCF; for Dekalb #3; undes. in 1963			
	54719 MCF; for Dekalb #12 & 13 Ute Trail unit; undes. in 1963			
	276	358019		7
1964	Includes: 2218 BO (drip); 995295 MCF; for Dekalb Ute Trail unit.			

Year	Oil	Gas	Water	Prod. Wells
	250 BO (drip); 143579 MCF; for Dekalb Uintah Unit; undes. in 1964			
	19062 MCF; for Dekalb Ute #13; undes. in 1964			
	2468	1362946		18
1965	Includes: 11284 MCF; 73 BO; for Depco, Inc., Uintah unit			
	16603 MCF for Ute Trail #13			
	73	111113		4
1966	Includes: 59873 MCF; for Depco Uintah unit			
	90893			3
1967	Includes: 47876 MCF; 20 BO; for Depco Uintah unit			
	20	60343		2
1968	Includes: 23558 MCF; for Tenneco Uintah unit			
	35410			
1969	Includes: 18269 MCF; for Tenneco Uintah unit			
	647	209705		4
1970	Includes: 21824 MCF; for Tenneco Uintah unit			
	3409	622632		9
Cumulative production				
6893				3177349

(BITTER CREEK AREA)
OURAY FIELD,
UINTAH COUNTY

Area designation (latest): December 1965
Discovery year: October 20, 1957
First recorded production: 1961
Producing formation (s): Green River, Wasatch

Year	Oil	Gas	Water	Prod. Wells
1961		846893		18
1962		2478184		22
1963	2035	1,170,055		19

Year	Oil	Gas	Water	Prod. Wells
1964				
1965	328	708487		13
1966		647796		13
1967	69	509211		13
1968	582	675659		13
1969	694	659096		13
1970	5928	496230		12
Cumulative production				
	9636	8191611		

(BITTER CREEK AREA)
UINTAH FIELD,
UINTAH COUNTY

Area designation (latest): June 1961,
unitized August 14, 1959
Discovery year: May 17, 1960

First recorded production: (included in Bitter Creek
field production)
Producing formation (s): Wasatch

BLACKTAIL RIDGE FIELD,
DUCHESNE COUNTY

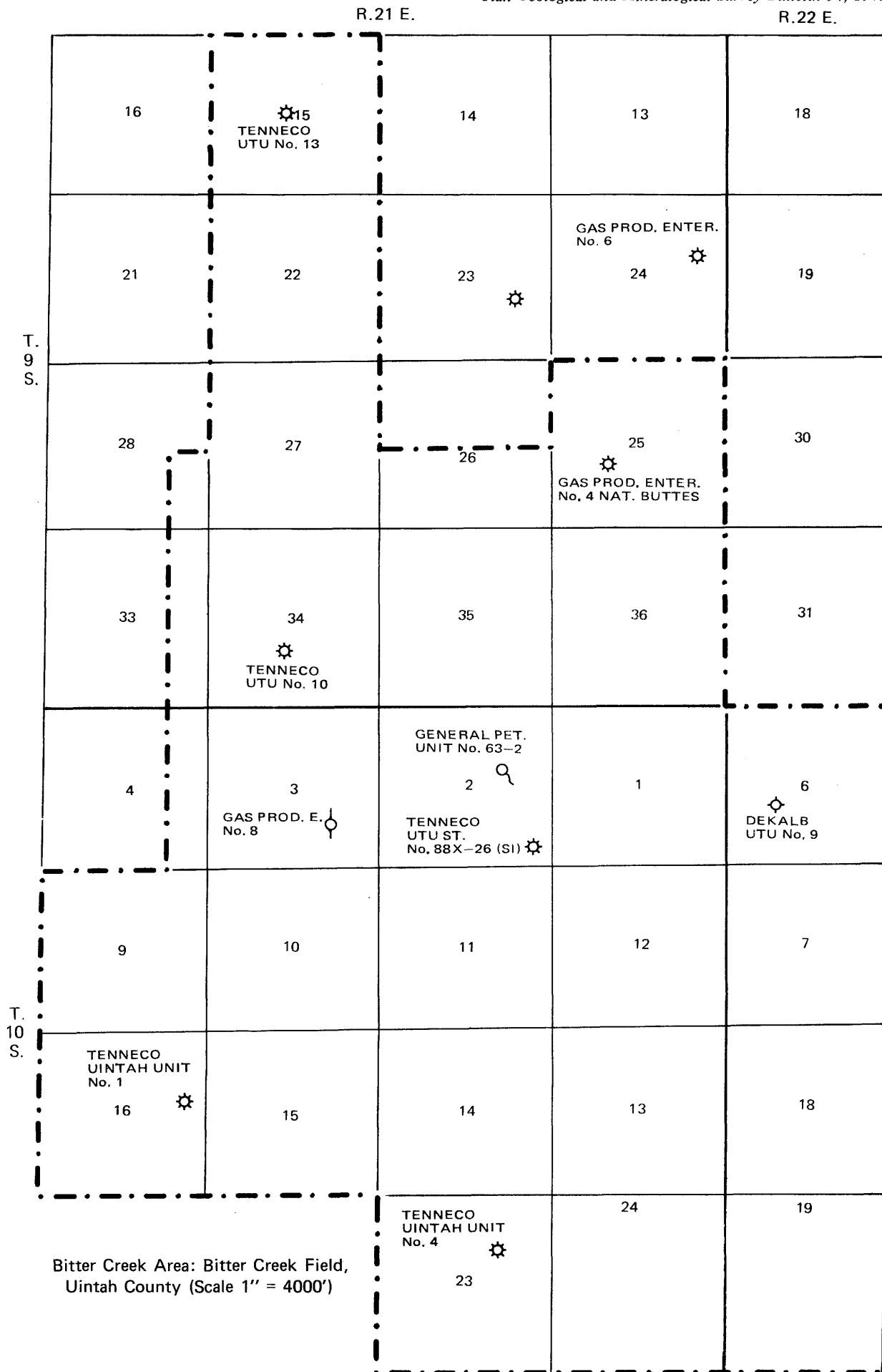
Area designation (latest): May 1966
Discovery year: 1965
First recorded production: 1965
Producing formation (s): Green River

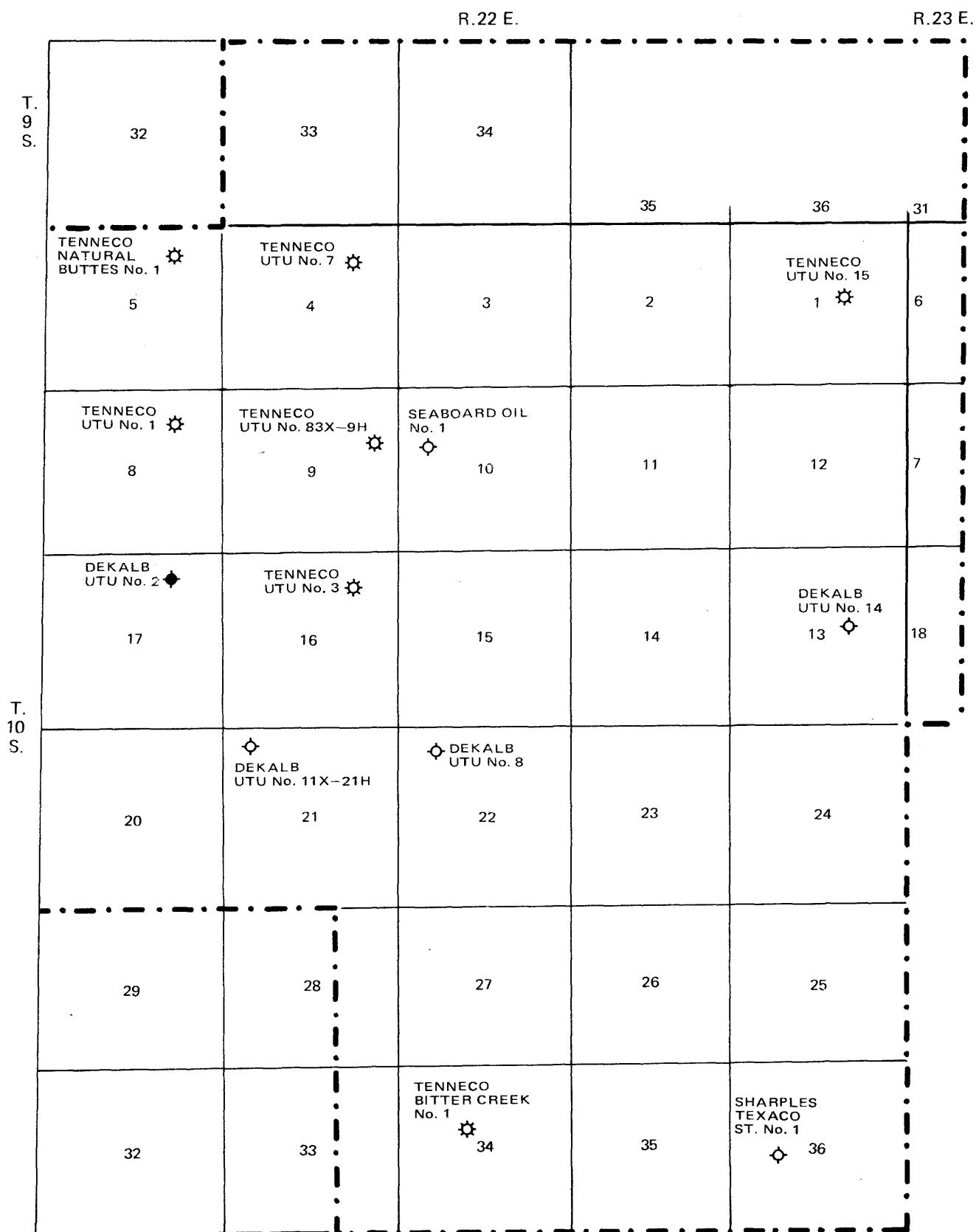
Year	Oil	Gas	Water	Prod. Wells
1965	3522	7182	10920	1
1966	1297	4420	3836	1
1967-1970	Shut in			
Cumulative	production			
	4819	11602	14756	

BLUEBELL FIELD,
DUCHESNE COUNTY

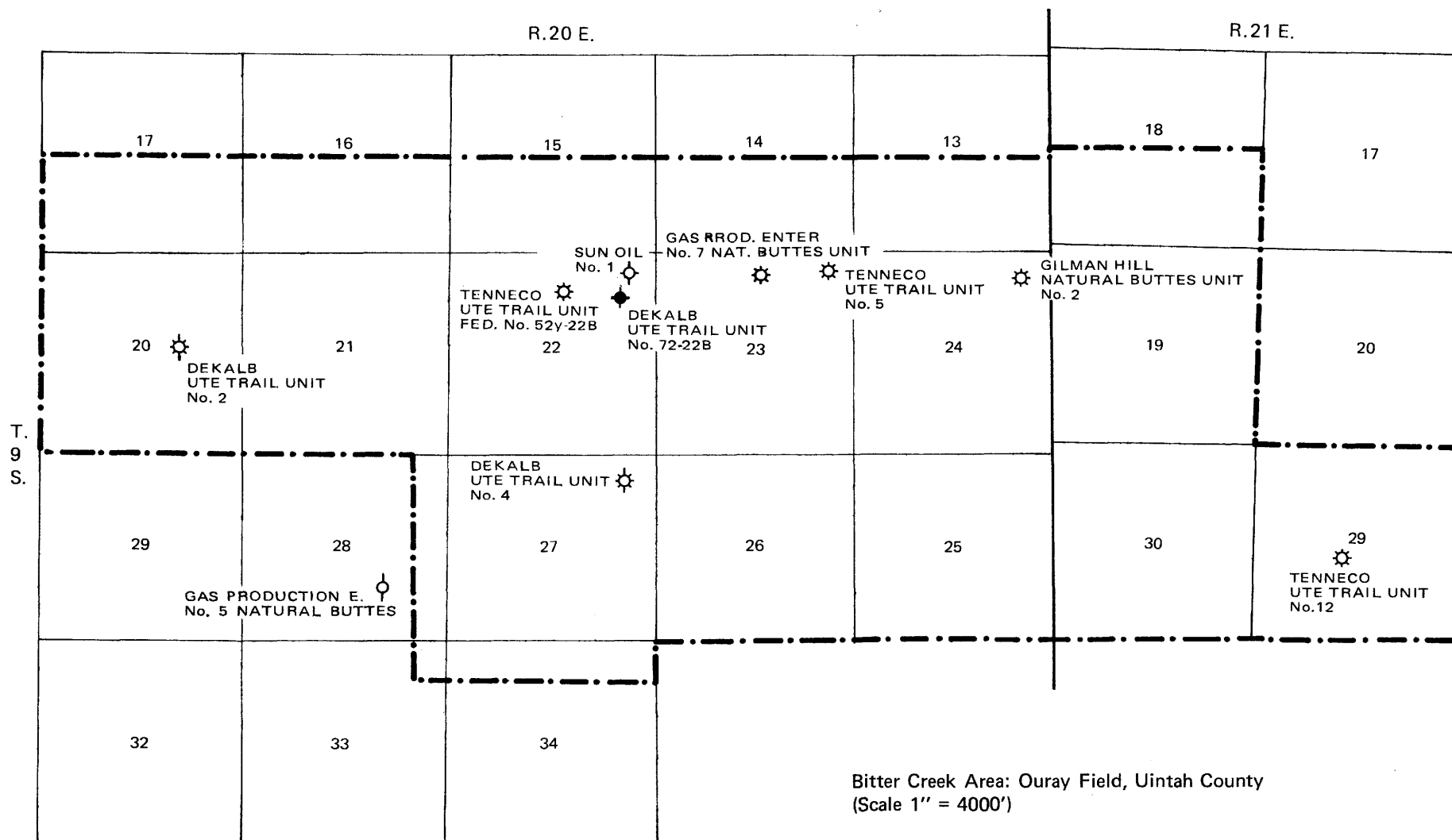
Area designation (latest): January 1971
Discovery year: 1955
First recorded production: 1957
Producing formation (s): Upper Green River,
Lower Green River
Disposition of products sold: Chevron Oil,
Cowboy Oil, Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1957		5375		
1958		33818		
1959		42230		
1960		54466		1
1961		61665		1
1962		60120		1
1963		70759		1
1964		16552		1

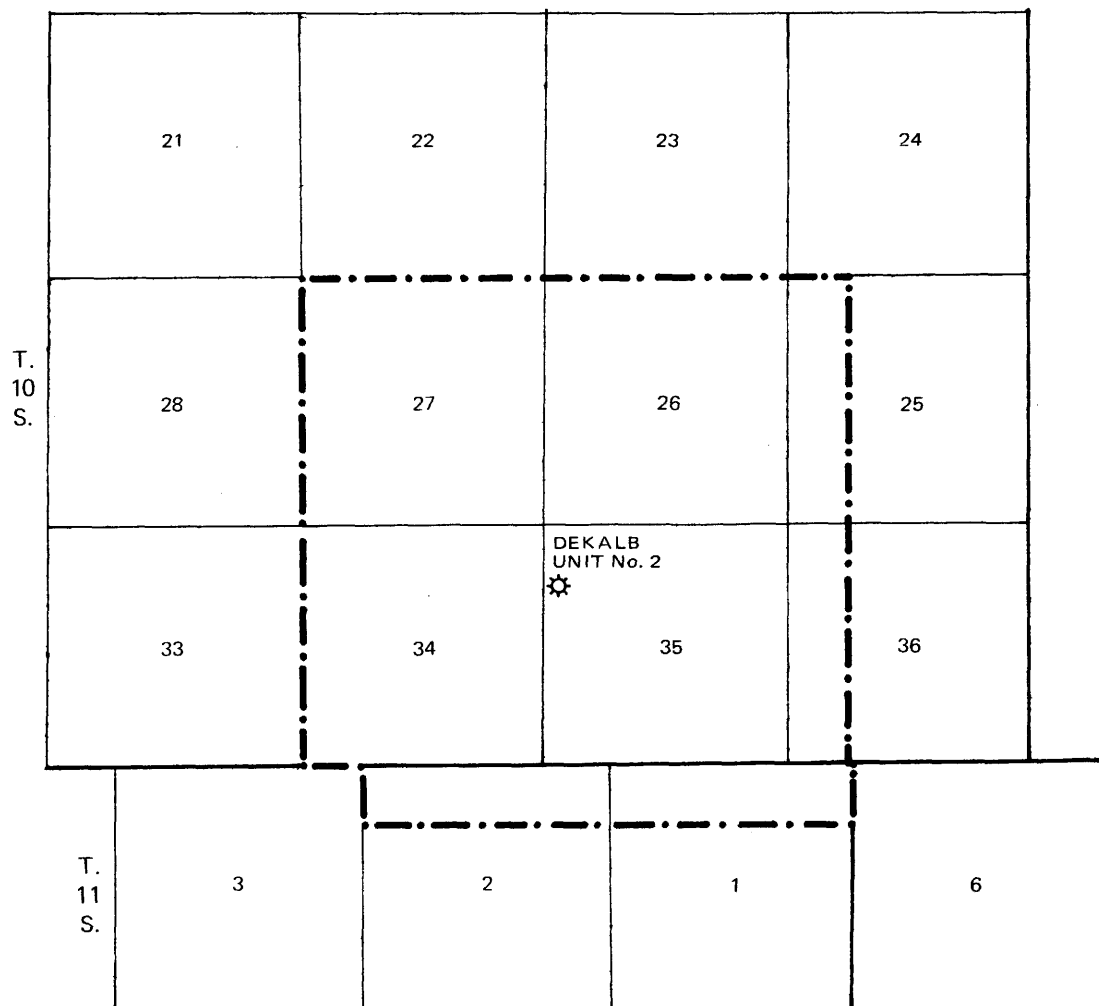




Bitter Creek Area: Bitter Creek Field (continued)



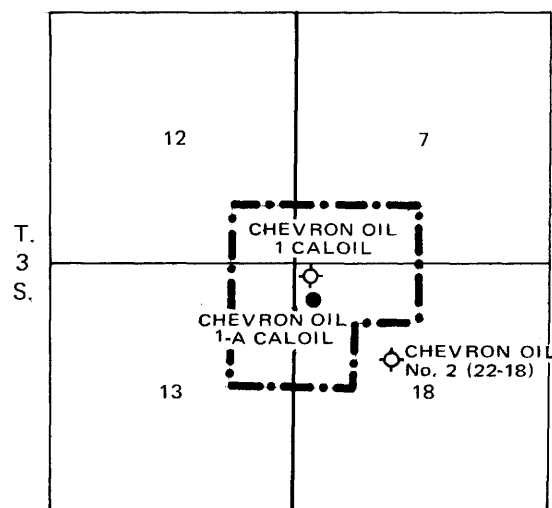
R. 20 E.



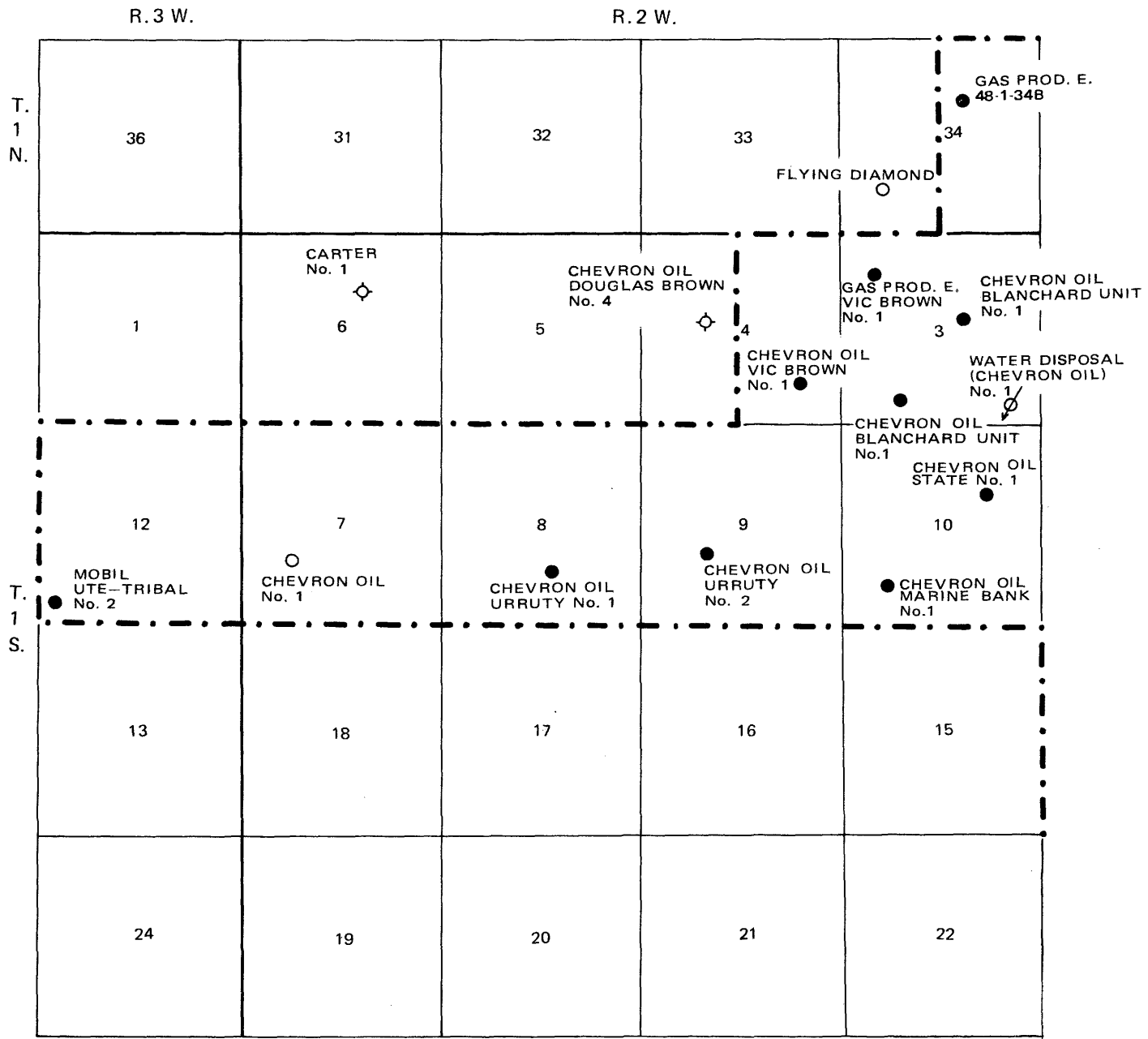
Bitter Creek Area: Uintah Field, Uintah County
(Scale 1" = 4000')

R. 7 W.

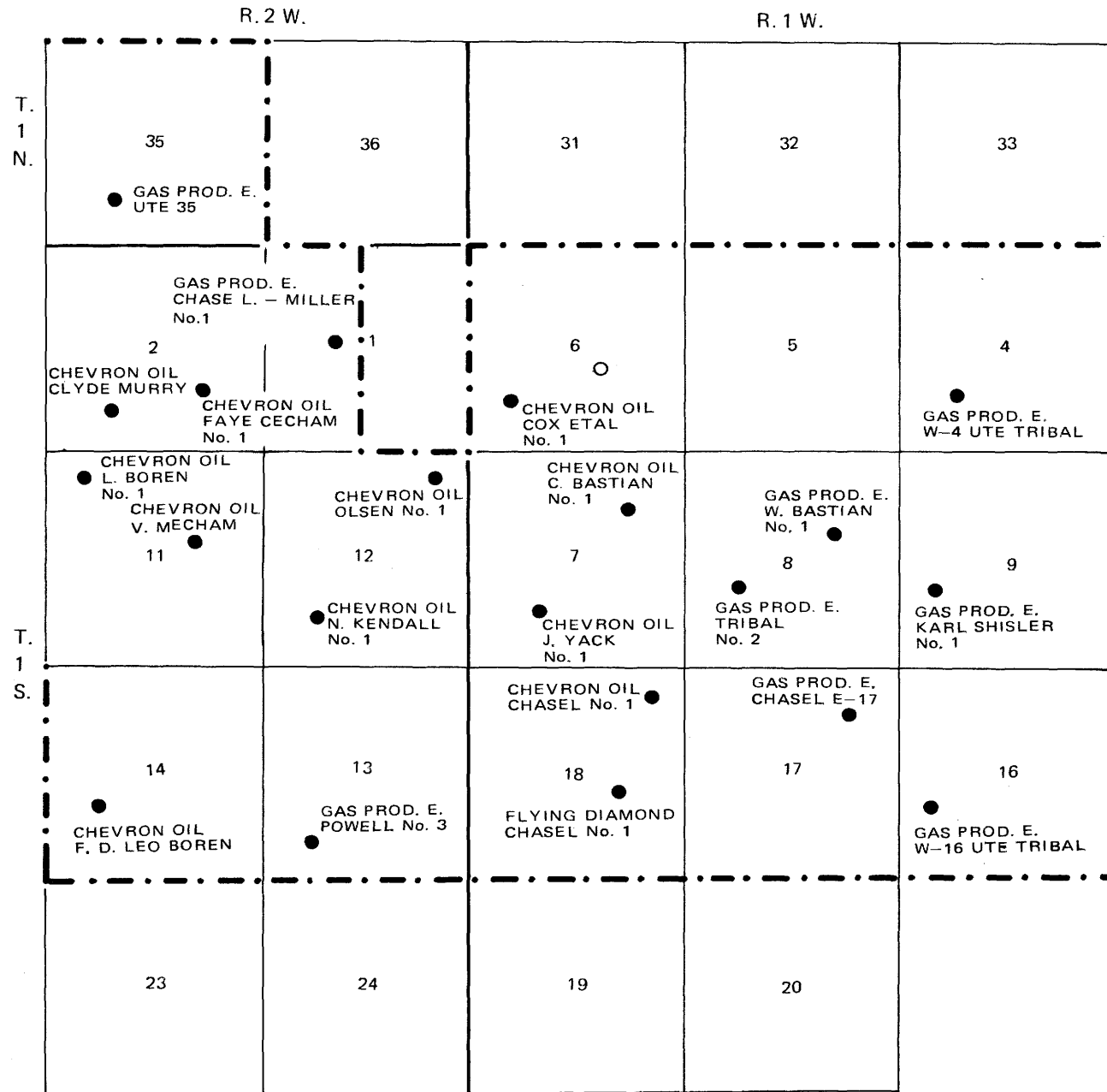
R. 6 W.



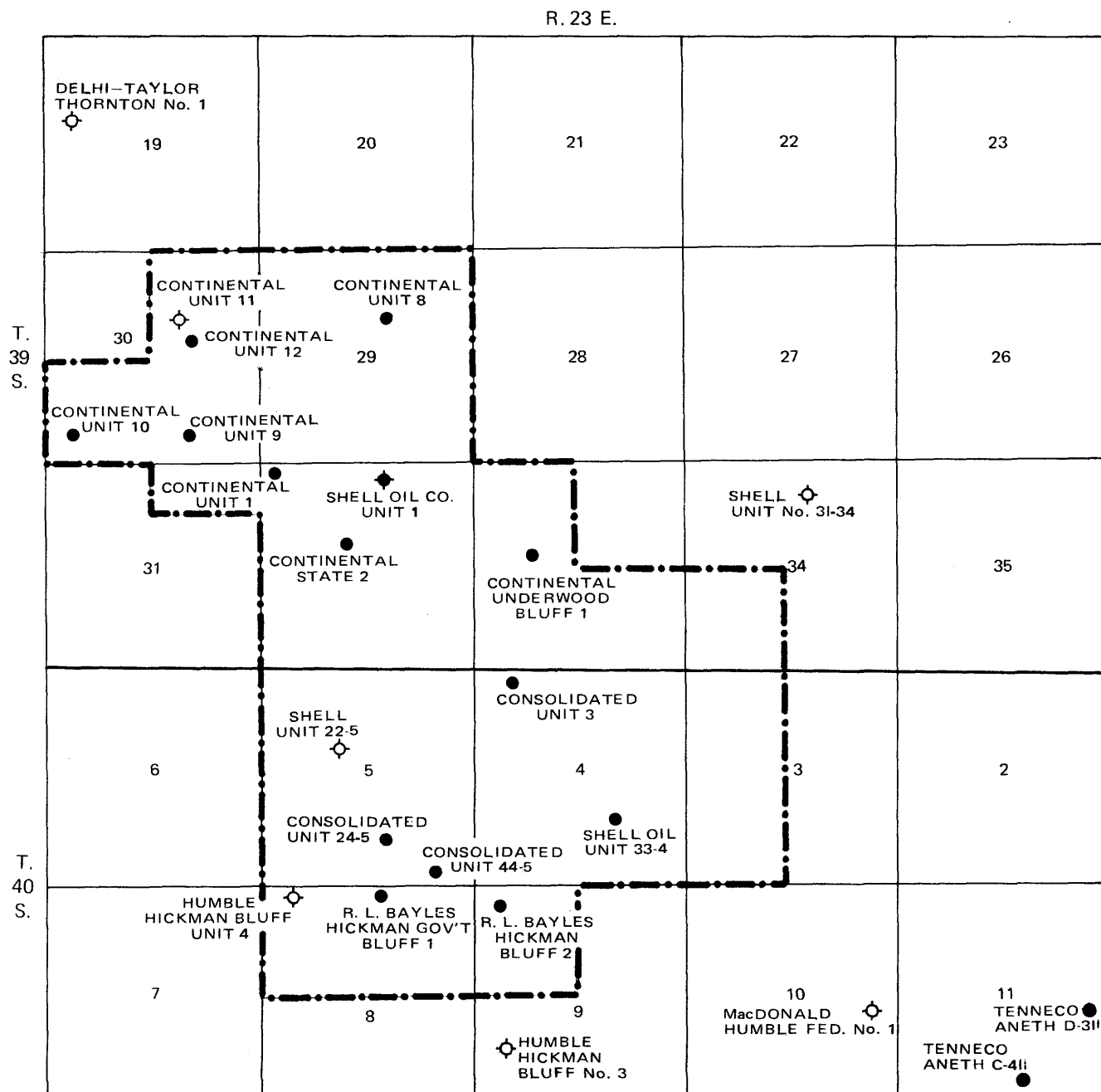
Blacktail Ridge Field, Duchesne County
(Scale 1" = 4000')



Bluebell Field, Duchesne County
(Scale 1" = 4000')



Bluebell Field (continued)



Bluff Field, San Juan County, Ismay, Desert Creek Pools
(Scale 1" = 4000')

Bluebell Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1965		2958		1
1966		98		1
1967	33326	9288	32874	2
1968	590335	267661	189158	8
1969	1205059	399539	457170	16
1970	1439197	616314	598263	31
Cumulative production				
	3267917	1640843	1277465	

CRUDE OIL ANALYSIS

Gravity, specific	0.868
Gravity, °A.P.I.	31.5
Pour point, °F	90
Sulfur, percent	.04
Color	Brownish black
Viscosity	@ 100° F, 150 sec.; @ 130° F, 62 sec.
Nitrogen, percent	0.123
Sample identification:	NW NW 11-1S-2W Lower Green River @ 10359-10517'

BLUFF FIELD,
SAN JUAN COUNTY

Area designation (latest): October 1966,
unitized May 17, 1951
Discovery year: 1956
First recorded production: 1958
Producing formation (s): Ismay, Desert Creek
Disposition of products sold: oil to Caribou Four
Corners Oil, Inc., Rock Island O&R, Plateau, Inc.,
Continental Oil Co.; gas to El Pasa Natural Co.

Viscosity @ 100° F, 38 sec.
Nitrogen, percent 0.019
Sample identification: SE SW 5-40S-23E, Paradox
Ls (Pennsylvanian) @ 5623-5704'

GAS ANALYSIS

Year	Oil	Gas	Water	Prod. Wells
1958	83089	53008	1217	4
1959	143283	161012	626	6
1960	88874	136631	811	6
1961	56229	84585	478	6
1962	43007	56443	2034	6
1963	37569	57310	3708	6
1964	32506	59216	2370	6
1965	65441	67128	7887	8
1966	136843	221929	21570	9
1967	151502	297641	2243	13
1968	111994	279883	828	13
1969	68285	186242	54	13
1970	62106	156944	0	13
Cumulative production				
	1080728	1817972	43826	

CRUDE OIL ANALYSIS

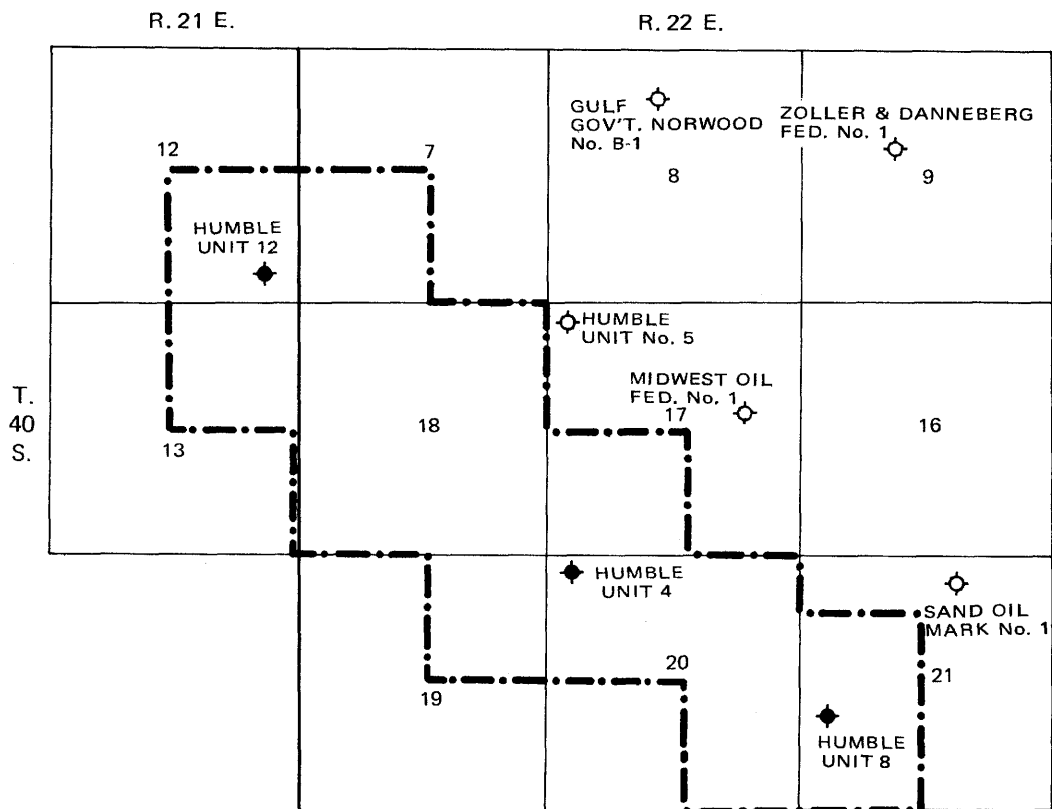
Gravity, specific	0.820
Gravity, °A.P.I.	41.1
Pour point, °F	25
Sulfur, percent	.05
Color	Green

Components: (nearest 0.1%)

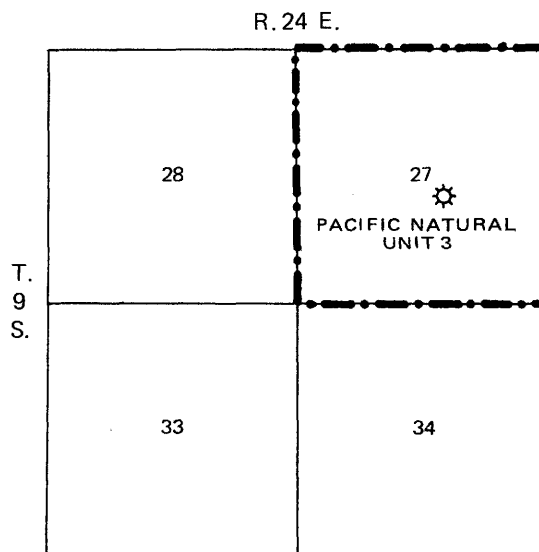
	No. 1	No. 2	No. 3	No. 4
Methane	0.0	trace	1.3	1.2
Ethane	0.0	trace	.4	.4
Higher fractions	0.6	0.4	0.6	0.6
Hydrogen sulfide	0.0	.0	.0	.0
Carbon dioxide	0.2	.1	85.7	86.6
Helium (nearest 0.01%;				
less than 0.05%				
denoted as "trace")	trace	trace	0.4	0.4
BTU value/ft ³				
(standard T&P)	1	1	45	45

Sample identification

- No. 1 Shell Oil and Three States Nat. Gas No. 3 unit, 4-40S-23E, sampled July 1, 1956, Hermosa @ 5559', index 1115
No. 2 Shell Oil and Three States Nat. Gas No. 3 unit, 4-40S-23E, sampled July 4, 1956, Paradox-Hermosa @ 5841', index 1116
No. 3 Shell Oil and Three States Nat. Gas No. 3 unit, 4-40S-23E, sampled July 14, 1956, Ouray @ 6914', index 1117
No. 4 Shell Oil and Three States Nat. Gas No. 3 unit, 4-40S-23E, sampled July 16, 1956, Ouray @ 6940', index 1118



Bluff Bench Field, San Juan County, Desert Creek, Ismay Pools
(Scale 1" = 4000')



Bonanza Field, Uintah County, Wasatch Pool
(Scale 1" = 4000')

BLUFF BENCH FIELD, SAN JUAN COUNTY

Area designation (latest): April 1960
 Discovery year: 1957
 First recorded production: 1957
 Producing formation (s): Ismay, Desert Creek

Year	Oil	Gas	Water	Prod. Wells
1957	841	0	80	
1958	8918	2573	3404	

Year	Oil	Gas	Water	Prod. Wells
1959	Includes: 603 BO; 923 BW; for Carter Oil W. Bluff Bench; undes. in 1959			
	2405	240	4137	1
1960	2956	1772	6712	1
1961	Abnd.			
	144	8	352	
Cumulative production				
	15264	4593	14685	

BONANZA FIELD, UINTAH COUNTY

Area designation (latest): June 1966
 Discovery year: 1963
 First recorded production: 1966
 Producing formation (s): Wasatch

GAS ANALYSIS

Components: (nearest 0.1%)

Methane	90.6
Ethane	4.5
Higher fractions	2.7
Hydrogen sulfide	0.0
Carbon dioxide	2.0
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace
BTU value/ft ³ (standard T&P)	1082

Year	Oil	Gas	Water	Prod. Wells
1963	Shut in			
1964	Shut in			
1965	Shut in			
1966		120344		1
1967		54396		1
1968		32012		1
1969		21668		1
1970		13720		1
Cumulative production				
		242140		

Sample identification: Pacific Nat. Gas No. 3 unit,
 27-9S-24E, completed October 15, 1963,
 sampled February 26, 1964, Wasatch
 @ 4917', sample 9247, index 206

BOOK CLIFFS FIELD, GRAND COUNTY

Area designation (latest): October 1961,
 unitized April 14, 1961
 Discovery year: 1961
 First recorded production: 1962
 Producing formation (s): Dakota

Year	Oil	Gas	Water	Prod. Wells
1961	Shut in			
1962	Great Western Drilling #1 Book Cliffs; undes. in 1962			

Book Cliffs (continued)				
Year	Oil	Gas	Water	Prod. Wells
	65			1
1963	Shut in			
1964	Shut in			
1965	Shut in			
1966	Shut in			
1967	Includes: Oil Inc. #1 Book Cliffs; undes. in 1967			
	142		400	1
1968	Shut in			
1969	Shut in			
1970	Shut in			
Cumulative production			400	
	207	—		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3	No. 4
Methane	88.9	86.9	87.7	89.4
Ethane	5.7	6.7	5.5	5.5
Higher fractions	2.5	4.3	2.6	2.3
Hydrogen sulfide	0.0	0.0	0.0	0.0
Carbon dioxide	0.2	1.0	0.7	0.2

Helium (nearest 0.01%;
less than 0.05%
denoted as "trace")
BTU value/ft³
(standard T&P)

No. 1 No. 2 No. 3 No. 4

0.2 0.1 0.2 0.2

1081 1132 1070 1077

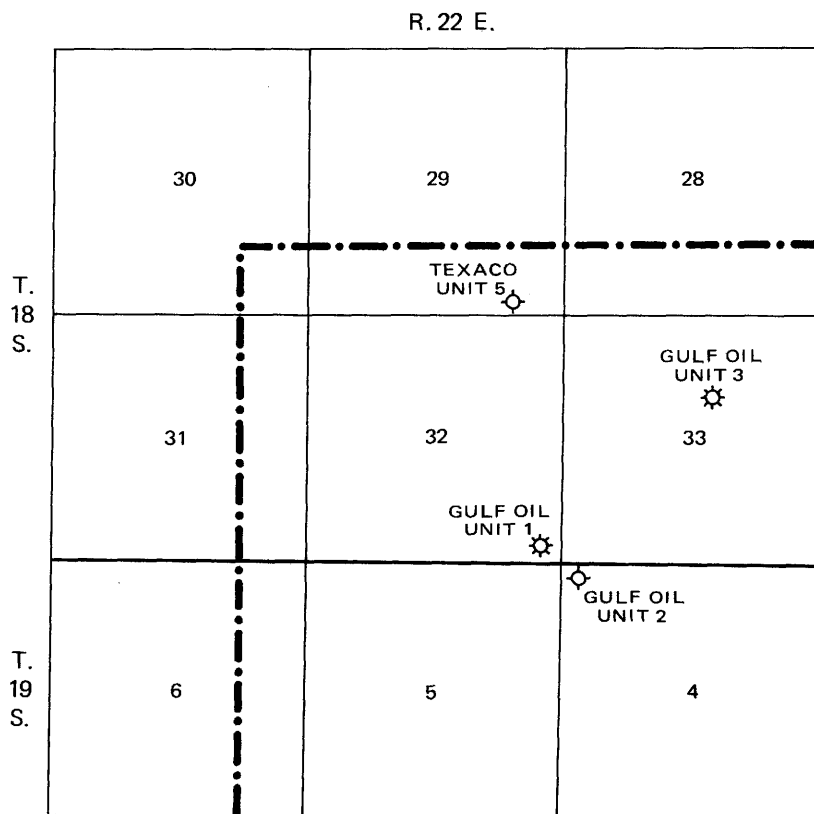
Sample identification:

No. 1 Gulf Oil Corp. No. 3, 33-18S-22E, completed August 17, 1962, sampled August 25, 1962, Dakota @ 5330', sample 8657, index 287

No. 2 Rip C. Underwood Federal Seagull No. 1-18, 18-16S-25E, sampled November, 1962, Cedar Mountain @ 20', sample 8766, index 288

No. 3 Gulf Oil Corp No. 1 unit, 32-18S-22E, completed July 5, 1961, sampled September 23, 1961, Dakota @ 5186', sample 8209, index 282

No. 4 Gulf Oil Corp No. 3, 33-18S-22E, completed August 15, 1962, sampled October 10, 1963, Dakota @ 5370', sample 9110, index 181



Book Cliffs Field, Grand County, Dakota Pool
(Scale 1" = 4000')

BOUNDARY BUTTE FIELD, SAN JUAN COUNTY

Area designation (latest): May 1959

Discovery year: 1947

First recorded production: 1948

Producing formation (s): Coconino, Akah, Ismay,
Desert CreekDisposition of products sold: El Paso Natural Gas Co.,
Continental Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1947	Shut in			1
1948	1290			1
1949	14403			5
1950	7740			5
1951	5555			5
1952	5668			5
1953	14744			5
1954	2342			5
1955	4716			5
1956	4055			8
1957	10432	46371		12
1958	7700	34517	650	13
1959	6011	33969		13
1960	7092	1366386		13
1961	7140	1614425		13
1962	7150	914497		12
1963	7100	350045		12
1964	5809	203461		12
1965	5752	406631		12
1966	46403	1169944		15
1967	403726	1049819	140663	27
1968	468497	990051	299166	30
1969	470852	935036	312520	30
1970	472961	632645	466576	30
Cumulative production				
	1987138	9747797	1219575	

CRUDE OIL ANALYSIS

Gravity, specific	0.814
Gravity, °A.P.I.	42.3
Pour point, °F	10
Sulfur, percent	.13
Color	Brownish green
Viscosity	@ 100° F, 36 sec.
Nitrogen, percent	0.025
Sample identification: SE NW 22-43S-22E, Coconino Ss (Permian) @ 1504-1514'	

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3	No. 4
Methane	67.4	66.2	66.6	68.1
Ethane	5.4	4.5	5.7	5.4
Higher fractions	3.2	4.0	5.0	4.5

	No. 1	No. 2	No. 3	No. 4
Hydrogen sulfide	.0	.0	.0	0.0
Carbon dioxide	7.1	5.5	6.0	
Helium (nearest 0.01%; less than 0.05 % denoted as "trace")	.6	.8	.6	0.7
BTU value/ft ³ (standard T&P)	893	876	942	904
	No. 5	No. 6	No. 7	No. 8
Methane	70.4	66.6	67.8	69.9
Ethane	5.0	4.5	4.8	4.2
Higher fractions	4.4	3.7	4.3	3.7
Hydrogen sulfide	0.0	0.0	0.0	0.0
Carbon dioxide				
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.7	0.8	0.8	0.9
BTU value/ft ³ (standard T&P)	938	865	904	891

Sample identification:

No. 1 Sinclair Oil and Gas No. 3 Nav.-Tribal,
15-43S-22E, completed April 23, 1957,
sampled August 18, 1957, Paradox @ 4338',
index 1119

No. 2 Western Nat. Gas No. 10 English,
21-43S-22E, completed March 5, 1958, sam-
pled April 25, 1958, Paradox @ 4648',
index 1120

No. 3 Western Nat. Gas Etal No. 7 English,
16-43S-22E, completed June 8, 1956, sam-
pled August 28, 1956, Paradox @ 4329',
index 1121

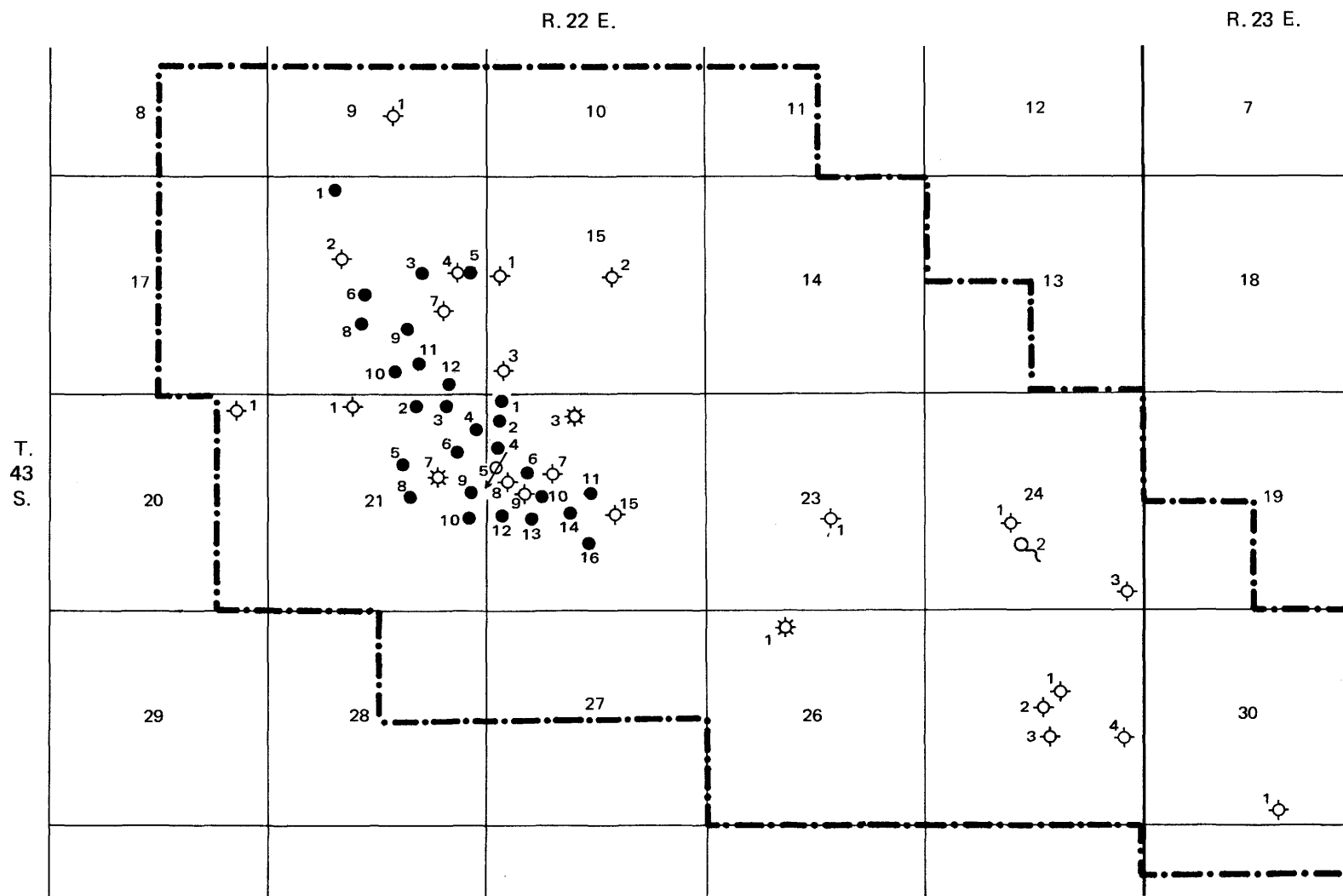
No. 4 Sinclair Oil and Gas No. 1 English,
22-43S-22E, completed November 12,
1964, sampled November 12, 1964, Paradox
(?), sample 9660, index 200

No. 5 Sinclair Oil and Gas No. 9 English,
16-43S-25E, completed November 12,
1964, sampled November 12, 1964, Paradox
@ 4142', sample 9655, index 201

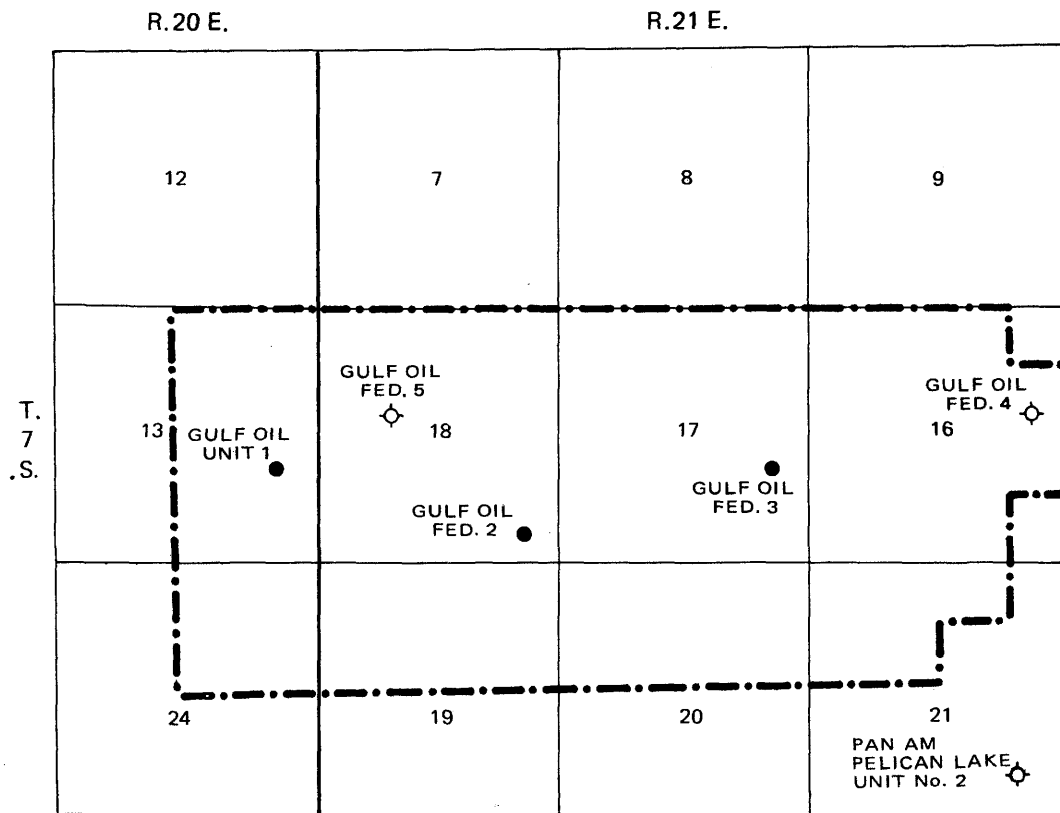
No. 6 Sinclair Oil and Gas No. 10 English,
21-43S-22E, completed November 12,
1964, sampled November 12, 1964, Paradox
@ 4684', sample 9656, index 202

No. 7 Sinclair Oil and Gas No. 11 English,
26-43S-22E, sampled November 12, 1964,
Paradox, sample 9659, index 203

No. 8 Sinclair Oil and Gas No. 1 Nav.,
25-43S-22E, sampled November 12, 1964,
Paradox @ 4370', sample 9657, index 204



Boundary Butte Field, San Juan County
(Scale 1" = 4000')



Brennan Bottom Field, Uintah County
(Scale 1" = 4000')

BRENNAN BOTTOM FIELD, UINTAH COUNTY

Area designation (latest): May 1959,
unitized June 12, 1953

Discovery year: 1954

First recorded production: 1954

Producing formation (s): Green River

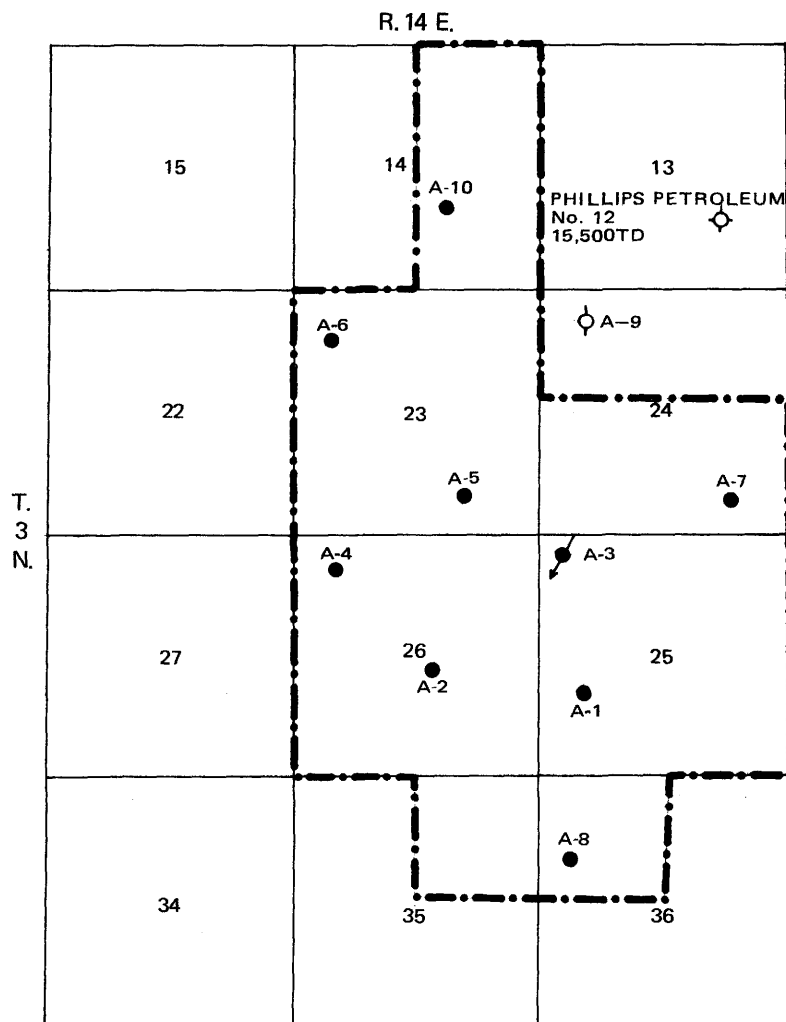
Disposition of products sold: Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1954	40393	16698	1803	
1955	36983	16753	647	
1956	45214	22363	1699	
1957	69286	19692	4818	
1958	75541	18325	6977	
1959	59065	107919	3884	4
1960	45926	84190	4007	4
1961	39216	72798	2980	4
1962	33936	74096	1999	4
1963	32421	73054	2189	4
1964	28638	64818	2518	4
1965	20518	45762	1553	4

Year	Oil	Gas	Water	Prod. Wells
1966	21808	42503	752	3
1967	21844	43054	524	3
1968	18036	11336	68	3
1969	12892	—	1896	3
1970	11954	6206	361	2
Cumulative production				
	613671	719567	38675	

CRUDE OIL ANALYSIS

Gravity, specific	0.892
Gravity, °A.P.I.	27.1
Pour point, °F	95
Sulfur, percent	.13
Color	Brownish green
Viscosity	@ 100° F, 200 sec.; @ 130° F, 96 sec.
Nitrogen, percent	0.146
Sample identification: NE SE 17-7S-21E, Wasatch Ss and Green River Sh (Tertiary) @ 6635-7010'	



Bridger Lake Field, Summit County
(Scale 1" = 4000')

BRIDGER LAKE FIELD, SUMMIT COUNTY

Area designation (latest): January 1970,

unitized May 19, 1965

Discovery year: 1966

First recorded production: 1966

Producing formation (s): Dakota

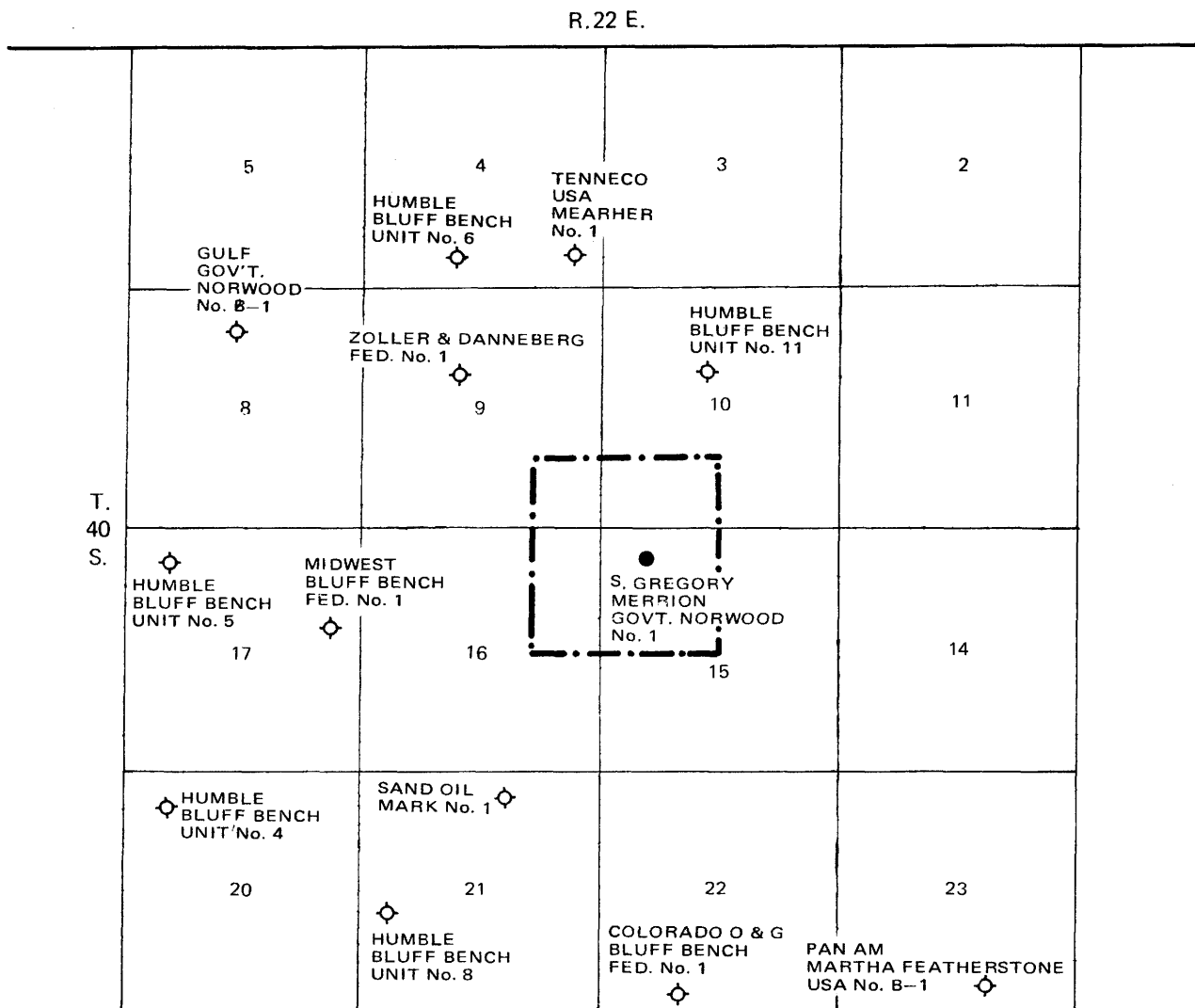
Disposition of products sold: Phillips Petroleum

Year	Oil	Gas	Water	Prod. Wells
1966	241218	162950	17607	2
1967	860636	579815	86020	5
1968	1301303	847940	225511	7
1969	1025582	638442	283298	8
1970	918152	597198	235070	8

Year	Oil	Gas	Water	Prod. Wells
Cumulative production:				
	4346891	2826345	847506	

CRUDE OIL ANALYSIS

Gravity, specific	0.826
Gravity, °A.P.I.	39.8
Pour point, °F	50
Sulfur, percent	.05
Color	Brownish green
Viscosity	@ 100° F, 40 sec.; @ 77° F, 56 sec.
Nitrogen, percent	0.047
Sample identification: NW SE 26-3N-14E, Dakota Ss (Lower Cretaceous) @ 15764-15776'	



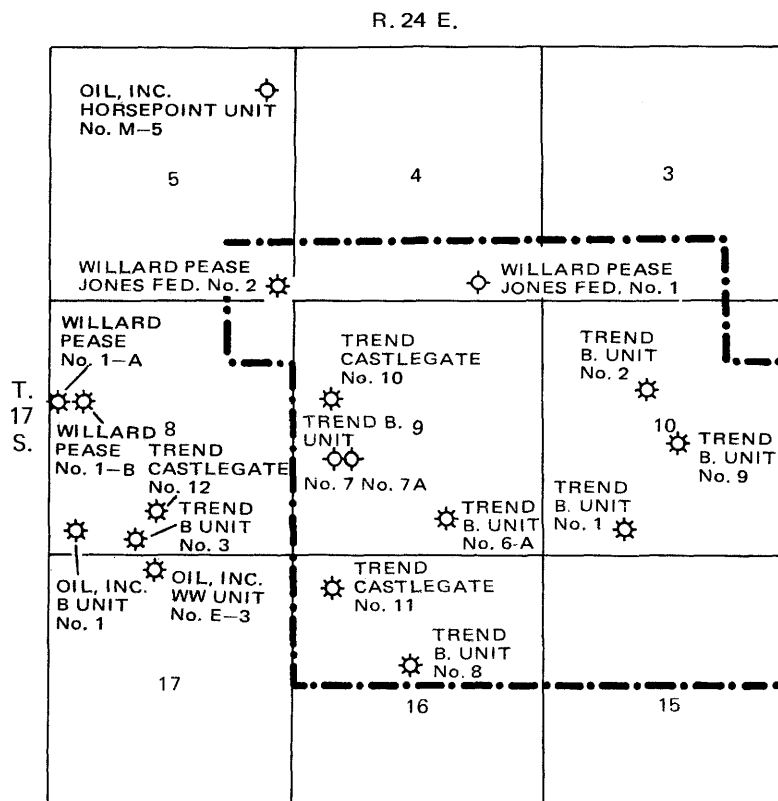
Broken Hills Field, San Juan County
(Scale 1" = 4000')

BROKEN HILLS FIELD, SAN JUAN COUNTY

Area designation (latest): January 1960
Discovery year: 1959
First recorded production: 1959
Producing formation (s): Ismay
Disposition of products sold: Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1959	5469	0	15198	1
1960	6808	2347	15772	1
1961	6610	3966	14793	1
1962	5075	3485	12751	1

Year	Oil	Gas	Water	Prod. Wells
1963	4828	2701	9468	1
1964	4666	2592	9507	1
1965	4780	2674	8776	1
1966	4574	3036	5066	1
1967	4008	2637	2846	1
1968	5037	3018	4196	1
1969	4245	2572	2592	1
1970	3895	2278	0	1
Cumulative production				
	59995	31306	100965	



Bryson Canyon Field, Grand County
(Scale 1" = 4000')

BRYSON CANYON FIELD, GRAND COUNTY

Area designation (latest): December 1963,
unitized December 27, 1960
Discovery year: October 1, 1960
First recorded production: November 10, 1962
Producing formation (s): Castlegate, Dakota, Cedar
Mountain
Disposition of products sold: Mesa Pipeline Co

Year	Oil	Gas	Water	Prod. Wells
1962		266513		4
1963		1476313		4
1964		1158980		6
1965		926667		12
1966		620433		10
1967		466710		11
1968		488007		11
1969		423557		11
1970		419114		10
Cumulative production		6246294		

GAS ANALYSIS

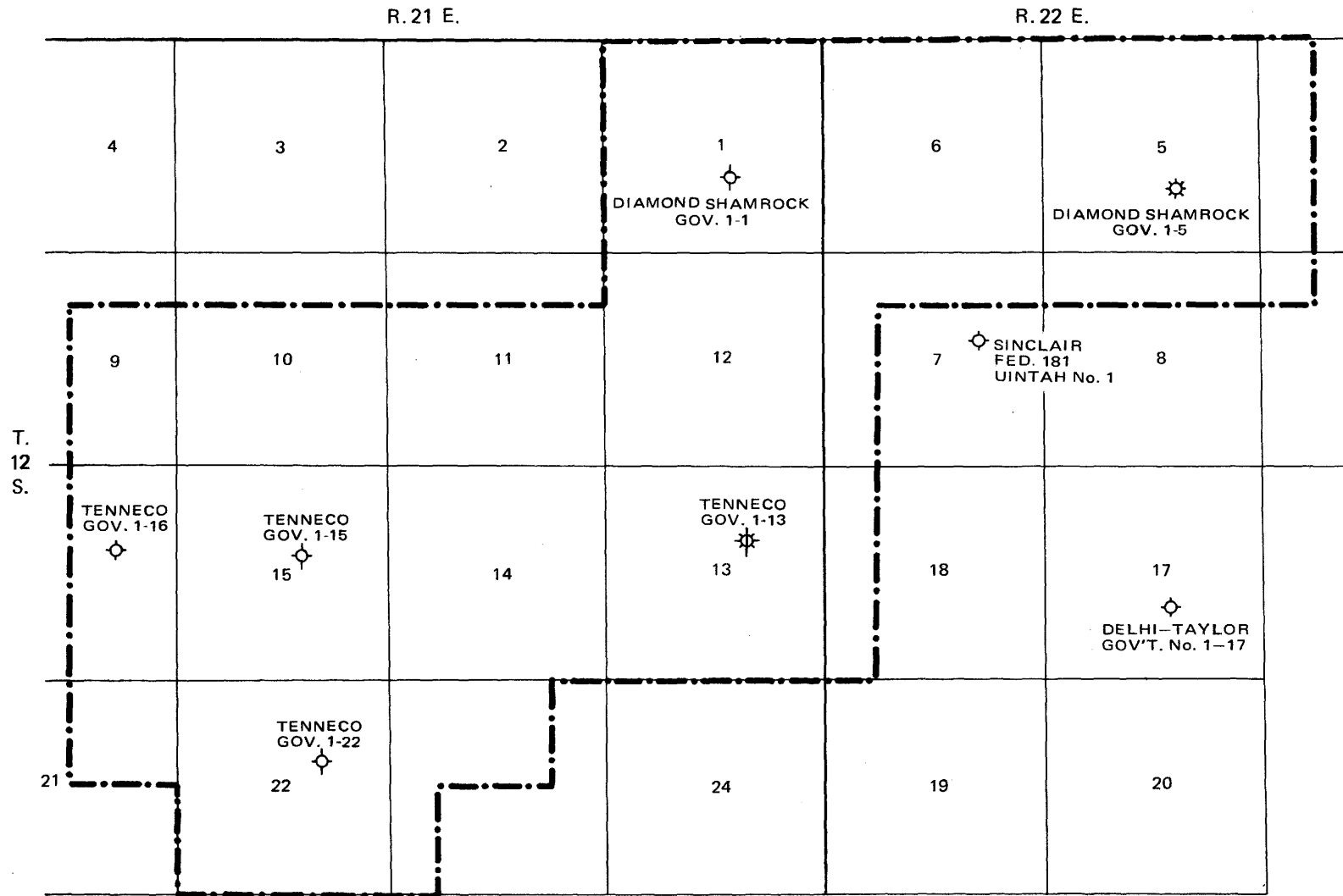
Components: (nearest 0.1%)

	No. 1	No. 2
Methane	87.1	82.4
Ethane	3.7	3.6
Higher fractions	1.1	1.7
Hydrogen sulfide	0.0	0.0
Carbon dioxide	1.0	0.5
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.10	0.70
BTU value/ft ³ (standard T&P)	983	958

Sample identification:

No. 1 Trend Oil No. 6A, 9-17S-24E, completed
November 29, 1960, sampled December 1,
1960, Dakota @ 4606', sample 7794, index
421

No. 2 Trend Oil No. 6A, 9-17S-24E, Morrison
@ 4731', sample 7798, index 422



Buck Canyon Field, Uintah County, Wasatch Pool
(Scale 1" = 4000')

BUCK CANYON FIELD, UINTAH COUNTY

Area designation (latest): March 1963

Discovery year: 1961

First recorded production: 1962

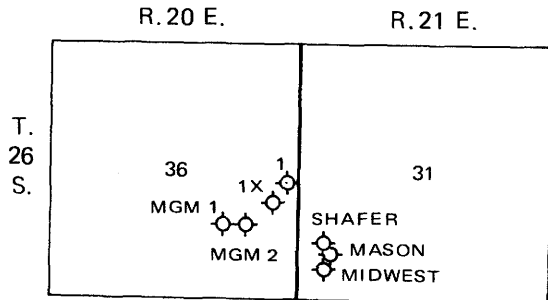
Producing formation (s): Wasatch

Year	Oil	Gas	Water	Prod. Wells
1961	Shut in			
1962	Includes: 5300 MCF; for Shamrock O&G #1-5 Gov't; undes. in 1962 50300			1

Year	Oil	Gas	Water	Prod. Wells
1963	Shut in			
1964	Shut in			
1965	Shut in			
1966		97219		4
1967		41640		4
1968		1395		2
1969	Shut in			2
1970	Shut in			
Cumulative production		190554		

CAHONE MESA (See Greater Aneth Area)

CANE CREEK FIELD, GRAND COUNTY



Cane Creek Field, Grand County
(Scale 1" = 4000')

Area designation (latest): Undesignated area

Discovery year: 1925

First recorded production: 1959

Producing formation (s): Paradox

Year	Oil	Gas	Water	Prod. Wells
1925	First known drilling			
1959	405			
1960	349	25000		1
1961	Shut in			
1962	1133			

Year	Oil	Gas	Water	Prod. Wells
1963-68	Shut in			
1969	P&A			
Cumulative production		1887	25000	

CRUDE OIL ANALYSIS

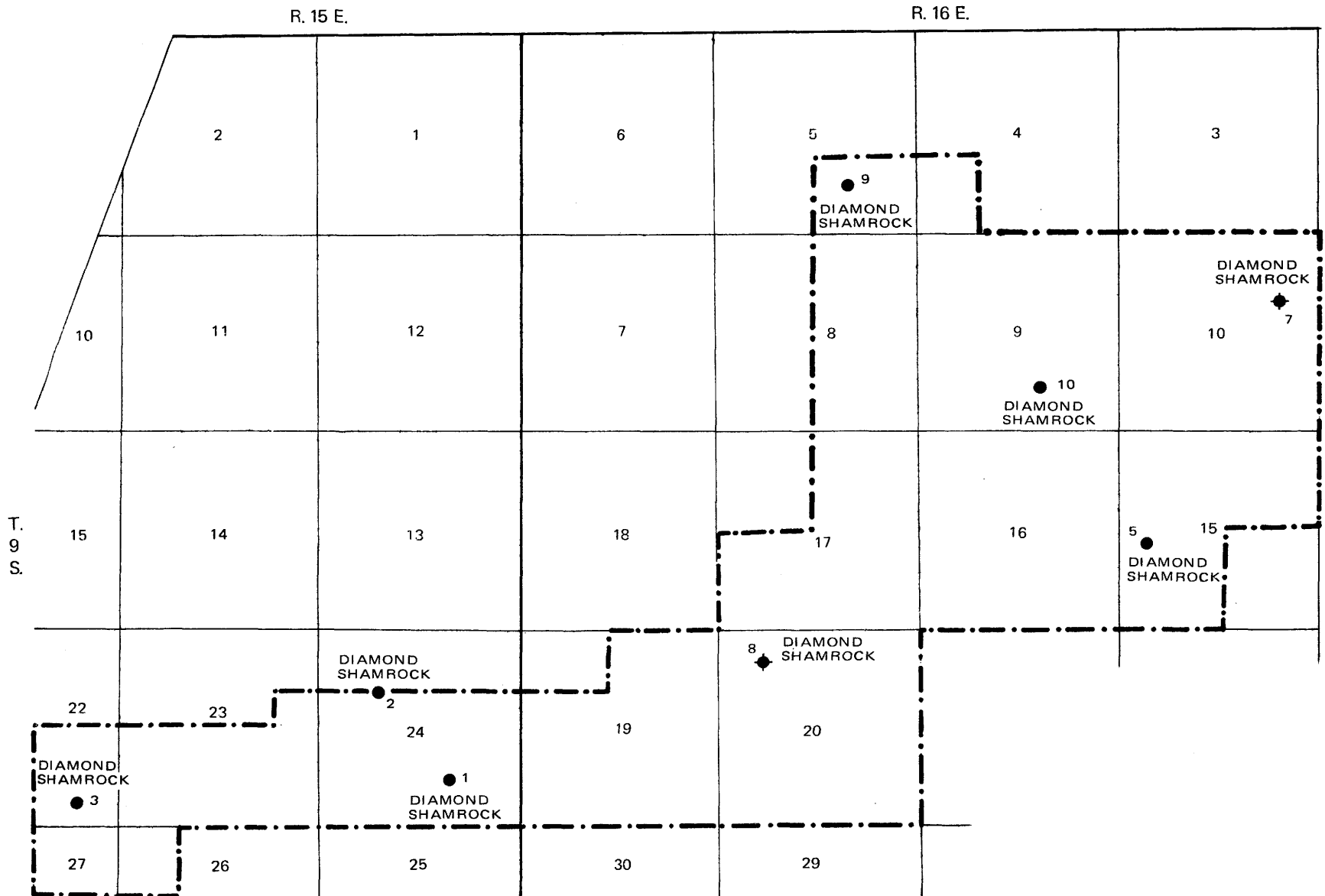
Gravity, specific	0.833
Gravity, °A.P.I.	38.4
Pour point, °F	Below 5
Sulfur, percent	.07
Color	NPA 5
Viscosity	@ 100° F, 46 sec.; @ 77° F, 51 sec.

Nitrogen, percent

Sample identification: SW SW 31-26S-21E, Paradox
Ls (Pennsylvanian) @ 2025-2058'

Gravity, specific	0.821
Gravity, °A.P.I.	40.9
Pour point, °F	20
Sulfur, percent	.09
Color	NPA 6
Viscosity	@ 100° F, 37 sec.
Nitrogen, percent	0.011

Sample identification: SE NE 36-26S-20E, Mississippian Ls @ 6605-6717'



Castle Peak Field, Duchesne County
(Scale 1" = 4000')

CASTLE PEAK FIELD, DUCHESNE COUNTY

Area designation (latest): January 1971,
unitized August 31, 1962

Discovery year: 1962

First recorded production: 1962

Producing formation (s): Green River

Disposition of products sold: Permian Corp., Pan
American Pet. (AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1962	616			
1963	12053			3
1964	8347			5
1965	33809			
1966	17523	11842	1313	8
1967	12944	38642	3555	7
1968	8534	30106	2499	7

Year	Oil	Gas	Water	Wells Prod.
1969	6838	36400	2399	7
1970	6287	6130	885	6
Cumulative production				
	106951	123120	10651	

CRUDE OIL ANALYSIS

Gravity, specific	0.888
Gravity, °A.P.I.	27.9
Pour point, °F	80
Sulfur, percent	.08
Color	Black
Viscosity	@ 100° F, 290 sec.; @ 130° F, 59 sec.
Nitrogen, percent	0.172
Sample identification: NW SE 24-9S-15E, Green River @ 4003-4726'	

CEDAR RIM FIELD, DUCHESNE COUNTY

Area designation (latest): December 1969

Discovery year: October 27, 1969

First recorded production: 1969

Producing formation (s): Wasatch, Green River

Disposition of products sold: Cowboy Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1969	22709			1
1970	107945	186639		3
Cumulative production				
	130654	186639		

CHAPITA WELLS FIELD, UINTAH COUNTY

Area designation (latest): June 1963,
unitized December 29, 1951

Discovery year: 1952

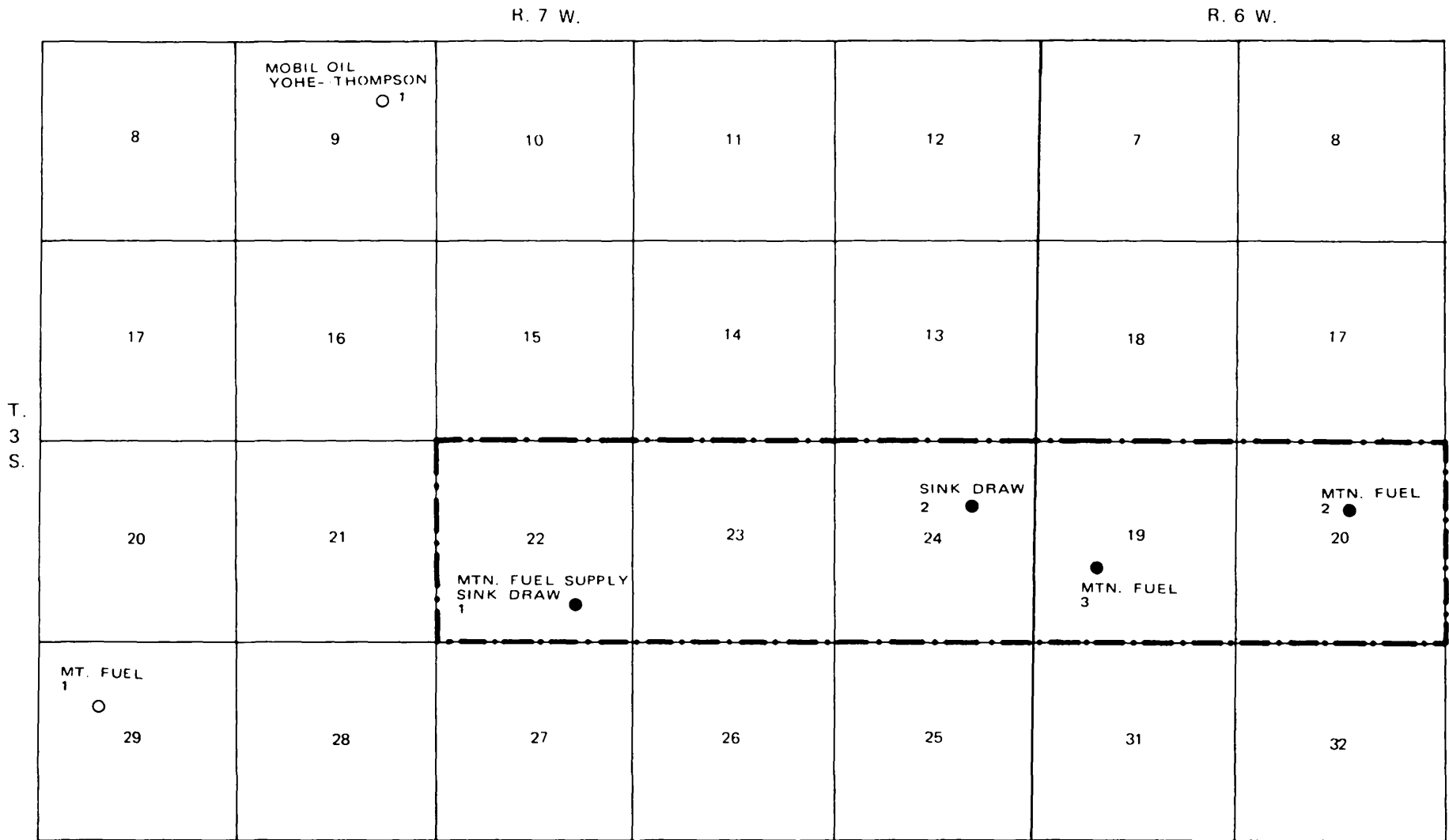
First recorded production: 1953

Producing formation (s): Mesaverde, Wasatch

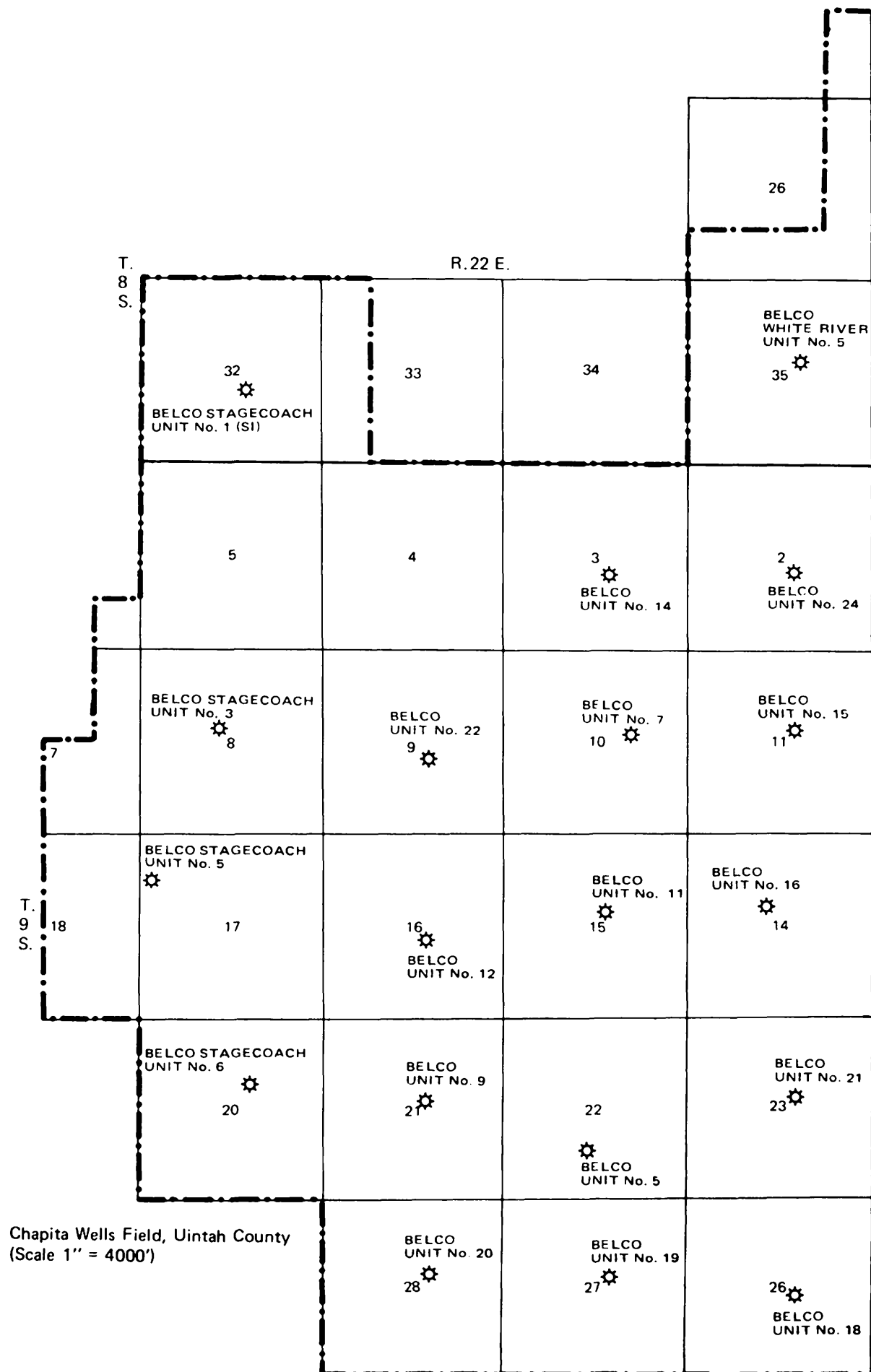
Disposition of products sold: gas to Mountain Fuel
Supply

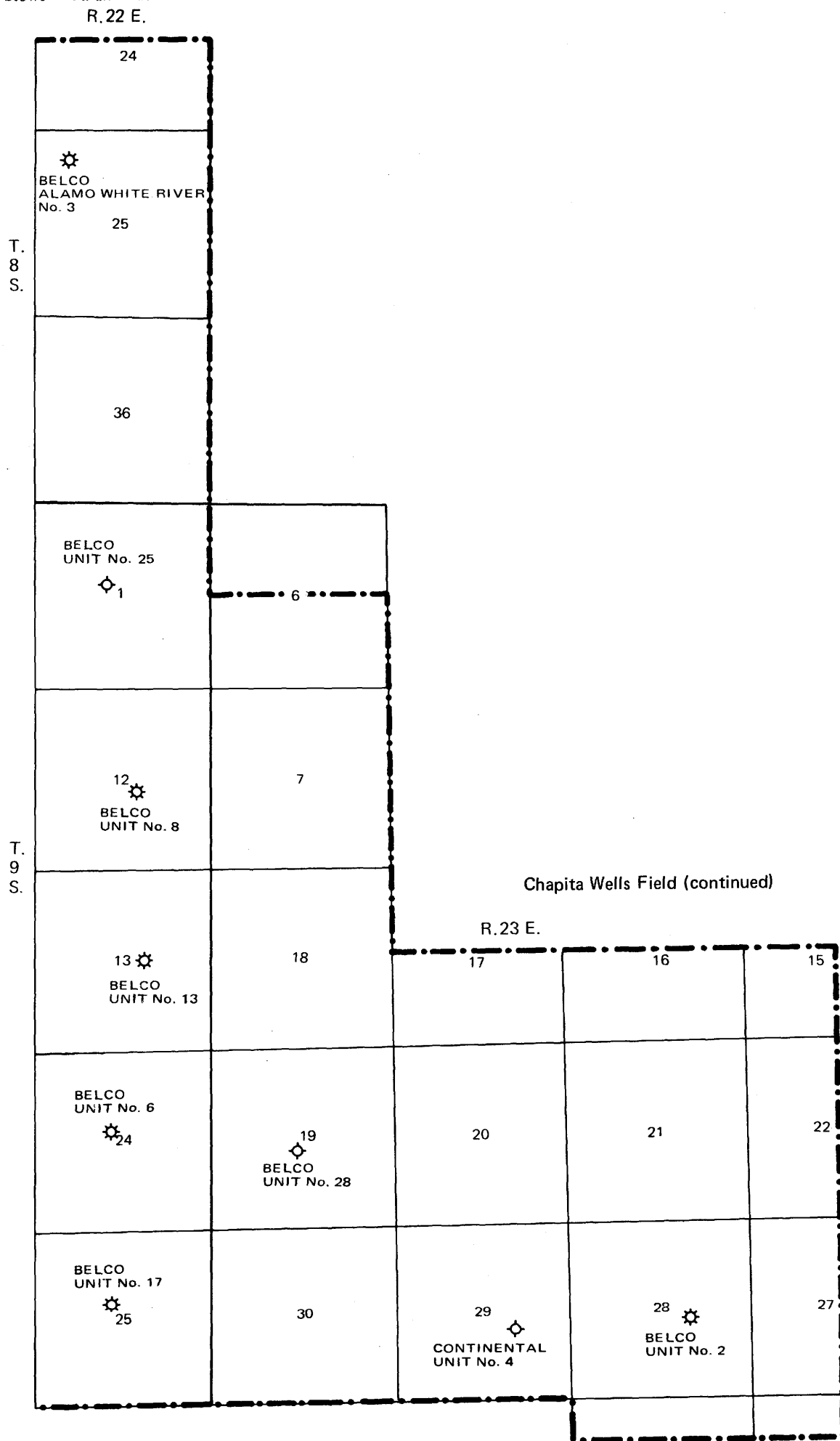
Year	Oil	Gas	Water	Prod. Wells
1953-1956 P&A				
	2315	15244	579	
1956 Shut in		23000		
1957 Shut in		16300		
1958 Shut in		27845		9

Year	Oil	Gas	Water	Prod. Wells
1959-1961	Shut in			
1962	7569	2819253		21
1963	3219	1476318		20
1964	2459	1237989		20
1965	1313	928220		26
1966	1487	888610		19
1967	1392	863330		19
1968	241	781884		19
1969	719	1430962		19
1970	454	726156		19
Cumulative production				
	21168	11235111	579	



Cedar Rim Field, Duchesne County
(Scale 1" = 4000')





Chapita Wells Field (continued)

CRUDE OIL ANALYSIS

Gravity, specific	0.763
Gravity, °A.P.I.	54.0
Pour point, °F	40
Sulfur, percent	.02
Color	NPA 1½
Viscosity	@ 100° F, less than 32 sec.
Nitrogen, percent	0.005

Sample identification: SE NW 16-9S-23E, Mesaverde
@ 8275-8301'

GAS ANALYSIS

Components: (nearest 0.1%)

Methane	97.8
Ethane	0.3
Higher fractions	0.9
Hydrogen sulfide	0.0
Carbon dioxide	0.3
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.1
BTU value/ft ³ (standard T&P)	1033

Sample identification: Belco Petroleum Corp. unit
25, 1-9S-22E, Green River @ 3022', sample
8338, index 317

CHINLE WASH FIELD,
SAN JUAN COUNTY

Area designation (latest): May 1959

Discovery year: February 14, 1957

First recorded production: January 1959

Producing formation (s): Ismay, Desert Creek

Disposition of products sold: El Paso Natural Gas Co.

GAS ANALYSIS

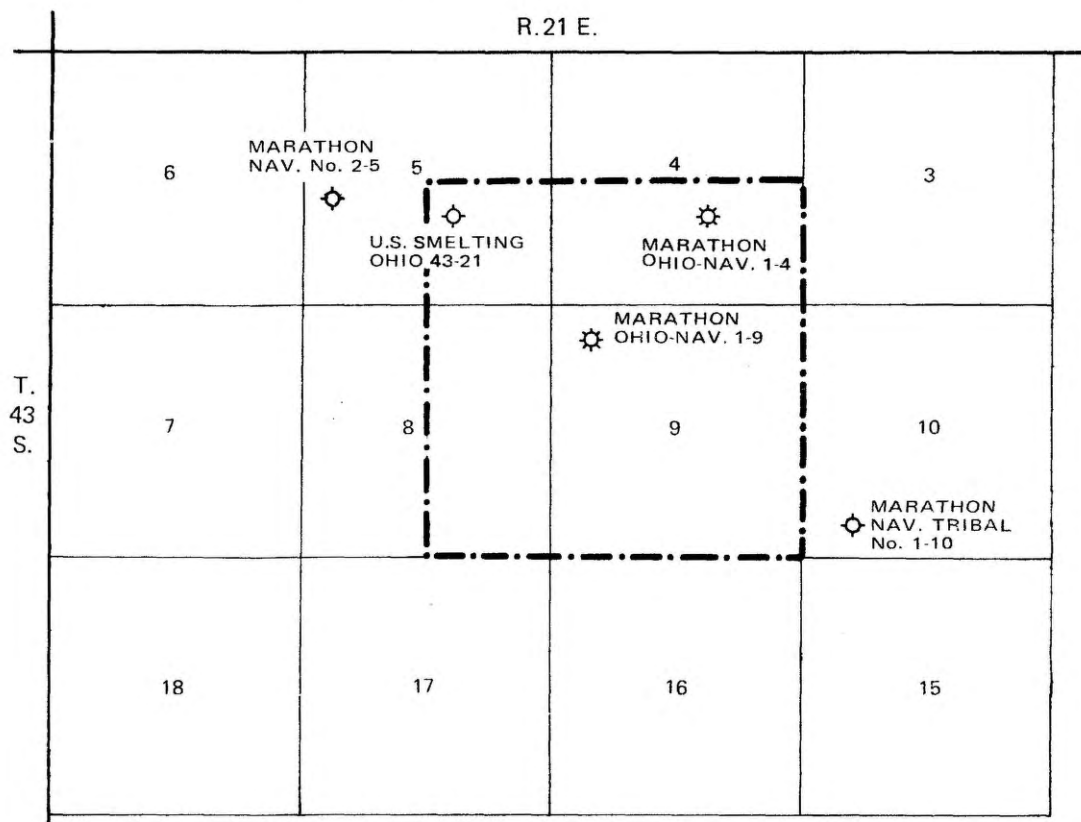
Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	69.7	69.7	69.7
Ethane	5.6	5.5	5.8
Higher fractions	4.2	4.0	3.6
Hydrogen sulfide	.0	.1	.0
Carbon dioxide	1.3	1.3	1.0
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.8	.8	.7
BTU value/ft ³ (standard T&P)	936	930	945

Sample identification:

- No. 1 U. S. Smelting, Refining and Mining No. 42-21-1-4 Ohio-Nav, 4-43S-21E, completed July 22, 1958, sampled November 6, 1958, Paradox @ 4870', index 1123
- No. 2 U.S.S.R. & M. No. 43-21-1-43 Ohio-Nav, 4-43S-21E, completed July 22, 1958, sampled November 6, 1958, Paradox @ 4810', index 1124
- No. 3 U.S.S.R. & M. No. 1 Ohio-Nav, 9-43S-21E, sampled January 20, 1957, Paradox @ 4917', index 1125

Year	Oil	Gas	Water	Prod. Wells
1959		13774		
1960	Shut in			
1961	Shut in			
1962	Shut in			
1963		30600		2
1964		194079		
1965		288365		2
1966		463635		2
1967		503140		2
1968		461434		2
1969		380390		2
1970		324255		1
Cumulative production		2659672		



Chinle Wash Field, San Juan County (Scale 1" = 4000')

CHOKECHERRY CANYON FIELD, DUCHESNE COUNTY

Area designation (latest): January 1960
 Discovery year: October 9, 1959
 First recorded production: 1959
 Producing formation (s): Green River

Year	Oil	Gas	Water	Prod. Wells
1959	3896	1690	2125	1
1960	3444	4534	1744	1
1961-1970 Shut in				
501				1
Cumulative production				
7841	6224	3869		

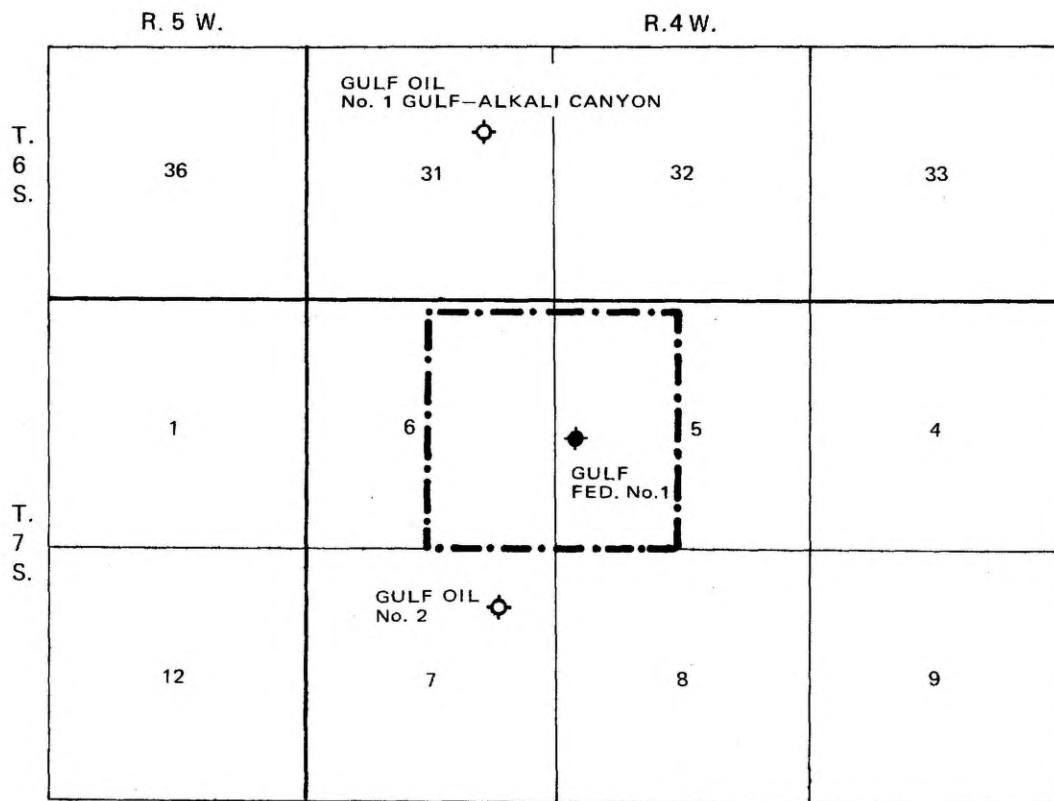
CRUDE OIL ANALYSIS

Gravity, specific 0.8697
 Gravity, °A.P.I. 31.2
 Pour point, °F 105

Sulfur, percent 0.17
 Color Brownish black
 Viscosity @ 130° F, 62.4 sec.
 Nitrogen, percent —
 Sample identification: NW NW SW 5-7S-4W, Green River @ 4099-4129'

Gravity, specific 0.8697
 Gravity, °A.P.I. 31.2
 Pour point, °F 105
 Sulfur, percent 0.17
 Color Brownish black
 Viscosity @ 100° F, 175 sec. (waxy);
 @ 130° F, 62.4 sec.

Nitrogen, percent
 Sample identification: Gulf Oil No. 1, 5-7S-4W, completed November 24, 1959, Green River @ 4099-4129'



Chokecherry Canyon Field, Duchesne County (Scale 1" = 4000')

CISCO DOME FIELD, GRAND COUNTY

Area designation (latest): May 1959

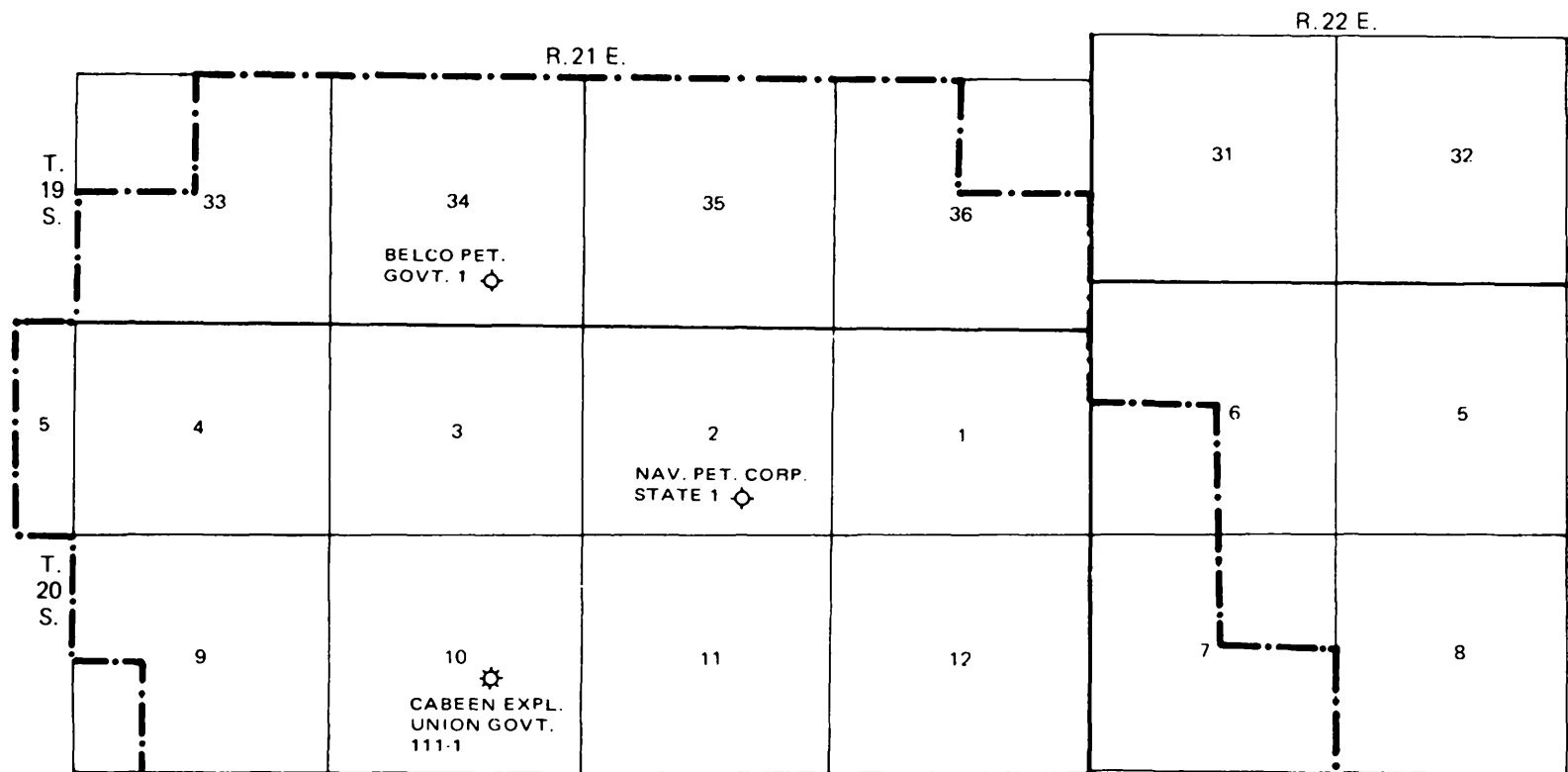
Discovery year: 1925

First recorded production: 1927

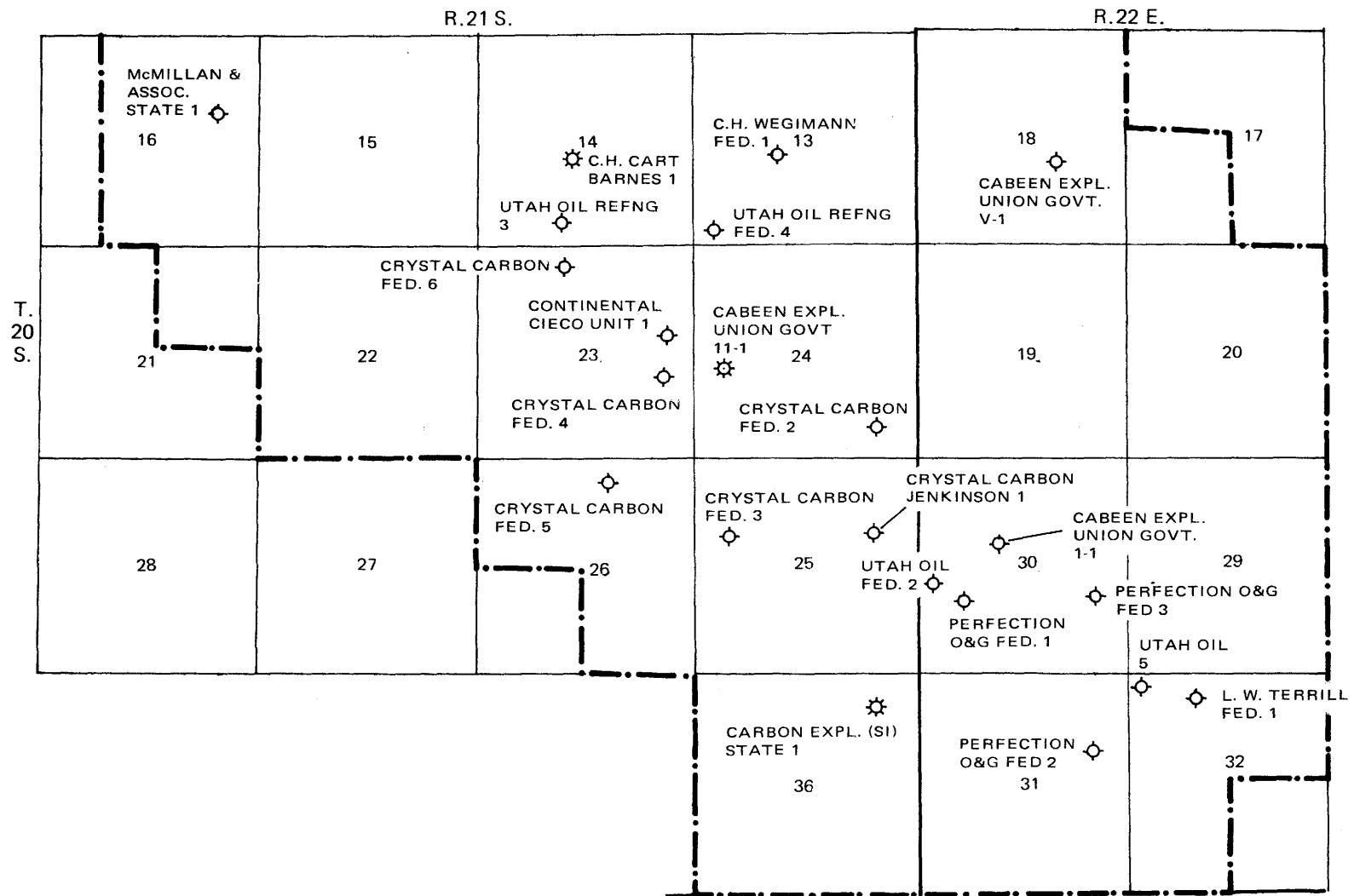
Producing formation (s): Dakota-Cedar Mountain,
Morrison

Year	Oil	Gas	Water	Prod. Wells
1925				
1926				
1927		926820		
1928		1105518		
1929		691644		
1930		392154		
1931		12750		
1932	Shut in			
1933	Shut in			
1934	Shut in			
1935	Shut in			
1936	Shut in			
1937		312		
1938		1250		

Year	Oil	Gas	Water	Prod. Wells
1939		1250		
1940		1250		
1941		1250		
1942		1250		
1943		1250		
1944		1250		
1945		1250		
1946		1250		
1947		1250		
1948		1250		
1949		1250		
1950		1250		
1951		1250		
1952		1250		
1953		1000		
1954		1000		
1955-1970	Shut in			
Cumulative production		3149948		
1927-1931 production used by Carbon Black plant, 1937 for farm use and 1938-1954, restricted.				



Cisco Dome Field, Grand County
(Scale 1" = 4000')



Cisco Dome Field (continued)

Sample identification:

No. 1 Cabeen Expl. No. 1 State, 36-20S-21E, completed July 9, 1955, sampled September 20, 1956, Dakota-Morrison @ 1940', index 1086

No. 2 Cabeen Expl. No. 11-1 Govt, 24-20S-21E,
completed September 3, 1957, sampled Sep-
tember 20, 1958, Morrison @ 2108', index
1087

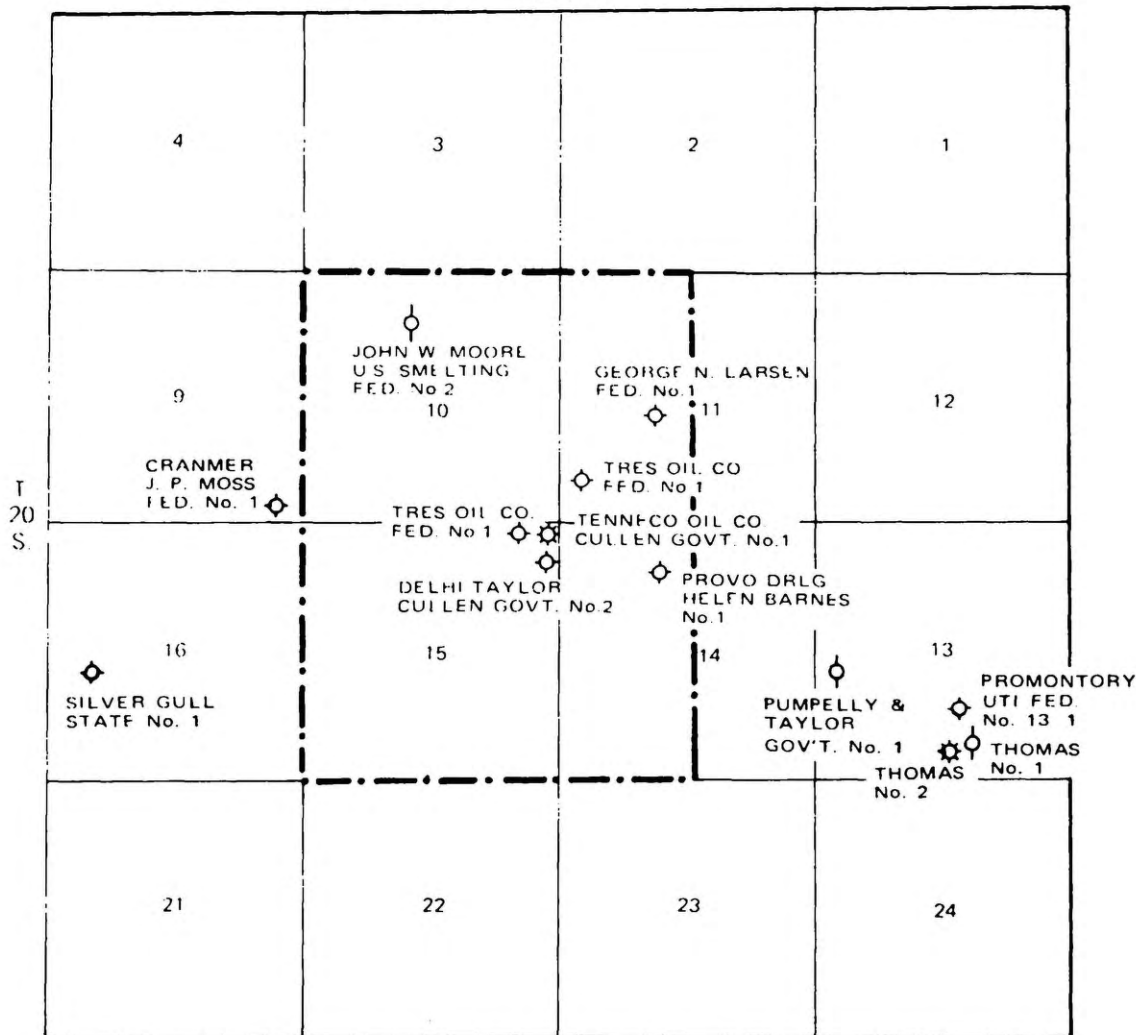
	No. 1	No. 2	No. 3
Methane	92.4	89.5	89.9
Ethane	3.6	2.1	4.0
Higher fractions	2.3	.6	2.5
Hydrogen sulfide	.0	.0	.0
Carbon dioxide	.1	3.0	.1
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.1	.1	.2
BTU value/ft ³ (standard T&P)	1074	967	1063

No. 3 Cabeen Expl. No. III-1, 10-20S-21E, completed September 5, 1958, sampled September 20, 1958, Morrison @ 2621', index 1088

Area designation (latest): May 1959
Discovery year: 1955

First recorded production: Shut in
Producing formation (s): Morrison

R. 23 E.



Cisco Springs Field, Grand County (Scale 1" = 4000')

Cisco Springs Field (continued)

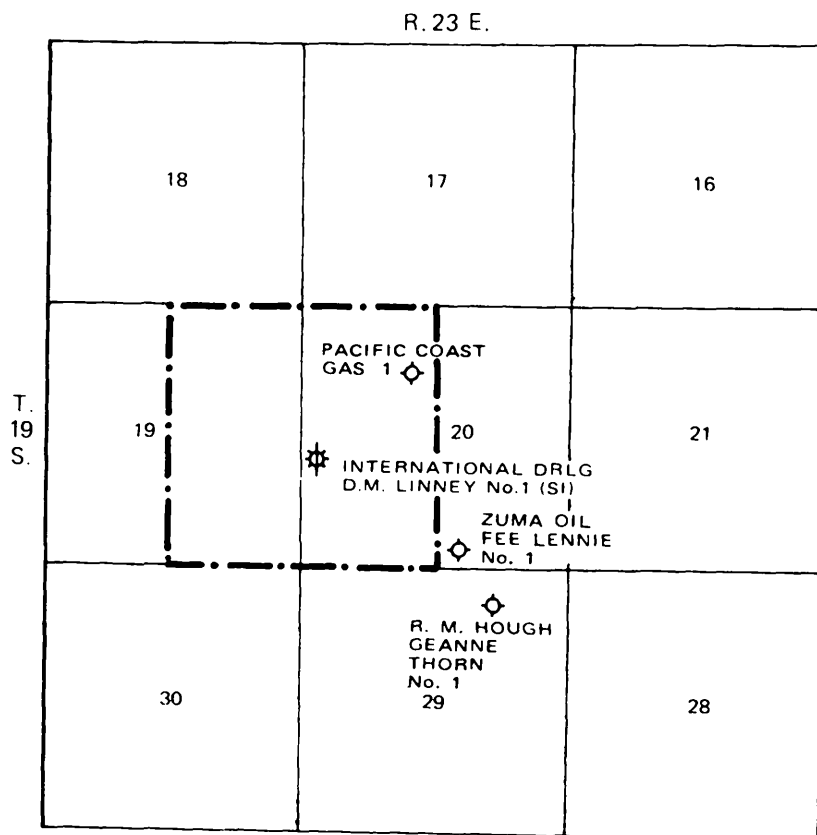
Year	Oil	Gas	Water	Prod. Wells
1955	Shut in			

Year	Oil	Gas	Water	Prod. Wells
1970	Shut in			
Cumulative production				
	Shut in			

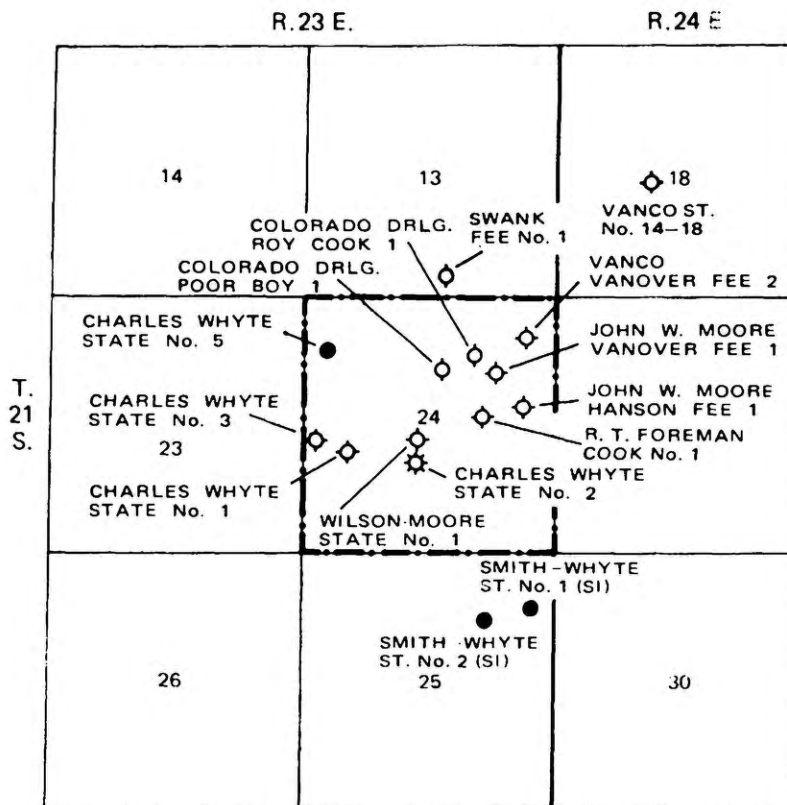
CISCO SPRINGS FIELD (NORTH),
GRAND COUNTY

Area designation (latest): May 1959
 Discovery year: 1955
 First recorded production: Shut in
 Producing formation (s): Dakota

Year	Oil	Gas	Water	Prod. Wells
1955	Shut in			
1970	Shut in			
Cumulative production				
	Shut in			



Cisco Springs Field (North), Grand County
 (Scale 1" = 4000')



Cisco Townsite Field, Grand County (Scale 1" = 4000')

CISCO TOWNSITE FIELD, GRAND COUNTY

Area designation (latest): May 1959

Discovery year: April 1, 1954

First recorded production: 1954

Producing formation (s): Morrison

Year	Oil	Gas	Water	Prod. Wells
1954	3041			
1955	3594			
1956	Shut in			
1957	726			
1958	450			
1959	123			
1960	292			1
1961	145			1
1962	Shut in			
1963	Shut in			
1964	Includes: 176 BO; for Lansdale #2; undes. in 1964			
	635			3
1965	351			1
1966	Shut in			
1967-1970	Shut in			
Cumulative production				
9357				

CRUDE OIL ANALYSIS

Gravity, specific	0.856
Gravity, °A.P.I.	33.8
Pour point, °F	Below 5
Sulfur, percent	1.07
Color	Brownish black
Viscosity	@ 100° F, 48 sec.
Nitrogen, percent	0.070
Sample identification: NE 24-21S-23E, Morrison @ 565'	

GAS ANALYSIS

Methane	82.1
Ethane	2.5
Higher fractions	1.4
Hydrogen sulfide	.0
Carbon dioxide	trace
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.7
BTU value/ft ³ (standard T&P)	922
Sample identification: Pumpelly-Stava No. 30-81, 30-20S-24E, completed February 12, 1964, sampled March 1964, Buckhorn @ 842', sample 9322, index 196	

CLAY BASIN FIELD, DAGGETT COUNTY

Area designation (latest): January 1970,
unitized January 1, 1940

Discovery year: 1927

First recorded production: 1934

Producing formation (s): Frontier, Dakota

Disposition of products sold: gas to Mountain Fuel Supply; gasoline to company operations and to Husky Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1927-1933	Shut in			
1934	62			
1935	36			
1936	172	44842		
1937	8705	1986682		
1938	14494	3729337		
1939	18298	4150561		
1940	16917	4308311		
1941	18918	4717031		
1942	17823	4384394		
1943	15158	3864741		
1944	21557	6202185		
1945	20105	6651871		
1946	13229	4294920		
1947	15427	6036372		
1948	12461	6609774		
1949	9918	6125730		
1950	5065	3949875		
1951	5107	3670529		
1952	4456	2833450		
1953	4029	3536556		
1954	3682	2628518		
1955	4226	3242999		
1956	3709	2540462		
1957	2256	1877445		
1958	2075	1817909		
1959	2256	2156347		
1960	1986	1816224		10

Year	Oil	Gas	Water	Prod. Wells
1961	1783	1947353		10
1962	1631	1605938		10
1963	1064	1979525		10
1964	976	2541915		12
1965	1503	2419074		15
1966	4592	2462587		15
1967	3281	1796402		15
1968	2765	1256007		15
1969	2990	1524030		15
1970	2640	2278972		17
Cumulative production				
	265372	112988868		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2
Methane	92.2	92.4
Ethane	4.4	3.9
Higher fractions	2.7	6.2
Hydrogen sulfide	0.0	0.0
Carbon dioxide	0.1	0.3
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	trace
BTU value/ft ³ (standard T&P)	1097	1074

Sample identification:

No. 1 Mtn. Fuel Supply No. 1 Murphy,
22-3N-24E, completed April 27, 1962, sam-
pled November 28, 1962, Frontier @ 5344',
sample 8793, index 276

No. 2 Mtn. Fuel Supply Stateline No. 1,
16-3N-24E, completed November 1936,
sampled November 28, 1962, Dakota
@ 5740', sample 8798, index 277

CLEAR CREEK FIELD, CARBON AND EMERY COUNTIES

Area designation (latest): May 1959,
unitized January 1, 1957

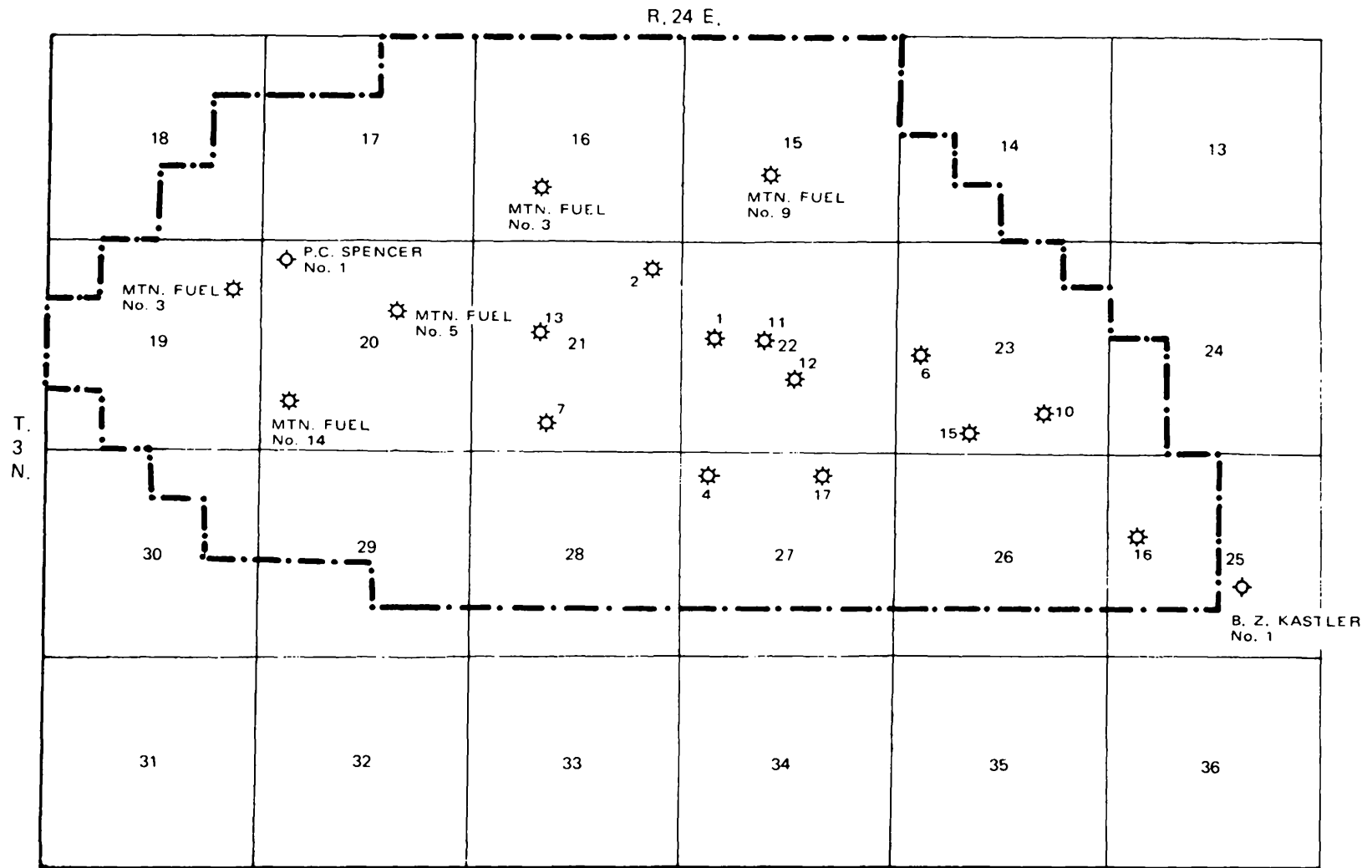
Discovery year: 1951

First recorded production: 1952

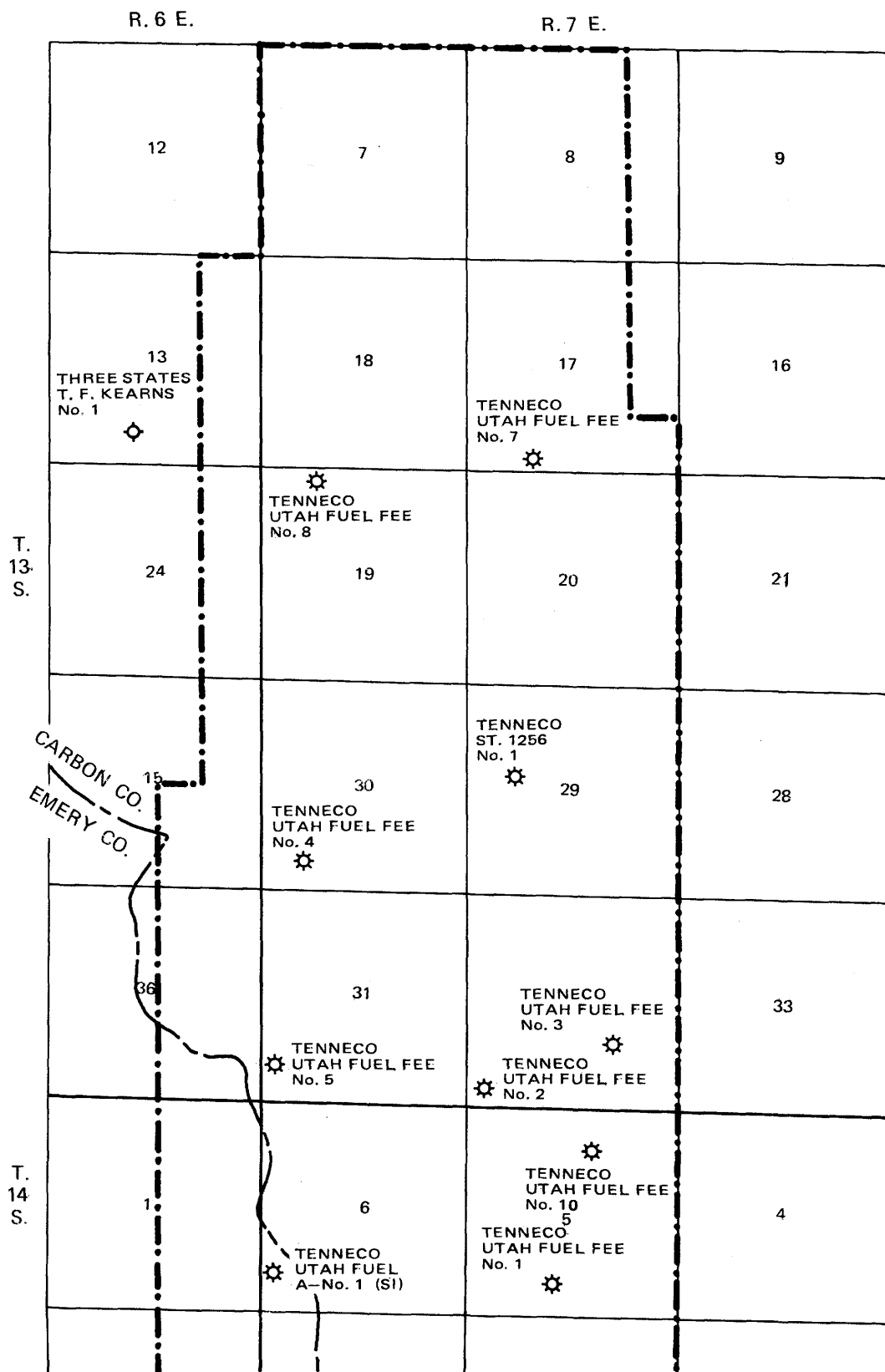
Producing formation (s): Ferron

Disposition of products sold: Mountain Fuel Supply

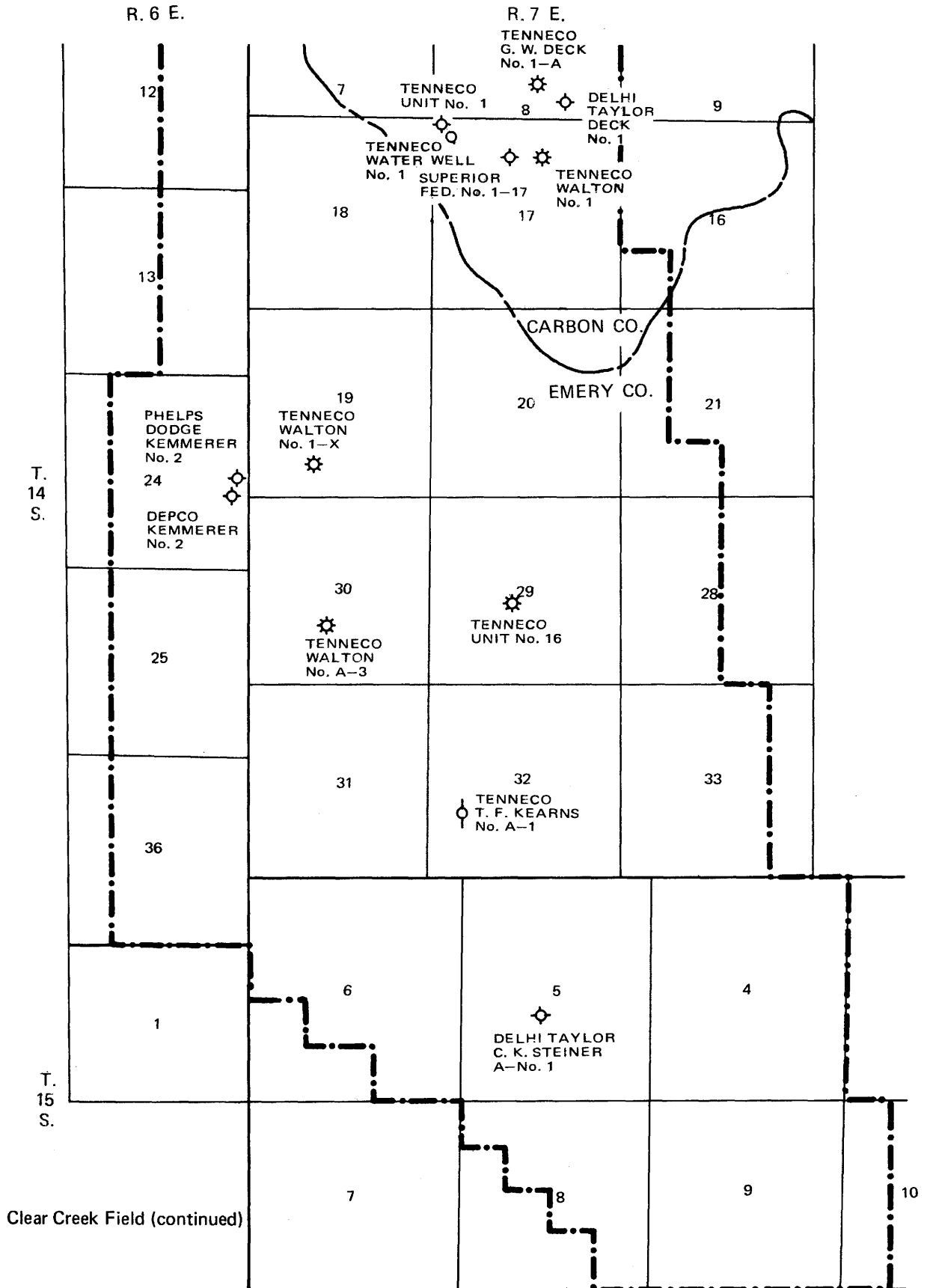
Year	Oil	Gas	Water	Prod. Wells
1951	Shut in			
1952		407673		
1953		2972686		



Clay Basin Field, Daggett County
(Scale 1" = 4000')



Clear Creek Field, Carbon and Emery Counties
(Scale 1" = 4000')



Clear Creek Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1954		13035428		
1955		13582184		
1956		13239147		
1957		11716219		
1958		11752459		
1959		11127711		13
1960		12222228		13
1961		9413620		15
1962		7045270		15

Year	Oil	Gas	Water	Prod. Wells
1963		8015241		15
1964		5733809		15
1965		3808384		15
1966		2730524		15
1967		1868337		16
1968		1696158		16
1969		1157559		16
1970		820464		16
Cumulative production		132345101		

CLEFT FIELD,
SAN JUAN COUNTY

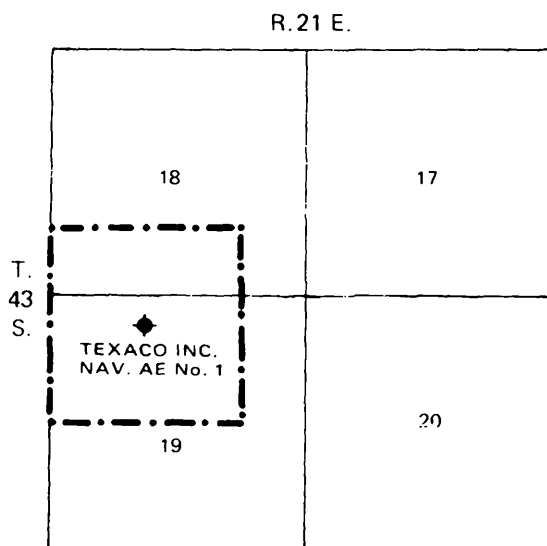
Area designation (latest): January 1963

Discovery year: 1962

First recorded production: 1962

Producing formation (s): Akah

Year	Oil	Gas	Water	Prod. Wells
1962	3268	548	5305	
1963 Temp. abnd.	269	483	516	
1964 P&A				
Cumulative production	3537	1031	5821	

Cleft Field, San Juan County
(Scale 1" = 4000')CONE ROCK FIELD,
SAN JUAN COUNTY

Area designation (latest): April 1960

Discovery year: July 26, 1959

First recorded production: 1959

Producing formation (s): Desert Creek

Year	Oil	Gas	Water	Prod. Wells
1959	889	4437	5	
1960 Operations suspended	56	116		1
Cumulative production	945	4553	5	

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2
Methane	62.2	58.5
Ethane	18.4	19.0
Higher fractions	17.9	20.6
Hydrogen sulfide	0.0	0.0
Carbon dioxide	0.0	0.1
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	0.09
BTU value/ft ³ (standard T&P)	1510	1581

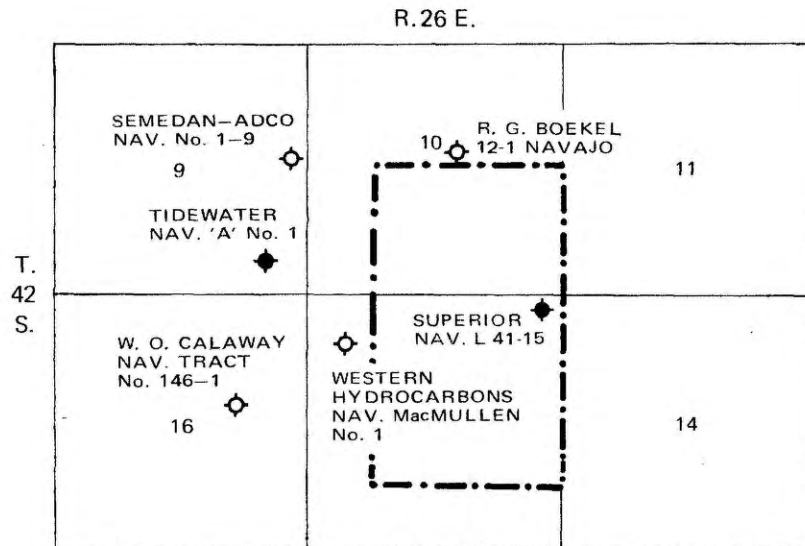
Cone Rock Field (continued)

Sample identification:

No. 1 Western Hydrocarbons Corp. No. 1 Navajo
MacMullen, 15-42S-26E, sampled August 1,
1968, Pennsylvanian DST @ 5890' No. 1

sample 11612, index 427

No. 2 Western Hydrocarbons Corp. No. 1 Navajo
MacMullen, sampled August 4, 1968, Penn-
sylvanian DST @ 5886' No. 2, sample
11613, index 428



Cone Rock Field, San Juan County
(Scale 1" = 4000')

COTTONWOOD WASH FIELD, DUCHESNE COUNTY

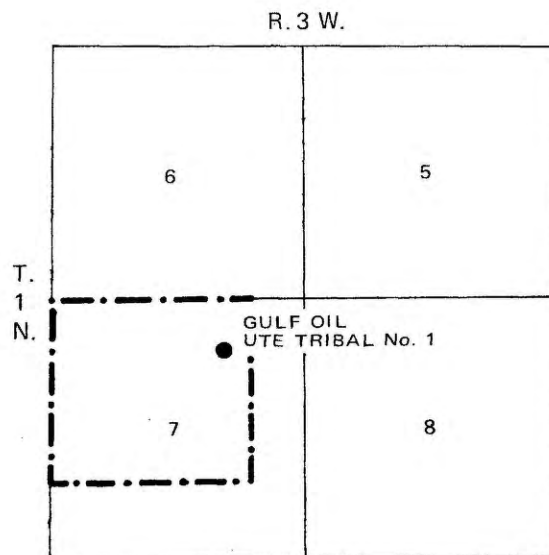
Area designation (latest): January 1970

Discovery year: August 30, 1969

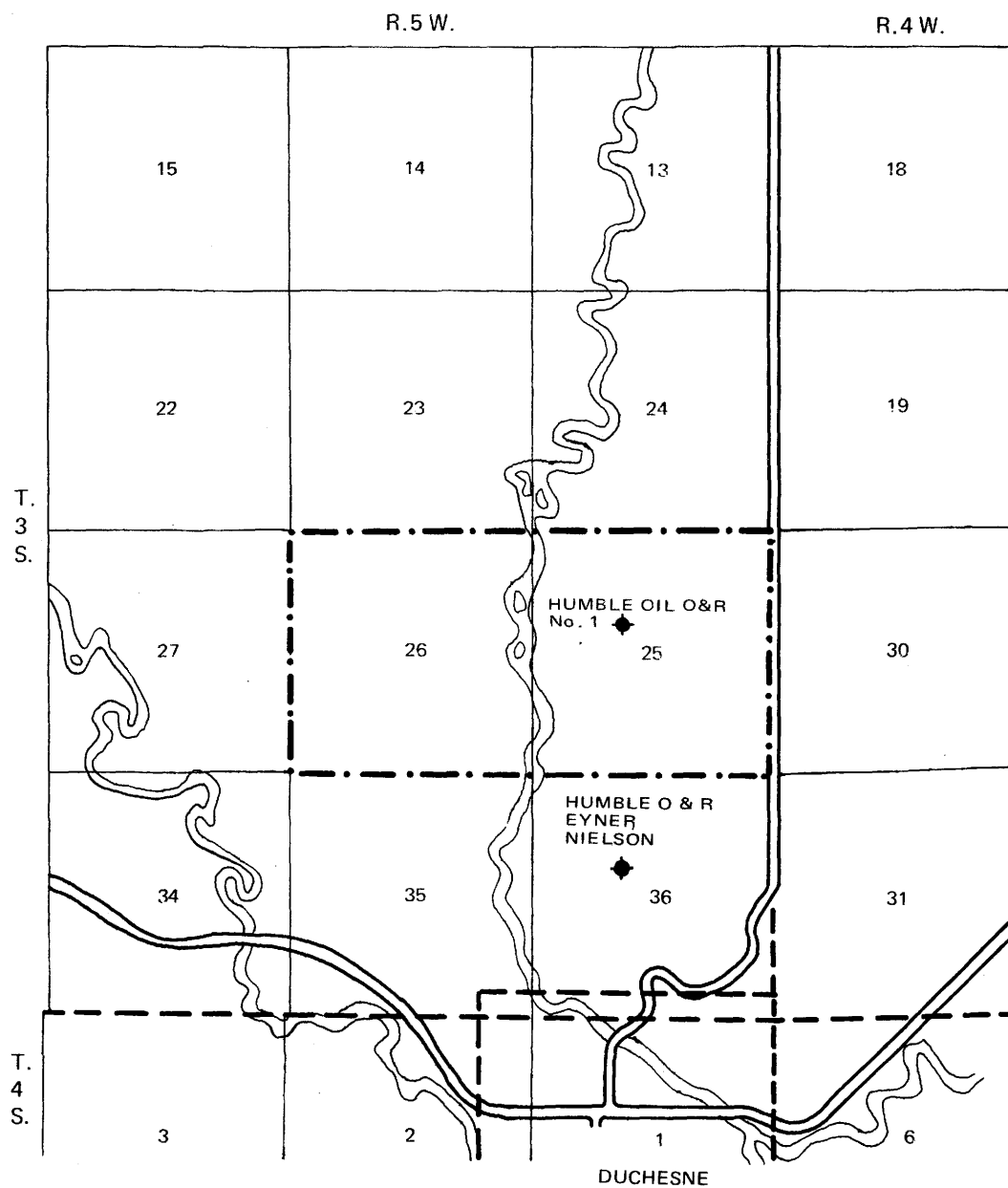
First recorded production: 1969

Producing formation (s): Lower Green River

Year	Oil	Gas	Water	Prod. Wells
1969	5552	2985	34	1
1970	11956	9708	80	1
Cumulative production		17508	12693	114



Cottonwood Wash Field, Duchesne County
(Scale 1" = 4000')



County Pool Field, Duchesne County
(Scale 1" = 4000')

COUNTY POOL FIELD, DUCHESNE COUNTY

Area designation (latest): May 1959
 Discovery year: 1953
 First recorded production: 1953
 Producing formation (s): Green River

Year	Oil	Gas	Water	Prod. Wells
1953	22776			
1954	9981			
1955 P&A	0			
Cumulative production				32757

CRUDE OIL ANALYSIS

Gravity, specific 0.8933
 Gravity, °A.P.I. 26.9
 Pour point, °F 30
 Sulfur, percent 0.58
 Color Brownish black
 Viscosity @ 70° F, 459 sec.; @ 100° F, 217 sec.

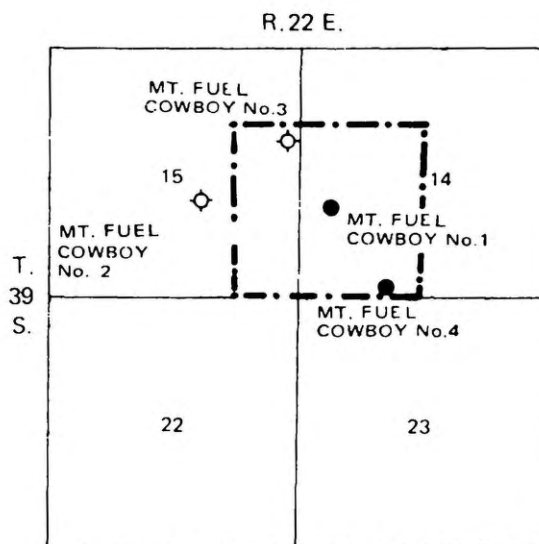
Nitrogen, percent

Sample identification: Carter Oil No. 1, 36-3S-5W, completed December 3, 1953, Upper Green River @ 4520-4623 '

COWBOY FIELD, SAN JUAN COUNTY

Area designation (latest): August 1968
 Discovery year: July 18, 1968
 First recorded production: 1968
 Producing formation (s): Ismay
 Disposition of products sold: Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1968	31236		29	1
1969	24738		271	2
1970	9620		12	2
Cumulative production				65594
				312



Cowboy Field, San Juan County
 (Scale 1" = 4000')

COYOTE BASIN FIELD, UINTAH COUNTY

Area designation (latest): September 1967
 Discovery year: November 4, 1964
 First recorded production: 1965
 Producing formation (s): Green River

Disposition of products sold: trucked by Weiss Trucking Co. for account of Pan American Pet. (AMOCO) to Service Pipeline Co.'s Rangely Station; other to Chevron Oil Co.

Coyote Basin Field (continued)

Sample identification: NE SW 12-8S-24E, basal
Green River @ 4375-4381'

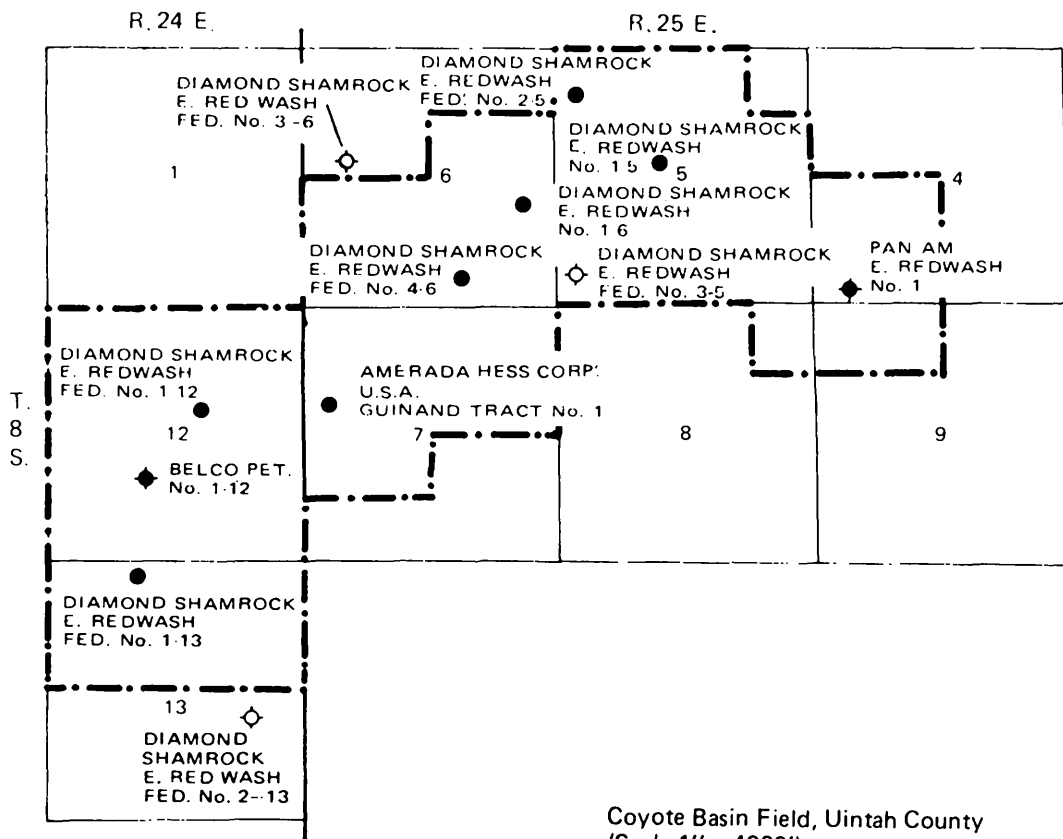
Year	Oil	Gas	Water	Prod. Wells
1964	Shut in			
1965	12922	9850	24	1
1966	10409	7493	111	1
1967	103858	80763	8176	10
1968	97488	83327	6771	9
1969	72755	53714	5753	8
1970	68675	14291	5868	8
Cumulative production				
	366107	249438	26703	

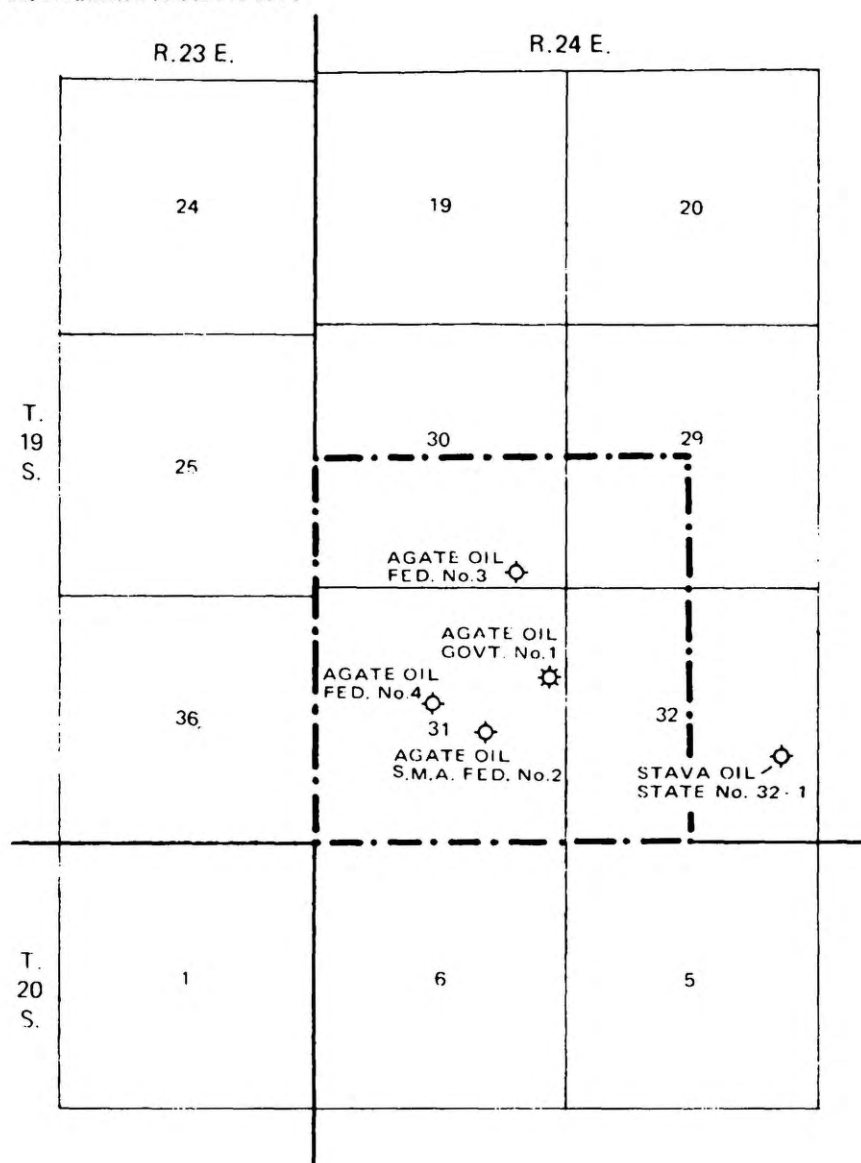
CRUDE OIL ANALYSIS

Gravity, specific	0.872
Gravity, °A.P.I.	30.8
Pour point, °F	95
Sulfur, percent	.08
Color	Brownish green
Viscosity	@ 100° F, —; @ 130° F, 73 sec.
Nitrogen, percent	0.077

Gravity, specific	0.863
Gravity, °A.P.I.	32.5
Pour point, °F	95
Sulfur, percent	.08
Color	Black
Viscosity	@ 100° F, 165 sec.; @ 130° F, 100 sec.
Nitrogen, percent	0.096
Sample identification: SE NW 5-8S-25E, Green River @ 4419-4501'	

Gravity, specific	0.863
Gravity, °A.P.I.	32.5
Pour point, °F	95
Sulfur, percent	.08
Color	Black
Viscosity	@ 100° F, 165 sec.; @ 130° F, 100 sec.
Nitrogen, percent	0.096
Sample identification: SE NW 5-8S-25E, Green River @ 4419-4501'	

Coyote Basin Field, Uintah County
(Scale 1" = 4000')



Danish Wash Field, Grand County
(Scale 1" = 4000')

DANISH WASH FIELD, GRAND COUNTY

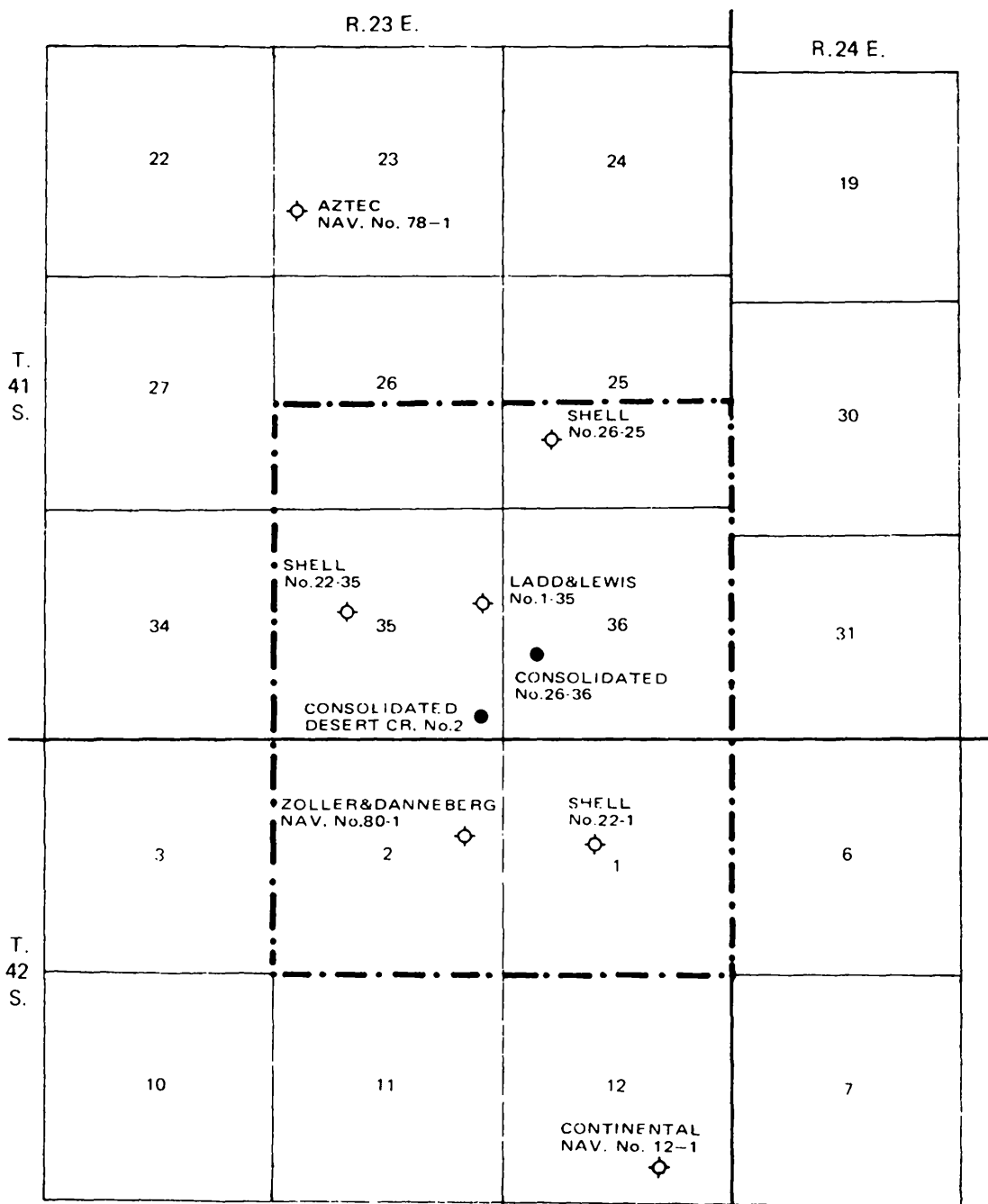
Area designation (latest): May 1959

Discovery year: June 6, 1955

First recorded production: Shut in

Producing formation (s): Dakota-Cedar Mountain,
Morrison

Year	Oil	Gas	Water	Prod. Wells
1955-1970	Shut in			
Cumulative production				
Shut in				



Desert Creek Field, San Juan County (Scale 1" = 4000')

DESERT CREEK FIELD, SAN JUAN COUNTY

Area designation (latest): May 1959

Discovery year: November 8, 1954

First recorded production: 1954

Producing formation (s): Desert Creek

Disposition of products sold: oil to Caribou

Four Corners Oil, Inc.; gas to El Paso

Natural Gas Co.

Year	Oil	Gas	Water	Prod. Wells
1954	4526	1858		
1955	87317	47125		
1956	63061	39988		
1957	Shut in			

Desert Creek Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1958	52328	27674	91	
1959	41915	41963	33	2
1960	22781	19836	24	2
1961	20748	15653	7	2
1962	20723	16817	44	2
1963	18230	15960	65	2
1964	14457	7456	29	2
1965	18999	15947	22	2
1966	19758	24214	14	2
1967	22178	33612	88	1
1968	17367	22760	7	1
1969	16748	17255	15	1

Year	Oil	Gas	Water	Prod. Wells
1970	14809	17942	3	1
Cumulative production				
	455945	366060	442	

CRUDE OIL ANALYSIS

Gravity, specific	0.828
Gravity, °A.P.I.	39.4
Pour point, °F	50
Sulfur, percent	0.11
Color	Green
Viscosity	@ 100° F, 40 sec.
Nitrogen, percent	0.037
Sample identification: SE SE 35-41S-23E, Paradox	
@ 5244-5320'	

DIAMOND RIDGE FIELD,
GRAND COUNTY

Area designation (latest): April 1960

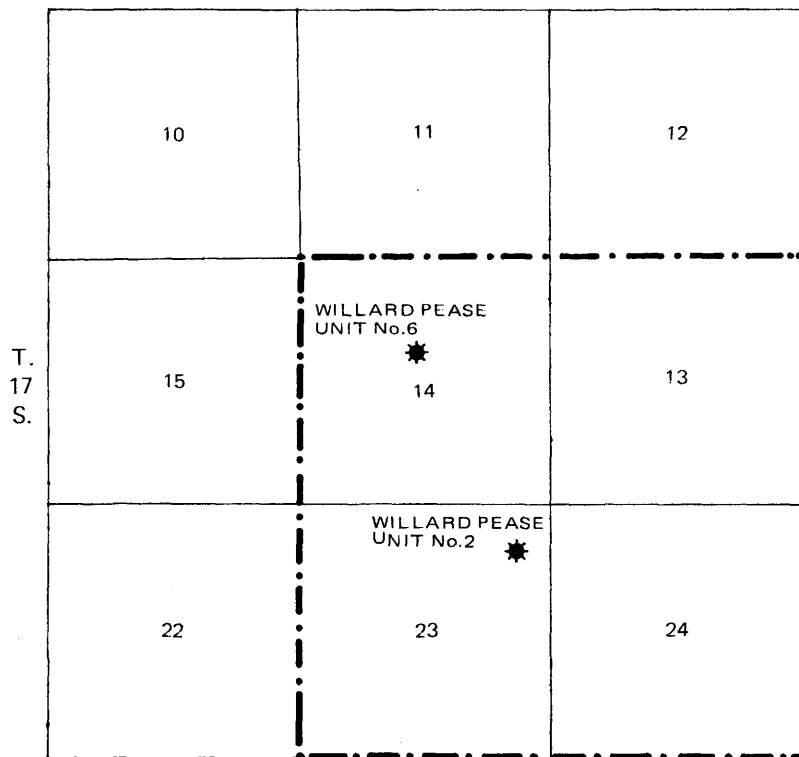
Discovery year: January 28, 1960

First recorded production: 1963

Producing formation (s): Dakota-Cedar Mountain,
Morrison

Year	Oil	Gas	Water	Prod. Wells
1963		91444		2
1964		62828		3
1965		80049		2

R. 22 E.

Diamond Ridge Field, Grand County
(Scale 1" = 4000')

Diamond Ridge Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1966		27134		3
1967 P&A				—
Cumulative production		261455		

GAS ANALYSIS

Components: (nearest 0.1%)

Methane 92.2

Ethane	3.6
Higher fractions	1.1
Hydrogen sulfide	.0
Carbon dioxide	.7
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.1
BTU value/ft ³ (standard T&P)	1036

Sample identification: Sunray No. 2 unit,
23-17S-22E, completed January 28, 1960,
sampled March 28, 1960, Dakota @ 7254'
index 1090

DUCHESNE FIELD, DUCHESNE COUNTY

Area designation (latest): January 1970

Discovery year: August 10, 1951

First recorded production: 1951

Producing formation (s): Wasatch, Green
River, Uinta

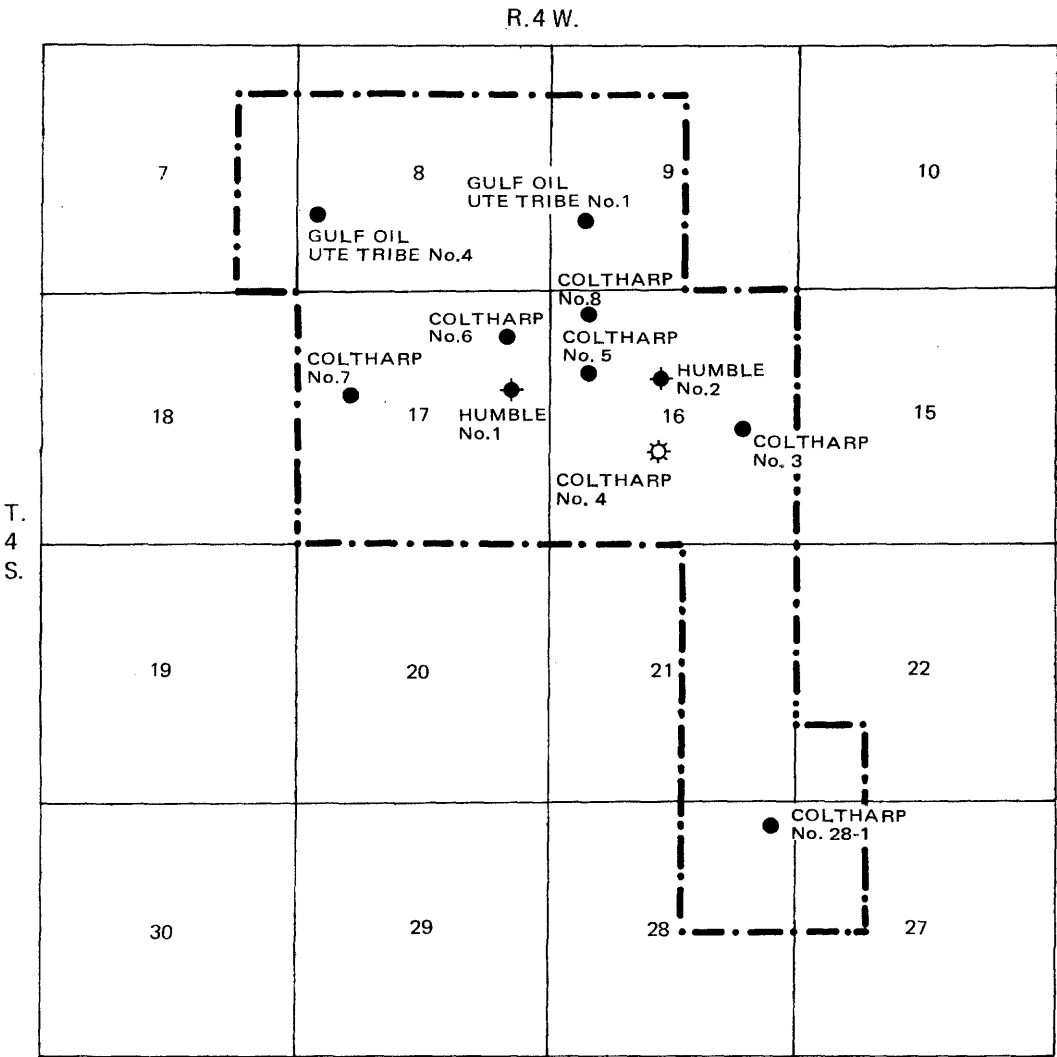
Disposition of products sold: Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1951	29069			
1952	45699			
1953	43821			
1954	27208		80223	
1955	21225		41274	
1956	4912		9794	
1957	1242		2420	
1958	1715		86	
1959	11624		491	2
1960	8594		199	1
1961	6768			1
1962	17373		33562	6
1963	15694	9278	34899	6
1964	11477	15455	55929	6
1965	7299			

Year	Oil	Gas	Water	Prod. Wells
1966	Includes: 19314 BO; 16023 MCF; 14 BW; for Gulf Oil Ute Tribal; undes. in 1966			
	26420	26043	152799	7
1967	47859	20355	75519	8
1968	36443	10025	10172	7
1969	54261	18816	4568	8
1970	41777	61531	1432	2
Cumulative production	460480	161503	503367	

CRUDE OIL ANALYSIS

Gravity, specific	0.845
Gravity, °A.P.I.	36.0
Pour point, °F	130
Sulfur, percent	.01
Color	Brownish green
Viscosity	@ 100° F, 125 sec.; @ 130° F, 89 sec.
Nitrogen, percent	0.002
Sample identification: SE NW 16-4S-4W, Wasatch @ 7518'	

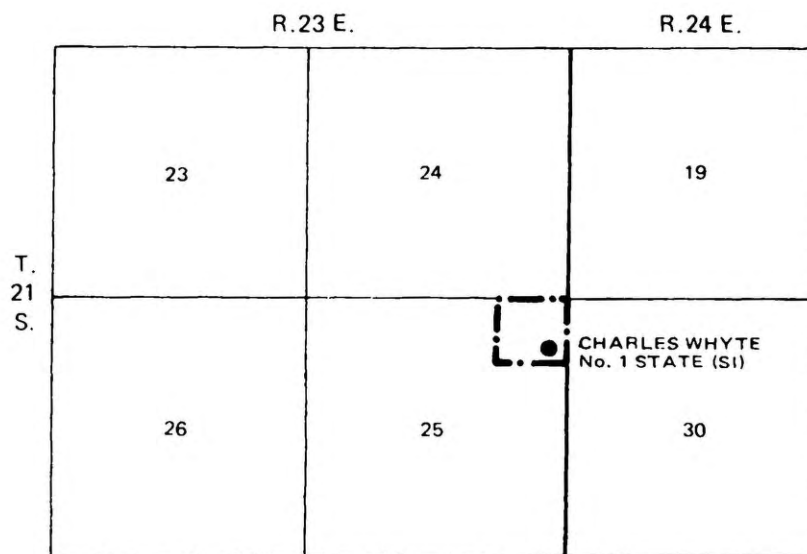


Duchesne Field, Duchesne County
(Scale 1" = 4000')

DUST BOWL FIELD,
GRAND COUNTY

Area designation (latest): July 1968
Discovery year: August 26, 1967
First recorded production: Shut in
Producing formation (s): Morrison

Year	Oil	Gas	Water	Prod. Wells
1967-1970	Shut in			
Cumulative production:				
Shut in				



Dust Bowl Field, Grand County
(Scale 1" = 4000')

EAST CANYON FIELD, GRAND COUNTY

Area designation (latest): December 1963,
unitized September 21, 1962
Discovery year: January 16, 1962
First recorded production: 1963
Producing formation (s): Dakota-Cedar Mountain,
Morrison
Disposition of products sold: Permian Corp,
Mesa Pipeline Co.

GAS ANALYSIS

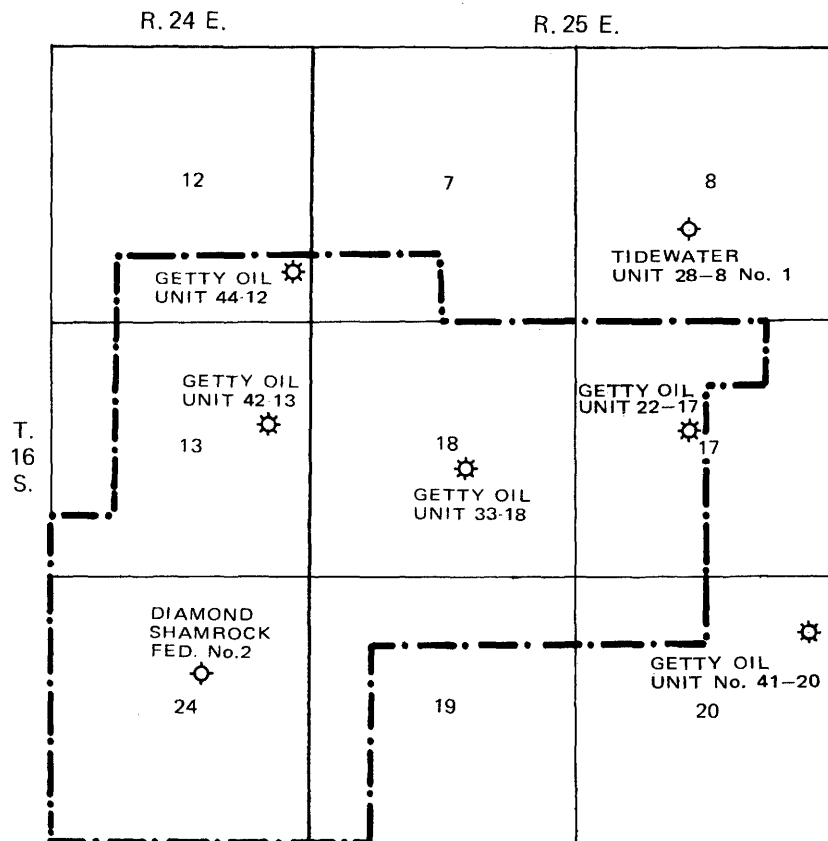
Components: (nearest 0.1%)

Methane	89.0
Ethane	5.9
Higher fractions	3.2
Hydrogen sulfide	.0
Carbon dioxide	1.4
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.1
BTU value/ft ³ (standard T&P)	1107

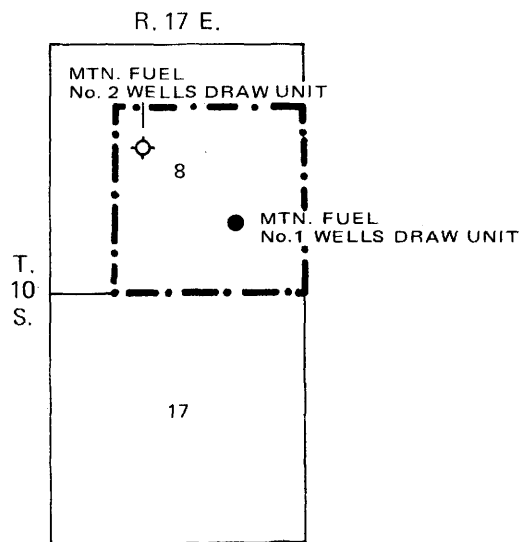
Year	Oil	Gas	Water	Prod. Wells
1963	314	321424		4
1964	839	700612		5
1965	549	572176		4
1966	170	323661		5
1967	207	306018		3
1968	202	249682		3
1969	151	272925		3
1970	223	327714		3
Cumulative production:				
	2655	3074212		

Sample identification: Tidewater Oil 44-12 unit,
12-16S-24E, completed October 15, 1963,
sampled May 15, 1964, Cedar Mountain
@ 5717', sample 9355, index 197

EAST WHITE RIVER FIELD (See White River Field, East)



East Canyon Field, Grand County
(Scale 1" = 4000')



Eight Mile Flat Field (Wells Draw), Duchesne
County (Scale 1" = 4000')

EIGHT MILE FLAT FIELD (WELLS DRAW), DUCHESNE COUNTY

Area designation (latest): December 1962
Discovery year: March 14, 1962
First recorded production: March 7, 1962
Producing formation (s): Green River

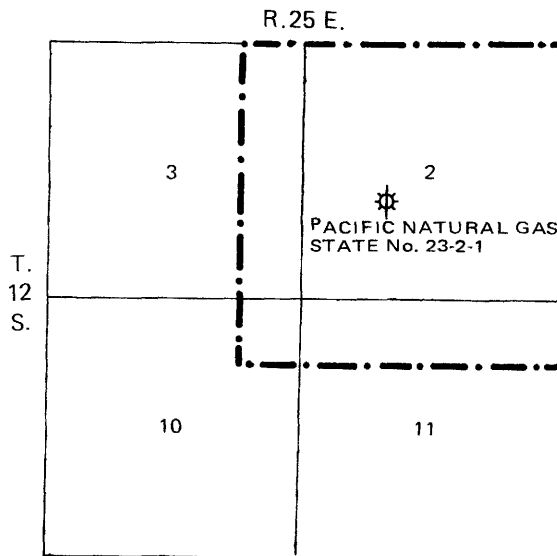
Year	Oil	Gas	Water	Prod. Wells
1962	Mtn. Fuel Supply Wells Draw; undes. in 1962 8701			1
1963	Mtn. Fuel Supply Wells Draw; undes. in 1963 4865			1
1964	Designated 1964 2901			1

Year	Oil	Gas	Water	Prod. Wells
1964-1970	Shut in			
Cumulative production 16467				
CRUDE OIL ANALYSIS				
Gravity, specific		0.862		
Gravity, °A.P.I.		32.7		
Pour point, °F		95		
Sulfur, percent		.03		
Color		Brownish green		
Viscosity		@ 100° F, 105 sec.; @ 130° F, 82 sec.		
Nitrogen, percent		0.063		
Sample identification: NW SE 8-10S-17E, Green River @ 5204-5214'				

EVACUATION CREEK FIELD, UINTAH COUNTY

Area designation (latest): April 1965
Discovery year: August 6, 1964
First recorded production: Shut in, P&A
Producing formation (s): Dakota-Cedar Mountain

Year	Oil	Gas	Water	Prod. Wells
1964-1968	Shut in, P&A			
Cumulative production				

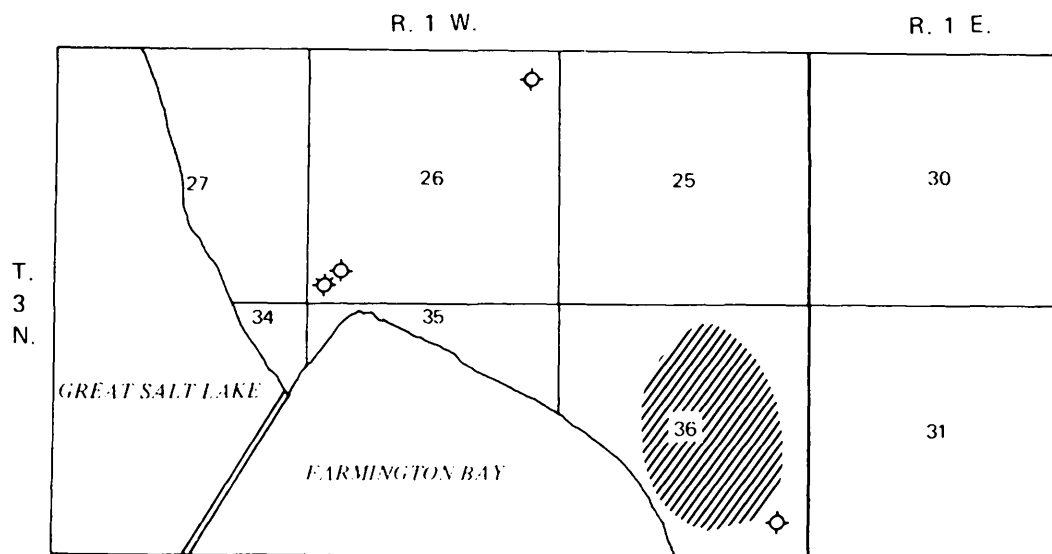


Evacuation Creek Field, Uintah County
(Scale 1" = 4000')

FARMINGTON FIELD, DAVIS COUNTY

Discovered 1891
Abandoned 1897

Cumulative Production: 150,000 MCF
Source: I.A.P.G., O&G Fields Symposium, 1961



Farmington Field, Davis County
(Scale 1" = 4000')

FARNHAM DOME FIELD, CARBON COUNTY

Area designation (latest): March 1963
Discovery year: 1924
First recorded production: 1931
Producing formation (s): Navajo

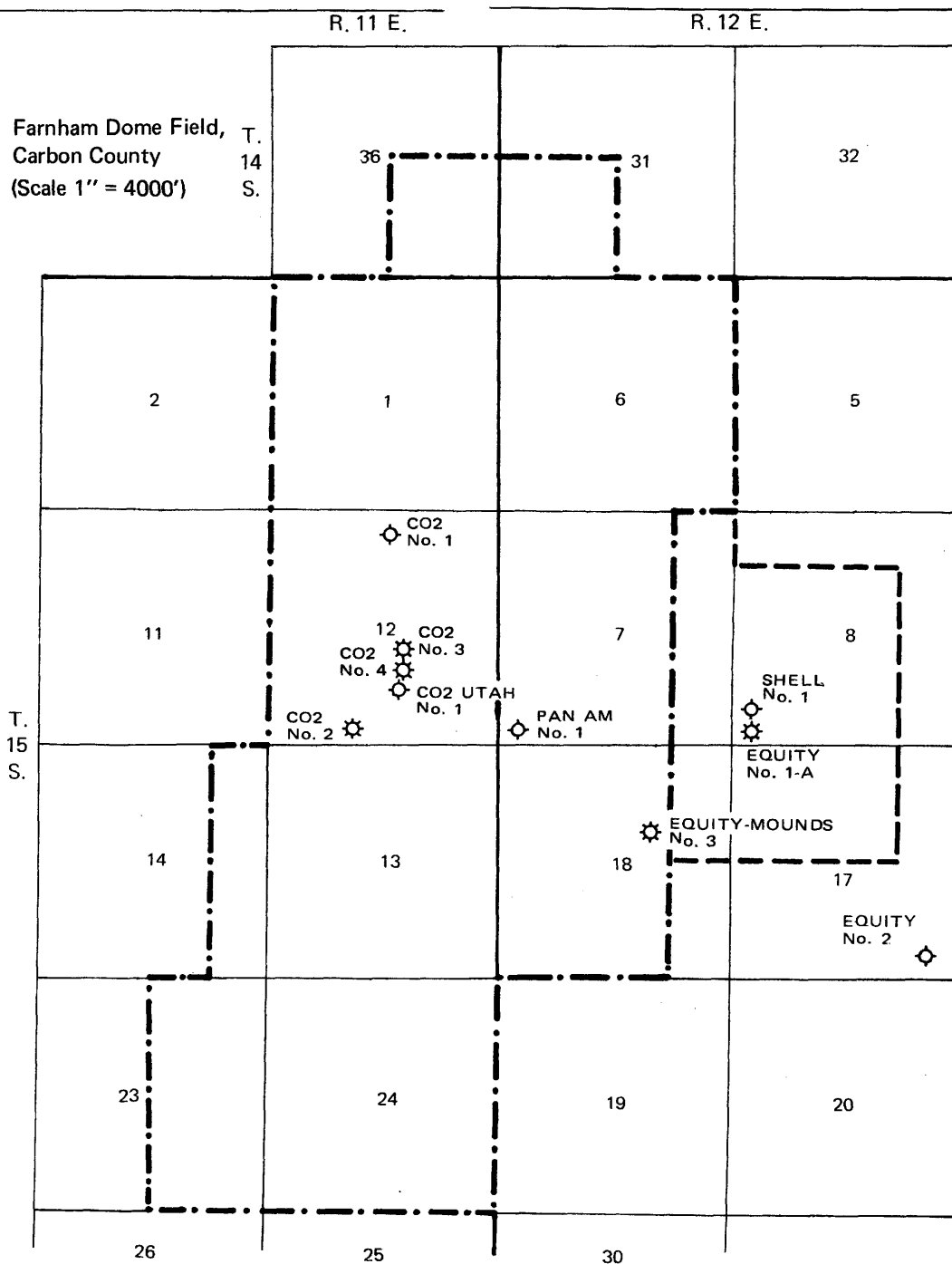
Year	Oil	Gas	Water	Prod. Wells
1931		35492		
1932		24387		
1933		23184		
1934		38434		
1935		22784		
1936		36764		
1937		43729		
1938		58971		
1939		51172		
1940		67930		

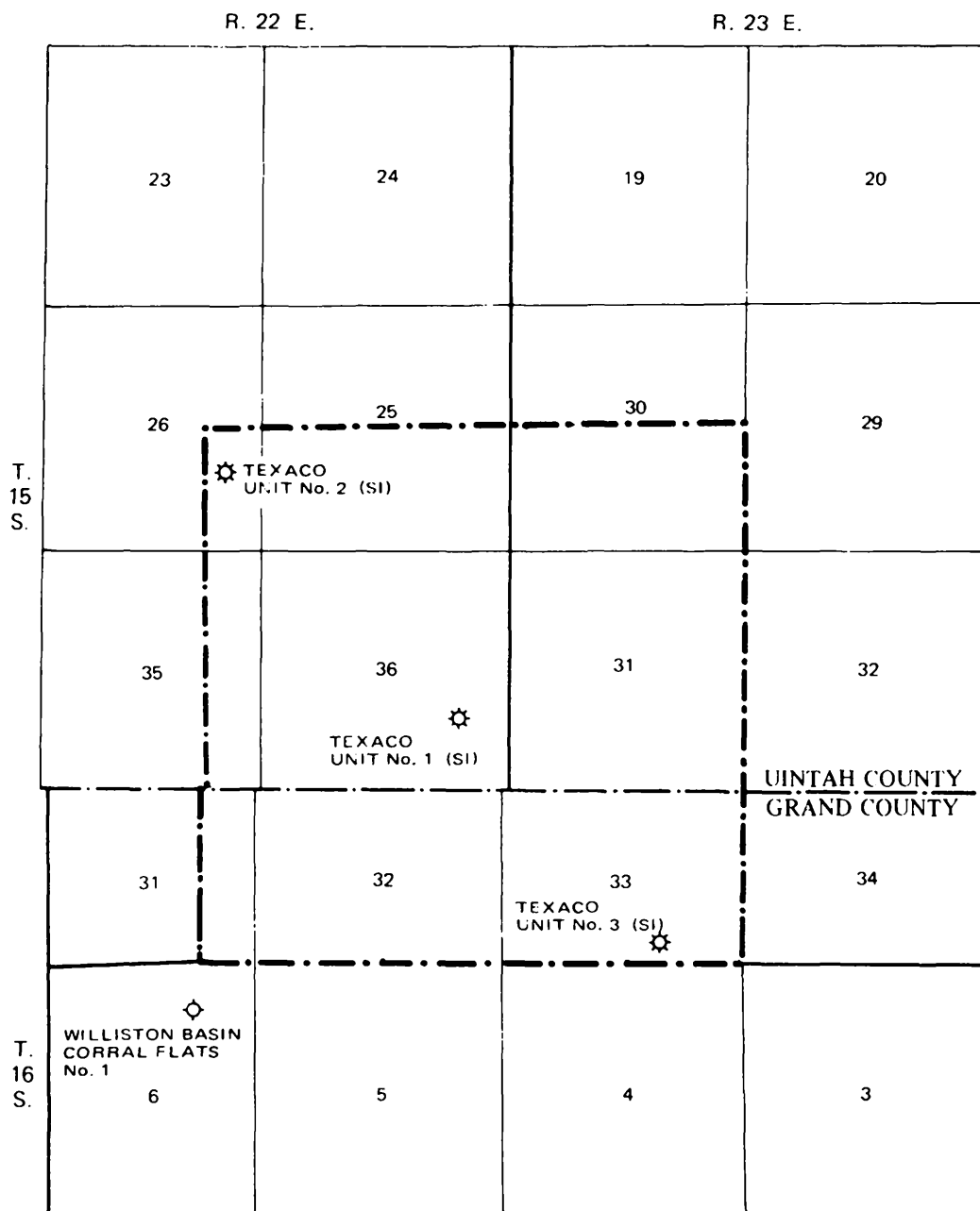
Year	Oil	Gas	Water	Prod. Wells
1941		101872		
1942		148902		
1943		160972		
1944		166508		
1945		139866		
1946		151512		
1947		183309		
1948		156105		
1949		93874		
1950		104334		
1951		97436		
1952		84506		
1953		114026		
1954		176957		
1955		133010		
1956		146610		
1957		125993		
1958		90447		

Farnham Dome Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1959		69625		
1960		60425		
1961		78136		1
1962		81920		1
1963		100895		1
1964		96432		1
1965		86201		1

Year	Oil	Gas	Water	Prod. Wells
1966		94006		2
1967		65664		1
1968		57747		1
1969		64839		1
1970		60754		1
Cumulative production		3695730		





Fence Canyon Field, Uintah and Grand Counties
(Scale 1" = 4000')

FENCE CANYON FIELD, UINTAH AND GRAND COUNTIES

Area designation (latest): June 1961,
unitized January 21, 1960
Discovery year: April 23, 1960
First recorded production: 1967
Producing formation (s): Dakota-Cedar Mountain,
Morrison

Year	Oil	Gas	Water	Prod. Wells
1960-1967	Shut in			
1967		403526		3
1968		401557		4
1969		353473		4
1970		233686		3
Cumulative production		1392242		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	95.1	92.8	92.7
Ethane	2.4	3.9	4.1
Higher fractions	0.6	1.1	1.7
Hydrogen sulfide	0.0	0.0	0.0

	No. 1	No. 2	No. 3
Carbon dioxide	1.0	1.1	1.1
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	0.1	0.1
BTU value/ft ³ (standard T&P)	1024	1045	1067

Sample identification:

No. 1 Texaco, Inc. Unit No. 1, 36-15S-22E, completed April 23, 1960, sampled November 11, 1961, Dakota @ 8544', sample 8310, index 312

No. 2 Texaco, Inc. Unit No. 2, 26-15S-22E, completed September 13, 1961, sampled November 11, 1961, Morrison @ 8378', sample 8309, index 313

No. 3 Texaco, Inc. Unit No. 2, 26-15S-22E, completed September 13, 1961, sampled November 11, 1961, Dakota @ 8236', sample 8311, index 314

FERRON FIELD, EMERY COUNTY

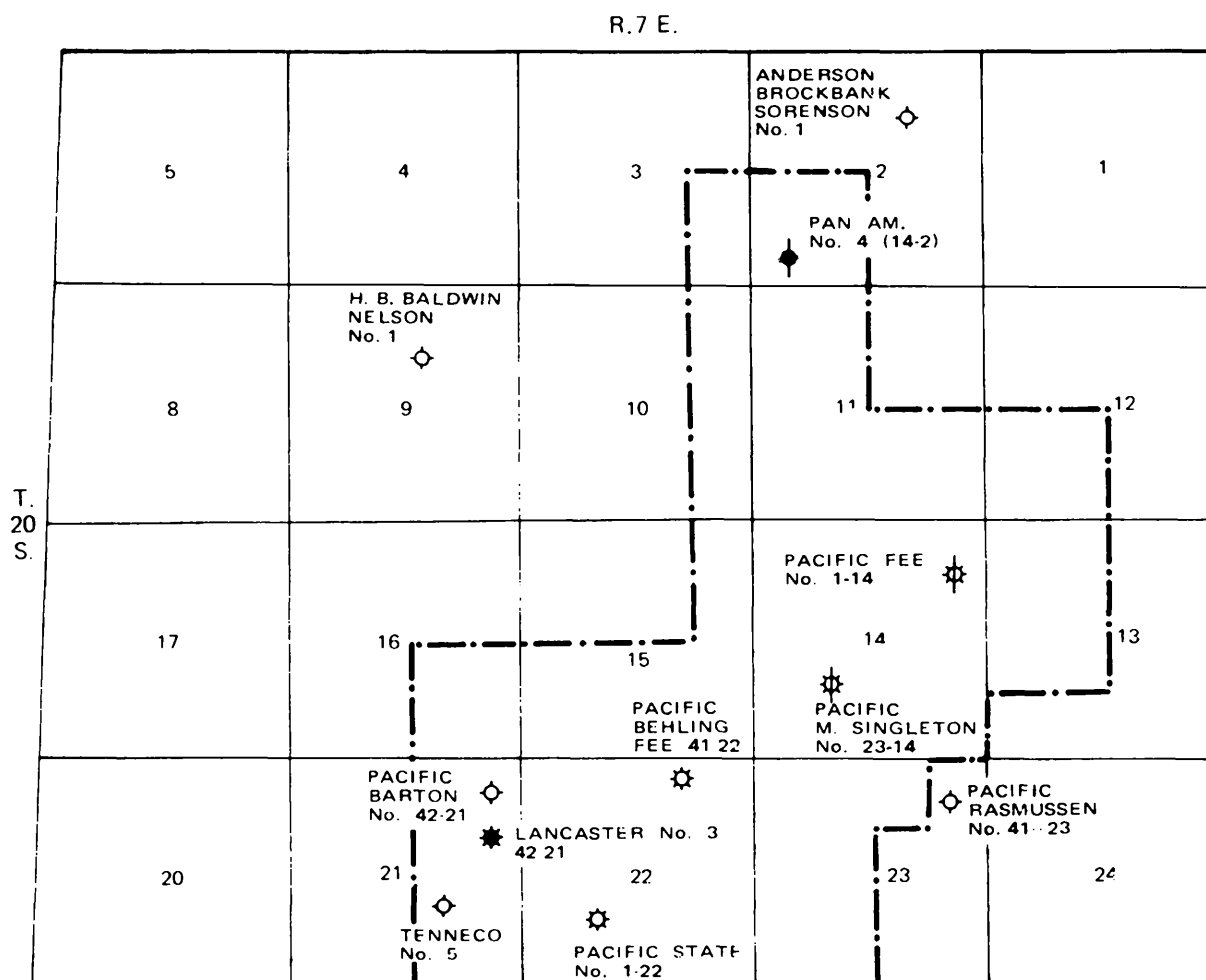
Area designation (latest): May 1966
Discovery year: June 23, 1957
First recorded production: 1965
Producing formation (s): Ferron, Kaibab
Disposition of products sold: Pan American Pet.
(AMOCO), Mountain Fuel Supply

Year	Oil	Gas	Water	Prod. Wells
1957-1964	Shut in			
1965	10136	454648	1257	7
1966	6168	1229950	693	9
1967	5050	1074044	75	7
1968	4117	723186	120	7
1969	2208	641854	115	7

Year	Oil	Gas	Water	Prod. Wells
1970	1645	848793	120	7
Cumulative production		29324	4972475	2380

CRUDE OIL ANALYSIS

Gravity, specific	0.814
Gravity, °A.P.I.	42.3
Pour point, °F.	Below 5
Sulfur, percent	.34
Color	Green
Viscosity	@ 100° F, 33 sec.; @ 77° F, 35 sec.
Nitrogen, percent	0.012
Sample identification:	SE NE 21-20S-7E Kaibab @ 7170-7220



Ferron Field, Emery County
(Scale 1" = 4000')

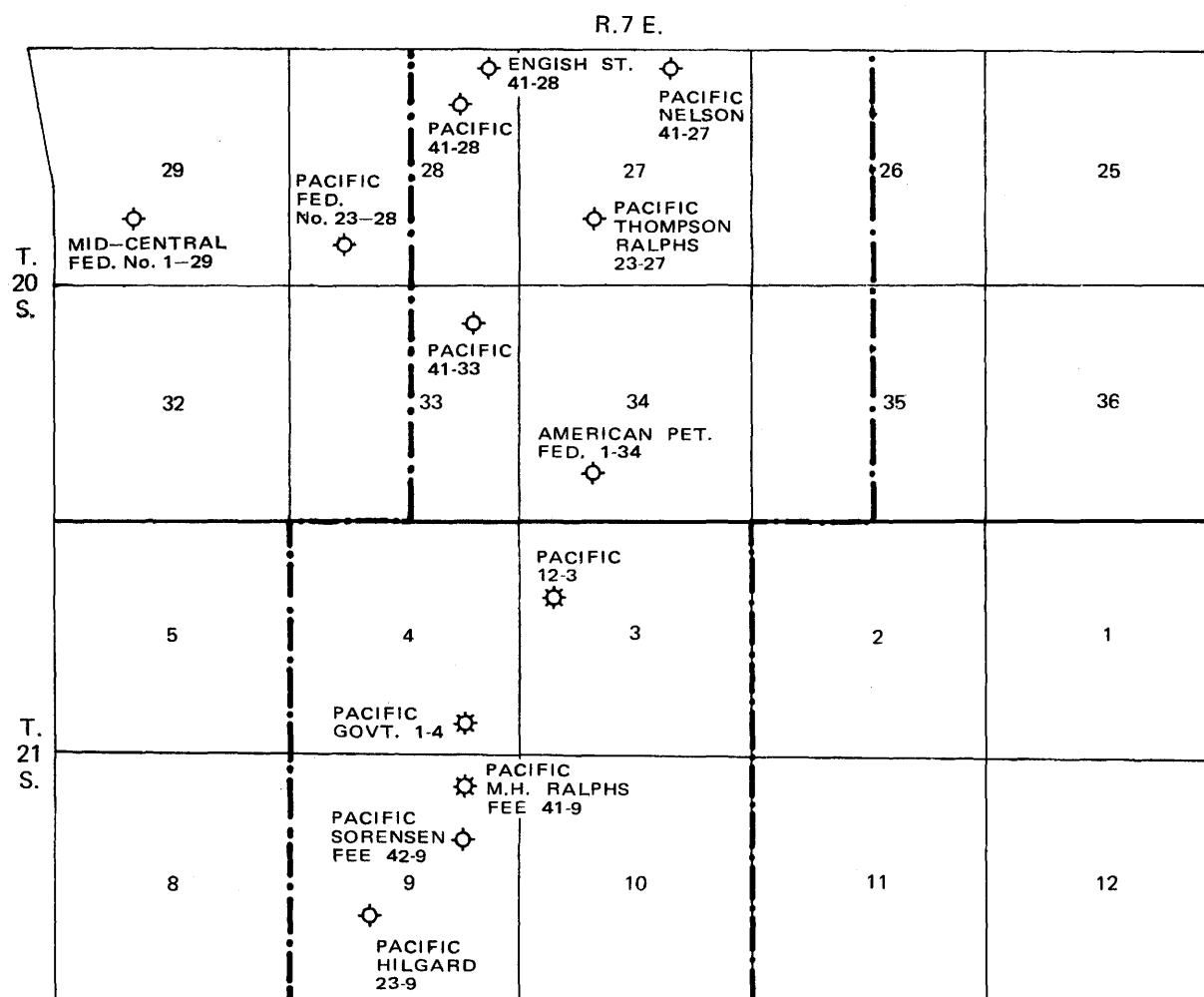
Ferron Field (continued)

GAS ANALYSIS
Components: (nearest 0.1%)

Methane	95.8
Ethane	1.3
Higher fractions	1.1
Hydrogen sulfide	0.0
Carbon dioxide	0.1
Helium (nearest 0.01%;	

less than 0.05%
denoted as "trace")
BTU value/ft³
(standard T&P) 1027

Sample identification: Am. Petrofina No. 1-22 State,
22-20S-7E, completed August 22, 1957,
sampled January 21, 1960, Ferron @ 628',
index 1074

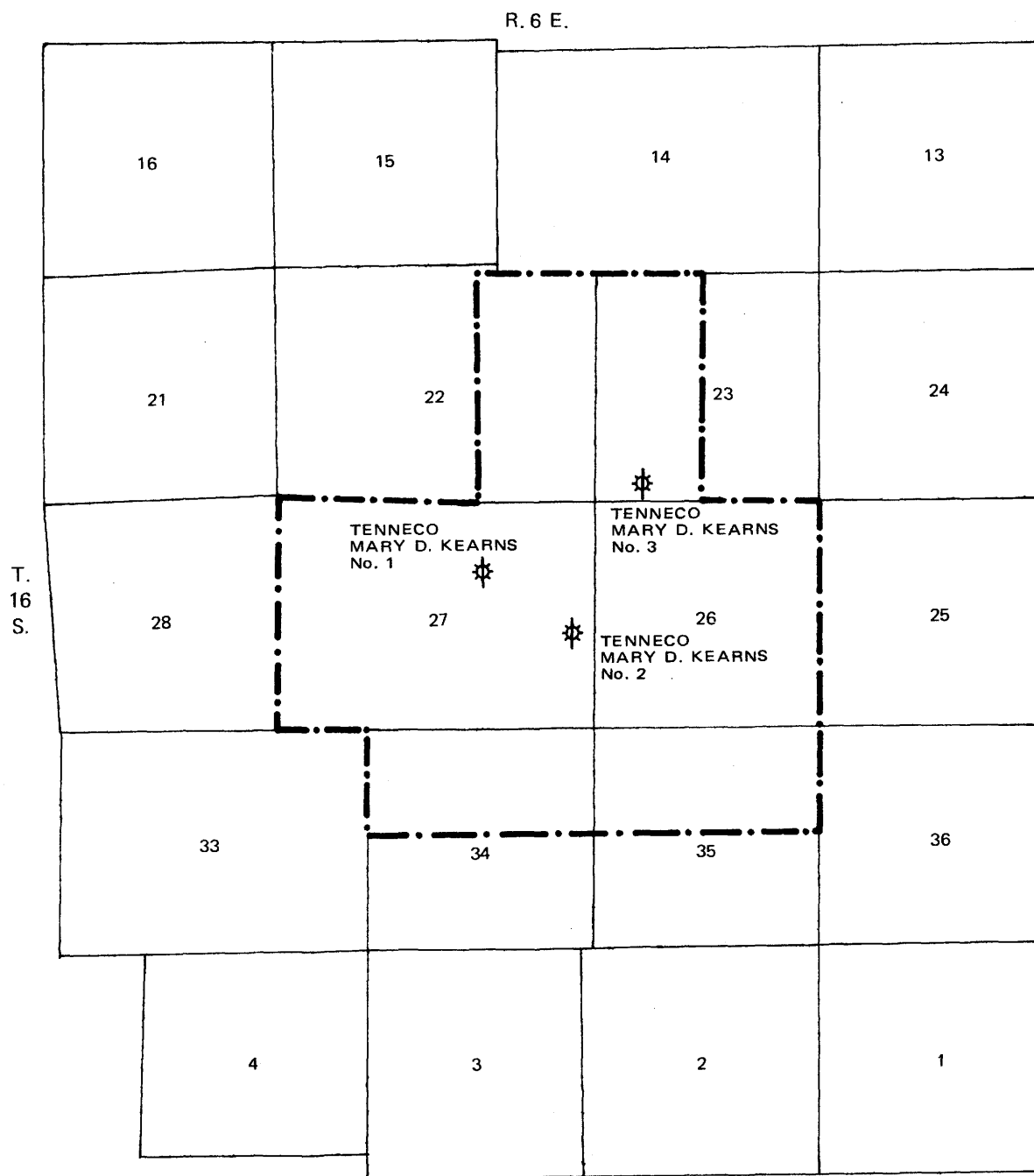


Ferron Field (continued)

FLAT CANYON FIELD, EMERY COUNTY

Area designation (latest): May 1959,
unitized September 23, 1953
Discovery year: June 23, 1953
First recorded production: 1953
Producing formation (s): Ferron, Dakota

Year	Oil	Gas	Water	Prod. Wells
1953		123609		
1954		151489		



Flat Canyon Field, Emery County
(Scale 1" = 4000')

Flat Canyon Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1955		1167		
1956		36391		
1957		80260		
1958		126581		
1959		110253		3
1960		164264		3
1961		103084		3
1962		77897		3
1963		89497		3
1964		98855		3
1965		98863		3
1966		113075		3
1967		61356		3
1968 P&A				
Cumulative production		1436641		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2
Methane	83.9	91.0
Ethane	7.6	3.5
Higher fractions	7.4	4.0
Hydrogen sulfide	0.0	0.0
Carbon dioxide	0.1	0.3
Helium (nearest 0.01%;		
less than 0.05%		
denoted as "trace")	0.1	trace
BTU value/ft ³		
(standard T&P)	1213	1107

Sample identification:

No. 1 Delhi-Taylor Oil Corp., Mary D. Kearns No. 1, 23-16S-6E, sampled October 22, 1962, Ferron, sample 8728, index 278

No. 2 Delhi-Taylor Oil Corp., Mary D. Kearns No. 2, 27-16S-6E, sampled October 22, 1962, Ferron, sample 8731, index 279

FLAT MESA FIELD,
DUCHESNE COUNTY

Area designation (latest): May 1959
Discovery year: December 4, 1952
First recorded production: 1952
Producing formation (s): Green River

CRUDE OIL ANALYSIS

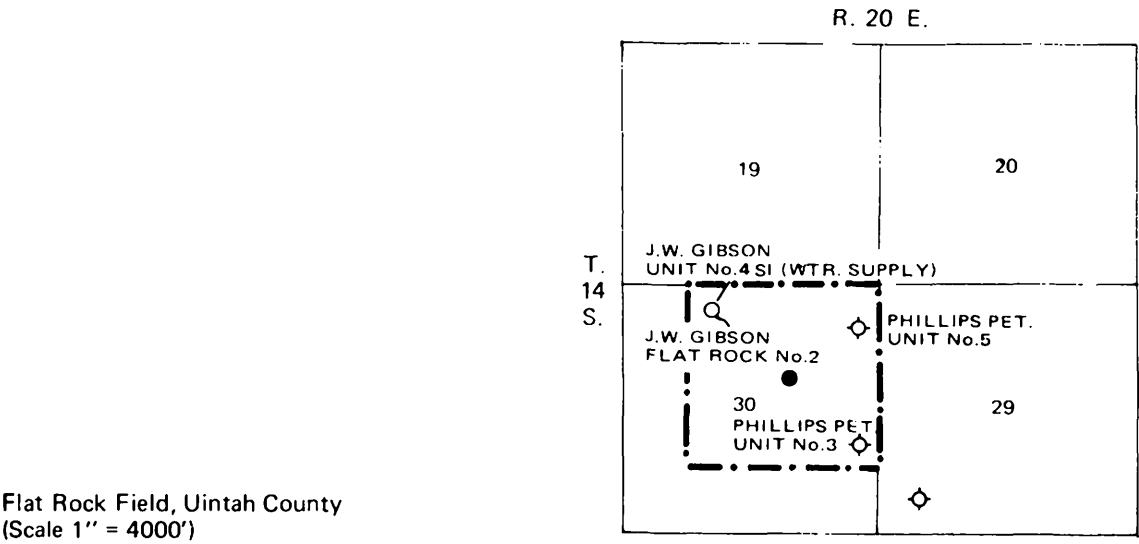
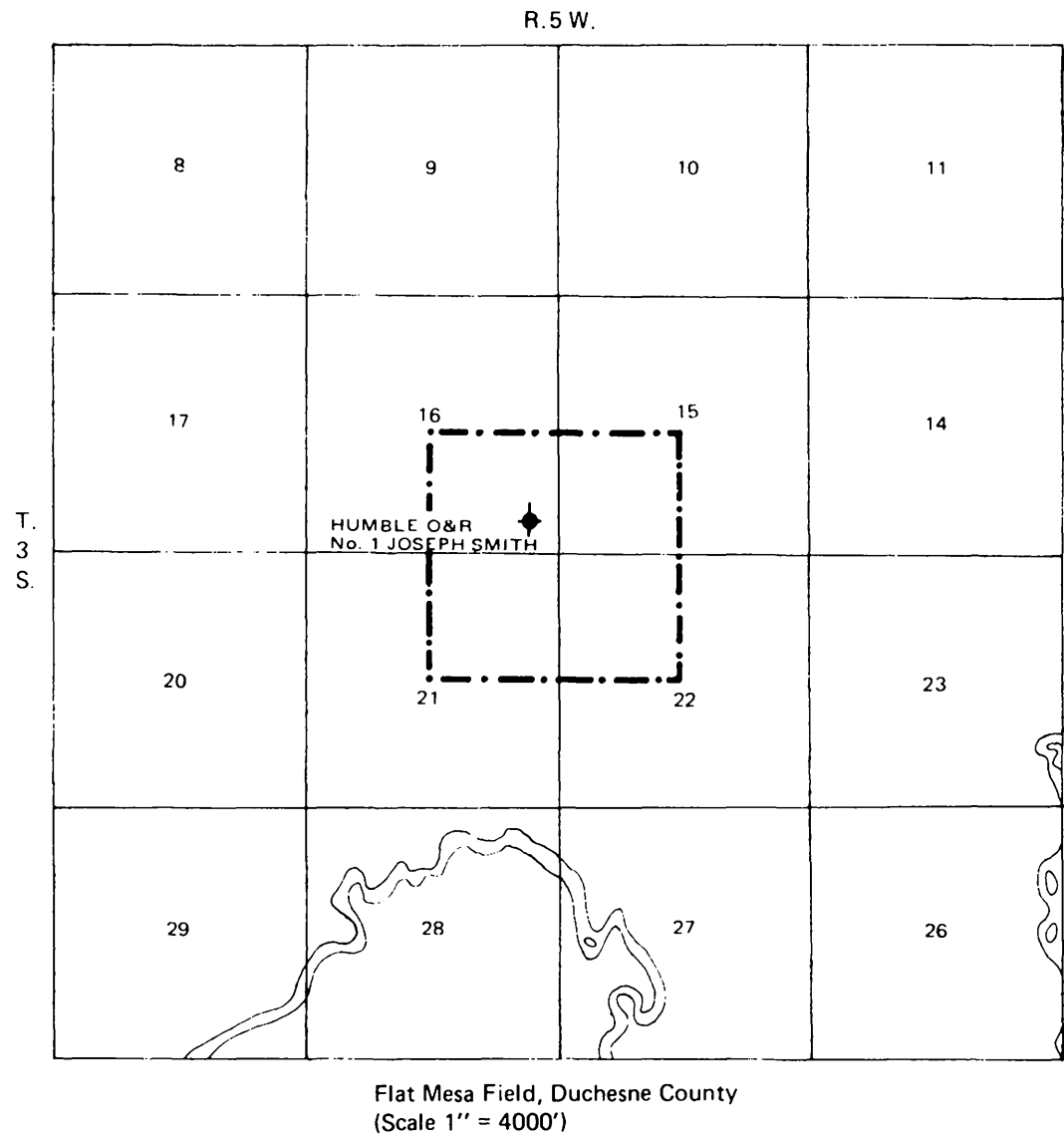
Gravity, specific	0.8289
Gravity, °A.P.I.	39.2
Pour point, °F	110
Sulfur, percent	0.01
Color	Greenish yellow
Viscosity	@ 122° F, 191 sec.
Nitrogen, percent	—

Sample identification: SE SE 16-3S-5W, Lower Green River @ 8820-9103'

Year	Oil	Gas	Water	Prod. Wells
1952	1975			
1953	23145			
1954	13109			
1955	6605			
1956	5934			
1957	4778			
1958 P&A				
Cumulative production	55546			

Gravity, specific	0.8289
Gravity, °A.P.I.	39.2
Pour point, °F	110
Sulfur, percent	0.01
Color	Greenish yellow
Viscosity	@ 122° F, 191 sec.
Nitrogen, percent	—

Sample identification: Carter Oil No. 1, 16-3S-5W, completed December 2, 1953, Green River @ 8820-9103'



FLAT ROCK FIELD, UINTAH COUNTY

Area designation (latest): January 1963

Discovery year: January 7, 1963

First recorded production: 1963

Producing formation (s): Wasatch

Disposition of products sold: Permian Corp.,
Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1963	8278		640	2
1964	3095		144	1

Year	Oil	Gas	Water	Prod. Wells
1965	3263		303	1
1966	2183		355	1
1967	1593	159		1
1968	1426			1
1969	Shut in			1
1970	846			1
Cumulative production				
	20684	159	1442	

GORDON CREEK FIELD, CARBON COUNTY

Area designation (latest): May 1959,
unitized June 20, 1946

Discovery year: 1948

First recorded production: Shut in, P&A

Producing formation (s): Ferron, Moenkopi

Year	Oil	Gas	Water	Prod. Wells
1948	Shut in			
1952	Shut in			
1960	Shut in			
1965	Shut in			
1969	Shut in			
1970	P&A			
Cumulative production (none)				

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2
Methane	.1	2.4
Ethane	.1	.3
Higher fractions	trace-.1	.6
Hydrogen sulfide	.0	.0
Carbon dioxide	99.5	89.3
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	.1
BTU value/ft ³ (standard T&P)	8	56

Sample identification:

No. 1 Skelly Oil No. 1 Bryner, 24-14S-7E, completed August 13, 1951, sampled December 31, 1958, Sinbad @ 10877', index 1076

No. 2 Skelly Oil No. 2 Bryner, 25-14S-7E, completed December 5, 1956, sampled December 31, 1958, Sinbad @ 10760', index 1077

GOTHIC MESA FIELD, SAN JUAN COUNTY

Area designation (latest): December 1963,
unitized June 1, 1965

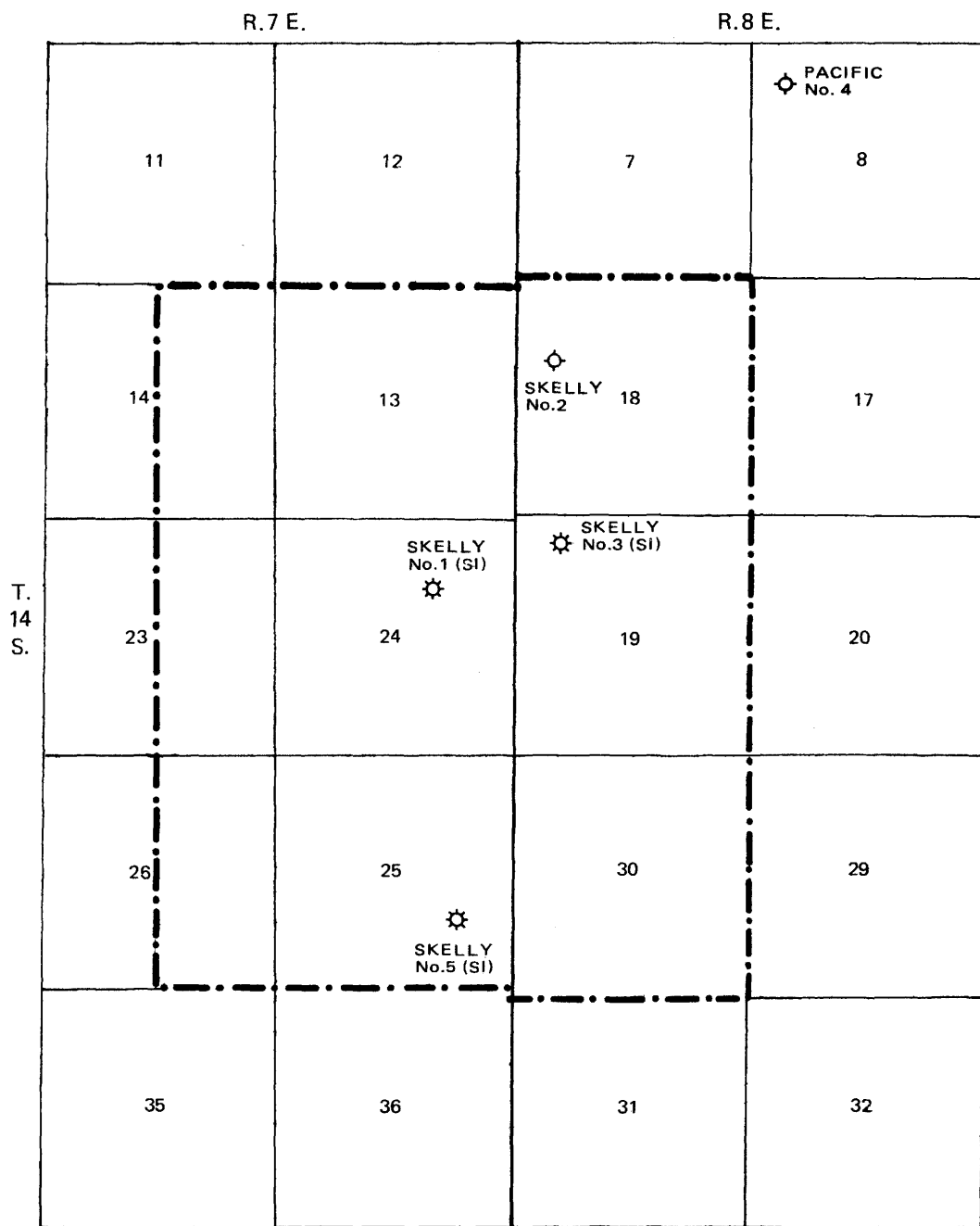
Discovery year: 1956

First recorded production: 1957

Producing formation (s): Ismay, Desert Creek

Disposition of products sold: Shell Oil Co.,
El Paso Natural Gas Co.

Year	Oil	Gas	Water	Prod. Wells
1956				
1957	8683	3407		
1958	32264	36878	1328	
1959	8645	16347	2719	2



Gordon Creek Field, Carbon County
(Scale 1" = 4000')

Gothic Mesa Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1960	3429	6483	1023	2
1961	40352	26049	904	4
1962	130658	69320	4424	12
1963	387032	47404	9357	17
1964	217524	54526	9551	14
1965	129258	35761	40679	12
1966	91139	32828	31954	11
1967	69932	44354	20265	13
1968	61551	39097	19825	12
1969	52981	27065	16374	12
1970	50222	18412	12412	12
Cumulative production				
	1283670	457931	170815	

CRUDE OIL ANALYSIS

Gravity, specific	0.823
Gravity, °A.P.I.	40.4
Pour point, °F	25
Sulfur, percent	.05
Color	Green
Viscosity	@ 100° F, 37 sec.

Nitrogen, percent

0.034

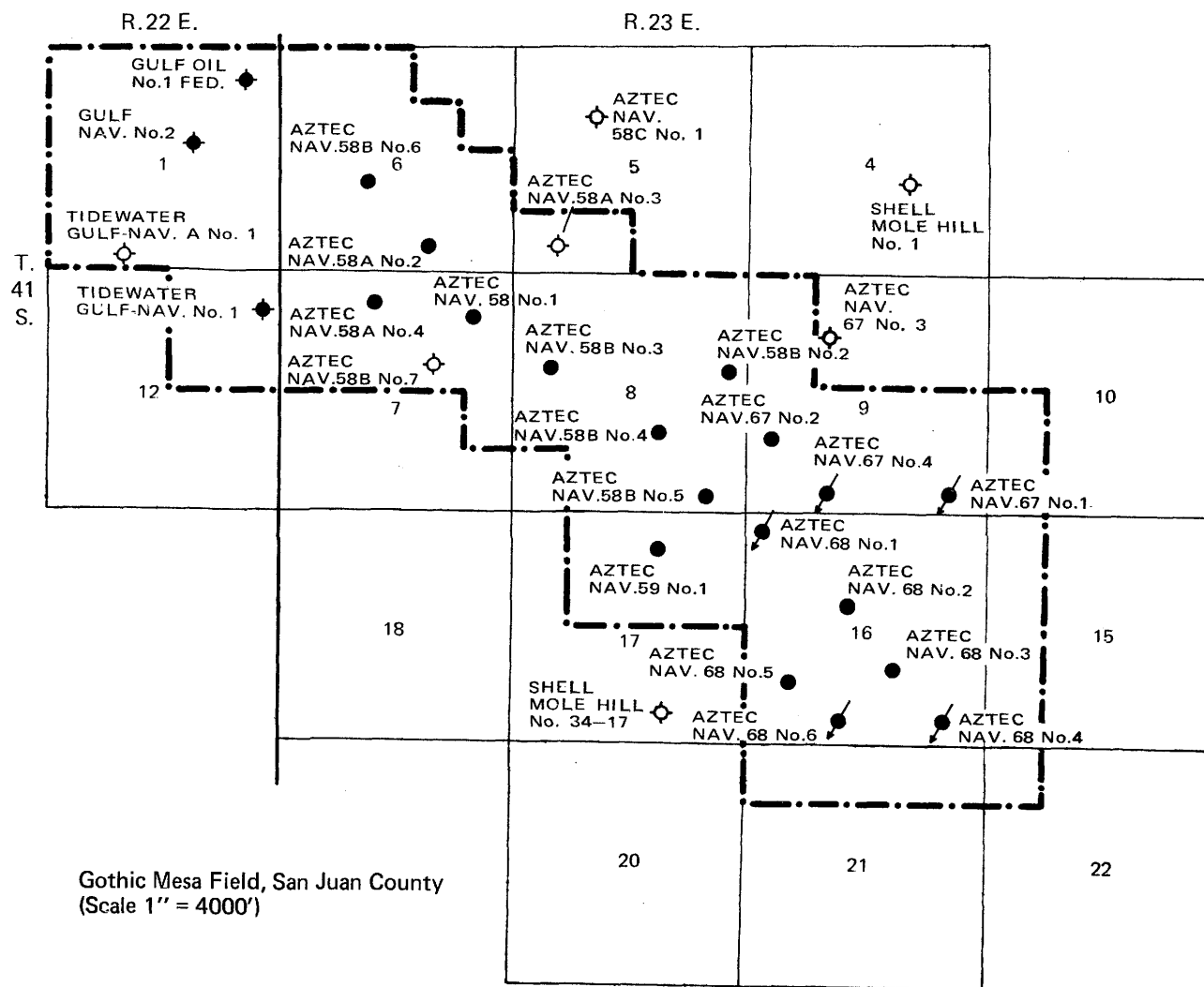
Sample identification: NE NE 1-41S-22E, Desert Creek @ 5768-5810'

GAS ANALYSIS

Components: (nearest 0.1%)

Methane	1.5
Ethane	.1
Higher fractions	.1
Hydrogen sulfide	.0
Carbon dioxide	73.2
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.9
BTU value/ft ³ (standard T&P)	20

Sample identification: Carter Oil No. 30-1, 7-41S-21E, completed May 9, 1958, sampled May 9, 1959, Mississippian @ 6952', index 1126



GRASSY TRAIL FIELD, CARBON AND EMERY COUNTIES

Area designation (latest); January 1963

Discovery year: September 21, 1961

First recorded production: 1961

Producing formation (s): Moenkopi

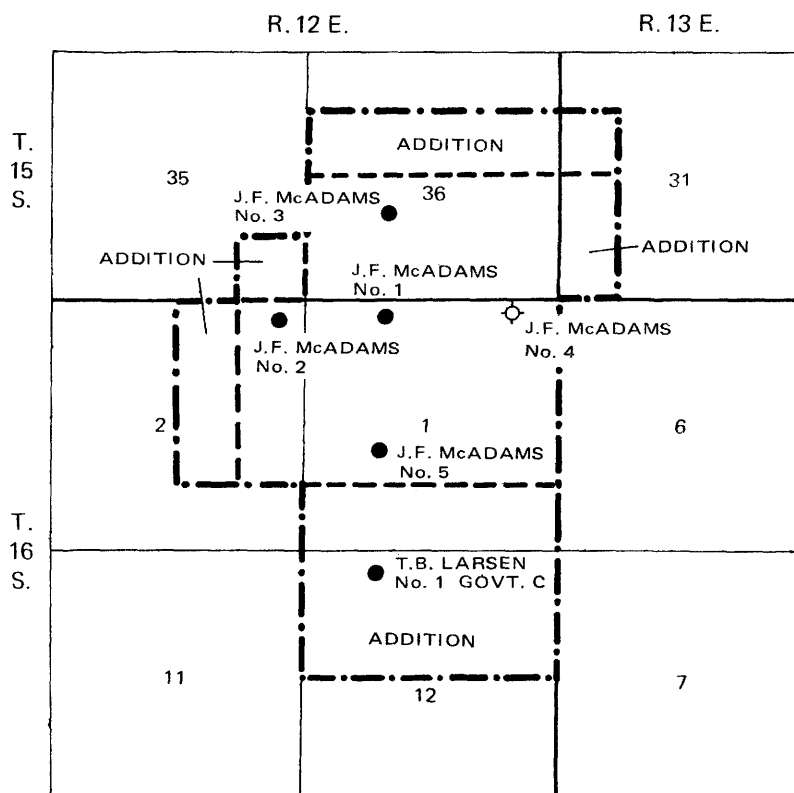
Disposition of products sold: Cowboy Oil Co.

CRUDE OIL ANALYSIS

Year	Oil	Gas	Water	Prod. Wells
1961	Cities Service unit; undes. 1961 5851			1
1962	Includes: Cities Service C-1 Govt. 2610 BO;undes. in 1962 34376			5
1963	25392			5
1964	19209			5
1965	15280			5
1966	9981			4
1967	6121			4
1968	4605			5
1969	4103			4
1970	2292			4
Cumulative production				
127210				

Gravity, specific 0.823
 Gravity, °A.P.I. 40.4
 Pour point, °F Below 5
 Sulfur, percent .18
 Color NPA 7½
 Viscosity @ 100° F, 38 sec.
 Nitrogen, percent 0.012
 Sample identification: NE NW 1-16S-12E, Moenkopi @ 3872-3906'

Gravity, specific 0.8232
 Gravity, °A.P.I. 40.4
 Pour point, °F Below 5
 Sulfur, percent 0.32
 Color Brownish green
 Viscosity @ 70° F, 44.0 sec.; @ 100° F, 38.8 sec.
 Nitrogen, percent
 Sample identification: Cities Service No. 1, 1-16S-12E, completed October 26, 1961, Moenkopi @ 3410-4017'



Grassy Trail Field, Carbon and Emery Counties
 (Scale 1" = 4000')

GRAVEL PILE FIELD, GRAND COUNTY

Area designation (latest): December 1965

Discovery year: 1963

First recorded production: 1963

Producing formation (s): Dakota-Cedar Mountain,
Morrison

Year	Oil	Gas	Water	Prod. Wells
1969	Shut in			
1970	85		610	2
Cumulative production				
2022			645	

GAS ANALYSIS

Components: (nearest 0.1%)

Methane 92.4

Ethane 1.8

Higher fractions 1.0

Hydrogen sulfide 0.0

Carbon dioxide 0.7

Helium (nearest 0.01%;

less than 0.05%

denoted as "trace")

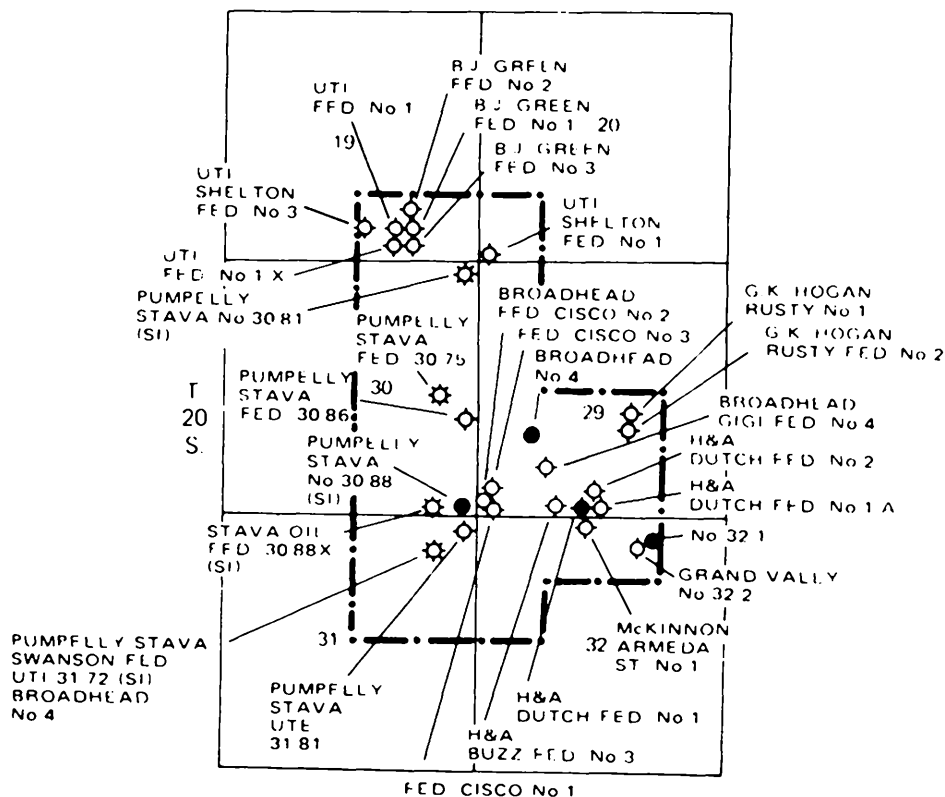
BTU value /ft³ 0.28

(standard T&P) 1001

Sample identification: Pumpelly-Stava No. 30-75,
30-20S-24E, completed February 8, 1967, Cedar
Mountain @ 648', sample 10960, index 388

Year	Oil	Gas	Water	Prod. Wells
1963	641			
1964	Includes: H&A Oil #1 and 1A Dutch Fed.; undes. in 1964			
	815			1
1965	Includes: H&A Oil #1 and 1A Dutch Fed.; undes in 1965			
	403		35	1
1966	68			2
1967	10			2
1968	Shut in			

R 24 E



Gravel Pile Field, Grand County
(Scale 1" = 4000')

GRAYSON FIELD, SAN JUAN COUNTY

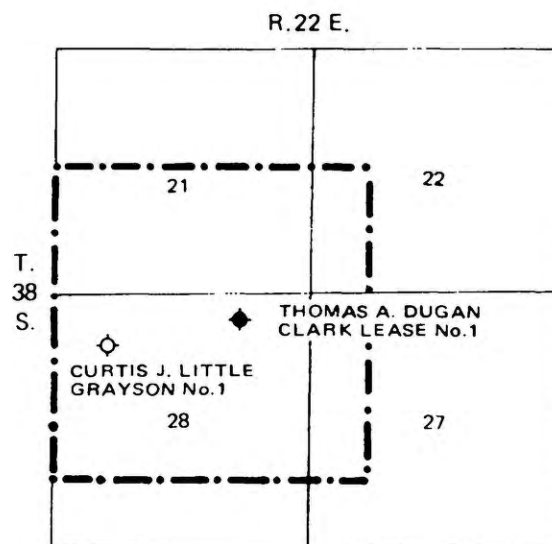
Area designation (latest): February 1962

Discovery year: July 21, 1961

First recorded production: 1961

Producing formation (s): Ismay

Year	Oil	Gas	Water	Prod. Wells
1961	Monsanto #1 Clark; undes. in 1961			
	3345	1999	1126	1
1962	2030	2135	1241	1
1963	Temp. abnd.			
	1066	1197	159	
1964	P&A			
	Cumulative production			
	6441	3531	2526	



Grayson Field, San Juan County
(Scale 1" = 4000')

GREATER ANETH AREA (See ANETH AREA, GREATER)

GREATER RED WASH AREA (See RED WASH AREA, GREATER)

GUSHER FIELD, UINTAH COUNTY

Area designation (latest): May 1959

Discovery year: August 27, 1950

First recorded production: 1950

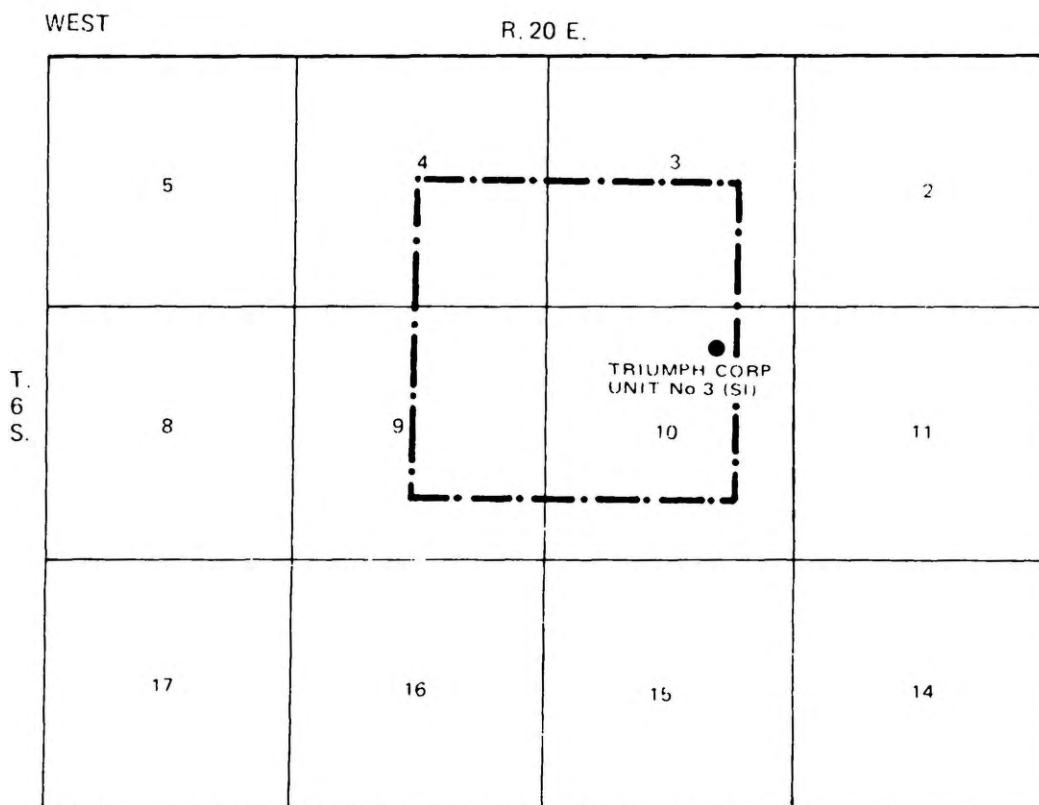
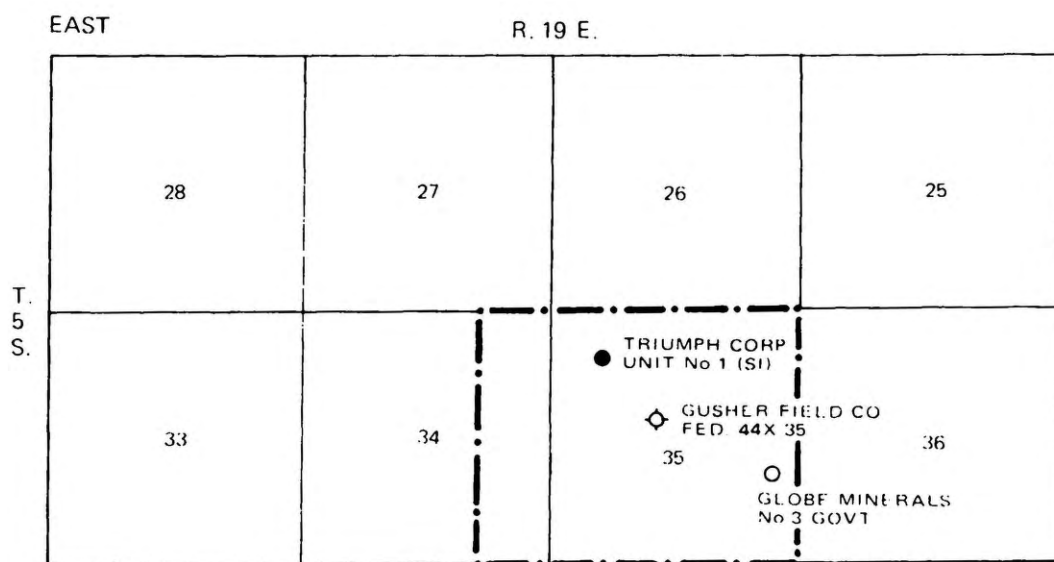
Producing formation (s): Green River

Year	Oil	Gas	Water	Prod. Wells
1950	1933		204	1
1951	Shut in			
1952	1279			
1953	Shut in			
1954	Shut in			
1955	Shut in			
1956	Shut in			
1957	3309		160	2
1958	6402		141	2
1959	9470		159	2
1960	6989		238	2
1961	Shut in			
1962	6445		109	2

Year	Oil	Gas	Water	Prod. Wells
1963	7994		177	2
1964	5015		81	
1965	2677			2
1966	3506			2
1967	3745			2
1968	3805			2
1969	Shut in			
1970	Shut in			
Cumulative production				
	62569		1269	

CRUDE OIL ANALYSIS

Gravity, specific	0.897
Gravity, °A.P.I.	26.2
Pour point, °F	95
Sulfur, percent	.08
Color	Brownish black



Gusher Field (East and West), Uintah County
(Scale 1" = 4000')

Gusher Field (continued)

Viscosity @ 100° F. 330 sec.; @ 130° F, 145 sec.

Nitrogen, percent 0.25

Sample identification: NW NW 35-5S-19E, basal Green River @ 8711-8950'

GYPSUM HILLS FIELD, UINTAH COUNTY

Area designation (latest): 1969,
unitized March 25, 1964
Discovery year: November 30, 1964
First recorded production: 1965
Producing formation (s): Green River

Year	Oil	Gas	Water	Prod. Wells
1964				
1965	7922	4354	368	1

Year	Oil	Gas	Water	Prod. Wells
1966	16915	9248	332	2
1967	12565	6078	55	2
1968	16073	1995		3
1969	21271			3
1970	18286			2
Cumulative production				
	93032	21675	755	

HALFWAY HOLLOW FIELD, UINTAH COUNTY

Area designation (latest): June 1967
Discovery year: March 23, 1967
First recorded production: 1967
Producing formation (s): Green River, Wasatch
Disposition of products sold: Pan American Pet.
(AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1967	14059	1425	710	1
1968	6367	900		1
1969	3342	217	784	1
1970	3717	—	924	1
Cumulative production				
	27485	2542	2418	

HARLEY DOME FIELD, GRAND COUNTY

Area designation (latest): May 1959
Discovery year: 1925 (helium shut in)
First recorded production:
Producing formation (s): Dakota-Cedar Mountain,
Morrison

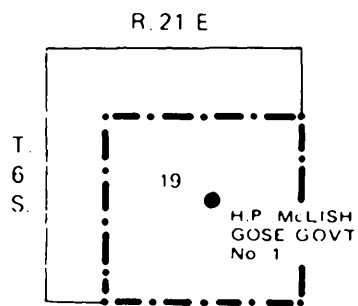
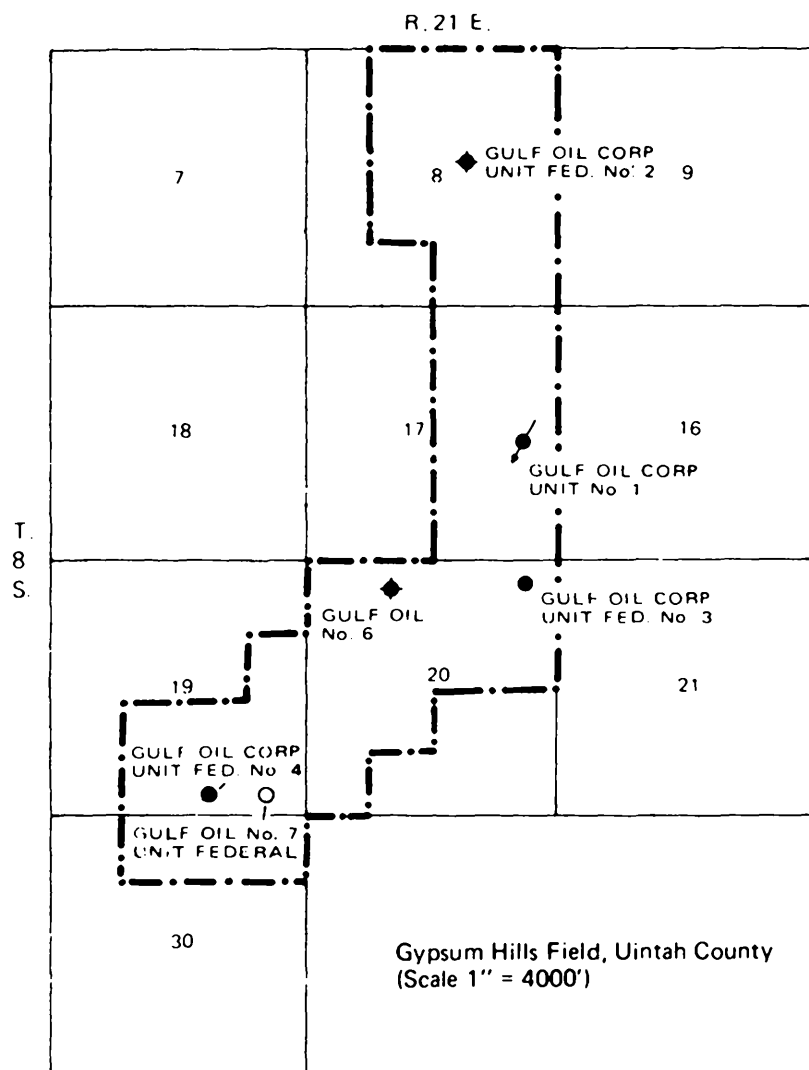
Year	Oil	Gas	Water	Prod. Wells
1925-1959	Helium, shut in			
1959	Shut in			
1960	Shut in			
1961	Shut in			
1962	Shut in			
1963-1970	Shut in			
Cumulative production				
	Shut in			

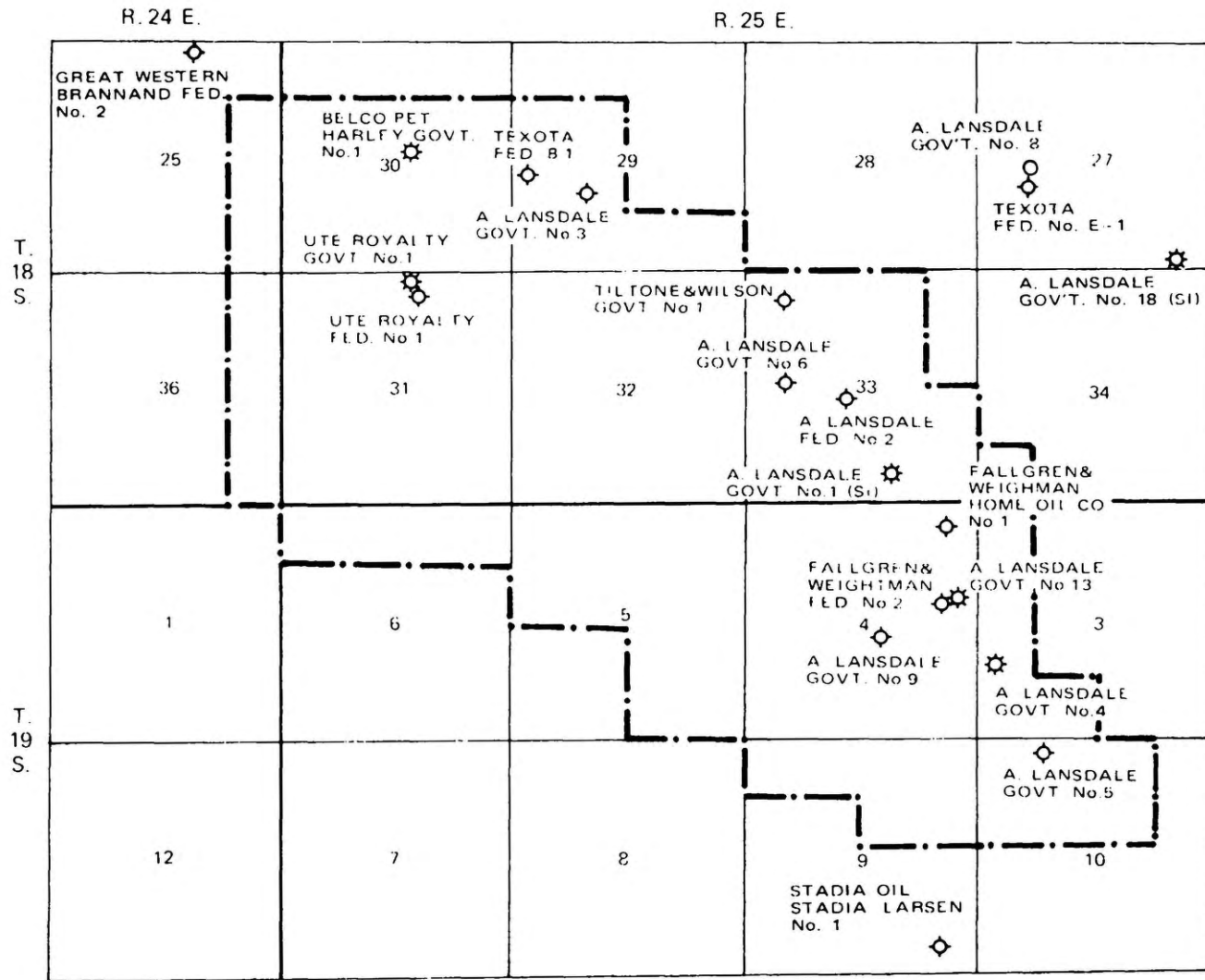
GAS ANALYSIS

Components: (nearest 0.1%)

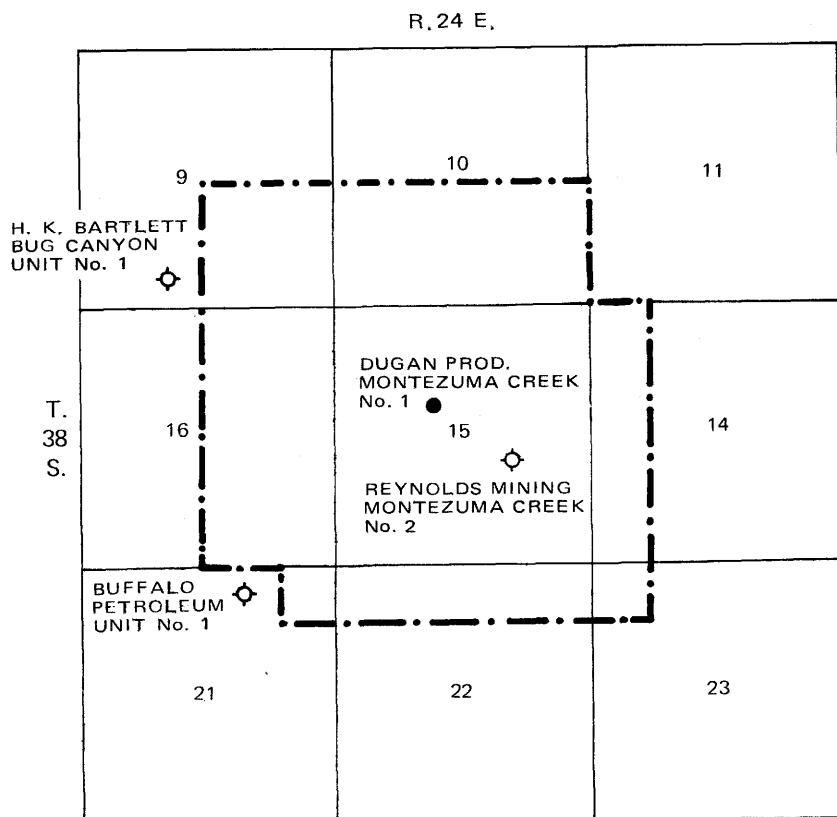
Methane 84.2
Ethane 0.7
Higher fractions 0.3
Hydrogen sulfide 0.0
Carbon dioxide 0.5
Helium (nearest 0.01%;
less than 0.05%
denoted as "trace") 0.20
BTU value/ft³
(standard T&P) 877

Sample identification: Belco Pet. No. 1 Govt.-
Harley, 30-18S-25E, completed March 21,
1960, sampled June 16, 1961, Dakota
@ 930', sample 8023, index 425





Harley Dome Field, Grand County
(Scale 1" = 4000')



Hatch Field, San Juan County
(Scale 1" = 4000')

HATCH FIELD, SAN JUAN COUNTY

Area designation (latest): May 1959
Discovery year: November 14, 1957
First recorded production: 1957
Producing formation (s): Desert Creek

Year	Oil	Gas	Water	Prod. Wells
1957	1933	5301		
1958	6564	12479		
1959	2514	8064		1
1960	1111	3878		1
1961	865	2963		1
1962	712	1999		1
1963	806	99850		2
1964	566	73246		2
1965	415	53382		2
1966	386	49163		2
1967	242	40823		2

Year	Oil	Gas	Water	Prod. Wells
1968	150	41255		2
1969	—	37594		1
1970	—	52209		1
Cumulative production				
	16264	482206		

CRUDE OIL ANALYSIS

Gravity, specific	0.823
Gravity, °A.P.I.	40.4
Pour point, °F	Below 5
Sulfur, percent	.09
Color	NPA 8
Viscosity	@ 100° F, 37 sec.
Nitrogen, percent	0.023
Sample identification: SE NW 15-38S-24E, Paradox	
@ 5967-5987'	

HOGAN FIELD, SAN JUAN COUNTY

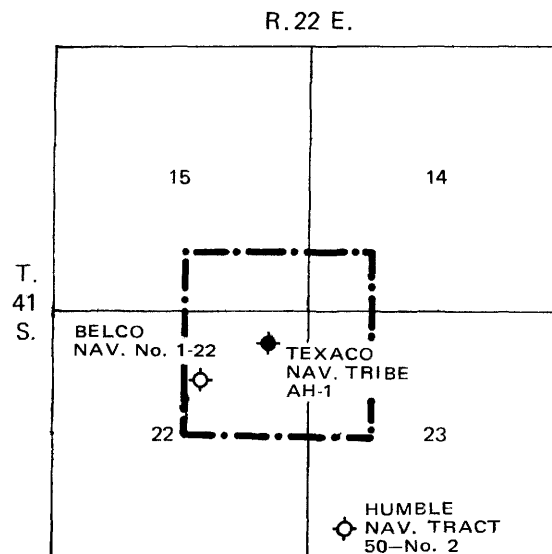
Area designation (latest): June 1963

Discovery year: December 26, 1962

First recorded production: 1963

Producing formation (s): Ismay

Year	Oil	Gas	Water	Prod. Wells
1963 P&A				
	645	719	90	—
Cumulative production	645	719	90	



Hogan Field, San Juan County
(Scale 1" = 4000')

HORSESHOE BEND FIELD, UINTAH COUNTY

Area designation (latest): January 1970

Discovery year: 1963

First recorded production: 1963

Producing formation (s): Uinta, Green River

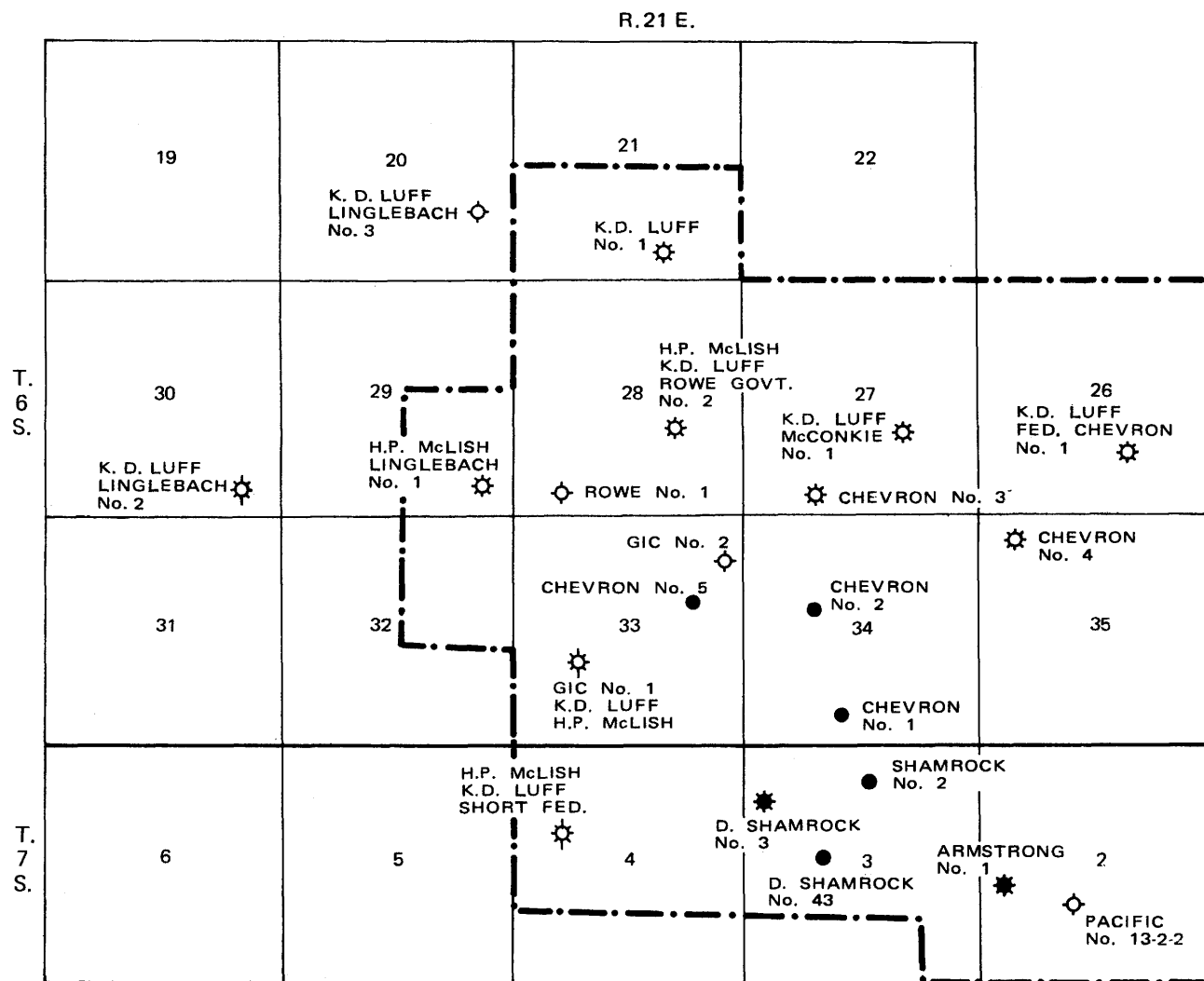
Disposition of products sold: oil to Chevron Oil Co.,
gas to Uintah Pipeline Co.

Year	Oil	Gas	Water	Prod. Wells
1963 Pan Am # 1 McLish; undes. in 1963				
	575		10	1
1964 Includes: undes. in 1964; Calif. Oil, Horseshoe Bend				
	3989	1199	2046	
Shamrock Horseshoe Bend				
	10262	0	0	
Shamrock McLish unit				
	652	0	0	
Shamrock Morgan-Fed.				
	2142	0	0	
Shamrock Wash Estate				
	4468			
	21513	1199	2046	4
1965 Includes: 850 BO for McLish unit; 275 BO for Morgan; 1637 BO for Wash Estate; undes. in 1965				

Year	Oil	Gas	Water	Prod. Wells
	1298 BO; 1416 BW; for Armstrong-Hafeman St. 13-2-1; undes. in 1965			
	48378	180909	15233	13
1966	28937	102613	11502	9
1967	18630	1840922	7785	20
1968 Includes: 64039 MCF; for H. P. McLish Shawnee State; undes. in 1968				
	13270	2295591	4303	25
1969	11286	2094524	4275	29
1970	8858	2046308	3368	27
Cumulative production	151447	8562066	48522	

CRUDE OIL ANALYSIS

Gravity, specific	0.893
Gravity, °A.P.I.	27.0
Pour point, °F	80
Sulfur, percent	.06
Color	Brownish black
Viscosity	@ 100° F, 210 sec.; @ 130° F, 120 sec.
Nitrogen, percent	0.177
Sample identification: NW NE 3-7S-21E, Green River @ 6779-7021'	



Horseshoe Bend Field (continued)

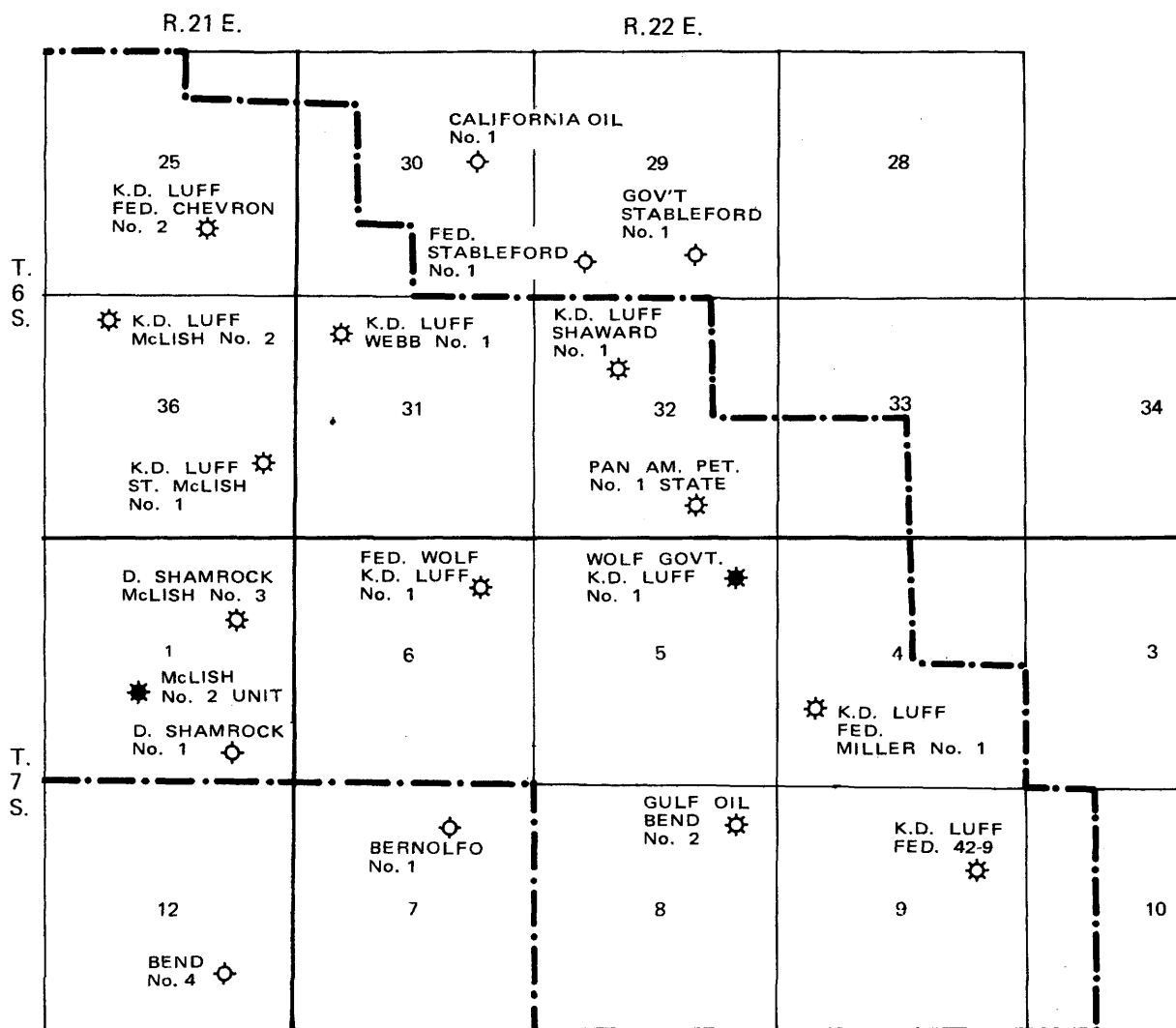
GAS ANALYSIS

Components: (nearest 0.1%)

Methane	98.1
Ethane	0.6
Higher fractions	0.4
Hydrogen sulfide	0.0
Carbon dioxide	0.1
Helium (nearest 0.01%;	

less than 0.05%
denoted as "trace")
BTU value/ft³
(standard T&P) 1017

Sample identification: California Oil Co., Horseshoe
Bend Federal No. 3, 27-6S-21E, completed
January 29, 1965, sampled March 25, 1965,
Uintah @ 3513', sample 9822, index 456

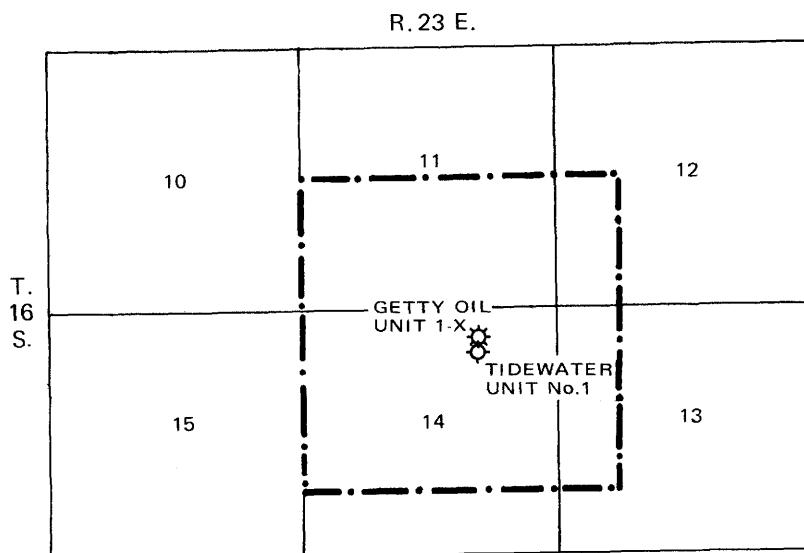


Horseshoe Bend Field (continued)

HORSE POINT FIELD, GRAND COUNTY

Area designation (latest): November 1962,
unitized August 8, 1961
Discovery year: December 11, 1961
First recorded production: 1967
Producing formation (s): Dakota-Cedar Mountain
Disposition of products sold: Grand Valley Transmis-
ion Co.

Year	Oil	Gas	Water	Prod. Wells
1961				
1967		183150		1
1968	Includes: 410516 MCF; for Oil, Inc., M4 Horse Point; undes. in 1968			



Horse Point Field, Grand County
(Scale 1" = 4000')

Horse Point Field (continued)

Year	Oil	Gas	Water	Prod. Wells
		537411		2
1969		98360		1

Year	Oil	Gas	Water	Prod. Wells
1970		113391		1
Cumulative production		932312		

INDIAN RIDGE FIELD,
DUCHESNE COUNTY

Area designation (latest): August 1967
 Discovery year: October 14, 1966
 First recorded production: 1966
 Producing formation (s): Green River, Wasatch
 Disposition of products sold: Permian Corp., Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1966	38281	47706	248	1
1967	61798	170758	11555	2
1968	52413	99781	17483	2
1969	52498	61753	15786	2
1970	11771	36096	12397	1
Cumulative production		216761	416094	57469

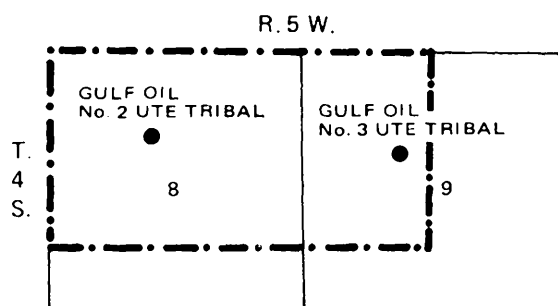
CRUDE OIL ANALYSIS

Gravity, specific 0.823
 Gravity, °A.P.I. 40.4
 Pour point, °F 115
 Sulfur, percent .03

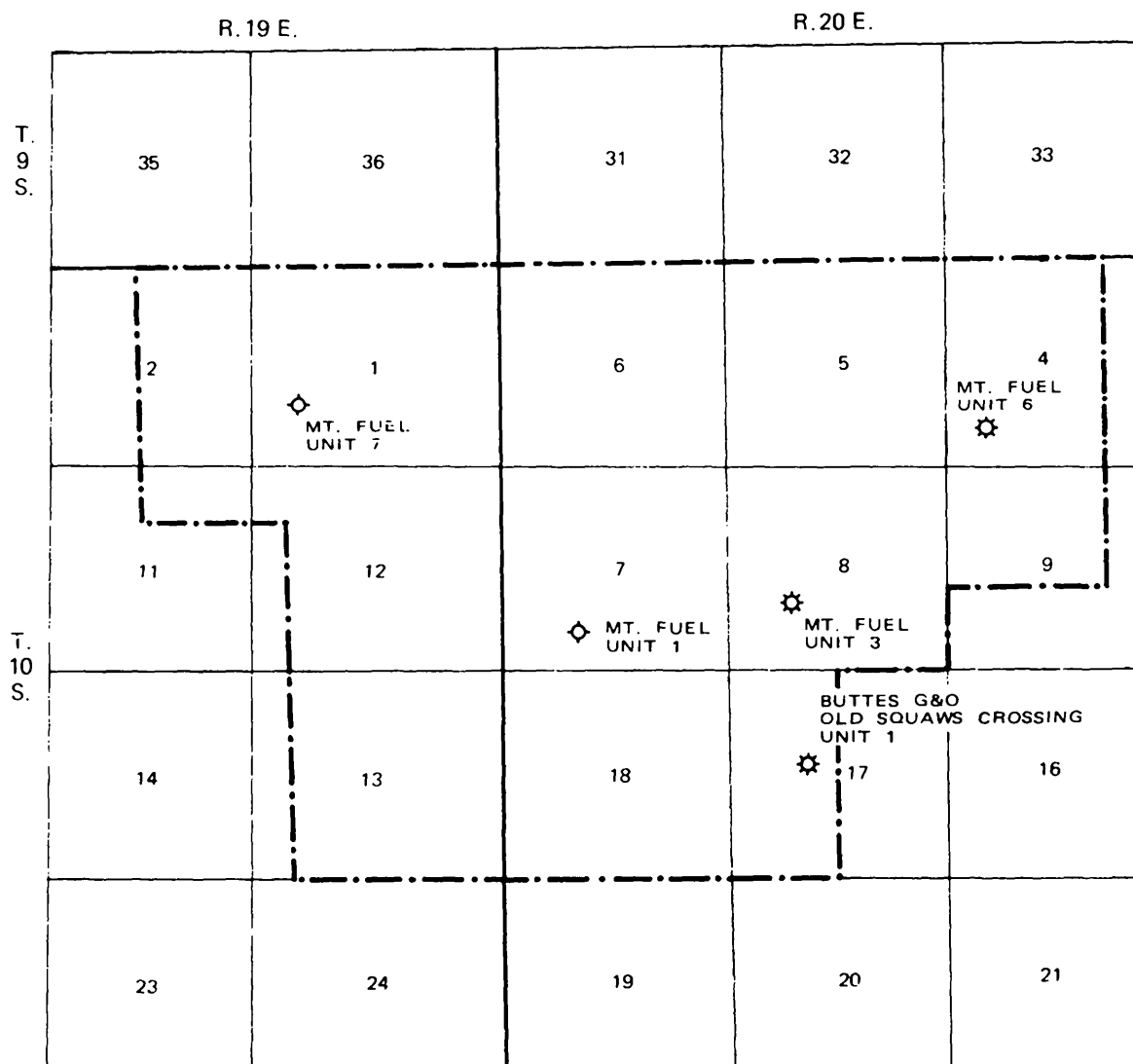
Color NPA 3
 Viscosity @ 100° F, 77 sec.; @ 130° F, 46 sec.
 Nitrogen, percent 0.004
 Sample identification: SE NW 8-4S-5W, Wasatch @ 7366-8122'

Gravity, specific 0.7996
 Gravity, °A.P.I. 45.5
 Pour point, °F 110
 Sulfur, percent 0.15
 Color —
 Viscosity @ 122° F, 63 sec.; @ 140° F, 50.8 sec.

Nitrogen, percent
 Sample identification: Gulf Oil No. 2 8-4S-5W, completed November 9, 1966, Green River-Wasatch @ 7366-8122'



Indian Ridge Field, "Revision," Duchesne County
(Scale 1" = 4000')



Island Field, Uintah County
(Scale 1" = 4000')

ISLAND FIELD, UINTAH COUNTY

Area designation (latest): September 1967,
unitized August 26, 1960
Discovery year: November 9, 1962
First recorded production: 1961
Producing formation (s): Wasatch
Disposition of products sold: Mountain Fuel Supply

Year	Oil	Gas	Water	Prod. Wells
1961		151206		2
1962	405	256770		2
1963	Includes: 71226 MCF; for Mtn. Fuel #6 unit; undes. in 1963			
	333	387071		4
1964	508	431758		4
1965	200	326826		4
1966	197	257277		4
1967		130082		3
1968		90681		4
1969		54236		2
1970		43099		2
Cumulative production				
	1643	2129006		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	95.4	91.6	89.8
Ethane	3.5	4.7	5.2
Higher fractions	0.8	2.7	3.1
Hydrogen sulfide	0.0	0.0	0.0
Carbon dioxide	0.1	0.2	0.2
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	trace	trace
BTU value/ft ³ (standard T&P)	1051	1098	1102

Sample identification:

No. 1 Mountain Fuel Supply Co. Unit No. 1,
7-10S-20E, completed January 5, 1961,
sampled March 13, 1961, Wasatch @
5487', sample 7911, index 315

No. 2 Mountain Fuel Supply Co. Unit No. 2,
14-10S-18E, completed May 13, 1961,
sampled October 19, 1962, Wasatch
@ 7078', sample 8771, index 304

No. 3 Mountain Fuel Supply Co. Unit No. 5,
13-10S-18E, completed December 23,
1961, sampled October 19, 1962, Wasatch
@ 5602', sample 8772, index 305

ISMAY FIELD, SAN JUAN COUNTY

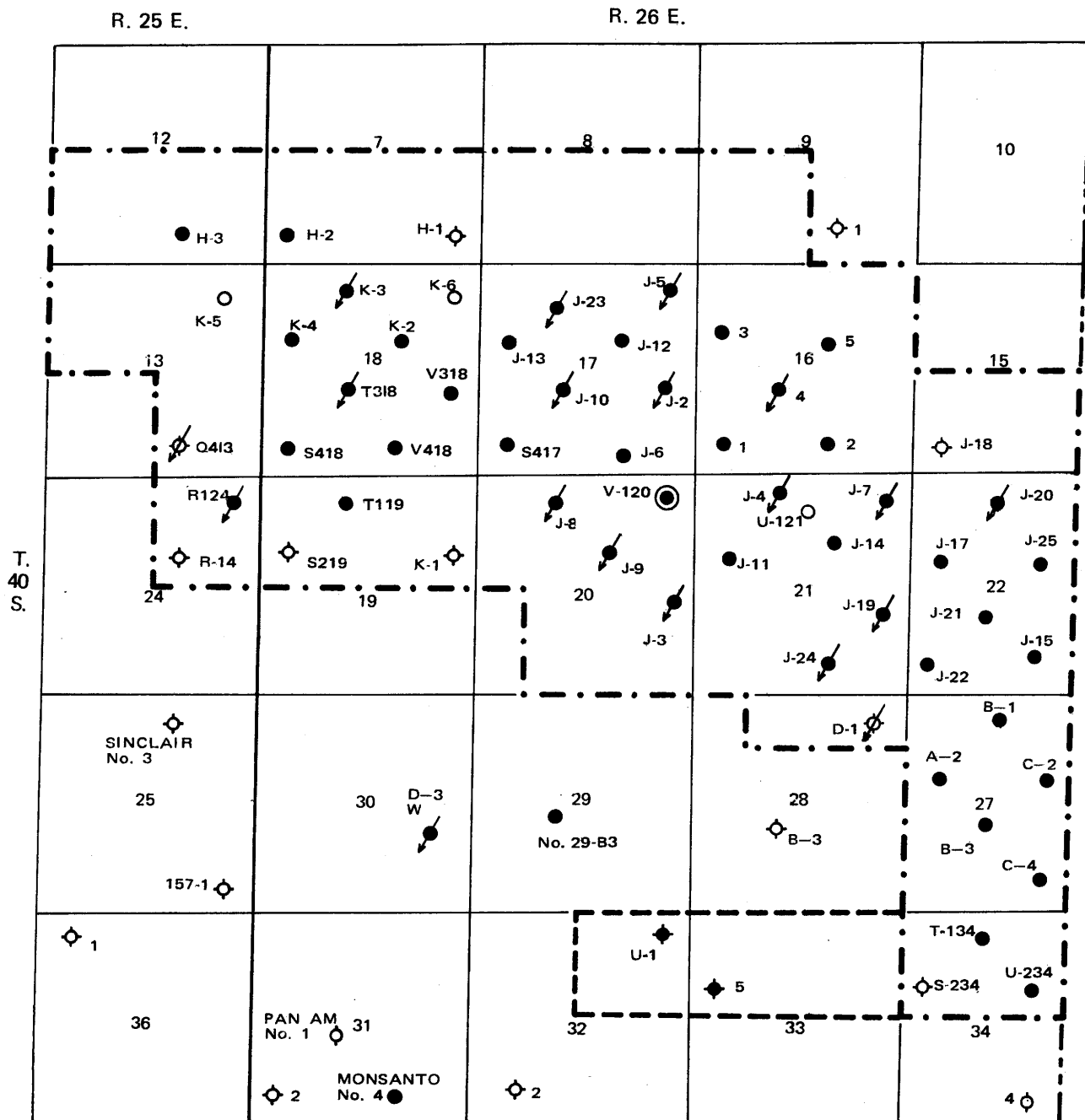
Area designation (latest): January 1967,
unitized January 1, 1966
Discovery year: 1956
First recorded production: 1956
Producing formation (s): Ismay
Disposition of products sold: Union Oil of California

Year	Oil	Gas	Water	Prod. Wells
1956	12894	13720		
1957	34175	28720	2519	
1958	233639	186637	46117	
1959	500031	538792	73384	20
1960	Includes: 30227 BO; 28232 MCF; for Pure Oil 158 Nav. Tribal; undes. in 1960			
	727193	693266	82056	31
1961	Includes: 369119 BO; 545944 MCF; 703 BW; for Pure Oil Nav. Tribal 158; undes. in 1961			1
		10588 BO; 17646 MCF; for Texaco Nav. Tribe AC; undes. in 1961		

Year	Oil	Gas	Water	Prod. Wells
	1064790	1346696	138197	35
1962	Includes: 4681 BO; 3222 MCF; for Texaco Nav. Tribal "AC"-5; undes. in 1962			
	1092314	1531588	172687	46
1963	970496	1462860	160617	46
1964	790851	1367063	206934	46
1965	649487	1078168	208431	47
1966	553309	1110902	181764	40
1967	468791	1030717	167833	36
1968	386799	959628	246705	36
1969	328795	805624	307805	36
1970	253515	677084	294094	33
Cumulative production				
	8067079	12831465	2289143	

CRUDE OIL ANALYSIS

Gravity, specific	0.806
Gravity, °A.P.I.	44.1
Pour point, °F	10
Sulfur, percent	.05



Ismay Field, San Juan County
(Scale 1" = 4000')

Ismay Field (continued)

Color

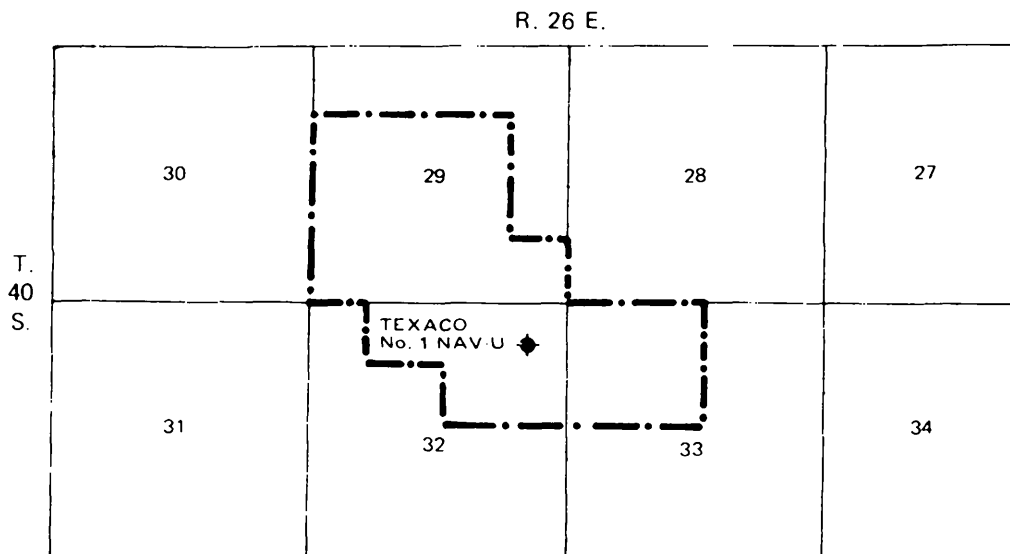
Brownish green

Viscosity

@ 100° F, 33 sec.

Nitrogen, percent

0.022

Sample identification: NE NE 20-40S-26E, Upper
Paradox-Hermosa @ 5585-5625'

Ismay, South Field, San Juan County
(Scale 1" = 4000')

ISMAY, SOUTH FIELD, SAN JUAN COUNTY

Area designation (latest): January 1967

Discovery Year: August 7, 1960

First recorded production: 1960

Producing formation (s): Ismay

Disposition of products sold: Union Oil of California

Year	Oil	Gas	Water	Prod. Wells
1960	Texaco Nav. Tribe "U"; undes. in 1960; "NCT"			
	998	528	933	1
1961	Texaco Navajo Tribe U; undes. in 1961			
	1478	2431	1436	1
1962	1167	1778	371	1

Year	Oil	Gas	Water	Prod. Wells
1963	Temp. abnd.			
	184	278	58	—
1964	5984	10674		1
1965	9066	17224	1040	1
1966	11545	11406	7	1
1967	11691	11655	11381	2
1968	7866	11343	1502	2
1969	6974	9102	1904	2
1970	6309	8311	1851	1
Cumulative production				
	63262	84730	20483	

JOES VALLEY FIELD, SANPETE COUNTY

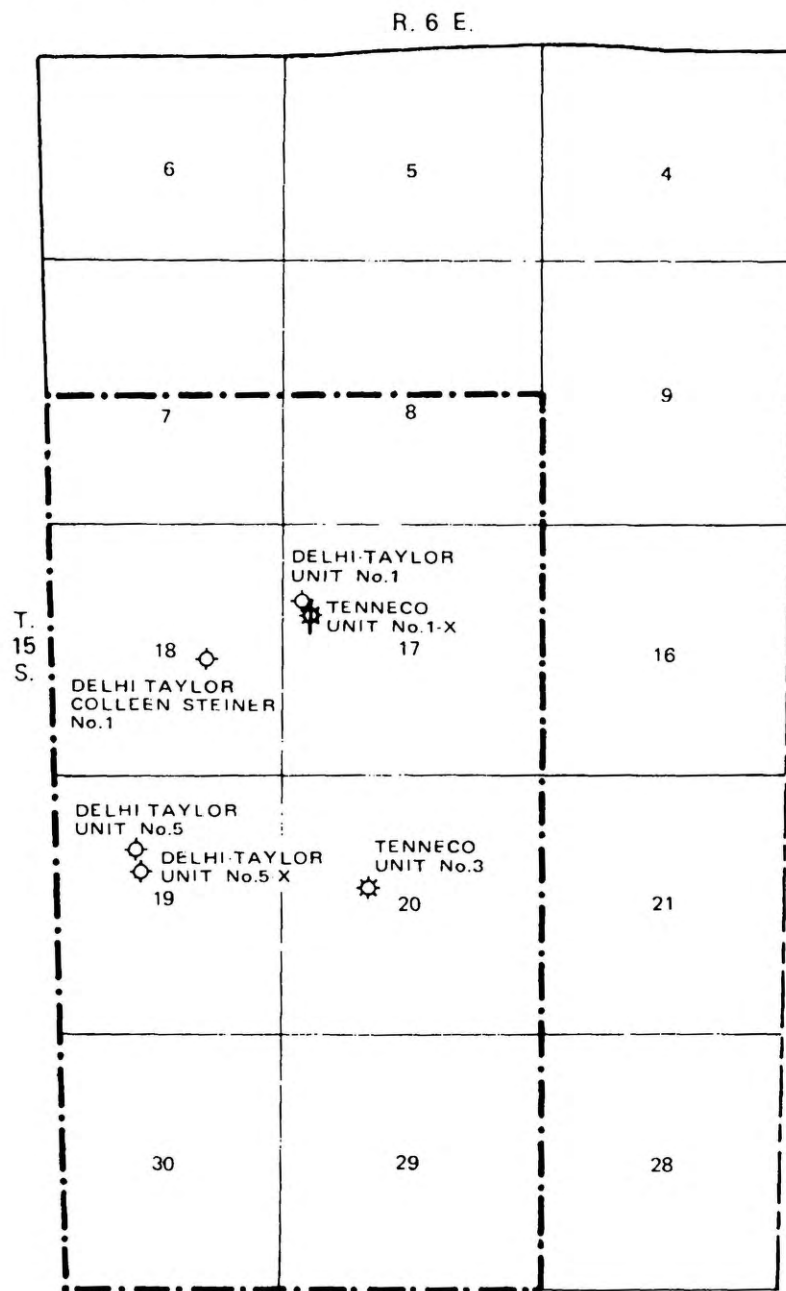
Area designation (latest): May 1959,
unitized February 15, 1954

Discovery year: September 7, 1956

First recorded production: 1955

Producing formation (s): Ferron, Dakota

Disposition of products sold: Mountain Fuel Supply



Joes Valley Field (continued)

Year	Oil	Gas	Water	Prod. Wells	Year	Oil	Gas	Water	Prod. Wells
1955		58287			1964	Shut in			
1956		190672		2	1965		95019		2
1957		688444		2	1966		91420		2
1958		940110		2	1967		51004		1
1959		325775		2	1968		59825		2
1960		141156		2	1969		64759		2
1961		13609		2	1970		50337		2
1962	Shut in				Cumulative production				
1963	Shut in				2770417				

Joes Valley Field (continued)

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2
Methane	86.0	88.4
Ethane	4.6	4.6
Higher fractions	5.6	5.8
Hydrogen sulfide	0.0	0.0
Carbon dioxide	0.1	0.1
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	trace

BTU value/ft³
(standard T&P)

1129 1159

Sample identification:

- No. 1 Delhi-Taylor Oil Corp. Joes Valley Unit No. 1-X, 17-15S-6E, sampled October 22, 1962, Dakota, sample 8727, index 299
- No. 2 Delhi-Taylor Oil Corp. Joes Valley Unit No. 3, 20-15S-6E, sampled October 22, 1962, Ferron, sample 8732, index 300

LAST CHANCE FIELD,
EMERY COUNTY

Area designation (latest): May 1959

Discovery year: 1947

First recorded production: 1947

Producing formation (s): Moenkopi

Year	Oil	Gas	Water	Prod. Wells
1947		4000		

Year	Oil	Gas	Water	Prod. Wells
1948		1000		
1949		1500		
1950-1970	Shut in			
Cumulative production		6500		

LISBON FIELD,
SAN JUAN COUNTYArea designation (latest): October 1961,
unitized April 16, 1962

Discovery year: January 1960

First recorded production: 1960

Producing formation (s): Paradox, Mississippian,
Devonian

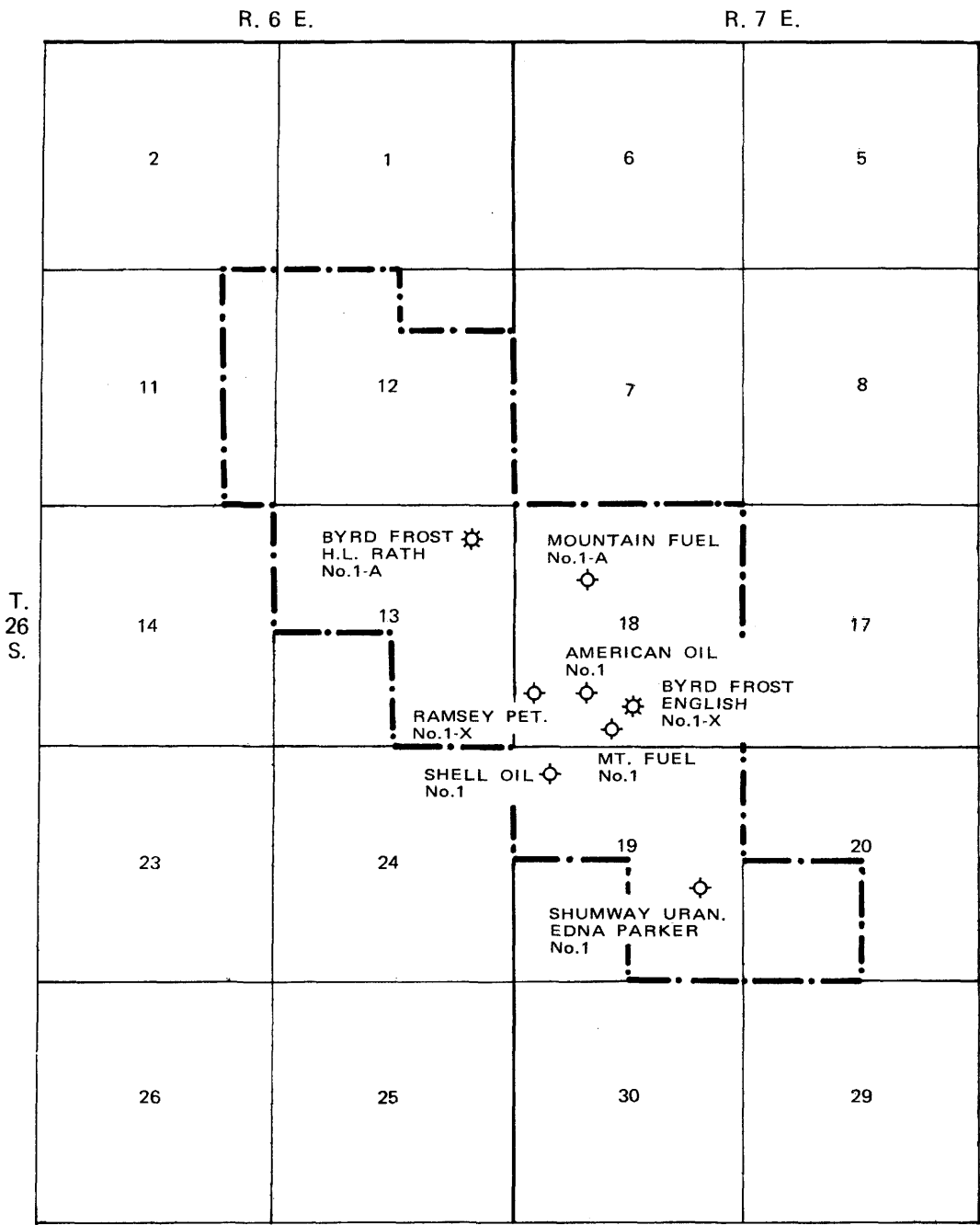
Disposition of products sold: Union Oil of California

Year	Oil	Gas	Water	Prod. Wells
1960	209307	425358	11348	8
1961	599462	1195407	77584	15
1962	1653452	3507478	78082	23
1963	3210900	7499813	66679	21
1964	3541487	9070695	81236	22
1965	3951626	13973784	278016	25
1966	3886404	17641319	307098	23
1967	3621958	21659143	490214	22

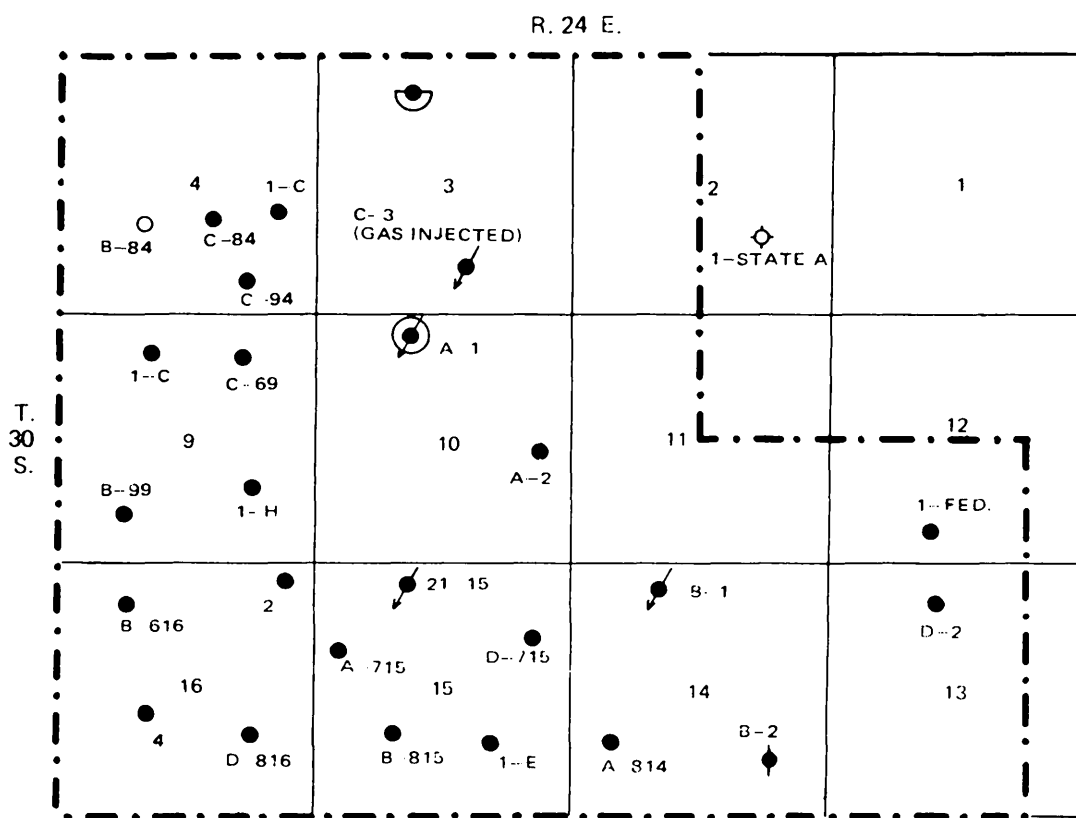
Year	Oil	Gas	Water	Prod. Wells
1968	3049522	9216605	733577	21
1969	2897245	25426334	992102	21
1970	2828140	27216756	996462	21
Cumulative production	29449503	136832692	4112398	

CRUDE OIL ANALYSIS

Gravity, specific	0.801
Gravity, °A.P.I.	45.2
Pour point, °F	Below 5
Sulfur, percent	.01
Color	NPA 2
Viscosity	@ 100° F, 37 sec.
Nitrogen, percent	0.002
Sample identification:	NE NW 3-30S-24E, Paradox @ 5934-6088'



Last Chance Field, Emery County
(Scale 1" = 4000')



Lisbon Field (continued)

CRUDE OIL ANALYSIS

Gravity, specific	0.729
Gravity, °A.P.I.	62.6
Pour point, °F	Below 5
Sulfur, percent	.21
Color	NPA 2
Viscosity	@ 100° F, less than 32 sec.
Nitrogen, percent	0.001
Sample identification:	NE SE 4-30S-24E Mississippian @ 8738-8750'

Gravity, specific	0.794
Gravity, °A.P.I.	46.7
Pour point, °F	40
Sulfur, percent	.03
Color	NPA 5
Viscosity	@ 100° F, 34 sec.
Nitrogen, percent	0.003
Sample identification:	NE NW 14-20S-24E McCracken @ 8905-8998'

GAS ANALYSIS

Components: (nearest 0.1%)	No. 1	No. 2	No. 3	No. 4
Methane	43.1	9.1	37.3	34.5

	No. 1	No. 2	No. 3	No. 4
Ethane	7.9	18.9	11.5	11.6
Higher fractions	4.5	52.2	12.2	20.1
Hydrogen sulfide	0.1	1.0	.0	.1
Carbon dioxide	29.9	17.7	30.2	26.6
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.6	trace	.4	.3
BTU value/ft ³ (standard T&P)	710	2071	943	1207

	No. 5	No. 6	No. 7	No. 8
Methane	37.8	41.2	42.3	42.1
Ethane	11.4	8.3	7.8	7.9
Higher fractions	13.7	9.0	8.0	10.0
Hydrogen sulfide	trace	.1	.1	.2
Carbon dioxide	29.0	23.0	22.9	22.5
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.4	1.0	1.1	1.0
BTU value/ft ³ (standard T&P)	997	875	835	874

Lisbon Field (continued)

	No. 9	No. 10	No. 11	No. 12
Methane	42.2	54.9	58.5	0.4
Ethane	8.3	11.4	13.3	trace
Higher fractions	8.9	8.3	13.1	0.1
Hydrogen sulfide	.0	.0	.0	.0
Carbon dioxide	21.6	2.0	.7	0.2
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.0	.4	.2	trace
BTU value/ft ³ (standard T&P)	880	1047	1269	7
	No. 13	No. 14	No. 15	No. 16
Methane	64.7	60.8	37.7	40.1
Ethane	13.6	16.6	7.2	8.5
Higher fractions	12.5	16.8	15.7	8.2
Hydrogen sulfide	.0	.0	.0	.0
Carbon dioxide	4.2	1.3	21.1	26.7
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.1	.1	.9	1.0
BTU value/ft ³ (standard T&P)	1280	1436	948	804
	No. 17	No. 18	No. 19	No. 20
Methane	36.9	33.5	36.4	30.4
Ethane	11.3	11.5	13.1	11.0
Higher fractions	8.8	18.0	11.4	19.2
Hydrogen sulfide	0.1	0.3	0.0	0.2
Carbon dioxide	32.9	26.3	28.7	29.6
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.4	0.4	0.3	0.3
BTU value/ft ³ (standard T&P)	846	1153	972	1170
	No. 21	No. 22	No. 23	No. 24
Methane	31.1	37.4	42.0	40.6
Ethane	11.6	12.0	8.0	8.0
Higher fractions	15.1	12.2	7.5	7.6
Hydrogen sulfide	0.3	0.3	0.2	0.2
Carbon dioxide	31.9	27.9	25.8	26.6
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.4	0.4	1.1	1.1
BTU value/ft ³ (standard T&P)	1029	974	785	781
	No. 25	No. 26	No. 27	No. 28
Methane	33.2	1.8	34.0	5.0
Ethane	14.0	11.9	14.0	26.7

	No. 25	No. 26	No. 27	No. 28
Higher fractions	13.1	80.9	13.3	40.3
Hydrogen sulfide	1.0	1.3	0.1	1.7
Carbon dioxide	35.6	2.2	30.6	24.9
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.1	trace	0.2	trace
BTU value/ft ³ (standard T&P)	962	2695	1001	1769
	No. 29	No. 30	No. 31	No. 32
Methane	41.6	43.6	43.1	43.1
Ethane	10.4	7.9	9.4	9.4
Higher fractions	5.0	6.3	5.9	5.9
Hydrogen sulfide	0.1	0.3	trace	trace
Carbon dioxide	28.3	23.9	27.5	27.5
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.6	1.1	0.5	0.50
BTU value/ft ³ (standard T&P)	768	777	786	786
	No. 33	No. 34	No. 35	No. 36
Methane	43.6	42.8	38.0	43.6
Ethane	7.9	7.5	12.2	7.6
Higher fractions	6.3	8.6	13.4	7.8
Hydrogen sulfide	0.3	trace	0.2	trace
Carbon dioxide	23.9	23.5	25.5	22.3
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.10	1.00	0.30	1.00
BTU value/ft ³ (standard T&P)	777	822	1039	812
	No. 37	No. 38	No. 39	
Methane	1.8	5.0	41.3	
Ethane	11.9	26.7	7.9	
Higher fractions	80.9	40.3	5.2	
Hydrogen sulfide	1.3	1.7	0.6	
Carbon dioxide	2.2	24.9	27.7	
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	trace	1.00	
BTU value/ft ³ (standard T&P)	2695	1769	717	

Sample identification:

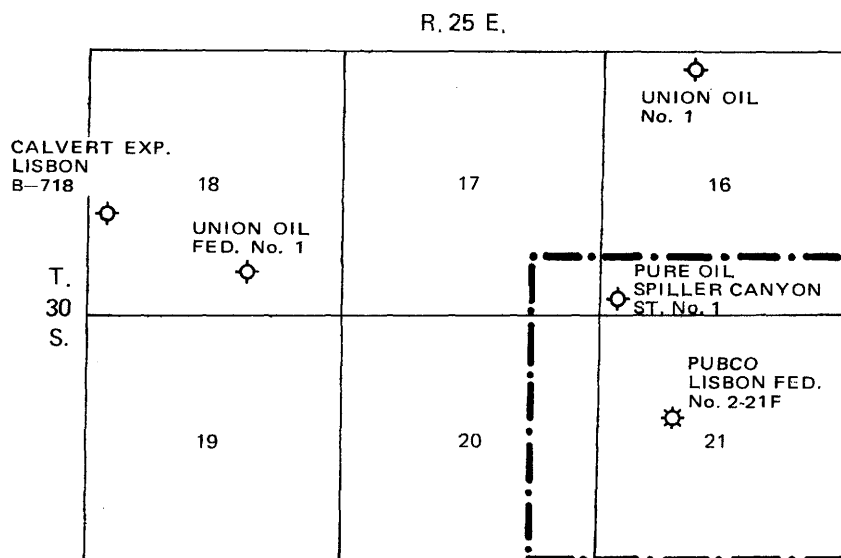
- No. 1 Belco Pet. State No. 2 NW Lisbon, 16-30S-24E, completed October 11, 1960, sampled February 8, 1961, Mississippian @ 8221', sample 7848, index 291
- No. 2 Pubco Pet. No. 1-12 Fed, 12-30S-24E, completed September 28, 1960, sampled November 22, 1960, Mississippian @ 8434', sample 7784, index 426

Lisbon Field (continued)

- No. 3 Belco Pet. No. 2, 16-30S-24E, completed October 11, 1960, sampled November 22, 1960, Mississippian @ 8548', index 1127
- No. 4 Pubco Pet. 1-12 Fed, 12-30S-24E, completed September 28, 1960, sampled September 28, 1960, Mississippian @ 843', index 1128
- No. 5 Pubco Pet. 1-12, Fed., 12-30S-24E, completed September 28, 1960, sampled September 28, 1960, Mississippian @ 8550', index 1129
- No. 6 Pure Oil No. 1 USA NW Lisbon, 10-30S-24E, sampled October 20, 1959, Mississippian @ 7644', index 1130
- No. 7 Pure Oil No. 1 USA NW Lisbon, 10-30S-24E, sampled October 20, 1959, Mississippian @ 7774', index 1131
- No. 8 Pure Oil No. 1 USA NW Lisbon, 10-30S-24E, sampled October 20, 1959, Mississippian @ 7829', index 1132
- No. 9 Pure Oil No. 1 USA NW Lisbon, 10-30S-24E, sampled October 20, 1959, Ouray (Devonian) @ 7996', index 1133
- No. 10 Pure Oil No. 1 USA NW Lisbon, 10-30S-24E, sampled October 20, 1959, Elbert (Devonian) @ 8176', index 1134
- No. 11 Pure Oil No. 1 USA NW Lisbon, 10-30S-24E, sampled October 20, 1959, McCracken (Devonian) @ 8261', index 1135
- No. 12 Pure Oil No. 2 NW Lisbon, sampled April 5, 1960, Mississippian @ 8421', index 1136
- No. 13 Pure Oil No. 2 NW Lisbon, sampled April 5, 1960, McCracken (Devonian) @ 8885', index 1137
- No. 14 Pure Oil No. 2 NW Lisbon, sampled April 5, 1960, McCracken (Devonian) @ 8947', index 1138
- No. 15 Pure Oil No. 2 NW Lisbon, sampled April 5, 1960, Mississippian @ 8536', index 1139
- No. 16 Pure Oil No. 3 NW Lisbon, 14-30S-24E, sampled May 14, 1960, Mississippian @ 8536', index 1140
- No. 17 Belco Pet. State No. 2, 16-30S-24E, completed October 11, 1960, sampled February 8, 1961, Mississippian @ 8221', sample 7851, index 292
- No. 18 California Oil Arnold 21-15 NW Lisbon, 15-30S-24E, sampled February 8, 1961, Mississippian @ 8098', sample 7849, index 293
- No. 19 California Oil Arnold 21-15 NW Lisbon, 15-30S-24E, sampled February 8, 1961, Ouray @ 8605', sample 7855, index 294
- No. 20 Elliott Prod. No. 1-C NW Lisbon, 9-30S-24E, completed June 14, 1960, sampled February 8, 1961, Mississippian @ 8640', sample 7847, index 295
- No. 21 Elliott Prod. No. 1-C NW Lisbon, 9-30S-24E, completed June 14, 1960, sampled February 8, 1961, Mississippian @ 8640', sample 7852, index 296
- No. 22 Pubco Pet No. 1-12 NW Lisbon, 12-24S-30E, completed September 28, 1960, sampled February 8, 1961, Mississippian @ 1300', sample 7854, index 297
- No. 23 Pure Oil No. A-1 NW Lisbon, 10-30S-24E, completed January 3, 1960, sampled June 24, 1961, Mississippian, sample 8043, index 298
- No. 24 Pure Oil USA A-1 NW Lisbon, 10-30S-24E, completed January 4, 1960, sampled July 13, 1961, Mississippian @ 7590', sample 8073, index 299
- No. 25 Pure Oil USA A-1 NW Lisbon, 10-30S-24E, completed January 4, 1960, sampled July 13, 1961, Mississippian @ 7590', sample 8072, index 300
- No. 26 Pure Oil B-1 NW Lisbon, 14-30S-24E, completed May 1, 1960, sampled May 8, 1961, Mississippian @ 8198', sample 7968, index 301
- No. 27 Pure Oil B-2 NW Lisbon, 14-30S-24E, sampled May 20, 1961, Mississippian, sample 7996, index 302
- No. 28 Pure Oil No. C-1 NW Lisbon, 4-30S-24E, completed June 21, 1960, sampled May 17, 1961, Mississippian @ 8738', sample 7977, index 303
- No. 29 Pure Oil No. C-1 NW Lisbon, 4-30S-24E, completed June 7, 1970, sampled February 8, 1961, Mississippian @ 8296', sample 7850, index 304
- No. 30 Pure Oil No. C-3 NW Lisbon, 3-30S-24E, completed March 7, 1961, sampled April 27, 1961, Mississippian @ 8000', sample 7947, index 305
- No. 31 Pure Oil No. E-1 NW Lisbon, 15-30S-24E, completed April 1, 1961, sampled May 6, 1961, Mississippian @ 8571', sample 7954, index 306
- No. 32 Pure Oil No. E-1 NW Lisbon, 15-30S-24E, completed April 1, 1961, sampled May 6, 1961, Mississippian @ 8571', sample 7954, index 391

Lisbon Field (continued)

- No. 33 Pure Oil No. C-3 NW Lisbon, 3-30S-24E, completed March 7, 1961, sampled April 27, 1961, Mississippian @ 8000', sample 7947, index 392
- No. 34 Pure Oil No. B-1 NW Lisbon, 14-30S-24E, sampled March 27, 1960, Mississippian @ 8309', sample 7461, index 393
- No. 35 Pure Oil No. B-1 NW Lisbon, 14-30S-24E, sampled March 24, 1960, Mississippian @ 8160', sample 7462, index 394
- No. 36 Pure Oil No. B-1 NW Lisbon, 14-30S-24E, DST, sampled March 31, 1960, Mississippian @ 8339', sample 7485, index 395
- No. 37 Pure Oil No. B-1 NW Lisbon, 14-30S-24E, completed 1960, sampled May 8, 1961, Mississippian @ 8198', sample 7968, index 396
- No. 38 Pure Oil No. C-1 NW Lisbon, 4-30S-24E, completed June 21, 1960, sampled May 17, 1961, Mississippian @ 8738', sample 7977, index 397
- No. 39 Pure Oil No. C-1 NW Lisbon, 4-30S-24E, completed June 21, 1960, sampled May 17, 1961, Mississippian @ 8738', sample 7980, index 398



Little Valley Field, San Juan County
(Scale 1" = 4000')

LITTLE VALLEY FIELD, SAN JUAN COUNTY

Area designation (latest): November 1962

Discovery year: December 11, 1961

First recorded production: 1962

Producing formation (s): Mississippian

Year	Oil	Gas	Water	Prod. Wells
1961	Shut in			
1962	200	16146	21	1
1963-1970	Shut in			
Cumulative production				
	200	16146	21	

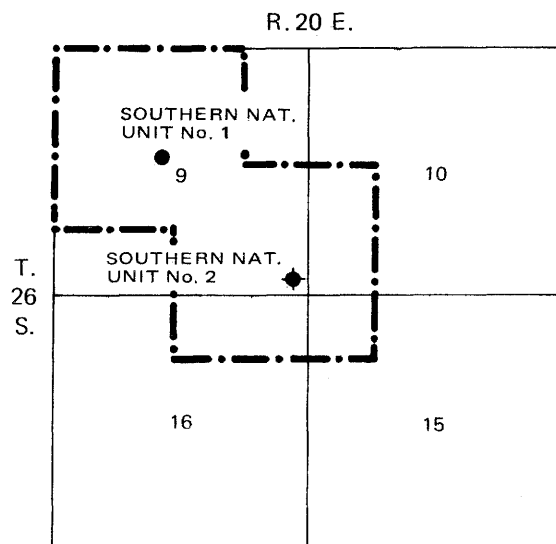
LONG CANYON FIELD, GRAND COUNTY

Area designation (latest): December 1963
 Discovery year: August 30, 1962
 First recorded production: 1962
 Producing formation (s): Paradox
 Disposition of products sold: K. E. McDougald

Year	Oil	Gas	Water	Prod. Wells
1962	31140			1
1963	78727	59483		2
1964	110857	176830	7034	2
1965	100965	153168	8948	1
1966	74746	108954	9256	1
1967	60270	60003	9953	1
1968	46766	43072	6466	1
1969	38444	35405	1461	1
1970	31010	28587	1549	1
Cumulative production				
	572925	665502	44667	

CRUDE OIL ANALYSIS

Gravity, specific	0.823
Gravity, °A.P.I.	40.4
Pour point, °F	25
Sulfur, percent	.02
Color	NPA 7
Viscosity	@ 100° F, 49 sec.
Nitrogen, percent	0.016
Sample identification: 9-26S-20E, Lower Paradox @ 7050-7075'	



Long Canyon Field, Grand County
 (Scale 1" = 4000')

GAS ANALYSIS

Components: (nearest 0.1%)

Methane	2.6
Ethane	0.8
Higher fractions	0.8
Hydrogen sulfide	0.0
Carbon dioxide	0.4
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.3
BTU value/ft ³ (standard T&P)	70

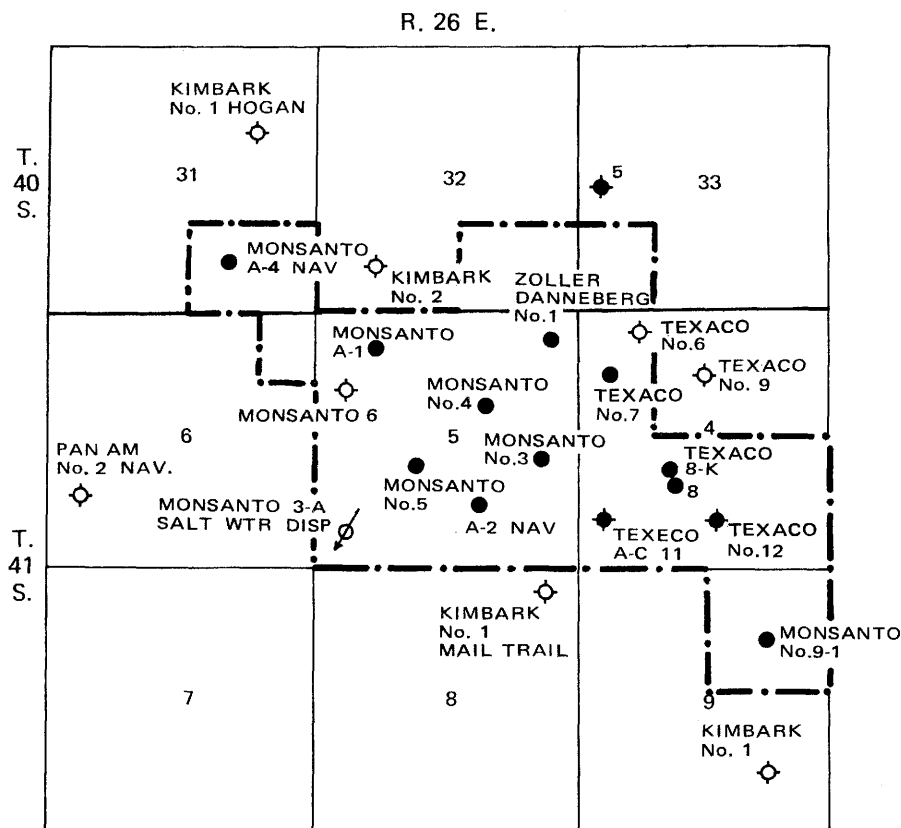
Sample identification: Southern Natural Gas Co. Long Canyon No. 2, 9-26S-20E, completed August 13, 1963, sampled July, 1963, Paradox

McELMO CREEK FIELD (See Greater Aneth Area)

McELMO MESA FIELD, SAN JUAN COUNTY

Area designation (latest): January 1968
 Discovery year: October 16, 1964
 First recorded production: 1964
 Producing formation (s): Ismay
 Disposition of products sold: Shell Oil Co.,
 Gulf Oil Co., El Paso Natural Gas Co., Texaco, Inc.

Year	Oil	Gas	Water	Prod. Wells
1964	33820	20745	40079	2
1965	23276	13966	29616	1
1966 Includes: 768 BO; 14592 BW; for Monsanto Co. Navajo 1-9; undes. in 1966				



McElmo Mesa Field, San Juan County
(Scale 1" = 4000')

McElmo Mesa Field (continued)

Year	Oil	Gas	Water	Prod. Wells
	716712	820507	174927	10
1967	656291	699733	342370	13
1968	266607	301229	416269	11
1969	138241	196379	346816	9
1970	81790	119221	331827	8
Cumulative production				
	1916737	2171780	1681904	

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3
Methane	68.5	60.4	60.5
Ethane	17.2	19.2	19.0
Higher fractions	12.4	18.4	18.6
Hydrogen sulfide	0.0	0.0	0.0
Carbon dioxide	0.3	0.1	0.1

No. 1 No. 2 No. 3

Helium (nearest 0.01%;

less than 0.05%

denoted as "trace")

trace trace trace

BTU value/ft³

(standard T&P)

1364 1523 1527

Sample identification:

No. 1 Texaco, Ac No. 8, 4-41S-26E, sampled April 5, 1966, Ismay @ 5798', sample 10525, index 325

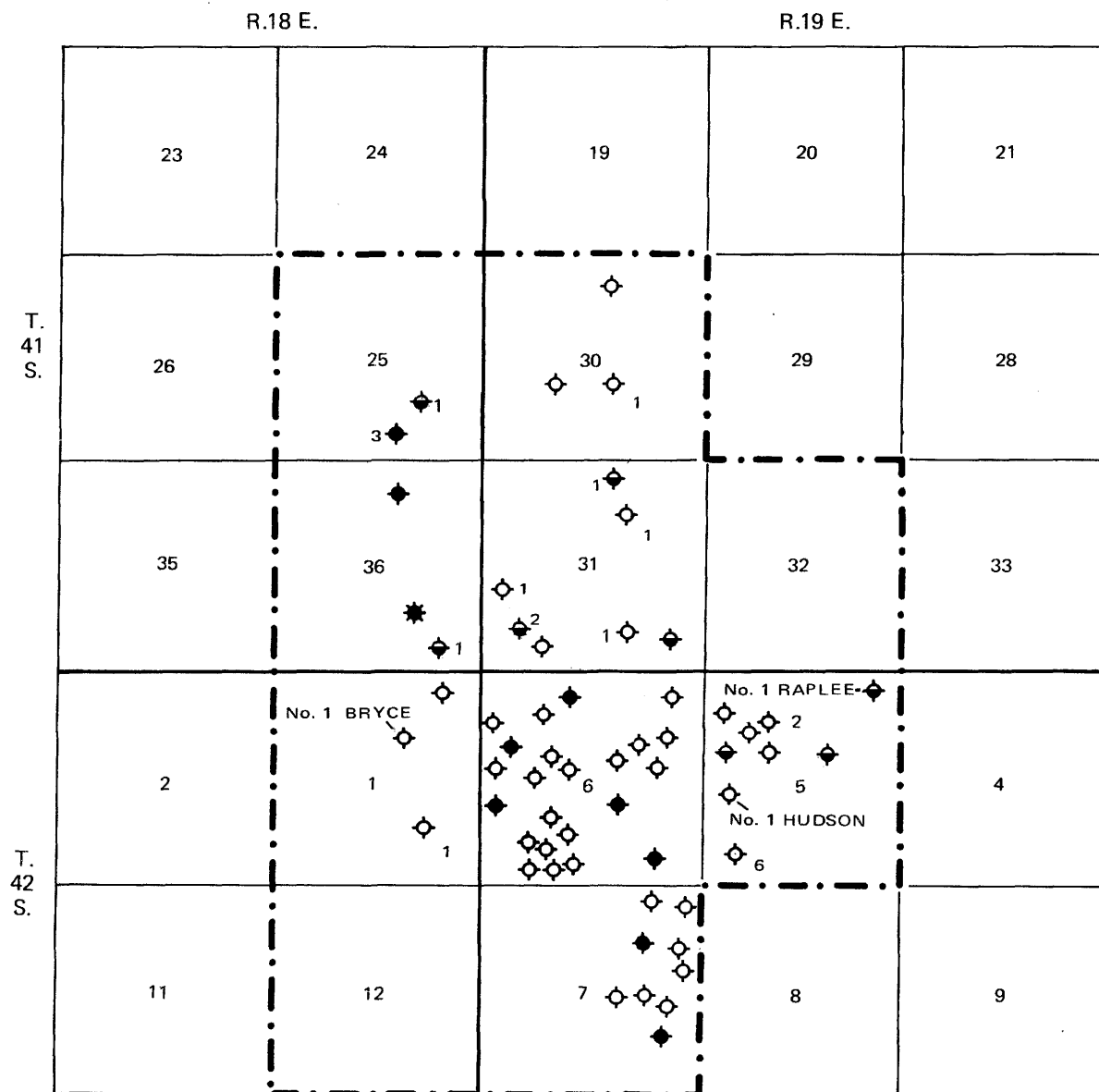
No. 2 Texaco, Navajo Ac No. 7, 4-41S-26E, completed March 1, 1965, sampled March 10, 1965, Ismay @ 5569', sample 9803, index 454

No. 3 Texaco, Navajo Ac No. 7, 4-41S-26E, completed March 1, 1965, sampled March 10, 1965, Ismay @ 5569', sample 9804, index 455

MEXICAN HAT FIELD,
SAN JUAN COUNTY

Area designation (latest): May 1959
Discovery year: 1908

First recorded production: 1948
Producing formation (s): Rico, Hermosa



Mexican Hat Field, San Juan County
(Scale 1" = 4000')

Mexican Hat Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1908	Oil prod. consumed locally			
1948	16000			
1952	599			
1954	1213			
1955	380			
1956	600			
1961	Source: I.A.P.G. O&G Fields Symposium 1961			
	54000			13
1970	Abnd.			
Cumulative production				
72792				

CRUDE OIL ANALYSIS

Gravity, specific	0.835
Gravity, °A.P.I.	38.0
Pour point, °F	Below 5
Sulfur, percent	.34
Color	—
Viscosity	@ 100° F, 43 sec.
Nitrogen, percent	—

Sample identification: SW 6-42S-19E Pennsylvanian Formation

MONUMENT BUTTE FIELD, DUCHESNE COUNTY

Area designation (latest): June 1966
 Discovery year: 1964
 First recorded production: 1964
 Producing formation (s): Green River
 Disposition of products sold: Permian Corp.,
 Pan American Pet. (AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1970	38688	18871	487	15
Cumulative production		463417	286704	4063

Year	Oil	Gas	Water	Prod. Wells
1964	48250	2000		5
1965	Includes: 5877 BO; for International State 1-16 22775 BO; for Shamrock Allen Fed. 3563 BO; for Union Castle Draw undes. in 1965			
	122113	23400		14
1966	89409	29352	511	16
1967	68125	85588	1308	16
1968	53512	68334	977	15
1969	43320	59159	780	16

CRUDE OIL ANALYSIS

Gravity, specific	0.867
Gravity, °A.P.I.	31.7
Pour point, °F	85
Sulfur, percent	.04
Color	Black
Viscosity	@ 100° F, 130 sec.; @ 130° F, 76 sec.
Nitrogen, percent	0.152
Sample identification: NW NW 5-9S-17E, Green River @ 4916-5216'	

MOON RIDGE FIELD, GRAND COUNTY

Area designation (latest): March 1963,
 unitized July 31, 1961
 Discovery year: December 18, 1962
 First recorded production: 1963
 Producing formation (s): Dakota-Cedar Mountain
 Disposition of products sold: Grand Valley Transmission
 Co.

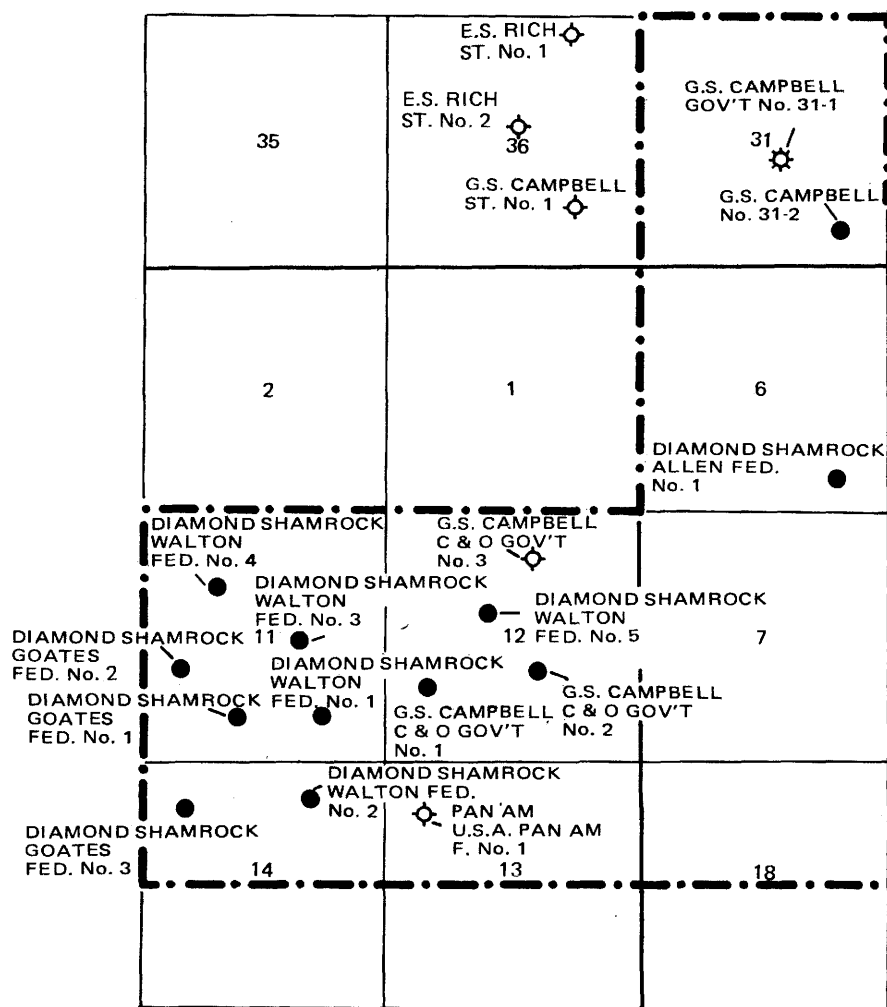
Year	Oil	Gas	Water	Prod. Wells
1962				
1963	Includes: Pac. Nat. Gas #31-15 unit; undes. in 1963			

Year	Oil	Gas	Water	Wells Prod.
		87000		1
1964	Shut in			
1965	Shut in			
1966		14259		1
1967		320777		1
1968		194055		1
1969		132371		1
1970		99430		1
Cumulative production		847892		

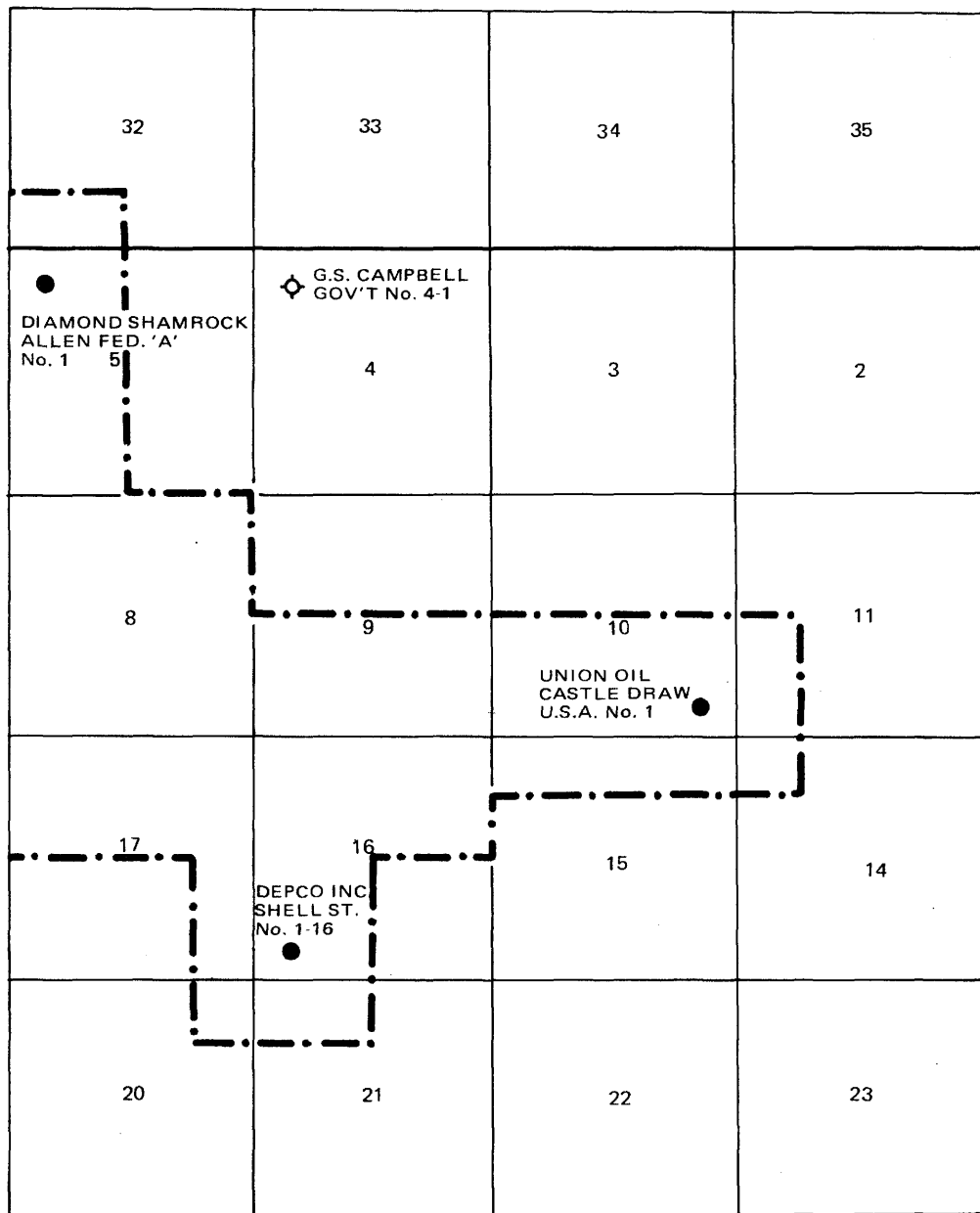
NINE MILE FIELD, CARBON COUNTY

Area designation (latest): January 1963,
 unitized April 24, 1963
 Discovery year: December 22, 1962

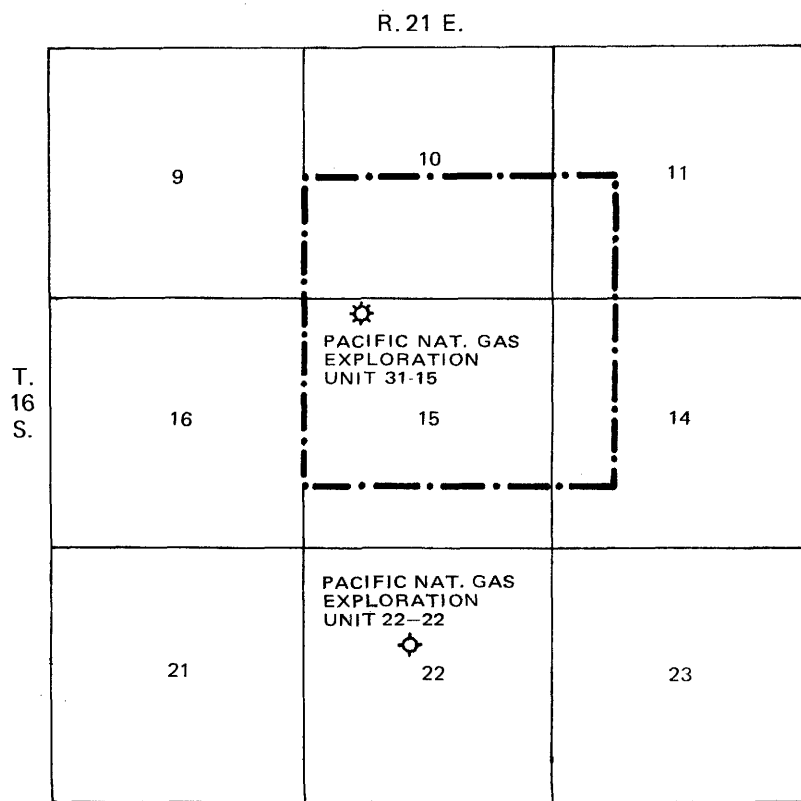
First recorded production: 1963
 Producing formation (s): Wasatch



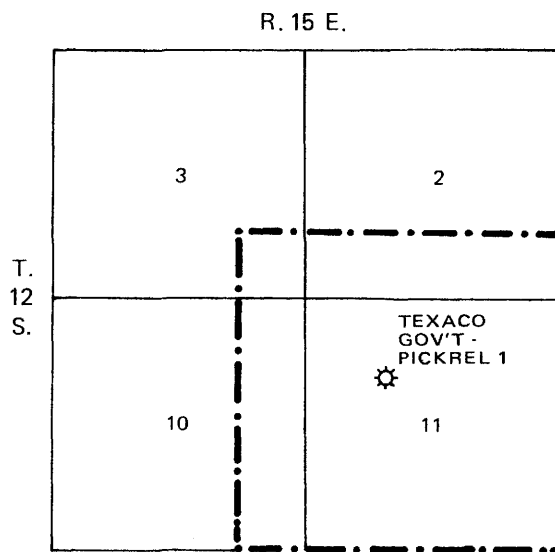
Monument Butte Field, Duchesne County
(Scale 1" = 4000')



Monument Butte Field (continued)



Moon Ridge Field, Grand County
(Scale 1" = 4000')



Nine Mile Field, Carbon County
(Scale 1" = 4000')

Nine Mile Field (continued)

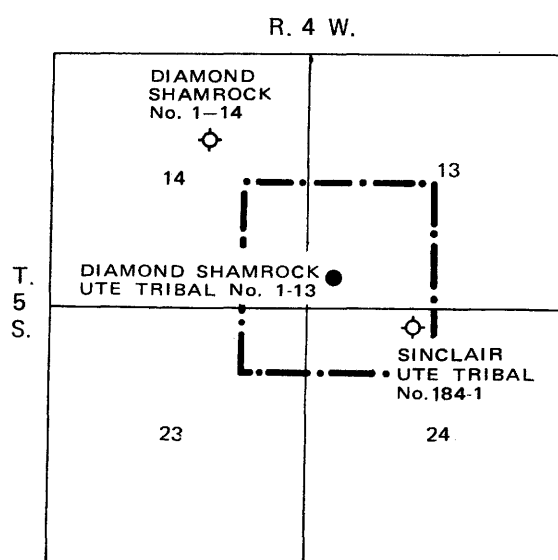
Year	Oil	Gas	Water	Prod. Wells
1962				
1963		28572		1
1964		37710		1
1965		31473		1

Year	Oil	Gas	Water	Prod. Wells
1966		36083		1
1967		29257		1
1968		31810		1
1969		26484		1
1970		23246		1
Cumulative production		244635		

NUTTER CANYON FIELD,
DUCHESNE COUNTY

Area designation (latest): November 1966
 Discovery year: July 22, 1966
 First recorded production: 1966
 Producing formation (s): Green River
 Disposition of products sold: Pan American Pet.
 (AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1966	8308	4723	145	1
1967	7550	12233	379	1
1968	6768	10963	399	1
1969	5356	6036	248	1
1970	4592	5116	69	1
Cumulative production		32574	39071	1240



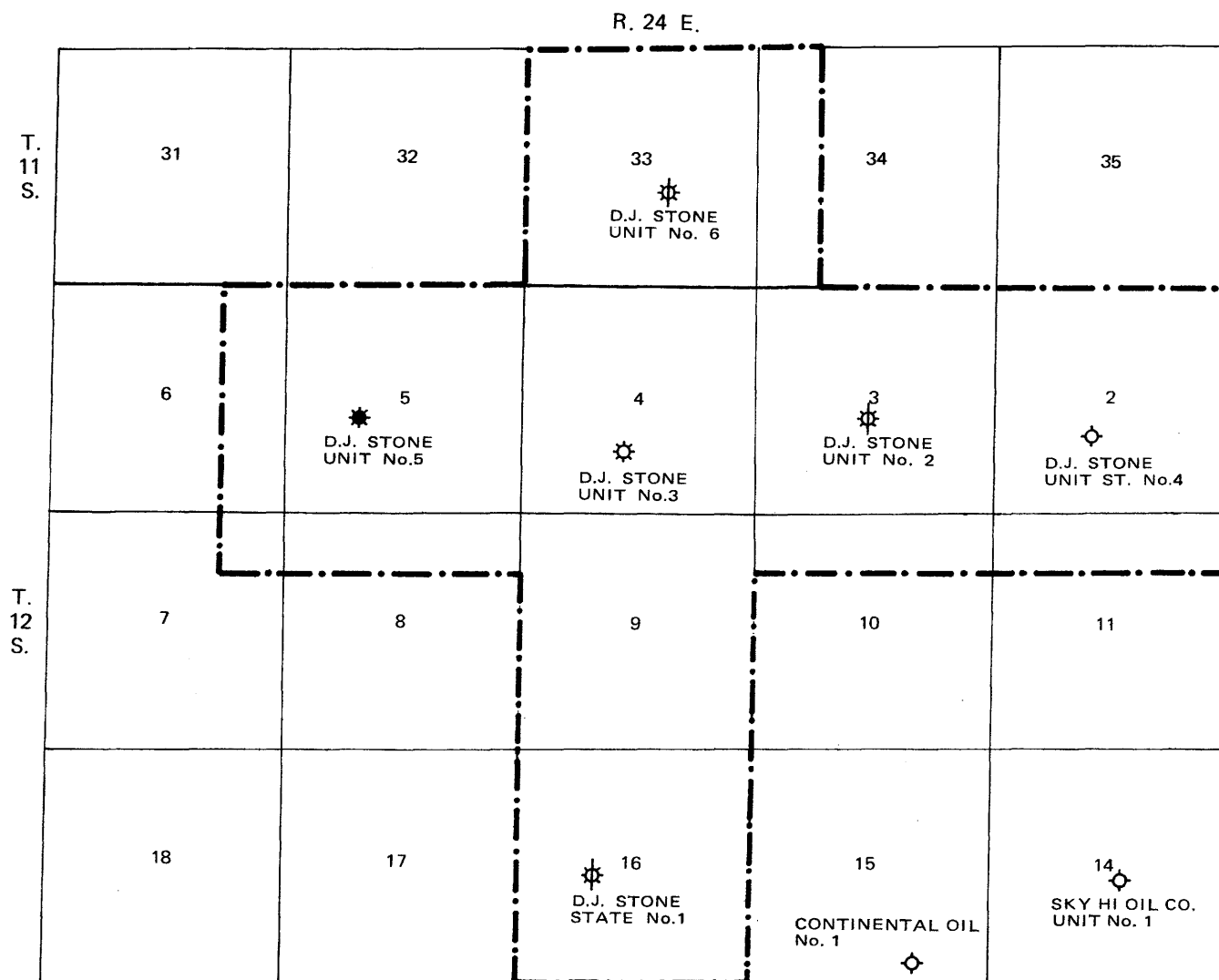
Nutter Canyon Field, Duchesne County
 (Scale 1" = 4000')

OIL SPRINGS FIELD,
UINTAH COUNTY

Area designation (latest): April 1965,
 unitized December 22, 1960
 Discovery year: May 5, 1963
 First recorded production: 1964
 Producing formation (s): Wasatch
 Disposition of products sold: Pan American Pet.
 (AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1963				

Year	Oil	Gas	Water	Prod. Wells
1964 D.J. Stone; unit undes. in 1964				
	6182	177346		5
1965	3802	233454		5
1966	1944	254978		5
1967	1663	164773		4
1968	1335	126114		2
1969	1168	143071		2
1970	—	140619		2
Cumulative production		16094	1240355	



Oil Springs Field, Uintah County
(Scale 1" = 4000')

OURAY FIELD
(See Bitter Creek Area)

OVERLOOK FIELD,
GRAND COUNTY

Area designation (latest): January 1969

Discovery year: August 2, 1968

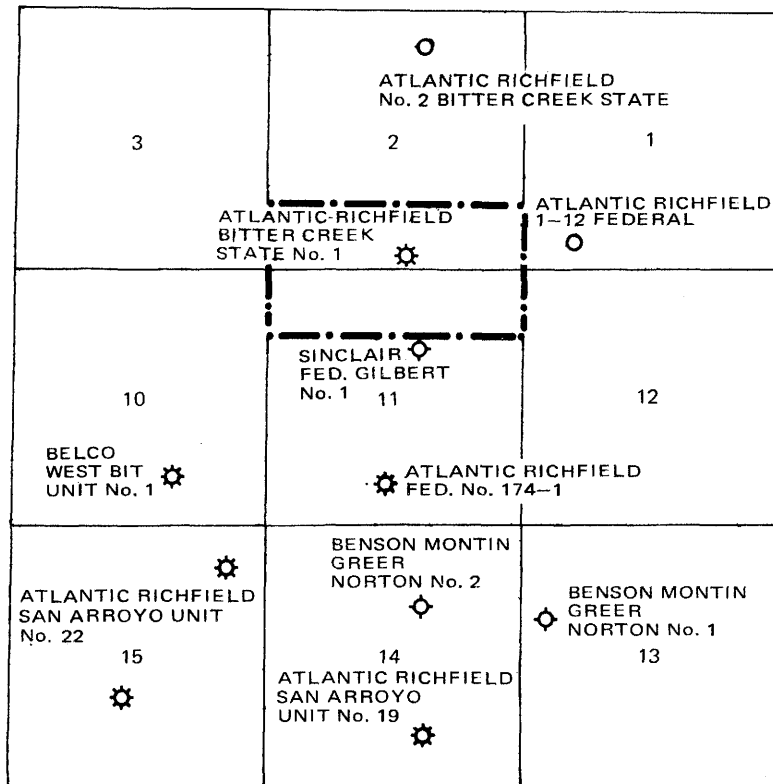
First recorded production: 1968

Producing formation (s): Dakota-Entrada

Disposition of products sold: Mesa Pipeline Co.

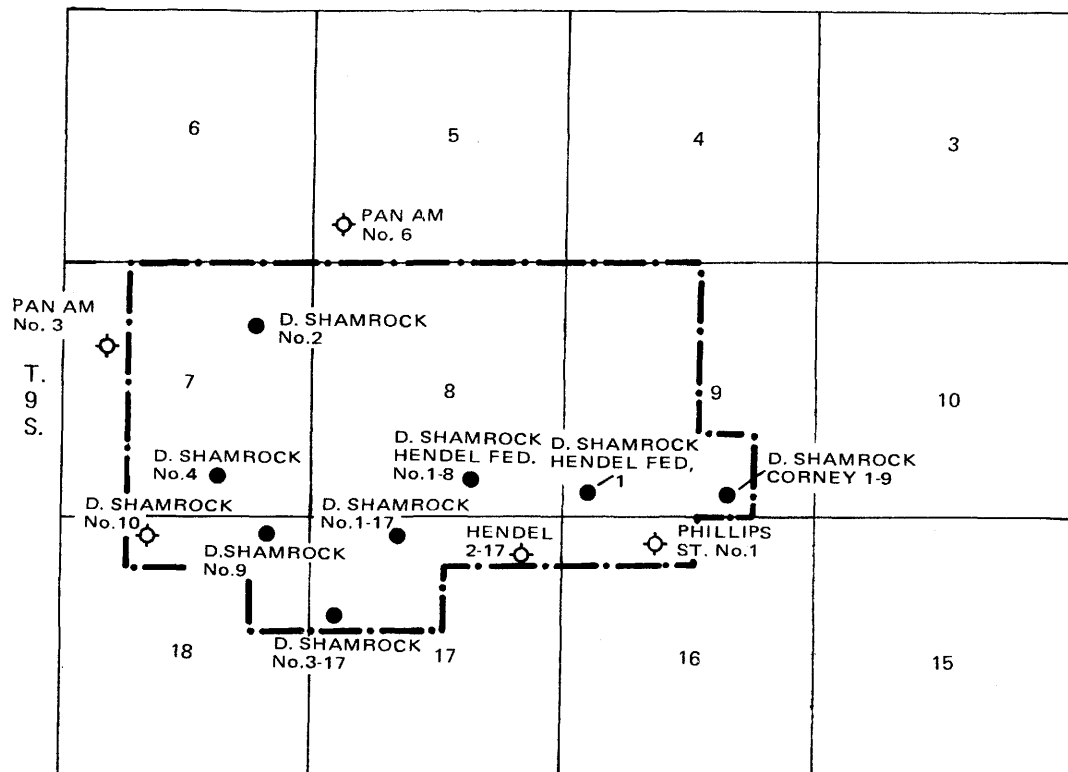
Year	Oil	Gas	Water	Prod. Wells
1968	Sinclair Bitter Creek-State			
		67997		1
1969		73458		1
1970		114151		1
Cumulative production		255606		

T.
16
S.



Overlook Field, Grand County (Scale 1" = 4000')

R. 19 E.



Pariette Bench Field, Uintah County (Scale 1" = 4000')

PARIETTE BENCH FIELD, UINTAH COUNTY

Area designation (latest): June 1970,
unitized October 5, 1960

Discovery year: July 14, 1962

First recorded production: 1962

Producing formation (s): Green River

Disposition of products sold: Pan American Pet.
(AMOCO)

Year	Oil	Gas	Water	Prod. Wells
1962	23100		46	1
1963	35422	24957	6254	2
1964	21730	31339	673	2
1965 Includes: 852 BO; 331 BW; for Pure Oil unit; undes. in 1965				
	18656	24735	969	3
1966	34152	27634	2678	4
1967	21464	31925	5148	4

Year	Oil	Gas	Water	Prod. Wells
1968	16392	31606	1489	3
1969	27240	9720	4119	5
1970	55207	19448	17544	8
Cumulative production				
	253363	201364	38920	

CRUDE OIL ANALYSIS

Gravity, specific	0.919
Gravity, °A.P.I.	22.5
Pour point, °F	90
Sulfur, percent	.22
Color	Brownish black
Viscosity	@ 100° F, —; @ 130° F, 185 sec.
Nitrogen, percent	0.254
Sample identification: SW SE 7-9S-19E, Green River @ 4851-4920'	

PEAR PARK FIELD, GRAND COUNTY

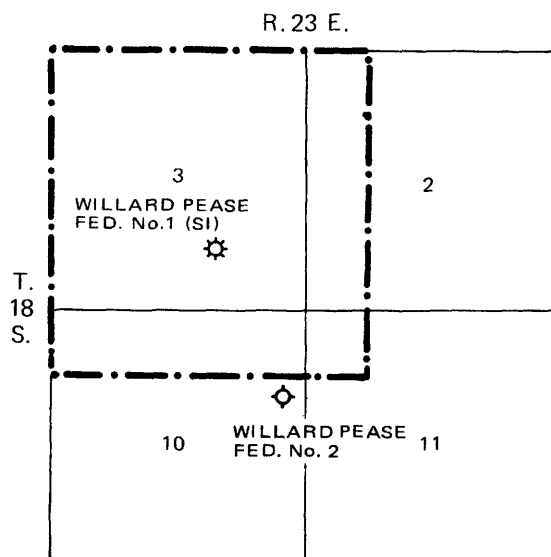
Area designation (latest): November 1962

Discovery year: December 18, 1961

First recorded production: Shut in

Producing formation (s): Dakota-Cedar Mountain

Year	Oil	Gas	Water	Prod. Wells
1962-1970	Shut in			
Cumulative production				
	Shut in			



Pear Park Field, Grand County
(Scale 1" = 4000')

PETERS POINT FIELD, CARBON COUNTY

Area designation (latest): May 1969,
unitized August 6, 1952
Discovery year: June 30, 1953
First recorded production: 1953
Producing formation (s): Green River, Wasatch

Year	Oil	Gas	Water	Prod. Wells
1953		4235		
1954		24000		

Year	Oil	Gas	Water	Prod. Wells
1955-1961	Shut in			
1962	2064			
1963	4436			4
1964	3040			4
1965	1577			
1966	2357			
1967	Shut in			
1970	Shut in			
Cumulative production				
	13474	28235		

PLEASANT VALLEY FIELD, DUCHESNE COUNTY

Area designation (latest): May 1959
Discovery year: May 28, 1952
First recorded production: 1952
Producing formation (s): Green River, Wasatch
Disposition of products sold: Cowboy Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1952	599			
1953	Shut in			

Year	Oil	Gas	Water	Prod. Wells
1954	1213			
1955	380			
1955-1965	Shut in			
1966	2081			1
1967	1620			1
1968	Shut in			
1969	Shut in			
1970	Shut in			
Cumulative production				
	5893			

POWDER SPRINGS FIELD, UINTAH COUNTY

Area designation (latest): February 1966
Discovery year: March 15, 1965
First recorded production: 1965
Producing formation (s): Green River
Disposition of products sold: Mountain Fuel Supply

Year	Oil	Gas	Water	Prod. Wells
1965		110138		2

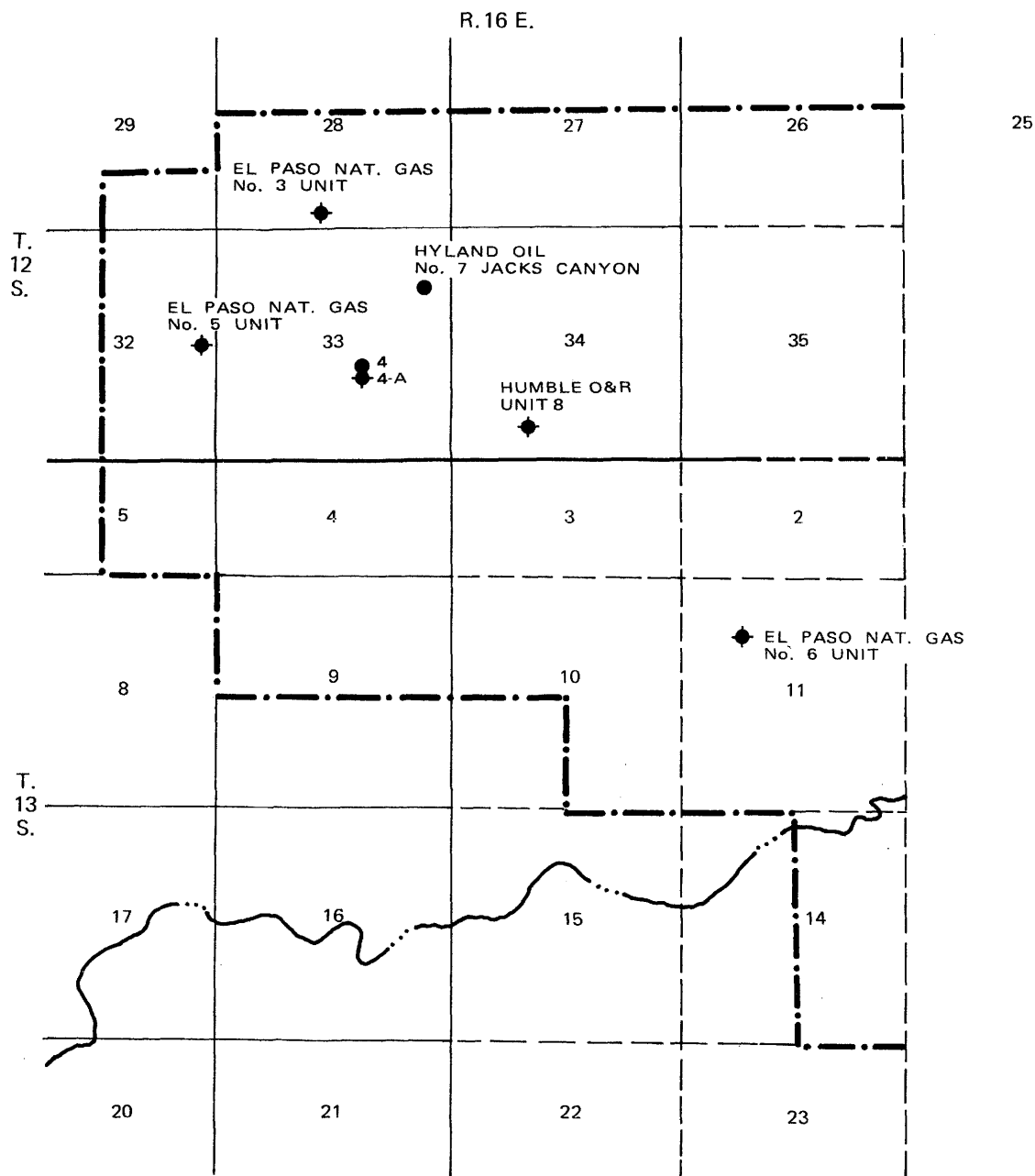
Year	Oil	Gas	Water	Prod. Wells
1966		889625		2
1967		876790		2
1968		571243		2
1969		584705		2
1970		680121		2
Cumulative production				
		3712622		

RABBIT EARS FIELD, SAN JUAN COUNTY

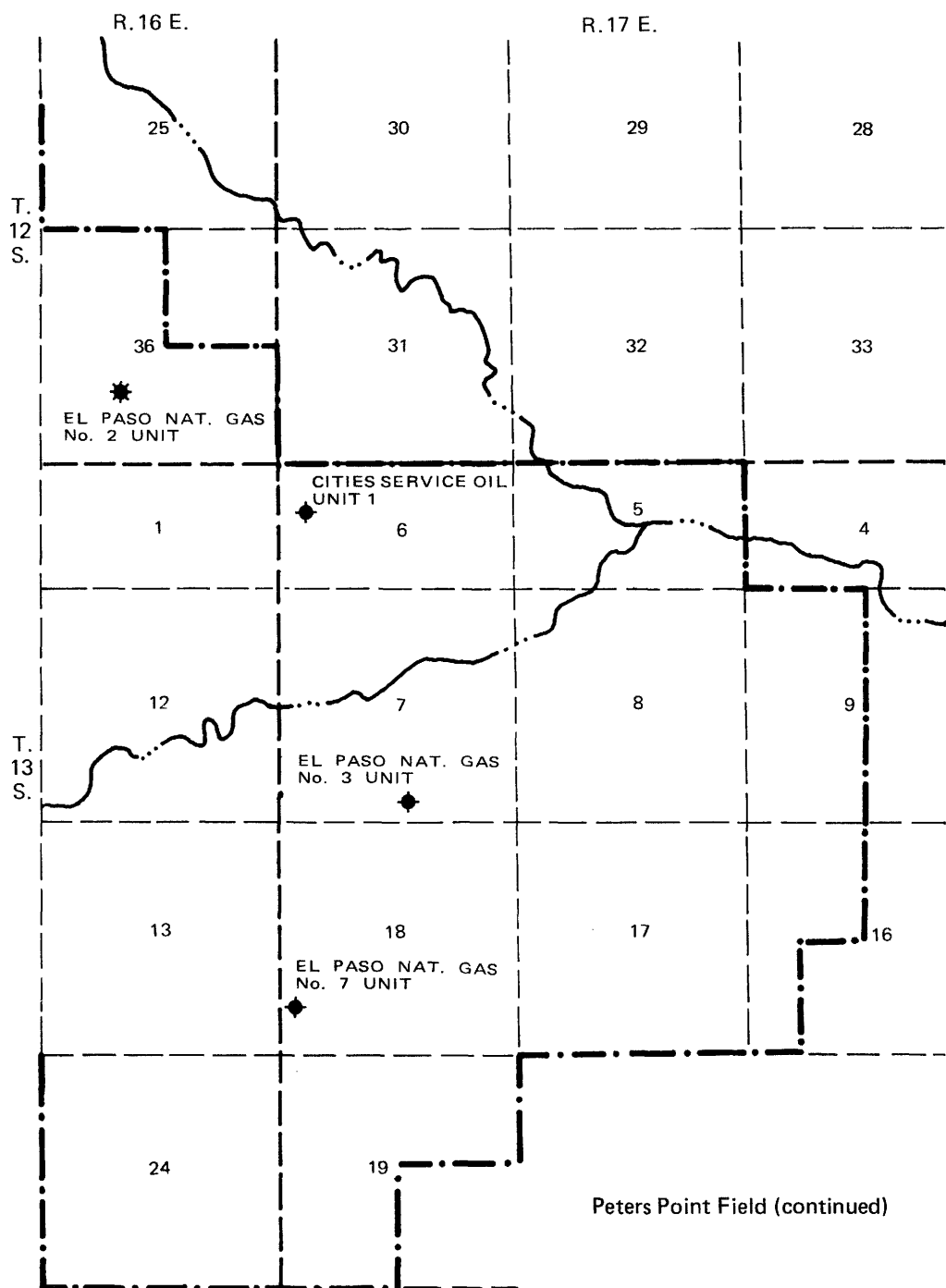
Area designation (latest): January 1968
Discovery year: November 14, 1967
First recorded production: 1967

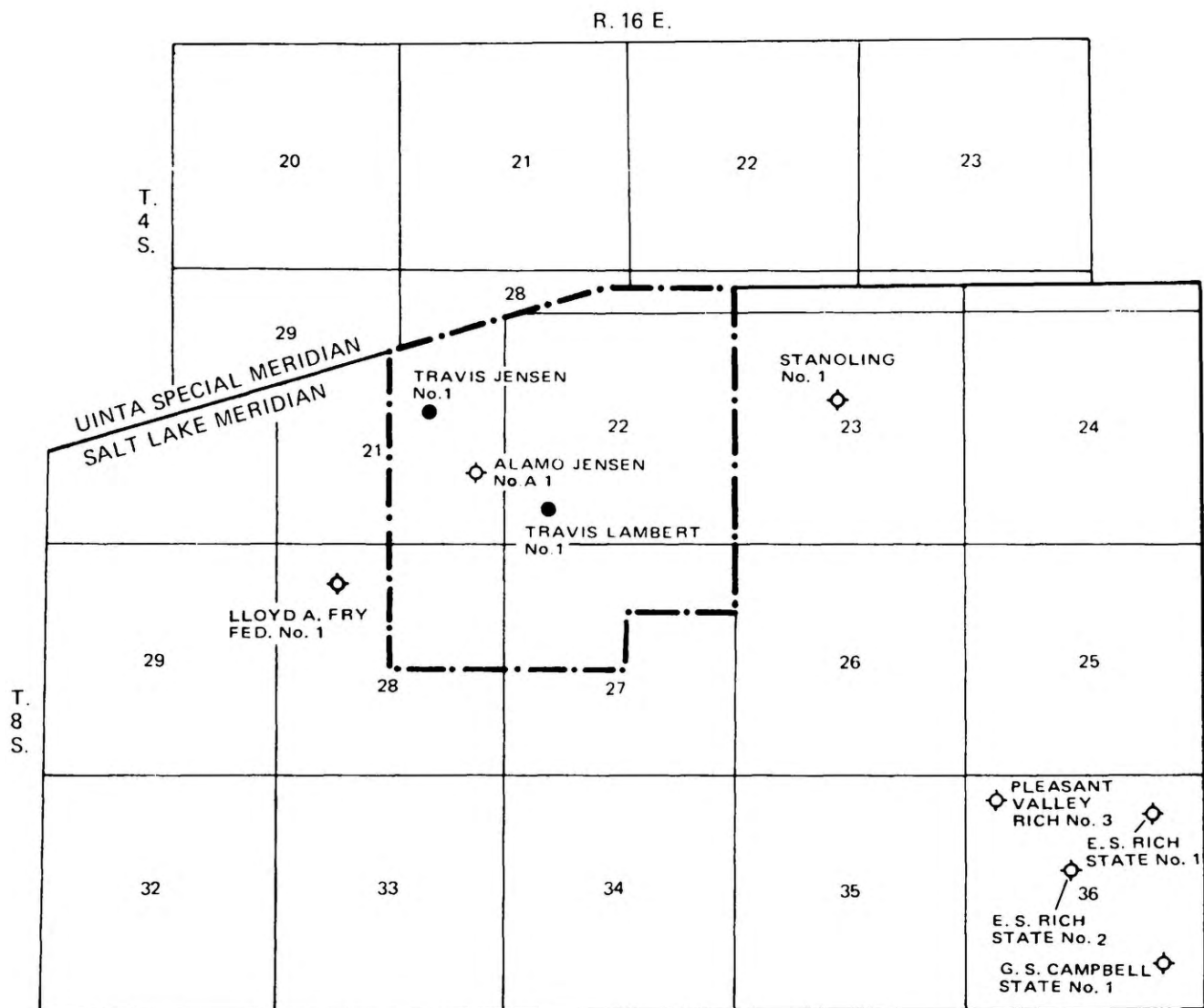
Producing formation (s): Ismay

Disposition of products sold: Permian Corp.

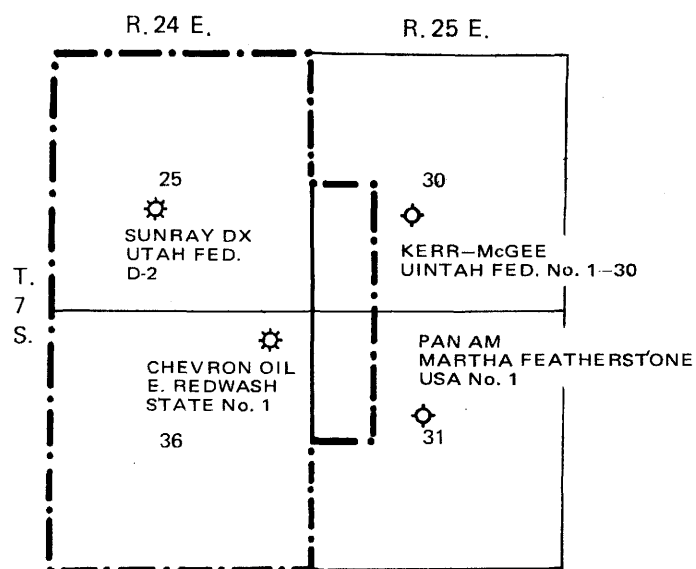


Peters Point Field, Carbon County
(Scale 1" = 4000')

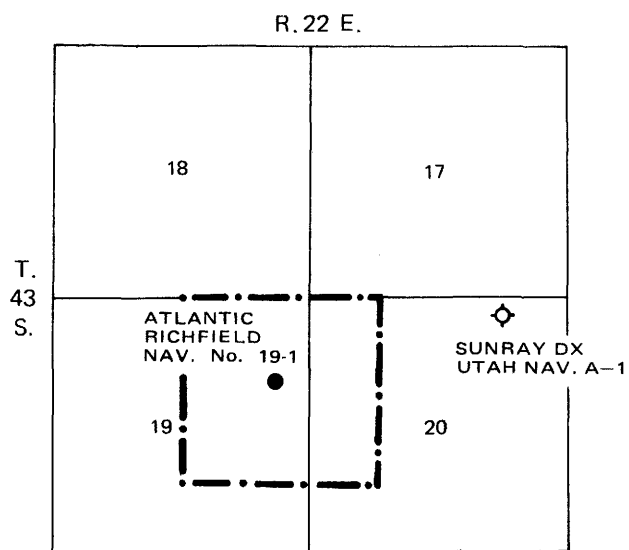




Pleasant Valley Field, Duchesne County
(Scale 1" = 4000')



Powder Springs Field, Uintah County
(Scale 1" = 4000')



Rabbit Ears Field, San Juan County
(Scale 1" = 4000')

Rabbit Ears Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1967	201			1
1968	7986	28381	7551	1

Year	Oil	Gas	Water	Prod. Wells
1969	9742	78	51011	1
1970	5903	124	39986	1
Cumulative production				
	23836	28583	98548	

RANDLETT FIELD, UINTAH COUNTY

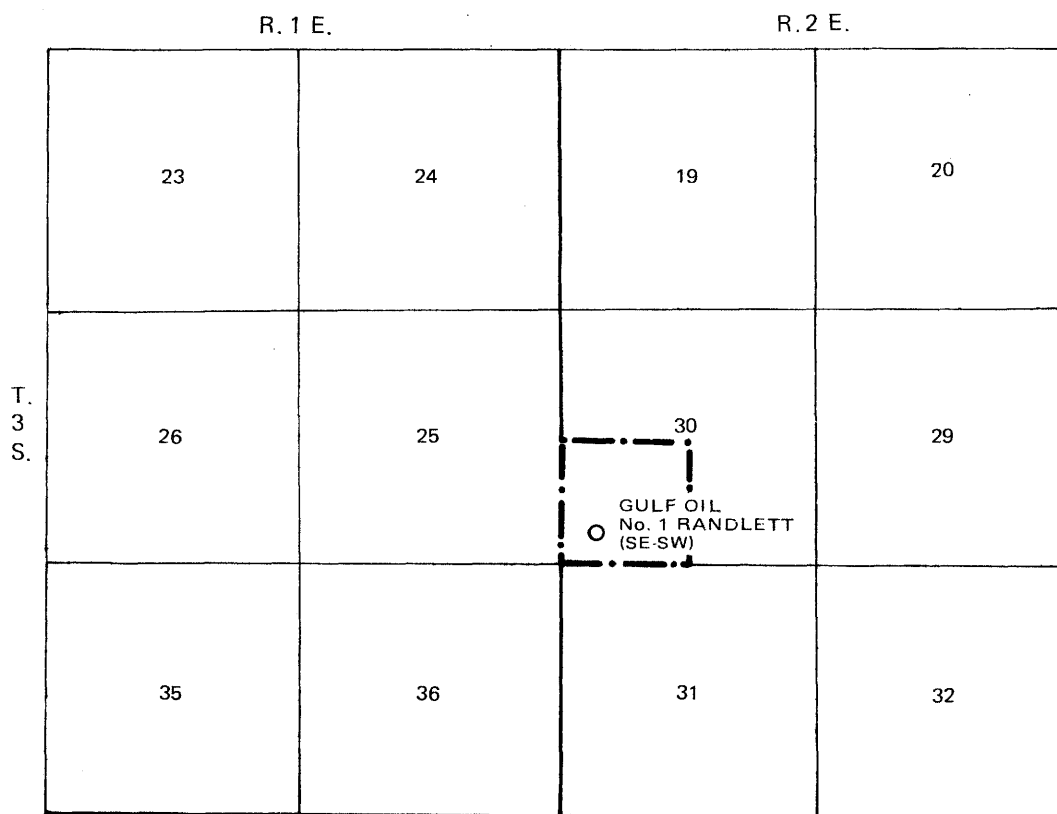
Area designation (latest): March 1971

Discovery year: 1970

First recorded production: December 1970

Producing formation (s): Green River

Year	Oil	Gas	Water	Prod. Wells
1970	1803		187	1
Cumulative production				
	1803		187	



Randlett Field, Uintah County
(Scale 1" = 4000')

RATHERFORD
(See Greater Aneth Area)

RECAPTURE CREEK FIELD, SAN JUAN COUNTY

Area designation (latest): April 1965,
unitized May 16, 1956

Discovery year: 1956

First recorded production: 1958

Producing formation (s): Ismay, Desert Creek

Disposition of products sold: oil to Caribou Four
Corners Oil, Inc., Shell Oil Co.; gas to El Paso
Natural Gas Co.

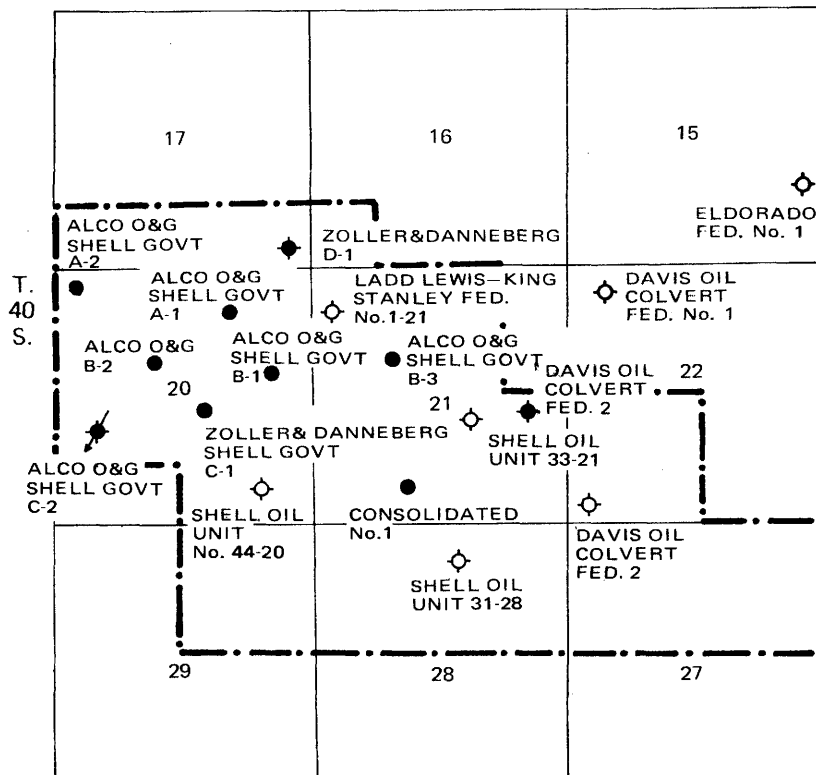
Year	Oil	Gas	Water	Prod. Wells
1956				
1958	54866	45501	107	
1959	98531	116346	216	
1960	69437	116488	29	1
1961	58553	112386	88	2
1962	97322	158671	356	4
1963 Includes: 1396 BO; for Alco O&G B-3 Shell-Gov't; undes. in 1963				
199420	300884	8542	5	
1964 Includes: 16464 BO; for Alco O&G B-3 Shell-Gov't; undes. in 1964				

Year	Oil	Gas	Water	Prod. Wells
	126749	196561	10228	6
1965	93520	156264	8687	5
1966	78456	136667	11060	5
1967	68835	112503	15294	5
1968	90386	138942	31301	7
1969	79965	114714	38968	7
1970	86868	115229	31778	7
Cumulative production				
	1202908	1821156	156654	

CRUDE OIL ANALYSIS

Gravity, specific	0.816
Gravity, °A.P.I.	41.9
Pour point, °F	20
Sulfur, percent	.10
Color	Green
Viscosity	@ 100° F, 35 sec.
Nitrogen, percent	0.031
Sample identification: SE SW 21-40S-23E, Upper Hermosa-Desert Creek @ 5354-5375'	

R. 23 E.



Recapture Creek Field, San Juan County
(Scale 1" = 4000')

(RED WASH AREA, GREATER)
RED WASH FIELD,
UINTAH COUNTY

Area designation (latest): August 1967,
unitized October 31, 1950

Discovery year: 1951

First recorded production: 1951

Producing formation (s): Mesaverde, Green River

Disposition of products sold: oil to Phillips Petroleum,
Chevron Oil Co.; gas to El Paso Natural Gas Co.,
Mountain Fuel Supply, Chevron Pipeline; natural
gas to Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1951	96128	140841	7	
1952	466839	272437	6501	
1953	591433	363091	10605	
1954	594235	534458	13699	
1955	803205	869579	18043	
1956	798113	925788	83727	
1957	1780618	3225642	235324	
1958	2685808	3865968	442161	
1959	3508352	3199945	735772	100
1960	3780222	6777776	1531566	120
1961	3778931	6992038	1229744	148
1962	Includes: 9151 BO; 16788 MCF; 13575 BW for Texaco Inc. #2 Govt-Prince; undes. in 1962			
	3783989	12912301	1982466	163
1963	Includes: 1287 BO; 2592 MCF; 2114 BW for Texaco Inc. #2 Govt-Prince; undes. in 1963			
	3784326	15912616	2528531	171
1964	3856942	19216417	3843200	173
1965	3754585	20777107	4213952	181
1966	3413276	21009166	3833639	178
1967	3245252	16965239	4129601	178
1968	2821213	18804603	5055907	167
1969	2476465	13429271	5168487	179
1970	2288751	10556145	5640665	178
Cumulative production				
	48308683	176750428	40703597	

CRUDE OIL ANALYSIS

Gravity, specific	0.904
Gravity, °A.P.I.	25.0
Pour point, °F	100
Sulfur, percent	0.31
Color	Brownish black

Viscosity @ 130° F, 164 sec.; @ 180°
F, 78 sec.

Nitrogen, percent 0.147

Sample identification: NE SE 21-7S-24E, Green
River @ 5246-5252'

Gravity, specific 0.765

Gravity, °A.P.I. 53.5

Pour point, °F Below 5

Sulfur, percent .03

Color NPA 2½

Viscosity @ 100° F, less than 32 sec.

Nitrogen, percent 0.007

Sample identification: NE NE 8-8S-24E, Mesaverde
@ 9159-9410'

GAS ANALYSIS

Components: (nearest 0.1%)

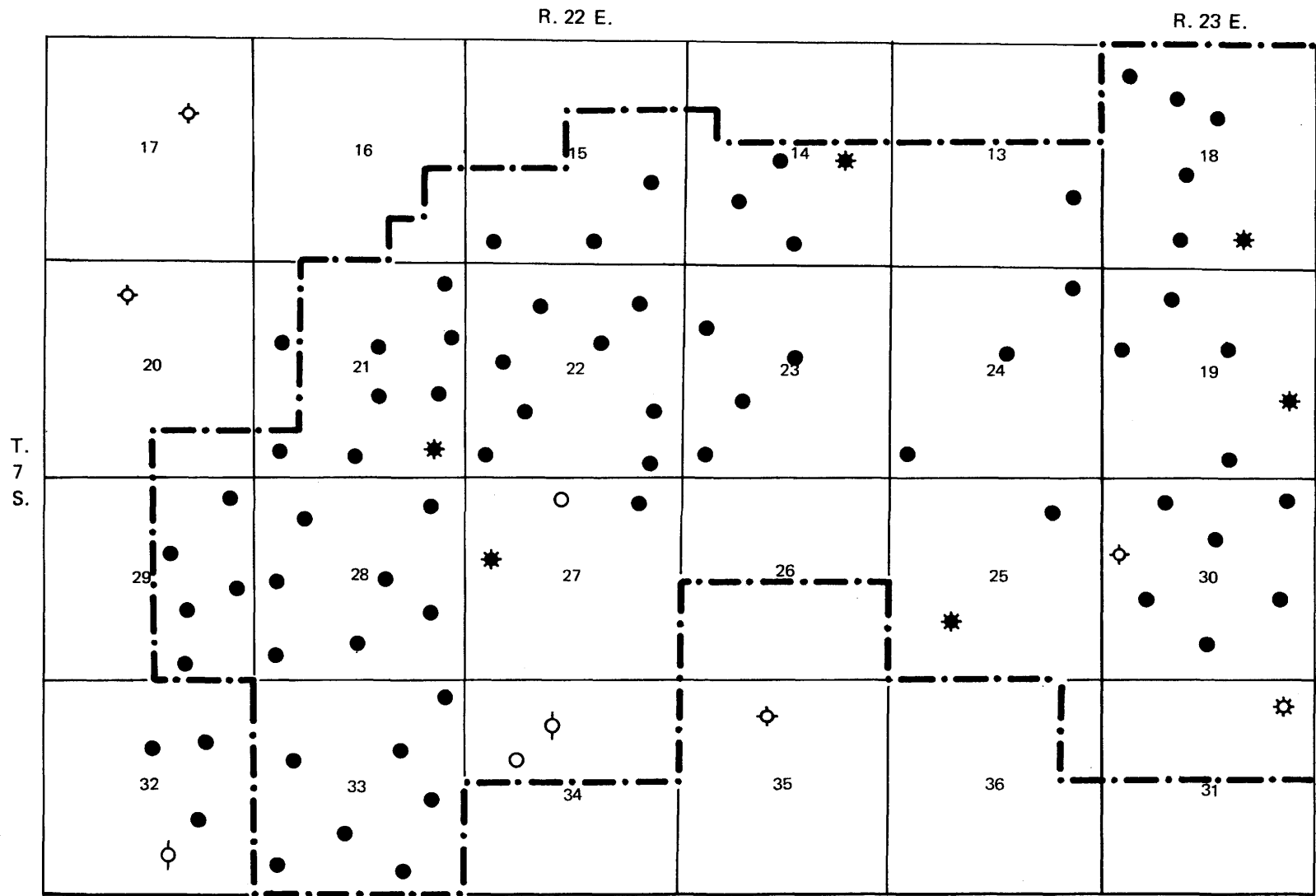
	No. 1	No. 2	No. 3
Methane	98.1	90.5	99.3
Ethane	0.8	4.5	0.1
Higher fractions		3.3	0.1
Hydrogen sulfide	0.0	0.0	0.0
Carbon dioxide	0.8	1.2	0.1
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	trace	trace
BTU value/ft ³ (standard T&P)	1008	1103	1010

Sample identification:

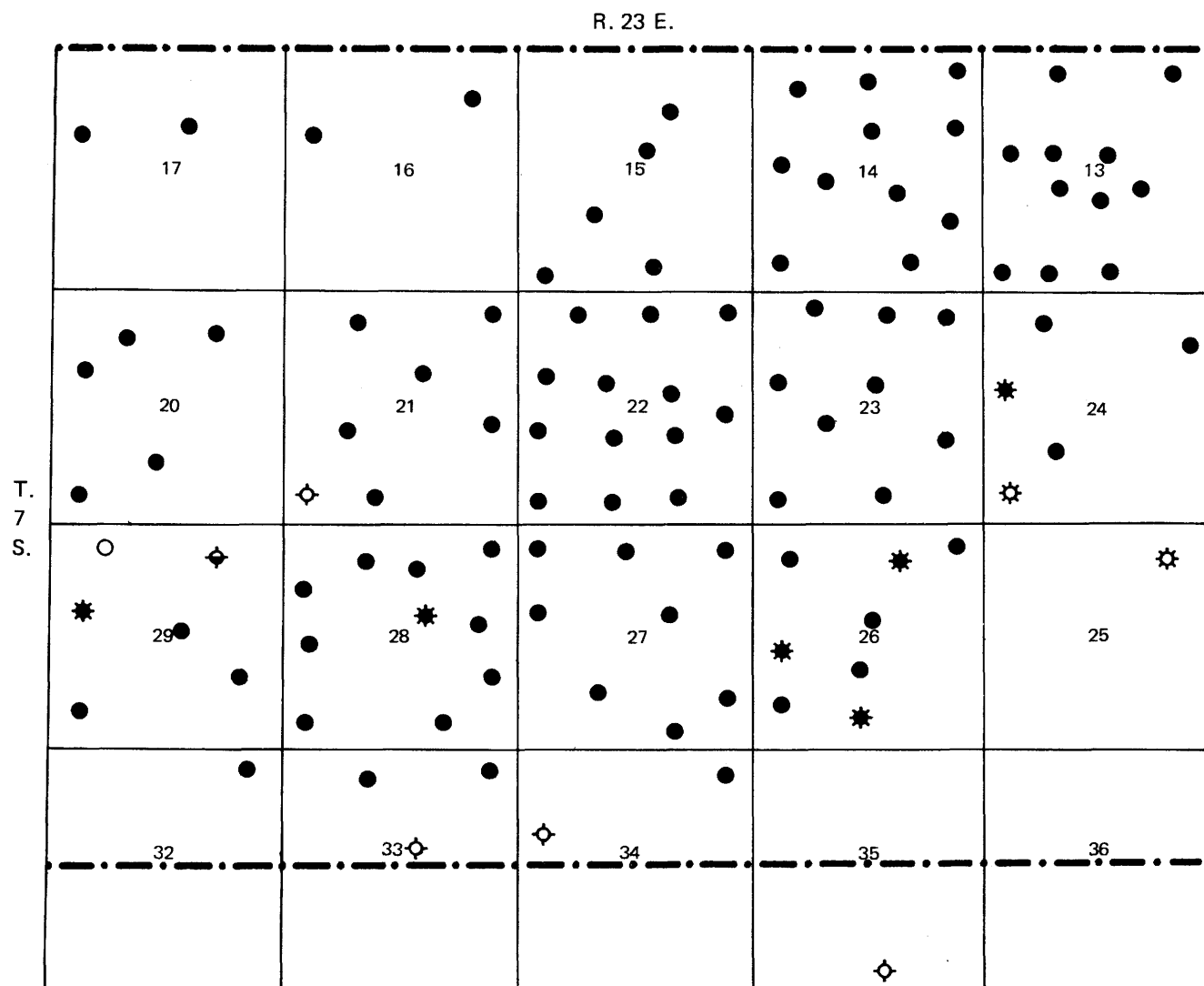
No. 1 Chevron Oil Co. Unit No. 208, 32-22C, com-
pleted August 31, 1965, sampled May 18,
1966, Green River @ 5010', sample 10572,
index 326

No. 2 Chevron Oil Unit No. 212, 8-8S-24E, com-
pleted June 1, 1966, sampled February 23,
1967, Mesaverde @ 9159', sample 10878,
index 403

No. 3 Texaco Inc. Government F. S. Prince No. 1,
10-7S-24E, completed July 2, 1960, sam-
pled November 13, 1961, Green River @
5322', sample 8308, index 316

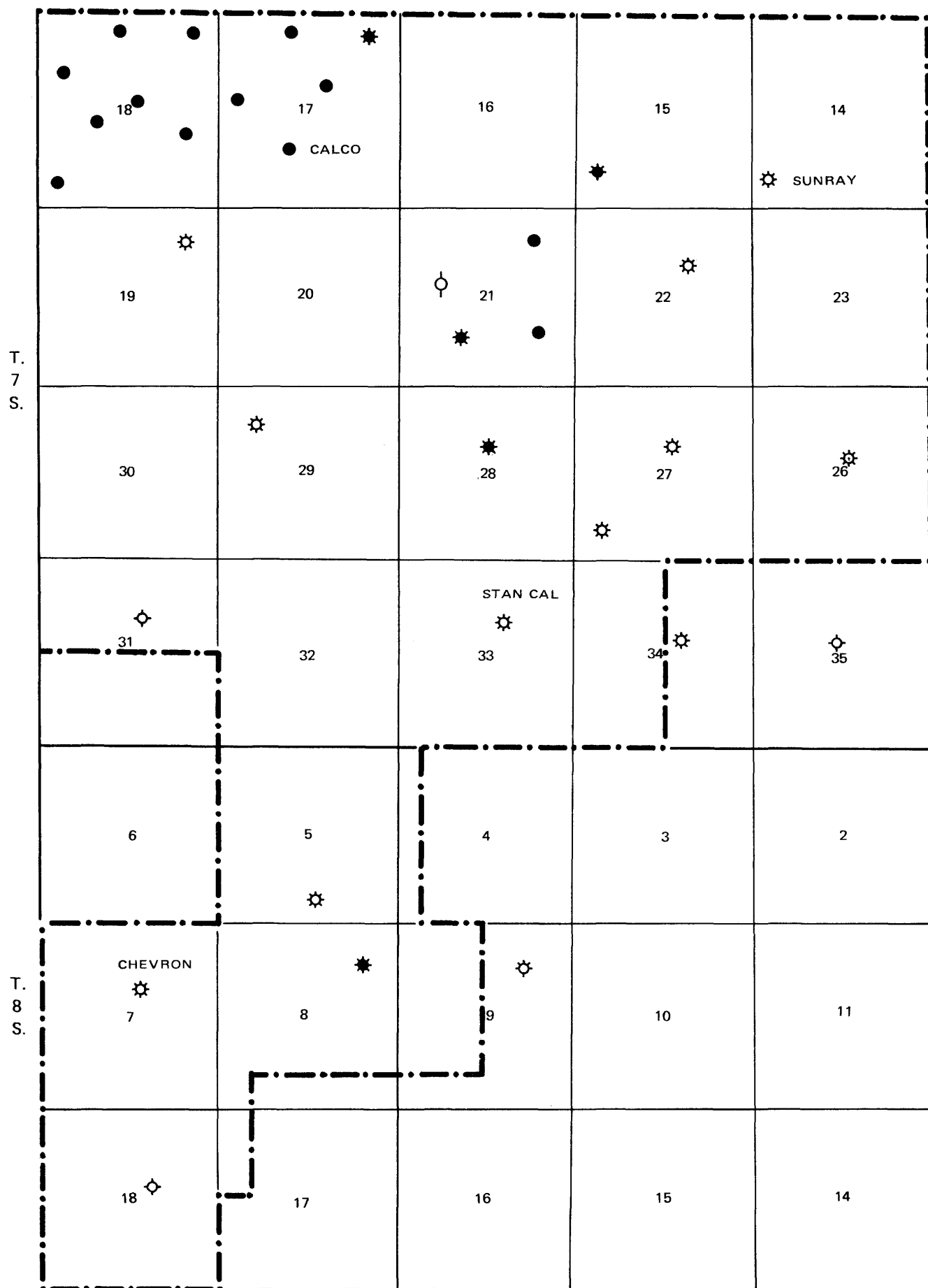


Greater Red Wash Area: Red Wash Field, Uintah County
(Scale 1" = 4000')



Greater Red Wash Area: Red Wash Field (continued)

R. 24 E.

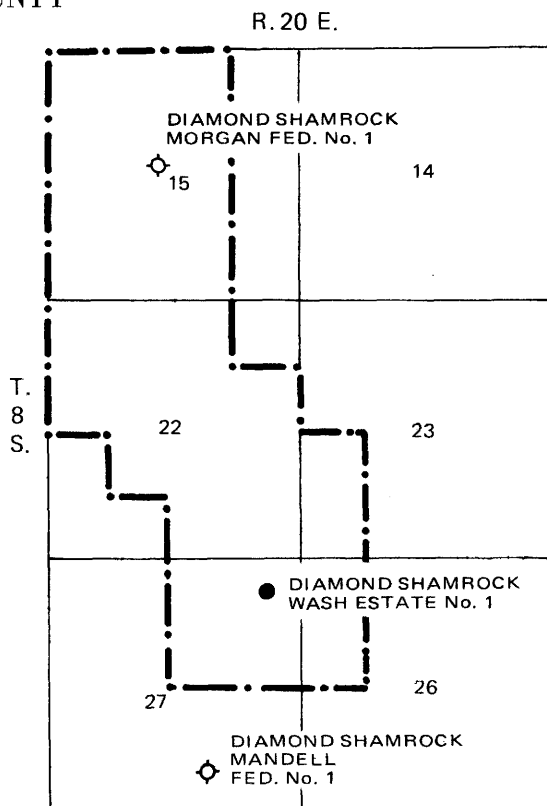


Greater Red Wash Area: Red Wash Field (continued)

(RED WASH AREA, GREATER)
REFUGE FIELD,
UINTAH COUNTY

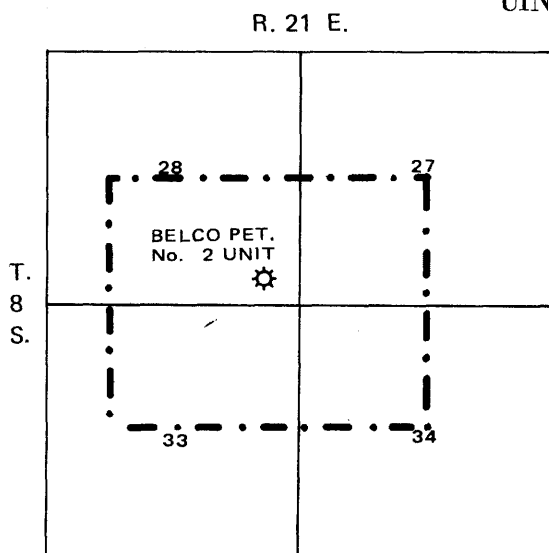
Area designation (latest): December 1965
Discovery year: March 10, 1964
First recorded production: 1966
Producing formation (s): Green River
Disposition of products sold: Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1964	4160			
1965	2212			
1966	2101	1295	227	1
1967	1354	3591	532	1
1968	1041	2979	271	1
1969	673	1681	336	1
1970	833	385	223	1
Cumulative production				
	12374	9931	1589	



Greater Red Wash Area: Refuge Field, Uintah County (Scale 1" = 4000')

(RED WASH AREA, GREATER)
STAGECOACH FIELD,
UINTAH COUNTY



Greater Red Wash Area: Stagecoach Field, Uintah County (Scale 1" = 4000')

Area designation (latest): April 1967,
unitized September 15, 1960
Discovery year: 1960
First recorded production: 1962
Producing formation (s): Wasatch
Disposition of products sold: gas to Mountain Fuel
Supply, Warren Oil Co.; oil to Chevron Co.

Year	Oil	Gas	Water	Prod. Wells
1960	Shut in			
1961	Shut in			
1962	Belco Stagecoach unit; undes. in 1962			
	886	321174		3
1963	1187	455196		5
1964	741	271983		5
1965	280	159340		3

Greater Red Wash Area: Stagecoach Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1966	Includes: Belco 10-23, 5551 BO; 2908 MCF; 524 BW; undes. in 1966			
	7887	220842	541	2
1967	95	174815		4

Year	Oil	Gas	Water	Prod. Wells
1968	94	165732		4
1969	41	172523		4
1970	200	147218		4
Cumulative production				
	11411	2078823	54	

(RED WASH AREA, GREATER)
WALKER HOLLOW FIELD,
UINTAH COUNTY

Area designation (latest): June 1969,
unitized February 11, 1953

Discovery year: 1953

First recorded production: 1953

Producing formation (s): Green River

Disposition of products sold: oil to Pan American
Pet. (AMOCO), Humble O & G; gas to El Paso
Natural Gas Co.

Year	Oil	Gas	Water	Prod. Wells
1953	394		4	
1954	6321		287	
1955	6735		277	
1956	9565		507	
1957	8592		913	
1958	327025		4215	
1959	348375	237059	53951	12
1960	420178	536859	70477	12
1961	350303	542351	79160	18
1962	487114	904548	125778	24
1963	Includes: 9425 BO; 6259 MCF; 377 BW for Pan AM USA Broadhurst; undes. in 1963			
	535286	1498235	136237	27
1964	Includes: 137113 BO; 103105 MCF; 163057 BW Pan Am USA Broadhurst; undes. in 1964			

Year	Oil	Gas	Water	Prod. Wells
	531625	1353226	376751	31
1965	525596	2372255	246100	31
1966	Includes: 429889 MCF for Texaco # 1 Prince			
	370260	2139997	201335	29
1967	401428	1768562	234547	26
1968	494991	809250	282545	35
1969	533367	2043061	369517	33
1970	519534	1705790	436141	27
Cumulative production				
	5877689	15911193	2618742	

CRUDE OIL ANALYSIS

Gravity, specific	0.909
Gravity, °A.P.I.	24.2
Pour point, °F	60
Sulfur, percent	.11
Color	Brownish black
Viscosity	@ 100° F, 360 sec.; @ 130° F, 170 sec.
Nitrogen, percent	0.255
Sample identification: SW SW 8-7S-24E, Green River @ 5520-5626'	

(RED WASH AREA, GREATER)
WHITE RIVER FIELD,
UINTAH COUNTY

Area designation (latest): January 1965,
unitized February 26, 1957

Discovery year: 1961

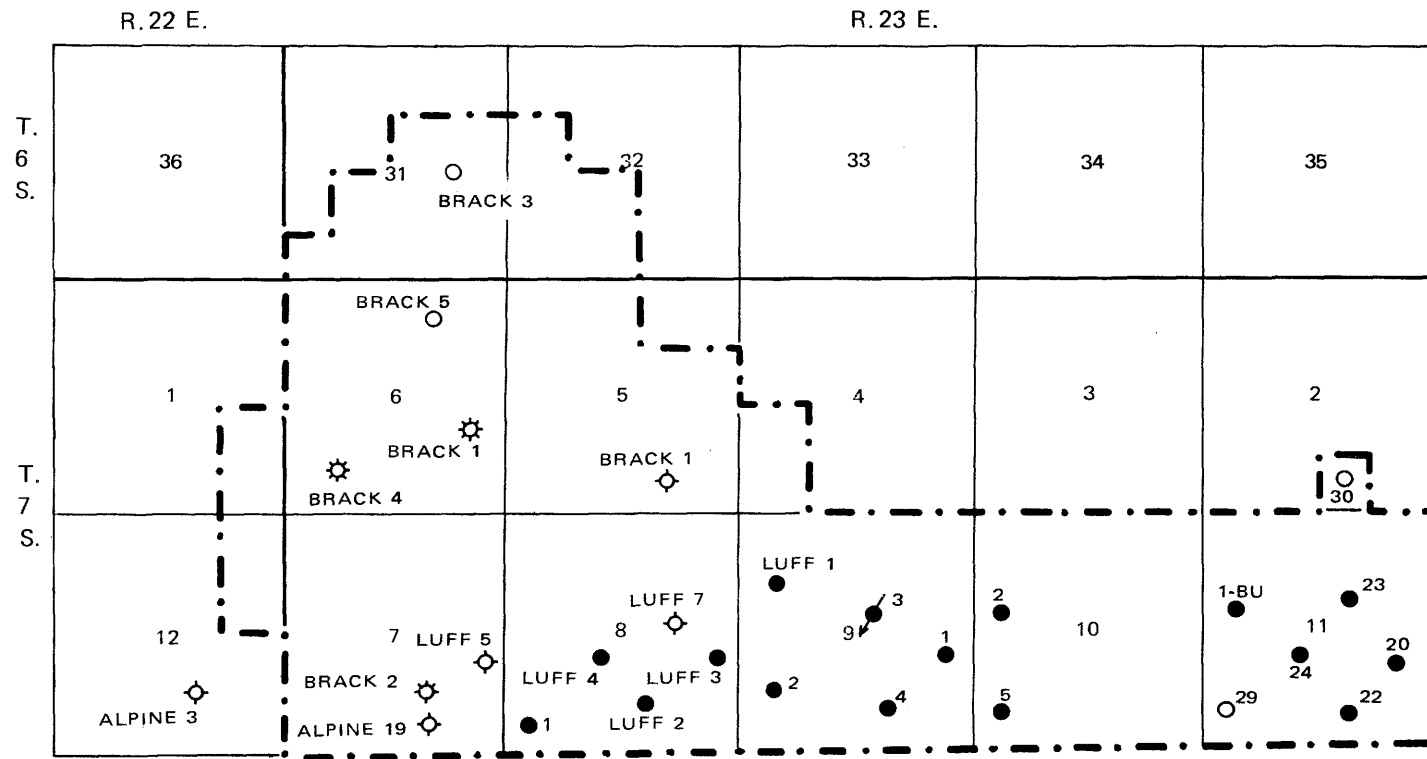
First recorded production: 1962

Producing formation (s): Green River

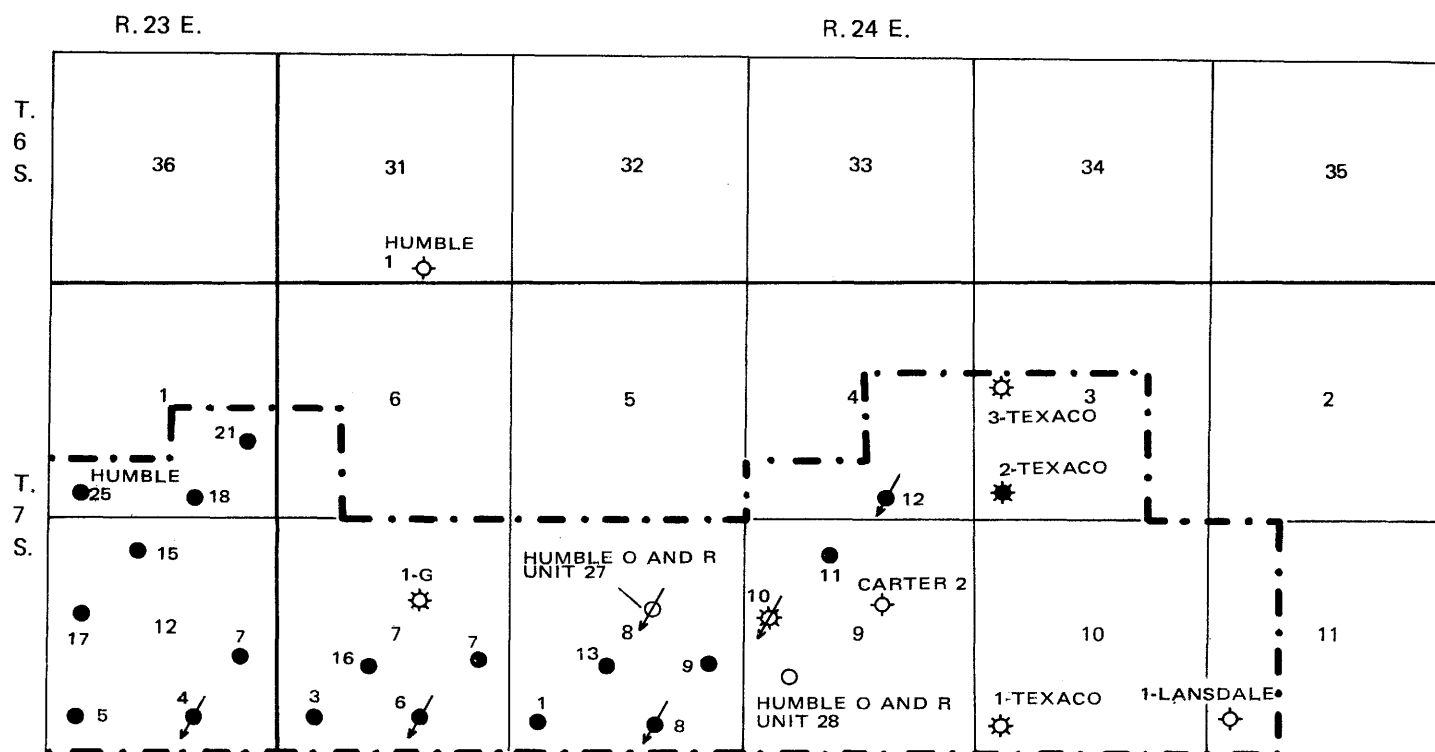
Disposition of products sold: gas to Mountain Fuel
Supply, Warren Oil Co.; oil to Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1962	135736	53038	6698	5
1963	Includes: 72004 MCF for Belco Pet. unit; undes. in 1963			

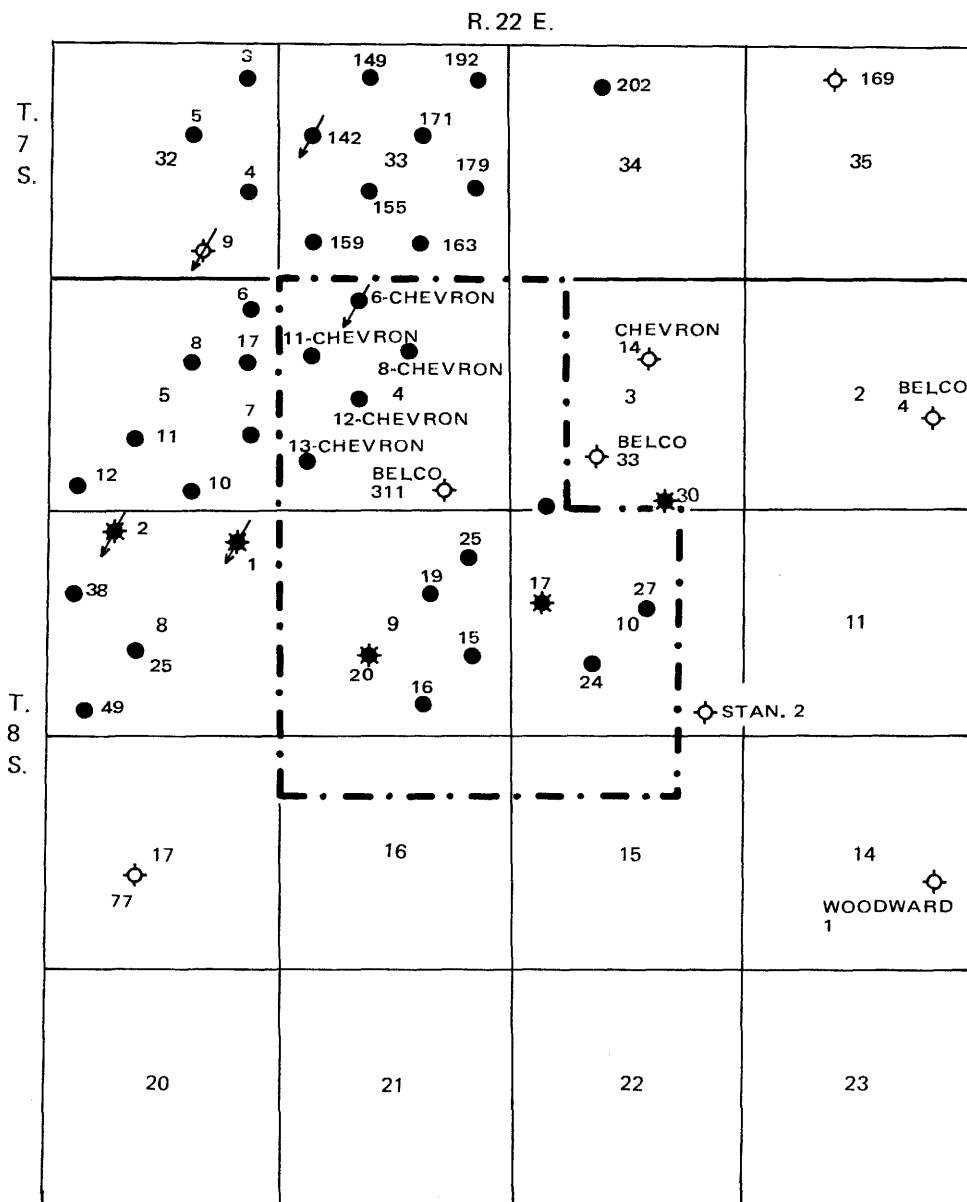
Year	Oil	Gas	Water	Prod. Wells
	115847	201080	5118	8
1964	103741	263882	13985	8
1965	479018	1990332	82375	17
1966	249339	912054	36064	14
1967	158570	700734	101504	30
1968	87364	447994	96158	20
1969	61159	415416	70717	20
1970	50422	144200	115787	19
Cumulative production				
	1441196	5128730	528406	



Greater Red Wash Area: Walker Hollow Field, Uintah County
(Scale 1" = 4000')



Greater Red Wash Area: Walker Hollow Field (continued)



(RED WASH AREA, GREATER)
WHITE RIVER FIELD, EAST
UINTAH COUNTY

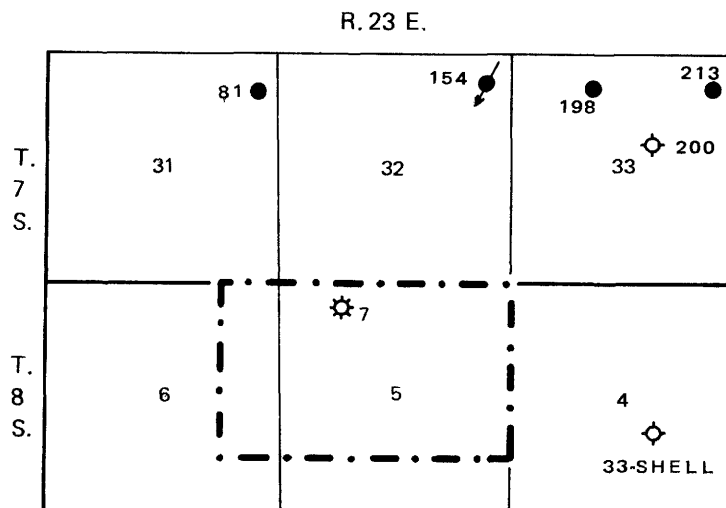
Area designation (latest): October 1966

Discovery year: 1966

First recorded production: 1966

Producing formation (s): Wasatch

Year	Oil	Gas	Water	Prod. Wells
1966		73784		1
1967	Shut in			1
1970	Shut in			
Cumulative production		73784		



Greater Red Wash Area: East White River Field, Uintah County
(Scale 1" = 4000')

(RED WASH AREA, GREATER)
WONSITS WONSITS VALLEY FIELD,
UINTAH COUNTY

Area designation (latest): April 1967,
unitized August 6, 1957

Discovery year: 1959

First recorded production: 1959

Producing formation (s): Green River

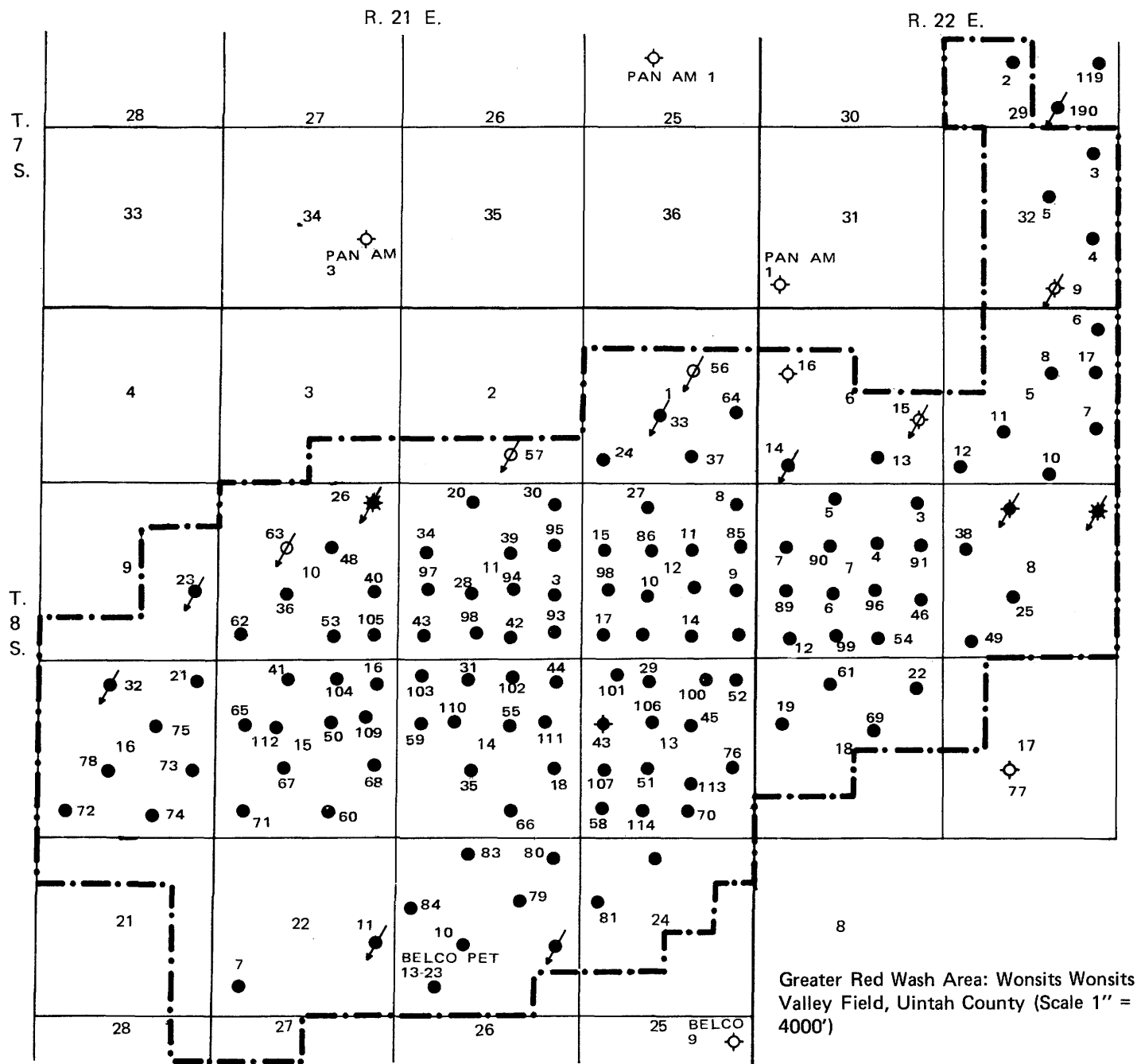
CRUDE OIL ANALYSIS

Gravity, specific 0.903
Gravity, °A.P.I. 25.2
Pour point, °F 85
Sulfur, percent .19
Color Brownish black
Viscosity @ 100° F, 400 sec.; @ 130° F, 195 sec.
Nitrogen, percent 0.291
Sample identification: NE SW 29-7S-22E, Green River @ 5820-5846'

Year	Oil	Gas	Water	Prod. Wells
1959	19982	4614	3725	1
1960	38953	18930	12559	2
1961	105644	63313	86218	4
1962	Includes: 9752 BO; 51 BW for Gulf # 1 unit; undes. in 1962			
	274945	151442	86027	10
1963	1450196	670515	171206	32
1964	2248540	1211660	226769	45
1965	2452795	2323493	422895	55
1966	2652520	3967078	764177	78
1967	2567634	3085663	1583977	82
1968	2810807	2726110	2142210	94
1969	2729624	1995737	3310195	99
1970	2883294	1513744	2829094	90
Cumulative production				
	20234934	17732299	11639052	

CRUDE OIL ANALYSIS

Gravity, specific 0.884
Gravity, °A.P.I. 28.6
Pour point, °F 95
Sulfur, percent .10
Color Brownish black
Viscosity @ 100° F, 220 sec.; @ 130° F, 92 sec.
Nitrogen, percent 0.248
Sample identification: NE NE 20-8S-21E, Green River @ 5226-5276'



REFUGE FIELD (See Greater Red Wash Area)

RIVER BANK FIELD, SAN JUAN COUNTY

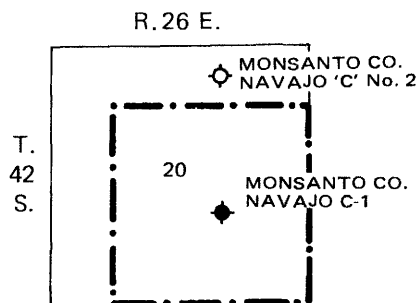
Area designation (latest): August 1967

Discovery year: May 23, 1967

First recorded production: 1967

Producing formation (s): Ismay

Year	Oil	Gas	Water	Prod. Wells
1967 Abnd.				
	1396	8774	376	1
Cumulative production				
	1396	8774	376	



River Bank Field, San Juan County
(Scale 1" = 4000')

RIVER JUNCTION FIELD, UINTAH COUNTY

Area designation (latest): December 1965,

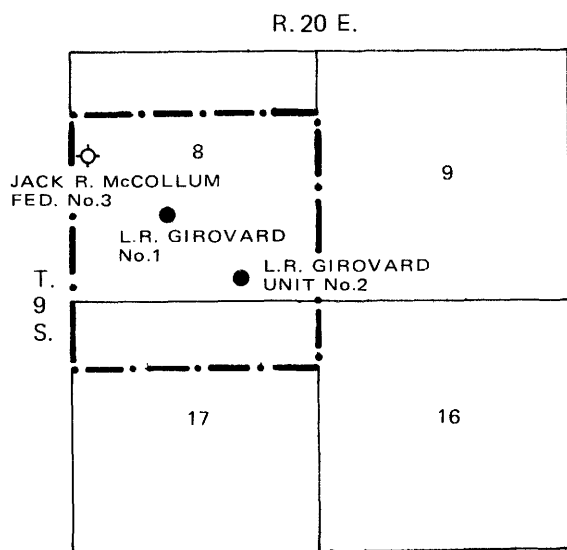
unitized December 17, 1964

Discovery year: May 5, 1965

First recorded production: 1965

Producing formation (s): Green River

Disposition of products sold: Permian Corp.

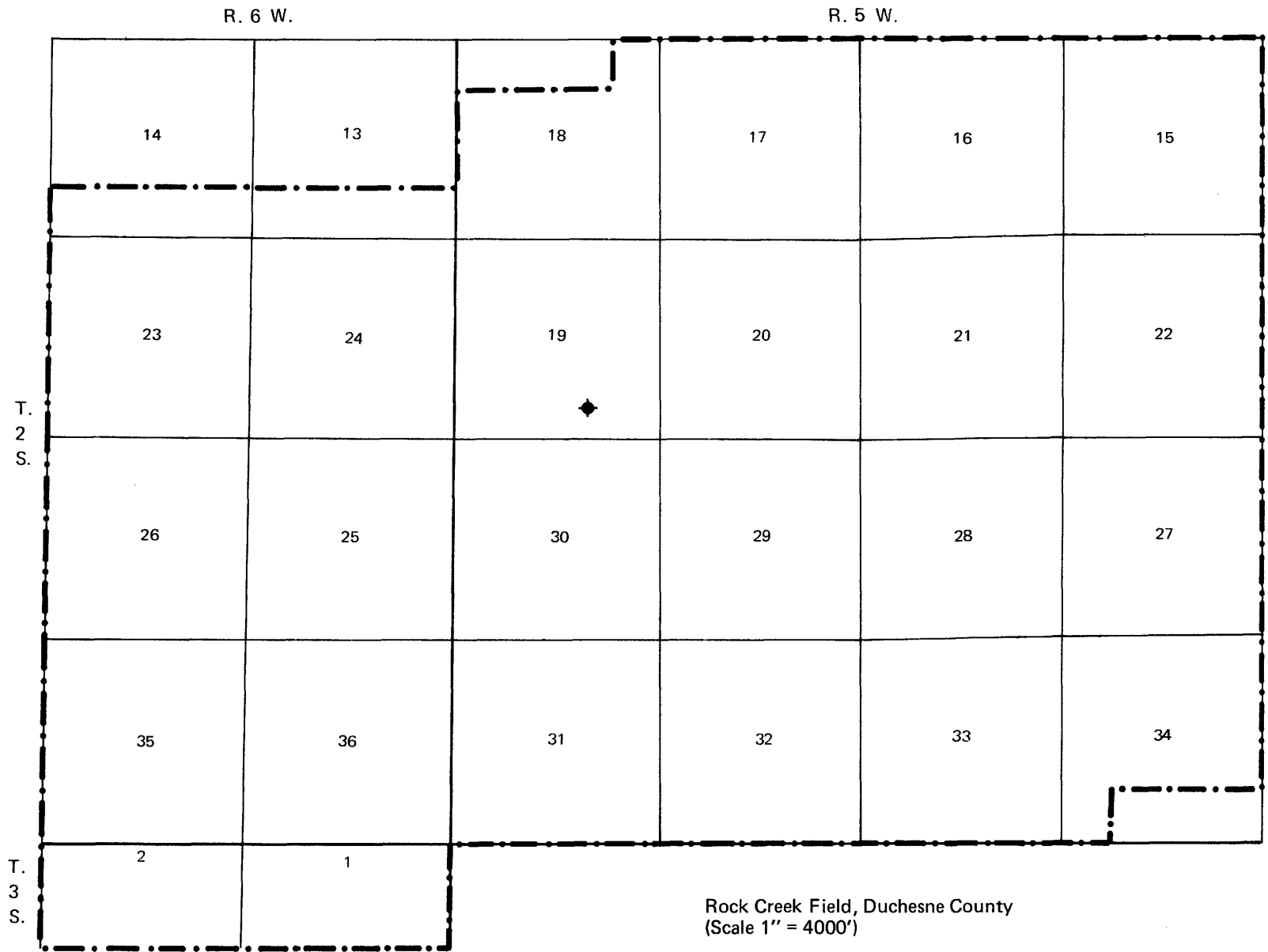


River Junction Field, Uintah County
(Scale 1" = 4000')

Year	Oil	Gas	Water	Prod. Wells
1965	25828		899	1
1966	20203		398	2
1967	12472		611	2
1968	11887		690	2
1969	9458	14008	362	2
1970	5453	33000	370	2
Cumulative production				
	74601	47008	3330	

CRUDE OIL ANALYSIS

Gravity, specific	0.894
Gravity, °A.P.I.	26.8
Pour point, °F	55
Sulfur, percent	.12
Color	Brownish black
Viscosity	@ 100° F, 220 sec.; @ 130° F, 110 sec.
Nitrogen, percent	0.223
Sample identification:	NE SW 8-9S-20E, Green River @ 4337-4346'



ROCK CREEK FIELD, DUCHESNE COUNTY

Area designation (latest): January 6, 1960 (unit)
 Discovery year: June 23, 1960
 First recorded production: 1960
 Producing formation (s): Wasatch

Year	Oil	Gas	Water	Prod. Wells
1960	Abnd.			
	1503	2469	2095	1
Cumulative production				
	1503	2469	2095	

ROCK HOUSE FIELD, UINTAH COUNTY

Area designation (latest): February 1967,
 unitized January 11, 1961
 Discovery year: November 17, 1960
 First recorded production: 1960
 Producing formation (s): Wasatch, Mesaverde
 Disposition of products sold: Permian Corp.,
 Mountain Fuel Supply

Year	Oil	Gas	Water	Prod. Wells
Cumulative production				
	8724	9898141		

GAS ANALYSIS

Components: (nearest 0.1%)

Methane	94.6
Ethane	3.2
Higher fractions	1.0
Hydrogen sulfide	0.0
Carbon dioxide	0.1
Helium (nearest 0.01%;	
less than 0.05%	
denoted as "trace")	trace
BTU value/ft ³	
(standard T&P)	1048

Sample identification: Shamrock Oil and Gas Corp.
 Rainbow Unit No. 2A, 18-11S-29E, sampled
 September 25, 1962, Wasatch @ 2982',
 sample 8680, index 306

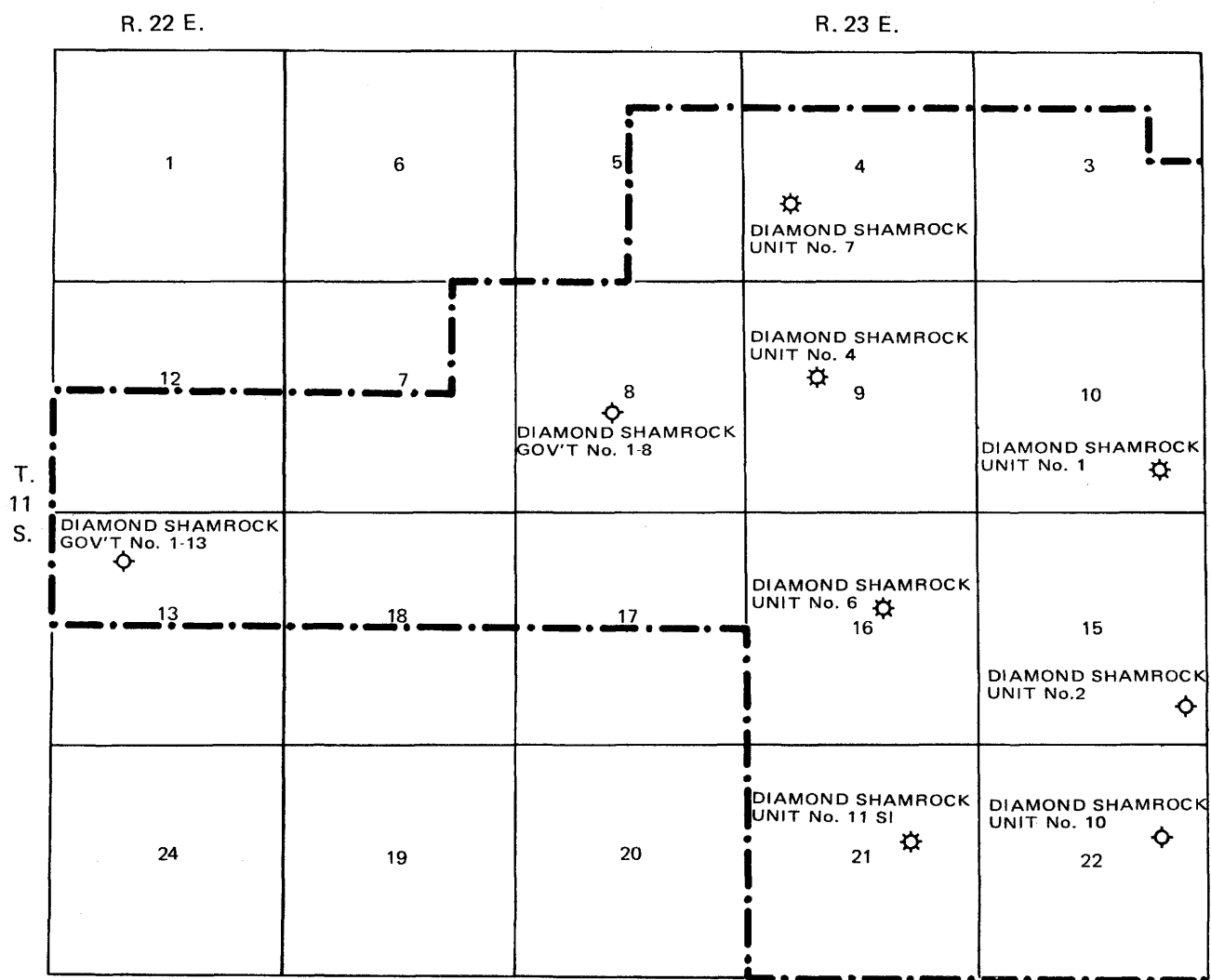
Year	Oil	Gas	Water	Prod. Wells
1960		3600000		1
1961		172881		6
1962	4666	1789566		11
1963	2224	1402884		14
1964	559	731758		13
1965	480	361248		12
1966	145	312138		14
1967	146	255474		13
1968	219	350009		13
1969		521502		13
1970	285	400682		14

ROCKWELL FLAT FIELD, SAN JUAN COUNTY

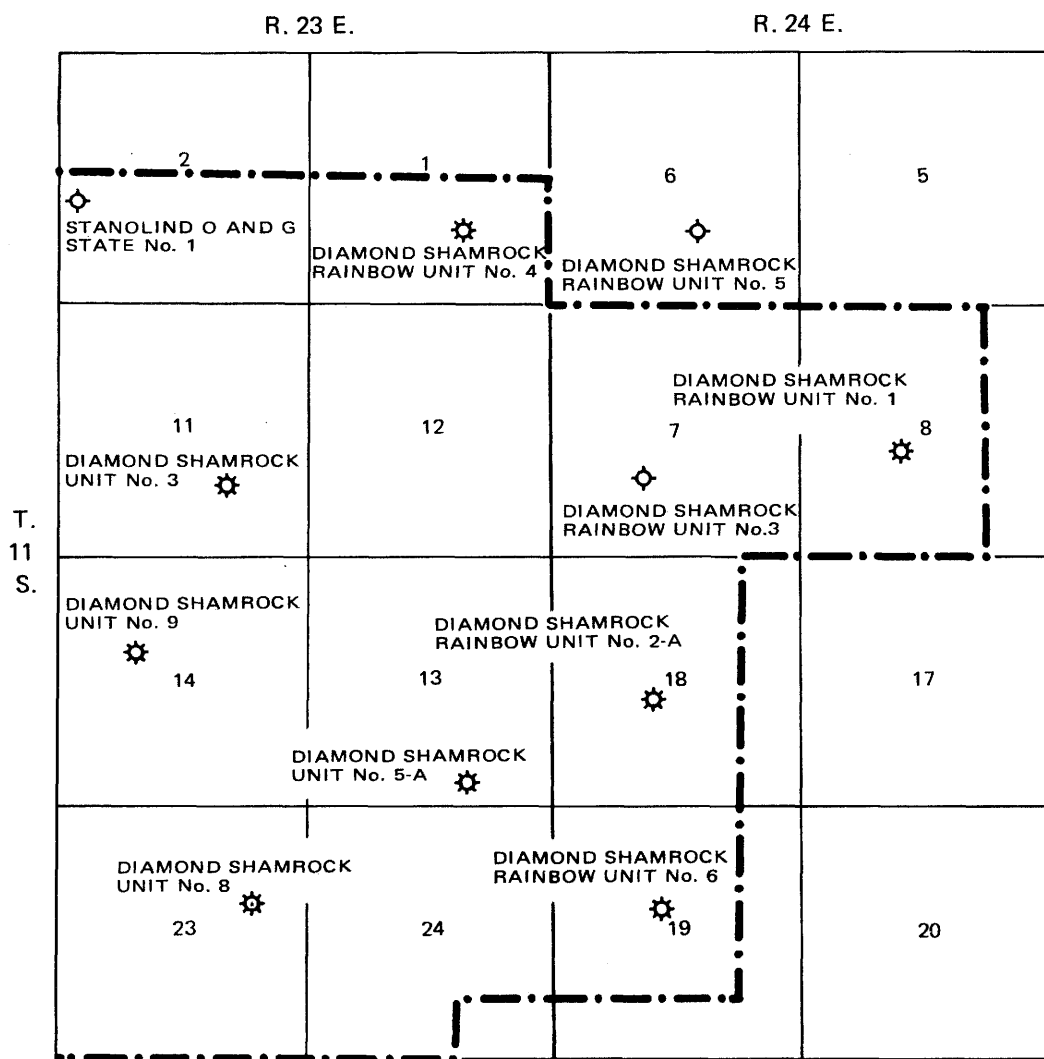
Area designation (latest): January 1968
 Discovery year: September 18, 1967
 First recorded production: 1967
 Producing formation (s): Ismay

Year	Oil	Gas	Water	Prod. Wells
1967	8523	7868	16431	1

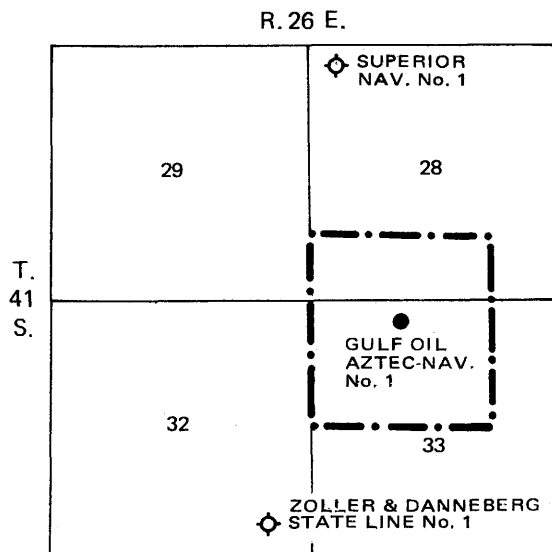
Year	Oil	Gas	Water	Prod. Wells
1968	15927	22682	30809	1
1969	5374	8001	11960	1
1970	4773	7198	11690	1
Cumulative production				
	34597	45749	70890	



Rock House Field, Uintah County
(Scale 1" = 4000')



Rock House Field (continued)



ROOSEVELT FIELD, DUCHESNE AND UINTAH COUNTIES

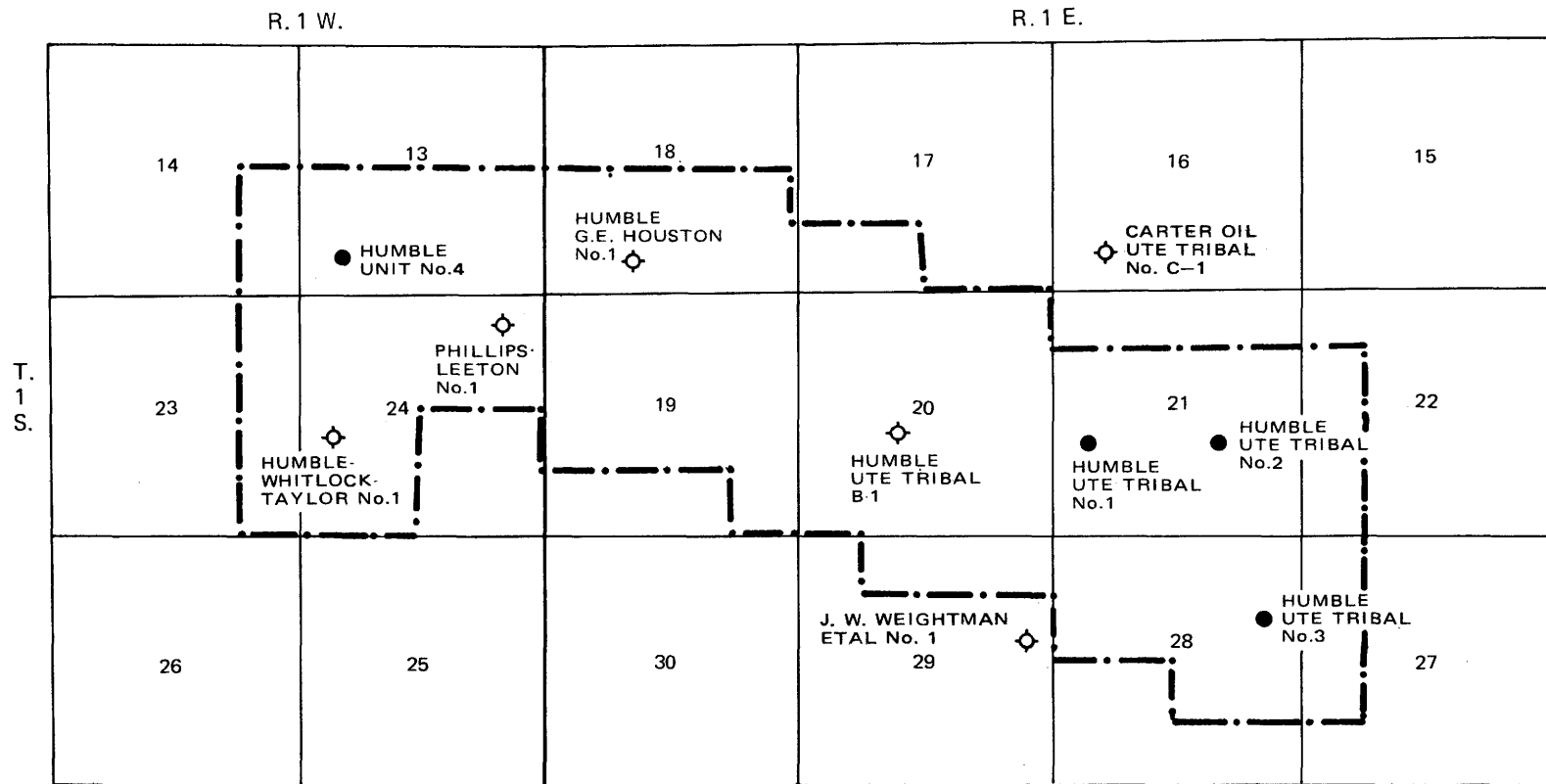
Area designation (latest): May 1959,
unitized October 30, 1951
Discovery year: June 25, 1949
First recorded production: 1949
Producing formation (s): Green River
Disposition of products sold: Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1949	81608	29621	0	
1950	231105	76090	0	
1951	227440	89745	0	
1952	220005	77152	16157	
1953	223371	91781	74591	
1954	222399	88015	100649	
1955	191275	78750	117698	
1956	171677	71313	143096	
1957	152428	77990	134411	
1958	121138	17861	135375	
1959	105598	44335	124140	6
1960	88961	36984	151988	6
1961	101946	33019	146063	6
1962	81489	22677	164397	5

Year	Oil	Gas	Water	Prod. Wells
1963	64960	38030	126706	5
1964	64857	16578	158678	4
1965	59550	11160	177541	4
1966	59712	3665	186413	4
1967	62228	5950	185731	3
1968	56892	14900	182874	4
1969	54791	8790	177160	4
1970	50684	7685	184340	4
Cumulative production				
	2694114	942091	2688008	

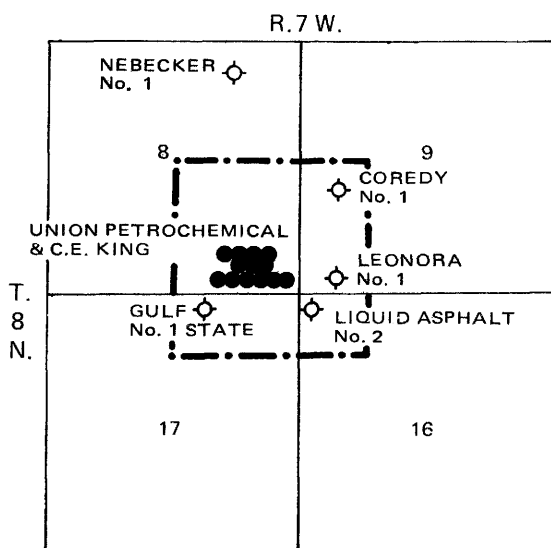
CRUDE OIL ANALYSIS

Gravity, specific	0.876
Gravity, °A.P.I.	30.0
Pour point, °F	85
Sulfur, percent	.07
Color	Greenish black
Viscosity	@ 100° F, 145 sec.; @ 130° F, 71 sec.
Nitrogen, percent	0.169
Sample identification:	C NW SW 21-1S-1E Green River @ 9350-9390'



Roosevelt Field, Duchesne and Uintah Counties
(Scale 1" = 4000')

ROZEL POINT FIELD, BOX ELDER COUNTY



Rozel Point Field, Box Elder County
(Scale 1" = 4000')

Area designation (latest): April 1965
Discovery year: 1904
First recorded production: 1965
Producing formation (s): Salt Lake Group (Pliocene)

Year	Oil	Gas	Water	Prod. Wells
1904-1964	Shut in			
1965	404			
1966	439		64	
1967	2053			9
1968	Shut in			
1970	Shut in			
Cumulative production	2896		64	

CRUDE OIL ANALYSIS

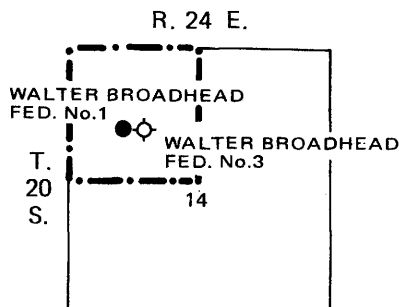
Gravity, specific	1.032
Gravity, °A.P.I.	5.6
Pour point, °F	
Sulfur, percent	12.13
Color	Brownish black
Viscosity	
Nitrogen, percent	0.514

Sample identification: NW NW 16-8N-7W, Salt Lake Group (Quaternary or Upper Tertiary), surface seepage

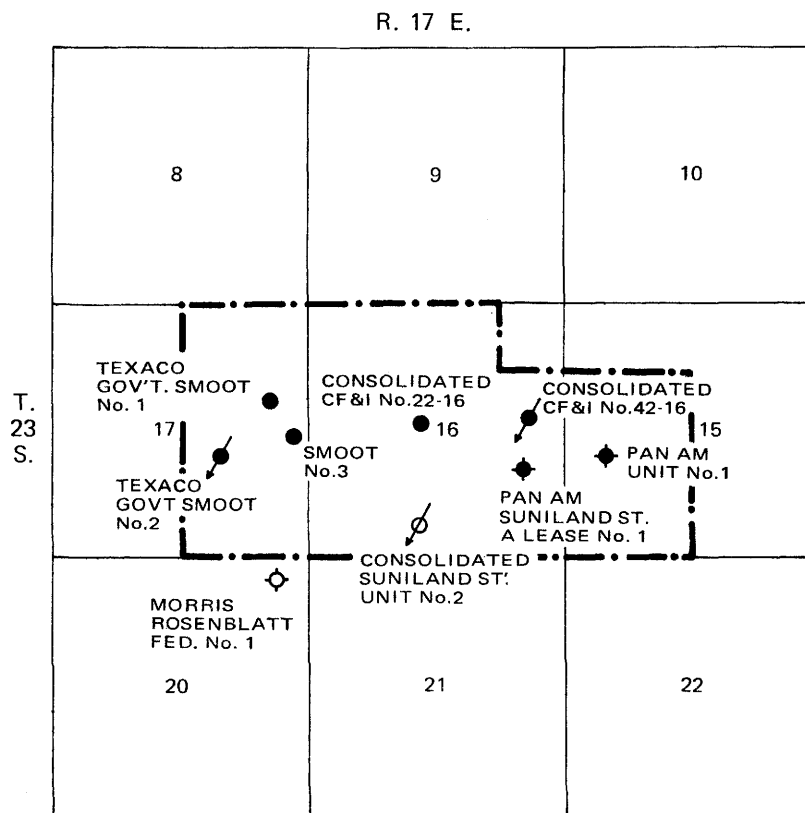
SAGE FIELD, GRAND COUNTY

Area designation (latest): August 1967
Discovery year: November 1, 1966
First recorded production: 1966
Producing formation (s): Dakota

Year	Oil	Gas	Water	Prod. Wells
1966	Broadhead # 1 Fed.; undes. in 1966			
	60			1
1967	60			1
1968	Shut in			
1970	Shut in			
Cumulative production	120			



Sage Field, Grand County
(Scale 1" = 4000')



Salt Wash Field, Grand County
(Scale 1" = 4000')

SALT WASH FIELD, GRAND COUNTY

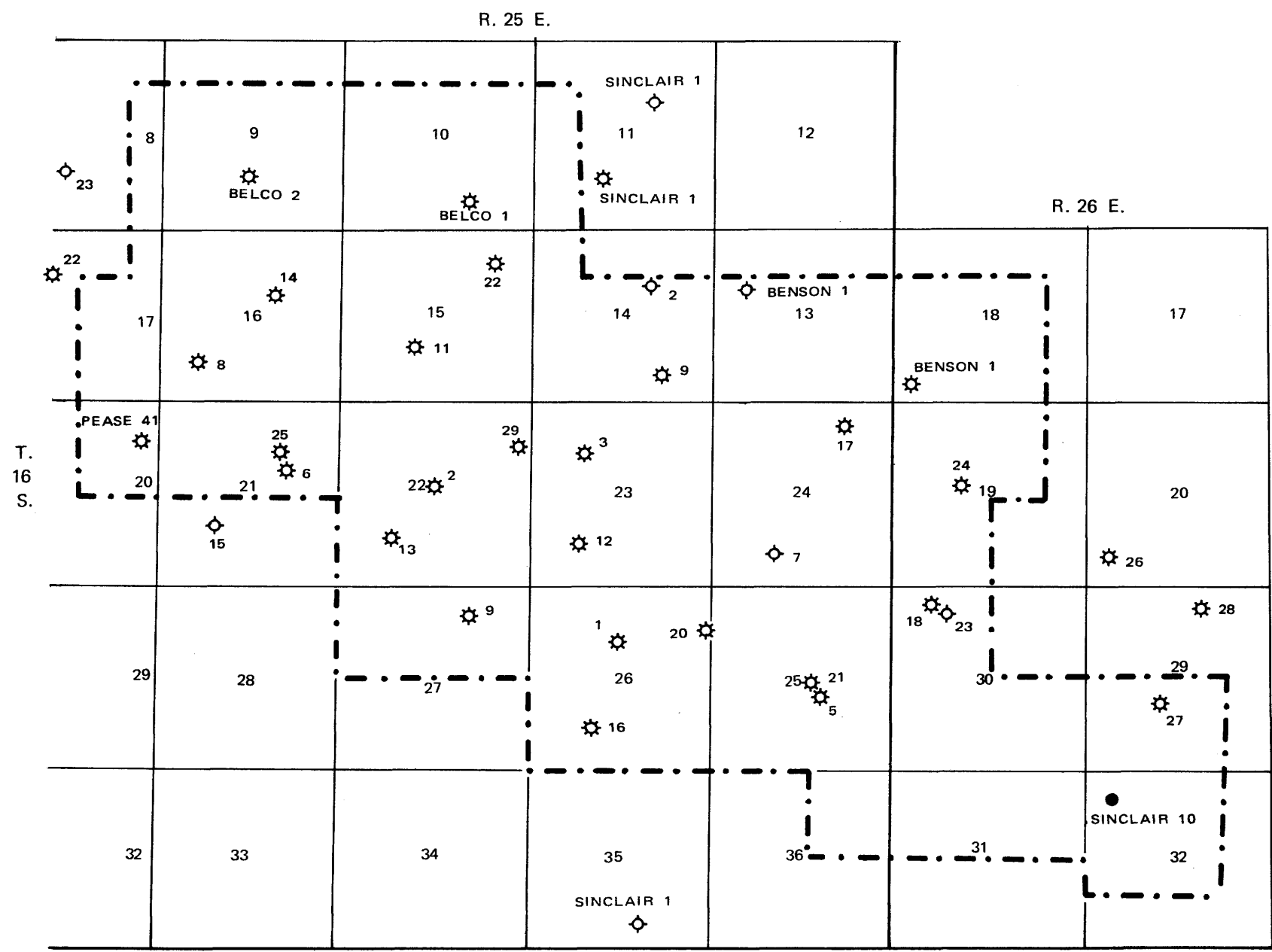
Area designation (latest): March 1963
 Discovery year: May 28, 1961
 First recorded production: 1961
 Producing formation (s): Mississippian
 Disposition of products sold: Caribou Four Corners
 Oil, Inc.

Year	Oil	Gas	Water	Prod. Wells
1961	25521	352731	1952	1
1962	Includes: 50806 BO; 610810 MCF; 14928 BW for Texaco Govt-Smoot; undes. in 1962			
	79472	1323811	26010	6
1963	255310	1897013	225789	7
1964	113577	1090816	358832	6
1965	77379	611386	376285	4
1966	61670	352303	376106	3
1967	58556	191202	359801	3
1968	58744	734516	441370	2

Year	Oil	Gas	Water	Prod. Wells
1969	70196	404939	404810	4
1970	108543	720073	665257	3
Cumulative production				
	908968	7678790	3236212	

CRUDE OIL ANALYSIS

Gravity, specific	0.779
Gravity, °A.P.I.	50.1
Pour point, °F	40
Sulfur, percent	.23
Color	NPA 3
Viscosity	@ 100° F, 32 sec.; @ 77° F, 34 sec.
Nitrogen, percent	0.002
Sample identification:	SE NE 16-23S-17E Mississippian (Leadville Ls) @ 8914-8941'



San Arroyo Field, Grand County
(Scale 1" = 4000')

Salt Wash Field (continued)

CRUDE OIL ANALYSIS

Gravity, specific	0.7715
Gravity, ° A.P.I.	51.9
Pour point, ° F	20
Sulfur, percent	0.15
Color	Greenish amber
Viscosity	@ 70 ° F, 35 sec.; @ 100° F, 32.2 sec.

Nitrogen, percent

Sample identification: Pan Am. Pet. No. 1, 15-23S-17E, completed June 29, 1961, Mississippian @ 8362-8988'

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3	No. 4
Methane	11.8	9.0	12.2	10.3
Ethane	1.8	1.6	2.8	1.7
Higher fractions	4.3	4.1	9.2	4.5
Hydrogen sulfide	0.0	0.0	0.0	0.0
Carbon dioxide	2.3	2.1	2.9	2.4

	No. 1	No. 2	No. 3	No. 4
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.8	1.2	1.3	1.5
BTU value/ft ³ (standard T&P)	297	258	484	290

Sample identification:

No. 1 Shell Oil Co. CF&I 22-16, 16-23S-17E, completed March 11, 1963, sampled February 22, 1963, Leadville @ 8793', sample 8872, index 183

No. 2 Shell Oil Co. CF&I 22-16, 16-23S-17E, completed March 11, 1963, sampled May 27, 1963, Mississippian @ 8900', sample 8975, index 184

No. 3 Shell Oil Co. CF&I 42-16, 16-23S-17E, completed April 25, 1963, sampled May 27, 1963, Leadville @ 8914', sample 8974, index 185

No. 4 Pan American Petroleum Corp. Salt Wash No. 1, 15-23S-17E, completed April 28, 1961, sampled May 27, 1963, Leadville @ 8693', sample 8972, index 186

SAN ARROYO FIELD,
GRAND COUNTY

Area designation (latest): December 1965, unitized September 1, 1957

Discovery year: 1962

First recorded production: 1962

Producing formation (s): Mancos, Dakota-Cedar Mountain, Morrison, Entrada

Disposition of products sold: Mesa Pipeline Co., Cowboy Oil Co., Atlantic Richfield

Year	Oil	Gas	Water	Prod. Wells
1962	445	746269		14
1963	10167	6166885		28
1964	11845	8763510		26
1965	12312	7576732		30
1966	8346	5265116		30
1967	5370	4247100		30
1968	13796	4493763		30
1969	3907	3588865		30
1970	6991	4244267		30
Cumulative production				
	73179	45092507		

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2	No. 3	No. 4
Methane	47.9	47.5	45.1	46.8
Ethane	2.2	3.5	2.4	2.0
Higher fractions	2.5	5.1	2.4	2.9
Hydrogen sulfide	.0	.0	.0	.0
Carbon dioxide	19.6	26.1	24.5	22.7
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	.9	.6	.9	.9
BTU value/ft ³ (standard T&P)	604	703	572	601

	No. 5	No. 6	No. 7	No. 8
Methane	46.8	89.9	47.2	90.2
Ethane	2.1	5.1	2.3	5.4
Higher fractions	2.9	1.9	3.0	2.5
Hydrogen sulfide	.0	.0	.0	.0

San Arroyo Field (continued)

	No. 5	No. 6	No. 7	No. 8
Carbon dioxide	23.4	.8	19.7	.9
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.0	.1	.5	.1
BTU value/ft ³ (standard T&P)	610	1059	619	1089
	No. 9	No. 10	No. 11	
Methane	47.2	78.6	51.4	
Ethane	2.2	5.1	2.3	
Higher fractions	3.1	2.5	4.3	
Hydrogen sulfide	0.0	0.0	0.0	
Carbon dioxide	19.7	1.2	23.9	
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.0	0.1	0.5	
BTU value/ft ³ (standard T&P)	620	969	721	
Sample identification:				
No. 1 Sinclair O & G No. 1 Govt., 26-16S-25E, completed October 1, 1955, sampled October 29, 1959, Entrada @ 5065', index 1091				
No. 2 Sinclair O & G No. 1, 26-16S-25E, completed October 1, 1960, sampled November 1, 1960, Entrada @ 4851', index 1092				

- No. 3 Sinclair O & G No. 2, 22-16S-25E, completed April 1, 1956, sampled October 31, 1960, Entrada @ 5635', index 1093
- No. 4 Sinclair O & G No. 3, 23-16S-25E, completed June 1, 1956, sampled October 29, 1959, Entrada @ 5505', index 1094
- No. 5 Sinclair O & G No. 3, 23-16S-25E, completed June 1, 1956, sampled November 1, 1960, Entrada @ 5440', index 1095
- No. 6 Sinclair O & G No. 4, 30-16S-25E, completed August 13, 1959, sampled September 13, 1960, Dakota @ 4235', index 1096
- No. 7 Sinclair O & G No. 5, 25-16S-25E, sampled September 12, 1960, Entrada @ 4814', index 1097
- No. 8 Sinclair O & G No. 5, 25-16S-25E, sampled September 12, 1960, Dakota @ 4053', index 1098
- No. 9 Sinclair O & G No. 5, 25-16S-25E, sampled November 1, 1960, Entrada @ 4792', index 1099
- No. 10 Sinclair O & G No. 6, 21-16S-25E, completed October 20, 1961, sampled November 8, 1961, Dakota @ 5834', sample 8279, index 283
- No. 11 Sinclair O & G No. 6, 21-16S-25E, completed October 20, 1961, sampled November 8, 1961, Entrada @ 6490', sample 8278, index 284

SEGUNDO CANYON FIELD,
GRAND COUNTY

Area designation (latest): July 1968

Discovery year: 1962

First recorded production: 1962

Producing formation (s): Dakota-Cedar Mountain

Disposition of products sold: Grand Valley Transmission Co.

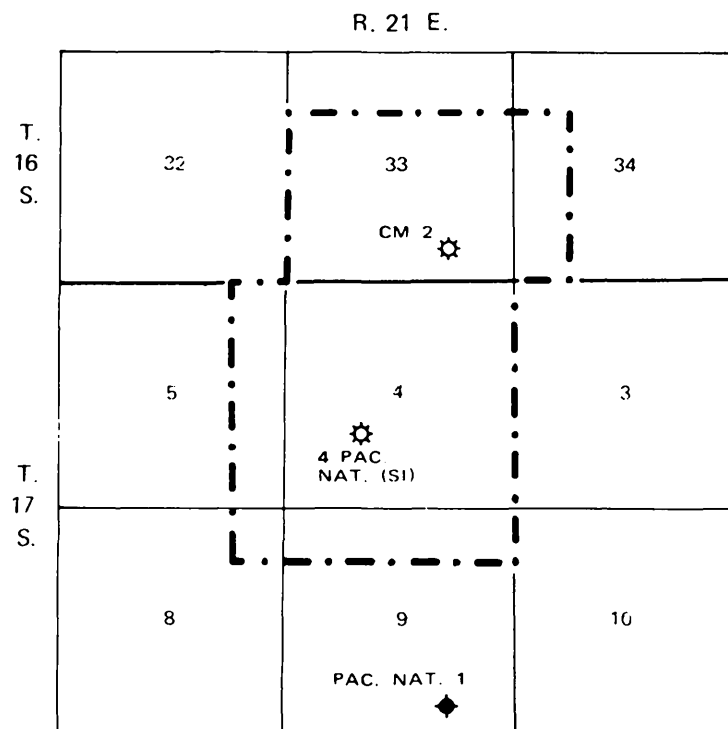
Year	Oil	Gas	Water	Prod. Wells
1962	168	888		1
1963 P&A	537	45000		0
1964				
1965				
1966				
1967				
1968		159404		2
1969		116117		2
1970		97886		2

GAS ANALYSIS

Components: (nearest 0.1%)

Methane	96.6
Ethane	1.4
Higher fractions	0.4
Hydrogen sulfide	.0
Carbon dioxide	0.8
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace
BTU value/ft ³ (standard T&P)	1017

Sample identification: Pac. Nat. Gas Expl. No. 2 Unit, 33-16S-21E, completed May 27, 1963, sampled June 6, 1964, Cedar Mountain @ 9832', sample 9390, index 198



Segundo Canyon Field, Grand County
(Scale 1" = 4000')

SEIBER NOSE FIELD, GRAND COUNTY

Area designation (latest): May 1959

Discovery year: 1955

First recorded production: 1955

Producing formation (s): Morrison

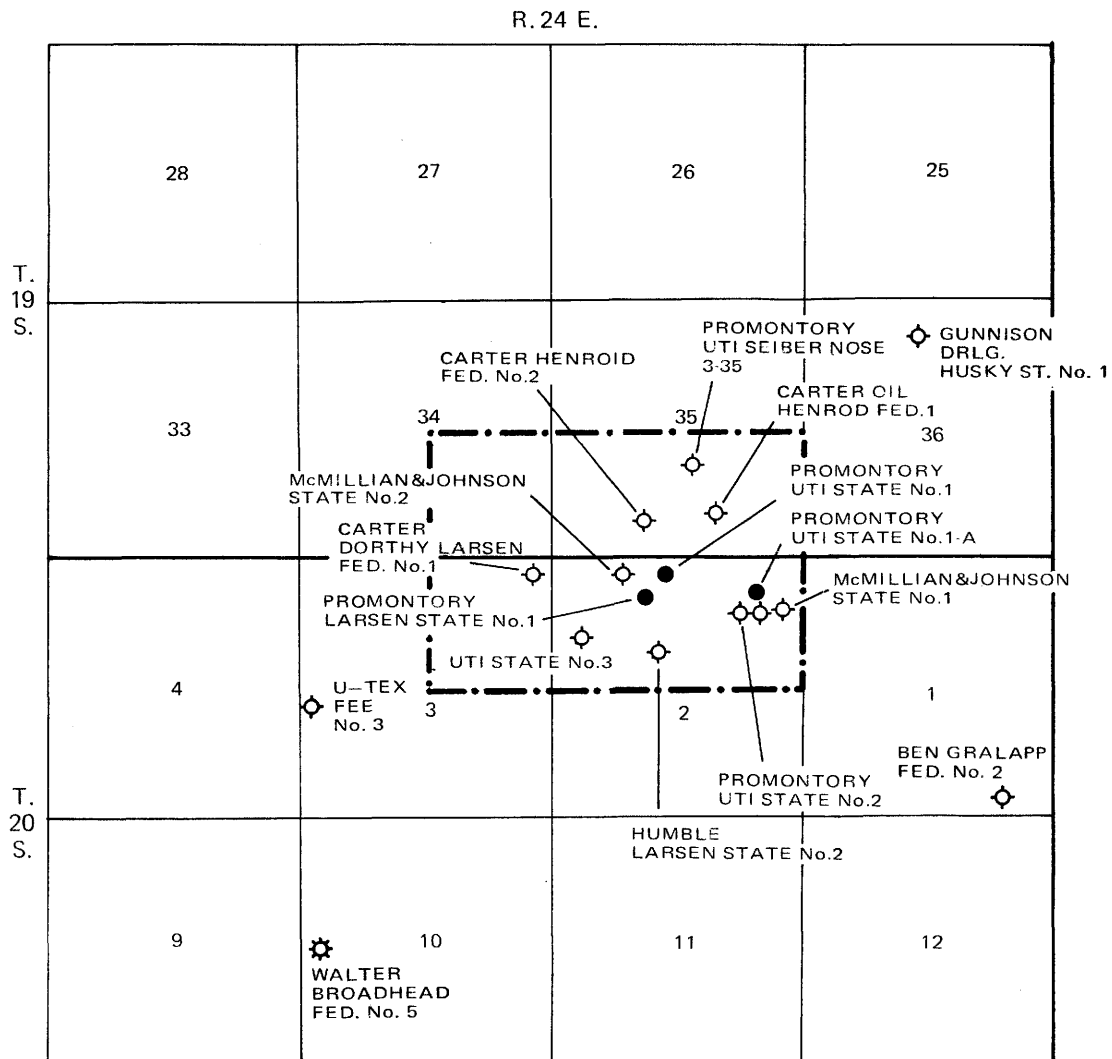
Disposition of products sold: Cowboy Oil Co.,
K. E. McDougald

Year	Oil	Gas	Water	Prod. Wells
1955	5777			
1956	1956			
1957	2700			
1958	806			
1959	714			
1960	807		47	1
1961	508			1
1962	390			1
1963				
1964	1027		215	2
1965	1080		455	2
1966	1571		1010	2

Year	Oil	Gas	Water	Prod. Wells
1967	825		516	2
1968	1014		782	2
1969	637		262	2
1970	859		413	2
Cumulative production				
	20671	—	3700	

CRUDE OIL ANALYSIS

Gravity, specific	0.851
Gravity, °A.P.I.	34.8
Pour point, °F	30
Sulfur, percent	.96
Color	Brownish black
Viscosity	@ 100° F, 44 sec.
Nitrogen, percent	0.055
Sample identification: NE NW 2-20S-24E, Morrison	
@ 1430-1439'	



SHAHER CANYON FIELD, SAN JUAN COUNTY

Area designation (latest): December 1963

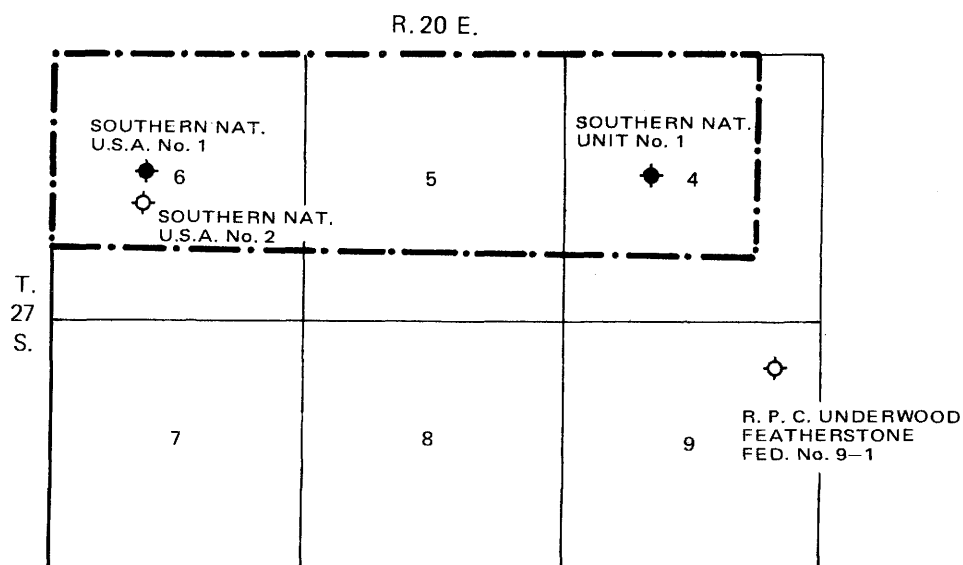
Discovery year: February 28, 1962

First recorded production: 1962

Producing formation (s): Paradox

Year	Oil	Gas	Water	Prod. Wells
1962	10183			1

Year	Oil	Gas	Water	Prod. Wells
1963	26483	14687		2
1964	15504	13839	886	1
1965	12401	28435	415	1
1966	2985	6846	107	1
1967	Shut in			1
1970	Shut in			
Cumulative production				
	67556	63807	1408	



Shafer Canyon Field, San Juan County
(Scale 1" = 4000')

SOUTH ISMAY FIELD
(See Ismay Field, South)

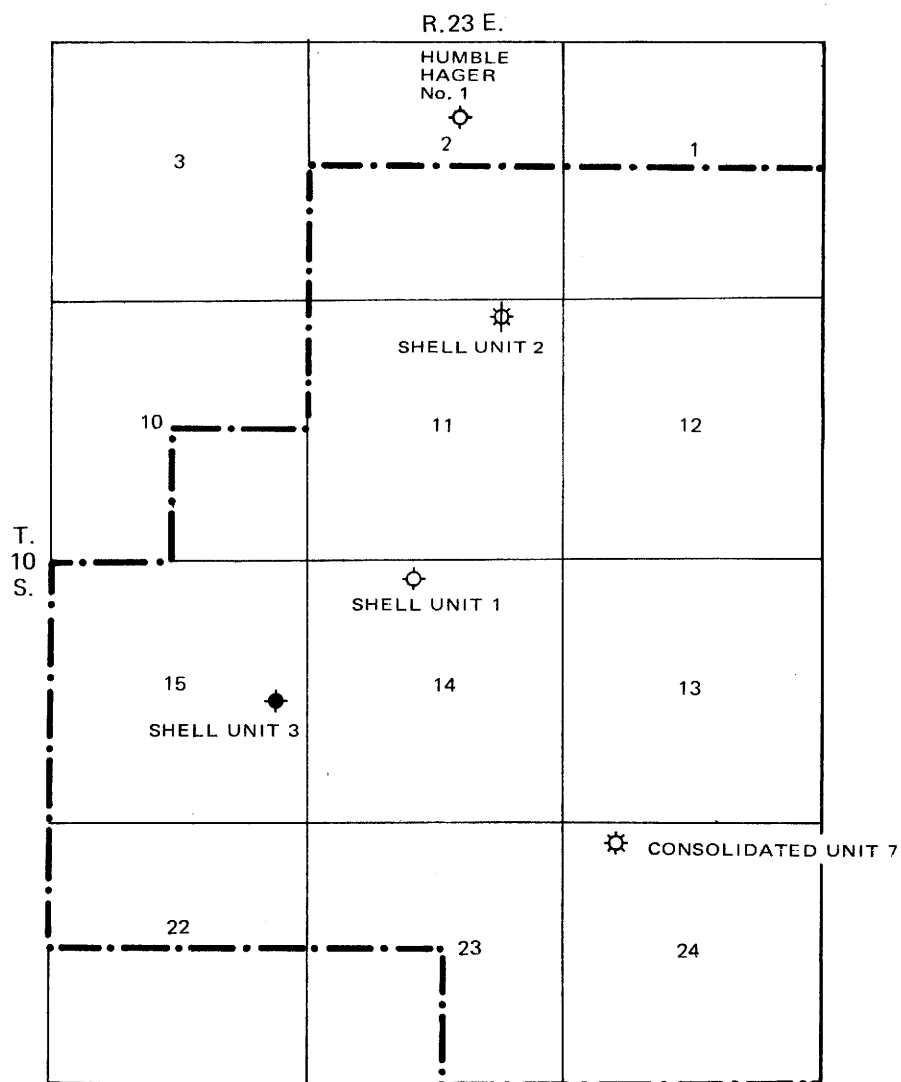
SOUTHMAN CANYON FIELD,
UINTAH COUNTY

Area designation (latest): April 1965,
unitized November 7, 1952
Discovery year: 1955
First recorded production: 1962
Producing formation (s): Wasatch, Mesaverde

Year	Oil	Gas	Water	Prod. Wells
1955-1961	Shut in			
1962		79840		

Year	Oil	Gas	Water	Prod. Wells
1963	753	148981		5
1964	243	88042		5
1965	223	56080		5
1966	185	53495		5
1967	22	41511		2
1968		34028		2
1969		34892		2
1970	118	31748		1
Cumulative production				
	1544	568617		

STAGECOACH FIELD
(See Greater Red Wash Area)

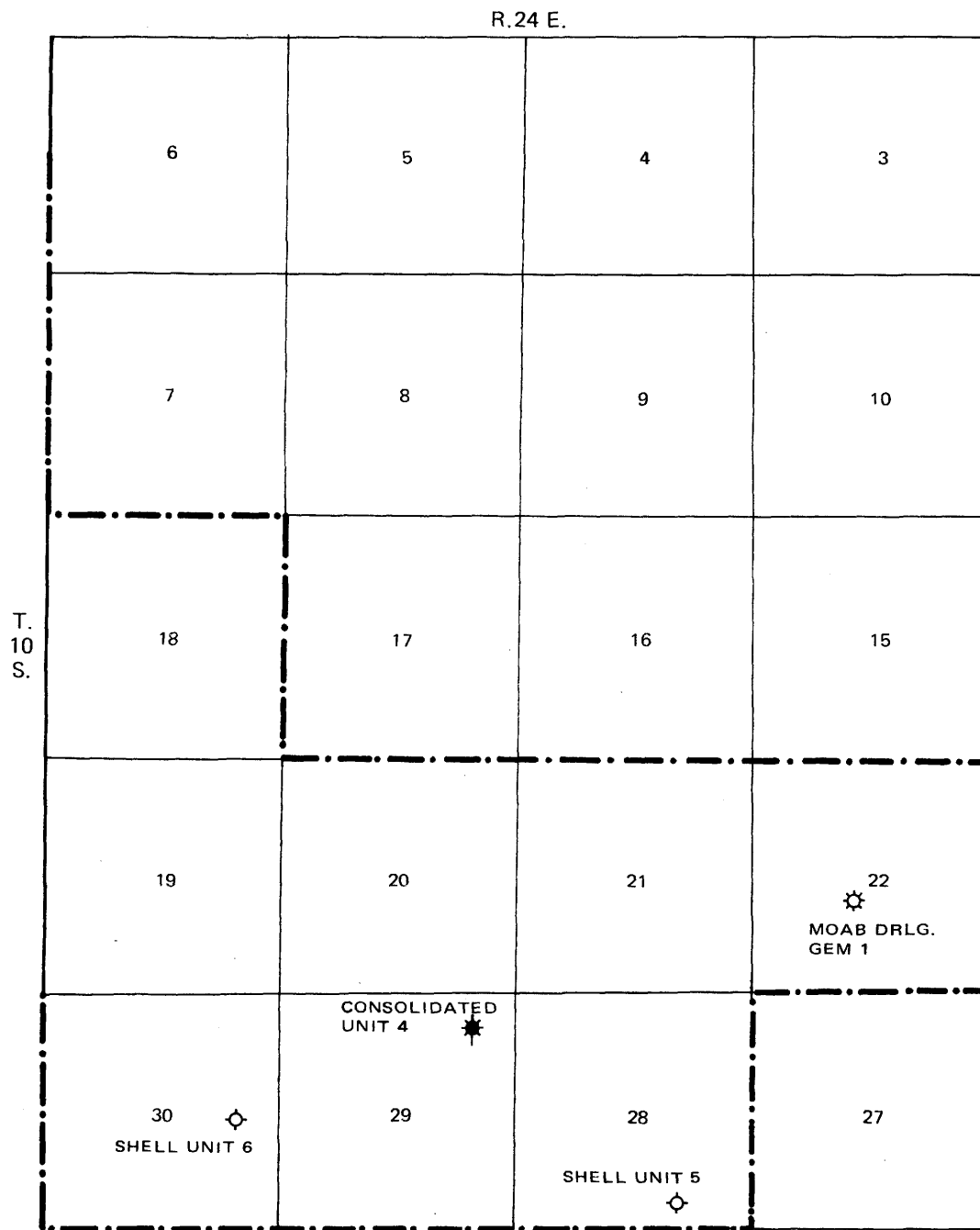


Southman Canyon Field, Uintah County
(Scale 1" = 4000')

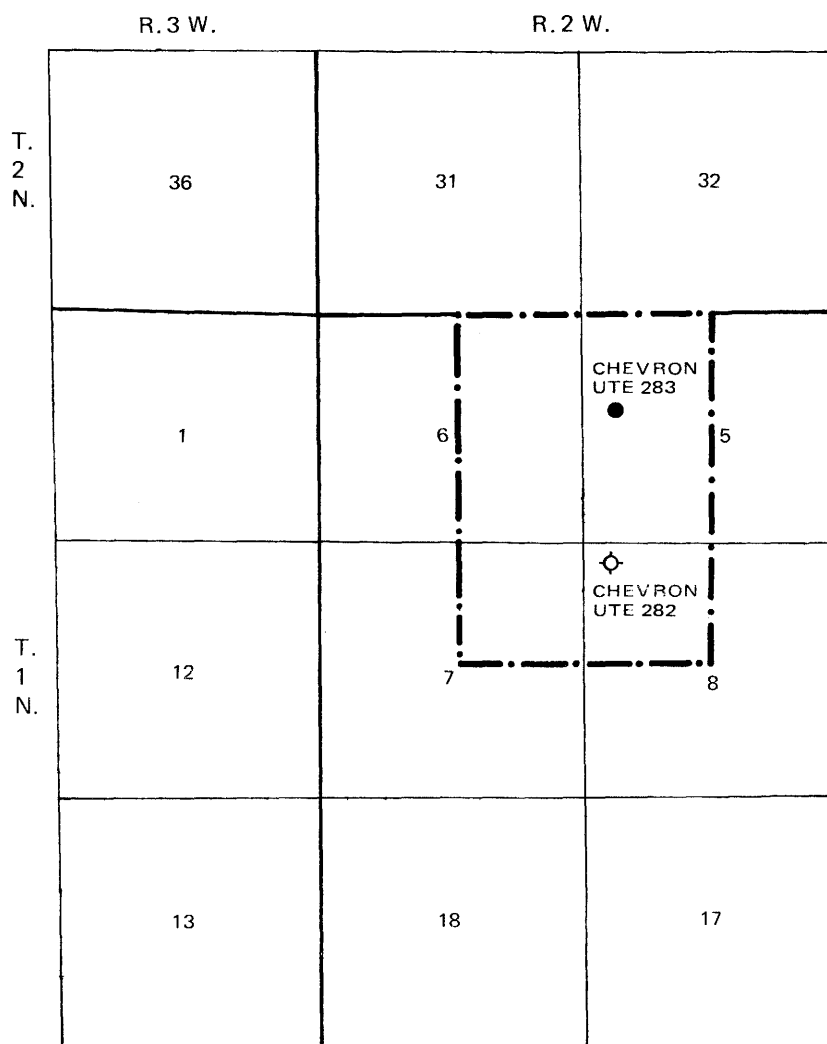
STARR FLAT FIELD, DUCHESNE COUNTY

Area designation (latest): January 1960
Discovery year: July 31, 1959
First recorded production: 1959
Producing formation (s): Green River

Year	Oil	Gas	Water	Prod. Wells
1959	6175	2006	33	
1960	5041	2836	4575	
Abandoned				
Cumulative production				
	11216	4832	4608	



Southman Canyon Field (continued)



Starr Flat Field, Duchesne County
(Scale 1" = 4000')

STATELINE FIELD, GRAND COUNTY

Area designation (latest): March 1963

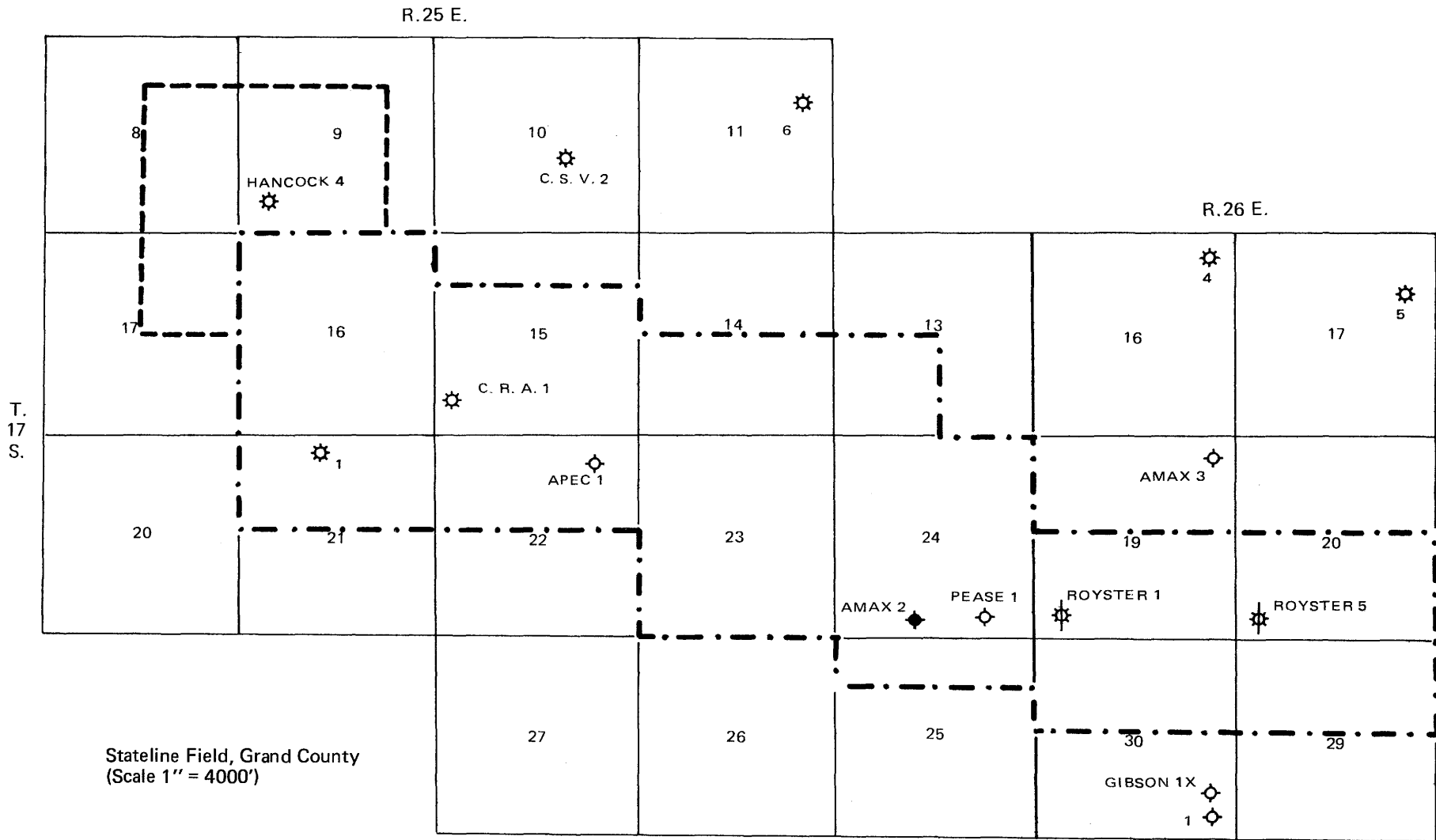
Discovery year: 1963

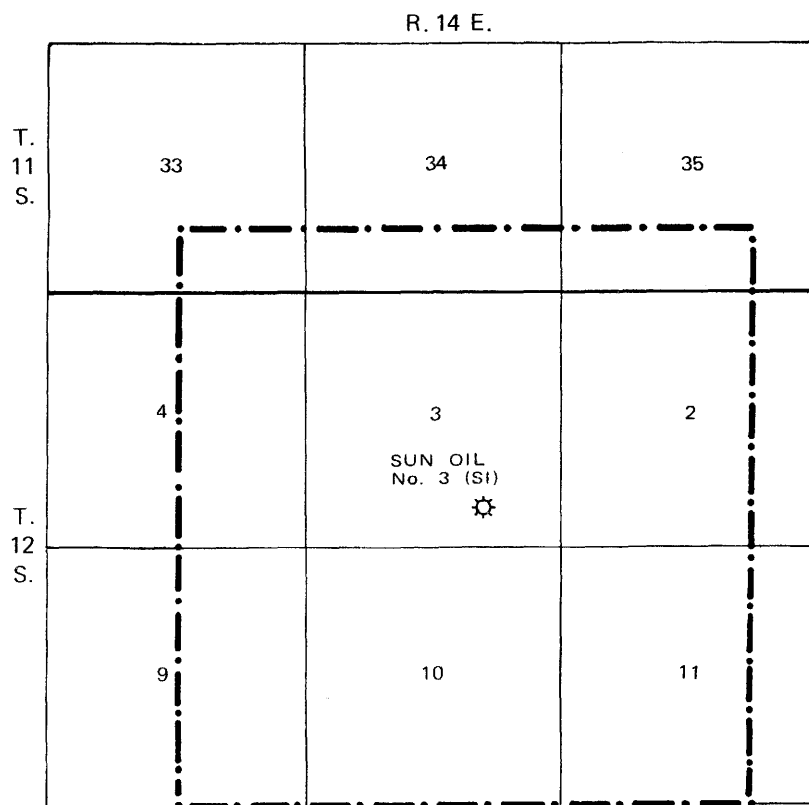
First recorded production: 1963

Producing formation (s): Dakota-Cedar Mountain,
Morrison, Entrada

Year	Oil	Gas	Water	Prod. Wells
1963		114581		2

Year	Oil	Gas	Water	Prod. Wells
1964		165474		2
1965		171442		2
1966		127608		2
1967		147858		3
1968		77626		3
1969		47873		2
1970		57716		2
Cumulative production				
				910178





Stone Cabin Field, Carbon and Duchesne Counties
(Scale 1" = 4000')

STONE CABIN FIELD, CARBON AND DUCHESNE COUNTIES

Area designation (latest): October 1961

Discovery year: July 26, 1960

First recorded production: 1962

Producing formation (s): Wasatch

Year	Oil	Gas	Water	Prod. Wells
1960	Shut in			

Year	Oil	Gas	Water	Prod. Wells
1961				
1962		230791		2
1963		102002		1
1964		37204		1
1965-1970	Shut in			
Cumulative production		369997		

TOHONADLA FIELD, SAN JUAN COUNTY

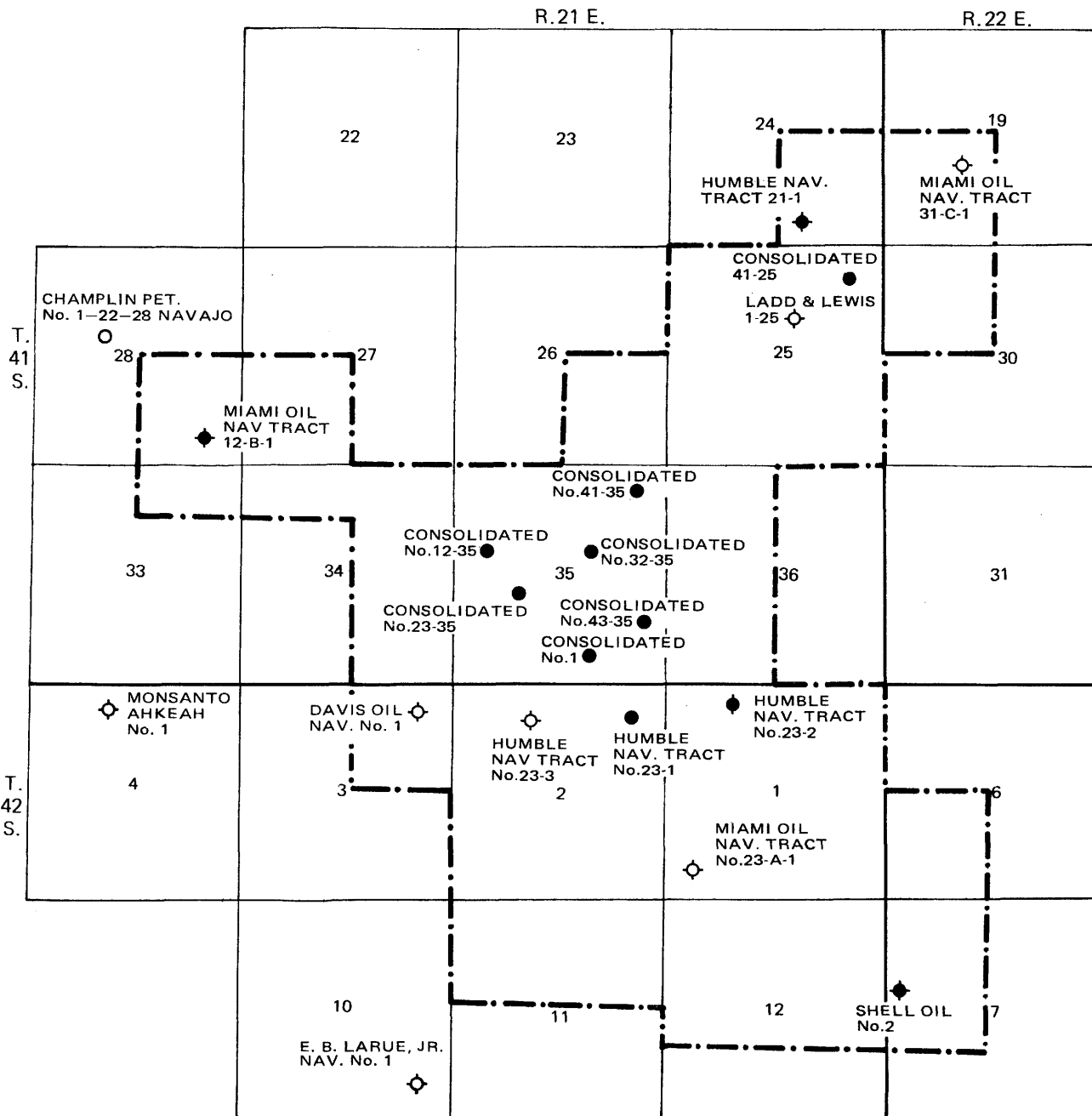
Area designation (latest): January 1963

Discovery year: 1957

First recorded production: 1958

Producing formation (s): Ismay, Desert Creek,
Akah

Disposition of products sold: Permian Corp.



Tohonadla Field, San Juan County
(Scale 1" = 4000')

Tohondla Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1958	160620	101840	21164	10
1959	237516	173490	13048	
1960	Includes: 7190 BO; 113 BW from Miami Pet. #12-B-1; undes in 1960			
	207847	119561	21688	9
1961	Includes: 3613 BO from Miami Pet. # 12-B-1; undes. in 1961			10
	157330	92162	47301	
1962	Includes: 2501 BO from Miami Pet. # 12-B-1; undes. in 1962			10
	135770	65670	57600	
1963	99183	46634	44487	9
1964	83412	56725	60087	9
1965	68036	40368	59625	8
1966	59631	28500	57622	8

Year	Oil	Gas	Water	Prod. Wells
1967	49554	11978	55972	6
1968	55856	9369	54649	7
1969	58741	9789	58894	7
1970	52002	8356	39570	7
Cumulative production				
	1425498	764442	591707	

CRUDE OIL ANALYSIS

Gravity, specific	0.831
Gravity, °A.P.I.	38.8
Pour point, °F	20
Sulfur, percent	.09
Color	Brownish green
Viscosity	@ 100° F, 40 sec.
Nitrogen, percent	0.069
Sample identification: SW SW 35-41S-21E, Paradox @ 5050'	

TURNER BLUFF FIELD,
SAN JUAN COUNTY

Area designation (latest): April 1965
Discovery year: August 27, 1957
First recorded production: 1957
Producing formation (s): Ismay

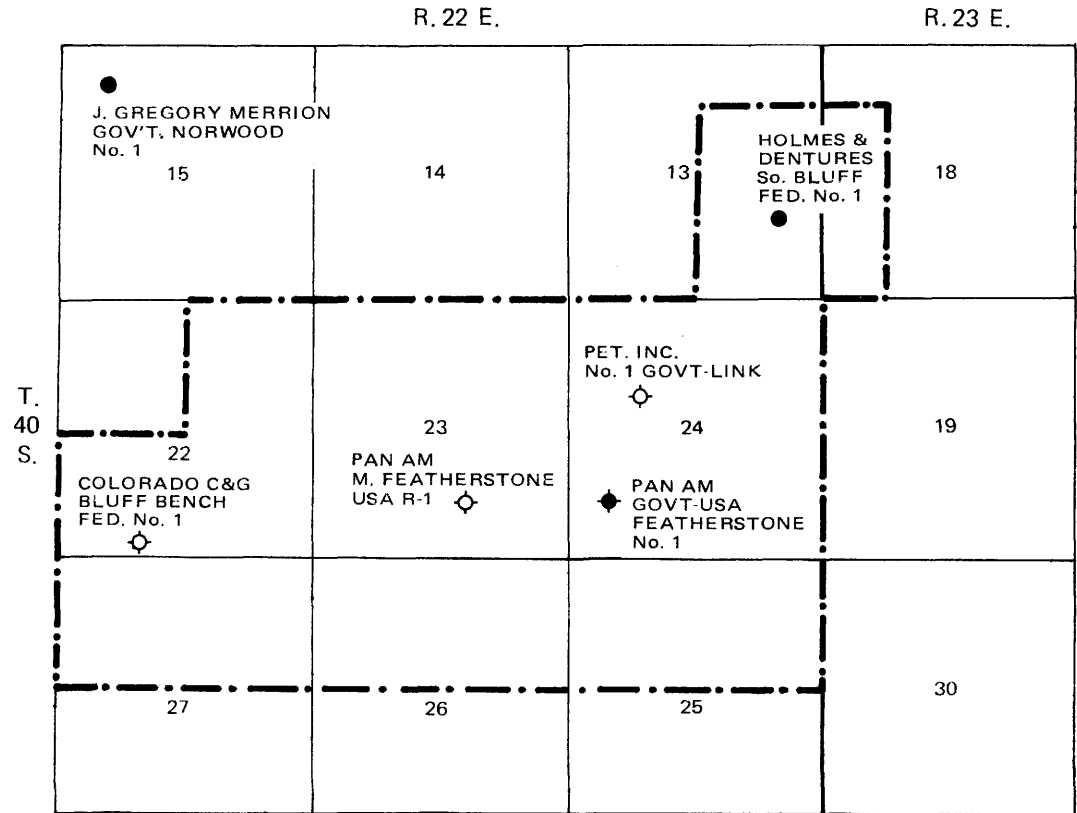
Year	Oil	Gas	Water	Prod. Wells
1957	8741			1
1958	8198	12521	536	
1959	3530	6356	520	
1960	2565	4341	704	
1961	128	304		
1962	Abnd.			

Year	Oil	Gas	Water	Prod. Wells
1963	Includes: Holmes & Ventures, # 1 Fed.; undes. in 1963			1
	6126			
1964	Includes: Holmes & Ventures, # 1 Fed.; undes. in 1964			1
	10140			
1965	8151			1
1966	3831			1
1967	3758			1
1968	3075			1
1969	2852			1
1970	2504			1
Cumulative production				
	63599	23522	1760	

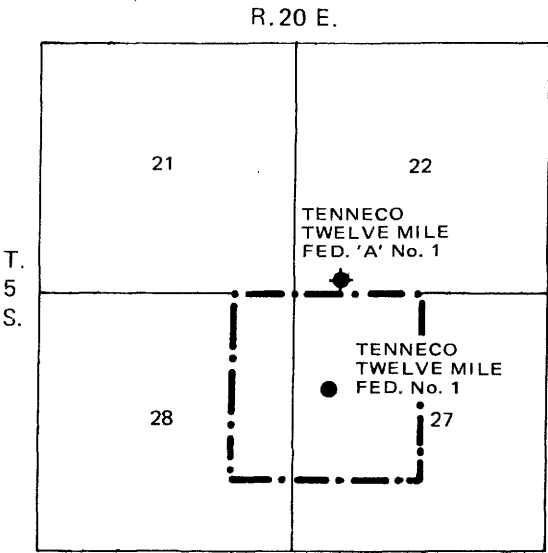
TWELVE MILE WASH FIELD,
UINTAH COUNTY

Area designation (latest): January 1968
Discovery year: December 7, 1967
First recorded production: 1968
Producing formation (s): Green River

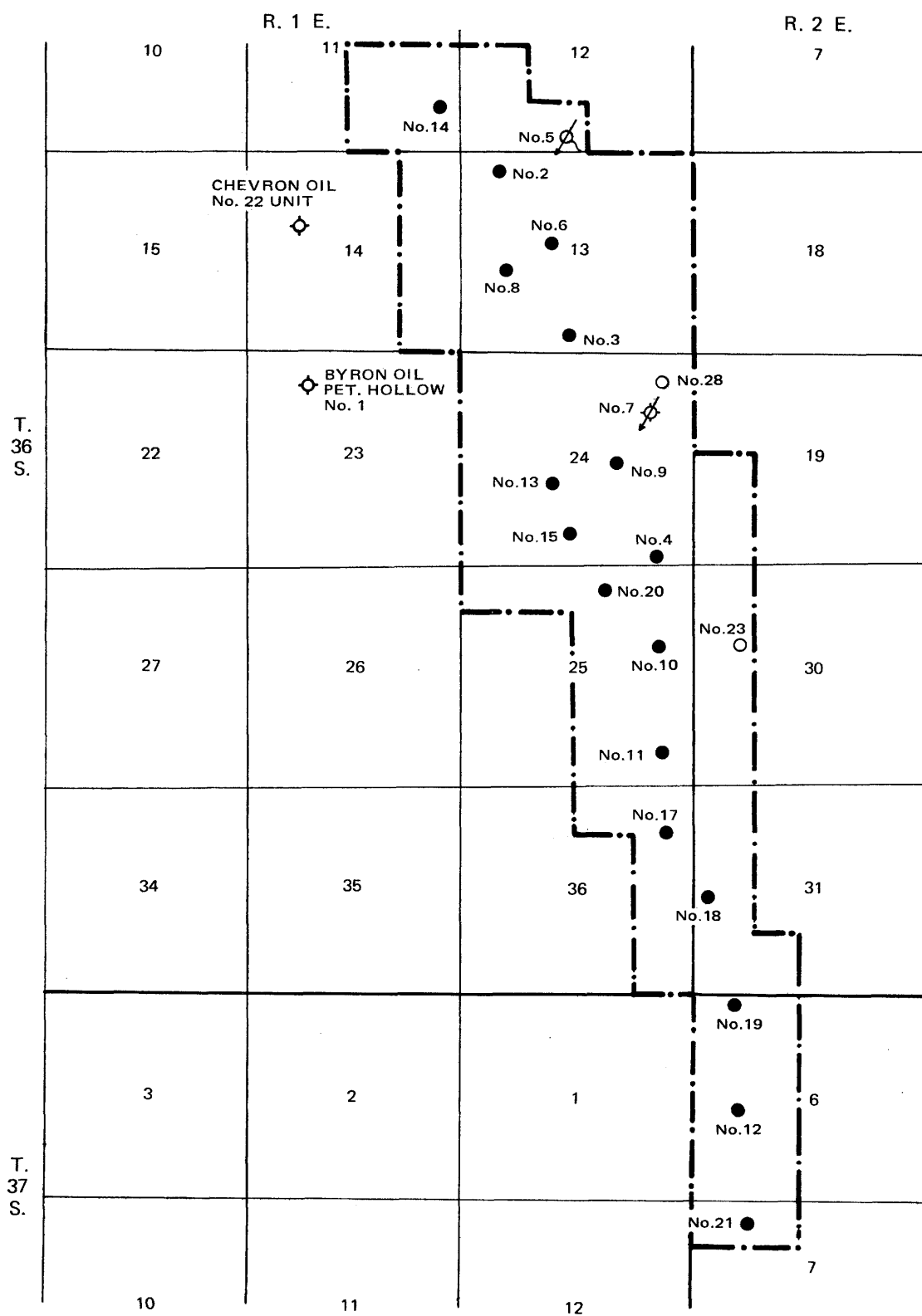
Year	Oil	Gas	Water	Prod. Wells
1968	8518	7175	41434	
1969	Shut in			
1970	P&A			
Cumulative production				
	8518	7175	41434	



Turner Bluff Field, San Juan County
(Scale 1" = 4000')



Twelve Mile Wash Field, Uintah County
(Scale 1" = 4000')



Upper Valley Field, Garfield County
(Scale 1" = 4000')

UINTAH FIELD
(See Bitter Creek Area)

UNDESIGNATED FIELD,
GARFIELD AND UINTAH COUNTIES

Year	Oil	Gas	Water	Prod. Wells
Garfield County				
Tenneco Oil # 1 Johns Valley (35-35S-2W) comp. December 28, 1969; P&A October 1970				
	1245		9151	1

Year	Oil	Gas	Water	Prod. Wells
Uintah County				
Continental Oil # 1 Conoco-Amerada-Federal (34-8S-25E) comp. 1970, Shut in				
		31870		1

UNDESIGNATED (SALT VALLEY–WILDCAT?)

CRUDE OIL ANALYSIS

Gravity, specific	.847
Gravity, °A.P.I.	35.6
Pour point, °F	85
Sulfur, percent	< 0.1
Color	Dark green

Viscosity @ 100° F, 68 sec.

Nitrogen, percent

Sample identification: Utah Southern No. 1,
31-23S-21E, Bailed from hole
@ 3387-3390', and @ 3410-3436', com-
pleted July 18, 1935

UPPER VALLEY FIELD,
GARFIELD COUNTY

Area designation (latest): June 1970,
unitized June 7, 1962

Discovery year: March 12, 1964

First recorded production: 1964

Producing formation (s): Kaibab

Disposition of products sold: Hatch Trucking to
Chevron Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1964	54108			1
1965	126611		63124	4
1966	223504		173899	4
1967	431622		557510	5
1968	897072		942829	11
1969	1563871		3119957	16
1970	1599697		3551725	17
Cumulative production				
	4896485	—	8409044	

Nitrogen, percent 0.050

Sample identification: SE NE 11-36S-1E, Kaibab
@ 6990-7011'

Gravity, specific	0.896
Gravity, °A.P.I.	26.4
Pour point, °F	30
Sulfur, percent	1.79
Color	Brownish black
Viscosity	@ 100° F, 105 sec.; @ 130° F, 75 sec.

Nitrogen, percent 0.142

Sample identification: NW NW 13-36S-1E, Kaibab
@ 6660-6683'

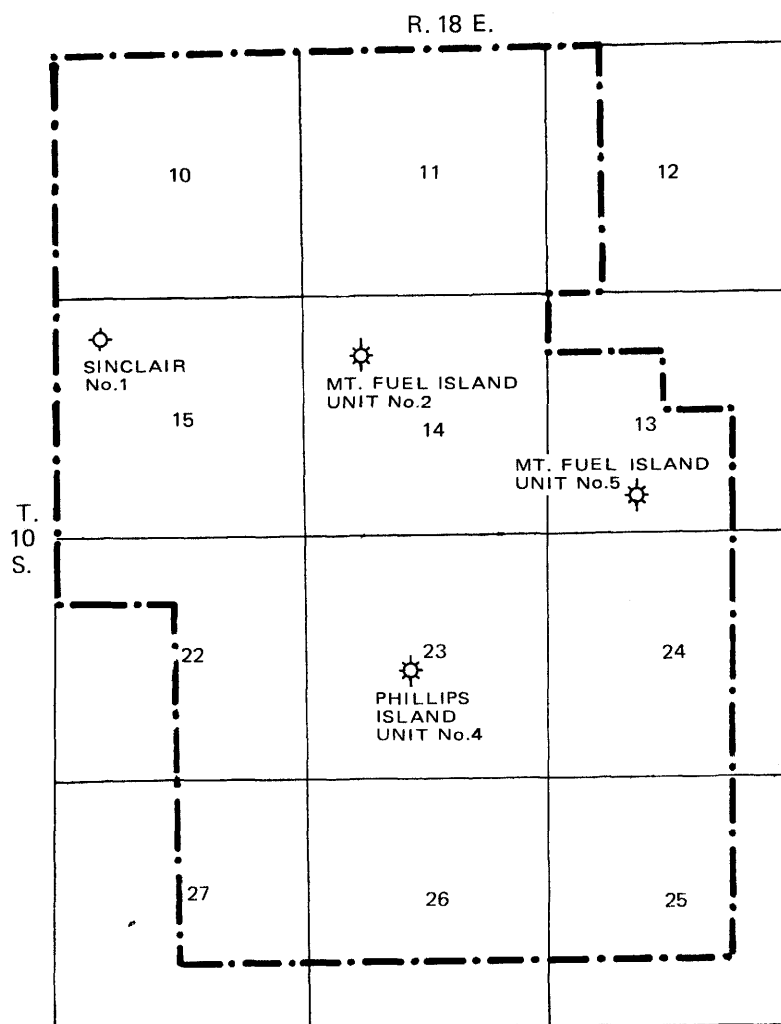
Gravity, specific	0.8961
Gravity, °A.P.I.	26.4
Pour point, °F	35
Sulfur, percent	2.07
Color	Brownish black
Viscosity	@ 70° F, 351.9 sec.; @ 100° F, 118.1 sec.

Nitrogen, percent

Sample identification: Tenneco Oil No. 2,
13-36S-1E, completed November 12, 1963,
Kaibab open hole @ 6589-6655'

CRUDE OIL ANALYSIS

Gravity, specific	0.893
Gravity, °A.P.I.	27.0
Pour point, °F	70
Sulfur, percent	.91
Color	Brownish black
Viscosity	@ 100° F, 160 sec.



Uteland Butte Field, Uintah County
(Scale 1" = 4000')

UTELAND BUTTE FIELD, UINTAH COUNTY

Area designation (latest): February 1962

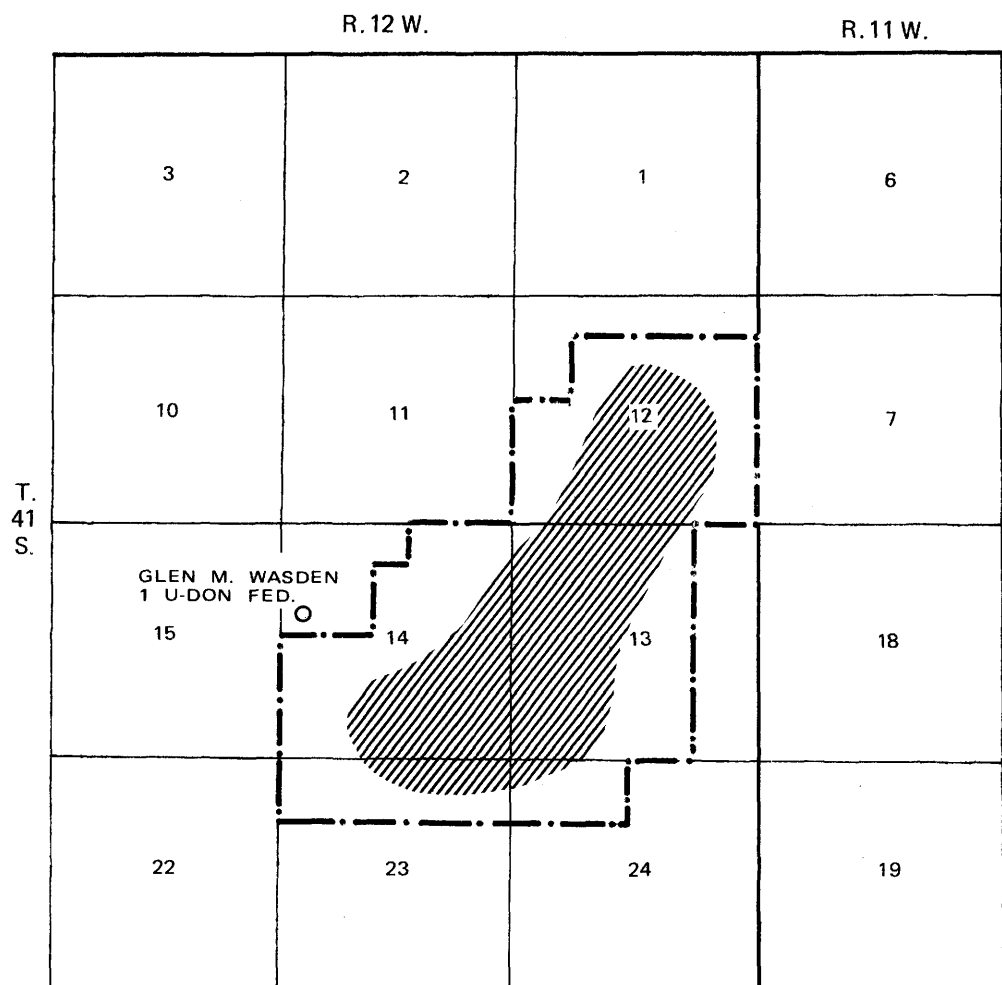
Discovery year: May 13, 1961

First recorded production: 1962

Producing formation (s): Wasatch

Year	Oil	Gas	Water	Prod. Wells
1961	Shut in			
1962	408	152879		3
1963		96934		3
1964		50374		3

Year	Oil	Gas	Water	Prod. Wells
1965			21088	3
1966			13849	3
1967			10546	3
1968			6990	3
1969			1448	1
1970	Shut in			
Cumulative production		408	354108	



Source: AIPG Oil and Gas Fields Symposium, 1961

Drilling density ± 150 wells, 1960

Virgin Field, Washington County
(Scale 1" = 4000')

VIRGIN FIELD, WASHINGTON COUNTY

Area designation (latest): 1963

Discovery year: 1907

First recorded production: 1907

Producing formation (s): Moenkopi

Year	Oil	Gas	Water	Prod. Wells
1907-1926	120000			
1927	1775			
1928	3300			
1929	7600			

Year	Oil	Gas	Water	Prod. Wells
1930	8000			
1931	6000			
1932	5000			
1933	4000			
1934	4000			
1935	4190			
1936	3075			
1937	2400			
1938	2025			
1939	3350			

Virgin Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1940	3275			
1941	3635			
1942	1685			
1943-1953	Shut in			
	0			
1954	863			
1955	1536			
1956	1904			
1957	3684			
1958	1725			
1959	4063			3
1960	2042		9705	1
1961	1039		7151	6
1962-1965	Shut in			
	0			
1966	961		2	1
1967-1970	Shut in			
	0			1
Cumulative production				
201127			16858	

CRUDE OIL ANALYSIS

Gravity, specific	0.867
Gravity, °A.P.I.	31.7
Pour point, °F	40
Sulfur, percent	0.82
Color	Brownish black
Viscosity	@ 100° F, 57 sec.; @ 77° F, 90 sec.
Nitrogen, percent	0.085
Sample identification: NE NE 13-41S-12W Moenkopi @ 557-559'	

Gravity, specific	0.923
Gravity, °A.P.I.	21.8
Pour point, °F	30
Sulfur, percent	2.21
Color	Black
Viscosity	@ 100° F, 270 sec.; @ 130° F, 135 sec.
Nitrogen, percent	0.158
Sample identification: NW SW 13-41S-12W, Moenkopi @ 550-552'	

WALKER HOLLOW FIELD
(See Greater Red Wash Area)

WELLS DRAW FIELD
(See Eight Mile Flat Field)

WESTWATER FIELD,
GRAND COUNTY

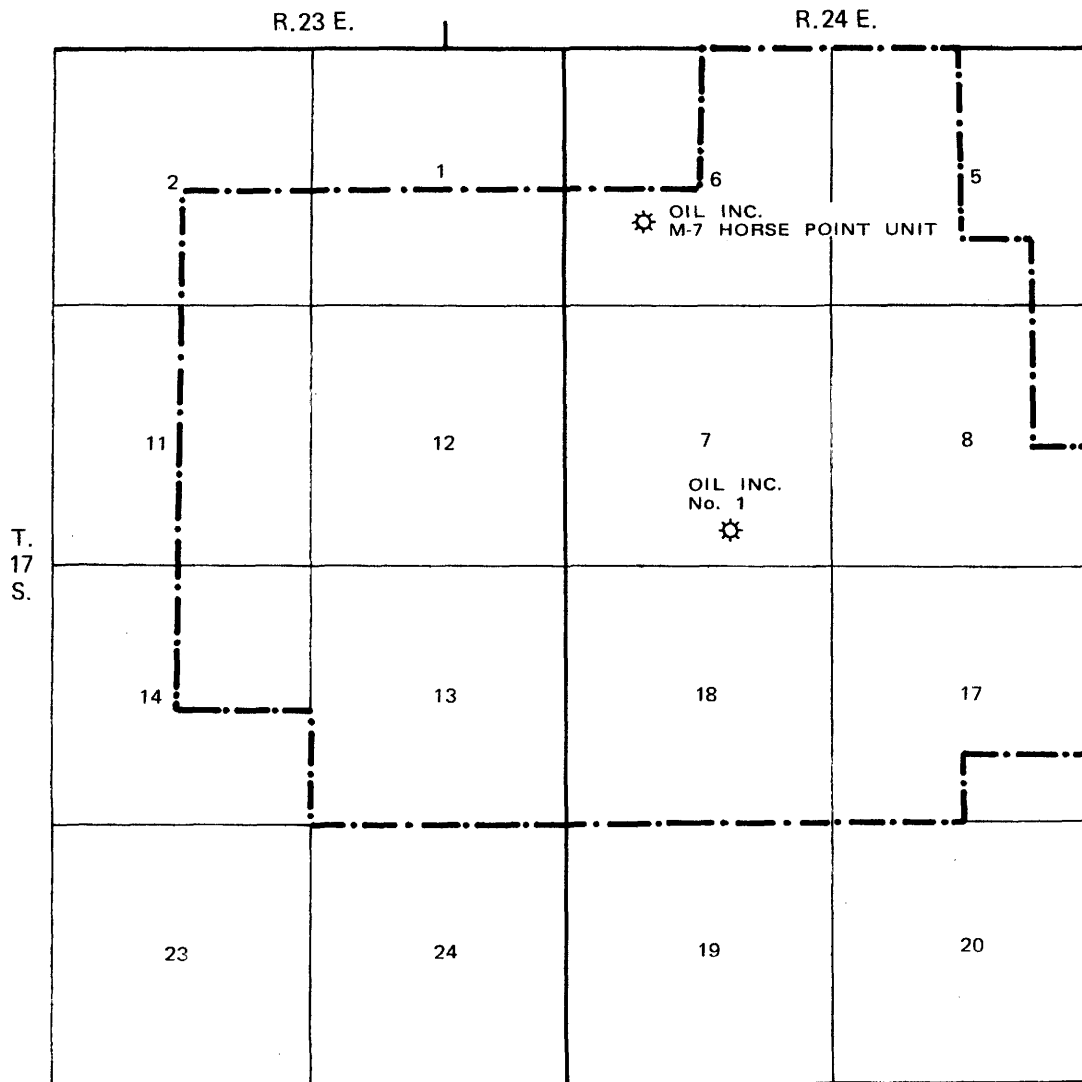
Area designation (latest): April 1969,
unitized July 1, 1958
Discovery year: 1957
First recorded production: 1961
Producing formation (s): Castlegate, Dakota,
Morrison, Entrada
Disposition of products sold: Grand Valley
Transmission Co.; other to Cowboy Oil Co.

Year	Oil	Gas	Water	Prod. Wells
1957-1960	Shut in			
1961		2354094		9
1962		1919301		9
1963	95	2553730		12
1964	1138	1932757		12
1965	1295	1979195		16

Year	Oil	Gas	Water	Prod. Wells
1966	1554	1971284		15
1967	816	1313143		18
1968	428	1484736		20
1969	595	1976527		22
1970	480	1596959		23
Cumulative production				
6401		19081726		

GAS ANALYSIS

Components: (nearest 0.1%)			
	No. 1	No. 2	No. 3
Methane	91.1	75.1	94.0
Ethane	5.2	1.9	3.1
Higher fractions	2.3	0.6	1.0
Hydrogen sulfide	0.0	0.0	0.0



Westwater Field, "Revision," Grand County (Scale 1" = 4000')

Westwater Field (continued)

	No. 1	No. 2	No. 3	
Carbon dioxide	0.5	1.0	1.2	
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	0.08	0.62	0.06	
BTU value/ft ³ (standard T&P)	1089	819	1041	
	No. 4	No. 5	No. 6	No. 7
Methane	84.9	68.2	77.9	93.4
Ethane	7.6	2.8	4.3	3.3
Higher fractions	5.2	1.2	4.7	1.9
Hydrogen sulfide	.0	.0	.0	.0
Carbon dioxide	.5	2.0	.5	.8
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	trace	.6	.2	.1
BTU value/ft ³ (standard T&P)	1197	780	1027	1073

Sample identification:

- No. 1 Oil Inc. No. D2, 18-17S-24E, completed April 9, 1961, sampled March 2, 1963, Dakota @ 4216', sample 8896, index 423
- No. 2 Oil Inc. No. E4, 14-17S-23E, completed May 27, 1962, sampled March 21, 1963, Entrada @ 6346', sample 8897, index 424
- No. 3 Oil Inc. No. M6 Horsepoint Unit, 32-16S-24E, sampled April 24, 1969, Dakota (Cretaceous) @ 6128', sample 11834, index 315
- No. 4 Oil Inc. No. C7, 7-17S-24E, sampled July 7, 1960, Castlegate @ 1066', index 1100
- No. 5 Oil Inc. No. E2 Fed., 7-17S-24E, sampled April 22, 1959, Entrada @ 5114', index 1101
- No. 6 Oil Inc. No. E2 Fed., 7-17S-24E, sampled April 22, 1959, Morrison, index 1102
- No. 7 Oil Inc. No. E3 Fed., 17-17S-24E, completed July 1, 1959, sampled July 7, 1960, Morrison @ 5540', index 1103

WHITE MESA FIELD
(See Greater Aneth Area)

WHITE RIVER FIELD
(See Greater Red Wash Area)

WHITE RIVER FIELD, EAST
(See Greater Red Wash Area)

WILSON CANYON FIELD,
SAN JUAN COUNTY

Area designation (latest): August 1968

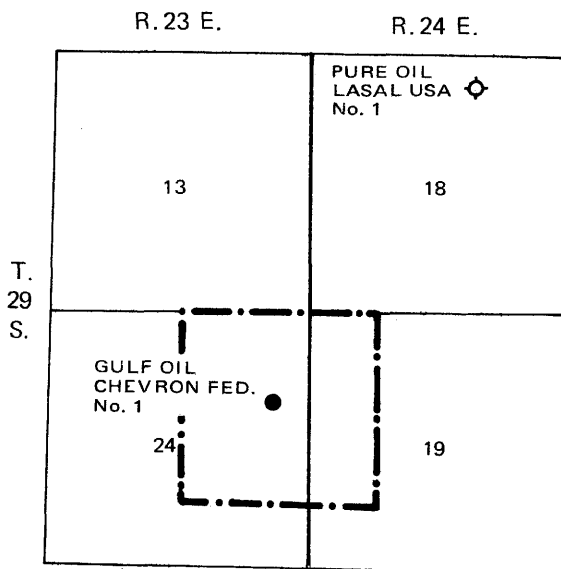
Discovery year: May 9, 1968

First recorded production: 1968

Producing formation (s): Paradox

Disposition of products sold: Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1968	12081	24727	5	1
1969	10782	21539	—	1
1970	5178	16347	—	1
Cumulative production				
	28041	62613	5	



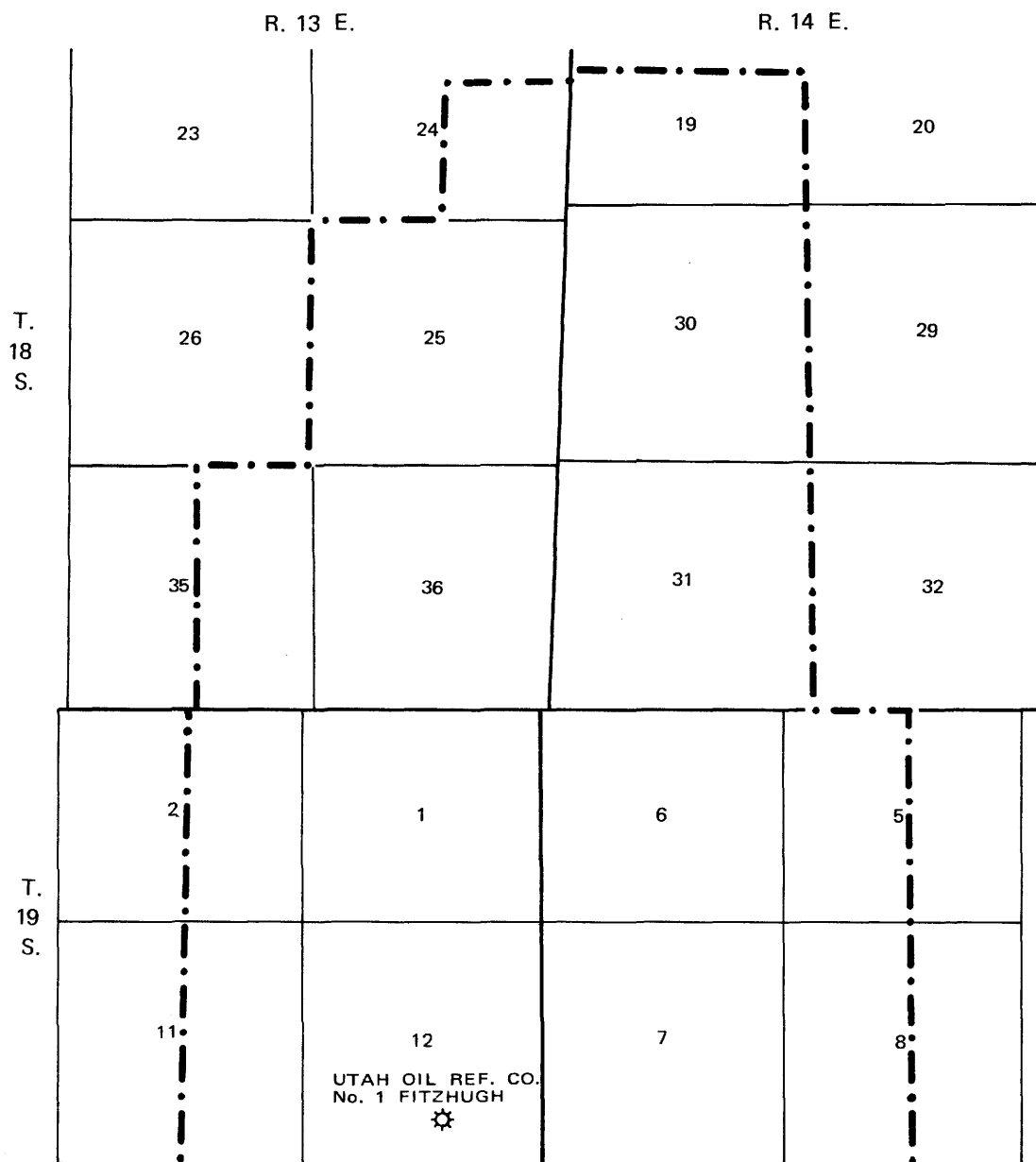
Wilson Canyon Field, San Juan County
(Scale 1" = 4000')

WONSITS WONSITS VALLEY FIELD
(See Greater Red Wash Area)

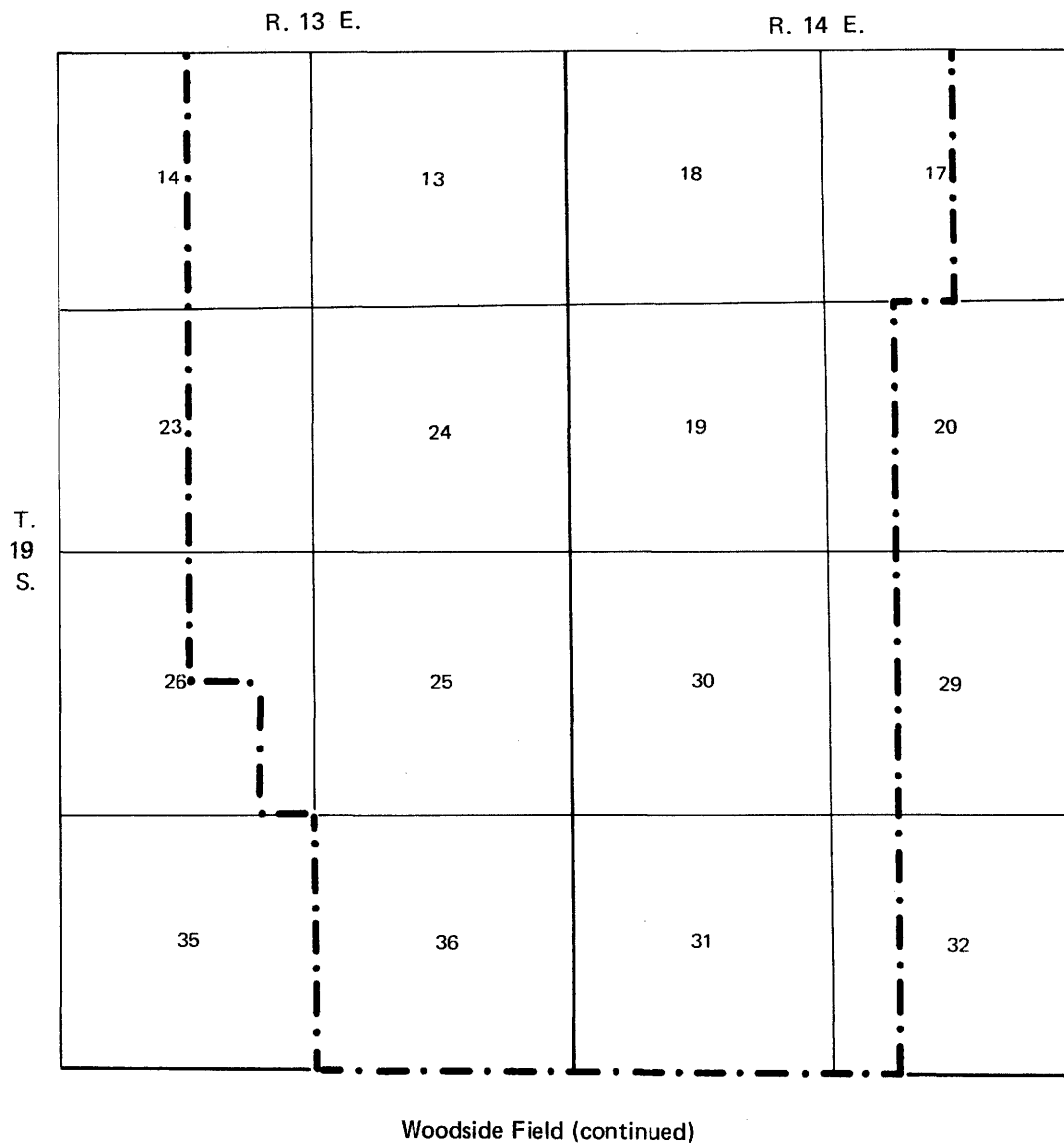
WOODSIDE FIELD,
EMERY COUNTY

Area designation (latest): May 1959
Discovery year: 1924

First recorded production:
Producing formation (s): Coconino



Woodside Field, Emery County
(Scale 1" = 4000')



Woodside Field (continued)

Year	Oil	Gas	Water	Prod. Wells
1924-1926	Helium Reserve (no prod.)			
1926	P&A			

GAS ANALYSIS

Components: (nearest 0.1%)

	No. 1	No. 2
Methane	0.2	0.2
Ethane	0.1	0.2
Higher fractions	0.5	0.6
Hydrogen sulfide	0.0	0.0
Carbon dioxide	33.0	33.2
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.51	1.36
BTU value/ft ³ (standard T&P)	24	28

Components: (nearest 0.1%)

	No. 3	No. 4	No. 5
Methane	27.0	67.0	36.5
Ethane	4.0	6.0	3.4
Higher fractions	2.7	3.1	2.1
Hydrogen sulfide	0.0	0.0	0.0

	No. 3	No. 4	No. 5
Carbon dioxide	0.1	0.2	4.0
Helium (nearest 0.01%; less than 0.05% denoted as "trace")	1.0	0.3	0.3
BTU value/ft ³ (standard T&P)	426	878	498

Sample identification:

No. 1 Holly Resources Corp. No. 44-12 Fed.,
12-19S-13E, sampled September 27,
1969, Kaibab (Permian) @ 3341', sample
12055, index 313

No. 2 Holly Resources Corp. No. 44-12 Fed.,
12-19S-13E, sampled October 1, 1969,
Kaibab (Permian) @ 3341', sample 12059,
index 314

No. 3 Humble Oil & Refining Unit No. 1,
12-19S-13E, sampled July 18, 1962, Ele-
phant Canyon @ 4490', sample 8633, in-
dex 280

No. 4 Humble Oil & Refining Unit No. 1,
12-19S-13E, sampled July 24, 1962, Virgil
@ 4910', sample 8634, index 281

No. 5 Humble Oil & Refining Unit No. 1,
12-19S-13E, sampled July 25, 1962, Vir-
gil @ 5080', sample 8632, index 282

YELLOW ROCK FIELD,
SAN JUAN COUNTY

Area designation (latest): April 1965

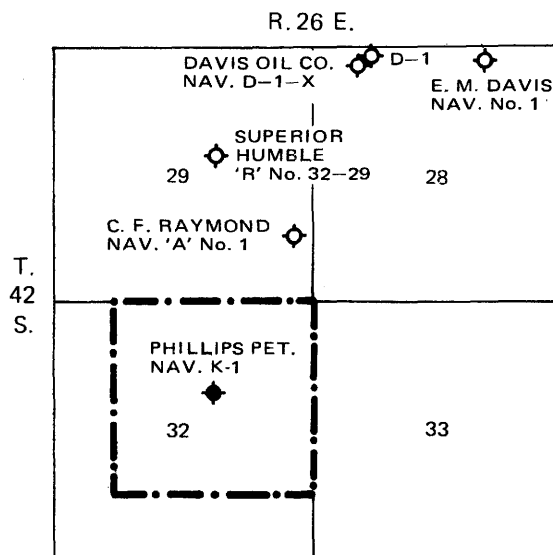
Discovery year: March 18, 1964

First recorded production: 1964

Producing formation (s): Ismay

Disposition of products sold: Permian Corp.

Year	Oil	Gas	Water	Prod. Wells
1964	10679	3332	34492	1
1965	5011	2080	43589	1
1966	4143	3519	42440	1
1967	5588	6790	47320	1
1968	7240	8437	48456	1
1969	5467	4026	26761	1
1970	8882	2671	32854	1
Cumulative production				
	47010	30855	275912	



Yellow Rock Field, San Juan County
(Scale 1" = 4000')

UTAH GEOLOGICAL AND MINERALOGICAL SURVEY

103 Utah Geological Survey Building
University of Utah
Salt Lake City, Utah 84112

THE UTAH GEOLOGICAL AND MINERALOGICAL SURVEY since 1949 has been affiliated with the College of Mines and Mineral Industries at the University of Utah. It operates under a director with the advice and counsel of an Advisory Board appointed by the Board of Regents of the University of Utah from organizations and categories specified by law.

The survey is enjoined to cooperate with all existing agencies to the end that the geological and mineralogical resources of the state may be most advantageously investigated and publicized for the good of the state. The *Utah Code, Annotated, 1953 Replacement Volume 5, Chapter 36, 53-36-2*, describes the Survey's functions.

Official maps, bulletins, and circulars about Utah's resources are published. (Write to the Utah Geological and Mineralogical Survey for the latest list of publications available).

THE LIBRARY OF SAMPLES FOR GEOLOGIC RESEARCH. A modern library for stratigraphic sections, drill cores, well cuttings, and miscellaneous samples of geologic significance has been established by the Survey at the University of Utah. It was initiated by the Utah Geological and Mineralogical Survey in cooperation with the Departments of Geology of the universities in the state, the Utah Geological Society, and the Intermountain Association of Petroleum Geologists. This library was made possible in 1951 by a grant from the University of Utah Research Fund and by the donation of collections from various oil companies operating in Utah.

The objective is to collect, catalog, and systematically file geologically significant specimens for library reference, comparison, and research, particularly cuttings from all important wells driven in Utah, and from strategic wells in adjacent states; the formations, faunas, and structures of which have a direct bearing on the possibility of finding oil, gas, salines or other economically or geologically significant deposits in this state. For catalogs, facilities, hours, and service fees, contact the office of the Utah Geological and Mineralogical Survey.

THE SURVEY'S BASIC PHILOSOPHY is that of the U. S. Geological Survey, i.e., our employees shall have no interest in Utah lands. For permanent employees this restriction is lifted after a 2-year absence; for consultants employed on special problems, there is a similar time period which can be modified only after publication of the data or after the data have been acted upon. For consultants, there are no restrictions beyond the field of the problem, except where they are working on a broad area of the state and, here, as for all employees, we rely on their inherent integrity.

DIRECTORS:

William P. Hewitt, 1961-

Arthur L. Crawford, 1949-1961