OF-232
Map 63.

TOADLENA, NEW MEXICO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)

7148,C
6694,M,(M)
9308,Dc
6850,Dc,(M)
7030,PC
7136,R
1000,Kd
3275,Ks
4830,Jm
4820,Jm
10,420,PC
11,282,M
1272,Kpc
6075,Kd
5388,Km
5581,Kg
5928,Kgh
4898,Km
5665,Kd,(Kd)
5437,Jm
505
5500,Kg
1740,Kpc
1740,Kpc
1653
1506,Kpc
1500,Kpc
5170,Kg
5205,Km
5435,Km
4975,Kg
5895,(Kg)
515,Kg
5877,(Kgh)
5859,Kgr
5032,Kmv
1362,Kpc
5260,Kg
5800,(Kg)
5905,(Kg)
1475,Kf
1440,Kpc
3825,Kmv
1325,Kpc
5034,Kg
4586,Kg,(Kg)
5803,Kd
5776,Kc
5451,Kgr
1386,Kch
816,Kf
4535,Kg,(Kg)
650,Kch
5089,Jm
504
5159,Kd,(Kd)
5272,Jm
(Kg)
5103,Kd,(Kg)
5350,Kd
220
9803,M,(Kg)
507
4692,Jm,(Kd)
4845,Kgr
4079,Km
4581,Kd
4730,Jm(Kgr,Kd)
4762,Jm(Kd)
4807,Km
4803,Kd
4793,Kd
4785,Kgr
9405,D
90
395
440
120
1116
980
610
3073,Kg
4104,Jm
4120,Jm
4131,Jm
507
819
889,(Kmv)
3826,Kd
3923,Kgh
3063
3670,Kd
888
780
707
3620,Kd
260
3645,Jm
3920,Kd
3720,Kd
3852,Jm
2873,Kg
3960,Jm
3815,Kg
4335,Jm
4410,Kd
9750,D
1028,Jm
1028,Jm
970,Kd
4281,Kgr
1100,Kmf
4620,Jm
4753,P C
2920,C
11,746,Cl

INDIAN RESERVATION
NAVAJO
CHACO
MOUNTAINS
CHACO CANYON NATIONAL MONUMENT
SAN JUAN CO
MCKINLEY CO

SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL 20 METERS

TOADLENA, NEW MEXICO
N3600–W10800/30 X 60
1980

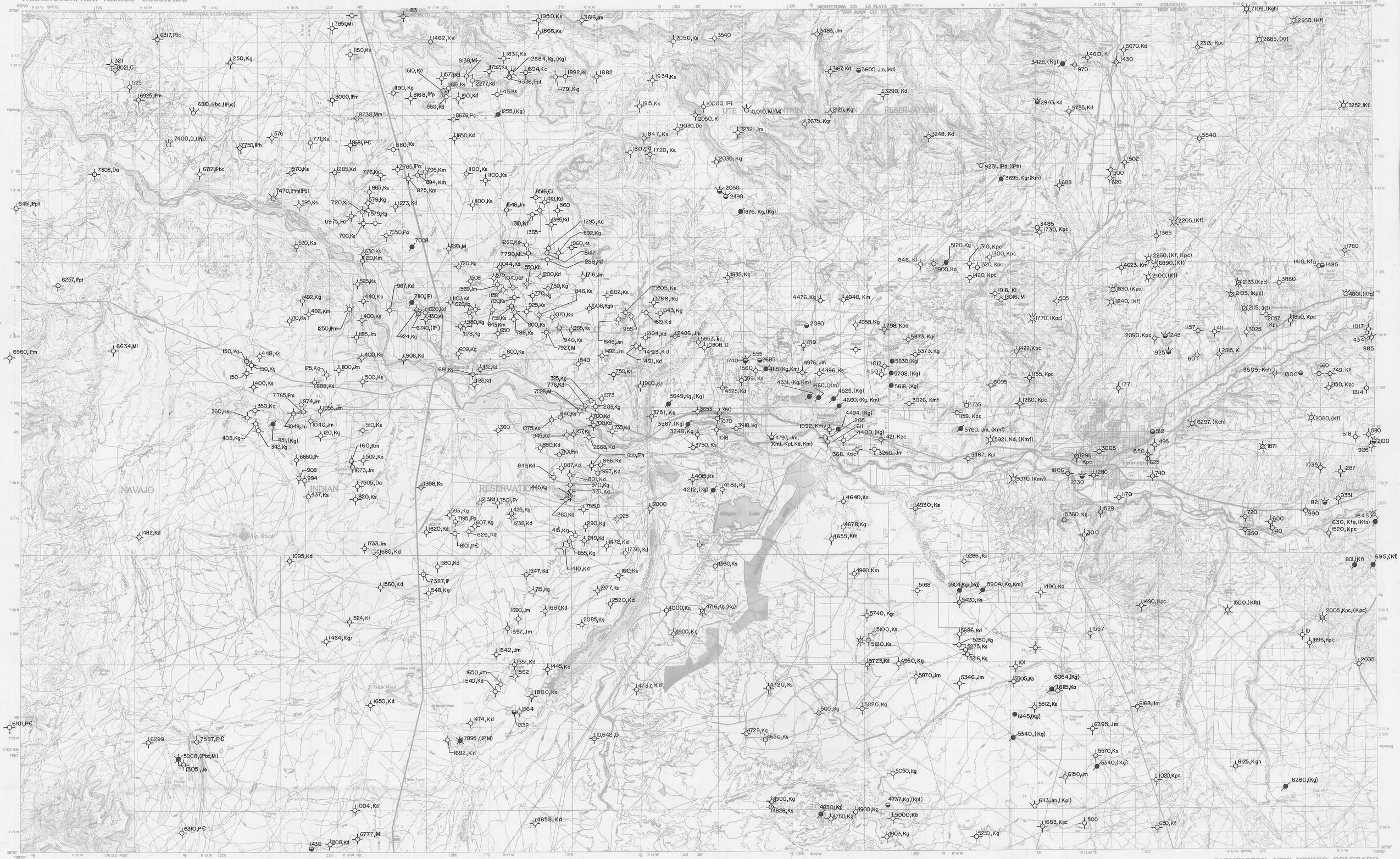
© INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1981

MAP 63 **Petroleum tests in the Toadlena 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.**

OF-232
Map 64.

FARMINGTON, NEW MEXICO–COLORADO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)



SCALE 1:100 000

CONTOUR INTERVAL 20 METERS

FARMINGTON, NEW MEXICO–COLORADO
N3630–W10800/30x60
1980

Tertiary	Tjo	Ojo Alamo Sandstone	Cretaceous	Kgh	Greenhorn Limestone Member of Mancos Shale	Permian	Py	Yeso Formation
Cretaceous	Kfa	Farmington Sandstone Member of Kirtland Shale		Kgr	Graneros Shale Member of Mancos Shale		Pc	Cutler Formation
	Kf	Fruitland Formation		Kd	Dakota Sandstone		Pco	Coconino Sandstone
	Kpc	Pictured Cliffs Sandstone	Cretaceous	Jbc	Burro Canyon Formation	Pennsylvanian	IPh	Hermosa Formation
	Kl	Lewis Shale		Jb	Brushy Basin Member of Morrison Formation		IPht	Honaker Trail Member of Hermosa Formation
	Kch	Chacra producing interval		Jw	Westwater Canyon Member of Morrison Formation		IPp	Paradox Member of Hermosa Formation
	Kmv	Mesaverde Group		Jm	Morrison Formation		IPak	Akah zone of Paradox Member
	Kmf	Menefee Formation		Jt	Todilto Limestone		IPbc	Barker Creek zone of Paradox Member
	Km	Mancos Shale		Je	Entrada Sandstone		IPpt	Pinkerton Trail Member of Hermosa Formation
	Kpl	Point Lookout Sandstone		Jc	Carmel Formation		IPa	Atoka (rocks correlated with Atoka Serries)
	Kh	Hosta Tongue of Point Lookout Sandstone	Triassic	Tic	Chinle Formation		IPtm	Table Mesa
	Ka	Dalton Sandstone Member of Crevasse Canyon Formation		Tm	Moenkopi Formation	Mississippian	MI	Leadville Limestone
	Kg	Gallup Sandstone (basal Niobrara sands)	Permian	Psa	San Andres Formation		Mm	Madison Limestone
	Kt	Tocito Sandstone Lentil of Mancos Shale		Pg	Glorieta Sandstone	Devonian	Do	Ouray Formation
	Kp	Hospah Sandstone (true Gallup Sandstone)					De	Elbert Formation
	Ks	Sanostee (Juana Lopez) Member of Mancos Shale					Da	Aneth Formation
	Kc	Carlile Shale Member of Mancos Shale				Cambrian	€i	Ignacio Formation

total depth

7936 Kd (Kd) Stratigraphic unit with shows or production

stratigraphic unit at total depth

well symbol

- dry hole, without reported shows
- dry hole, with reported oil show
- dry hole, with reported gas show
- dry hole, with reported oil & gas show
- producing oil well
- producing gas well
- abandoned oil well
- abandoned gas well

MAP 64 Petroleum tests in the Farmington 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.

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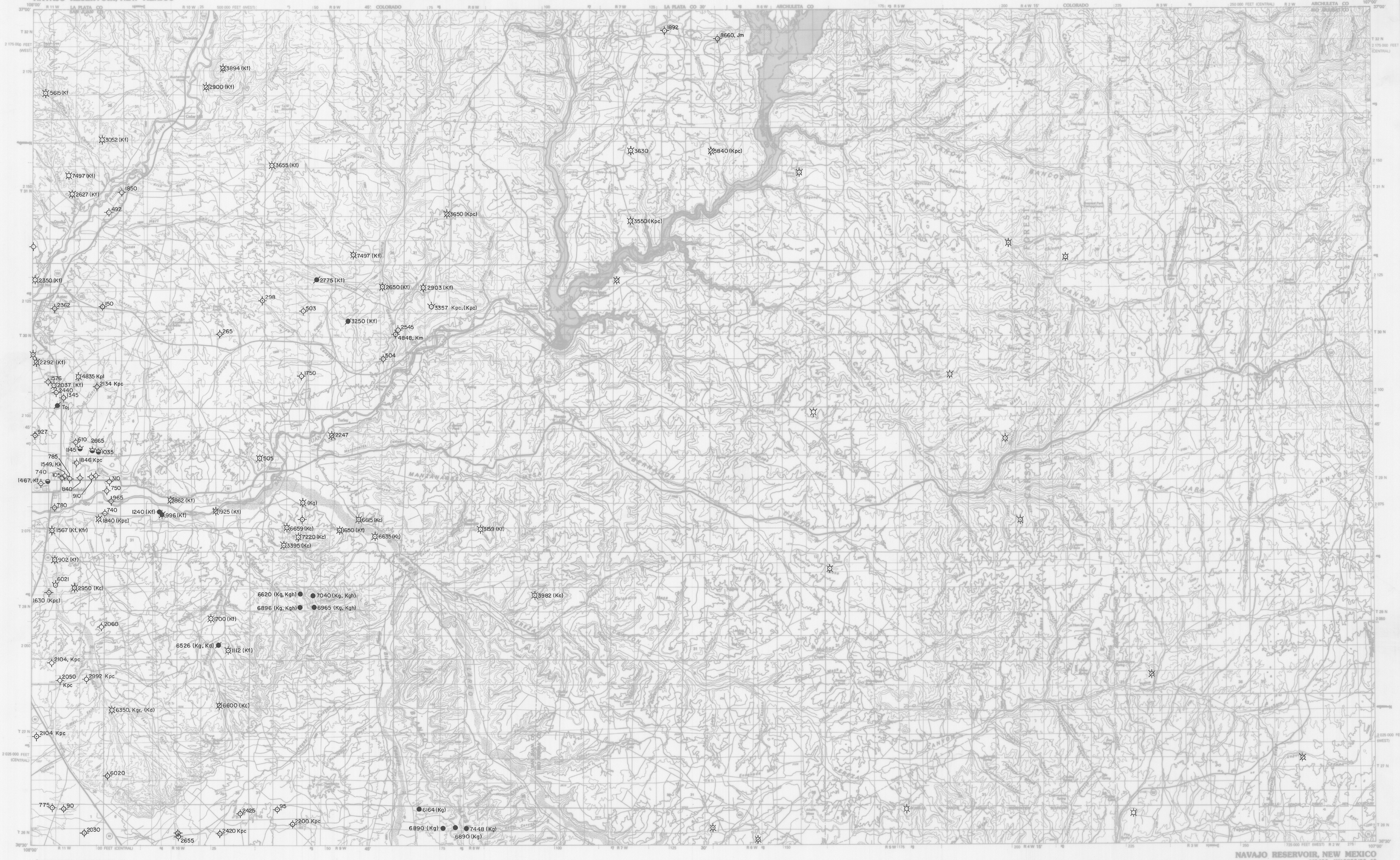
Map 65.

NAVAJO RESERVOIR, NEW MEXICO

30X60 MINUTE SERIES (TOPOGRAPHIC)



SCALE 1:100 000

CONTOUR INTERVAL 50 METERS

NAVAJO RESERVOIR, NEW MEXICO
N3630—W10700/30x60
1980

MAP 65 **Petroleum tests in the Navajo Reservoir 30- by 60-minute topographic quadrangle, San Juan and Rio Arriba Counties, New Mexico.**

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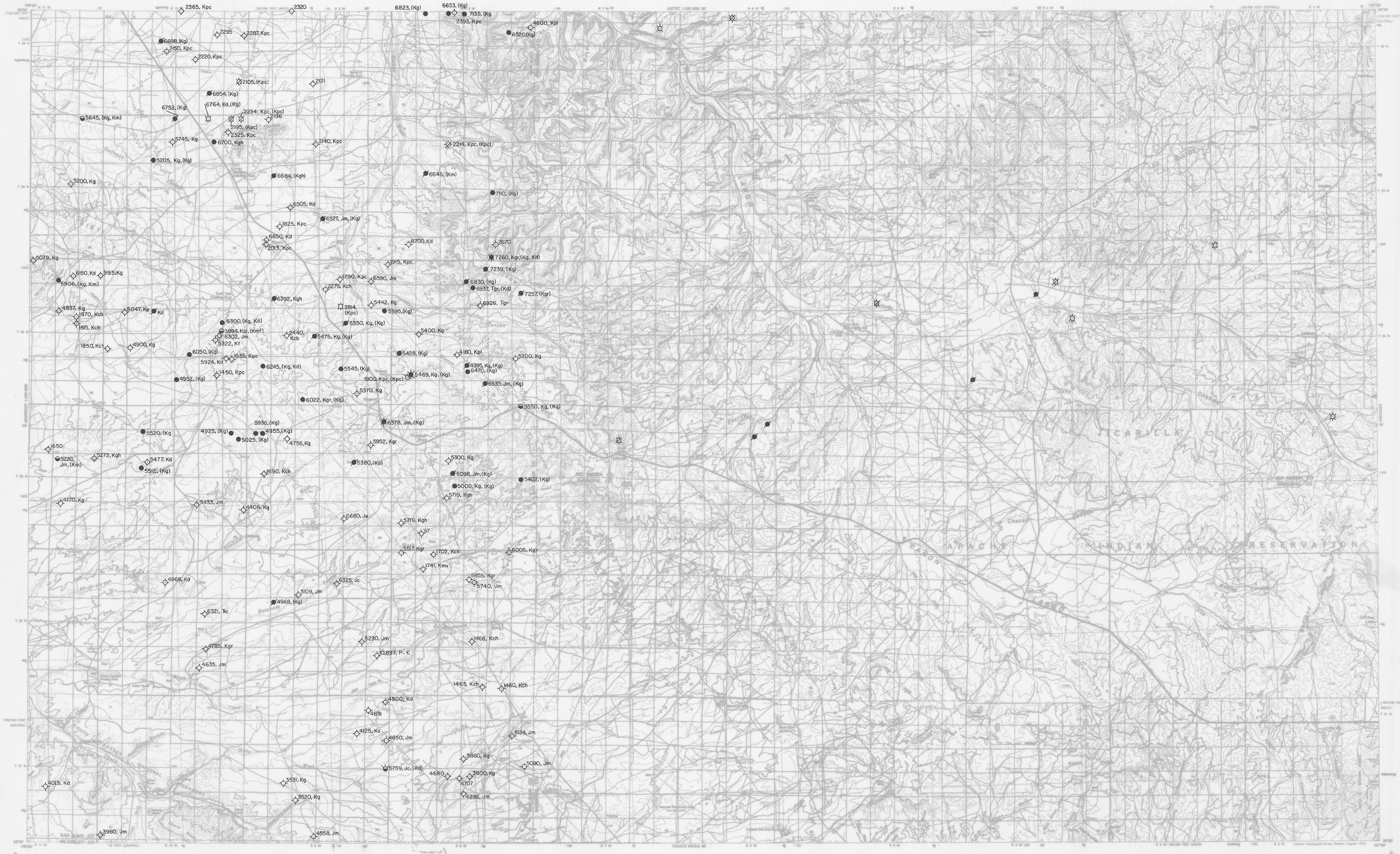
Map 66.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CHACO CANYON QUADRANGLE
NEW MEXICO
1:100 000-SCALE SERIES



Mapped, edited, and published by the Geological Survey

Compiled in 1976 from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1959–1967. See index for dates of individual maps

Partially revised from aerial photographs taken 1975–1976 and from other official sources. Revised information not field checked

Projection and 10 000-meter grid, zone 13: Universal Transverse Mercator
50 000-foot grid ticks based on New Mexico coordinate system, central and west zones. 1927 North American datum

Areas covered by dashed light-blue pattern are subject to controlled inundation

INDEX TO 1:24 000 AND 1:62 500-SCALE MAPS

1	2	3		4	5	6	7
8	9			10	11	12	13
14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29

1 Huerfano Trading Post NW–1966
2 Huerfano Trading Post–1967
3 Chaco Canyon–1959
4 Gobernador Mesa–1963
5 Lapis Point–1963
6 Schmitz Ranch–1963
7 Otero–1963
8 Huerfano Trading Post SW–1966
9 Burro Trading Post–1966
10 Tohlakai Canyon–1963
11 Cherry Shale–1963
12 Billy Rice Canyon–1963
13 Pueblo Bonito–1963
14 Pueblo Bonito NW–1966
15 Kinlichee–1967
16 Lybrook NW–1966
17 Lybrook–1959
18 Lybrook SW–1966
19 Tsoodzil Mesa–1966
20 Five Lakes Canyon NW–1963
21 Five Lakes Canyon NE–1963
22 Pueblo Bonito–1959
23 Pueblo Bonito–1966
24 Fire Rock Wash–1966
25 Lybrook SE–1966
26 Mule Dam–1966
27 Door Mesa–1966
28 Taylor Ranch–1963
29 Arroyo Chijuilla–1963

UTM GRID AND 1976 MAGNETIC NORTH DECLINATION AT CENTER OF MAP

SCALE 1:100 000

KILOMETERS 0 1 2 3 4 5 6 7 8 9 10
MILES 0 1 2 3 4 5
FEET 5000 0 5000 10000 15000 20000 25000

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NEW MEXICO
QUADRANGLE LOCATION

LEGEND

Perennial stream, lake
Intermittent stream, lake
Village or locality
Landmark structure
Public park or recreation area
Forest or game land area
Other public area or Military or Indian reservation

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Street or unimproved road
Trail
Interstate route
U.S. route
State route

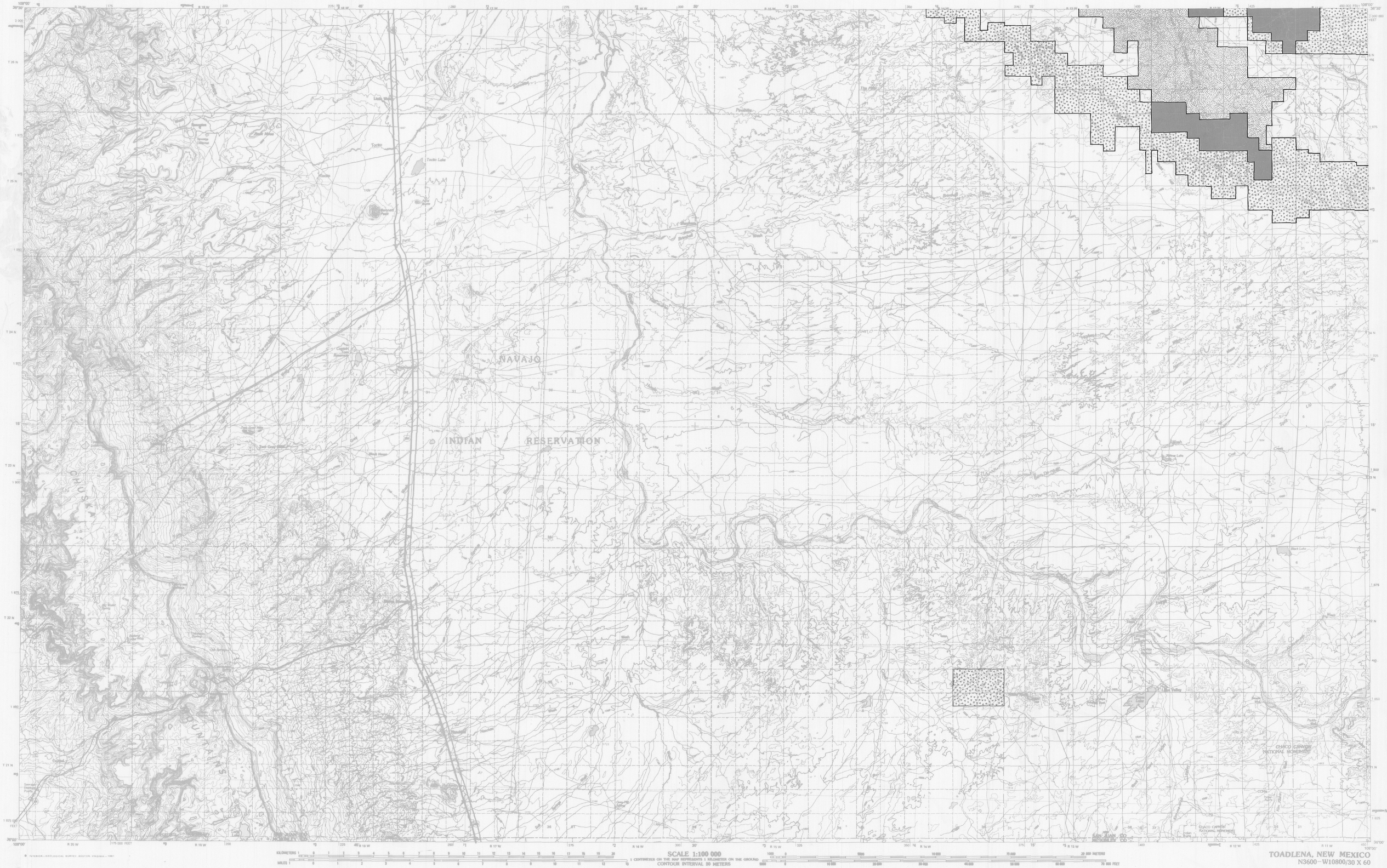
CHACO CANYON, NEW MEXICO
SW/4 AZTEC (NJ 13-10) 1:250 000-SCALE MAP
N3600–W10700/30x60
1976

MAP 66 Petroleum tests in the Chaco Canyon 30- by 60-minute topographic quadrangle, San Juan and Rio Arriba Counties, New Mexico.

OF-232
Map 67.

TOADLENA, NEW MEXICO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)



TOADLENA, NEW MEXICO
N3600—W10800/30 X 60
1980

MAP 67 **Oil and gas fields in the Toadlena 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.**

FARMINGTON, NEW MEXICO–COLORADO OF-232 Map 68.

MAP 68 Oil and gas fields in the Farmington 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.

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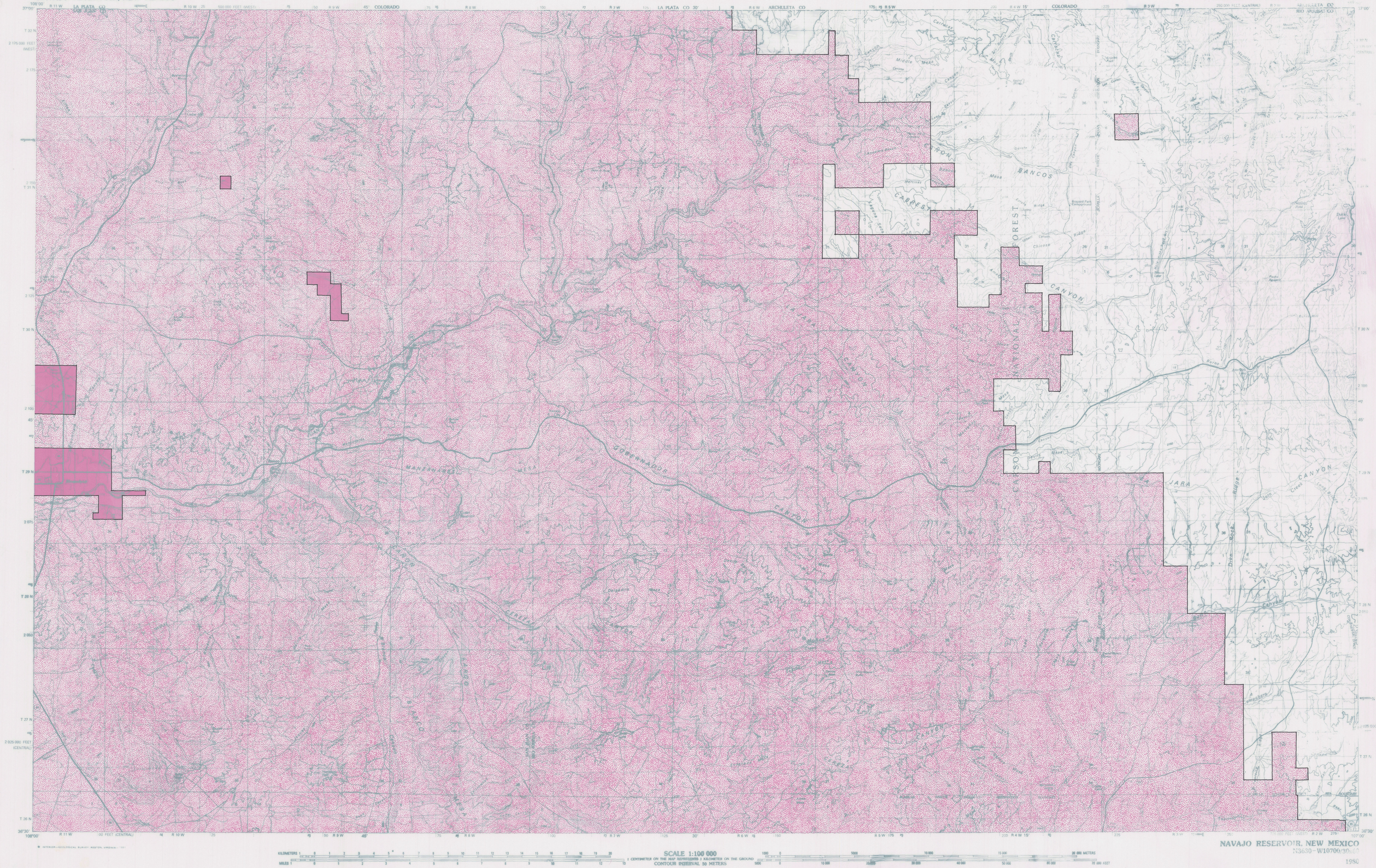
Map 69.

NAVAJO RESERVOIR, NEW MEXICO

30X60 MINUTE SERIES (TOPOGRAPHIC)



SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL 50 METERS

Oil Field
Gas Field
Combination Oil & Gas Field

MAP 69 **Oil and gas fields in the Navajo Reservoir 30- by 60-minute topographic quadrangle, San Juan and Rio Arriba Counties, New Mexico.**

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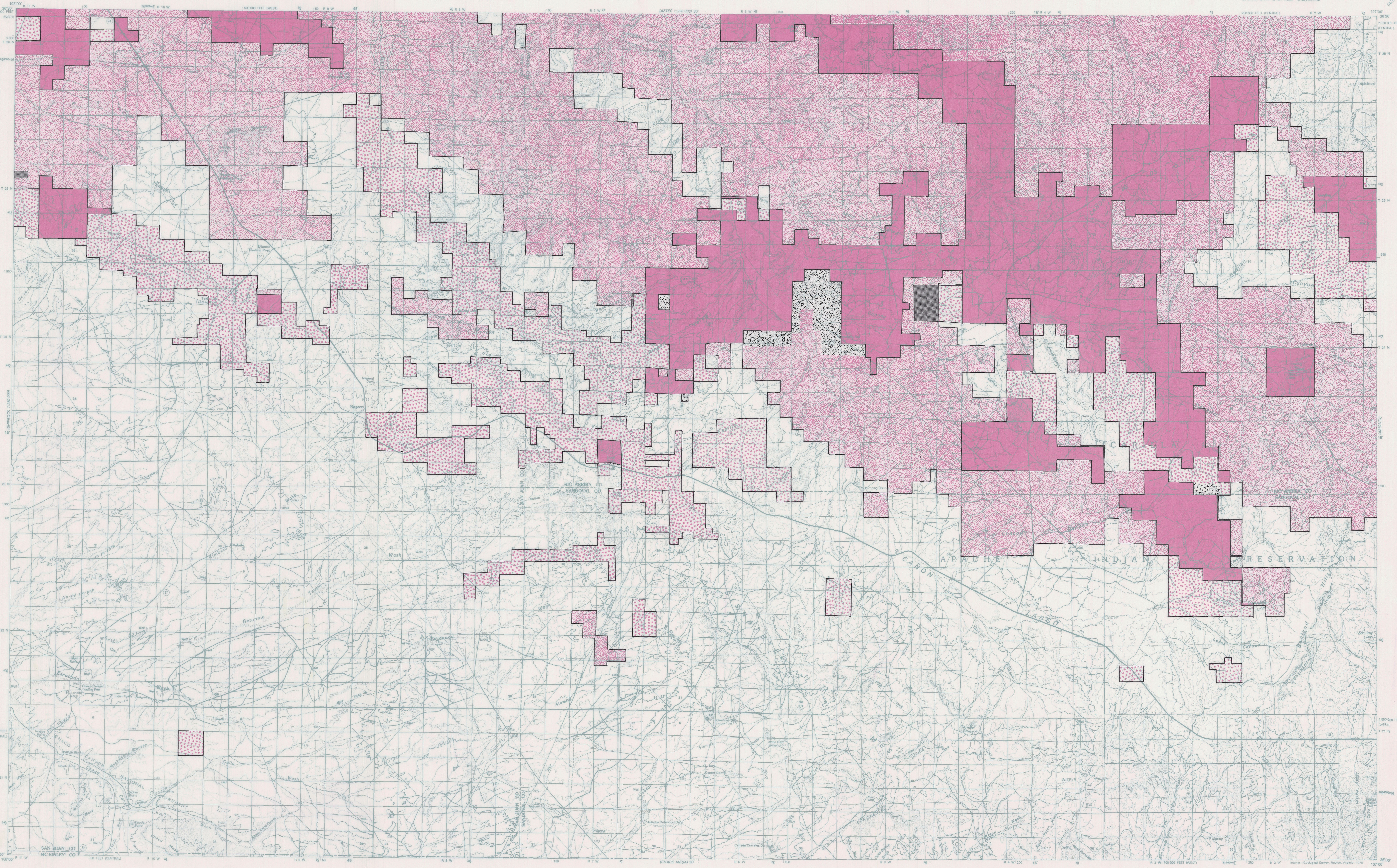
Map 70.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CHACO CANYON QUADRANGLE
NEW MEXICO
1:100 000-SCALE SERIES



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50 000-foot grid ticks based on New Mexico coordinate system, central and west zones. 1927 North American datum

Areas covered by dashed light-blue pattern are subject to controlled inundation

INDEX TO 1:24 000 AND 1:62 500-SCALE MAPS

1 Huerfano Trading Post NW–1966
2 Huerfano Trading Post–1967
3 Nageezi–1959
4 Gonzales Mesa–1963
5 Lapis Point–1963
6 Schmitz Ranch–1963
7 Ojito–1963
8 Huerfano Trading Post SW–1966
9 Blanco Trading Post–1966
10 Tafoya Canyon–1963
11 Otero Store–1963
12 Billy Rice Canyon–1963
13 Lindrith–1963
14 Pueblo Bonito NW–1966
15 Kimbeto–1967
16 Lybrook NW–1966
17 Lybrook–1966
18 Counselor–1966
19 Tancosa Windmill–1966
20 Five Lakes Canyon NW–1963
21 Five Lakes Canyon NE–1963
22 Pueblo Bonito–1966
23 Sargent Ranch–1966
24 Fire Rock Well–1966
25 Lybrook SE–1966
26 Mule Dam–1966
27 Deer Mesa–1966
28 Taylor Ranch–1963
29 Arroyo Chijuillita–1963

UTM GRID AND 1976 MAGNETIC NORTH DECLINATION AT CENTER OF MAP
1°29′ 27 MILS
12½° 222 MILS

SCALE 1:100 000
KILOMETERS
MILES
FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NEW MEXICO
QUADRANGLE LOCATION

▨	Oil Field
▨	Gas Field
▩	Combination Oil & Gas Field

LEGEND

Perennial stream, lake
Intermittent stream, lake
Village or locality
Landmark structure
Public park or recreation area
Forest or game land area
Other public area or Military or Indian reservation

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Street or unimproved road
Trail
Interstate route U.S. route State route

CHACO CANYON, NEW MEXICO
SW/4 AZTEC (NJ 13-10) 1:250 000-SCALE MAP
N3600–W10700/30x60
1976

Interior—Geological Survey, Reston, Virginia—1976

MAP 70 Oil and gas fields in the Chaco Canyon 30- by 60-minute topographic quadrangle, San Juan and Rio Arriba Counties, New Mexico.

TOADLENA, NEW MEXICO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)

Moderate
Low
High

TOADLENA, NEW MEXICO
N3600–W10800/30 X 60

1980

MAP 71 **Petroleum resource potential in the Toadlena 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.**

OF-232
Map 72.

FARMINGTON, NEW MEXICO–COLORADO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)

FARMINGTON, NEW MEXICO–COLORADO
N3630–W10800/30x60
1980

Moderate
High

MAP 72 **Petroleum resource potential in the Farmington 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.**

OF-232
Map 73.

TOADLENA, NEW MEXICO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)

TOADLENA, NEW MEXICO
N3600–W10800/30 X 60
1980

Kf Fruitland Formation
Kmfu Upper Member of Menefee Formation
Kmfa Allison Member of Menefee Formation
● SJ-407 Drill hole & drill hole number

▩ High
▨ Moderate
☐ Very low
▧ New mine locations

MAP 73 Coal occurrences, prospects, mines, and resource potential for Toadlena 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.

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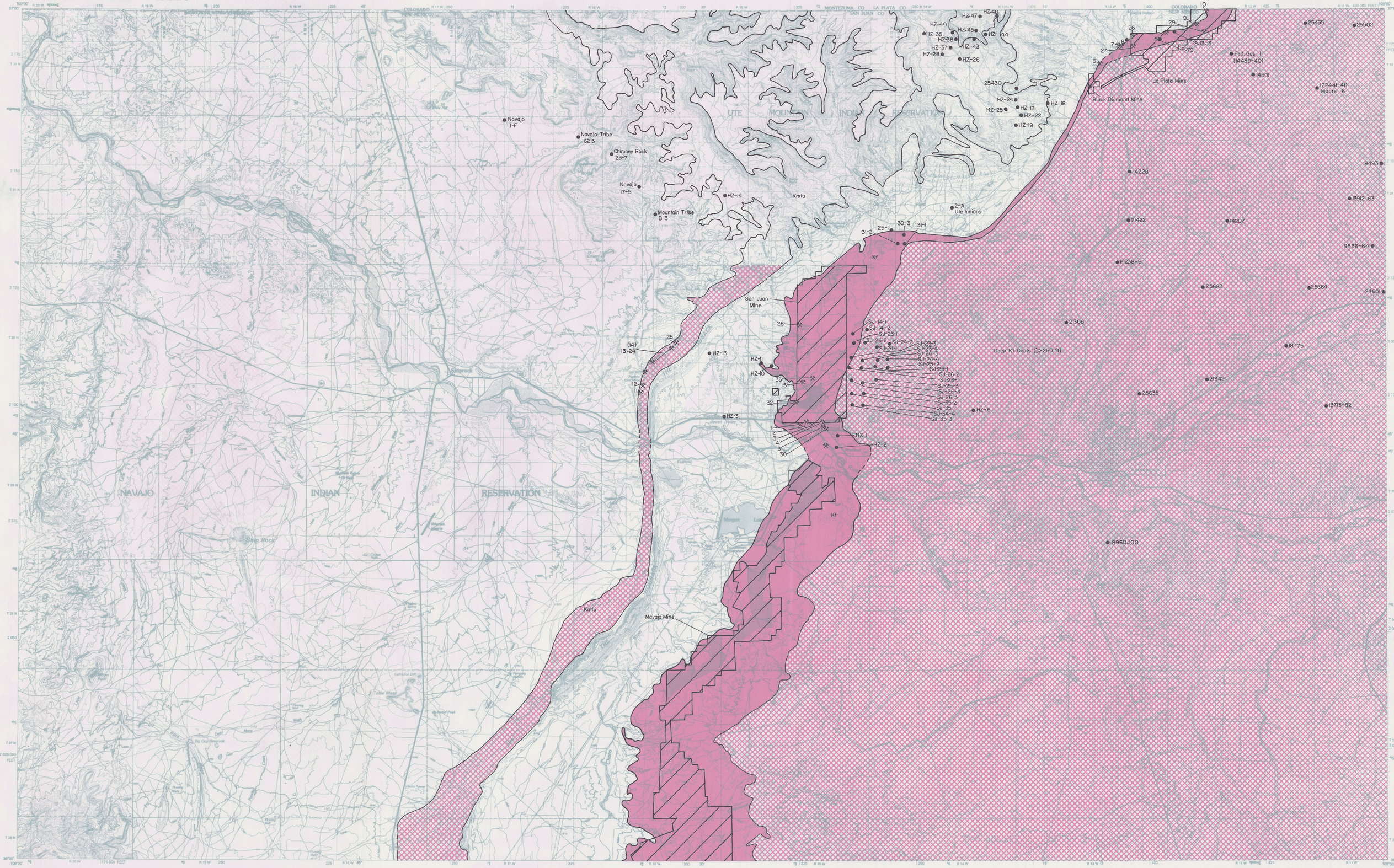
Map 74.

FARMINGTON, NEW MEXICO–COLORADO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)



SCALE 1:100 000

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

CONTOUR INTERVAL 20 METERS

Kf Fruitland Formation
Kmfu Upper Member of Menefee Formation
●H2-6 Drill hole & drill hole number

High
Moderate
Very low
New mine leases

FARMINGTON, NEW MEXICO–COLORADO
N3630–W10800/30x60
1980

MAP 74 **Coal occurrences, prospects, mines, and resource potential for Farmington 30- by 60-minute topographic quadrangle, San Juan County, New Mexico.**