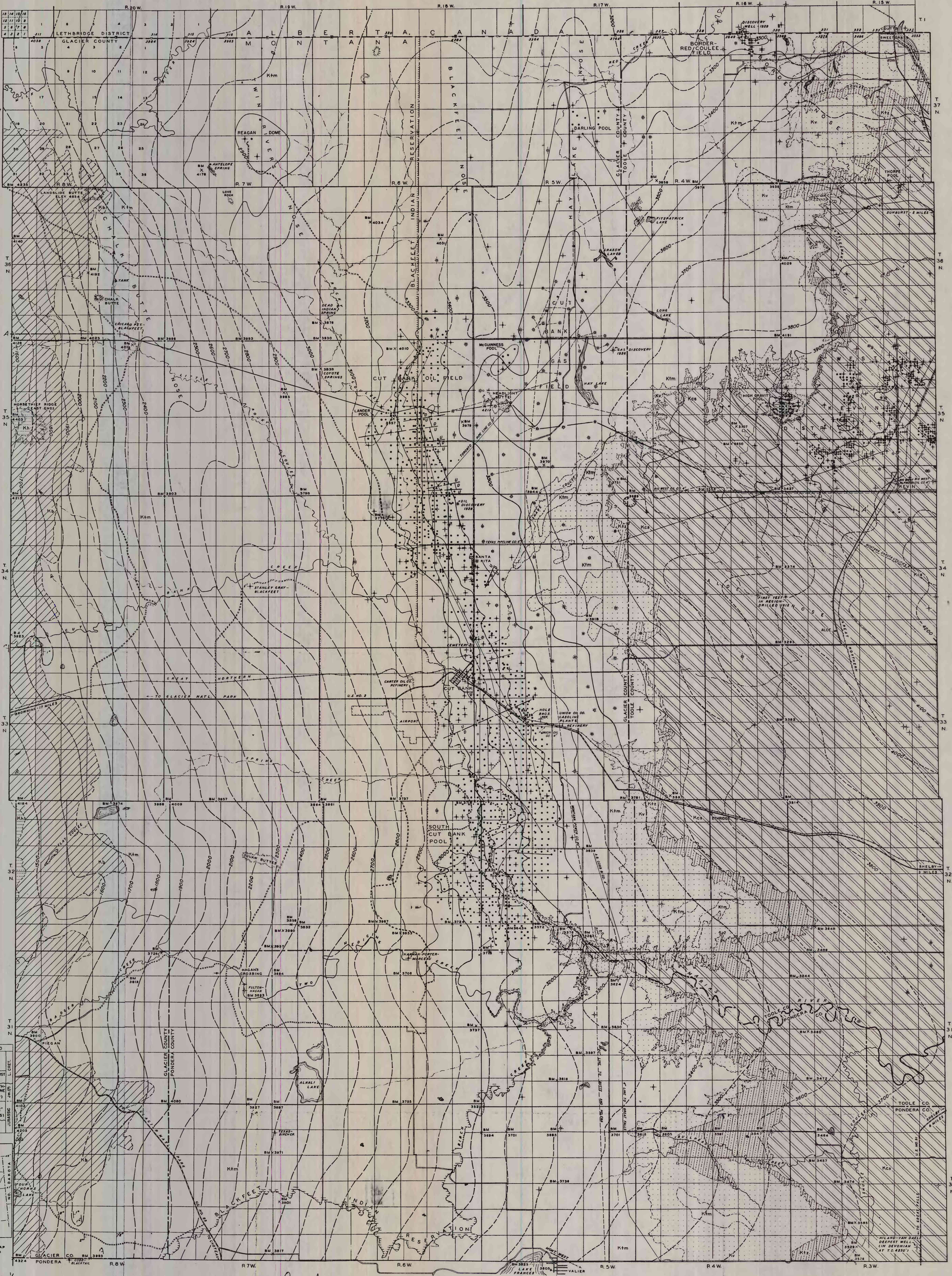
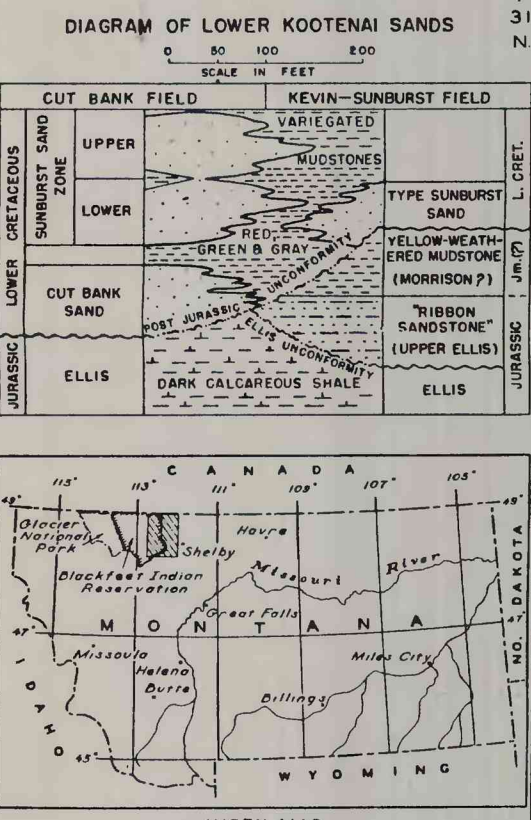


EXPLANATION

- SEDIMENTARY ROCKS**
- | | |
|--|---|
| | HORNETSHIEF SANDSTONE |
| | BEARPAW SHALE |
| | TWO MEDICINE FM. CLAGGETT SHALE
UPPER PART OF EARLE SANDSTONE
PRESENT NORTH OF HEADLIGHT BUTTE AND
EAST OF BLACKFEET INDIAN RESERVATION
NOT DIFFERENTIATED. |
| | VIRGELLE SANDSTONE |
| | TRANSITION ZONE |
| | COLORADO SHALE |
- STRUCTURE CONTOURS**
- | | |
|--|--|
| | CONTROL BY SURFACE MAPPING
AND FROM WELL DATA. |
| | CONTROL BY INTERPOLATION |
| | CONTROL INADEQUATE. POSITION
OF CONTOURS INFERRED |
- WELL SYMBOLS**
- | | |
|--|--------------------------------|
| | OIL WELL |
| | OIL WELL, ABANDONED |
| | SHOW OF OIL, ABANDONED |
| | SHOW OF OIL AND GAS, ABANDONED |
| | OIL AND GAS WELL |
| | GAS WELL |
| | GAS WELL, SHUT IN |
| | GAS WELL, ABANDONED |
| | DRILLING OR LOCATION |
| | INADEQUATE TEST |
| | DRY HOLE |
- FAULT**
- | | |
|--|---|
| | FAULT |
| | DIP AND STRIKE |
| | BENCH MARK |
| | LAND CORNER AND ELEVATION |
| | INTERNATIONAL
BOUNDARY MONUMENT ON NEW SITE,
WITH NUMBER AND ELEVATION. |
| | INTERNATIONAL
BOUNDARY MONUMENT ON ORIGINAL SITE,
WITH NUMBER AND ELEVATION |
| | TRIANGULATION STATION AND ELEV. |
- BITUMINOUS SURFACE ROAD**
- | | |
|--|-----------------|
| | IMPROVED ROAD |
| | UNIMPROVED ROAD |
| | GAS PIPE LINE |
| | OIL PIPE LINE |
- LITHOLOGY OF LOWER KOOTENAI SANDS
WITH NOTES ON CORRELATION**

[illegible]

OIL PRODUCTION-CUT BANK FIELD			
YEAR	BARRELS	YEAR	BARRELS
1932	20,659	1939	3,541,679
1933	278,513	1940	4,086,464
1934	1,201,521	1941	5,057,201
1935	3,234,021	1942	5,521,545
1936	3,394,847	1943	5,359,035
1937	3,366,234	1944	5,443,486
1938	2,833,146	1945	4,675,894
			TOTAL 47,226,273

Y MONTANA STATE OIL CONSERVATION BOARD

GAS PRODUCTION-CUT BANK FIELD			
YEAR	MCF	YEAR	MCF
1929		1938	7,704,469
1930	2,210	1939	9,025,880
1931	1,421,841	1940	10,726,671
1932	4,081,827	1941	11,488,478
1933	4,502,107	1942	13,554,401
1934	5,049,846	1943	15,203,426
1935	7,275,869	1944	14,947,090
1936	8,809,985	1945	14,730,406
1937	9,771,101		
		TOTAL	138,258,261

Oil and Gas Leasing Division U.S.G.S. GREAT FALLS

MONTANA STATE OIL CONSERVATION BOARD

TOTAL 47,826,273

PRELIMINARY STRUCTURE CONTOUR MAP

OF THE

CUT BANK-WEST KEVIN-BORDER DISTRICTS,

GLACIER, TOOLE, AND PONDERA COUNTIES, MONTANA

BY

C. E. ERDMANN, WM. BEER AND J. W. NORDQUIST

SCALE OF MILES

0 1 2 3 4 5

CONTOURS DRAWN ON TOP OF COLORADO SHALE

INTERVAL 100 FEET DATUM MEAN SEA LEVEL

MAY 1, 1939

REVISED APRIL, 1946

1937

9,771,101

1938

138,248,857

1939

1,000,000

1940

1,000,000

1941

1,000,000

1942

1,000,000

1943

1,000,000

1944

1,000,000

1945

1,000,000

1946

1,000,000

1947

1,000,000

1948

1,000,000

1949

1,000,000

1950

1,000,000

1951

1,000,000

1952

1,000,000

1953

1,000,000

1954

1,000,000

1955

1,000,000

1956

1,000,000

1957

1,000,000

1958

1,000,000

1959

1,000,000

1960

1,000,000

1961

1,000,000

1962

1,000,000

1963

1,000,000

1964

1,000,000

1965

1,000,000

1966

1,000,000

1967

1,000,000

1968

1,000,000

1969

1,000,000

1970

1,000,000

1971

1,000,000

1972

1,000,000

1973

1,000,000

1974

1,000,000

1975

1,000,000

1976

1,000,000

1977

1,000,000

1978

1,000,000

1979

1,000,000

1980

1,000,000

1981

1,000,000

1982

1,000,000

1983

1,000,000

1984

1,000,000

1985

1,000,000

1986

1,000,000

1987

1,000,000

1988

1,000,000

1989

1,000,000

1990

1,000,000

1991

1,000,000

1992

1,000,000

1993

1,000,000

1994

1,000,000

1995

1,000,000

1996

1,000,000

1997

1,000,000

1998

1,000,000

1999

1,000,000

2000

1,000,000

2001

1,000,000

2002

1,000,000

2003

1,000,000

2004

1,000,000

2005

1,000,000

2006

1,000,000

2007

1,000,000

2008

1,000,000

2009

1,000,000

2010

1,000,000

2011

1,000,000

2012

1,000,000

2013

1,000,000

2014

1,000,000

2015

1,000,000

2016

1,000,000

2017

1,000,000

2018

1,000,000

2019

1,000,000

2020

1,000,000

2021

1,000,000

2022

1,000,000

2023

1,000,000

2024

1,000,000

2025

1,000,000

2026

1,000,000

2027

1,000,000

2028

1,000,000

2029

1,000,000

2030

1,000,000

2031

1,000,000

2032

1,000,000

2033

1,000,000

2034

1,000,000

2035

1,000,000

2036

1,000,000

2037

1,000,000

2038

1,000,000

2039

1,000,000

2040

1,000,000

2041

1,000,000

2042

1,000,000

2043

1,000,000

2044

1,000,000

2045

1,000,000

2046

1,000,000

2047

1,000,000

2048

1,000,000

2049

1,000,000

2050

1,000,000

2051

1,000,000

2052

1,000,000

2053

1,000,000

2054

1,000,000

2055

1,000,000

2056

1,000,000

2057

1,000,000

2058

1,000,000

2059

1,000,000

2060

1,000,000

2061

1,000,000

2062

1,000,000

2063

1,000,000

2064

1,000,000

2065

1,000,000

2066

1,000,000

2067

1,000,000

2068

1,000,000

2069

1,000,000

2070

1,000,000

2071

1,000,000

2072

1,000,000

2073

1,000,000

2074

1,000,000

2075

1,000,000

2076

1,000,000

2077

1,000,000

2078

1,000,000

2079

1,000,000

2080

1,000,000

2081

1,000,000

2082

1,000,000

2083

1,000,000

2084

1,000,000

2085

1,000,000

2086

1,000,000

2087

1,000,000

2088

1,000,000

2089

1,000,000

2090

1,000,000

2091

1,000,000

2092

1,000,000

2093

1,000,000

2094

1,000,000

2095

1,000,000

2096

1,000,000

2097

1,000,000

2098

1,000,000

2099

1,000,000

2100

1,000,000

2101

1,000,000

2102

1,000,000

2103

1,000,000

21