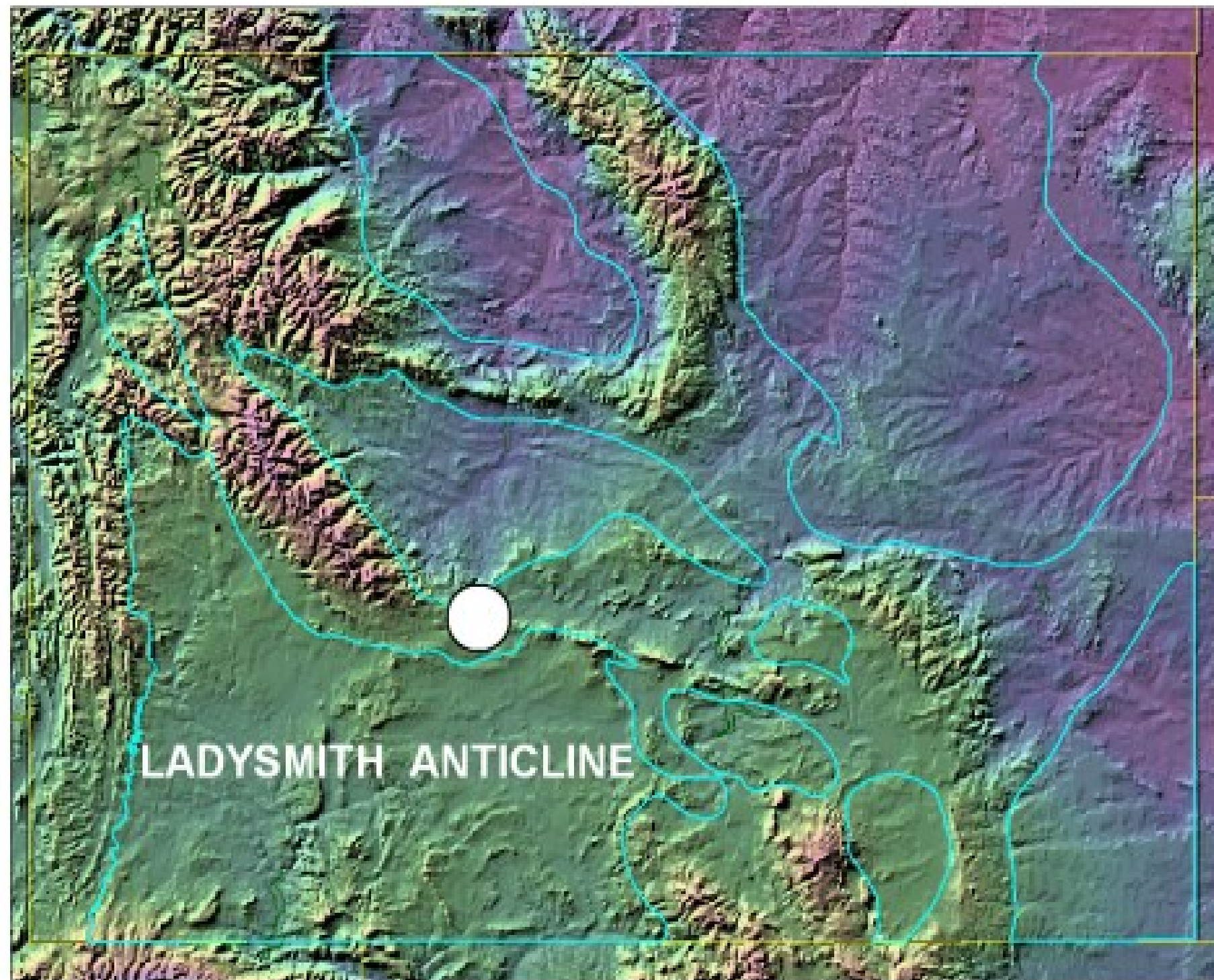


WYOMING



Highlights

Undrilled Top of Faulted Anticline

**Structure Confirmed by Field Work,
Air Photo, Landsat & Well Control**

Shallow Depth

Lease Position Controls Structure

John D. Adamson - Geology
Robert Hanagan - Land
P.O. Box 746
Big Horn, Wyoming 82833

307-920-0599 Cell
307-371-0337 Cell
307-673-2719 Office
800-806-1506 Fax



LADYSMITH ANTICLINE

FREMONT COUNTY, WYOMING

PROSPECT SUMMARY: The Ladysmith Anticline prospect is located in what is called the Jeffrey City Triangle Area. This area is located between the Great Divide / Greater Green River Basin and the Wind River Basin. Historical regional production of oil and gas exists in several Paleozoic formations including Phosphoria, Tensleep, Madison and Flathead. "Lost Soldier" field has also produced from Cambrian and Precambrian.

This prospect trap is a structurally faulted anticline, similar to other producing structures in the region. The prospect is defined by air photo, landsat imagery, field work and wells, with the highest structural point untested.

LOCATION: Ladysmith Anticline is located in T29N, R96W of Fremont County, Wyoming. Leases lie on the southeast end of the Wind River Range.

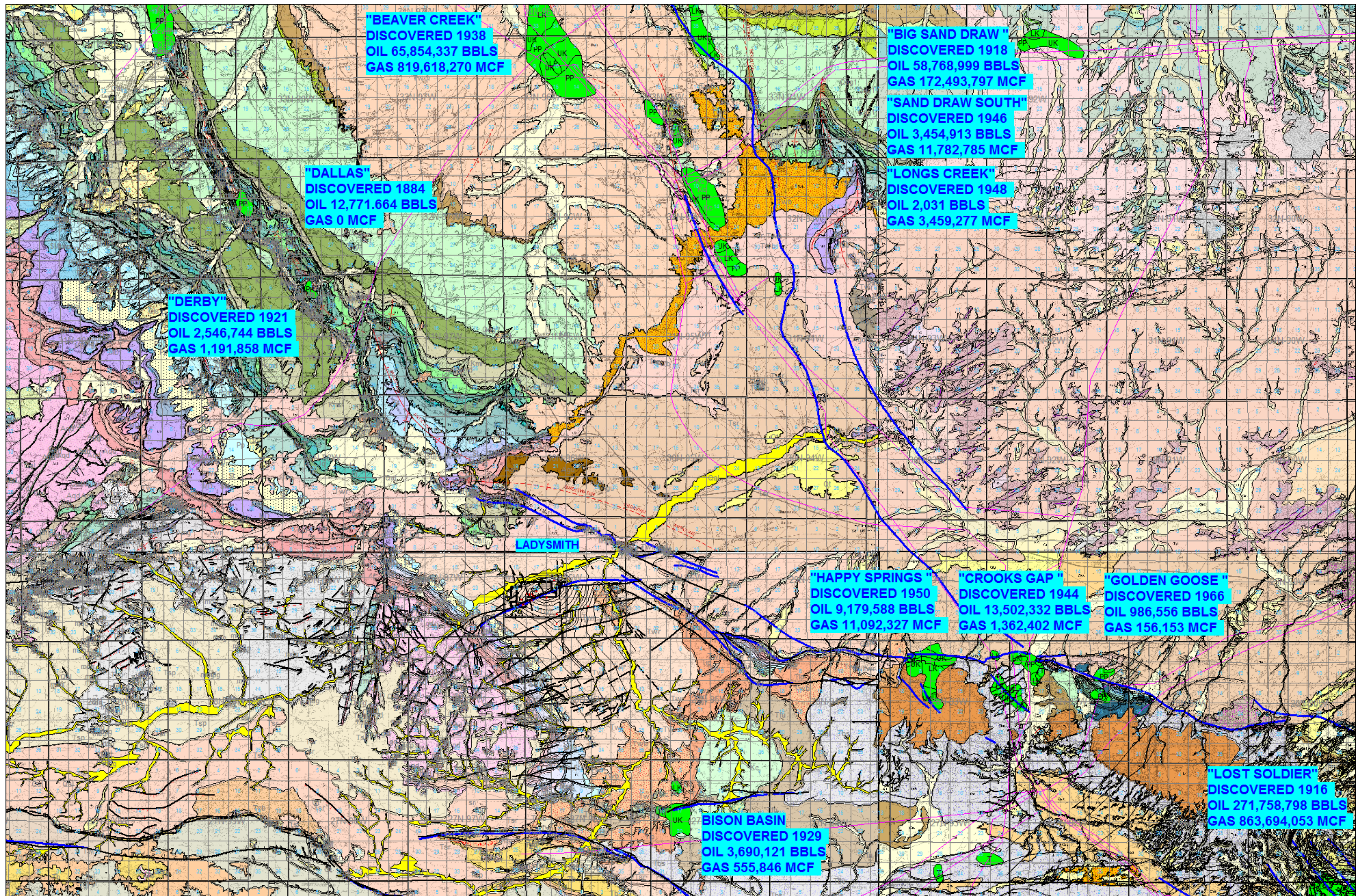
TRAP: Thrust faulted anticline with verified closure dips to the west, north and south. Wrench and normal faulting also present and will influence trapping.

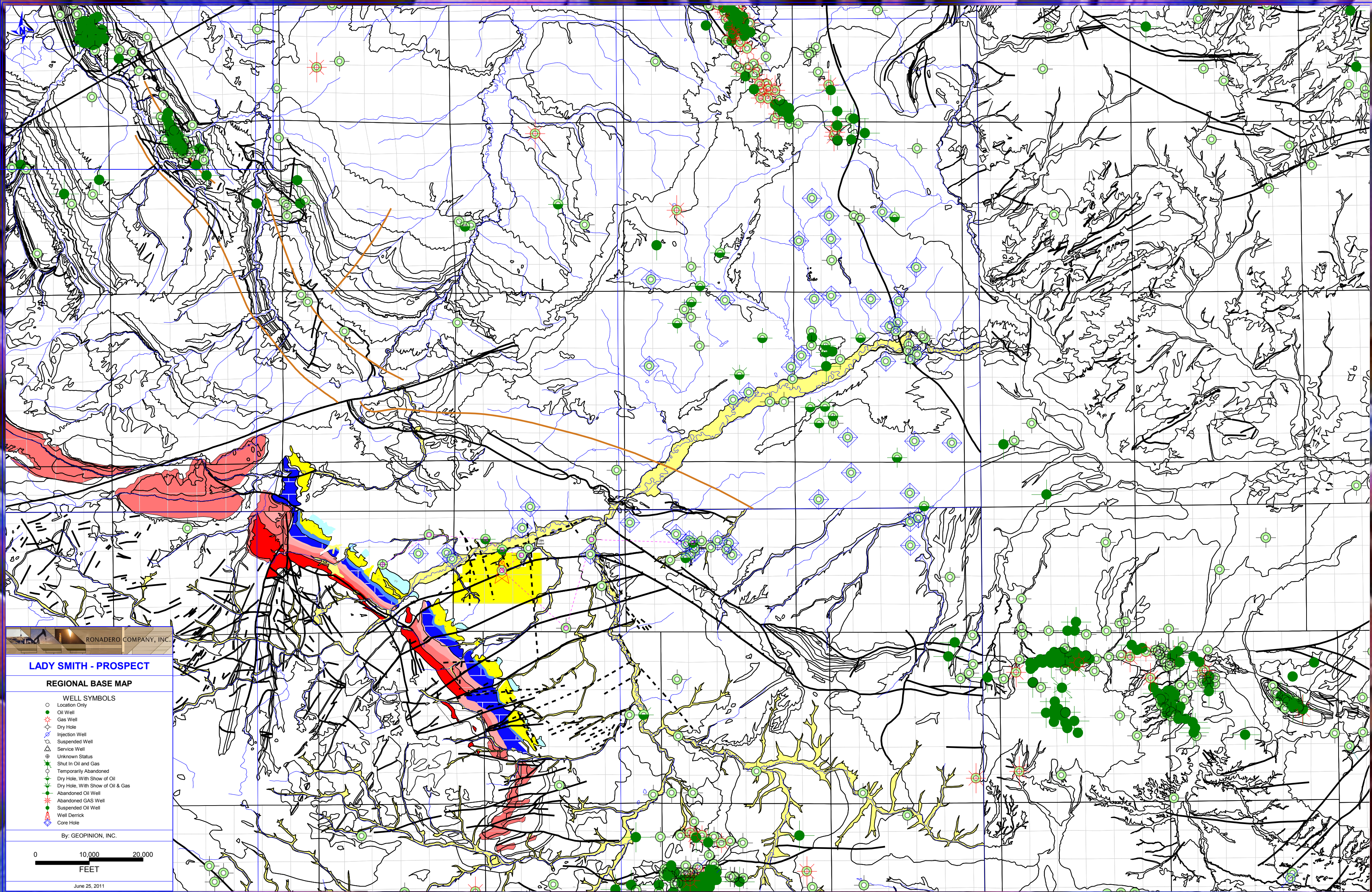
RESERVOIR: Reservoir rock of primary interest is the variable Phosphoria and Tensleep sandstone. Secondary reservoirs are Madison limestone and Flathead sandstone. Area wells have made 1 million barrels plus. 10 – 25 MMBO potential.

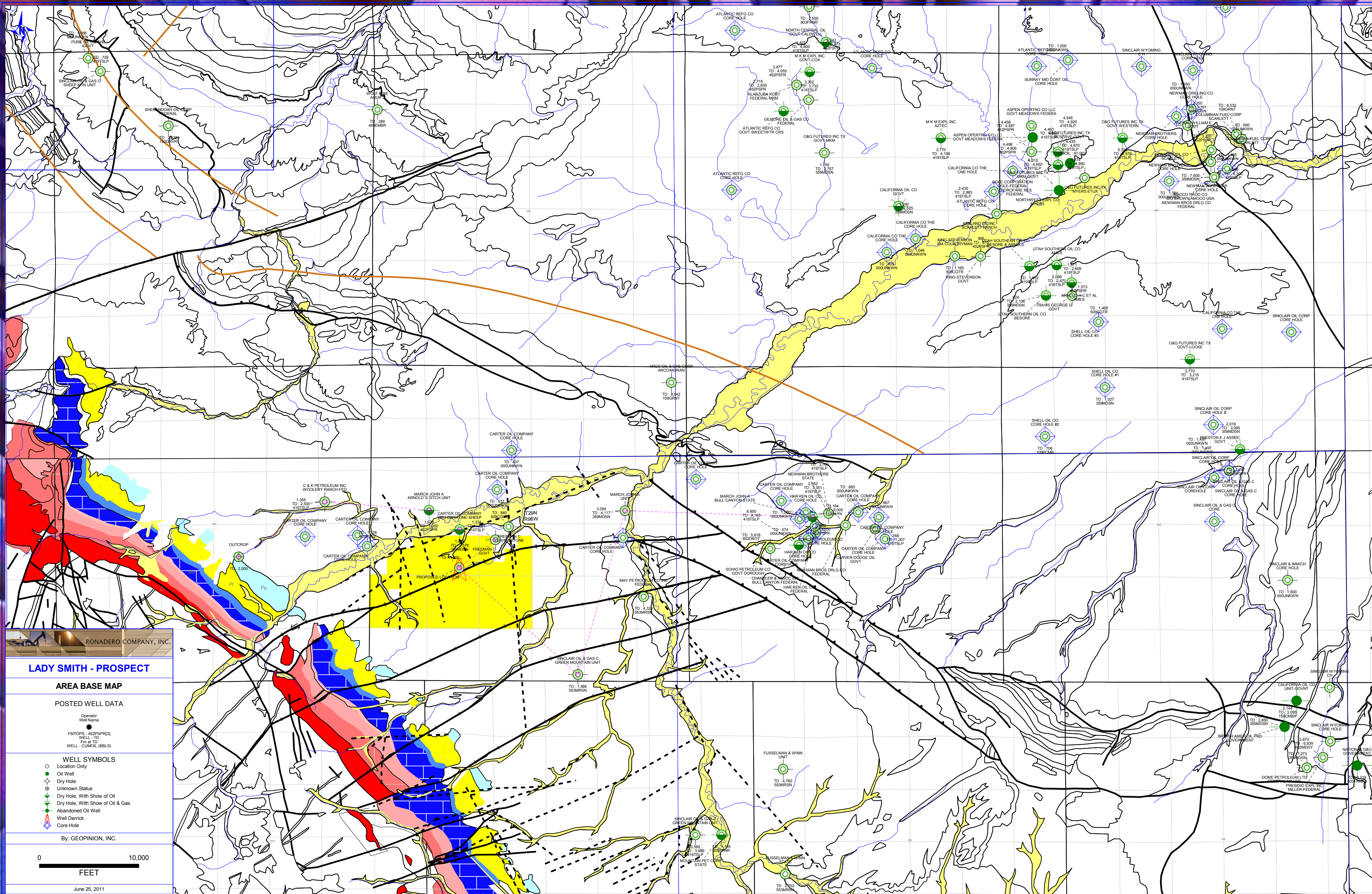
ACREAGE: 2 Federal leases. WYW - 172309, 1,000.00 acres, expires 12/1/2015 and WYW - 173238, 2,060.8 acres, expires 8/14/2016.

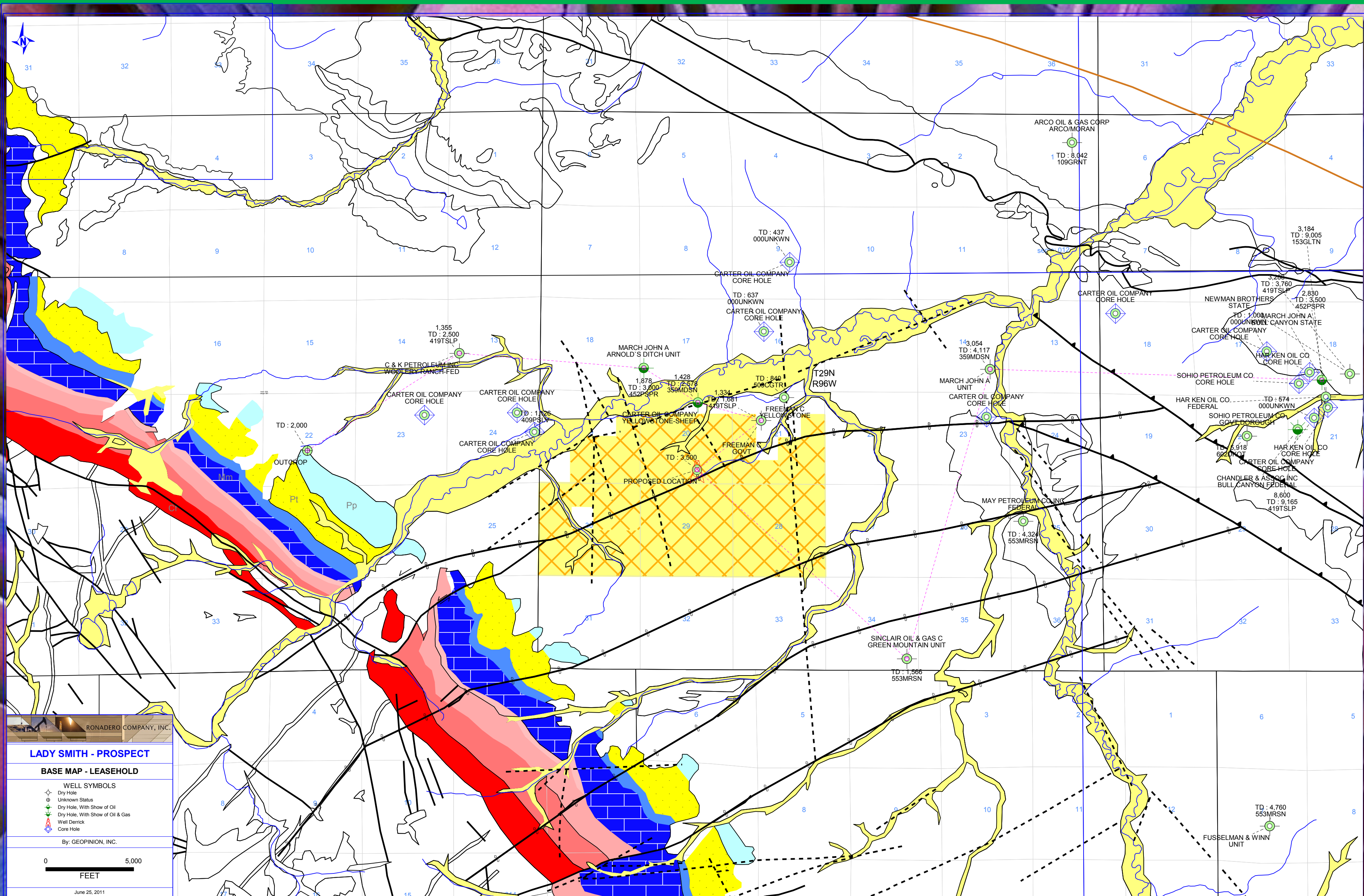
DEAL: Offer to sell 3,060.8 acres for price per acre, delivering negotiable % NRI leases. All leases are federal with earliest expiration in 2015. Lower acreage cost, commitment to drill and a carried working interest is also negotiable. Possible AMI

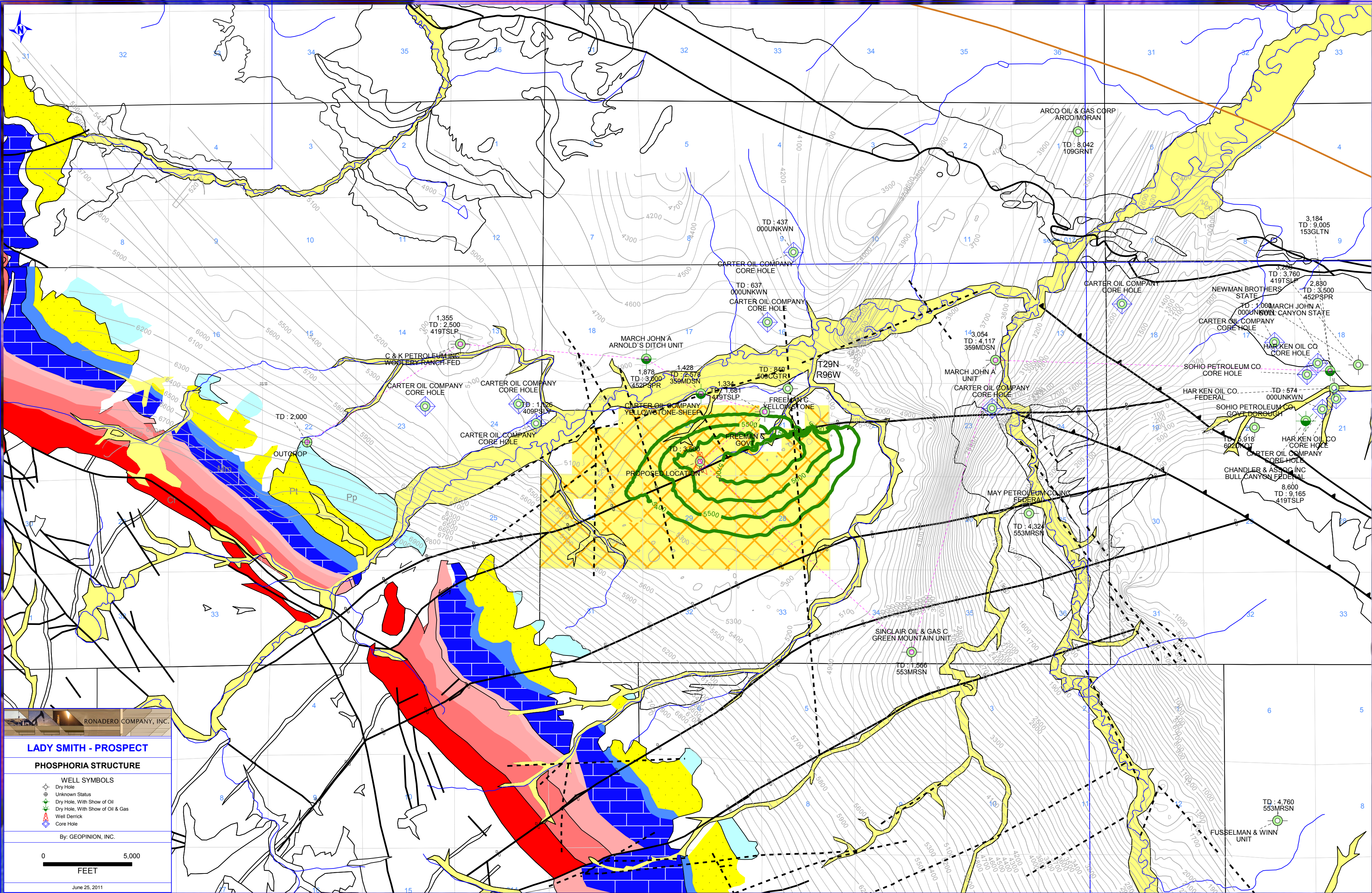
LOTS OF BIG OIL

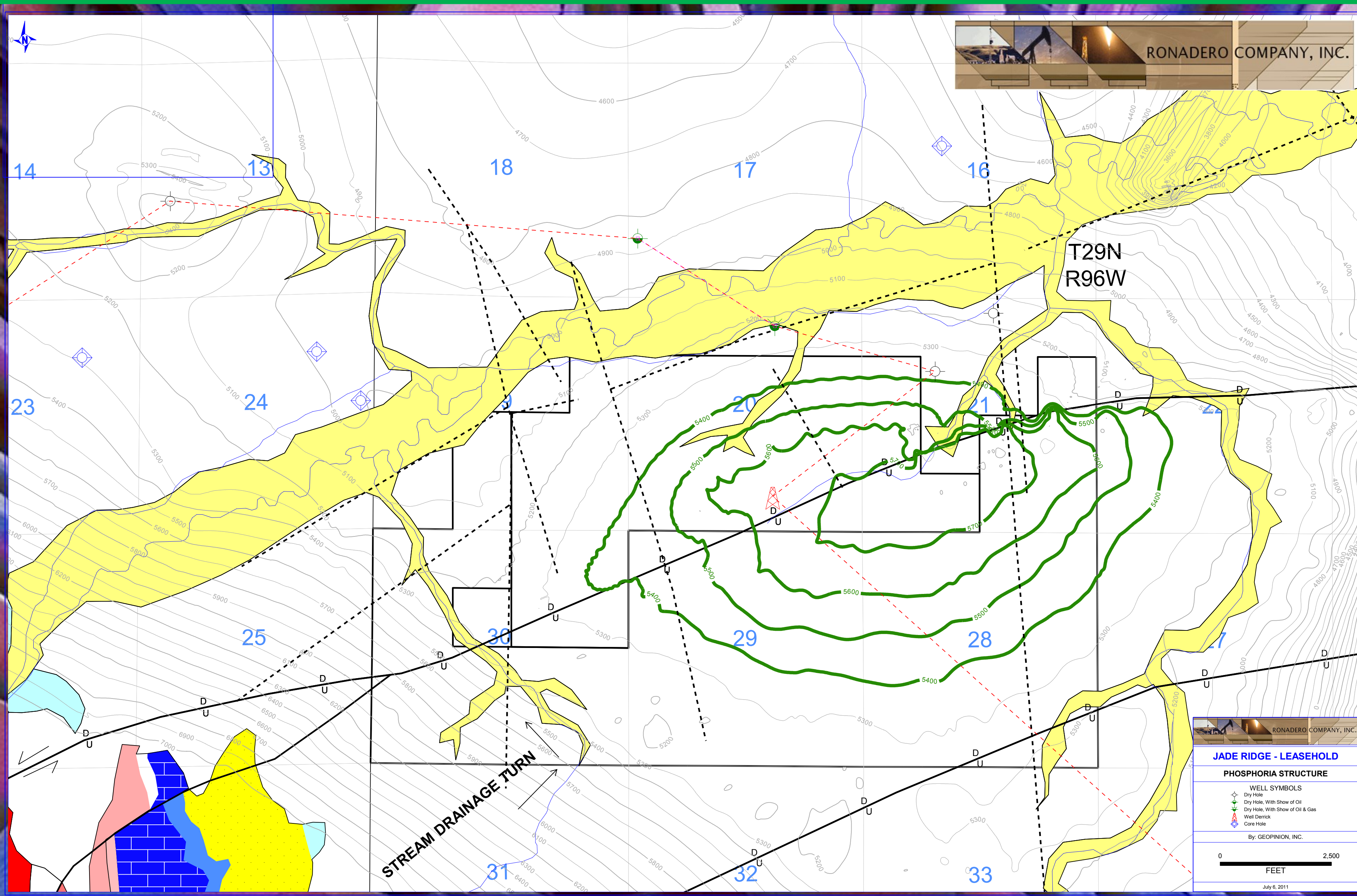


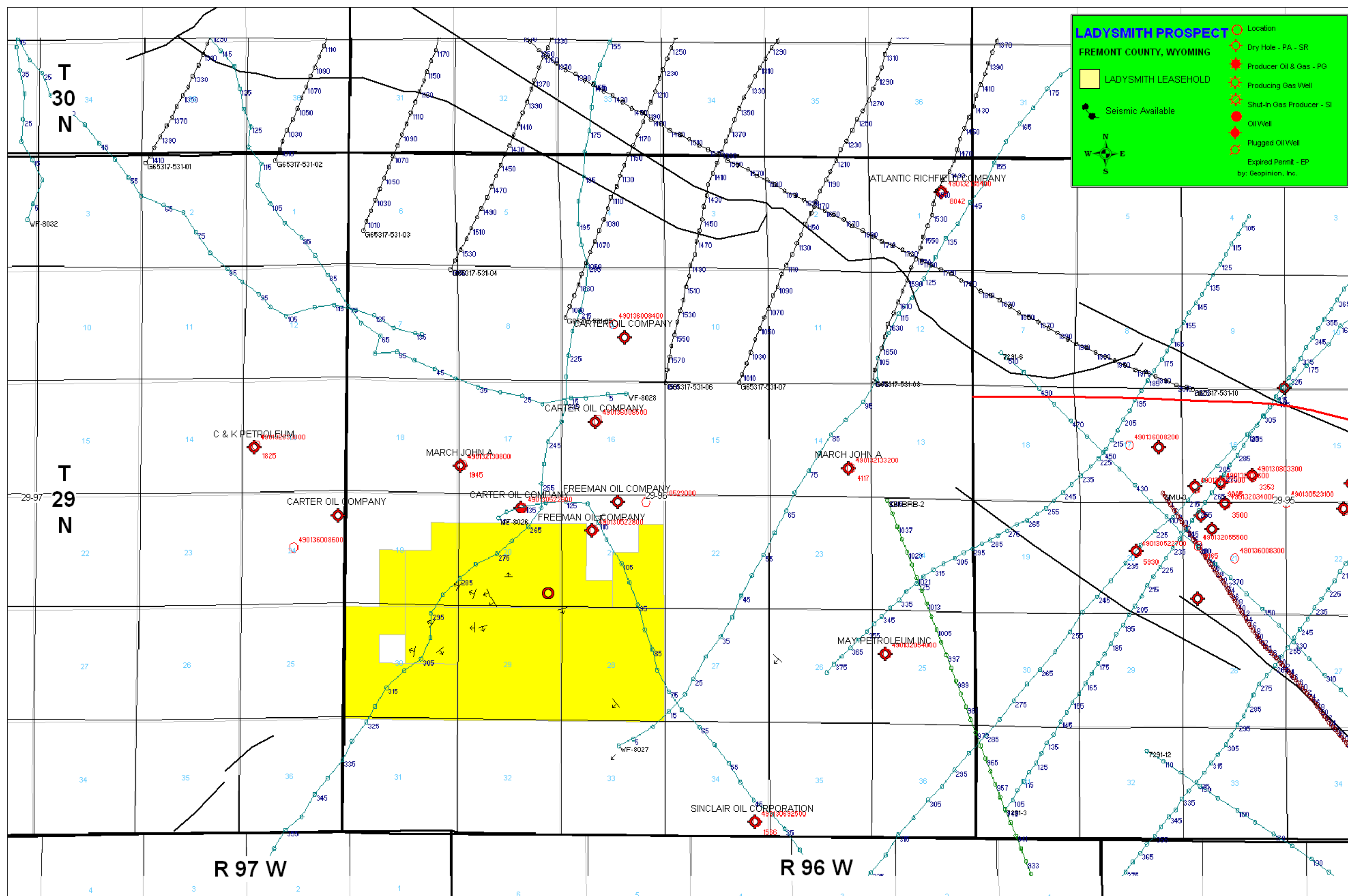


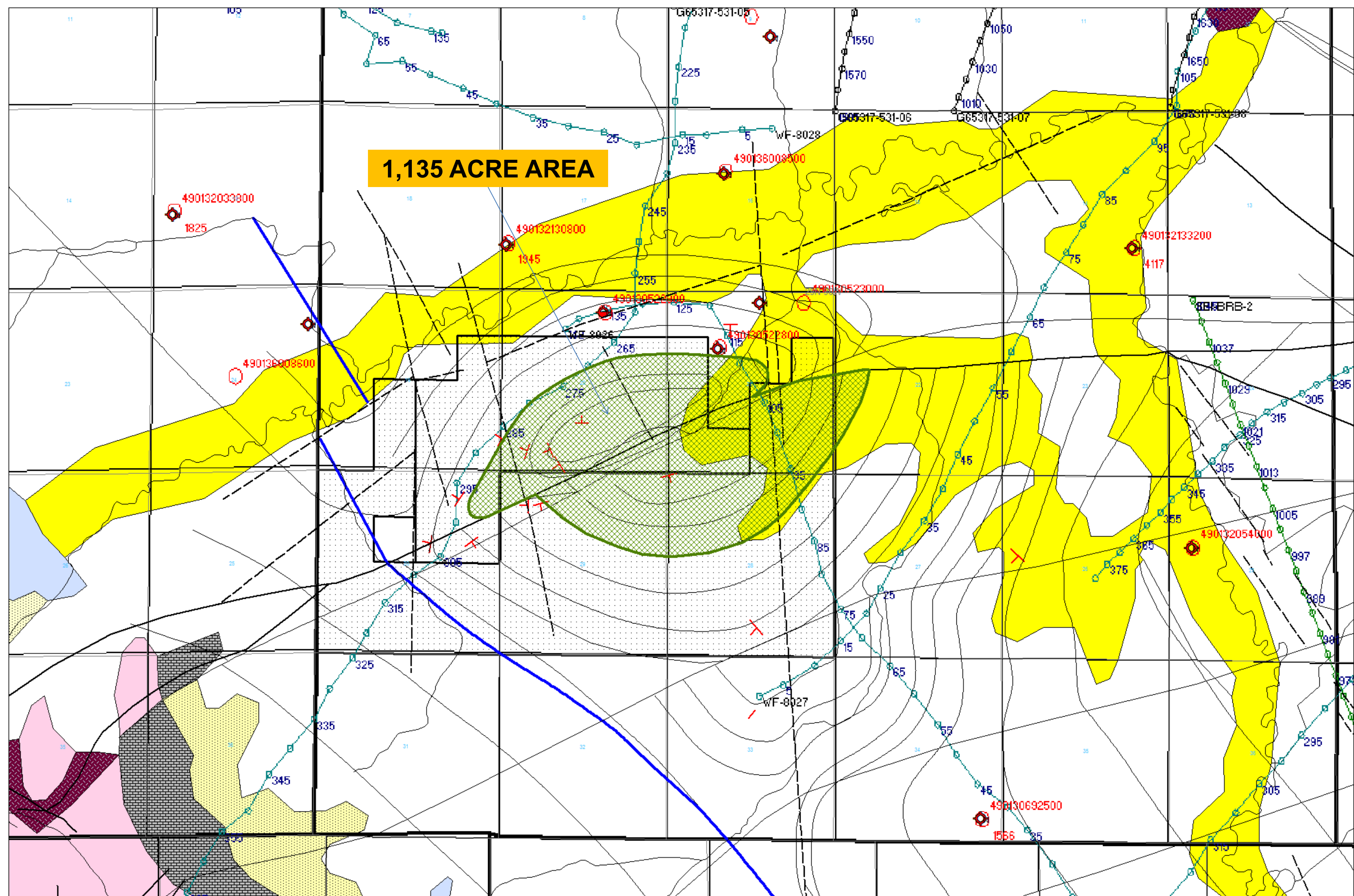




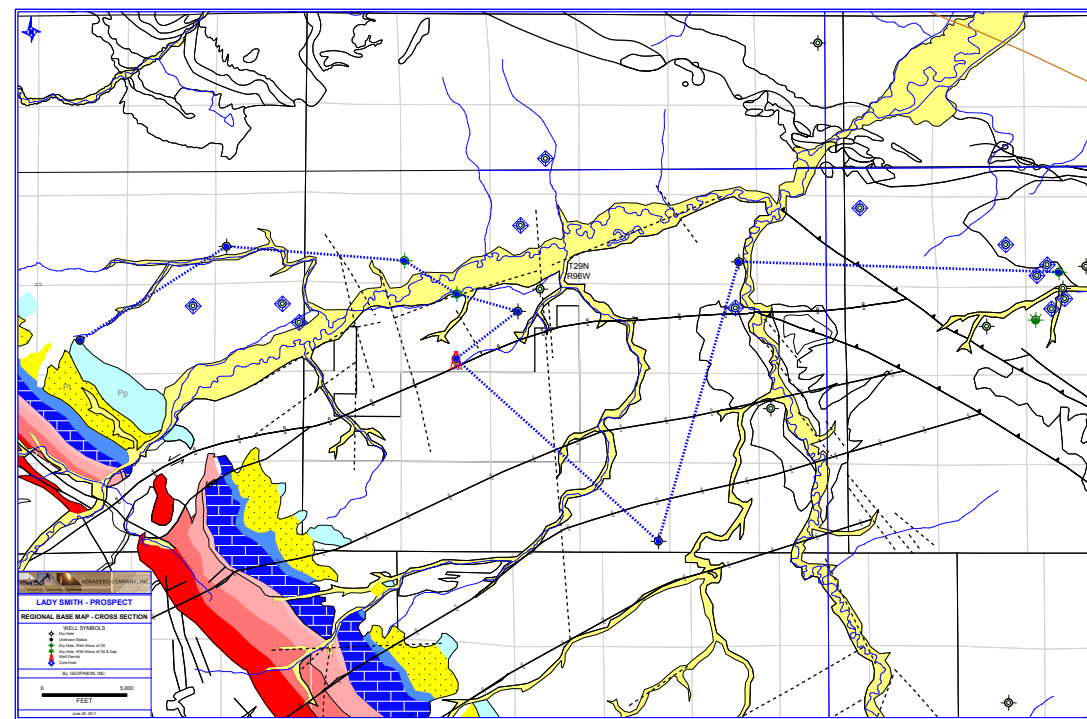
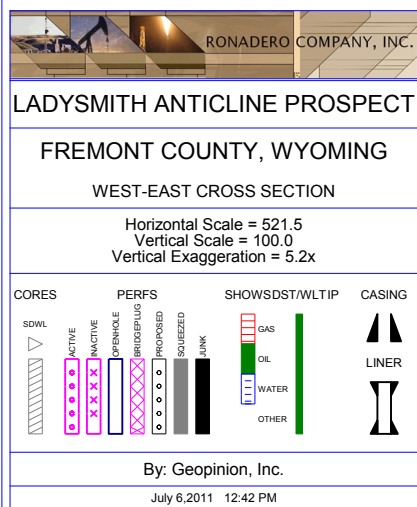




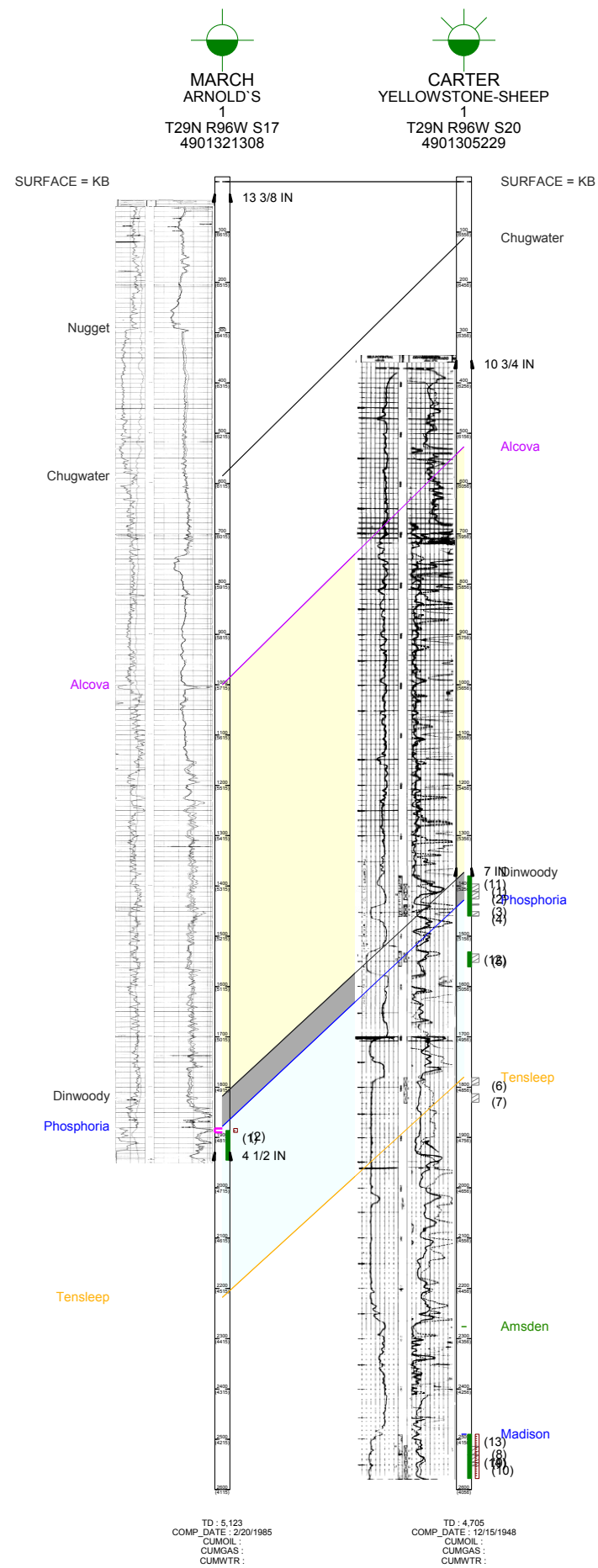




A'

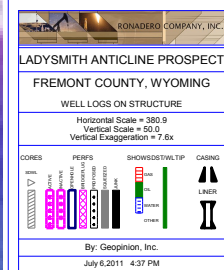


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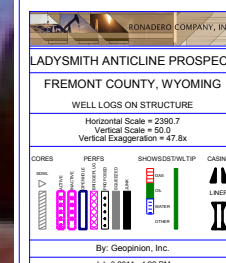
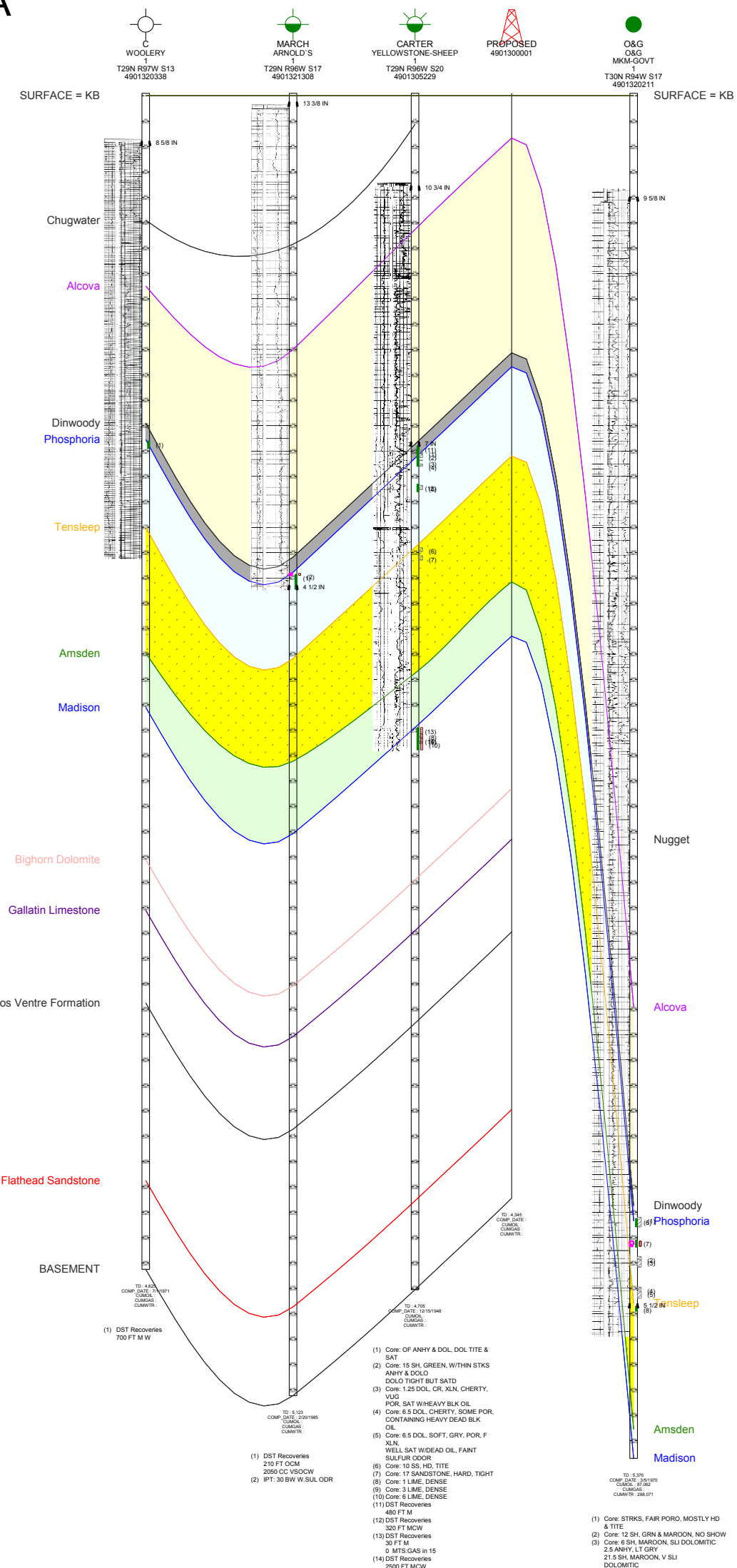
- (1) DST Recoveries
210 FT OCM
2050 CC VSOCW
- (2) IPT: 30 BW W SUL ODR

- (1) Core: OF ANHY & DOL, DOL TITE & SAT
- (2) Core: 15 SH, GREEN, WITHIN STKS ANHY & DOLO DOL TIGHT BUT SATD
- (3) Core: 1.25 DOL, CR, XLN, CHERTY, VUG POR, SAT W/HEAVY BLK OIL
- (4) Core: 6.5 DOL, CHERTY, SOME POR, CONTAINING HEAVY DEAD BLK OIL
- (5) Core: 6.5 DOL, SOFT, GRY, POR, F XLN, WELL SAT W/DEAD OIL, FAINT SULFUR ODOR
- (6) Core: 10 SS, HD, TITE
- (7) Core: 17 SANDSTONE, HARD, TIGHT
- (8) Core: 1 LIME, DENSE
- (9) Core: 3 LIME, DENSE
- (10) Core: 6 LIME, DENSE
- (11) DST Recoveries
480 FT M
- (12) DST Recoveries
320 FT MCW
- (13) DST Recoveries
30 FT M
0 MTS GAS IN 15
- (14) DST Recoveries
2500 FT MCW



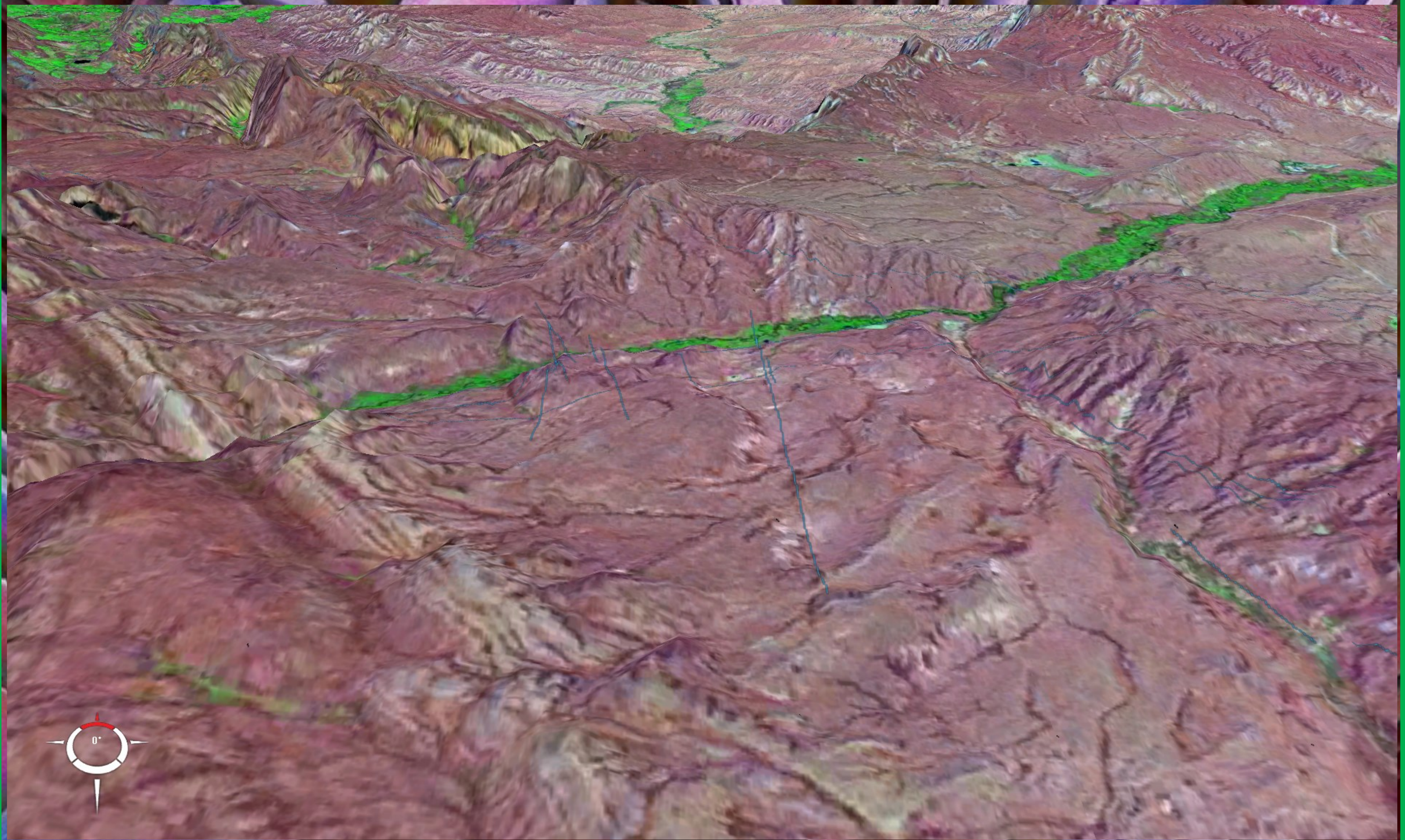
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12/3/2013 2:21 pm



Ladysmith #1

Oregon Trail

Image USDA Farm Service Agency
© 2013 Google

Google earth

1994

Imagery Date: 8/1/2013 42°27'47.10" N 108°21'13.25" W elev 6870 ft eye alt 14752 ft

12/9/2013 2:31 pm



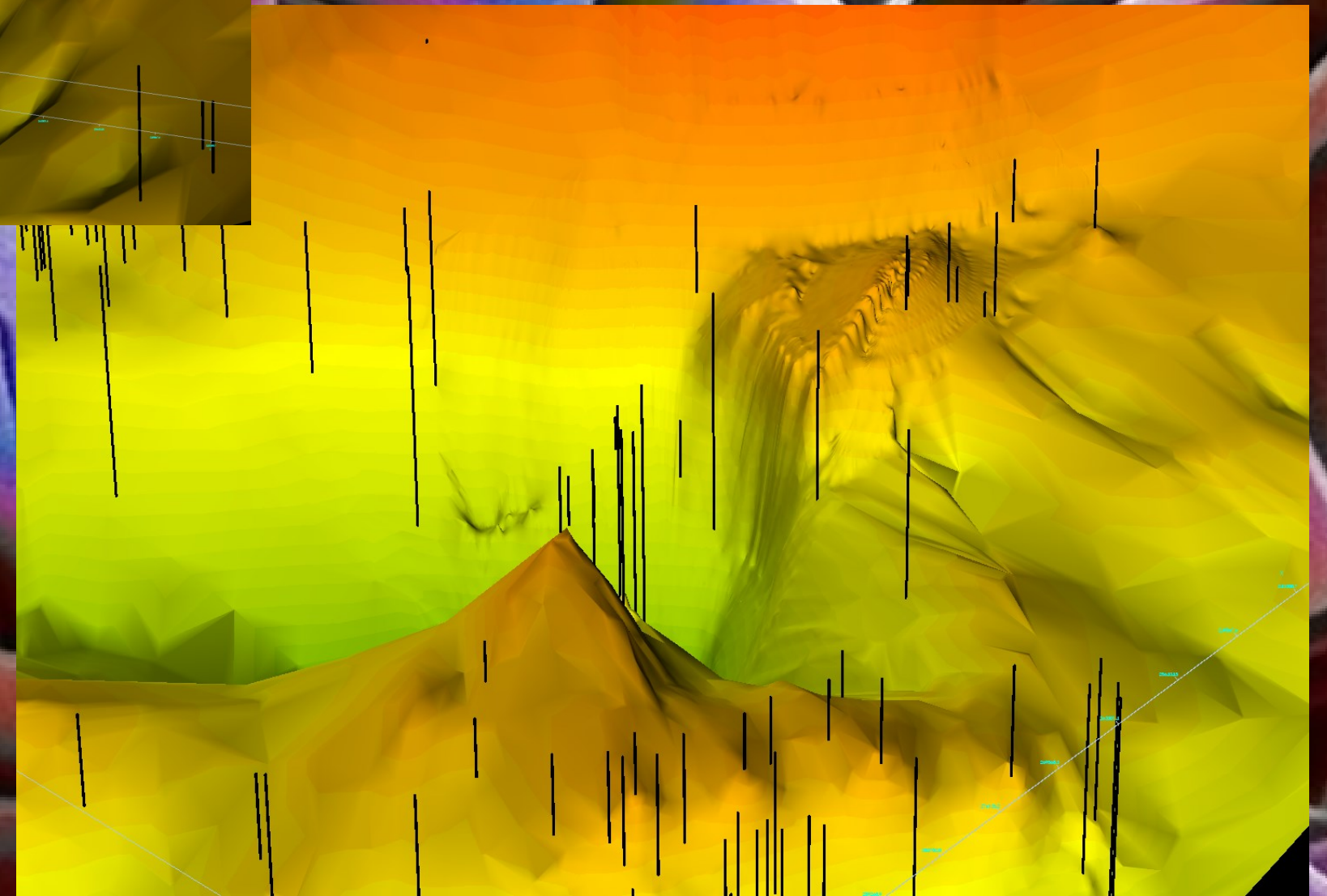
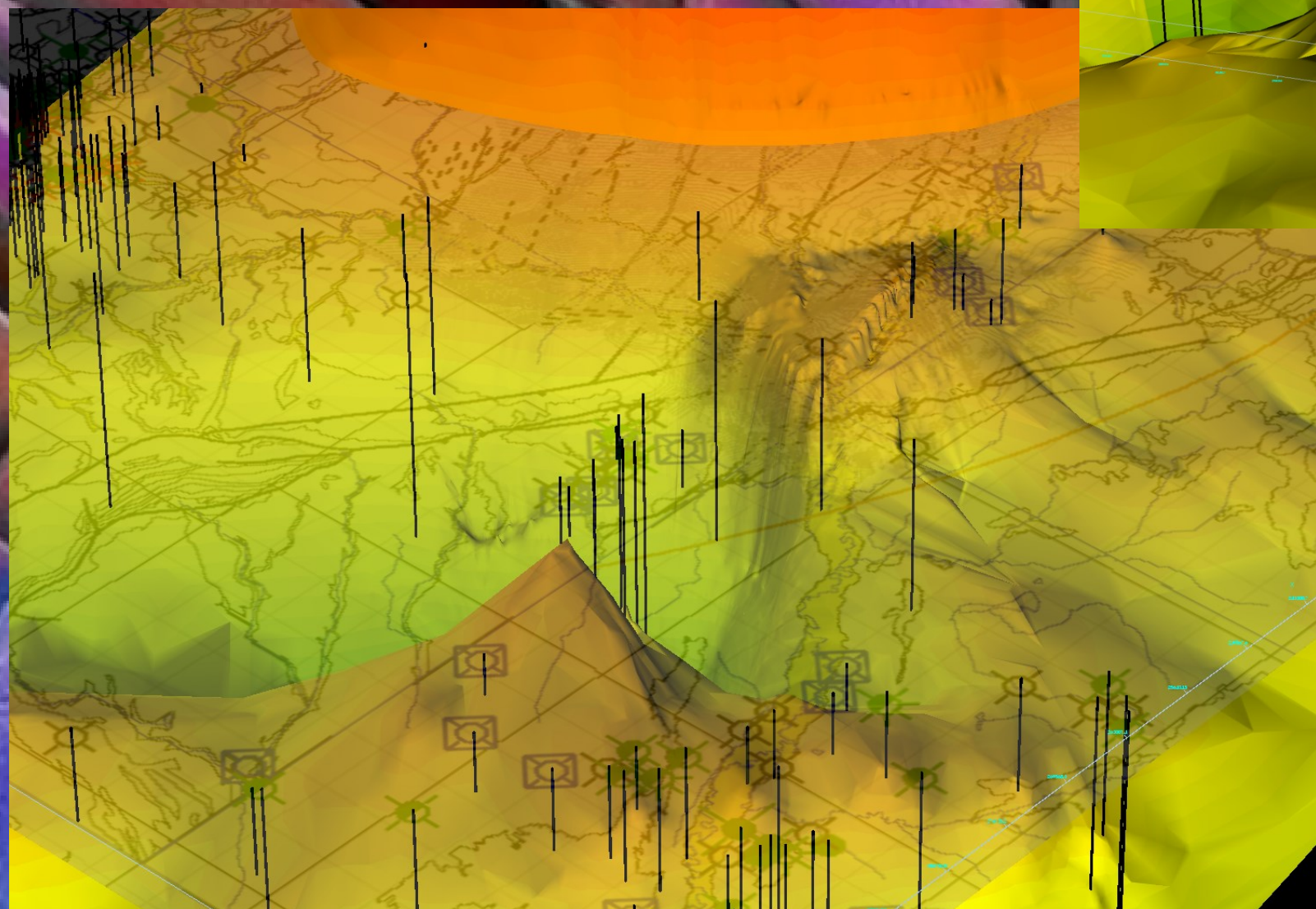
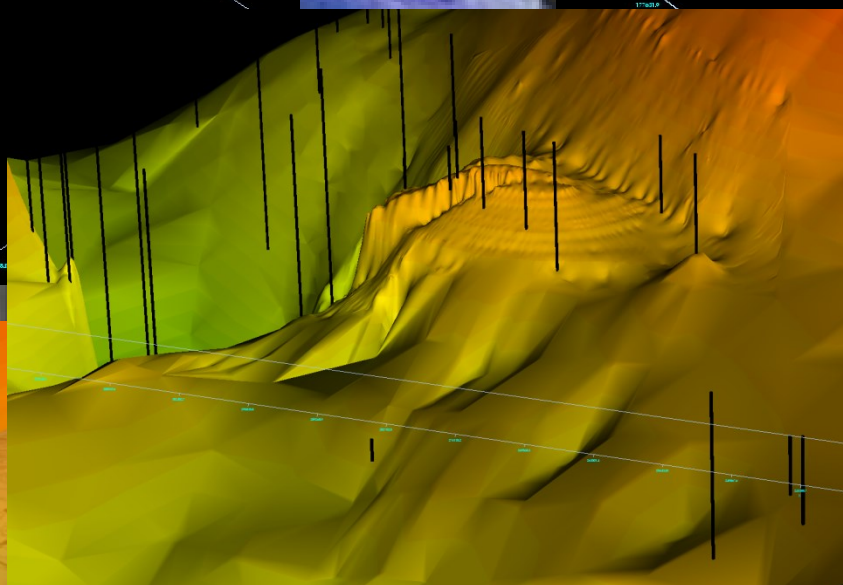
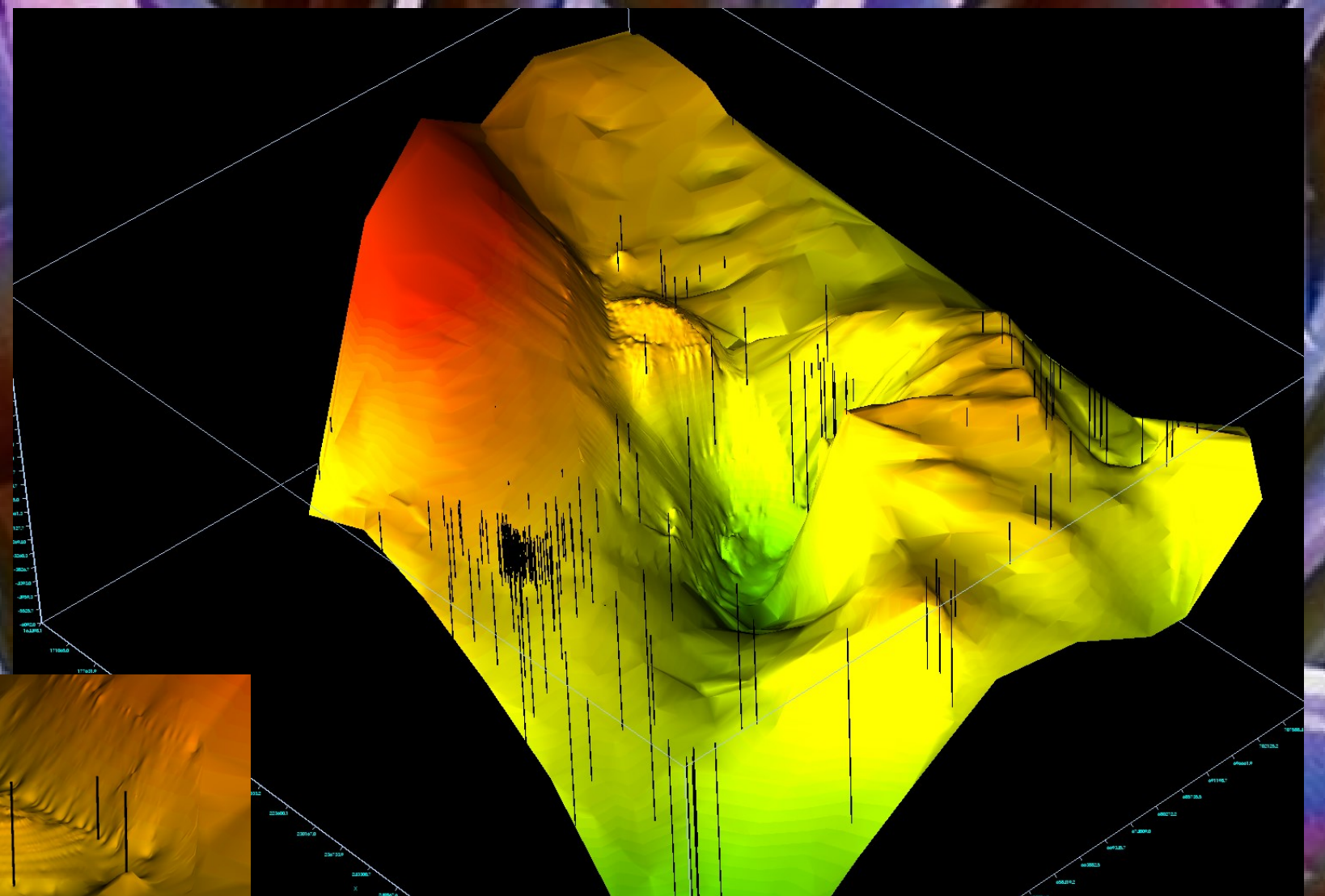
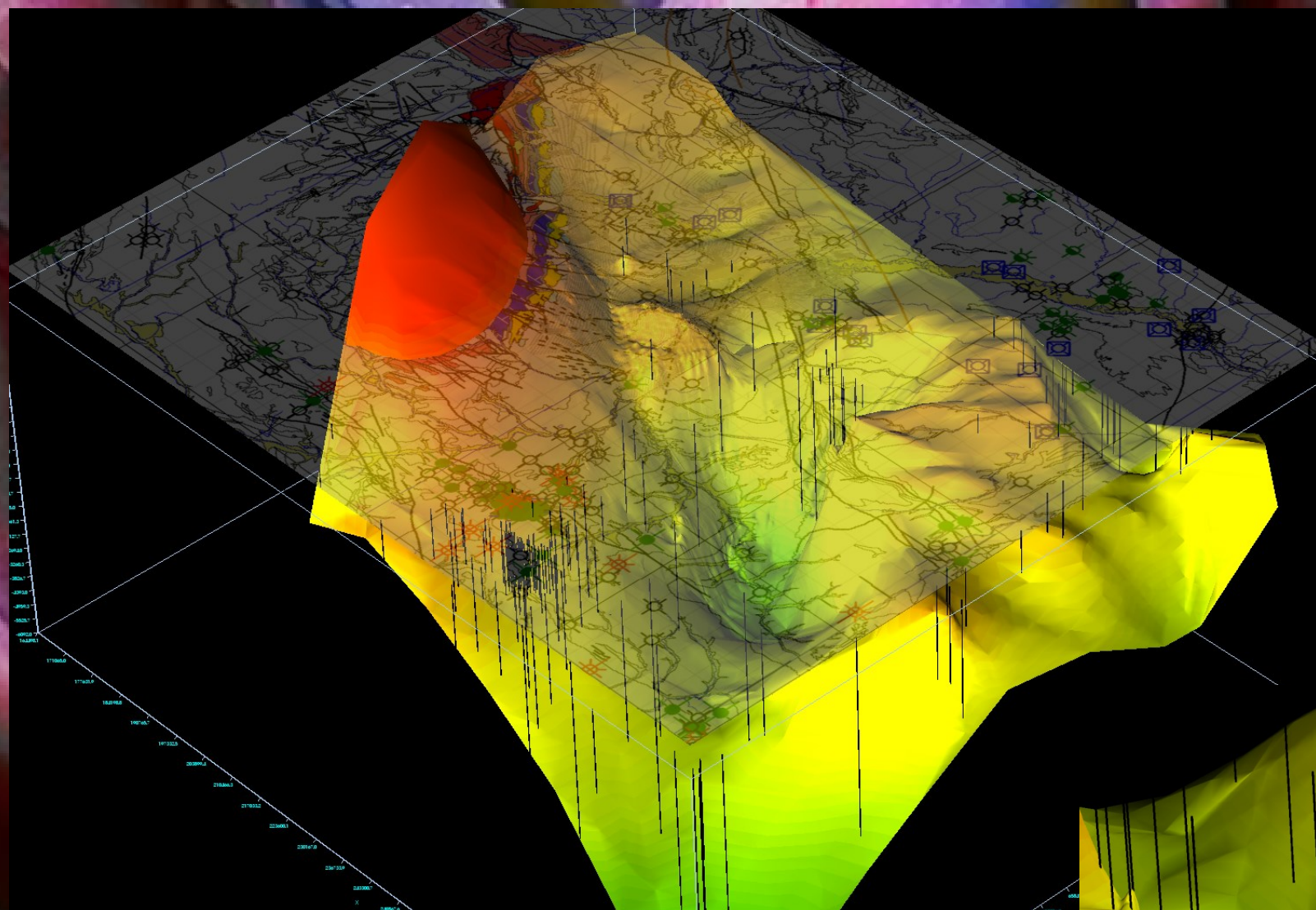
Ladysmith #1

Image USDA Farm Service Agency
© 2013 Google

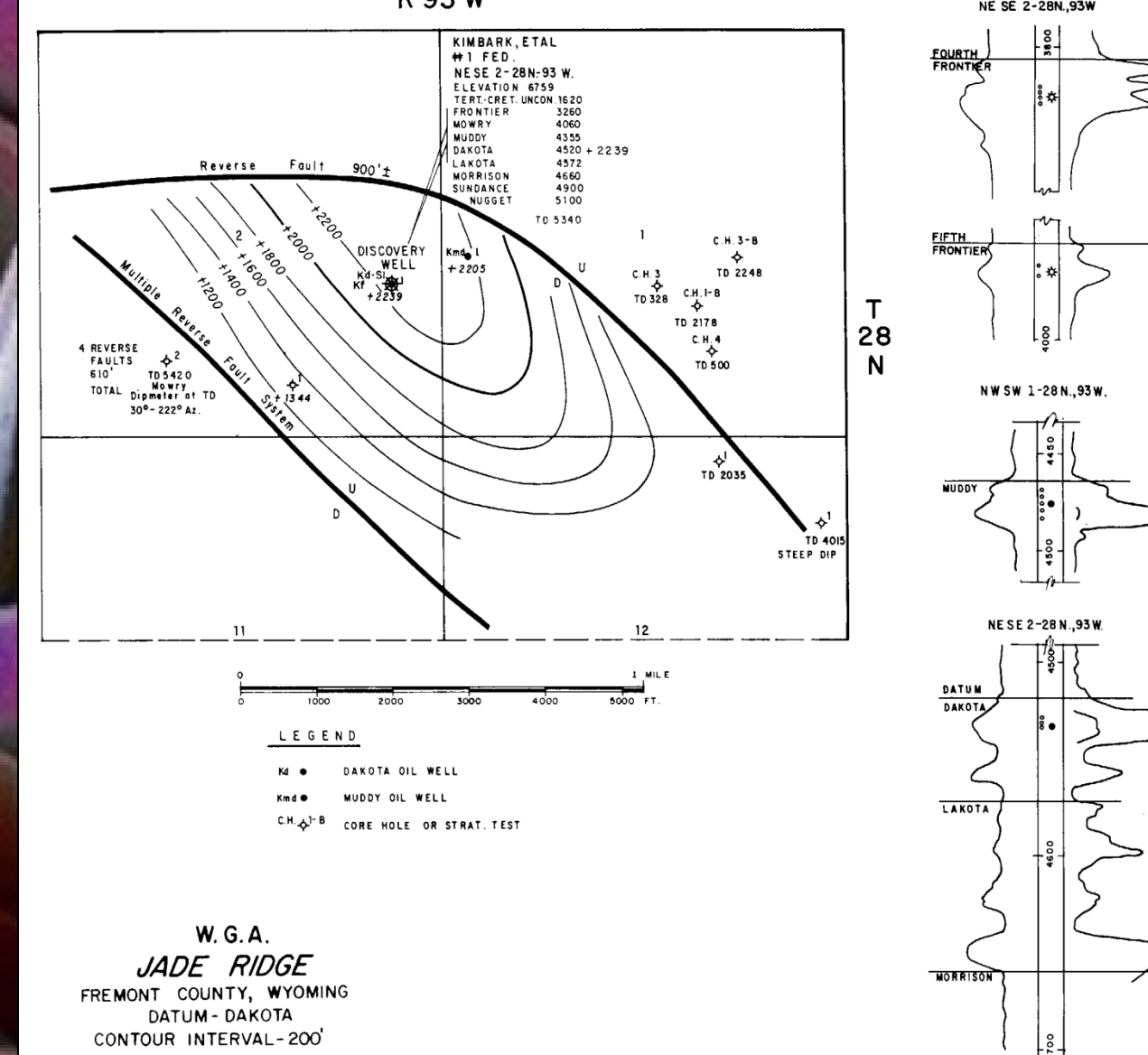
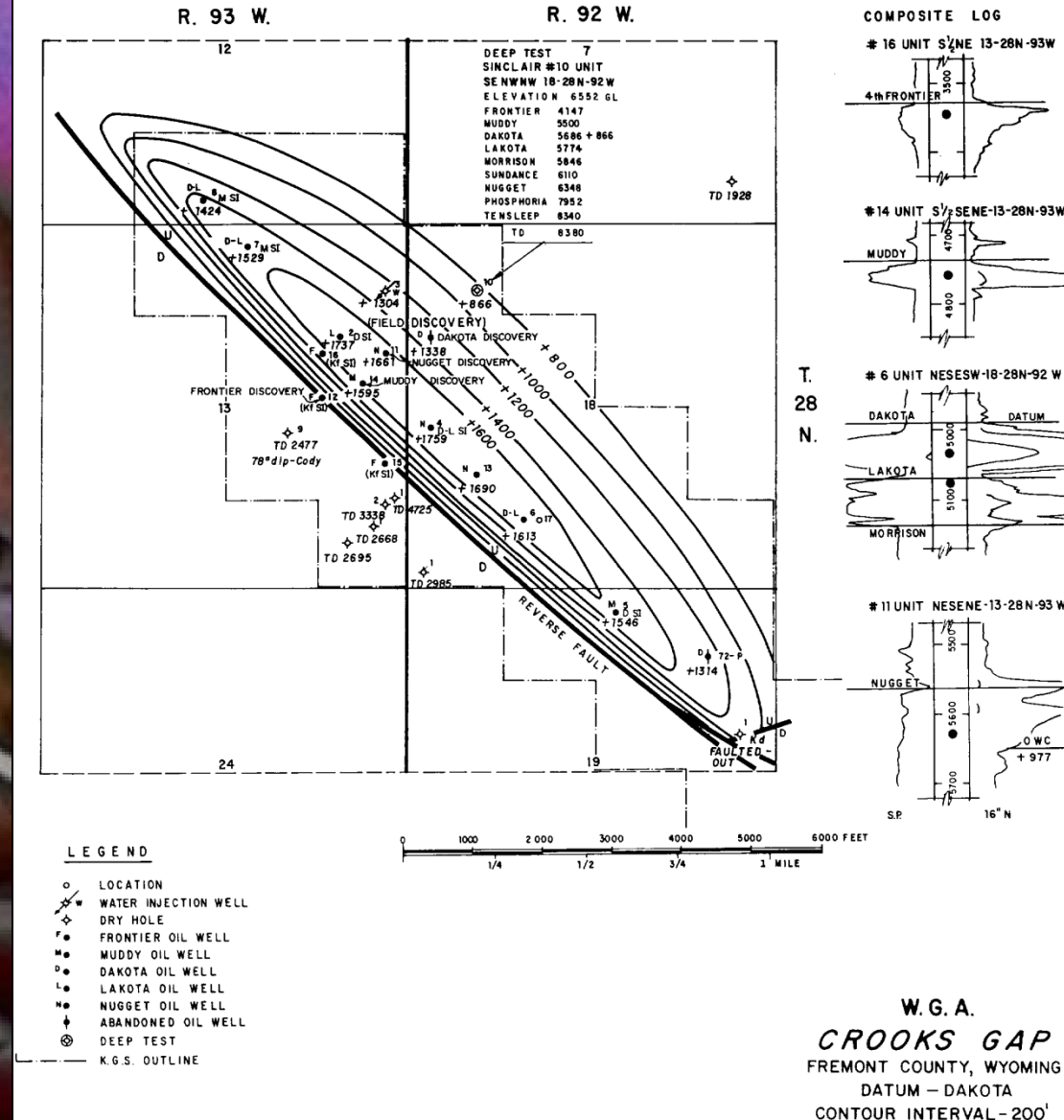
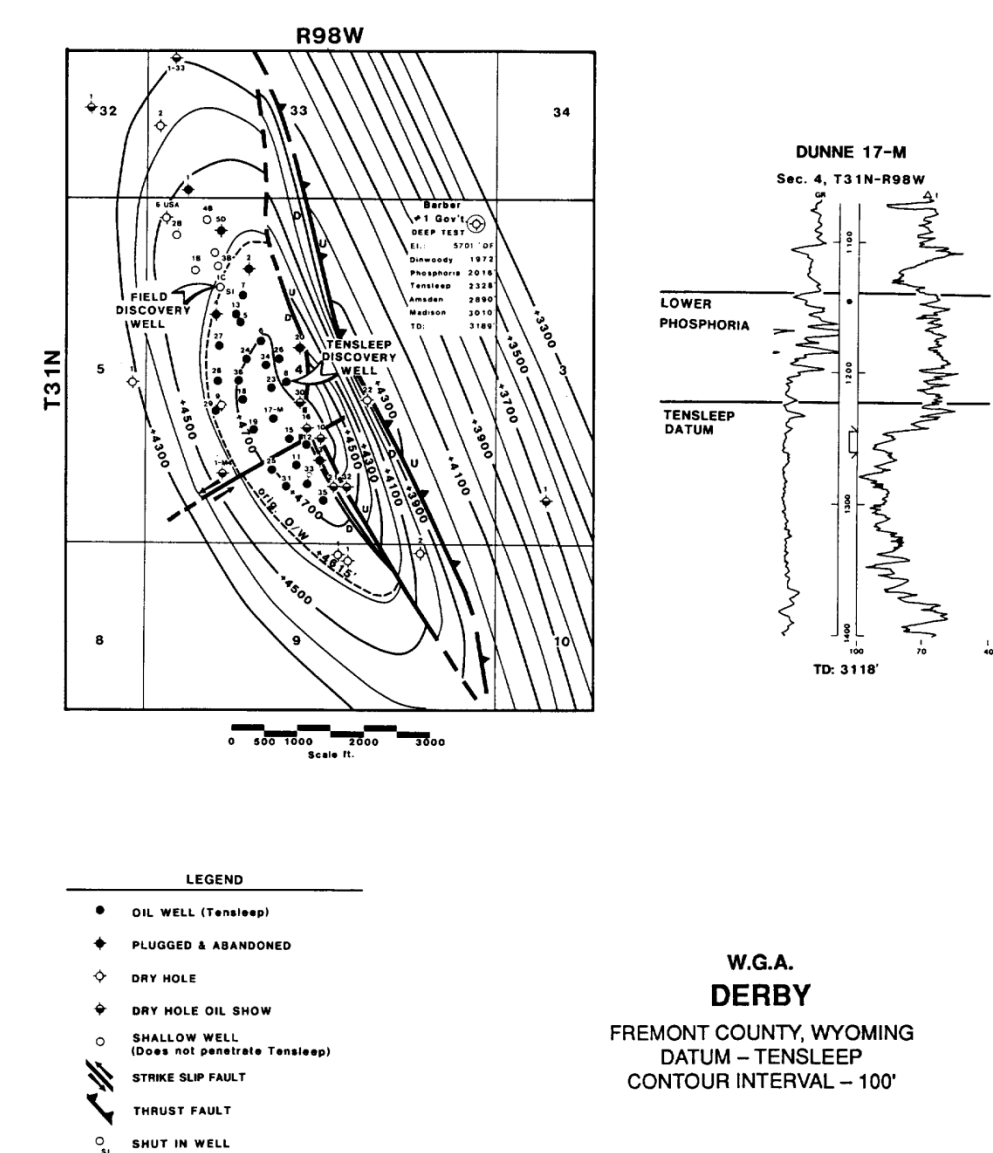
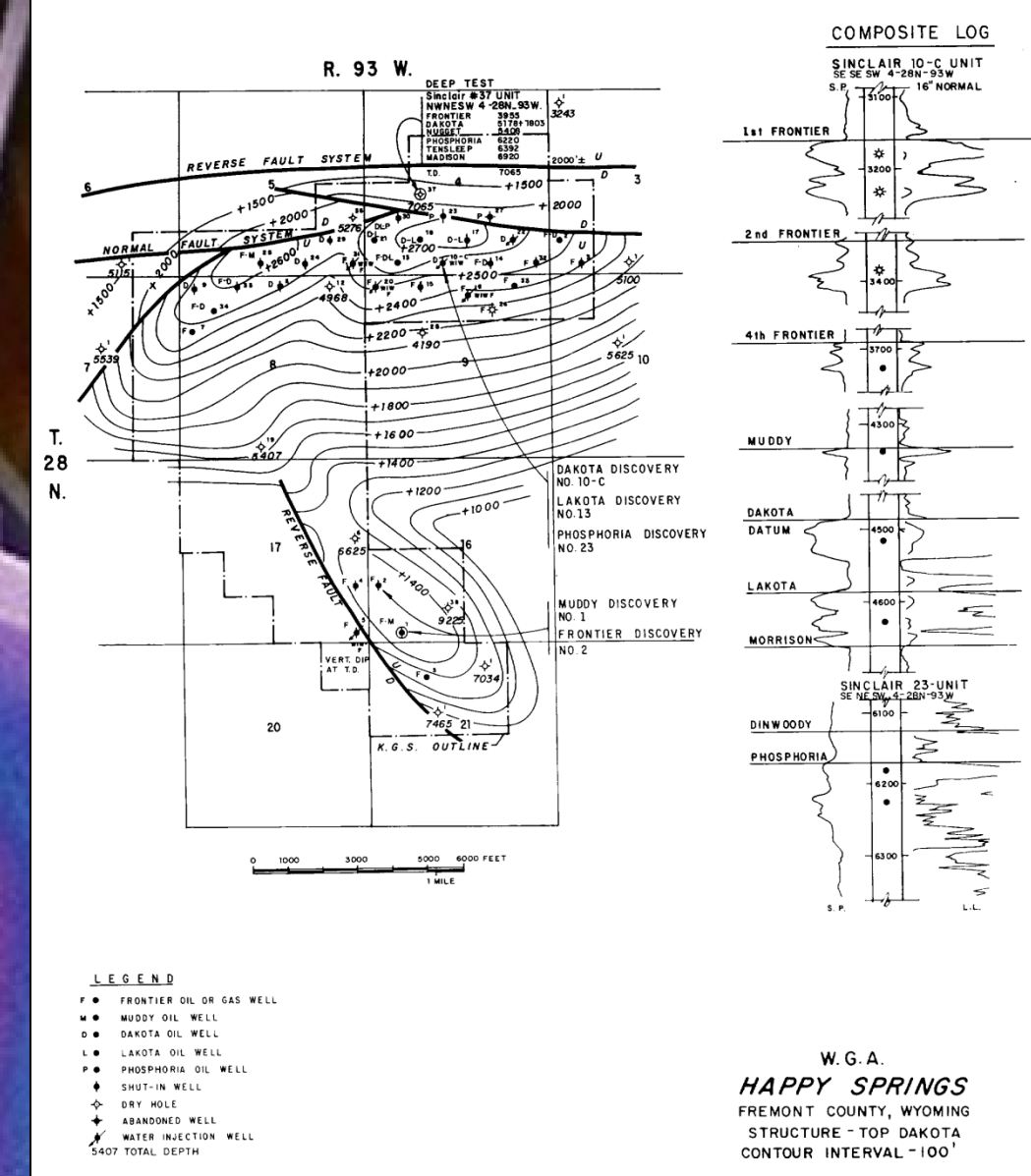
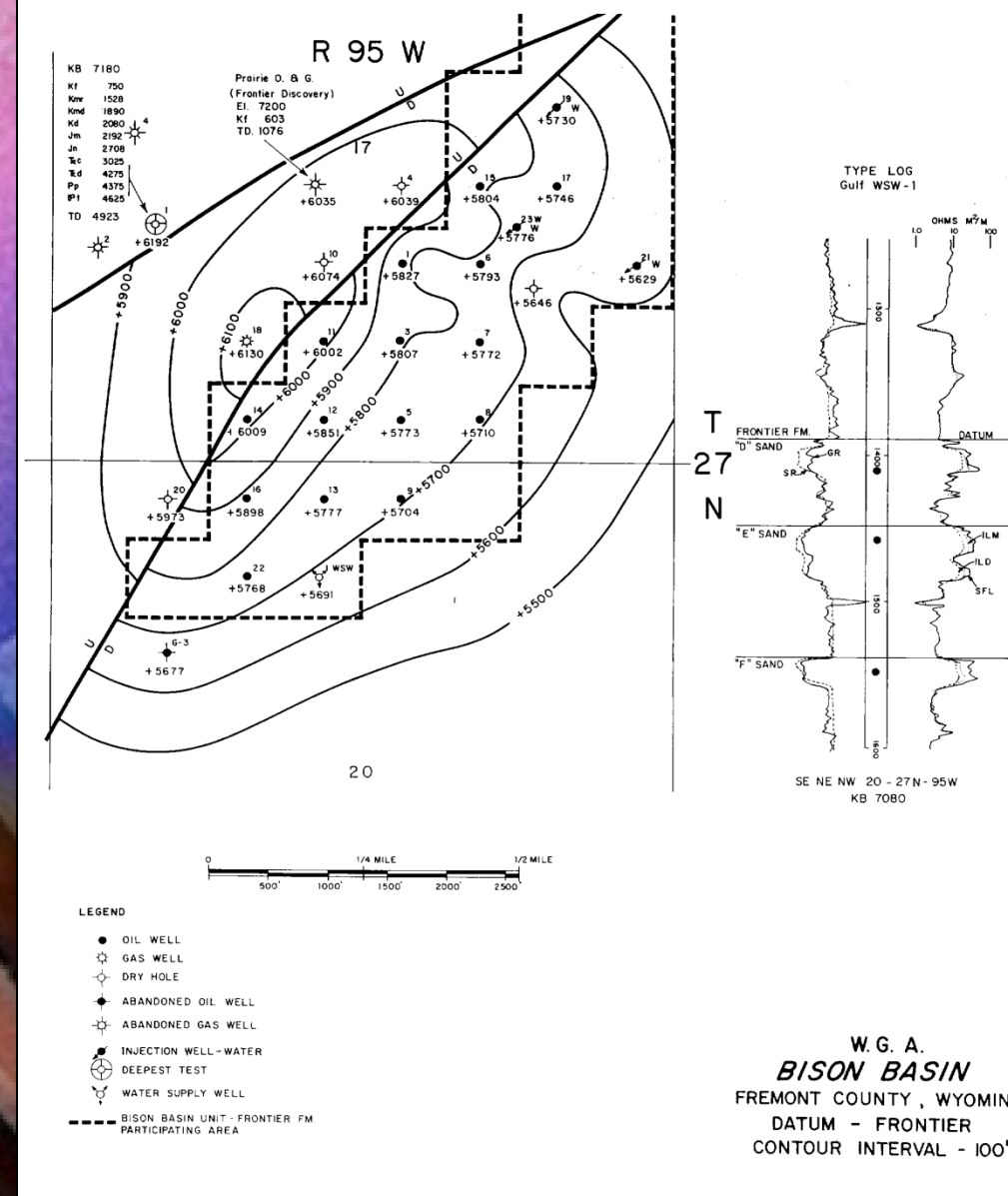
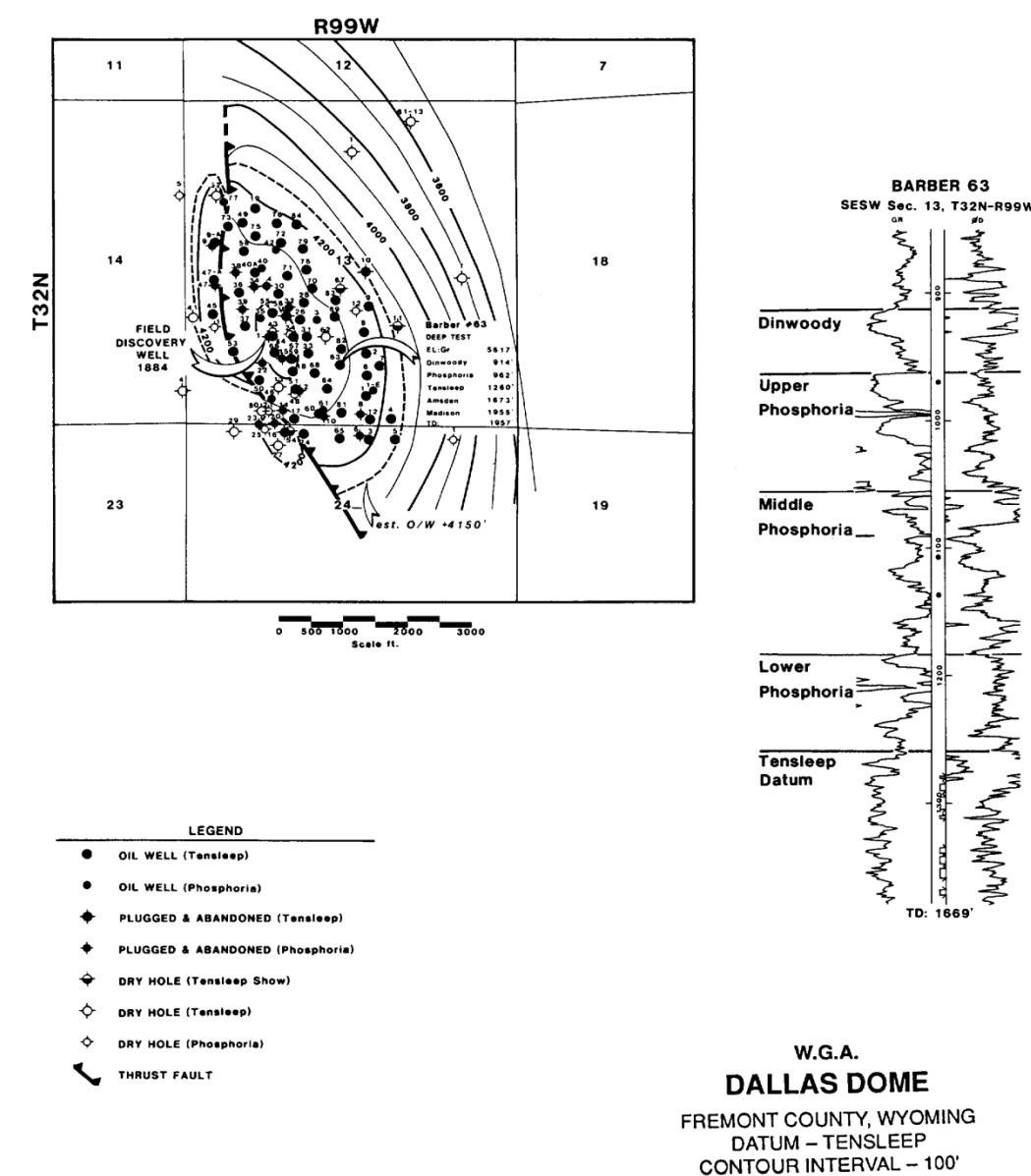
Google earth

1994

Imagery Date: 8/1/2013 42°26'45.00" N 108°20'53.84" W elev 6975 ft eye alt 18893 ft



FIELD ANALOGS

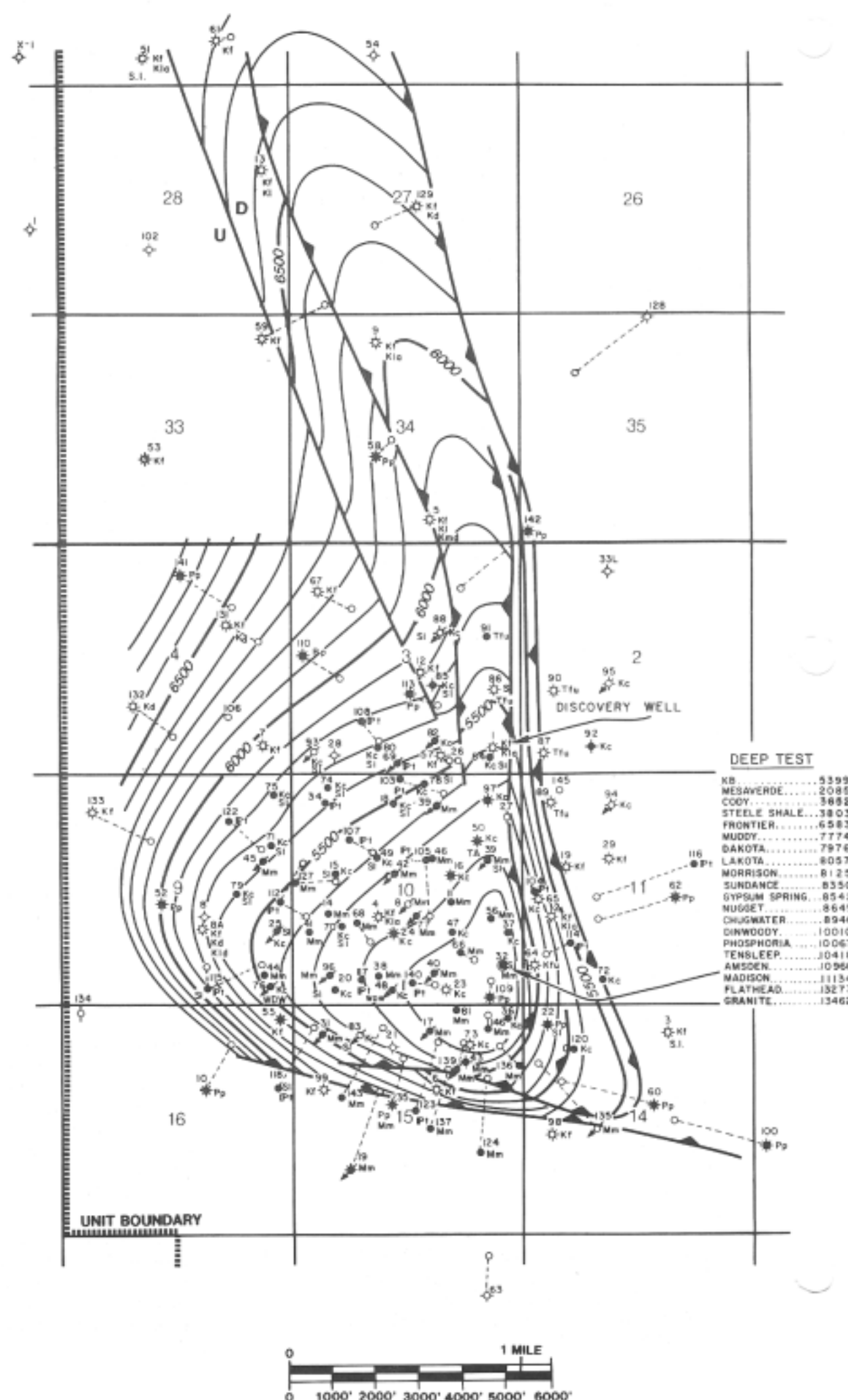


WYOMING OIL AND GAS FIELDS

R 96 W

T 34 N

T 33 N



W.G.A.
BEAVER CREEK
FREMONT COUNTY, WYOMING
DATUM - TENSLEEP
CONTOUR INTERVAL - 100'

LEGEND		
○ LOCATION	★ OIL & GAS WELL	
◇ DRILLING WELL	✱ WATER INJECTOR WELLS	
◇ DRY HOLE	✱ WDW WATER DISPOSAL WELL	
✱ ABANDONED OIL WELL	✱ SHUT-IN INJECTOR WELLS	
● OIL WELL	✱ SHUT-IN OIL & GAS WELLS	
◇ GAS WELL	✱ DIRECTIONALLY DRILLED WELL	
★ OIL WELL, SHOW GAS	○ BOTTOM HOLE LOCATION	
PROD. FM SYMBOLS		
Tfu FORT UNION	Klo LAKOTA	
Kc CODY	Pp PHOSPHORIA	
Kf FRONTIER	Pt TENSLEEP	
Kmd MUDDY	Mm MADISON	
Kd DAKOTA		

Robert G. Specht
Bureau of Land Management
Casper, Wyoming
April, 1989

BEAVER CREEK

DISCOVERY WELL

Name: Stanolind Oil, 1 E.D. Johnson
Location: C SESE (660 N/S, 660 W/E) 3-33N-96W
Date of Completion: June 1, 1938
Initial Potential: 9000 MCFGPD Cloverly "Lakota"-
Cretaceous
Total Depth: 8922 Nugget-Triassic
Elevation: 5292 Gr
Casing: 20 @ 196 w/200 sx; 13 @ 2779 w/1100 sx; 10 @
7458 w/300 sx
Perforations: 8230-8285 open hole
Treatment: Stimulated with nitroglycerin
Pressures: 3500 psi SIP DST

GENERAL FIELD DATA

Regional Setting: Southwestern Wind River Basin
Other Formations with Shows: Mesaverde-
Cretaceous, Darwin-Mississippian
Exploration Method Leading to Discovery:
Subsurface geology and seismic
Trap Type: Structural, asymmetrical anticline with
about 100 feet closure

Surface Formations: Alluvium-Quaternary, Wind
River-Tertiary

Oldest Formation Penetrated: Precambrian
Well: Stanolind 32-M Unit, NESESE 10-33N-96W

Spacing Order: None, excluded from Rule 302

Logging Practice: GR-CNL, GR-CBL-VD, GR-
NEUT, ES, ML, BSL, T, CNDL, DLL, L-LI-L

Completion Practice: Fracture and acidize

Productive Area: Cody 977 acres, Frontier 5370
acres, Cloverly 5370 acres, Tensleep 1320 acres,
Madison 1260 acres

Number of Producing Wells: 90 (5 Ft. Union, 11
Cody, 21 Frontier, 1 Muddy, 4 Cloverly "Dakota", 6
Cloverly "Lakota", 13 Phosphoria, 12 Tensleep, 17
Madison)

Number of Abandoned producers: 6

Number of Dry Holes: 13

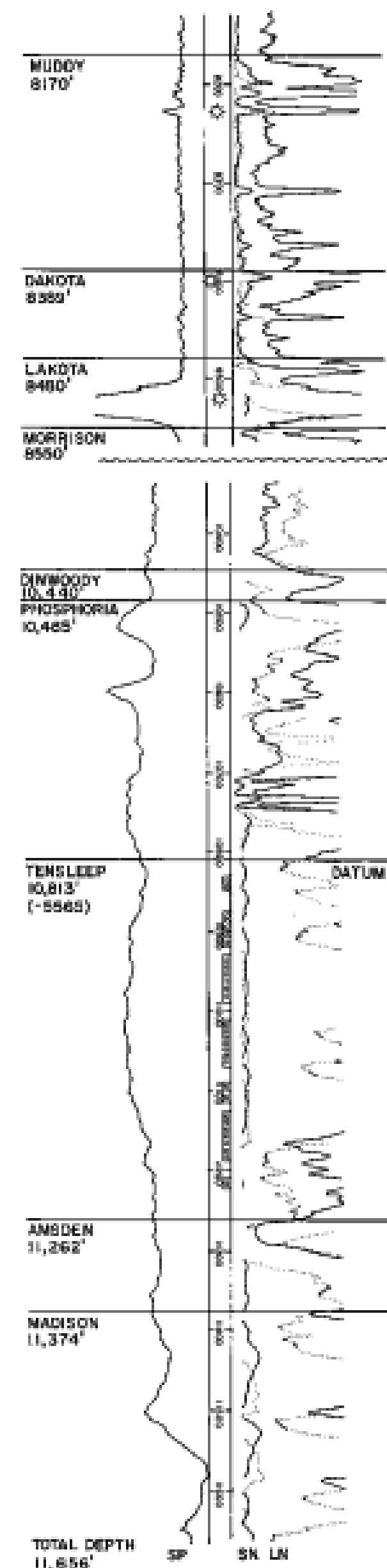
Number of Shut-in Wells: 19 (1 Ft. Union, 11 Cody,
2 Frontier, 1 Cloverly, 1 Phosphoria, 2 Tensleep, 1
Madison)

Number of Disposal Wells: 2 (Cody)

Number Pressure Maintenance Injection Wells:
16 (5 Cody, 1 Tensleep, 10 Madison)

Market for Production: Northern Gas of Wyoming,
pipeline

Major Operators: Amoco Production Company



Perforations: Frontier-6554-6612, 6664-94, 6731-64, 6965-79, 6985-7016 w/4/ft. ("Dakota" perfs not reported)
Treatment: Acidized
Porosity: 10% Frontier average, 9% "Dakota" average
Logs
Permeability: 1 md Frontier average, 15 md "Dakota" average
Average Pay Thickness: 40 feet Frontier
Oil Column: Unknown
Oil/Water Contact: Unknown
Gas Oil Ratio: Dry gas
Initial Pressure: 3500 psi SIP DST
Present Pressure: 1000 psi SIP DST
Drive Mechanism: Gas expansion
Rw and/or Salinity: Unknown
Bottom hole Temperature: 180°F Log
Character of oil or gas: Oil: Gravity-61° API, Gas: (see Frontier-Cretaceous)
Continuity of Reservoir: Approximately 100 feet of structural closure
Cumulative Production: 81,310,099 BO, 823,355,211 MCFG commingled (1/31/89)
Primary Recovery STBO or MCF/AC FT: 4,736.72 BO, 47,963.9 MCF/AC FT (all reservoirs)
Secondary: Not available
Estimated Ultimate Recovery: Not available
Decline Curve: Appendix

RESERVOIR DATA

Formation: Phosphoria-Permian
Lithology: Dolomitic limestone
Discovery Date: December 28, 1961
Location: Pan American 58 Unit, NESW 34-34N-96W
Initial Potential: 5836 MCFGPD, 1140 BOPD (Condensate)
Perforations: 11,201-207, 11,095-11,100 w/4/ft.
Treatment: Acidize
Porosity: 10% average Log
Permeability: 1.5 md Core
Average Pay Thickness: 112 feet
Oil Column: Unknown
Oil/Water Contact: Unknown
Gas Oil Ratio: Unknown
Initial Pressure: 5200 psi SIP DST
Present Pressure: 1500 psi SIP DST
Drive Mechanism: Gas expansion
Rw and/or Salinity: Unknown
Bottom hole Temperature: 188°F Log
Character of oil or gas: Oil: Gravity-59° API, Gas: BTU-1042
Continuity of Reservoir: Approximately 100 feet of structural closure
Cumulative Production: 81,310,099 BO, 823,355,211 MCFG (1/31/89) commingled
Primary Recovery STBO or MCF/AC FT: 4,736.7 BO, 47,963.9 MCF/AC FT (all reservoirs)
Secondary: Not available
Estimated Ultimate Recovery: Not available
Decline Curve: Appendix

RESERVOIR DATA

Formation: Tensleep-Pennsylvanian
Lithology: Sandstone
Discovery Date: March 13, 1956
Location: Stanolind 11 Unit, NENWSE 10-33N-96W
Initial Potential: 917 BOPD
Perforations: 10,470-495, 10,495-520, 10,521-546, 10,565-590, 10,700-725 w/4/ft.
Treatment: Hydrofrac w/750 gal. kerosene, 331# CaCl₂, 400# Nopalim, 400# Frac sand and 6 bbls. water followed by gel solution @ 36 bbls. crude + 10 gal. HB-2 gel w/80 bbl. crude displacement
Porosity: 8% average Core
Permeability: 7.05 - 10 md average Core
Average Pay Thickness: 70 feet
Oil Column: Unknown
Oil/Water Contact: Unknown
Gas Oil Ratio: 431-735:1
Initial Pressure: 4800 psi SIP DST
Present Pressure: 4200 psi SIP DST
Drive Mechanism: Solution gas
Rw and/or Salinity: 2.3 @ 68°F
Bottom hole Temperature: 208°F Log
Character of oil or gas: Oil: Gravity-42-45° API, Pour point-<5°F, Sulfur-.58%, Nitrogen-.01%, Color-brownish green
 Gas: Methane-65.46%, Ethane-16.41%, Propane-7.72%, Butanes-4.09%, Pentanes-1.17%, Hexanes-.46%, Nitrogen-1.17%, CO₂-.04%, H₂S-3.48%.
Continuity of Reservoir: Approximately 100 feet of structural closure
Cumulative Production: 81,310,099 BO, 823,355,211 MCFG commingled (1/31/89)
Primary Recovery STBO or MCF/AC FT: 4,736.7 BO, 47,963.9 MCF/AC FT (all reservoirs)
Secondary: Not available
Estimated Ultimate Recovery: Not available
Decline Curve: Appendix

RESERVOIR DATA

Formation: Madison-Mississippian
Lithology: Limestone
Discovery Date: January 1, 1954
Location: Stanolind 30M Unit, C N WNE 10-33N-96W
Initial Potential: 515 BOPD, 77 MCFGPD
Perforations: 11,406-447 w/4/ft.
Treatment: Hydrofrac & pump 22# 15% HCl. Pump 850# rock salt in gel brine. Pump 17# HCl.
Porosity: 9-10% average Log
Permeability: 9 md Core
Average Pay Thickness: 207 feet
Oil Column: Unknown
Oil/Water Contact: Unknown
Gas Oil Ratio: 400:1 estimated
Initial Pressure: 5909-60 psi SIP DST
Present Pressure: 3500 psi average SIP DST
Drive Mechanism: Limited water
Rw and/or Salinity: 5.1 @ 68°F
Bottom hole Temperature: 212°F Log
Character of oil or gas: Gravity-40.5° API

Continuity of Reservoir: Approximately 100 feet of structural closure
Cumulative Production: 81,310,099 BO, 823,355,211 MCFG Commingled (1/31/89)
Primary Recovery STBO or MCF/AC FT: 4,736.7 BO, 47,963.9 MCF/AC FT (all reservoirs)
Secondary: Not available
Estimated Ultimate Recovery: not available
Decline Curve: Appendix

DISCUSSION

Beaver Creek Field is located 14 miles southeast of Riverton and 20 miles east of Lander in the south central portion of the Wind River Basin. The field is an asymmetrical anticline that trends north to northwest. The stratigraphy dips about 6 degrees on the western and southern sides while the eastern and northern sides dip at a steeper angle. Several low angle thrusts trend across the southern end from east to west in Sections 13 through 16. There are also several thrust faults that parallel the axis of the structure on its eastern flank. There is one reverse fault that parallels the anticline on the western flank of the structure. The displacement of the faults average from 25 to 200 feet.

The Beaver Creek Unit was made effective September 1, 1937 and contains 17,166.13 acres within its Unit boundaries and is operated by Amoco Production Company. The field was discovered in June 1938 with the completion of the #1 E. D. Johnson, C SESE Section 3, T33N-R96W, which was completed for an initial potential of 9000 MCFGPD from the "Lakota" Formation. The Frontier-"Dakota" participation horizons were also discovered in the same well. These zones include the seven Frontier sands, and the two Dakota sands which are all productive.

The Muddy sand production was discovered in the No. 7 Unit well in April 1947. This gas well had an initial production of 2.25 million cubic feet of gas at the 8,515 to 8,550 foot interval. Since then the Muddy has been commingled with the Frontier-"Dakota" for production statistic purposes.

A majority of the Frontier formations were found to be gas productive with the discovery of the No. 3 Unit well in the NWNE of Section 14. When the well was worked over in November 1948, an initial production of 2.6 million cubic feet of gas, 60 barrels of distillate and 3 barrels of water were recovered. Production had been established in the Second, Third, Fourth, and Fifth Frontier sands.

The first oil production was established from the Tensleep formation in 1949 with the Unit well No. 11 in the NENW Section 10. The initial production was 481 BO.

In July 1951 the Mesaverde Formation was discovered to be oil productive and the discovery of the no. 15 Unit well in the SESWNW Section 10. This well was completed for an initial production of 288 BOPD. Since the 1960's this formation horizon has been reclassified and is now called the productive sands of

the Cody Formation.

The Madison Formation was the first limestone horizon found to be productive on the anticline with the completion of the No. 30-M well in the S/2 NWNW Section 10 in January 1954. The initial flow was 515 BO and 77,000 cubic feet of gas. The Phosphoria Formation was next discovered in December 1961 with production established from the No. 58 Unit well in the NESW of Section 34, T34N-R96W. This well had an initial production of 5,836 MCFGPD and 1,140 barrels of oil condensate.

The last horizon found to productive at Beaver Creek Field was the Fort Union. This zone was discovered in December 1984 with the recompletion of the No. 19 Unit well in the SW NW Section 11, T33N-R96W and had an initial production of 1500 MCFG. A total of five wells are now producing gas from this formation.

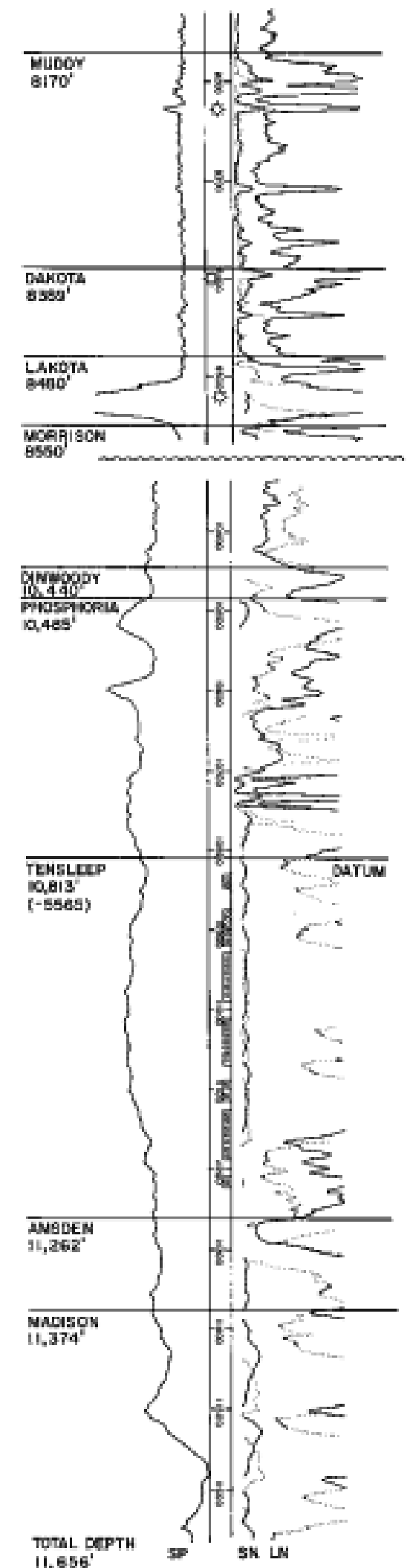
Currently this field is operated by Amoco Production Company out of Riverton, Wyoming. All of the gas/oil/water contacts for the field horizons have never been established due to the degree of faulting. Presently all wells in the Fort Union Formation have been shut-in due to the current economic prices of the oil and gas market. The structure contour map reflects the 1988 plan of development for the Beaver Creek Field with the exception of the Fort Union Formation which is now shut-in. Beaver Creek Field was operating at 95% capacity during the first quarter of 1989.

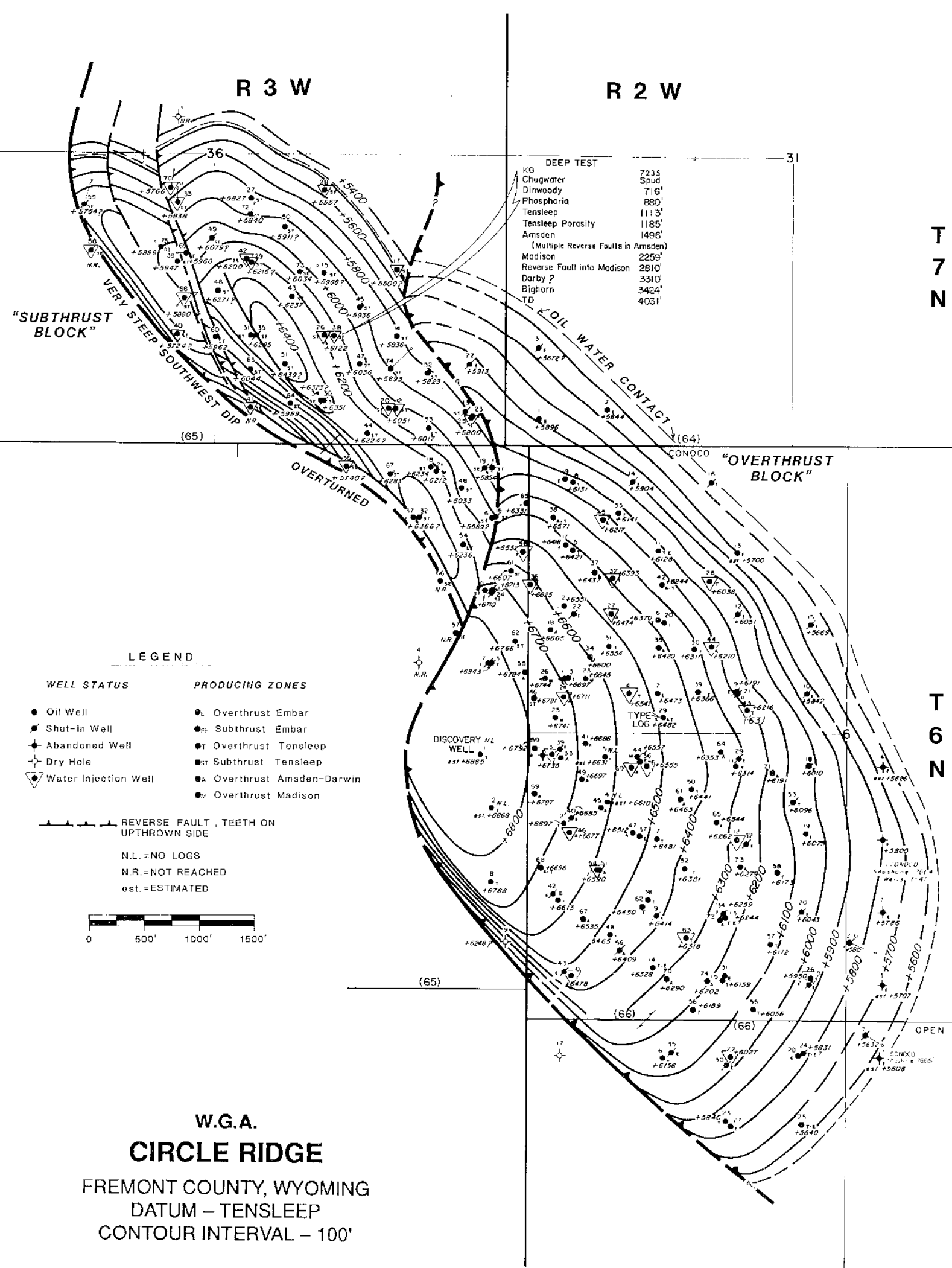
REFERENCES

- Amoco Production Company, Beaver Creek Field, Fremont County, Wyoming: Structure Contour Map on Top of the Tensleep Formation, Wyoming State Oil and Gas Conservation commission Files, Tensleep Unit Map.
 Biggs, Paul and Ralph H. Espach, 1960, Beaver Creek, Petroleum and Natural Gas Fields in Wyoming: The Bureau of mines 50th Anniversary, Bulletin 582, Bureau of Mines, p. 24-25, 292 and 230-232.
 Ross, Richard B., 1957, Beaver Creek Field: Twelfth Annual Field conference of the Wyoming Geological Association, p. 148-149.
 Symposium Committee, 1957, Beaver Creek, Fremont Co., Wyoming: Wyoming Geological Association oil and Gas Fields Symposium Binder, p. 63 and map.

ACKNOWLEDGMENTS

The author would like to thank the following for their time in contributing to the Beaver Creek Field report: John Murry and Jeff Olson - Rawlins District Office and Fred Georgeson - Lander Area Resource Office of the Bureau of Land Management. I would also like to thank the staff of Amoco Production for their help and use of the Tensleep Structure Contour map. The following were helpful in drafting and typing - Gordon Simon and Shirley Olson - Casper District Office.





CIRCLE RIDGE

T6-7N, R2-3W
Fremont County, Wyoming
Phosphoria, Tensleep, Amsden, Madison

Rick R. Whitman
Conoco Inc.
Casper, Wyoming
February, 1989

DISCOVERY WELL

Name: Union Oil Co. Circle Ridge Well No. 1
(Shoshone 65 No. 1)
Location: NENESE (2137 N/S, 428 W/E) 1-6N-3W
Date of Completion: July 12, 1923
Initial Potential: P 150 BOPD Phosphoria-Permian,
Tensleep-Pennsylvanian
Total Depth: 655 Tensleep
Elevation: 7190 Gr
Casing: 12-1/2 @ 154; 8-5/8 @ 366 w/100 sx (in 1941)
Perforations: 154-655 open hole
Treatment: None reported
Pressures: Unknown

GENERAL FIELD DATA

Regional Setting: Northwest Flank, Wind River Basin
Other Formations with Shows: Dinwoody-Triassic
Exploration Method Leading to Discovery: Surface geology
Trap Type: Structural, faulted asymmetrical anticline
Surface Formations: Phosphoria-Permian;
Chugwater, Dinwoody-Triassic
Oldest Formation Penetrated: Bighorn-Ordovician
Well: Shoshone 65 No. 38, NESWSE 36-7N-3W
Spacing Order: None, spaced 5-10 acres
Logging Practice: Past: GRN Present: GR-CNDL
Completion Practice: Past: Open hole
Present: Run casing, perforate and stimulate
Productive Area: 670 acres
Number of Producing Wells: 115 (22 Phosphoria,
58 Tensleep, 22 Amsden, 4 Madison, 5 Tensleep-
Phosphoria, 4 Amsden-Tensleep) (12/88)
Number of Abandoned producers: 7 (5
Phosphoria, 1 Tensleep, 1 Amsden) (12/88)
Number of Dry Holes: 4 (12/88)
Number of Shut-in Wells: 42 (29 Phosphoria, 10
Tensleep, 2 Amsden, 1 Tensleep-Phosphoria)
(12/88)
Number of Disposal Wells: 0
Number Pressure Maintenance Injection Wells:
35 (11 Phosphoria, 17 Tensleep, 7 Amsden) (12/88)
Market for Production: Conoco Pipeline, Platte
Pipeline Co., pipeline
Major Operators: Conoco Inc.

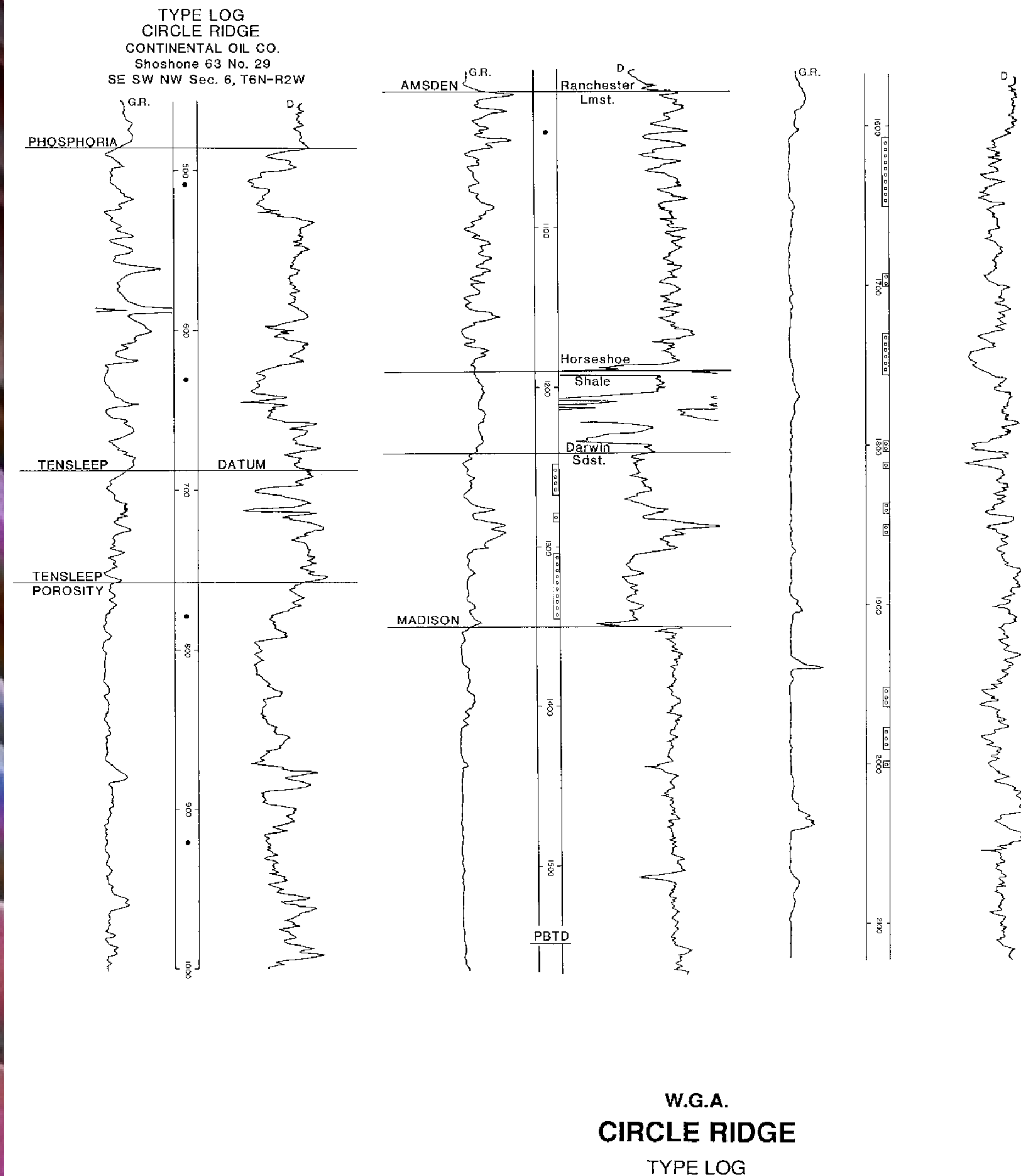
RESERVOIR DATA

Formation: "Overthrust" Phosphoria (Embar)-
Permian
Lithology: Cherty limestone and dolomite
Discovery Date: November 8, 1923
Location: Union Oil Co. Circle Ridge No. 2 (Shoshone
66 No. 1) NWNWSW 6-6N-2W
Initial Potential: 25 BOPD while drilling (11/23)

Perforations: 125-220 open hole
Treatment: None reported
Porosity: 22.6% average Core (5 wells)
Permeability: 31.4 md average Core (5 wells)
Average Pay Thickness: 47 feet
Oil Column: 1490 feet
Oil/Water Contact: +5566
Gas Oil Ratio: Assume same as Tensleep: 0.9
SCF/STB
Initial Pressure: 597 psia @ +5566 (estimated)
Present Pressure: 493 psi @ +5566 (5/1/84)
Drive Mechanism: Water drive and fluid expansion
Rw and/or Salinity: 5.41 @ 68°F average (4.0-7.67
wellhead)
Bottom hole Temperature: 75°F, variable Log
Character of oil: Gravity-23.6° API, Viscosity-60 cp,
Color-black, Sulfur-2.84%
Continuity of Reservoir: Two continuous porosity
zones
Cumulative Production: 5,373,422 BO, 31,385,582
BW (44 wells) (12/1/88)
Primary Recovery: 5,790,000 BO estimated
ultimate
Secondary: None
Estimated Ultimate Recovery: 5,790,000 BO
Decline Curve: Appendix

RESERVOIR DATA

Formation: "Subthrust" Phosphoria (Embar)-
Permian
Lithology: Cherty limestone and dolomite
Discovery Date: July 14, 1942
Location: Shoshone 65 No. 6, SENENE 1-6N-3W
Initial Potential: Shut in due to insufficient storage,
1019 feet of oil in well bore
Perforations: 876-1269 open hole
Treatment: None reported
Porosity: 17.1% average Core (2 wells)
Permeability: 20.5 md average Core (2 wells)
Average Pay Thickness: 33 feet
Oil Column: 1325 feet
Oil/Water Contact: +5455
Gas Oil Ratio: 0.9 SCF/STB
Initial Pressure: 338 psia (estimated)
Present Pressure: 350 psia @ +5566 (estimated)
(2/89)
Drive Mechanism: Water drive and fluid expansion
Rw and/or Salinity: 6.28 @ 68°F average, (4.61-8.9
wellhead)
Bottom hole Temperature: 91°F Log
Character of oil or gas: Gravity-23.4° API,
Viscosity-50 cp, Color-black
Continuity of Reservoir: Two continuous zones, cut
by reverse faults on west flank



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February, 1989

Cumulative Production: 1,975,744 BO, 12,273,664 BW (25 wells) (12/1/88)
Primary Recovery: 1,998,000 BO estimated ultimate
Secondary: 372,000 BO estimated ultimate
Estimated Ultimate Recovery: 2,370,000 BO
Decline Curve: Appendix

RESERVOIR DATA

Formation: "Overthrust" Tensleep-Pennsylvanian
Lithology: Sandstone interbedded with dolomite
Porosity: 15% average Core (9 wells)
Permeability: 78.2 md average Core (9 wells)
Average Pay Thickness: 122 feet
Oil Column: 1350 feet
Oil/Water Contact: +5541
Gas Oil Ratio: 0.9 SCF/STB (same as "Subthrust" Phosphoria)
Initial Pressure: Unknown
Present Pressure: 499 psi @ +5541 (9/87)
Drive Mechanism: Water drive and fluid expansion
Rw and/or Salinity: 9.84 @ 68°F average (6.7-13.1 wellhead)
Bottom hole Temperature: 83°F, variable Log
Character of oil: Gravity-23.8° API, Viscosity 50 cp, Color-black, Sulfur-2.73%
Continuity of Reservoir: Continuous with local development of an "upper" sandstone
Cumulative Production: 10,741,888 BO, 63,623,171 BW (55 wells) (12/1/88)
Primary Recovery: 11,763,000 BO estimated ultimate
Secondary: 1,307,000 BO estimated ultimate
Estimated Ultimate Recovery: 13,070,000 BO
Decline Curve: Appendix

RESERVOIR DATA

Formation: "Subthrust" Tensleep-Pennsylvanian
Lithology: Sandstone interbedded with dolomite
Discovery Date: November 26, 1951
Location: Shoshone 65 No. 10 NESENE 1-6N-3W
Initial Potential: P 424 BOPD
Perforations: 1111-1570 open hole
Treatment: Shot w/260 qts. nitro from 1520-1570
Porosity: 12% average Core (3 wells)
Permeability: 26.8 md average Core (3 wells)
Average Pay Thickness: 104 feet
Oil Column: 950 feet
Oil/Water Contact: +5492
Gas Oil Ratio: 0.9 SCF/STB (Same as "Overthrust" Tensleep)
Initial Pressure: 604 psi @ +5492
Present Pressure: 441 psi @ +5492 (1/1/84)
Drive Mechanism: Water drive and fluid expansion
Rw and/or Salinity: 6.46 @ 68°F average (2.69-9.3 wellhead)
Bottom hole Temperature: 101°F Log
Character of oil: Gravity-23.9° API, Viscosity-38 cp, Color-black
Continuity of Reservoir: Continuous, cut by reverse faults on west flank

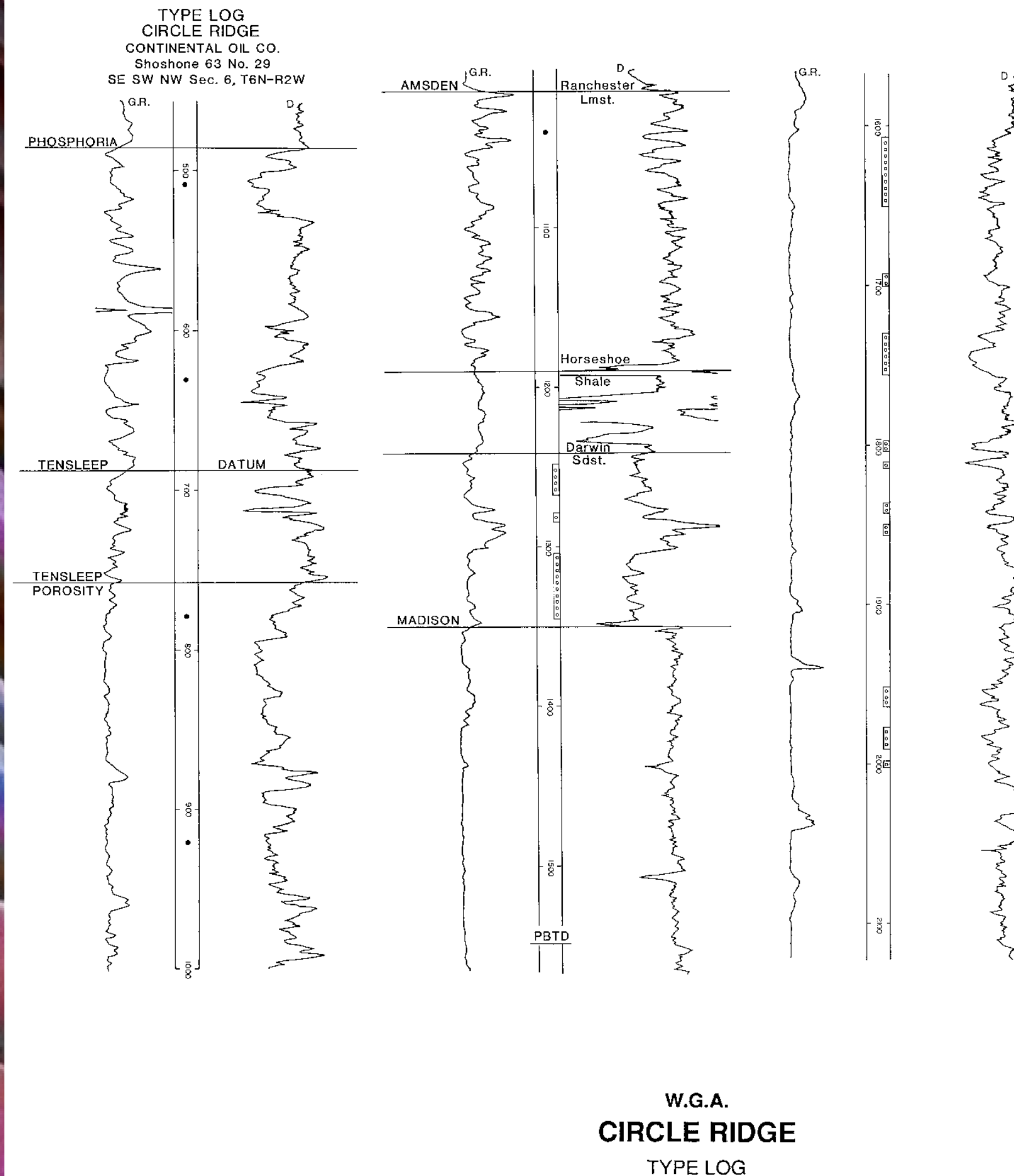
Cumulative Production: 4,366,983 BO, 17,109,768 BW (38 Wells) (12/1/88)
Primary Recovery: 6,081,000 BO estimated ultimate
Secondary: 1,219,000 BO estimated ultimate
Estimated Ultimate Recovery: 7,300,000 BO
Decline Curve: Appendix

RESERVOIR DATA

Formation: "Overthrust" Amsden (Darwin sandstone member) - Pennsylvanian
Lithology: Sandstone
Discovery Date: May 20, 1955
Location: Shoshone 66 No. 47, SENWSW 6-6N-2W
Initial Potential: P 329 BOPD, 8 BWPD (3 day test)
Perforations: 1252-1261, 1268-1277
Treatment: None reported
Porosity: 14.6% average Core (above 10% cutoff) (6 wells)
Permeability: 61.2 md average (above 11 md cutoff) (6 wells)
Average Pay Thickness: 60 feet
Oil Column: 660 feet
Oil/Water Contact: +5500 estimated
Gas Oil Ratio: 0.9 SCF/STB (same as Tensleep)
Initial Pressure: Unknown
Present Pressure: 385 psia @ +5000 estimated (2/89)
Drive Mechanism: Water drive and fluid expansion
Rw and/or Salinity: 5.0-6.3 @ 68°F wellhead
Bottom hole Temperature: 85°F, variable Log
Character of oil: Gravity-24° API, Viscosity-43 cp, Color-black
Continuity of Reservoir: 40-106 feet thick, continuous "lower" sandstone, discontinuous, thin "upper" sandstones
Cumulative Production: 3,344,009 BO, 20,571,577 BW (41 wells) (12/1/88)
Primary Recovery: 3,553,000 BO estimated ultimate
Secondary: 607,000 BO estimated ultimate
Estimated Ultimate Recovery: 4,160,000 BO
Decline Curve: Appendix

RESERVOIR DATA

Formation: "Overthrust" Madison-Mississippian
Lithology: Limestone and dolomite
Discovery Date: December 20, 1946
Location: Shoshone 63 No. 4 SESWNW 6-6N-2W
Initial Potential: P 135 BOPD, 2 BWPD
Perforations: 1600-1665
Treatment: Acidize w/1000 gallons
Porosity: 14.2% average Log, 10.4% average Core (3 wells)
Permeability: 2.61 md average Core (above 0.38 md cutoff) (3 wells)
Average Pay Thickness: Poorly defined and unknown, gross thickness approx. 700 feet
Oil Column: 570 feet
Oil/Water Contact: +5500
Gas Oil Ratio: 0.9 SCF/STB (same as Tensleep)
Initial Pressure: Unknown



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Present Pressure: 420 psia @ +4660 estimated (2/89)
Drive Mechanism: Water drive and fluid expansion
Rw and/or Salinity: 6.26 @ 68°F wellhead
Bottom hole Temperature: 85°F, variable Log
Character of oil: Gravity-24° API, Viscosity-40 cp,
 Color-black, Sulfur-2.67%, Nitrogen-.25%
Continuity of Reservoir: Continuous
Cumulative Production: 1,279,060 BO, 10,345,349
 BW (10 wells) (12/1/88)
Primary Recovery: 1,320,000 BO estimated
 ultimate
Secondary: None
Estimated Ultimate Recovery: 1,320,000 BO
Decline Curve: Appendix

DISCUSSION

Union Oil Co. drilled the discovery well, Circle Ridge Well No. 2, for the "overthrust" Phosphoria pool in 1923. In 1941 Continental Oil Company attempted to deepen it but eventually had to junk and abandon the well.

Circle Ridge Field is unusual in that the Phosphoria crops out on a hillside at the apex of the "overthrust" structure. Near surface cementation and/or asphaltic plugging are assumed to provide the up-dip lateral seal.

Although production from Circle Ridge Field is classified as Embar, the Dinwoody is not productive and all the Embar oil is from the Phosphoria. The "overthrust" Tensleep pool was discovered in 1923 when Union Oil Co. drilled the Circle Ridge Well No. 1. The isolated location and a poor market for the low gravity crude led to the shut in of this and a second well until 1941 when Continental Oil Company (later Conoco Inc.) renewed operations in the field. Depositional and/or erosional relief resulted in the local development of an "upper" Tensleep sandstone in the southern part of the field. Subvertical strata on the west flank of the surface anticline are overturned. Communication behind pipe with the underlying Madison may have enhanced the Amsden (Darwin) production in Shoshone 66 No. 47. The basal Darwin sandstone was deposited unconformably on the underlying Madison. The vast bulk of the Amsden production is from the Darwin sandstone and the two terms have been used more or less interchangeably. However, oil from three wells, Shoshone 63 No. 24, 65 No. 55 and 66 No. 46 was commingled from the Ranchester Limestone member of the Darwin. Only 65 No. 55 still produces from the Ranchester.

The Madison reservoir is incompletely understood. In cores the Madison is apparently extensively fractured. The low matrix permeability suggests that the existence of fractures may be a prerequisite for the development of reservoir quality rock. There is evidence that there may be water influx into the Madison from the west across the fault.

In 1977 a pilot waterflood was initiated in the Darwin sandstone and full scale waterflooding began

in 1979. Conoco Inc. initiated a "subthrust" Phosphoria and "subthrust" Tensleep waterflood in February 1986. The Phosphoria can clearly be identified as overturned on logs from some wells on the west flank. An unsuccessful pilot steam flood was tried in 1965 in Shoshone 66 No. 39. A pilot waterflood was initiated in 1987 and a full scale flood was underway by autumn 1988. At this early stage of the waterflood, the secondary recovery value is a rough estimate.

At Circle Ridge Field, the original Shoshone leases were numbered 7607, 7608, 7609, 7610, 7664 and 7665. The productive 7607, 7608, 7609 and 7610 leases have been redesignated the Shoshone 63, 64, 65 and 66 leases, respectively.

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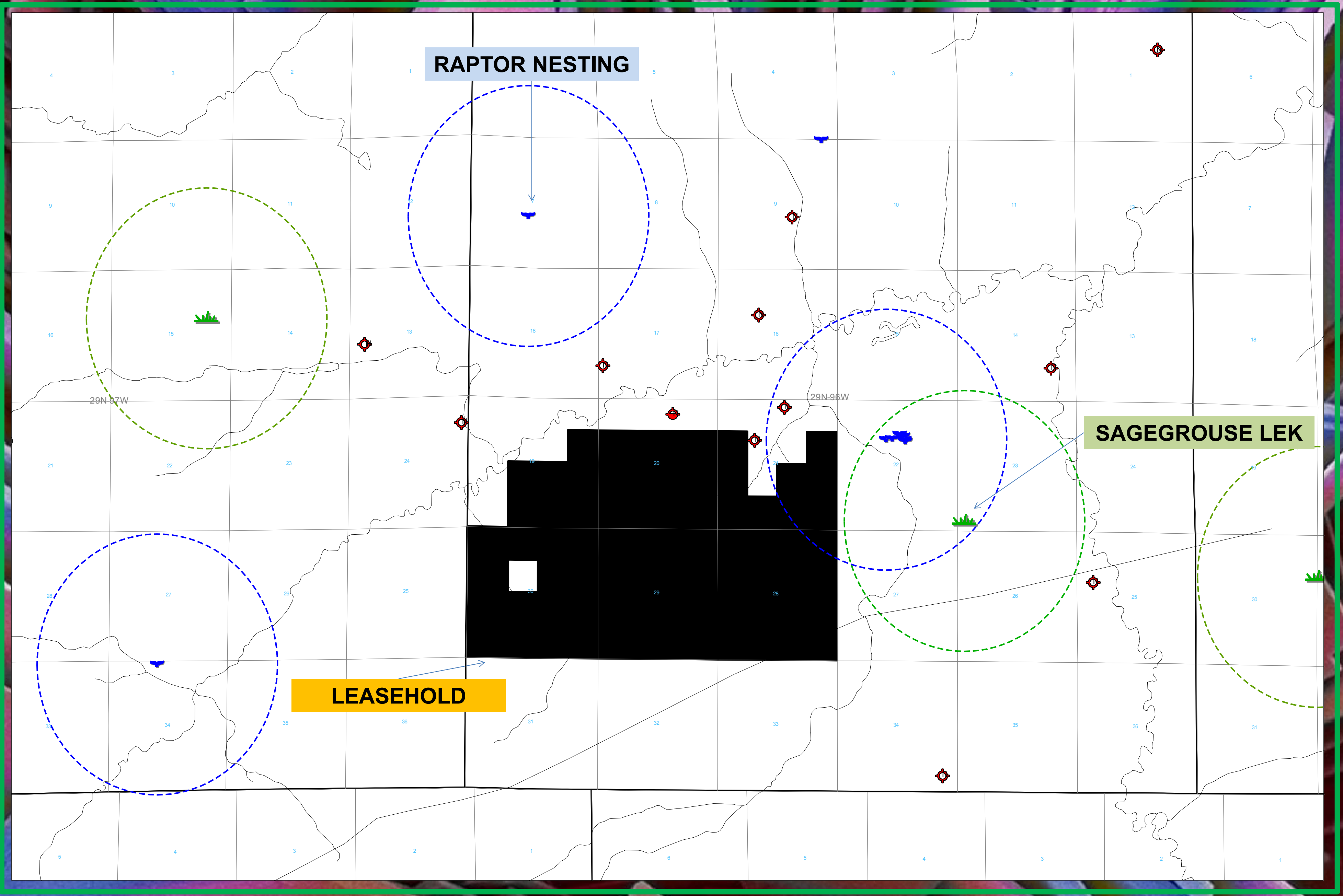
ACKNOWLEDGMENTS

Many thanks to M.D. Anderson, S.G. Chipperfield and W.M. Morrison who all cheerfully made substantial contributions to this report.

RAPTOR NESTING

SAGEGROUSE LEK

LEASEHOLD



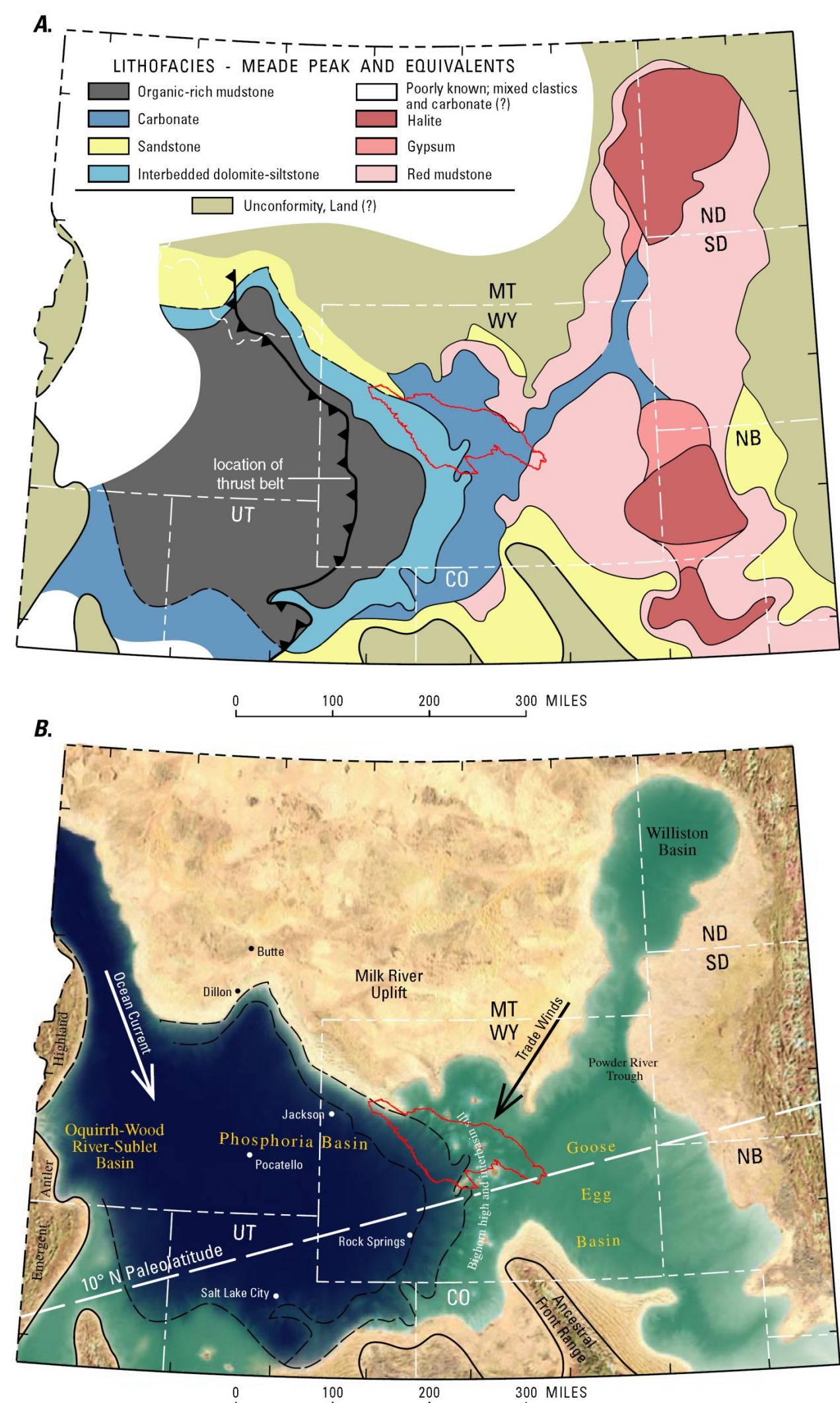
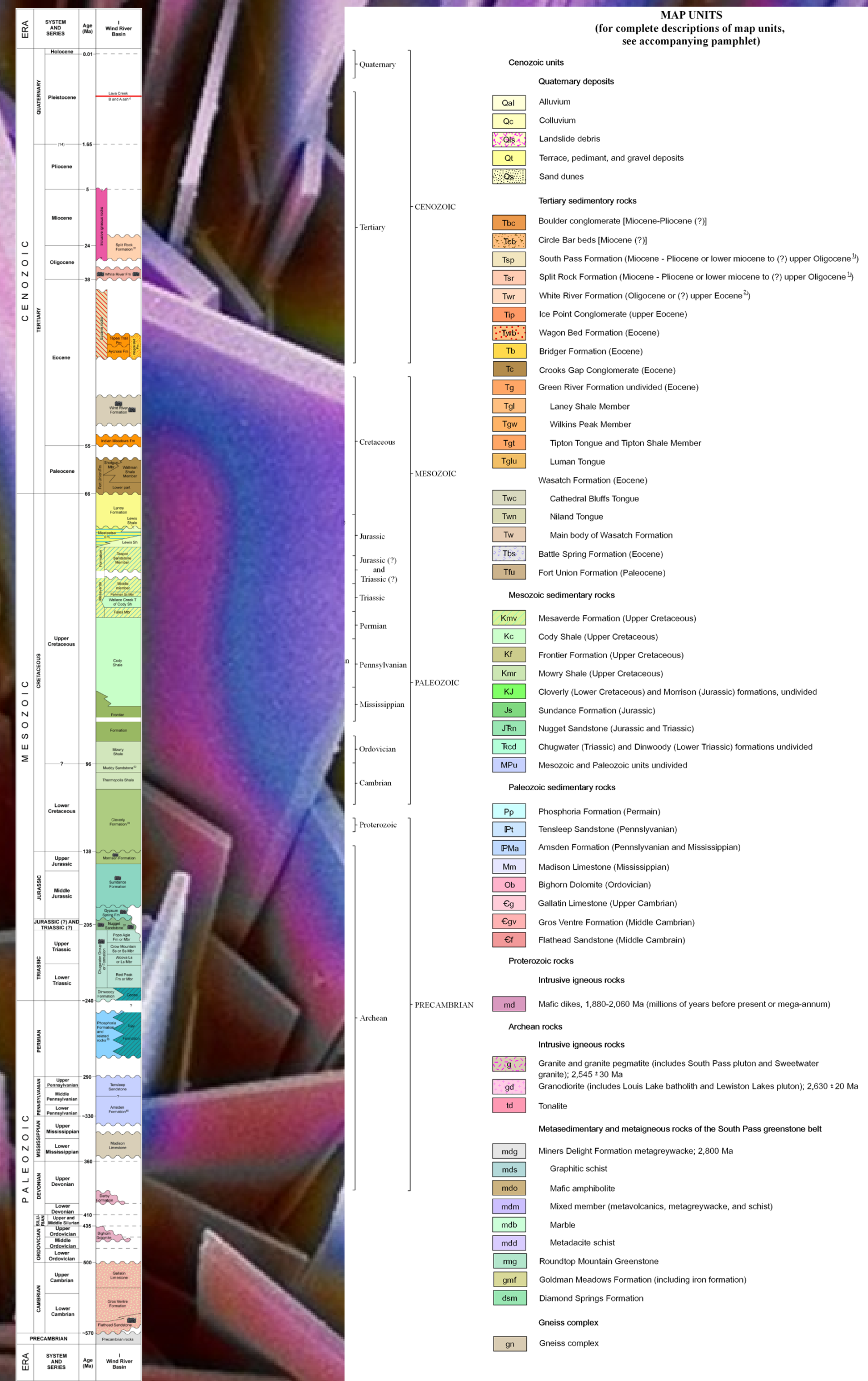


Figure 13. A, lithofacies of Meade Peak Phosphatic Shale Member of the Phosphoria Formation and equivalent rocks in Wyoming and adjacent areas from Maughan (1984). B, generalized paleogeographic reconstruction of the Meade Peak, based on Maughan (1984), Peterson (1988), and Piper and Link (2002). Area of Wind River Basin Province outlined in red.



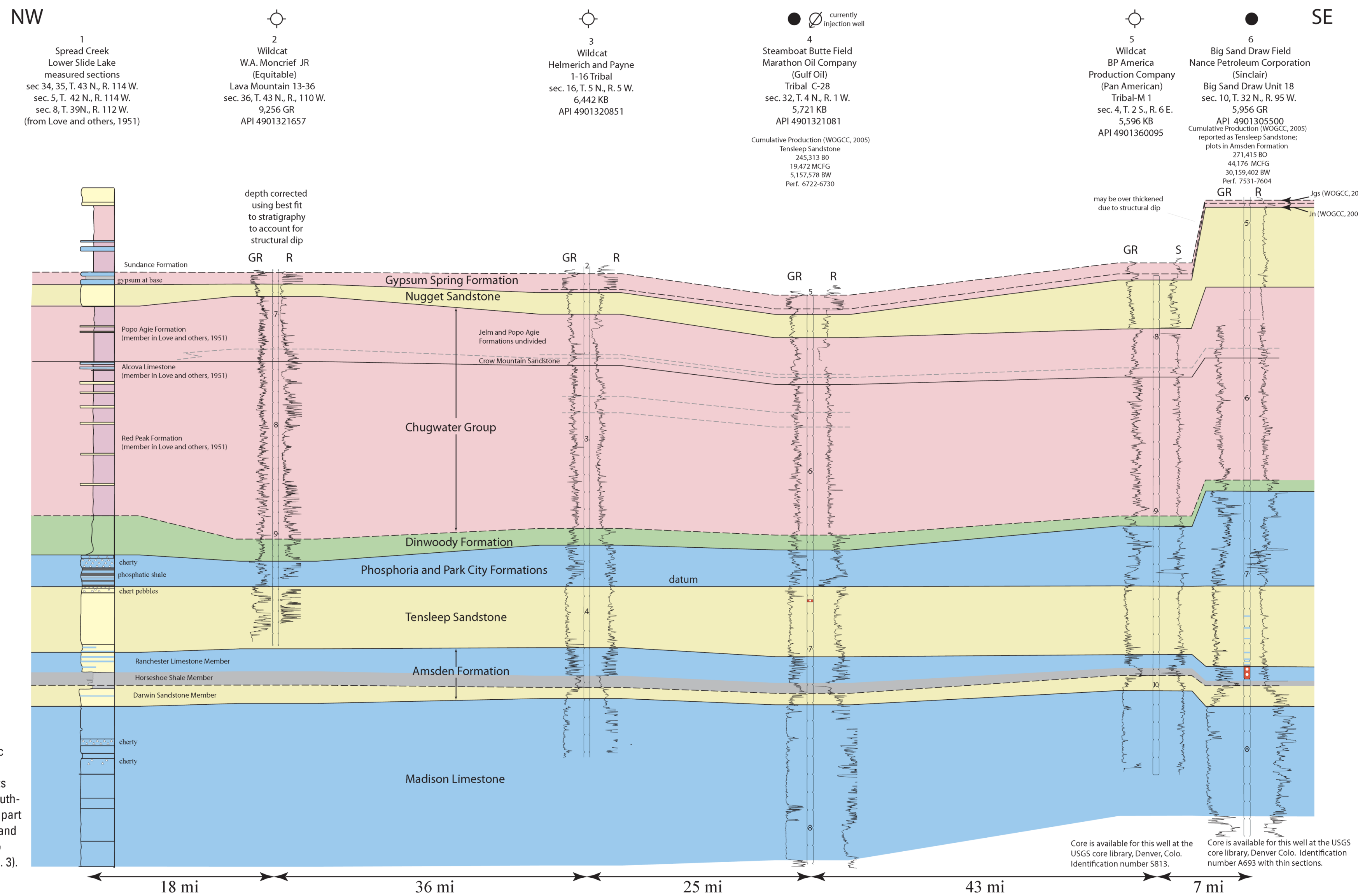
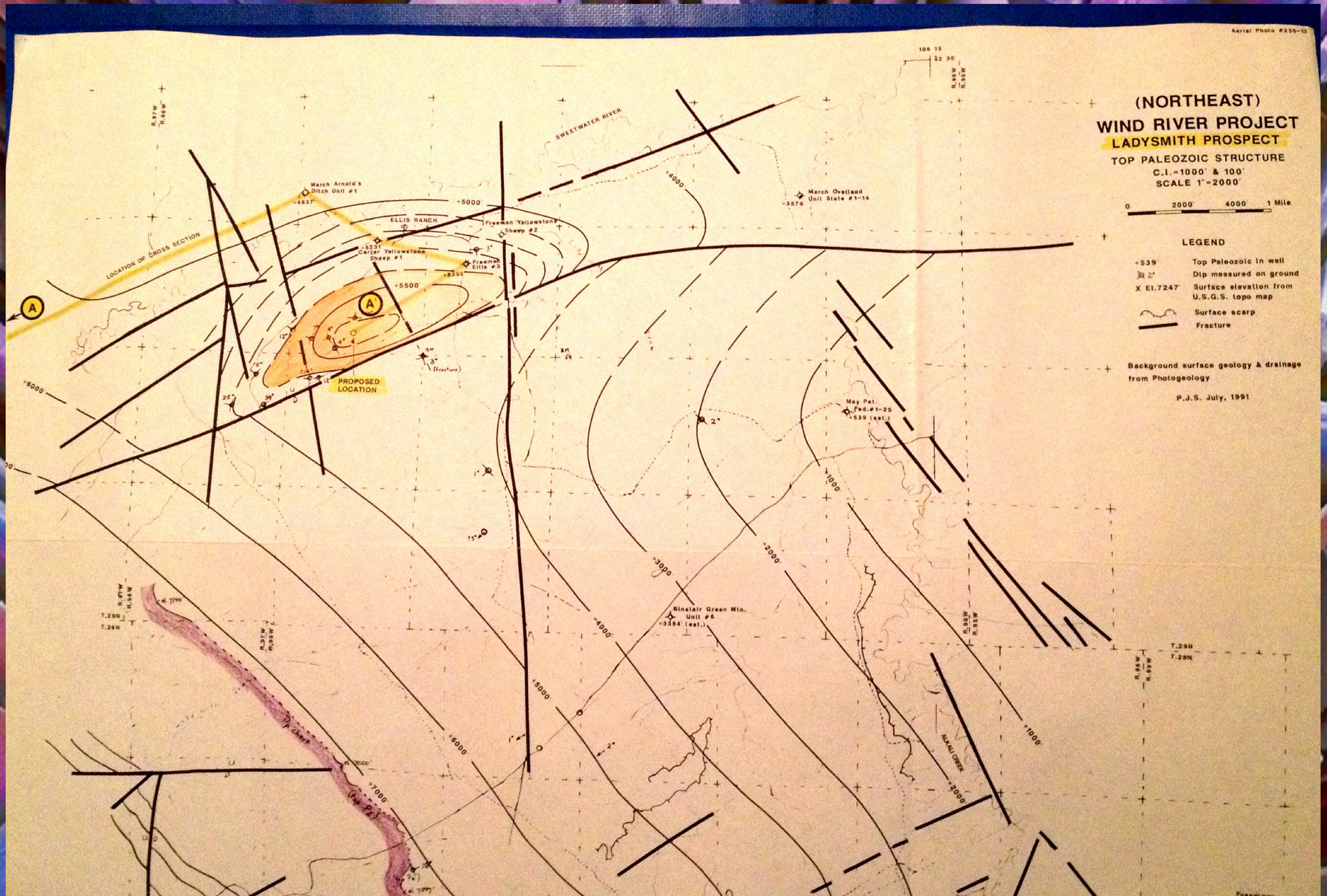


Figure 11.—Stratigraphic cross section of upper and lower Mesozoic units oriented northwest to southeast across the western part of the Wind River Basin and extending westward into Fish Creek Basin (see fig. 3).

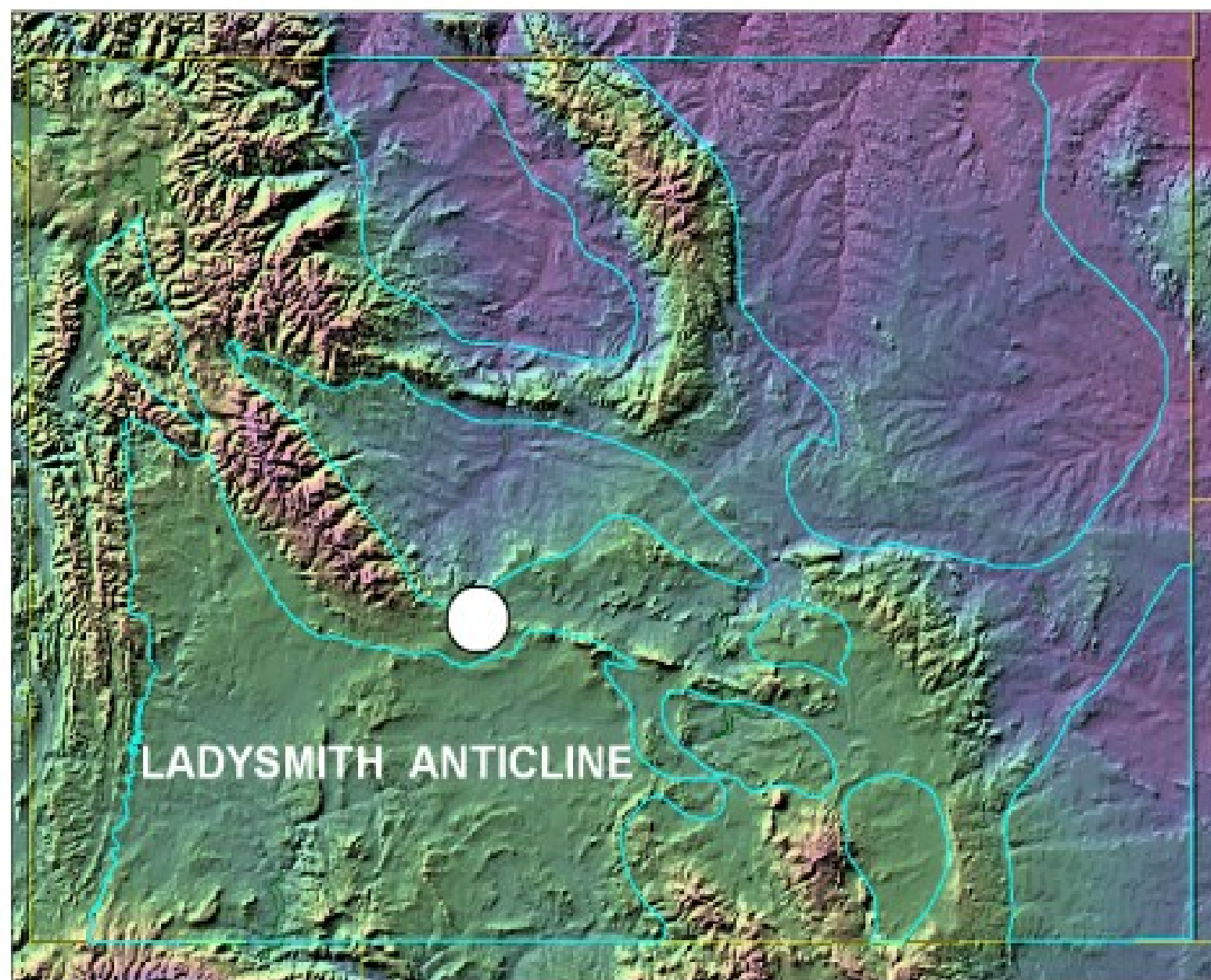
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LADYSMITH ANTICLINE

FREMONT COUNTY, WYOMING



Leasehold

WYW-172309

WYW-172309

1,000.0 gross/net acres

2,060.8 gross/net acres

3, 060.8 gross/net acres

Deal:

Offer to sell 3,060.8 acres for price per acre

Deliver negotiable % NRI lease

All leases are federal with earliest expiration in 2015

Possible AMI

Lower acreage cost, commitment to drill and a
carried working interest is also negotiable.

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