LITHOLOGIC DESCRIPTION OF CORES

HUMBLE OIL & REFINING CO. - JEWEL BURFORD NO. 1

Henderson County, Texas

CORING COMMENCED IN WASHITA

Depth in Feet		
4530 - 31 cr		Dense light brownish gray silty spherulitic limestone *Inoceramus* sp., fragments rare, *Ostrea* sp. rare
4531 - 32 cr		As above
4532 - 33 cr	(1)	As above
	(2)	Dense spherulitic light grayish limestone
	(3)	As above irregularly interbedded with thin streaks of gray shale
4533 - 34 cr	(1)	As above - decrease in shale
	(2)	Very thinly and irregularly bedded gray shale and light gray spherulitic limestone. Shale in excess.
	(3)	Highly calcareous silty shale, slightly pyritic
4534 - 35 cr	(1)	Irregularly interbedded brownish spherulitic limestone and gray calcareous shale.
	(2)	Gray calcareous silty fine sandy shale
	(3)	As above
	(4)	Dense light brownish gray spherulitic finely crystalline to granular limestone.
4535 - 36 cr	(1)	Dense light brownish gray very spherulitic limestone.
	(2)	As above irregularly interbedded with gray shale Fish remains - common, scales and bones.
	(3)	Gray silty calcareous shale *Ostrea* sp. - rare
	(4)	Light brownish gray silty spherulitic limestone irregularly interbedded with thin streaks of gray silty shale
4536 - 37 cr	(1)	Thin and irregularly bedded light gray spherulitic silty limestone and highly calcareous silty shale
	(2)	As above shale more prominent
	(3)	Gray calcareous silty shale
	(4)	As above - trace of lignite
4537 - 38 cr	(1)	Light brownish gray silty spherulitic limestone Shell fragments - few

	(2)	Light gray highly calcareous shale to impure limestone
	(3)	Dense light brownish silty spherulitic limestone with scattered thin shale streaks.
4538 - 39 cr	(1)	Dense grayish white spherulitic limestone Small Ostrea sp. - few
	(2)	As above. Gastropod sp.
	(3)	As above
	(4)	As above
4539 - 40 cr	(1)	Irregularly interbedded gray shale and grayish spherulitic limestone
	(2)	As above
	(3)	As above - "bore holes"?
4540 - 41 cr	(1)	Dense light brownish gray spherulitic limestone irregularly interbedded with gray silty shale Ammonite impression
	(2)	As above Previnquieria sp. ? fragment
	(3)	As above
	(4)	As above - increase in shale Plant remains ?
	(5)	Dense tan spherulitic limestone
	(6)	As above
4541 - 42 cr	(1)	Dense grayish white spherulitic limestone
	(2)	As above
	(3)	As above
4542 - 43 cr	(1)	Dense spherulitic limestone, dark gray thinly laminated shale. Biotite mica - common
	(2)	Dense white spherulitic limestone
	(3)	Dense grayish spherulitic limestone with thin streaks of gray micaceous (Biotite) shale Between cuts 3 and 4, there is a 2" bed of dark gray micaceous silty shale. Biotite mica.
	(4)	Dense grayish spherulitic limestone
4543 - 44 cr	(1)	Dense grayish spherulitic limestone Ammonite impression ?
	(2)	Dark gray thinly laminated shale
	(3)	Dense grayish spherulitic limestone Plant impressions ?
4544 - 45 cr	(1)	Thin bedded grayish spherulitic limestone and gray shale Irregularly interbedded. Pryitic
	(2)	Dense grayish spherulitic limestone

4545 - 46 cr	(1)	Thin irregularly bedded grayish spherulitic limestone and gray shale
	(2)	Whitish slightly spherulitic limestone, few shale streaks
	(3)	Grayish slightly spherulitic limestone
4546 - 47 cr	(1)	Dense grayish slightly spherulitic limestone, shell fragments rare
	(2)	Irregularly bedded grayish spherulitic limestone and dark brownish gray shale. Shell fragments - rare
	(3)	Dense grayish spherulitic limestone Ostrea sp. Inoceramus prisms
	(4)	Dense grayish limestone with thin irregular streaks of gray shale Shell fragments
	(5)	As above. Black thinly laminated shale in last 1" of this foot.
4547 - 48 cr	(1)	As above
	(2)	Dense grayish spherulitic limestone. Between cuts 3 and 4 there is a 1/2 foot streak of interbedded gray shale and limestone.
	(3)	Dense grayish spherulitic limestone
	(4)	Irregularly bedded highly calcareous silty gray shale Shell fragments - rare
4548 - 49 cr	(1)	As above
	(2)	As above - lighter gray Shell fragments
	(3)	Dense grayish spherulitic limestone
	(4)	Irregularly bedded gray shale - spherulitic limestone Ostrea sp. - rare
	(5)	Dense grayish spherulitic limestone Hamites sp. ?
	(6)	As above
4549 - 50 cr	(1)	As above
	(2)	Irregularly interbedded grayish spherulitic limestone and gray silty shale
	(3)	As above - shale darker
	(4)	As above
4550 - 51 cr	(1)	Dense grayish spherulitic limestone with streaks of gray shale
	(2)	Dark gray highly calcareous silty shale Shell fragments - few
	(3)	Irregularly interbedded black thinly laminated shale and white spherulitic limestone. Cross section of small ammonite (sp.)
	(4)	Dense grayish spherulitic limestone with thin irregular streaks of gray shale

	(5)	Thin and irregularly interbedded black shale and grayish limestone
4551 - 52 cr	(1)	Dense grayish very spherulitic limestone with irregular gray shale streaks
	(2)	Dense white slightly spherulitic limestone
4552 - 53 cr	(1)	Dense white chalky slightly spherulitic limestone
	(2)	As above with ammonite - fragment
4553 - 54 cr	(1)	Dense white slightly spherulitic brittle limestone Shell fragments - rare
	(2)	As above
4554 - 55 cr	(1)	As above
	(2)	As above
4555 - 56 cr	(1)	As above with 1/2 foot black shale between
	(2)	Dense white slightly spherulitic limestone
	(3)	As above - slightly brecciated with calcite veins around fragments
	(4)	Grayish slightly spherulitic limestone with thin gray shale streaks
4556 - 57 cr	(1)	Dense grayish spherulitic limestone Prohysteroceras prob. burckhardti (Bose)
	(2)	Dense light brownish gray spherulitic limestone Shell fragments - rare
	(3)	As above
4557 - 58 cr	(1)	As above
	(2)	Thin and irregularly interbedded grayish slightly spherulitic limestone and gray pyritic shale
	(3)	Dense grayish limestone with shale streaks Inoceramus sp.
	(4)	Dense grayish slightly spherulitic limestone
4558 - 59 cr	(1)	Thin and irregularly interbedded grayish limestone and silty shale
	(2)	Dense grayish slightly spherulitic limestone
	(3)	Thin and irregularly interbedded grayish limestone and gray silty shale
	(4)	As above - shale darker
4559 - 60 cr	(1)	As above
	(2)	Dense white chalky limestone
	(3)	As above
4560 - 61 cr	(1)	Dense white chalky slightly spherulitic limestone
	(2)	As above
4561 - 62		No sample

4562 - 63 cr	(1)	Dense white slightly spherulitic limestone *Prohysteroceras* prob. whitei (Bose)
	(2)	Irregularly bedded gray shale and grayish limestone *Inoceramus comancheanus* Cragin
4563 - 64 cr	(1)	Dense white slightly spherulitic limestone
	(2)	As above "*Elobiceras*" (*Rhytidoceras*) *serratascens* (Cragin)
	(3)	Dense grayish spherulitic limestone with thin gray shale streaks
	(4)	Gray silty calcareous shale
4564 - 65 cr	(1)	Gray chalky spherulitic limestone
	(2)	As above
	(3)	As above
4565 - 66 cr	(1)	Dense grayish spherulitic limestone with thin irregular streaks of gray pyritic silty shale. Shell fragments.
	(2)	As above - large fragments of a think shelled *Ostrea* sp.
	(3)	As above
4566 - 67 cr	(1)	Dense grayish highly spherulitic limestone with thin gray shale streaks
	(2)	As above - spherules not as abundant
4567 - 68 cr	(1)	As above
	(2)	Irregularly and thinly bedded grayish limestone and gray shale
	(3)	As above *Beudanticeras* N. sp.
4568 - 69 cr	(1)	Dense grayish slightly spherulitic limestone
	(2)	As above
4569 - 70 cr	(1)	Thin and irregularly interbedded black shale and grayish limestone
	(2)	As above - less shale, fish remains
	(3)	Dense grayish spherulitic limestone
4570 - 71 cr	(1)	Dense grayish highly spherulitic limestone
	(2)	As above
4571 - 72 cr	(1)	As above
	(2)	As above with thin streaks of black shale, small styolitic structure.
4572 - 73 cr	(1)	As above Ammonite - poorly preserved
	(2)	Dense grayish highly spherulitic limestone

4573 - 74 cr
(1) Dense white highly spherulitic limestone
(2) As above with thin gray shale streaks

4574 - 75 cr
(1) As above - more shale
(2) Dense grayish highly spherulitic limestone
(3) Irregularly interbedded dark gray shale and grayish spherulitic limestone

4575 - 76 cr
(1) As above - more shale
(2) Dense grayish highly spherulitic limestone
Ammonite - small - poorly preserved
(3) As above
Fragment of large ammonite
(4) Irregularly interbedded dark gray shale and grayish highly spherulitic limestone

4576 - 77 cr
(1) Dark gray highly calcareous shale and very impure limestone. Fish remains - few
(2) Dense light brownish gray highly spherulitic limestone with thin streaks of gray shale
(3) As above
Pervinquieria n. sp. close to P. kiliani (Lasswitz)
(4) Thin and irregularly interbedded gray shale and grayish highly spherulitic limestone

4577 - 78 cr
(1) Dense grayish highly spherulitic limestone
(2) As above with thin gray shale streaks
(3) Black pyritic silty shale

4578 - 79 cr
(1) Dark gray silty shale with think streaks of limestone
Fish remains
(2) As above - more limestone
(3) Grayish highly spherulitic limestone
(4) Dark gray silty shale with thin limestone streaks

4579 - 80 cr
(1) Dense brownish gray very highly spherulitic limestone
(2) Dark gray silty shale with thin limestone streaks

4580 - 81 cr
(1) Black shale interbedded with grayish and brownish highly spherulitic limestone
(2) As above

4581 - 82 cr
(1) Grayish highly spherulitic limestone
(2) Dense grayish slightly spherulitic limestone
Fragment of small ammonite

4582 - 83 cr
(1) Dense grayish slightly spherulitic limestone
(2) Dense brownish highly spherulitic limestone
Prohysteroceras
(3) Dense grayish spherulitic limestone

4583 - 84 cr (1) As above
(2) As above
Oxytropidoceras (Adkinsites) sp.**
(3) As above
Idiohamites n. sp.

4584 - 85 cr (1) Dense spherulitic grayish limestone with gray shale
(2) As above
"Elobiceras" (Rhytidoceras) sp.
(3) Dense brownish highly spherulitic limestone with streaks of shale

4585 - 86 cr (1) Irregularly interbedded brownish spherulitic limestone and brownish gray shale
(2) Dark gray silty shale, shell fragments
(3) As above with thin limestone streaks
(4) Dense brownish highly spherulitic limestone with shale streaks.

4586 - 87 cr (1) Dense grayish spherulitic limestone
(2) As above with thin shale streaks
(3) As above - highly spherulitic

4587 - 88 cr (1) As above - spherulitic
(2) As above - slightly spherulitic
Oxytropidoceras (Adkinsites) sp.
Hysteroseras ?

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4588 - 89 cr (1) Dark gray shale with streaks of highly spherulitic limestone. Ostrea
(2) Dark gray silty shale. Shell fragments.
(3) Brownish gray slightly spherulitic limestone with streaks of shale.
(4) As above
Oxytropidoceras (Adkinsites) sp. like trinitense,
Ostrea sp.

4589 - 90 cr (1) Dark gray silty shale with think streaks of spherulitic limestone.
(2) Dark gray silty shale
(3) As above with black shale and streaks of spherulitic limestone with shell fragments
(4) As above

4590 - 91 cr (1) Dark gray silty shale
Ostrea sp.
(2) As above

4590 - 91 cr	(3)	Dense grayish spherulitic limestone Ammonite fragment Ostrea sp.
	(4)	Black silty micaceous shale. Biotite mica
4591 - 92 cr	(1)	Dense grayish slightly spherulitic limestone with gray shale streaks
	(2)	Gray silty shale
	(3)	Brownish gray spherulitic limestone with gray shale streaks.
4592 - 93 cr		No samples
4593 - 94 cr	(1)	Dense brownish gray spherulitic limestone
	(2)	Black silty shale
	(3)	Dense brownish gray slightly spherulitic limestone
	(4)	As above with gray shale streaks
4594 - 95 cr	(1)	As above
	(2)	As above
	(3)	As above
4595 - 99 cr		No recovery
4599 - 4600 cr	(1)	Dense grayish slightly spherulitic limestone
	(2)	As above with gray shale streaks
	(3)	Gray silty shale with thin limestone streaks Pyrite. Oyster shells rare
4600 - 01 cr	(1)	As above - oyster shells more abundant
	(2)	As above
	(3)	Dense brown highly spherulitic limestone
	(4)	As above with shale streaks Ostrea sp. abundant
4601 - 02 cr	(1)	Black silty shale, shell fragments abundant
	(2)	As above
	(3)	As above
	(4)	As above
	(5)	Dense brownish finely crystalline limestone, shell fragments
4602 - 03 cr	(1)	Irregularly and thinly bedded gray shale and grayish limestone Shell fragments
	(2)	As above - shell fragments abundant
	(3)	As above - more limestone
	(4)	Gray silty shale, shell fragments abundant
	(5)	Dense grayish silty slightly spherulitic limestone Shell fragments

4603 - 04 cr
(1) Irregularly interbedded gray silty shale and grayish limestone
Shell fragments common
(2) Dense brownish gray slightly spherulitic limestone
(3) Dark gray silty irregularly bedded shale
Shell fragments - common
(4) Dense brownish gray slightly spherulitic limestone
Shell fragments - few

4604 - 05 cr
(1) As above - with gray shale streaks
(2) Dark gray silty irregularly bedded shale
Shell fragments - common
(3) Dense brownish gray slightly spherulitic limestone
(4) Black silty irregularly bedded shale
Actinoceramus sp. close to A. subsulcatus

4605 - 06 cr
(1) As above
(2) Dense brownish gray lime
(3) Dark silty irregularly shale
Actinoceramus sp.
(4) Dense brownish gray slightly spherulitic limestone

4606 - 07 cr
(1) Dense brownish gray silty limestone with thin gray shale streaks
(2) Dense light grayish tan finely crystalline limestone
Oxytropidoceras supani (Lasswitz)

4607 - 08 cr
(1) Dark gray silty shale and thin streaks of grayish limestone irregularly interbedded.
Shell fragments - common
(2) As above
(3) As above
(4) As above
(5) Dense light brownish gray slightly spherulitic limestone

4608 - 09 cr
(1) As above with gray shale streaks
(2) As above
Oxytropidoceras supani (Lasswitz)

4609 - 10 cr
(1) Dense grayish tan spherulitic limestone
Spherules very small and close together
(2) As above with dark gray shale streaks

4610 - 11 cr
(1) As above - shell fragments
(2) Black silty shale
Shell fragments - common
(3) Dense grayish limestone with black shale streaks
Shell fragments -common

4611 - 12 cr
(1) Dark gray to black silty shale. Shell fragments common
(2) Dense grayish tan finely crystalline limestone, shell fragments, gastropod casts common
(3) As above
Oxytropidoceras sp. close to O. supani (Lasswitz)
(4) Dark gray silty shale, shell fragment abundant
(5) As above

4612 - 13 cr
(1) As above
(2) Dense grayish tan finely crystalline spherulitic limestone. Spherules very small and close
(3) As above
(4) As above

4613 - 14 cr
(1) As above with streak of gray silty shale
(2) Dark gray silty shale, shell fragments common
(3) Dense grayish tan limestone with streaks of gray shale
(4) Dark gray silty shale with streak of limestone

4614 - 15 cr
(1) Dense grayish tan spherulitic limestone. Spherules very small and close
gastropod casts - common
(2) As above
(3) Black silty shale
(4) Dense tan highly spherulitic limestone

4615 - 16 cr
(1) As above
(2) As above
(3) Black silty shale. Shell fragments abundant

4616 - 17 cr
(1) As above
(2) As above
(3) As above

4617 - 18 cr
(1) As above
(2) As above
(3) As above
(4) Dense grayish tan very slightly spherulitic calcitic limestone, shell fragments common, gastropod casts common
(5) As above
(6) As above
Oxytropidoceras acutocarinatum

4618 - 19 cr
(1) As above
(2) Dense grayish limestone and gray silty shale irregularly interbedded
(3) Black silty shale
Shell fragments abundant
(4) Dense grayish tan calcitic limestone, shell fragments common

4619 - 20 cr	(1)	As above with streaks of gray silty shale
	(2)	As above
	(3)	Black very silty shale, shell fragments abundant
	(4)	As above
4620 - 21 cr	(1)	As above
	(2)	As above
	(3)	As above
	(4)	As above
	(5)	Dark gray silty limestone, dark gray silty shale shall fragments abundant
	(6)	As above
4621 - 22 cr	(1)	As above
	(2)	Dense grayish tan calcitic limestone Shell fragments abundant
	(3)	Dark gray silty shale
	(4)	Dense light gray silty limestone Shell fragments abundant
	(5)	Black silty shale, shell fragments abundant
4622 - 23 cr	(1)	As above Inoceramus sp. close to I. concentricus
	(2)	As above
	(3)	As above
4623 -24 cr	(1)	Dense light gray limestone, shell fragments
	(2)	As above with gray silty shale streaks
	(3)	Black silty shale. Abundant shell fragments
	(4)	As above
	(5)	As above
	(6)	Black brittle silty shale - calcareous. Shell fragments
4624 - 25 cr	(1)	As above
	(2)	As above
4625 - 26 cr	(1)	Black brittle fine grained slightly calcareous shell fragments with thin bed of highly fossiliferous highly calcareous shale
	(2)	Black very slightly calcareous satiny silty shale. Fossils very rate
4626 - 27 cr		As above
4627 - 28 cr		As above
4628 - 29 cr		As above
4629 - 30 cr		As above

4630 - 31	cr	(1)	As above more compact and calcareous
4631 - 32	cr	(1)	As above with thin fine calcareous sandstone lenses
4632 - 33	cr	(1)	Calcareous fine sandy silty shale. Shell fragments
		(2)	Dense brown impure silty fine sandy limestone
4633 - 34	cr	(1)	Dense dark grayish brown highly calcareous siltstone or very impure limestone
		(2)	Fine compact calcareous pyritic sandstone black calcareous shale

* Numers enclosed in parenthesis indicate individual cuts from interval.

** Although this ammonite is an index tothe Fredericksburg, it occurred in this well five feet above the contact as determined by lithology. It is thought that in this well the "Transition Zone" occupies more section than is normal for the region, possibly due to the influence of local structure.

FULTON BEACH FIELD AREA ARANSAS COUNTY, TEXAS

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ABSTRACT

This paper presents a summary of the history, geology, and development of the Fulton Beach Area, Aransas County, Texas. The discovery well was completed July 7, 1947, and development has been continuous since.

The structure is a faulted anticline with all production to date being on the westward-dipping flank. The maximum dimensions of the productive area are three by five miles. Production is from sands in the Frio Formation. There are numerous productive sands, and they range in depth from 6800 to 8350 feet.

Nearby productive areas are described. These lie North, West and possibly East of the Fulton Beach Field.

Producing characteristics of the sands, and total estimated reserves are presented.

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