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New section

TABLE A-1. GEOLOGIST'S LOG OF WELL L-M-2465

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664-770

36-00034W

<u>Depth(feet)</u>	<u>Lithology</u>
0-15	Shell and sand, unlithified, quartz fine-sand size common, high permeability.
15-25	Clay, olive gray, lime mud, unlithified, 10-20% quartz silt, interbedded oyster and barnacle fragments more abundant with depth, low permeability.
25-30	Sandstone, medium gray, hard, 50-75% fine quartz sand and silt, shell fragments and fossil molds common, medium permeability.
30-34	Limestone, yellowish gray and light gray, micrite, soft to medium, common quartz silt and fine sand, abundant shell fragments, partial solutioning common, good moldic porosity, medium to high permeability (increased drilling fluid loss from 30 feet).
34-35	Lime mud, white, shelly marl, unlithified, low permeability.
35-37	Limestone, yellowish gray to brown, similar to 30-34 feet interval, medium to hard, medium to high permeability.
37-50	Limestone, as above, but yellowish gray and medium gray, finer moldic porosity, softer with depth, medium permeability.
50-52	As above, and interbedded light gray clayey lime mud, medium to low permeability.
52-68	Sand, unlithified, fine to medium sand sized quartz and minor phosphate, occasional interbedded shelly limestone lenses, becoming clayey with depth, medium to low permeability.
68-110	Clay, olive gray, unlithified, abundant quartz and phosphate sand upper 5 feet, denser more clayey with depth, low permeability.
110-155	Clay, olive gray, clayey, dense, sandy, dolomitic, low permeability.
155-188	Clay, olive gray, as above, looser with depth, low permeability.

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TABLE A-1. GEOLOGIST'S LOG OF WELL L-M-2465 - Continued:

<u>Depth(feet)</u>	<u>Lithology</u>
188-208	Limestone, light olive gray, soft, and interbedded lime mud, unlithified, same, dolomitic, 40-50% quartz sand, abundant white shell fragments, phosphate pebble lense from 188 feet, low to medium permeability.
208-213	Limestone, ligh gray, hard to medium, 40-50% quartz sand, minor phosphate sand and pebbles, minor friable, same, medium to low permeability.
213-235	Lime mud, light olive gray, unlithified to poorly lithified and abundant unlithified quartz sand, occasional hard interbedded sandy limestone lenses, as above, and minor phosphate sand and pebbles, common shell, overall low permeability.
235-248	Limestone, light olive gray, medium to hard and interbedded lime mud as above, abundant quartz sand, common phosphate sand and pebbles, fossil fragments, unlithified and sandier from 245 feet, low to medium permeability.
248-275	Sandstone, sandy limestone, light olive gray, soft to medium and interbedded lime mud, same and white, 50-75% fine quartz sand, common phosphate pebbles and sand, occasional shell fragments.
275-309	Clay, olive gray, stiff, unlithified, clayey, common quartz sand and silt, probable interbedded lenses of unlithified quartz and phosphate sand from 282 feet.
309-318	Dolosilt, olive gray, as above but highly dolomitic, dense, very low permeability.
318-324	Lime mud, light olive gray, dolomitic, silty, phosphate sand and pebble lense from 318 feet, low permeability.
324-347	Lime mud, as above, and interbedded, soft, light gray, sandy limestone lenses, dolomitic, minor phosphate sand, low permeability.
347-367	Lime mud, white and minor interbedded, soft, limestone, same, minor quartz and phosphate sand, fossiliferous, low permeability.
367-374	Lime mud, as above, white and light olive gray, unlithified, low permeability.

TABLE A-1. GEOLOGIST'S LOG OF WELL L-M-2465 - Continued:

<u>Depth(feet)</u>	<u>Lithology</u>
374-398	Limestone, white to yellowish gray, micrite, medium soft and medium hard, commonly unlithified, minor quartz and phosphate sand, shell and shell molds common, fair moldic porosity, medium permeability.
398-437	Limestone, white to yellowish gray, as above, soft to medium, minor hard, arenitic to fine moldic texture, fair to good moldic porosity, highly fossiliferous, also hard dolomitic limestone lense, pale olive, microcrystalline, from 407 feet, medium permeability.
437-458	Limestone, yellowish gray, biomicrite, hard and medium, 5-10% quartz sand and phosphate sand, abundant fossil molds and casts, good moldic porosity, medium permeability.
458-459	Limestone, light olive gray, hard, secondary dolomitization common, microcrystalline, minor fossil molds, low to medium permeability.
459-463	Dolosilt, greenish gray, unlithified, dense, clayey, highly dolomitic, low permeability.
463-475	Dolosilt, light olive gray becoming olive gray with depth, similar to above, highly dolomitic, low permeability.
475-484	Interbedded clay, as above, and yellowish gray limestone, poorly lithified to unlithified, fossils abundant, predominant echinoid spines and corals, quartz sand common, medium to low permeability.
484-486	Dolomite, olive brown, hard, microcrystalline, occasional small vugs, fine moldic porosity, medium to low permeability.
486-494	Limestone, light yellowish gray, medium to hard, microcrystalline sparite, occasional white micrite filled molds, porosity similar to above, medium to low permeability.
494-500	Clay, light olive gray, stiff, clayey, possible dolomitic, minor better lithified, same, and white lime mud with depth; trace silty, low permeability.

TABLE A-1. GEOLOGIST'S LOG OF WELL L-M-2465 - Continued:

<u>Depth(feet)</u>	<u>Lithology</u>
500-510	Limestone, yellowish gray, medium hard, microcrystalline sparite, minor unlithified white lime mud, fine moldic porosity with minor sparry calcite and chert infilling, medium permeability.
510-534	Limestone, similar to above, but light olive gray, highly dolomitic, occasional interbedded white lime mud, better developed secondary moldic porosity, medium to high permeability.
534-553	Interbedded, dolomitic limestone, hard, yellowish gray and unlithified dolomitic lime mud, same; also interbedded white to light gray lime mud, minor lithified, occasional fossils, minor phosphate sand, low to medium permeability - overall.
553-582	Lime mud, yellowish gray to light olive gray, unlithified and interbedded, hard, similar limestone, highly dolomitic, phosphate fine sand and pebbles common, possible thin, hard, dolomite lense, light olive gray from 573 feet, low permeability.
582-592	Lime mud, white to light olive gray, unlithified, and interbedded hard yellowish gray limestone, dolomitic, sparite, fossil molds common, low to medium permeability.
592-608	Lime mud, light olive gray, unlithified, similar to above, interbedded yellowish gray dolomitic limestone from 606 feet, low permeability.
608-613	Limestone, yellowish gray to light olive gray, hard, biosparite, highly dolomitic, microcrystalline, fair to good moldic porosity, medium permeability.
613-623	Lime mud, white, unlithified, hard dolomitic limestone lense, as above, from 619 feet, low to medium permeability.
623-626	Dolosilt, light olive gray, stiff, clayey, highly dolomitic, low permeability.
626-632	Dolomite, light olive gray, hard to medium, microcrystalline, occasional white shell fragments, low to medium permeability.

TABLE A-1. GEOLOGIST'S LOG OF WELL L-M-2465 - Continued:

<u>Depth(feet)</u>	<u>Lithology</u>
632-635	Lime mud, white, unlithified, minor dolomitic and interbedded thin lenses of yellowish gray hard dolomitic limestone, overall low permeability.
635-644	Limestone, white, biomicrudite, medium to hard, fossiliferous, trace quartz and phosphate sand, good moldic porosity, medium to high permeability.
644-665	Limestone, as above, but white and yellowish gray, better secondary porosity than above, partial spar infilling of molds common, trace unlithified white lime mud, medium to high permeability.
665-673	Limestone, yellowish gray, biomicrudite, medium to hard, similar to above, medium to high permeability.
673-698	Limestone, light yellowish gray and light gray, hard and medium, trace unlithified white lime mud, possibly from 684 feet, fossil molds and casts common, minor spar, trace quartz fine sand, medium permeability.
698-706	Lime mud, white, unlithified and interbedded thin lenses of hard limestone, similar to above, trace quartz silt, low permeability.
706-708	Dolomite or dolomitic limestone, yellowish gray, medium to hard, microcrystalline, highly dolomitic (basal light olive gray dolomitic clay from 708 feet), low to medium permeability.
708-710	Clay, light olive gray, very dense, unlithified, clayey, silty, low permeability.
710-714	Lime mud, white, dense, minor dolomitic, minor fine quartz sand, low permeability.
714-717	Dolomite or dolomitic limestone, yellowish gray, hard to medium, minor unlithified same, microcrystalline, medium to low permeability.
717-719	Dolosilt, dark greenish gray, unlithified, dolomitic, clayey, silty, low permeability.
719-720	Clay, (dolosilt?), olive gray unlithified, dense clayey, silty, low permeability.

TABLE A-1. GEOLOGIST'S LOG OF WELL L-M-2465 - Continued:

<u>Depth(feet)</u>	<u>Lithology</u>
720-722	Lime mud, white, unlithified, trace dolomitic, clayey, trace fine quartz sand, low permeability.
722-726	Limestone, light olive gray, medium soft, dolomitic and interbedded unlithified clay, same, with depth, common quartz sand and silt, low to medium permeability.
726-734	Limestone, yellowish gray, medium, micro-crystalline, highly dolomitic, silty, light olive gray clay and white lime mud, interbedded from 731 feet, similar composition, minor phosphate sand, low to medium permeability.
734-738	Limestone, yellowish gray, medium hard, biomicrite, common microfossils, minor calcite spar, common fine moldic porosity, medium permeability.
738-742	Limestone, yellowish gray, wackestone, soft, loosely cemented, calcarenite, possible thin white lime mud lense from 740 feet, fair intergranular porosity, medium to low permeability.
742-761	Limestone, yellowish gray and light gray, microfossiliferous calcarenite, medium to hard, large secondary calcite spar and micrite fossil molds common, excellent moldic and intergranular porosity, medium to high permeability (increased formational water flow after encountering this unit during drilling).
761-770	Limestone, yellowish gray, as above but softer, minor friable, less moldic than above, medium permeability.