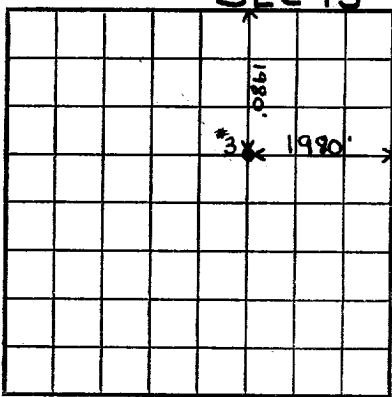


Sec 13



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MAR 9 - 1953

U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

LOG OF OIL OR GAS WELL

Company Magnolia Petroleum Co. Address Box 633, Midland, Texas
Lessor or Tract Matthews-Federal Field Bough State New Mexico
Well No. 3 Sec. 13 T. 9S R. 35E Meridian N.M.P.M. County Lea
Location 1980 ft. N. of N Line and 1980 ft. E. of E Line of Section 13 Elevation 4106 ft.
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed *R. J. Sumner*Date March 2, 1953Title Division Superintendent

The summary on this page is for the condition of the well at above date.

Commenced drilling September 18, 1953 Finished drilling November 19, 1952

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 9542' to 9613' No. 4, from (Bough Pay) to _____
No. 2, from _____ to _____ No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from No Water Well Drilled to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
10-3/4	35.75	8 RT	SBC	440	Hallib				
7-5/8	24.0	8 RT	FLC	3261	Hallib				
7-5/8	26.3	8 RT	J55	1006	Hallib				
5-1/2	17.0	8 RT	J55	5413	Hallib				
2	4.7	8 RT	J55	9610	Hallib				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	440	400 Sacks	Pump & Plug		
7-5/8	4267	1700 Sacks	Pump & Plug		
5-1/2	5413	1450 Sacks	Pump & Plug		

PLUGS AND ADAPTERS

Heaving plug—Material NONE Length _____ Depth set _____
Adapters—Material NONE Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
No Nitro Shooting						
See Perf. Record						

TOOLS USED

Rotary tools were used from 0 feet to 9625' feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Potential Test February 15, 1953 Potential Tested February 15, 1953
Put to producing February 15, 1953

The production for the first 24 hours was 154.2 barrels of fluid of which 100 % was oil; 0 % emulsion; 0 % water; and 0 % sediment. Gravity, °Bé. 49.0 @ 60 deg.

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

Southeastern Drilling Co. Driller (Rotary) _____, Driller
901 Employers Ins. Bldg
Dallas, Texas _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1708	1708	Red Bed
1708	2004	296	Anyh. - Shale
2004	2487	483	Shale
2487	2698	211	Shale - Anyh - Salt
2698	3145	447	Red Bed - Salt
3145	3520	375	Salt - Anyh
3520	4055	535	Anyh
4055	4160	105	Lime
4160	4178	18	Lime - Anyh
4178	6130	1952	Lime
6130	6180	50	Sand - Lime
6180	7561	1381	Lime
7561	7625	64	Lime - Shale
7625	7695	70	Shale - Lime
7695	7753	58	Lime - Shale
7753	8128	375	Shale
8128	8200	72	Shale
8200	8230	30	Shale - Lime
8230	8404	174	Shale
8404	8515	111	Shale - Lime
8515	9088	573	Lime
9088	9109	21	Lime - Chert
9109	9261	152	Lime
9261	9281	20	Shale
9281	9335	54	Shale - Lime

2 10084-31

-01-

NOLLYWOOD

2 10084-31

FROM	TO	TOTAL FEET	FORMATION
0-10	10-20	10	SANDSTONE
10-20	20-30	10	SANDSTONE
20-30	30-40	10	SANDSTONE
30-40	40-50	10	SANDSTONE
40-50	50-60	10	SANDSTONE
50-60	60-70	10	SANDSTONE
60-70	70-80	10	SANDSTONE
70-80	80-90	10	SANDSTONE
80-90	90-100	10	SANDSTONE
90-100	100-110	10	SANDSTONE
100-110	110-120	10	SANDSTONE
110-120	120-130	10	SANDSTONE
120-130	130-140	10	SANDSTONE
130-140	140-150	10	SANDSTONE
140-150	150-160	10	SANDSTONE
150-160	160-170	10	SANDSTONE
160-170	170-180	10	SANDSTONE
170-180	180-190	10	SANDSTONE
180-190	190-200	10	SANDSTONE
190-200	200-210	10	SANDSTONE
200-210	210-220	10	SANDSTONE
210-220	220-230	10	SANDSTONE
220-230	230-240	10	SANDSTONE
230-240	240-250	10	SANDSTONE
240-250	250-260	10	SANDSTONE
250-260	260-270	10	SANDSTONE
260-270	270-280	10	SANDSTONE
270-280	280-290	10	SANDSTONE
280-290	290-300	10	SANDSTONE
290-300	300-310	10	SANDSTONE
300-310	310-320	10	SANDSTONE
310-320	320-330	10	SANDSTONE
320-330	330-340	10	SANDSTONE
330-340	340-350	10	SANDSTONE
340-350	350-360	10	SANDSTONE
350-360	360-370	10	SANDSTONE
360-370	370-380	10	SANDSTONE
370-380	380-390	10	SANDSTONE
380-390	390-400	10	SANDSTONE
390-400	400-410	10	SANDSTONE
400-410	410-420	10	SANDSTONE
410-420	420-430	10	SANDSTONE
420-430	430-440	10	SANDSTONE
430-440	440-450	10	SANDSTONE
440-450	450-460	10	SANDSTONE
450-460	460-470	10	SANDSTONE
460-470	470-480	10	SANDSTONE
470-480	480-490	10	SANDSTONE
480-490	490-500	10	SANDSTONE
490-500	500-510	10	SANDSTONE
500-510	510-520	10	SANDSTONE
510-520	520-530	10	SANDSTONE
520-530	530-540	10	SANDSTONE
530-540	540-550	10	SANDSTONE
540-550	550-560	10	SANDSTONE
550-560	560-570	10	SANDSTONE
560-570	570-580	10	SANDSTONE
570-580	580-590	10	SANDSTONE
580-590	590-600	10	SANDSTONE
590-600	600-610	10	SANDSTONE
600-610	610-620	10	SANDSTONE
610-620	620-630	10	SANDSTONE
620-630	630-640	10	SANDSTONE
630-640	640-650	10	SANDSTONE
640-650	650-660	10	SANDSTONE
650-660	660-670	10	SANDSTONE
660-670	670-680	10	SANDSTONE
670-680	680-690	10	SANDSTONE
680-690	690-700	10	SANDSTONE
690-700	700-710	10	SANDSTONE
700-710	710-720	10	SANDSTONE
710-720	720-730	10	SANDSTONE
720-730	730-740	10	SANDSTONE
730-740	740-750	10	SANDSTONE
740-750	750-760	10	SANDSTONE
750-760	760-770	10	SANDSTONE
760-770	770-780	10	SANDSTONE
770-780	780-790	10	SANDSTONE
780-790	790-800	10	SANDSTONE
790-800	800-810	10	SANDSTONE
800-810	810-820	10	SANDSTONE
810-820	820-830	10	SANDSTONE
820-830	830-840	10	SANDSTONE
830-840	840-850	10	SANDSTONE
840-850	850-860	10	SANDSTONE
850-860	860-870	10	SANDSTONE
860-870	870-880	10	SANDSTONE
870-880	880-890	10	SANDSTONE
880-890	890-900	10	SANDSTONE
890-900	900-910	10	SANDSTONE
900-910	910-920	10	SANDSTONE
910-920	920-930	10	SANDSTONE
920-930	930-940	10	SAND

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sacked", or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE 16-43094-1

Date		Time		Location		Remarks	
1944	10/10	10:00	10:15	10:30	10:45	11:00	11:15
10/11		10/12		10/13		10/14	
10/15		10/16		10/17		10/18	
10/19		10/20		10/21		10/22	
10/23		10/24		10/25		10/26	
10/27		10/28		10/29		10/30	
10/31		11/1		11/2		11/3	
11/4		11/5		11/6		11/7	
11/8		11/9		11/10		11/11	
11/12		11/13		11/14		11/15	
11/16		11/17		11/18		11/19	
11/20		11/21		11/22		11/23	
11/24		11/25		11/26		11/27	
11/28		11/29		11/30		12/1	
12/2		12/3		12/4		12/5	
12/6		12/7		12/8		12/9	
12/10		12/11		12/12		12/13	
12/14		12/15		12/16		12/17	
12/18		12/19		12/20		12/21	
12/22		12/23		12/24		12/25	
12/26		12/27		12/28		12/29	
12/30		12/31		1/1		1/2	
1/3		1/4		1/5		1/6	
1/7		1/8		1/9		1/10	
1/11		1/12		1/13		1/14	
1/15		1/16		1/17		1/18	
1/19		1/20		1/21		1/22	
1/23		1/24		1/25		1/26	
1/27		1/28		1/29		1/30	
1/31		2/1		2/2		2/3	
2/4		2/5		2/6		2/7	
2/8		2/9		2/10		2/11	
2/12		2/13		2/14		2/15	
2/16		2/17		2/18		2/19	
2/20		2/21		2/22		2/23	
2/24		2/25		2/26		2/27	
2/28		2/29		3/1		3/2	
3/3		3/4		3/5		3/6	
3/7		3/8		3/9		3/10	
3/11		3/12		3/13		3/14	
3/15		3/16		3/17		3/18	
3/19		3/20		3/21		3/22	
3/23		3/24		3/25		3/26	
3/27		3/28		3/29		3/30	
3/31		4/1		4/2		4/3	
4/4		4/5		4/6		4/7	
4/8		4/9		4/10		4/11	
4/12		4/13		4/14		4/15	
4/16		4/17		4/18		4/19	
4/20		4/21		4/22		4/23	
4/24		4/25		4/26		4/27	
4/28		4/29		4/30		5/1	
5/2		5/3		5/4		5/5	
5/6		5/7		5/8		5/9	
5/10		5/11		5/12		5/13	
5/14		5/15		5/16		5/17	
5/18		5/19		5/20		5/21	
5/22		5/23		5/24		5/25	
5/26		5/27		5/28		5/29	
5/30		5/31		6/1		6/2	
6/3		6/4		6/5		6/6	
6/7		6/8		6/9		6/10	
6/11		6/12		6/13		6/14	
6/15		6/16		6/17		6/18	
6/19		6/20		6/21		6/22	
6/23		6/24		6/25		6/26	
6/27		6/28		6/29		6/30	
7/1		7/2		7/3		7	

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... of

$$0 \rightarrow \mathcal{O}_X \rightarrow \mathcal{O}_X \otimes \mathcal{O}_X^* \rightarrow \mathcal{O}_X^* \rightarrow 0 \quad (1)$$

... of (1-2) ...

[illegible]

10. *How do you think the world will be different in 20 years?*

100-443887-1000

1. The following information is being furnished to you for your information:

Journal of Management Studies, 19(1), 67-80.

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

14. *Journal of the American Medical Association*, 272, 1993, 1033-1034.

[illegible]

1950年10月1日

DATE	TIME	LOCATION	REMARKS
10/10/1964	10:00	1000' E. of 1000' N. of 1000' W.	1000' E. of 1000' N. of 1000' W.

[illegible]

CONFIDENTIAL

1. Name of the person 2. Address 3. City 4. State 5. Zip 6. Phone 7. Fax 8. E-mail 9. Date 10. Signature 11. Title 12. Company 13. Industry 14. Size of company 15. Number of employees 16. Number of customers 17. Number of products 18. Number of services 19. Number of locations 20. Number of franchises 21. Number of licenses 22. Number of patents 23. Number of trademarks 24. Number of copyrights 25. Number of other intellectual property 26. Number of other assets 27. Number of other liabilities 28. Number of other obligations 29. Number of other commitments 30. Number of other interests 31. Number of other relationships 32. Number of other connections 33. Number of other contacts 34. Number of other references 35. Number of other sources 36. Number of other information 37. Number of other data 38. Number of other records 39. Number of other documents 40. Number of other files 41. Number of other folders 42. Number of other drives 43. Number of other networks 44. Number of other systems 45. Number of other applications 46. Number of other programs 47. Number of other tools 48. Number of other equipment 49. Number of other facilities 50. Number of other resources 51. Number of other capabilities 52. Number of other strengths 53. Number of other weaknesses 54. Number of other opportunities 55. Number of other threats 56. Number of other risks 57. Number of other challenges 58. Number of other problems 59. Number of other issues 60. Number of other concerns 61. Number of other matters 62. Number of other topics 63. Number of other subjects 64. Number of other areas 65. Number of other fields 66. Number of other disciplines 67. Number of other professions 68. Number of other occupations 69. Number of other careers 70. Number of other vocations 71. Number of other callings 72. Number of other missions 73. Number of other purposes 74. Number of other goals 75. Number of other objectives 76. Number of other aims 77. Number of other intentions 78. Number of other desires 79. Number of other wishes 80. Number of other hopes 81. Number of other dreams 82. Number of other aspirations 83. Number of other ambitions 84. Number of other aspirations 85. Number of other aspirations 86. Number of other aspirations 87. Number of other aspirations 88. Number of other aspirations 89. Number of other aspirations 90. Number of other aspirations 91. Number of other aspirations 92. Number of other aspirations 93. Number of other aspirations 94. Number of other aspirations 95. Number of other aspirations 96. Number of other aspirations 97. Number of other aspirations 98. Number of other aspirations 99. Number of other aspirations 100. Number of other aspirations	1. Name of the person 2. Address 3. City 4. State 5. Zip 6. Phone 7. Fax 8. E-mail 9. Date 10. Signature 11. Title 12. Company 13. Industry 14. Size of company 15. Number of employees 16. Number of customers 17. Number of products 18. Number of services 19. Number of locations 20. Number of franchises 21. Number of licenses 22. Number of patents 23. Number of trademarks 24. Number of copyrights 25. Number of other intellectual property 26. Number of other assets 27. Number of other liabilities 28. Number of other obligations 29. Number of other commitments 30. Number of other interests 31. Number of other relationships 32. Number of other connections 33. Number of other contacts 34. Number of other references 35. Number of other sources 36. Number of other information 37. Number of other data 38. Number of other records 39. Number of other documents 40. Number of other files 41. Number of other folders 42. Number of other drives 43. Number of other networks 44. Number of other systems 45. Number of other applications 46. Number of other programs 47. Number of other tools 48. Number of other equipment 49. Number of other facilities 50. Number of other resources 51. Number of other capabilities 52. Number of other strengths 53. Number of other weaknesses 54. Number of other opportunities 55. Number of other threats 56. Number of other risks 57. Number of other challenges 58. Number of other problems 59. Number of other issues 60. Number of other concerns 61. Number of other matters 62. Number of other topics 63. Number of other subjects 64. Number of other areas 65. Number of other fields 66. Number of other disciplines 67. Number of other professions 68. Number of other occupations 69. Number of other careers 70. Number of other vocations 71. Number of other callings 72. Number of other missions 73. Number of other purposes 74. Number of other goals 75. Number of other objectives 76. Number of other aims 77. Number of other intentions 78. Number of other desires 79. Number of other wishes 80. Number of other hopes 81. Number of other dreams 82. Number of other aspirations 83. Number of other ambitions 84. Number of other aspirations 85. Number of other aspirations 86. Number of other aspirations 87. Number of other aspirations 88. Number of other aspirations 89. Number of other aspirations 90. Number of other aspirations 91. Number of other aspirations 92. Number of other aspirations 93. Number of other aspirations 94. Number of other aspirations 95. Number of other aspirations 96. Number of other aspirations 97. Number of other aspirations 98. Number of other aspirations 99. Number of other aspirations 100. Number of other aspirations
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$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

10. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthaler and Whistler (1973).

[illegible]

Journal of Management Education 30(6)p.789-804

1. The first group of respondents (10%) was asked to identify the most important factors influencing their decision to purchase a new car. The results showed that the most important factors were the car's performance, reliability, and safety. These factors were ranked first, second, and third respectively, with 80% of respondents prioritizing them.

FROM	TO	TOTAL FEET	FORMATION
9335	9370	35	Lime - Shale
9370	9359	89	Lime
9459	9471	12	Shale - Lime
9471	9570	99	Lime
9570	9582	12	Shale - Lime
9582	9603	21	Lime - Shale
9603	9625	22	Lime

PRODUCTION TESTS AND POTENTIAL TEST DATA:

Potential Test completed on February 15, 1953, in the Lime formation, Bough zone top @ 9542', bottom @ 9613', open hole from 9568' to 9613'. Well flowed on 24 hr test, rate per day 154.2 barrels oil, no water, 190 MCF gas, GOR 1232-1, 32/64" choke, tubing pressure 110#, casing pressure sealed with packer, API Gravity 49 @ 60 deg, allowable 170 barrels per day, Magnolia Pipe Line Co. Connected.

HISTORY OF WELL:

Date:	Operations
-------	------------

9-17-52	Commenced drilling (Spud Date)
9-17-52	Set 10-3/4" Casing @ 440' W/400 Sacks Cement
9-25-52	#1 B.J. Calliper Survey 0-4119'
9-28-52	Set 7-5/8" Casing @ 4267' W/1700 Sacks Cement
9-28-52	#1 B.J. Temperature Survey 0 - 1500'
11-14-52	#1 Schlumberger Electrical Log 4264-9493'.
11-17-52	#1 Core 9570-9615'
11-18-52	#1 DST 9563-9615' Bough
11-19-52	Completed Drilling Total Depth.
11-19-52	#2 Core 9615-1625'
11-19-52	#1 Schlumberger Micro Log 9400-9615'
11-20-52	#2 B.J. Caliper Survey 4215-9615'
11-21-52	#2 B.J. Temperature Survey 3487-5247'
11-22-52	Set 5 1/2" Liner @ 9570' W/1450 Sacks Cement
12-1-52	Western Co. Acidize Open Hole 9570-9585' W/500 Gal.
12-2-52	Western Co. Re-Acidize Open Hole 9570-9585' W/1000 Gal.
12-3-52	McCollough Cone Shot Open Hole 9568-9578' W/3 SPF Jet.
12-7-52	Western Co. Re-Acidize Open Hole 9568-9578' W/1000 Gal.
12-9-52	#1 Lane Wells Gamma Ray & Neutron Log 0-9585'
12-10-52	#2 Lane Wells Gamma Ray & Neutron Log 9300-9595'.
12-10-52	Halliburton Squeezed Open Hole 9568-9585' W/100 Sacks Cement.
12-13-52	Western Co. Washed Open Hole 9595-9570' W/250 Gal Mud Acid.
12-15-52	Western Co. Washed McCollough perf Open Hole 9580-9585' W/3 SI Jet.
12-16-52	Western Co. Washed open Hole 9570-9595' W/250 Gal.
12-17-52	Halliburton attempted to squeeze open hole 9530-9595 W/50 Sack Packer Failed.
12-19-52	Western Co. acidize open hole 9570-9595 W/1000 Gal Acid.
12-19-52	Halliburton Squeezed open hole 9570-9595 W/25 Sacks Cement.
12-22-52	Western Co. attempt to acidize open hole 9598-9615 W/250 Gal. Acid.
1-4-53	McCollough cone shot open hole 9618-9628' W/3 SPF Jet.
1-12-53	Western Co. attempted to re-acidize open hole 9618-9628' W/250 Gal Acid.
1-13-53	Western Co. attempted to reacidize open hole 9618-9628' W/250 Gal. Acid.
1-15-53	Western Co. re-acidize open hole 9618-9639' W/250 Gal. Acid.
1-17-53	Western Co. Acidize open hole 9615-9628' W/500 Gal Acid.
1-24-53	McCollough cone shot open hole @ 9570-9615' W/3 SPF - Jet.
1-25-53	Western Co. attempted to acidize open hole 9570-9615' W/750 Gal Acid.
1-27-53	Western Co. acidized open hole 9570-9615' W/750 gal Acid.
1-28-53	Western Co. acidized open hole 9570-9615' W/1000 Gal. Acid.
1-29-53	Western Co. re-Acidize open hole 9570-9615' W/2000 Gal Acid.
2-1-53	Western Co. perf. liner 9563-9570' W/4 SPF - Jet (Final Perf)
2-1-53	Western Co. acidized perf in liner W/500 Gal. Acid.
2-2-53	Western Co. re-acidize perf W/1000 Gal Acid.
2-3-53	Western Co. re-acidize perf W/1000 Gal Acid.
2-6-53	Lane Wells cone shot open hole 9574-9686' W/2 SPF - Jet.
2-7-53	Western Co. acidized open hole 9574-9615 W/1000 Gal Acid.
2-8-53	Completed subsurface installations.

2-9-53 Western Co. re-acidize open hole 9574-9586' W/2000 Gal. Acid
 2-9-53 Completed well head installations.
 2-9-53 Plug Back (Final)
 2-11-53 Western Co. acidize open hole 9574-9586' W/4000 Gal. Acid.
 2-11-53 Commenced bringing in (final)
 2-11-53 Well Cleared (Final)
 2-15-53 Potential Test Completed.

Geological Tops:

<u>Formation</u>	<u>Top</u>
Anhydrite	2206'
Yates	2756'
San Andres	4005'
Glorietta	5449'
Tubb	6850'
Abo	7648'
Permo Penn	8874'
Bough	9542'

DRILL STEM TESTS:

No. 1, 11-18-52, from 9563' - to 9615', Open Hole, Tool set @ 9563', 5/8 X 1" choke, No WC. Tested for 2 hours.

2 packers, gas to surface 1 hour & 55 minutes, too small to measure, recovered 90' oil and gas cut drill-ing mud plus 360' clean oil, SFP 0#, BHFP - 0#, SI 15 min. SIP 665#, HH 5255# in and 5190# out - Bough.

PERFORATING AND SQUEEZE RECORD:

McCullough cone shot open hole 9568-9578' W/3 SPF - Jet (12-3-52)

Halliburton cemented open hole 9568-9585' W/100 sacks slosat cement, pressured 0-6000#, reversed out 35 sacks. (12-10-52)

McCullough perforated open hole 9580-9585' W/3 SPF - Jet (12-15-52)

Halliburton attempted to squeeze open hole 9530-9595', spotted 50 sacks cement, retainer @ 9530' gave way, (@ 5800#), reversed out 50 sacks cement.

Halliburton squeezed open hole 9570-9595' W/75 sacks, pressured 3000#-6000#, reversed out 40 sacks.

CORE RECORD:

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Recovered</u>	<u>Description of Core</u>
1.	9570'	9615'	44½'	5' - Fine crystalline to medium crystalline brown lime W/trace small vuggy porosity. 5' - Dark green & black shale. 4½' - Very fine crystalline brown lime W/shale partings. 6' - Dark green shale 6½' - Fine crystalline brown lime W/green shale partings. 17½' - Very fine crystalline tan lime.
2.	9615'	9625'	9'	6' - Very fine crystalline tan lime (dense) W/thin green shale partings 3' - Dark gray shale.

