

COMPANY

WELL: HARVEY FEDERAL NO. 8
 FIELD: MC MILLAN
 LOCATION: EDDY
 COUNTY: NEW MEXICO

COMPANY: HARVEY E. YATES

WELL: HARVEY FEDERAL NO. 8

FIELD: MC MILLAN

LOCATION: 3301 EDDY, SEC. 5, T-2-S

COUNTY: EDDY STATE: NEW MEXICO

LOG ZERO KELLY DRIVE FISHING
 DRUG ZERO KELLY DRIVE FISHING
 PERM. DATUM AROUND 15' FEET

OF LOG NO.	DATE	TIME	ACQUISITION
1. DEPTH (DRILLER)	7-24-57	7-24-59	ONE - NW
2. DEPTH (DRILLER)	237	237	
3. DEPTH (DRILLER)	287	237	
4. DEPTH (DRILLER)	30	505	
5. DEPTH (DRILLER)	986	793	
6. DEPTH (DRILLER)	WATER	WATER	
7. DEPTH (DRILLER)	WATER	WATER	
8. DEPTH (DRILLER)	WATER	WATER	
9. DEPTH (DRILLER)	WATER	WATER	
10. DEPTH (DRILLER)	WATER	WATER	
11. DEPTH (DRILLER)	WATER	WATER	
12. DEPTH (DRILLER)	WATER	WATER	
13. DEPTH (DRILLER)	WATER	WATER	
14. DEPTH (DRILLER)	WATER	WATER	
15. DEPTH (DRILLER)	WATER	WATER	
16. DEPTH (DRILLER)	WATER	WATER	
17. DEPTH (DRILLER)	WATER	WATER	
18. DEPTH (DRILLER)	WATER	WATER	
19. DEPTH (DRILLER)	WATER	WATER	
20. DEPTH (DRILLER)	WATER	WATER	
21. DEPTH (DRILLER)	WATER	WATER	
22. DEPTH (DRILLER)	WATER	WATER	
23. DEPTH (DRILLER)	WATER	WATER	
24. DEPTH (DRILLER)	WATER	WATER	
25. DEPTH (DRILLER)	WATER	WATER	
26. DEPTH (DRILLER)	WATER	WATER	
27. DEPTH (DRILLER)	WATER	WATER	
28. DEPTH (DRILLER)	WATER	WATER	
29. DEPTH (DRILLER)	WATER	WATER	
30. DEPTH (DRILLER)	WATER	WATER	
31. DEPTH (DRILLER)	WATER	WATER	
32. DEPTH (DRILLER)	WATER	WATER	
33. DEPTH (DRILLER)	WATER	WATER	
34. DEPTH (DRILLER)	WATER	WATER	
35. DEPTH (DRILLER)	WATER	WATER	
36. DEPTH (DRILLER)	WATER	WATER	
37. DEPTH (DRILLER)	WATER	WATER	
38. DEPTH (DRILLER)	WATER	WATER	
39. DEPTH (DRILLER)	WATER	WATER	
40. DEPTH (DRILLER)	WATER	WATER	
41. DEPTH (DRILLER)	WATER	WATER	
42. DEPTH (DRILLER)	WATER	WATER	
43. DEPTH (DRILLER)	WATER	WATER	
44. DEPTH (DRILLER)	WATER	WATER	
45. DEPTH (DRILLER)	WATER	WATER	
46. DEPTH (DRILLER)	WATER	WATER	
47. DEPTH (DRILLER)	WATER	WATER	
48. DEPTH (DRILLER)	WATER	WATER	
49. DEPTH (DRILLER)	WATER	WATER	
50. DEPTH (DRILLER)	WATER	WATER	
51. DEPTH (DRILLER)	WATER	WATER	
52. DEPTH (DRILLER)	WATER	WATER	
53. DEPTH (DRILLER)	WATER	WATER	
54. DEPTH (DRILLER)	WATER	WATER	
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56. DEPTH (DRILLER)	WATER	WATER	
57. DEPTH (DRILLER)	WATER	WATER	
58. DEPTH (DRILLER)	WATER	WATER	
59. DEPTH (DRILLER)	WATER	WATER	
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67. DEPTH (DRILLER)	WATER	WATER	
68. DEPTH (DRILLER)	WATER	WATER	
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72. DEPTH (DRILLER)	WATER	WATER	
73. DEPTH (DRILLER)	WATER	WATER	
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75. DEPTH (DRILLER)	WATER	WATER	
76. DEPTH (DRILLER)	WATER	WATER	
77. DEPTH (DRILLER)	WATER	WATER	
78. DEPTH (DRILLER)	WATER	WATER	
79. DEPTH (DRILLER)	WATER	WATER	
80. DEPTH (DRILLER)	WATER	WATER	
81. DEPTH (DRILLER)	WATER	WATER	
82. DEPTH (DRILLER)	WATER	WATER	
83. DEPTH (DRILLER)	WATER	WATER	
84. DEPTH (DRILLER)	WATER	WATER	
85. DEPTH (DRILLER)	WATER	WATER	
86. DEPTH (DRILLER)	WATER	WATER	
87. DEPTH (DRILLER)	WATER	WATER	
88. DEPTH (DRILLER)	WATER	WATER	
89. DEPTH (DRILLER)	WATER	WATER	
90. DEPTH (DRILLER)	WATER	WATER	
91. DEPTH (DRILLER)	WATER	WATER	
92. DEPTH (DRILLER)	WATER	WATER	
93. DEPTH (DRILLER)	WATER	WATER	
94. DEPTH (DRILLER)	WATER	WATER	
95. DEPTH (DRILLER)	WATER	WATER	
96. DEPTH (DRILLER)	WATER	WATER	
97. DEPTH (DRILLER)	WATER	WATER	
98. DEPTH (DRILLER)	WATER	WATER	
99. DEPTH (DRILLER)	WATER	WATER	
100. DEPTH (DRILLER)	WATER	WATER	

BIT SIZE 8 1/2 CASING WT.-LB. 8 5/8 FROM WELL RECORD
 SURF. TO 505
 505 TO 287

600

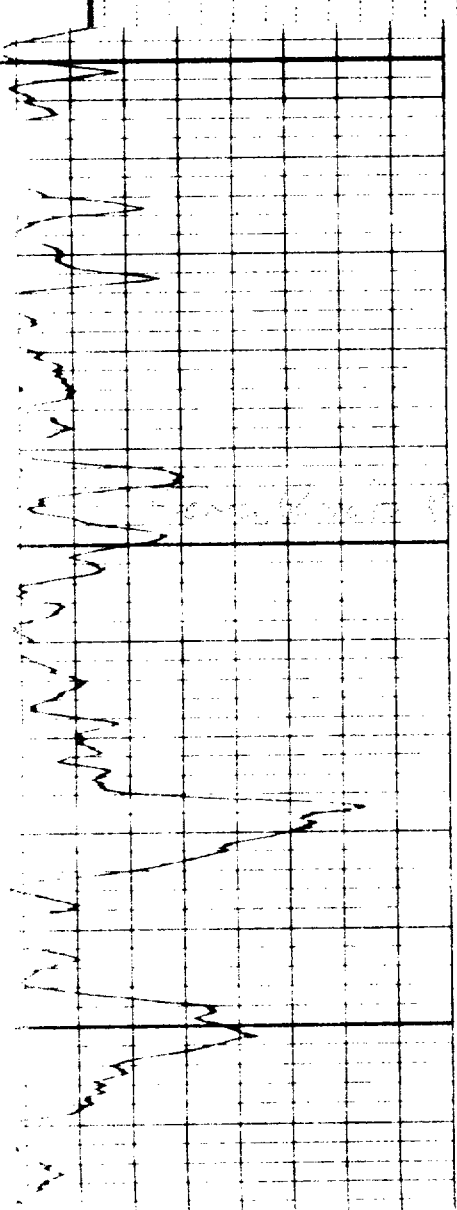
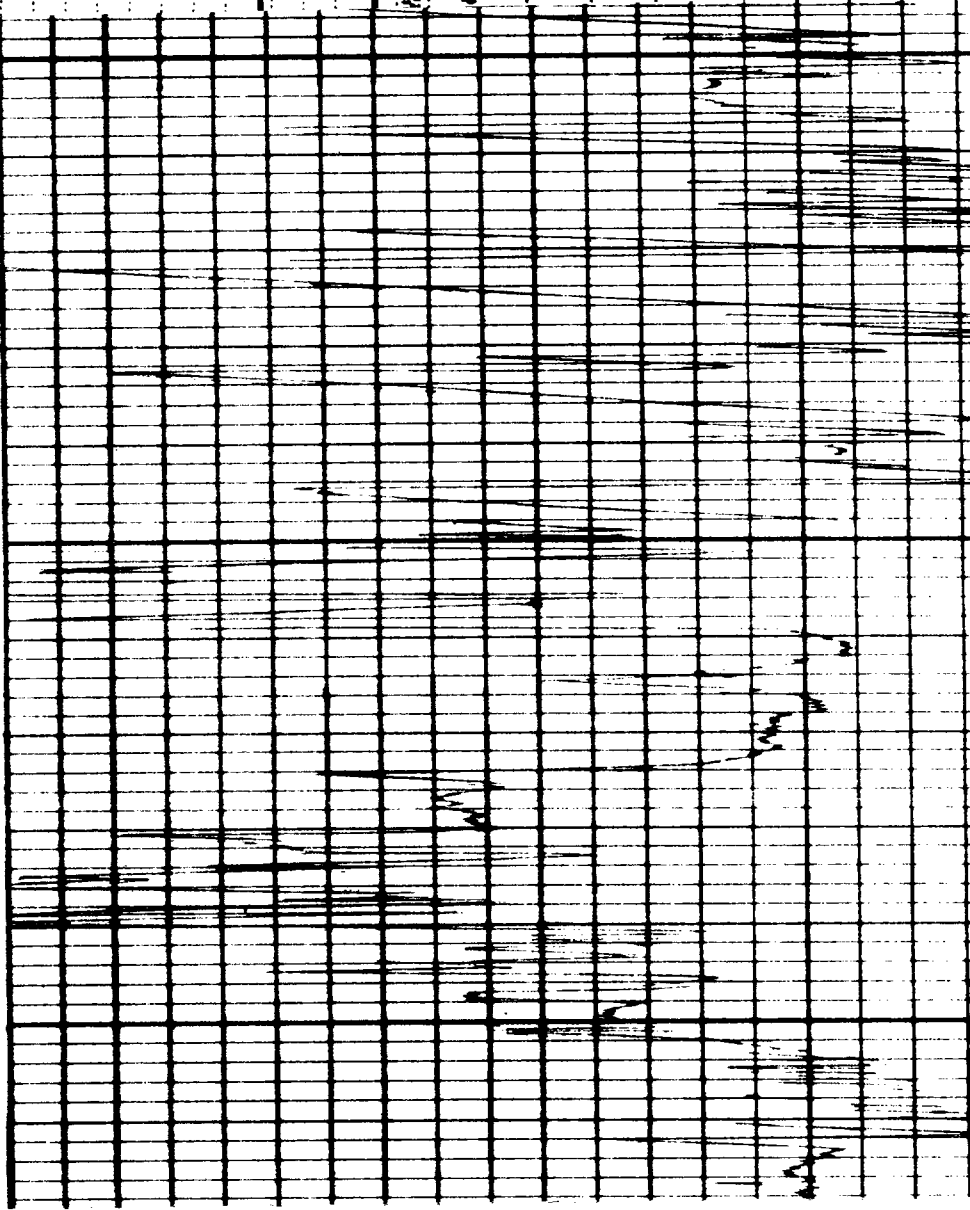


TABLE I

WELL COMPLETION DATA

Johnson #1 c.3/51 2310/N 330/W E-5-20-27	El.3391 TD- 881	8 5/8 @ 455' w/ 25sx Shot 780-815, 175qts IP- 3 BOPD pump, 30° API	FW @ 47', 350-55' SW @ 417-35' S/O 584-85, 781-95
Johnson #3 c.2/54 2310/N 630/W E-5-20-27	El.3382 TD-860	8 5/8 @ 246', mud 5 1/2 @ 855' w/ 25sx SF 820-61, IP-? SF 428-40, IP- 20 BOPD SF 746-55, did not recover all oil, PB-860 Pulled 619' of 5 1/2" csg	S/O 328-31, 428-40, 746-55, 820-61
	r.4/55 DD-897 r.1/59 PB-661		
Yates Fed#1 c.1/49 330/S 2310/W N-6-20-27	El.3361 TD-997 PB-540	8 5/8 @ 254' Shot 535-40, 684-98	Wtr 200-06, 765-70, S/O 686, 925-33 D&A 5/49
Yates Fed#2 c.7/49 330/N 2310/W C-7-20-27	El.3364 TD-653	7" @ 550' Nat. 50 BOPD, 150 BW	SW @ 572; Qn @ 652 Sd-545 blew oil/wtr TA-10/50
Yates Fed#3 c.11/49 330/S 1650/W N-6-20-27	El.3339 TD-929 PB-535	6 5/8 @ 525' w/ 50sx IP-17 BOPD, 30° API	SW @ 824-31, 918-29 S/O 460-85, 522-32, S/O 621-42, 650-72, S/O 769-76
L. Yates#1 c.12/49 330/N 2310/E B-7-20-27	El.3361 TD-703	7" @ 275' w/ 50sx 5" @ 515' w/ pkr Shot 680-703, IP:36 BOPD, 40 BWPD No results reported	SW 310-15, 500-15, 680-85 S/O 685-703
	r.1/55 DD-715		
L. Yates#2 c.11/51 330/N 1650/E B-7-20-27	El.3367 TD-735	7" @ 435' w/ 20sx Shot 712-35, IP: 50 BOPD, 30° API Shot 735-67, 100qts	Wtr 200-15, 325-55, S/O 712-35, 735-67
	r. 2/55 DD-767		
L. Yates#4 c.12/50 330/S 1650/E O-6-20-27	El.3367 TD-744	7" @ 471' w/ 20sx Shot 696-744, 120qts; IP-50 BOPD Wtr incr, PB-749; lease prod incr	Wtr 160-65, 420-30, 749-55 S/O 698-728, 732-44
	r.2/55 DD-755		
L. Yates#1-Y c.8/50 350/S 2251/E C-6-20-27	El.3360 TD-715	7" @ 433' w/ 20sx Shot 685-715, 110qts IP- 50BOPD, 36°API	Wtr 165-70, 350-65 S/O 405-10, 480-90 S/O 540-50, 686-715
Page #1 c.5/50 330/N 990/E A-7-20-27	El.3368 TD-732	5 1/2" @ 701' w/ 75sx Shot 715-30, 60qts IP-100 BOPD, 32°API Prod incr fr 25 BOPD to 60 BOPD	Wtr 347-66 S/O 714-30, 737-49
	r.11/50 DD-749		
Page #2 c.8/50 330/S 990/E P-6-20-27	El.3371 TD-750 PB-745	5 1/2" @ 497' w/ 40sx Shot 705-750, 120qts IP-100 BOPD	Wtr 350-55, 745-47 S/O 500-05, 705-35, 40-50
	r.7/65 DD-750		Top On 3-718

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

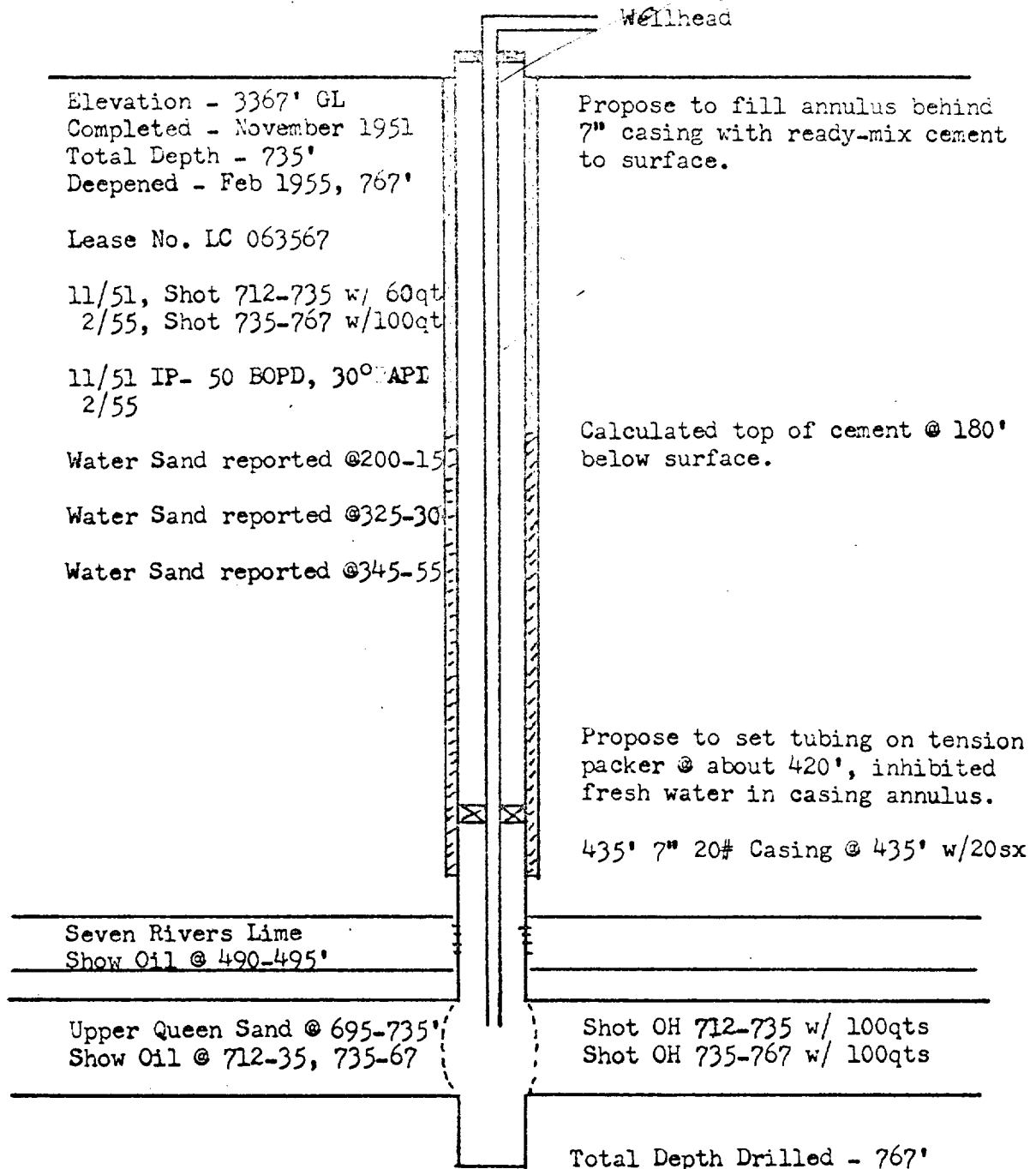
EXHIBIT NO. 2

CASE NO. 4209

Page #3	c. 11/50	El. 3373	7" @ 435' 20sx	Wtr: 275', 763-75
1650/S 330/E		TD-775	Shot 548-655, 202qts	S/O: 555-67, 735-75
I-6-20-27		PB-763	Shot 735-63, 180qts	IP-60 BOPD, 33° API
Page #4	c. 2/51	El. 3377	7" @ 503' 25sx	Wtr: 145, 332-40, 778-805
330/N 330/W		TD-901	Shot 840-900, 150qts	S/O 573-82, 811-22, 876-93
D-8-20-27			IP-60 BOPD, 33° API	Top Qn @ 790'
Page #5	c. 7/59	El. 3388	7" @ 426' 50sx	Wtr: 170, 778
2970/N 330/W		TD-885	Shot 595-693, 243qts	S/O: 595-614, 775-848
I-5-20-27			Shot 775-885, 175qts	S/O 862-70
			IP-15 BOPD, 6 BOPD, 32° API	
Page #6	c. 7/51	El. 3371	7" @ 422' 50sx	Wtr: not recorded
990/S 330/E		TD-784	Shot 735-78, 240qts	S/O: 554-65, 762-84
P-6-20-27		PB-778	IP-20 BOPD, 340 BOPD, 32° API	
Page #7	c. 10/52	El. 3346	7" @ 320' 20sx	Wtr: not recorded
1650/S 1650/E		TD-685	Tr 690-705, 1500g.	S/O: 690-705, 721-736
J-6-20-27			Tr 721-736, 1500g.	IP- 1.5 BOPD, TA 10/52
Page #8	c. 7/59	El. 3376	4 1/2" @ 977 125sx	Wtr: 300-16, 762-77
330/S 330/W		TD-987	Pf 791-842	S/O: 791-824, 830-42
M-5-20-27			SOF 19280# 65000g	Pumped LO & Wtr, TA
FWY-Yates #1	c. 8/35	El. 3355	6 5/8 @ 1143	FW & Suf wtr @ several pts
1980/N 660/E		TD-2026		to TD. S/O: 356-59, 590-95,
H-6-20-27				809-26, 890-94, 906-11, D&A
HEY-Yates #1	c. 7/48	El. 3345	8" @ 180'	FW & Suf wtr @ several pts
2310/N 990/E		TD-1003		to TD. S/O 344-49, D&A
H-6-20-27				
Hondo Singer #2A	c. 8/64	El. 3340		Hole full of wtr @ 1600'
K-7-20-27		TD-1601		D&A
Hondo Singer #1A		El. 3331		Rapid wtr entry, increasing
660/S 660/E		TD-11100		with depth to 1600'
P-7-20-27				

DIAGRAMMATIC SKETCH OF INJECTION WELL

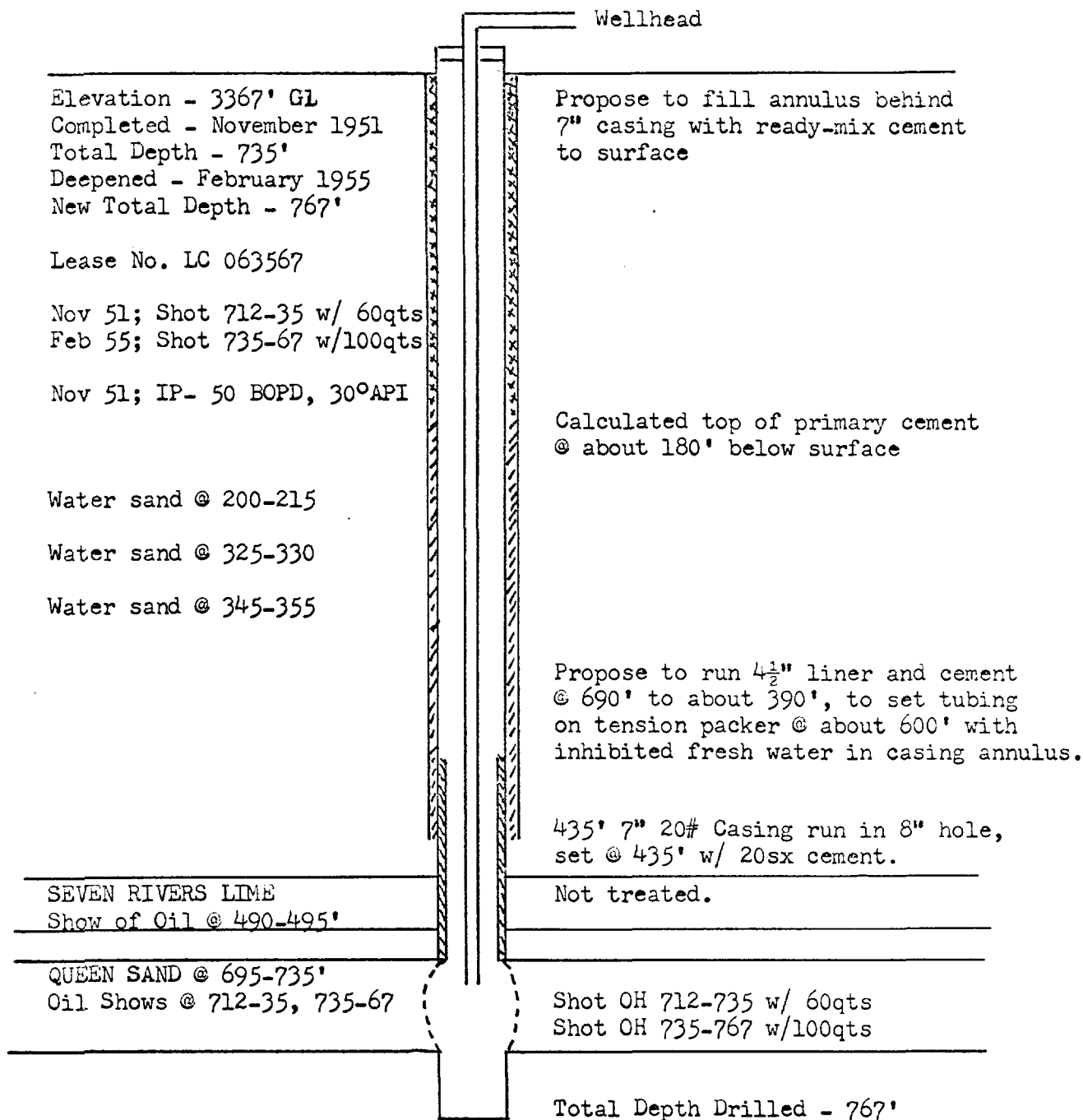
LILLIE YATES - HARVEY YATES NO.2
330 FNL 1650 FEL, Sec 7, T-20-S R-27-E
McMillan (S.R., 3n) Pool, Eddy County



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 4209

DIAGRAMMATIC SKETCH OF INJECTION WELL

LILLIE YATES - HARVEY YATES NO. 2
330 FNL 1650 FEL, Sec 7, T-20-S,R-27-E
McMillan (S.R., Qn) Pool, Eddy County

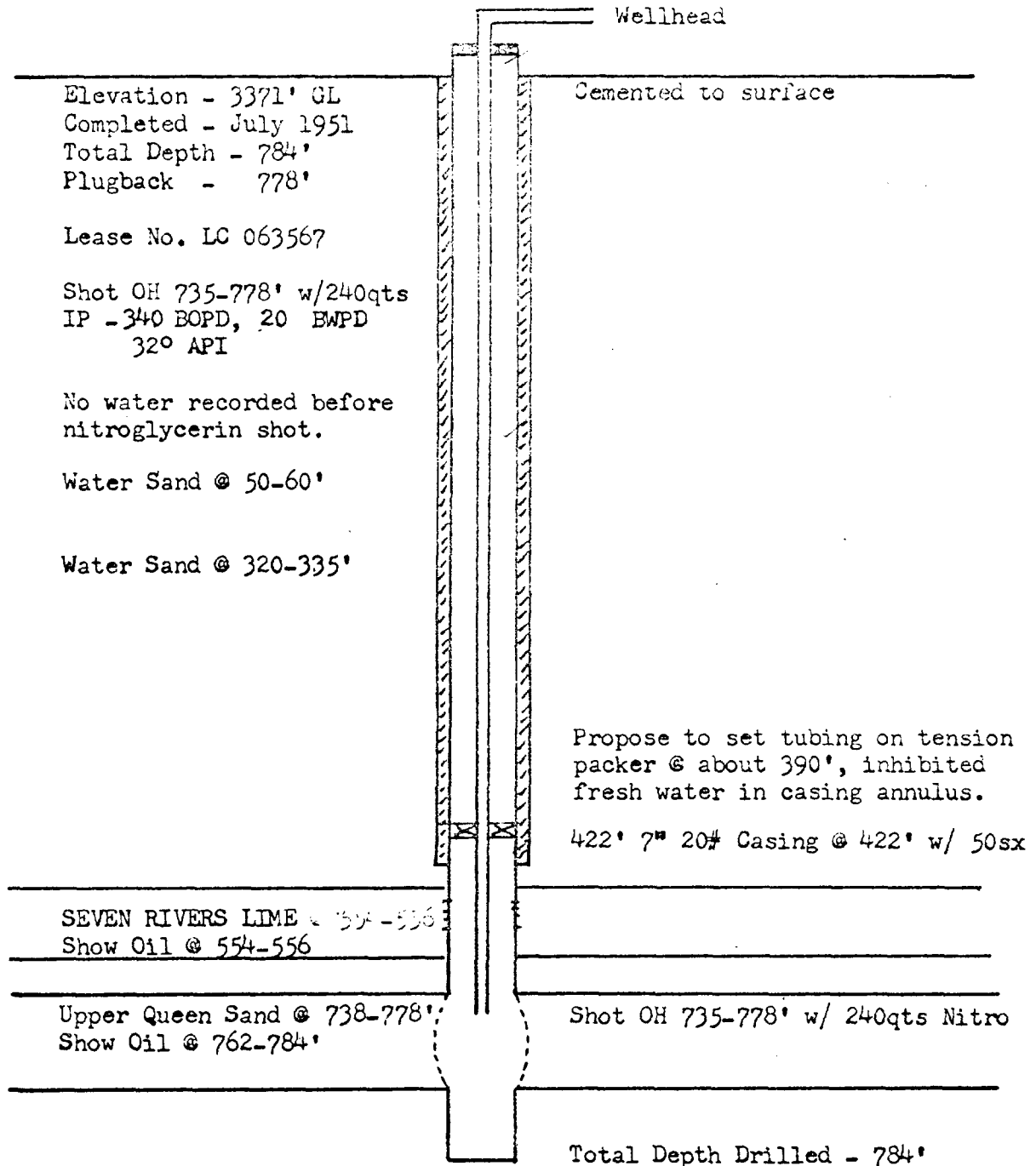


BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 41A
CASE NO. 4209

To be made off Seven Rivers

DIAGRAMMATIC SKETCH OF INJECTION WELL

HARVEY E. YATES - PAGE & YATES NO. 6
990 FSL 330 FEL, Sec 6, T-20-S, R-27-E
McMillan (S.R., Qn) Pool, Eddy County



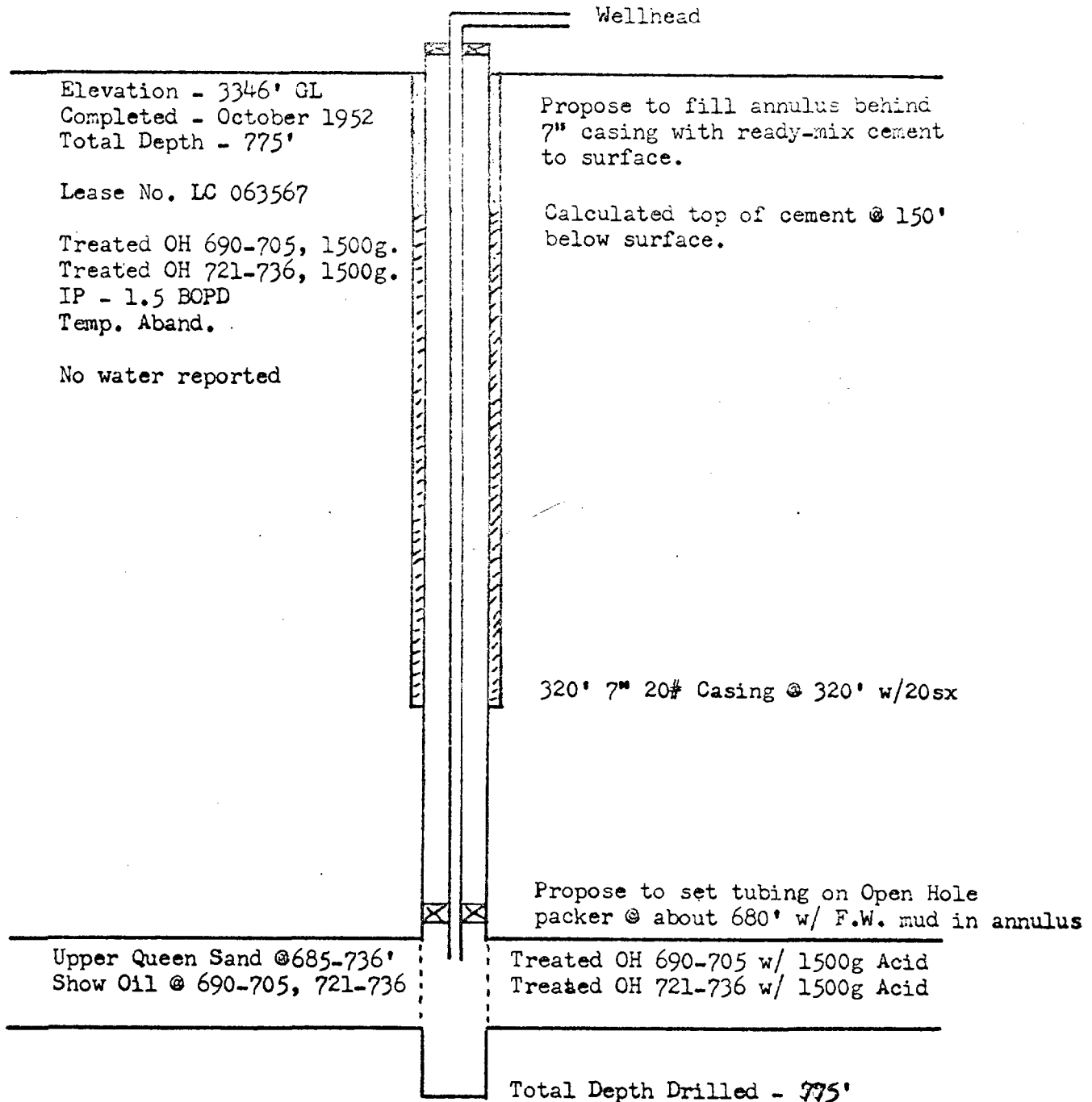
BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 4209

HARVEY E. YATES - PAGE & YATES NO. 6
990 FSL 330 FEL, Sec 6, T-20-S, R-27-E
McMillan(S.R., Qn) Pool, Eddy County

5A

DIAGRAMMATIC SKETCH OF INJECTION WELL

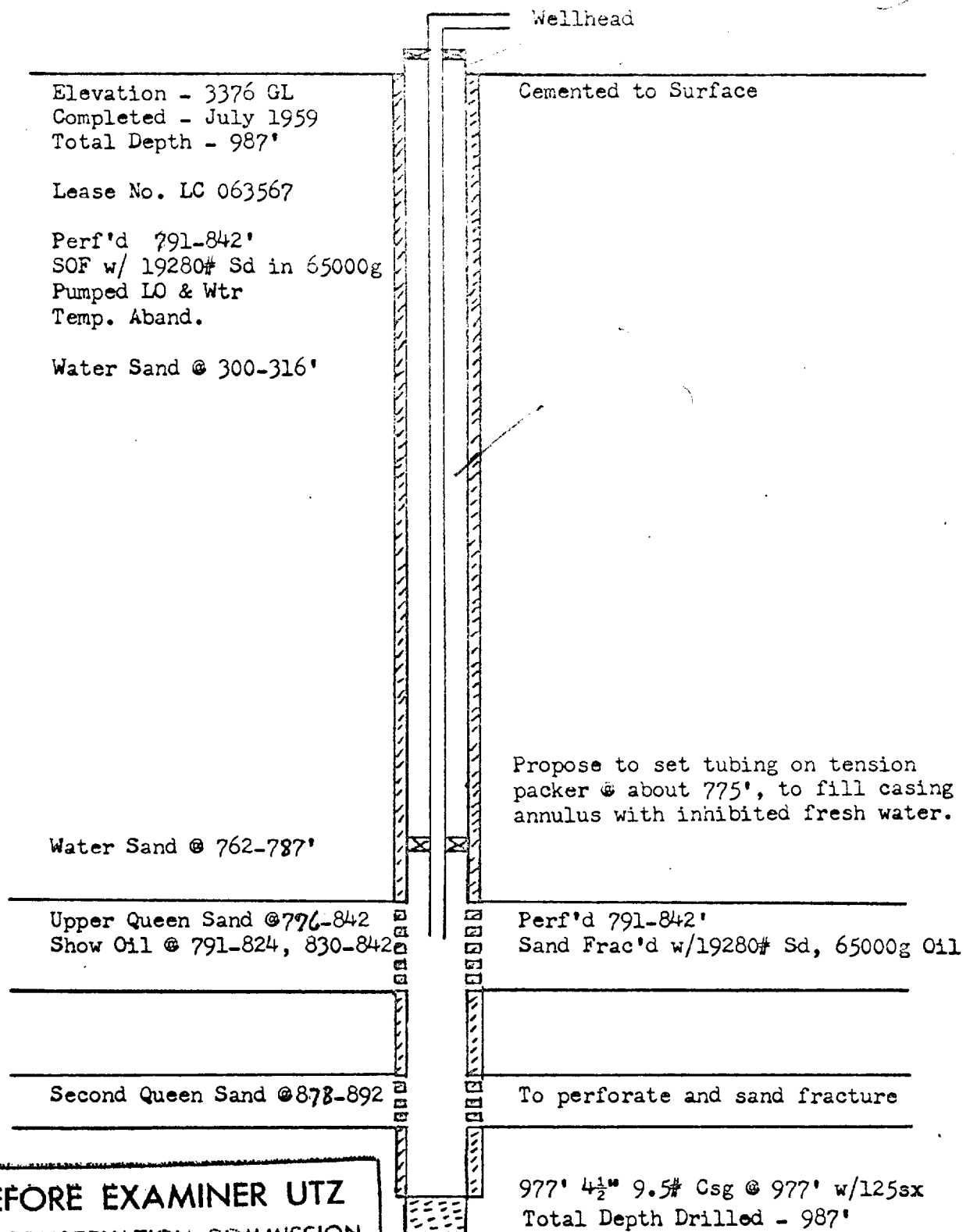
HARVEY E. YATES - PAGE & YATES No. 7
1650 FSL 1650 FEL, Sec 6, T-20-S, R-27-E
McMillan (S.R., Qn) Pool, Eddy County



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO. 4209

DIAGRAMMATIC SKETCH OF INJECTION WELL

HARVEY E. YATES - PAGE & YATES No. 8
330 FSL 330 FWL, Sec 5, T-20-S, R-27-E
McMillan (S.R., Qn) Pool, Eddy County



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 7
CASE NO. 4209



DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WATER ANALYSIS

Date

8-13-69

Lab. Location

Hobbs, N.M.

Lab no. 5375

S. no.

Harvey Yates

Mail 4 Copies to: Eddie Mahfood
P.O. Box 896
Artesia, N.M. 88210

Source Flow Line			Total Solids 4660		Pool Mc Millan	Formation Queen - 7 Rivers	
Constituents			mg/L	meq/L	Legal Description Page & Yates #1-2-4	BHT	Depth 500'
Sodium			1080	47	pH 7.0	Specific Gravity .998 @	81 °F
Calcium			300	15	Chloride X	1775	50
Magnesium			132	11	Bicarbonate	1373	22.5
Iron			0		Sulfate	Nil	
					Carbonate		

Stiff Diagram (meq/L)

Na/1000	6	5	4	3	2	1	0	1	2	3	4	5	6	Cl/1000
Ca/100														HCO ₃ /10
Mg/100														SO ₄ /10
Fe/10														CO ₃ /10

Remarks:

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 8
CASE NO. 4209

J.L. Sarff 8-13-69

Analysis Based On API Recommended Procedure