

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco Mesa Verde Undesignated		Pictured Cliffs		County Mo Arriba	Date Nov. 5, 1958
Operator Magnolia Petroleum Company		Lease Jicarilla "H"		Well No. 8	
Location of Well H	Unit 12	Section 26N	Township 34	Range 34	

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES ☒ NO ☐

2. If answer is yes, identify one such instance: Order No. **DC-596**; Operator, Lease, and Well No.:

Magnolia Petroleum Co.
Jicarilla "G" #5

3. The following facts are submitted:		Upper Zone	Lower Zone
a. Name of reservoir		Pictured Cliffs	Mesa Verde
b. Top and Bottom of Pay Section (Perforations)		3694 3756	5476 5977
c. Type of production (Oil or Gas)		Gas	Gas
d. Method of Production (Flowing or Artificial Lift)		Flowing	Flowing

4. The following are attached. (Please mark YES or NO)

Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.

Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.

Yes c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*

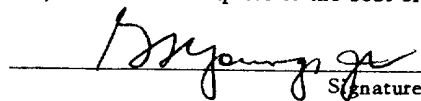
Yes d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Northwest Production Co., Sims Building, Albuquerque, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☐ NO ☐ . If answer is yes, give date of such notification **11-5-58**.

CERTIFICATE: I, the undersigned, state that I am the **District Superintendent** of the **Magnolia Petroleum Company** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.


Signature

* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

NEW MEXICO
OIL CONSERVATION COMMISSION

8-15-56

PACKER LEAKAGE TEST (SAN JUAN BASIN)

Operator Magnolia Petroleum Co. Pool (Upper Completion) Pictured Cliffs
Lease Hearilla #1, Well No. 2 Pool (Lower Completion) Mesa Verde
Location: Unit M, S. 12, T. 26N, R. 3W, 10 Arriba County, N. Mex.

Pre-Test Shut-In

	Upper Completion	Lower Completion
Shut-in (date).	<u>10/6/58</u>	<u>10/6/58</u>
Pressure Measured (Dwt.) (date).	<u>10/8/58</u>	<u>10/13/58</u>

Flow Test No. 1

Test commenced at (hour, date) 10:15 A.M., 10/13/58 Choke size 0.750"
Completion producing Mesa Verde Completion shut-in Pictured Cliffs

	Upper Completion	Lower Completion
Pressure at beginning of test.	<u>925</u> psi	<u>1528</u> psi
Maximum pressure during test.	<u>930</u> psi	<u>1528</u> psi
Minimum pressure during test.	<u>925</u> psi	<u>380</u> psi
Pressure at end of test.	<u>927</u> psi	<u>380</u> psi
Maximum pressure change during test. . . .	<u>+ 5</u> psi	<u>-1139</u> psi
Oil flow rate during test: <u>-</u> BOPD based on BO in <u>-</u> hours.		
Gas Flow rate during test:		
Choke volume <u>4958</u> MCFD: Meter volume <u>-</u> mcf.		

Mid-Test Shut-In

	Upper Completion	Lower Completion
Shut-in (date).	<u>10/13/58</u>	<u>10/13/58</u>
Pressure measured (Dwt) (date).	<u>10/20/58</u>	<u>10/20/58</u>

Flow Test No. 2

Test commenced at (hour, date) 1:25 A.M., 10/20/58 Choke size 0.750"
Completion producing Pictured Cliffs Completion shut-in Mesa Verde

	Upper Completion	Lower Completion
Pressure at beginning of test.	<u>964</u> psi	<u>1582</u> psi
Maximum pressure during test.	<u>964</u> psi	<u>1582</u> psi
Minimum pressure during test.	<u>103</u> psi	<u>1580</u> psi
Pressure at end of test.	<u>103</u> psi	<u>1585</u> psi
Maximum pressure change during test. . . .	<u>-801</u> psi	<u>+ 5</u> psi
Oil flow rate during test: <u>-</u> BOPD based on <u>-</u> BO in <u>-</u> hrs.		
Gas flow rate during test:		
Choke volume <u>2164</u> MCFD: Meter volume <u>-</u> mcf.		

Test performed by William A. Morgan Title Jr. Co. Engineer
Witnessed by - Title -

REMARKS: None

NOTE: Recording gauge pressure charts, test data sheet, and a graphic depiction of all phases of the test shall be submitted with this report.

AFFIDAVIT:

I HEREBY CERTIFY that all conditions prescribed by the Oil Conservation Commission of the State of New Mexico for this packer leakage test were complied with and carried out in full, and that all dates and facts set forth in this form and all attached material are true and correct.

William A. Morgan For MAGNOLIA PETROLEUM CO. INC.
(Representative of Company Making Test) (Company Making Test)



INSTRUCTIONS

(NORTHWEST NEW MEXICO ONLY)

1. At least seventy-two hours prior to the commencement of this test, the operator shall have notified the Aztec Office of the Oil Conservation Commission in writing of the exact time said test is to be commenced.
2. The packer leakage test shall commence with both sides of the completion shut-in. Both sides of the completion must be shut-in at least seven days. This shut-in must show on the charts of the pressure recorder and also must appear on the data sheets.
3. For Flow Test No. 1, one side of the dual completion shall be produced with the other side shut-in. Such test shall be continued for seven days, and shall be at a rate of flow approximating the normal rate of flow for the zone being produced. Note: Where gas is flowed to the atmosphere in taking the initial packer test, the well shall be flowed for three hours.
4. Following the completion of flow test No. 1, the well will again be shut-in for seven days.
5. Flow Test No. 2 shall be performed with the previously shut-in side of the dual completion flowing and with the flowing side of the completion used in Flow Test No. 1, remaining shut-in. This test shall be conducted exactly as outlined under Flow Test No. 1, and must be performed even though no leak was indicated by Flow Test No. 1.
6. All pressures, throughout the entire test, must be continuously measured and recorded with recording pressure gauges.
7. The accuracy of the recording gauges shall be checked at regular intervals throughout the test with a dead weight test gauge (Dwt), and such readings shall be recorded on the test data sheet provided.
8. This form must be completed and filed in duplicate with the Aztec Office of the Oil Conservation Commission within 15 days following the completion of the testing, and must be accompanied by:
 - a. all of the charts, or copies thereof, used on the pressure recorders during the test.
 - b. The test data-sheet (s), or copies thereof, required under paragraph 7 above.
 - c. a graph depicting the pressures and their changes, for both sides of the completion over the entire test.
9. This packer leakage test shall be performed upon the dual completion of any new wells so approved by the Commission. This test shall also be required each year during the annual deliverability test on gas wells. This test shall be required until such time as the Commission has sufficient information on testing dual completions in San Juan Basin on which to base a simplified packer leakage test. The Commission may also request packer leakage tests at any time they feel that a new test is desirable.

INITIAL PACKER LEAKAGE TEST DATA

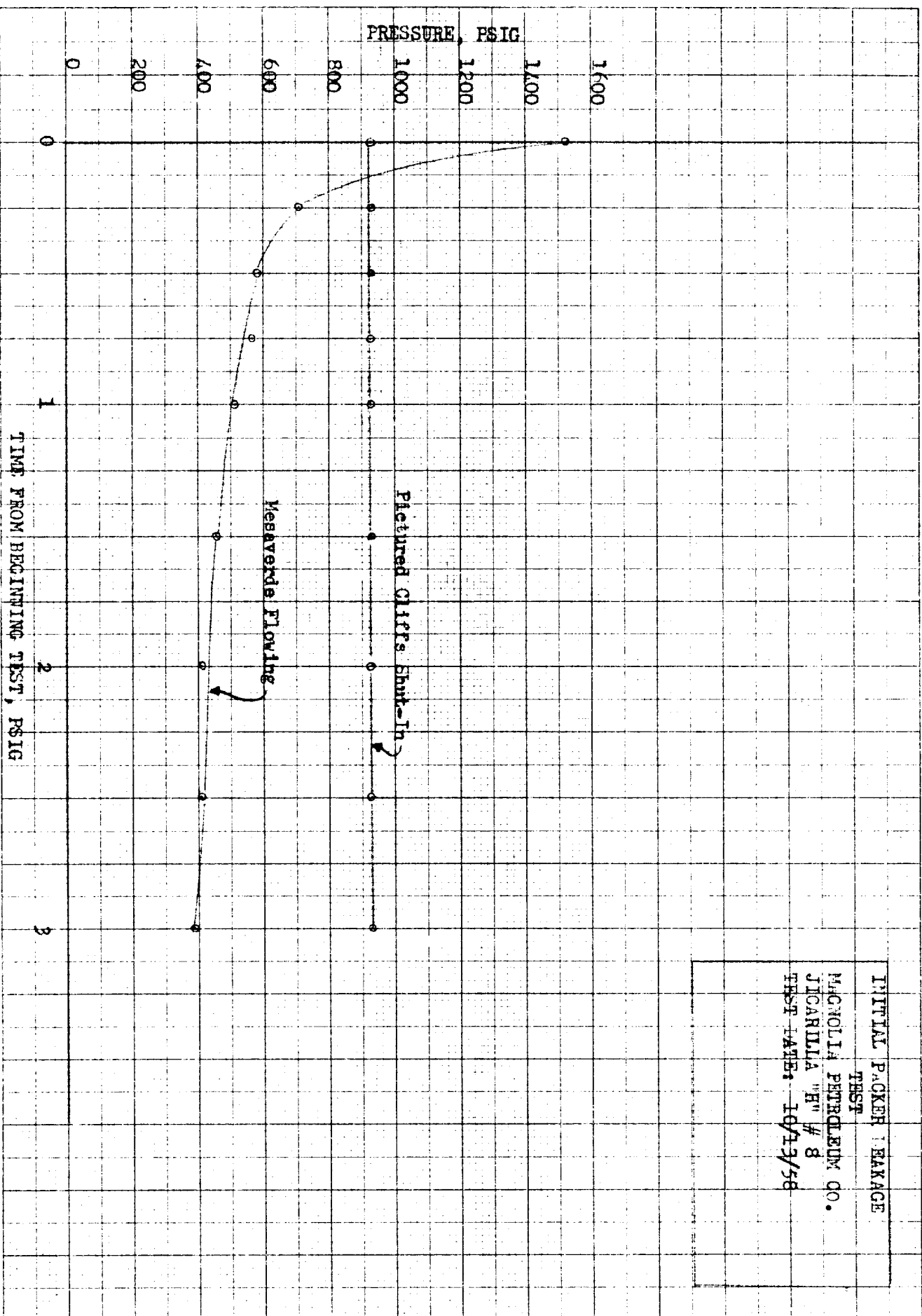
JICARILLA "H" WELL NO. 8

FIRST HALF: 10/13/58

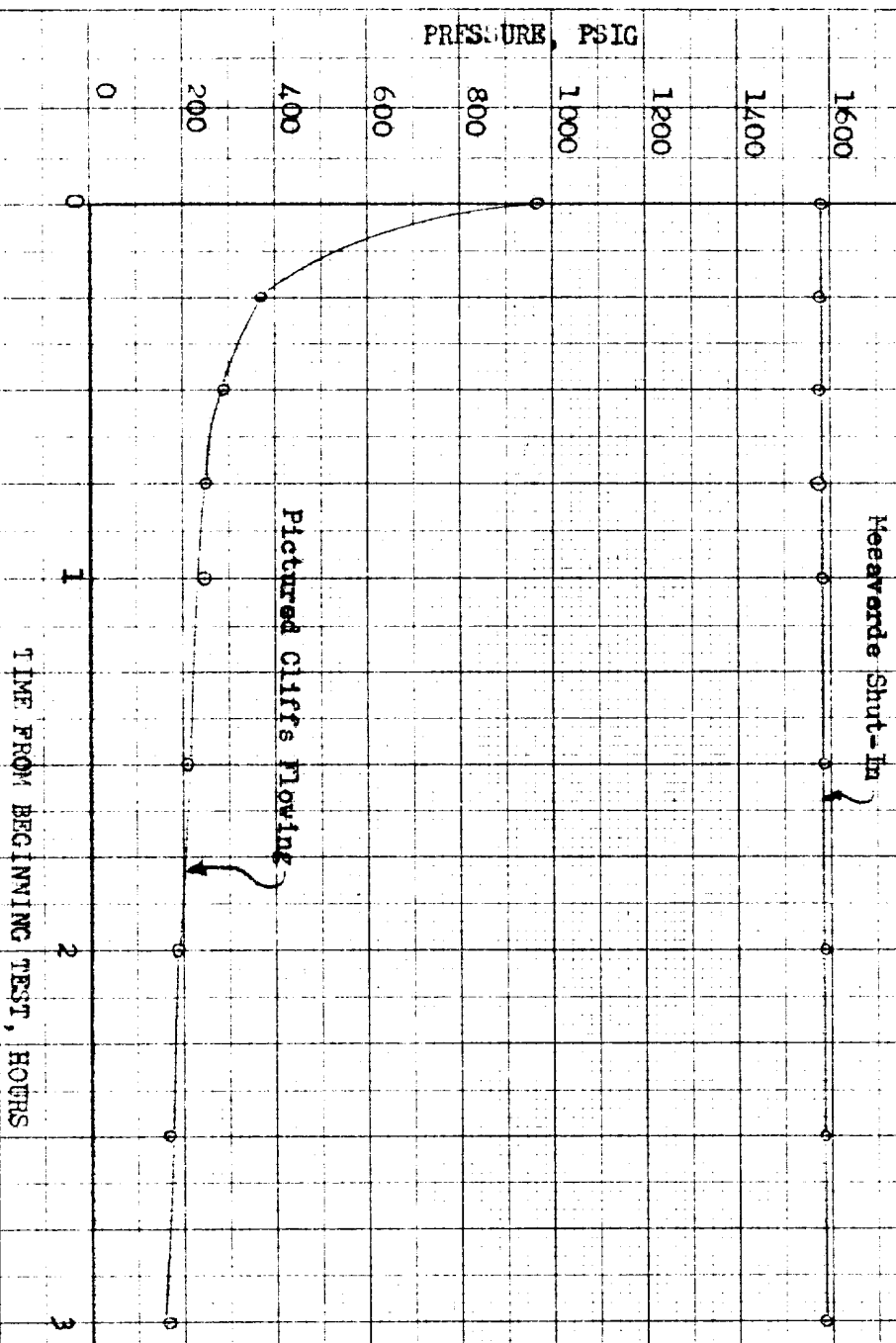
TIME	MEASURED FLOWING TUBING PRESSURE, PSIG	PICTURED CLIFF'S SHUT-IN TUBING PRESSURE, PSIG
10:15 A.M.	1528 DWT.	925 DWT
10:30 "	710 "	928 "
10:45 "	585 "	926 "
11:00 "	565 "	926 "
11:15 "	517 "	926 "
11:45 "	459 "	928 "
12:15 P.M.	411 "	930 "
12:45 "	411 "	927 "
1:15 "	389 "	927 "

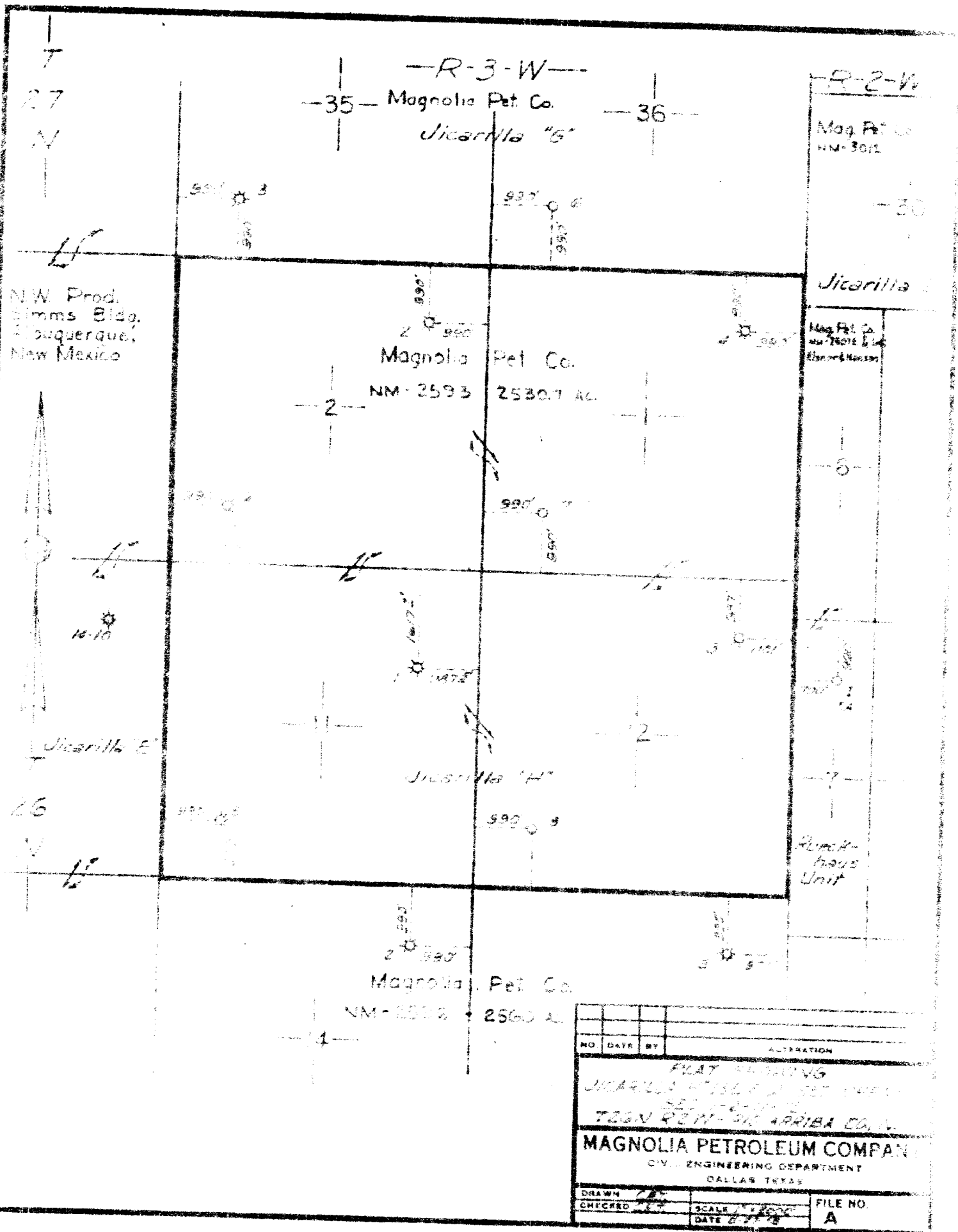
SECOND HALF: 10/20/58

TIME	MEASURED SHUT-IN TUBING PRESSURE, PSIG	PICTURED CLIFF'S FLOWING TUBING PRESSURE, PSIG
10:25 A.M.	1582 DWT	964 DWT
10:40 "	1580 "	371 "
10:55 "	1580 "	292 "
11:10 "	1580 "	251 "
11:25 "	1583 "	245 "
11:55 "	1584 "	209 "
12:25 "	1584 "	191 "
12:55 "	1585 "	166 "
1:25 "	1585 "	163 "



INITIAL PACKER LEAKAGE
TEST
MAGNOLIA PETROLEUM CO.
JICARILLA "H" # 8
TEST DATE: 10/20/58





NO.	DATE	BY	ALTERATION			
FLAT SURVEYING						
JICARILLA "H" & "G" PET. CO.						
SECT. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000						
MAGNOLIA PETROLEUM COMPANY						
CIV. ENGINEERING DEPARTMENT						
DALLAS TEXAS						
DRAWN	DATE	BY	FILE NO.			
CHECKED	DATE	BY	A			
SCALE		DATE				

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

6-1-56

PACKER-SETTING AFFIDAVIT
(Dual Completions)

STATE OF NEW MEXICO)
County of SAN JUAN) ss

G. W. WALKER, being first duly sworn according to law, upon his oath deposes and says:

That he is of lawful age and has full knowledge of the facts herein below set out.

That he is employed by Magnolia Petroleum Company in the capacity of Production Foreman and as such is its authorized agent.

That on September 17, 1958, he personally supervised the setting of a Baker Model "D" in Magnolia Petroleum Company's
(Make and Type of Packer) (Operator)

Jicarilla "H" Well No. 8, located in Unit
(lease)
Letter M, Section 12, Township 26N, Range 3W, NMPM,
Rio Arriba County, New Mexico.

That said packer was set at a subsurface depth of 5437 feet,
said depth measurement having been furnished by Welox, Inc.

That the purpose of setting this packer was to effect a seal in the annular space between the two strings of pipe where the packer was set so as to prevent the commingling, within the well-bore, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer. That this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

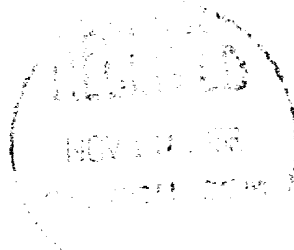
MAGNOLIA PETROLEUM COMPANY
(Company)

(its Agent) G. W. Walker

Subscribed and sworn to before me this the 24th day of September, AD, 1958.

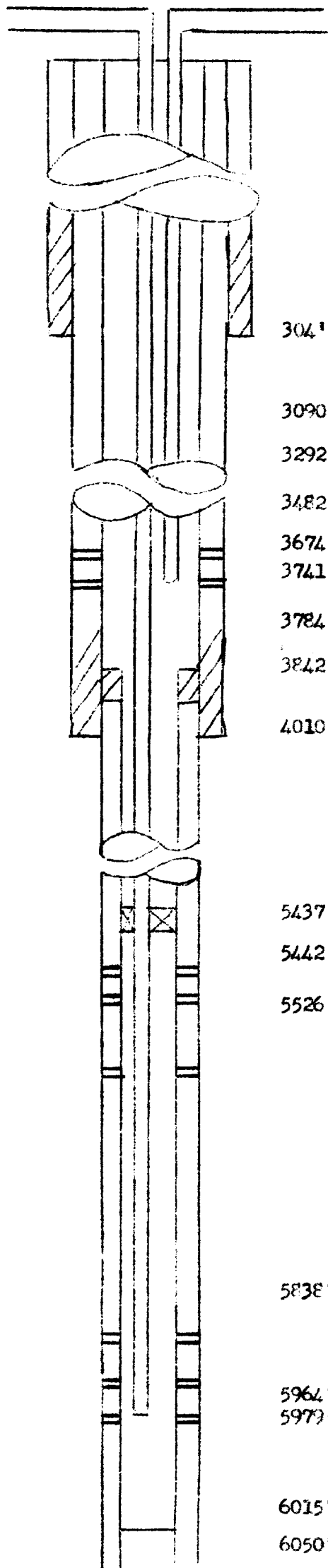
M. C. Tedmore
Notary Public in and for the County of San Juan

My Commission Expires Aug 20, 1961.



MAGNOLIA PETROLEUM COMPANY
 Jicarilla "H", Well No. 8
 Blanco Mesaverde &
 Undesignated Pictured Cliffs
 Rio Arriba County, New Mexico

Elevation: 7202' Ground level



304' - 10 3/4" casing set w/250 sacks cement

3090' - Top of cement

3292' - Top of Ojo Alamo

3482' - Top of Kirtland Fruitland

3674' - Top of Pictured Cliffs

3741' - Bottom 2" tubing

3784' - Top of Lewis Shale

3842' - Top of 5" liner & top of cement

Set w/200 sacks 6% Gel + 1/2# Floccle + 25 sacks neat

4010' - 7 5/8" casing set w/75 sacks 6% Gel + 1/2# Floccle
 per sack + 50 sacks neat

5437' - Baker Model "D"
 Production Packer

5442' - Top of Cliff House

5526' - Top of Menefee

Perforated 5" liner
 w/126 jets (5476'-
 83', 5499'-5504',
 5585'-5589, 5652'-
 84', 5931'-38',
 5969'-77) sand water
 frac w/131,300 gals.
 water + 92,500#
 20-40 mesh sand

5838' - Top of Point Lookout

5964' - Bottom 2" tubing

5979' - Top of Mancoes

6015' - Plugged back total depth

6050' - Total depth