

GENERAL OFFICE
Box 2040
TULSA 2, OKLA.

AMERADA PETROLEUM CORPORATION
Box 668
HOBBS, NEW MEXICO

August 22, 1966

MEX-238
New Sept 7

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil
Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

RECEIVED
1966 AUG 23 AM 8 06

Re: Langlie Mattix Woolworth Unit
Sec. 27, 28, 33 and 34,
R-37-E, T-24-S,
Lea County, New Mexico

Dear Sir:

The New Mexico Oil Conservation Commission authorized a pilot injection project utilizing six injection wells on Amerada's Langlie Mattix Woolworth Unit by Order No. R-2197 dated March 14, 1962. Water injection began during May, 1963. Results of the water injection program have been sufficient to warrant the expansion of the project. Administrative approval is, therefore, sought to convert seven wells to injection as set out in Rule 701. The seven wells to be converted are:

- L. M. W. U. Tract 5 No. 4 located in SE/4, NW/4, Sec. 27
- L. M. W. U. Tract 7 No. 3 located in NW/4, SE/4, Sec. 27
- L. M. W. U. Tract 11 No. 8 located in NW/4, NE/4, Sec. 33
- L. M. W. U. Tract 11 No. 1 located in SE/4, NE/4, Sec. 33
- L. M. W. U. Tract 12 No. 2 located in SE/4, NW/4, Sec. 34
- L. M. W. U. Tract 12 No. 5 located in NW/4, NE/4, Sec. 34
- L. M. W. U. Tract 14 No. 2 located in NE/4, SW/4, Sec. 34

These wells along with existing injection wells are shown on the attached plat. The proposed injection wells are direct offsets to producing wells which have experienced substantial response to water injection with the exception of Tract 14 Well No. 2. This well is included in the expansion since it will complete the 5-spot immediately south of the pilot area. Response from the center well of this 5-spot is expected in the immediate future. Well tests for the responding wells, offsetting the proposed injection wells, are shown on the attached form C-116 before and after response.

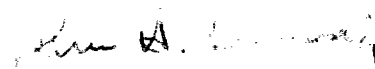
August 22, 1966

The injection water is to be obtained from the Santa Rosa formation located at a depth of approximately 900 feet. It is anticipated that the injection volume will be approximately 500 barrels per day per well.

The following attachments accompany this request in compliance with Rule 701:

1. A plat showing the proposed injection wells and all other wells within two miles.
2. All available logs of the proposed injection wells.
3. Diagramatic sketch of all proposed injection wells.
4. Commission report form C-116 showing well tests before and after waterflood response.

Very truly yours,



John H. Swendig
District Engineer

AMERADA PETROLEUM CORPORATION

JHS/jh

cc: Please see attached Distribution Sheet

DISTRIBUTION SHEET

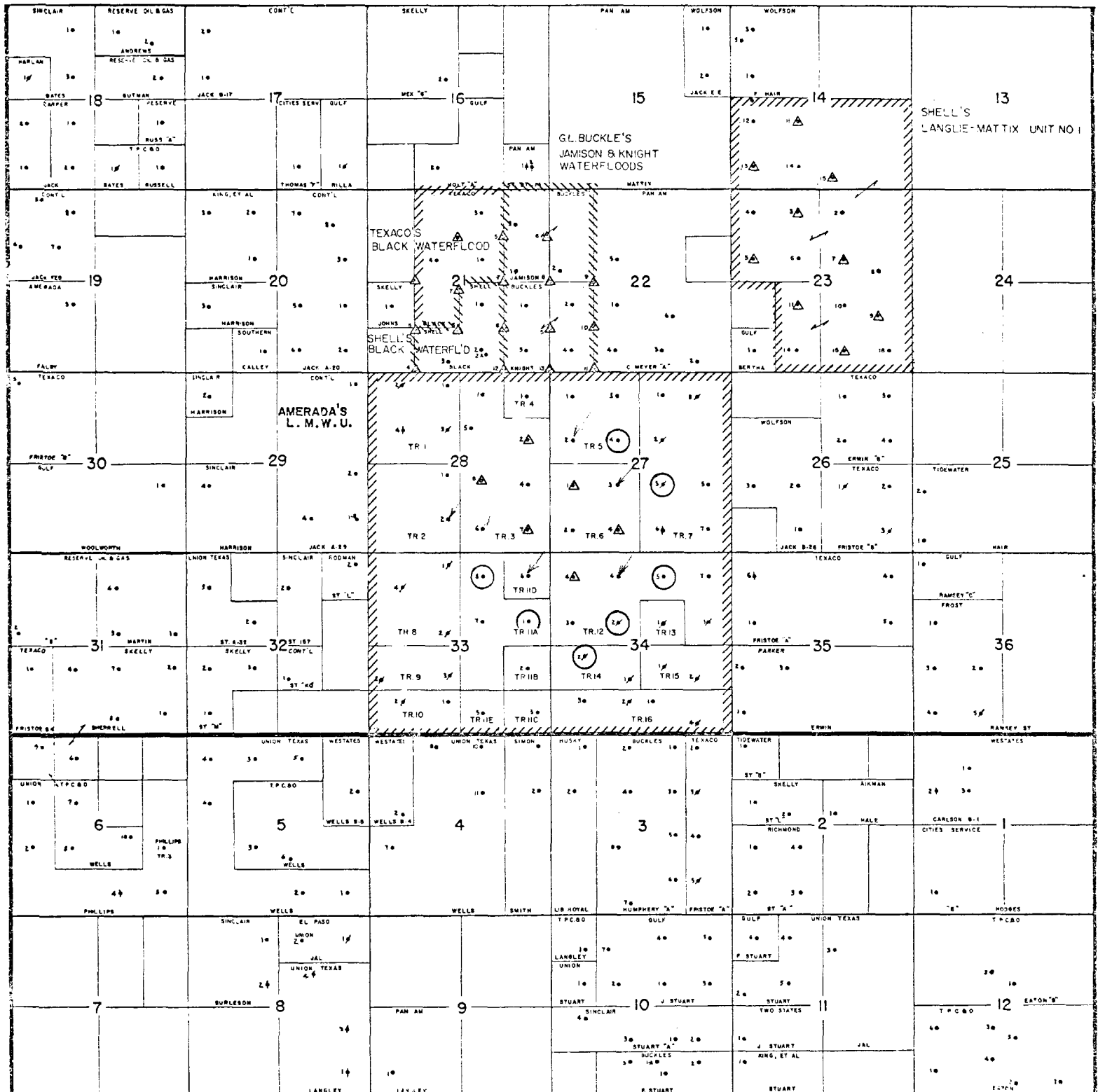
Orig & 2 cc: Mr. A. L. Porter, Jr., P. O. Box 2088, Santa Fe, New Mexico
W/Attachments

cc: N. M. State Engineer's Office, P. O. Box 1079, Santa Fe,
New Mexico W/Attachments

cc: Mr. Joe Ramey, N. M. O. C. C., P. O. Box 1980, Hobbs,
New Mexico W/Attachments

cc: Gulf Oil Corporation, P. O. Box 670, Hobbs, New Mexico
Continental Oil Company, P. O. Box 460, Hobbs, New Mexico
Wolfson Oil Company, 311 Midland Nat'l. Bank, Midland, Texas
Texaco, Incorporated, P. O. Box 728, Hobbs, New Mexico
R. L. Parker, 518 NBT Bldg., Tulsa, Oklahoma
Tidewater Oil Company, P. O. Box 547, Hobbs, New Mexico
G. L. Buckles, P. O. Box 56, Monahans, Texas
Husky Oil Company, 107 Wilkinson Foster Bldg., Midland, Texas
Julian E. Simon, 12th Floor, Sinclair Bldg., Fort Worth 2, Texas
Union of Texas, P. O. Box 196, Midland, Texas
Westates Petroleum Company, P. O. Box "SS", Jal, New Mexico
Rodman Petroleum Company, P. O. Box 3826, Odessa, Texas
Shell Oil Company, P. O. Box 1509, Midland, Texas
Pan American Petroleum Corporation, P. O. Box 68, Hobbs, New Mexico

R 37 E



△ PRESENT INJECTION WELLS

⊙ PROPOSED INJECTION WELLS

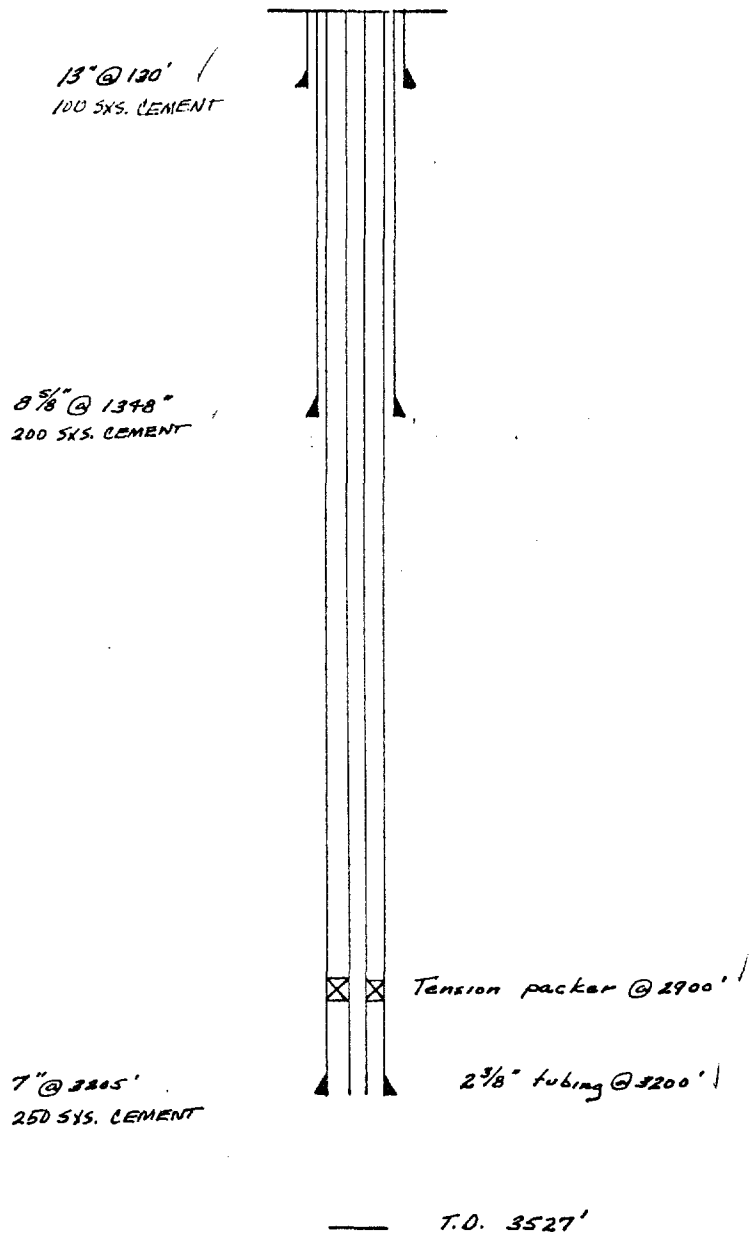
AMERADA'S L.M.W.U.

LANGLIE-MATTIX POOL

LEA CO., NEW MEXICO

LANGLE MATTHEW WOOLWORTH UNIT

TRAIL 5 WELL No. 4



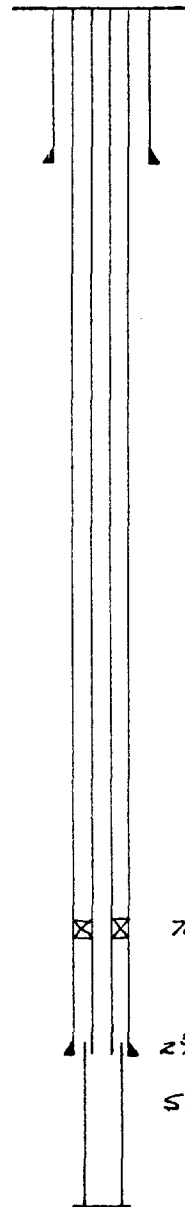
LANGHE MATTIX WOOLWORTH UNIT

TRACT 7 Well No. 3

8 $\frac{5}{8}$ " @ 311' /
125 SKS. CEMENT

5 $\frac{1}{2}$ " @ 3205' /
950 SKS. CEMENT

T.D. 3540' /



Tension Packer @ 2900' /

2 $\frac{3}{8}$ " Tubing @ 3200' /

Slotted liner 4" from 3116' to /
3540'

LANGLE MATTIX WOOLWORTH UNIT

TRACT 11 WELL No. 1

✓
10³/₄" @ 311'
CEMENTED N/250 SKS.

5¹/₂" Liner from surface to 658"

7" @ 3335'
400 SKS. CEMENT

✓
Tension Packer @ 3000' /

2³/₈" Tubing @ 3300' /

T.D. 3649'

LANGRIS MATTIX WOOLWORTH UNIT

TRACT 11 Well No. 8

9 5/8" @ 280'
170 SLS. CEMENT

Tension Packer @ 2900'

7" @ 3255'
400 SLS. CEMENT

2 3/8" Tubing @ 3200'

Slotted 5 1/2" Liner from 3293'
to 3565'

T.D. 3716'

LANGLE MATTHEW WOOLWORTH UNIT

TRACT 12 WELL No. 2

9 5/8" @ 419' /
250 SXS. CEMENT

Tension Packer @ 2900' /

7" @ 3202' /
550 SXS. CEMENT

2 3/8" Tubing @ 3200' /

Slotted 5 1/2" Liner from 3189' /
to 3505' /

T.D. 3505'

LANGLEY MATTHEW WOOLWORTH UNIT

TRACT 12 Well No. 5

9 5/8" @ 415' ✓
250 SKS CEMENT

Tension Packer @ 2900' /

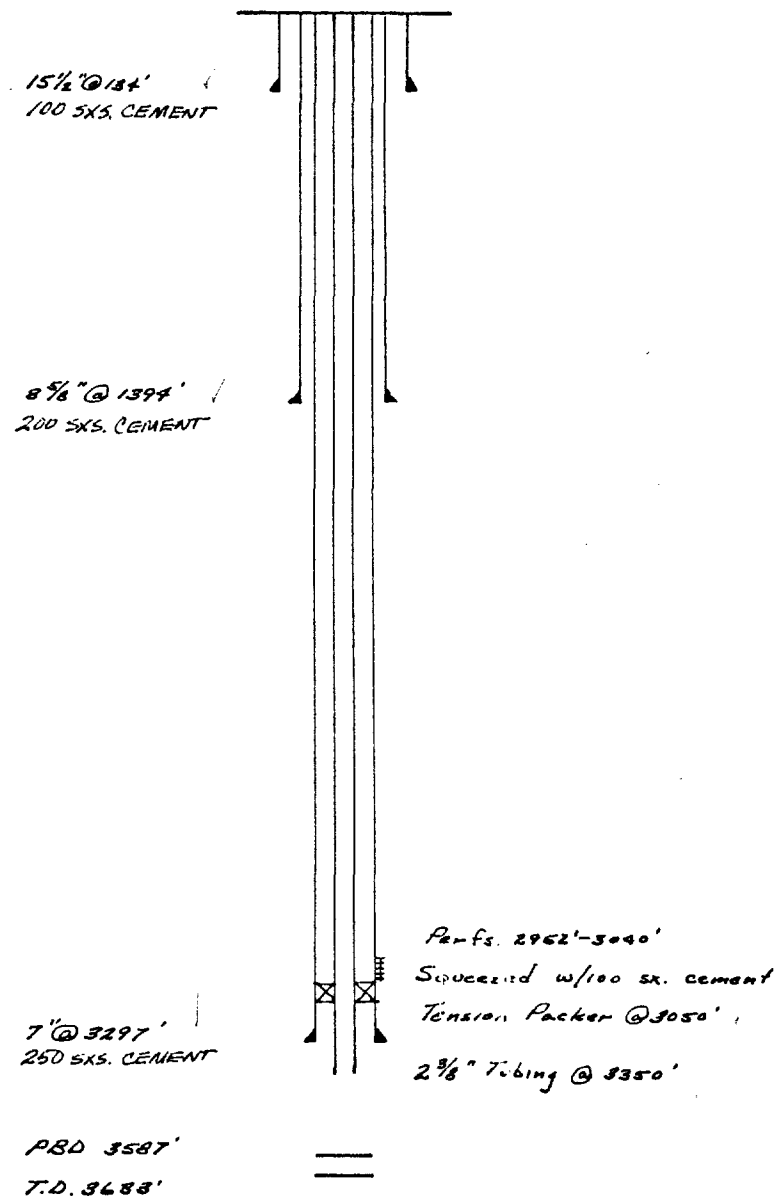
7" @ 3202'
250 SKS CEMENT

2 3/8" Tubing @ 3200' /
Slotted 5" Liner from 3182'
to 3526' /

T.O. @ 3526' /

LANGLE MATTHEW WOOLWORTH UNIT

TRACT 14 Well No. 2



NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-1116
Revised 1-1-65

Operator Amerada Petroleum Corporation		Pool Langlie Mattix		County Lea									
Address P.O. Box 668 - Hobbs, New Mexico		TYPE OF TEST - (X)		Completion ☐ Scheduled ☐		Special ☒							
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.
		U	S	T						R	WATER BBLs.	GRAV. OIL	
L.M.W.U. Tract 5	2	E	27	24S	37E	12-2-65 8-5-66	P P	4 35	24 24	33 0	6.20 20.70	8.074 8.284	1302 400
L.M.W.U. Tract 6	3	K	27	24S	37E	3-17-65 4-8-66	P P	7 30	24 24	Tr. 5.18	6.83 15.52	27.080 10.479	3964 675
L.M.W.U. Tract 11	6	A	33	24S	37E	4-7-66 11-16-66	P P	12 16	24 24	.67 1.95	5.99 17.58	50.317 25.747	8400 1465
L.M.W.U. Tract 12	6	C	34	24S	37E	4-6-65 8-5-66	P P	3 50	24 24	Tr. 7.02	2.09 36.85	11.136 6.522	5328 177
L.M.W.U. Tract 2	2	N	28	24S	37E	7-2-63 2-8-66	P P	8 80	24 24	Tr. 171.00	9.50 28.39	7.000 TSTM	737 TSTM
L.M.W.U. Tract 3	6	O	28	24S	37E	11-18-64 7-13-66	P P	7 75	24 24	2.95 14.53	6.88 40.02	7.860 TSTM	1142 TSTM

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

(Signature)

District Engineer

(Title)

August 17, 1966

(Date)

1. 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. 84

(continued)

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

August 24, 1966

Amerada Petroleum Corporation
P. O. Box 668
Hobbs, New Mexico

Attention: Mr. John H. Swendig

Gentlemen:

Additional information is requested regarding your application to convert seven wells in the Langlie Mattix Woolworth Unit, Lea County, New Mexico. What type tension packer can be run through a 5 1/2 inch liner and set in 7-inch casing as indicated on plat for Tract 11 Well No. 1.

Very truly yours,

J. E. KAPTEINA
Engineer

JEK/og

Hyman Packer

C
O
P
Y

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

August 14, 1950

Amesbury Petroleum Corporation

P. O. Box 588

Hobbs, New Mexico

Attention: Mr. John H. Gandy

Gentlemen:

Additional information is requested regarding your application to convert seven wells in the Landis Field, Woolworth Unit, Lea County, New Mexico. What type casing can be run through a 2 1/2 inch liner and set in 7-inch casing as indicated on plot for Tract 13 Well No. 1.

Very truly yours,

J. E. KATZMAN
Engineer

JEK/ed



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

September 14, 1966

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, NEW MEXICO 87501

SEP 16 4 18 05

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Amerada Petroleum Corporation which seeks to convert 7 wells to injection service in their Langlie Mattix Woolworth Unit in Sections 27, 28, 33 and 34 in Township 24 South, Range 37 East by administrative approval in the expansion of this unit.

After reviewing the application and the exhibits attached, it appears that no threat of contamination to the waters which exist in the area will occur, provided the squeeze job on the perforations in Well #2, Tract 14, which is described as being located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 34, is pressure-tested to 200 psi in excess of the anticipated water injection pressure. On the plat showing the well locations, it appears to me that your well in Tract 14 is probably in the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ instead of the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$.

In view of the above, this office offers no objection to the granting of the application.

FEI/ma
cc-Amerada Petro. Corp.
F. H. Hennighausen

Yours truly,

S. E. Reynolds
State Engineer

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Div.

LANE WELLS

Radioactivity Log

| | |
|--|----------------|
| COMPANY: HUBLE OIL & REFINING COMPANY | Well Location |
| WELL: JOHN WILLIAMS NO. 5 | |
| FIELD: LAMBLE MATTHE | |
| LOCATION: 660' FRL & 1320' FRL OF SEC. | |
| COUNTY: LEA | STATE: N. MEX. |
| LOG ZERO: 7" BRADEN HEAD + 12' | ELEV. 3287 |
| DRAG ZERO: 7" BRADEN HEAD + 12' | ELEV. 3287 |
| PERM. DATUM: 7" BRADEN HEAD | ELEV. 3195 |

| TYPE OF LOG | GAMMA RAY | N/NEUTRON |
|-------------------------------|---------------|---------------|
| RUN NO. | ONE-ON | ONE-ON |
| DATE | 5-11-59 | 5-11-59 |
| TOTAL DEPTH (HILLER) (STRAIN) | 3526 | 3526 |
| EFFECTIVE DEPTH (HILLER) | 3492 | 3492 |
| TOP OF LOGGED INTERVAL | SURFACE | SURFACE |
| BOTTOM OF LOGGED INTERVAL | 3473 | 3485 |
| TYPE OF LOG IN HOLE | OIL | OIL |
| FLUID LEVEL | | 3415' |
| MAXIMUM RECORDED TEMP | | 81.8A3 |
| SCALING STRENGTH & TYPE | | 13.5 |
| SOURCE SPACING - IN. | | |
| DETECTOR CLASS. | SCINT. | SCINT. |
| DETECTOR TYPE | DL01 | DL01 |
| LENGTH OF MEAS. DEVICE - IN. | 1 5/8 | 1 5/8 |
| O.D. OF INSTRUMENT - IN. | 2 1/8-2 3/4 | 2 1/8-2 3/4 |
| TIME CONSTANT - SECONDS | 20-60 | 20-60 |
| LOGGING SPEED FT./MIN. | RECORDED | RECORDED |
| STATISTICAL VARIATION - IN. | 0.933 | 0.968 |
| SENSITIVITY REFERENCE | SCINTILLATION | SCINTILLATION |
| RECORDED BY | WHITE | WHITE |
| WITNESSED BY | | |

| WELL RECORD | | | |
|-------------|----------|----------------|-----------------|
| RUN | BIT SIZE | CASING WT.-LB. | FROM LOG |
| ONE | 8 1/4 | 1 | SURFACE TO 261 |
| TWO | 8 1/4 | 2 1/2 | SURFACE TO 3282 |
| THREE | 8 1/4 | 5 | 3182 TO 3492 |
| | | | 3473 TO 3486 |
| | | | TO |
| | | | TO |

REMARKS OR OTHER DATA

Reproduced By
West Texas Electrical Log Service

Dallas 2, Texas

REFERENCE A8814B

8

COMPLETION RECORD

SPUD DATE