

# **ENVIROMENTAL SITE ASSESSMENT WORKPLAN**

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410


State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

IN DIVISION  
SUBMIT 2 COPIES TO  
APPROPRIATE DISTRICT  
OFFICE IN ACCORDANCE  
WITH RULE 116 PRINTED  
ON BACK SIDE OF FORM

## NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

OPERATOR AMOCO E&P SECTOR					ADDRESS P.O. BOX 1000 DENVER CITY, TX 79323		TELEPHONE 806/397-8
REPORT OF	FIRE	BREAK	SPILL	LEAK X	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTRY	PIPE LINE	GASO PLNT	OIL RFY	OTHER* INJECTION LINE
FACILITY NAME: SOUTH HOBBS UNIT INJECTION WELL #33							
LOCATION OF FACILITY Qtr/Qty Sec. or Footage 2310' FNL X 1650' FEL					SEC. 4	TWP. 19-S	RGE. 38-E
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK							
DATE AND HOUR OF OCCURRENCE UNKNOWN				DATE AND HOUR OF DISCOVERY 10/5./94 12:30 PM			
WAS IMMEDIATE NOTICE GIVEN?		YES X	NO	NOT RE- QUIRED	IF YES, TO WHOM WAYNE PRICE, NMOC		
BY WHOM JOHN HAMMERLE				DATE AND HOUR 10/5/94			
TYPE OF FLUID LOST INJECTION FLUID				QUANTITY OF LOSS EST. 420 BBLs		VOLUME RE- COVERED 20 BBLs	
DID ANY FLUIDS REACH A WATERCOURSE?		YES X	NO	QUANTITY EST. 142 BBLs			
IF YES, DESCRIBE FULLY** EST. OF 142 BBLs OF INJECTION FLUID THAT IS A PART OF THE TOTAL AVERAGE INJECTION DAILY VOLUME OF 135,000 BBLs THAT CONSIST OF 127,000 BBLs OF PRODUCED WATER PLUS 8,000 BBLs OF CITY EFFLUENT. POSSIBLE TRACE OF OIL. A VISIBLE RAINBOW/SHEEN WAS PRESENT ON THE WATER.							
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** EXTERNAL CORROSION TO 3" STEEL LINE. SHUT-IN INJECTION SOURCE AND PICKUP FREE FLUIDS.							
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** IN THE CITY OF HOBBS' STORMWATER DRAINAGE DITCH, AN AREA OF 228 ACRES EST. WILL BE REMOVE AND REMEDIATED TO NMOC STANDARDS. AFTER RECEIVING SAMPLE ANALYSIS 9/11/94. THE DIRT FROM THE INJECTION LINE ON STATE LAND AND AMOCO'S LAND WILL BE REMOVED TO THE EXTENT THAT MEETS NMOC STANDARDS.							
DESCRIPTION OF AREA	FARMING	GRAZING	URBAN X	OTHER*			
SURFACE CONDITIONS	SANDY X	SANDY LOAM	CLAY	ROCKY X	WET	DRY X	SNOW
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** PARTLY CLOUDY. TEMP. 85, WIND 15 MPH FROM THE SOUTH, AND NO PRECIPITATION IN LAST 24 HOURS							
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF							
SIGNED: 				PRINTED NAME: G. A. ULRICH AND TITLE: MANAGER, ENVIRONMENTAL			

RECEIVED

OCT 14 1994

OCT 14 1994

# Facsimile Cover Sheet

To: Mr. Wayne Price  
Company: New Mexico Oil Conservation Division  
Fax: 505/393-0720

From: G. A. Ulrich  
Company: Amoco Production Company  
Phone: 713/368-4510  
Fax: 713/368-7589

Date: October 14, 1994

Pages including this cover  
page: 14

cc: 3 letters  
your book!!

**OCTOBER 5, 1994 SPILL  
SOUTH HOBBS UNIT INJECTION WELL #33  
HOBBS, NEW MEXICO**

Attached for your information is a copy of a Notification of Fire, Breaks, Spills, Leaks, and Blowouts and related documents regarding the Hobbs spill on October 5, 1994. This will be followed up by letter where two copies of these documents will be submitted.

If you need additional information, please call Linda Oates at 713/368-4510.

*G. A. Ulrich*

Attachments

cc: J. Adams, WT/ENM Communications Center  
J. Hembree, Hobbs OC  
C. Wagner, Wasson OC

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**OCT 14 1994**

**OCU HOBBS  
OFFICE**



**Amoco**  
Exploration and Production Sector  
Permian Basin Business Unit  
501 Westlake Park Boulevard  
Post Office Box 3092  
Houston, Texas 77253-3092

G. A. Ulrich  
Manager, Environmental Affairs and Safety

October 14, 1994

Mr. Wayne Price  
State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

**OCTOBER 5, 1994 SPILL  
SOUTH HOBBS UNIT INJECTION WELL #33  
HOBBS, NEW MEXICO  
GAU-94179-988.SR20-LO**

Attached for your information are two copies of a Notification of Fire, Breaks, Spills, Leaks, and Blowouts and related documents regarding the Hobbs spill on October 5, 1994.

If you need additional information, please call Linda Oates at 713/366-4510.

*G. A. Ulrich*

G. A. Ulrich

LO/lo  
Attachments

cc: J. Adams, WT/ENM Communications Center  
J. Hembree, Hobbs OC  
C. Wagner, Wasson OC

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**OCT 14 1994**

**OCU nypoo  
OFFICE**

PHONE (505) 382-8187

FAX (505) 382-8788



October 10, 1994

AMOCO Production Company  
Hobbs Operations Center  
P.O. Box 1000  
Denver City, Texas 79323

Attn: Mr. Glen Hubbard  
Field Technician

Re: Injection Line Leak at Well # 33

Dear Mr. Hubbard:

There were two areas of concern in the Injection Line Leak at Well # 33. The first area was in the bottom of the drainage ditch to the east. This area was approximately 228 feet long with an average width of 7 feet and an average depth of 10". This yielded approximately 48 cubic yards of contaminated soil removed. There was 100 feet of contamination north of the city sewer line that was dug out by hand and 128 feet on the south side that was dug out with a backhoe. This accounted for approximately 58 cubic yards. This was loaded on dump trucks and moved to Amoco's bio-area just west of the central battery.

The second area of concern was the leak site itself. The hole was excavated to allow for working room to fix the leak. Extra excavation was done to allow for proper slope for safety in the confined space. This material along with the surface soil from the spill was loaded on dump trucks and hauled to Amoco's bio-area. There was approximately 240 cubic yards. The surface area was 80 feet by 50 feet which would yield approximately 4000 square feet.

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OCU HUBBS  
OFFICE

10/11/94  
Final

There was a core hole drilled to a depth of 26 feet. This hole was approximately 4 feet south of the city sewer line and 27 feet south of the fence and 27 feet west of the ditch. A soil sample was taken at 26 feet and tested for Total Petroleum Hydrocarbon (TPH) and Chlorides (Cl). The TPH was +01 ppm and the Cl was 2000 ppm.

The leak site was left open and flagged off for line repair.

If you have any questions, please feel free to call anytime.

Sincerely,

ENVIRONMENTAL SPILL CONTROL, INC.



Allen Hodge, R.E.M.  
Field Superintendent

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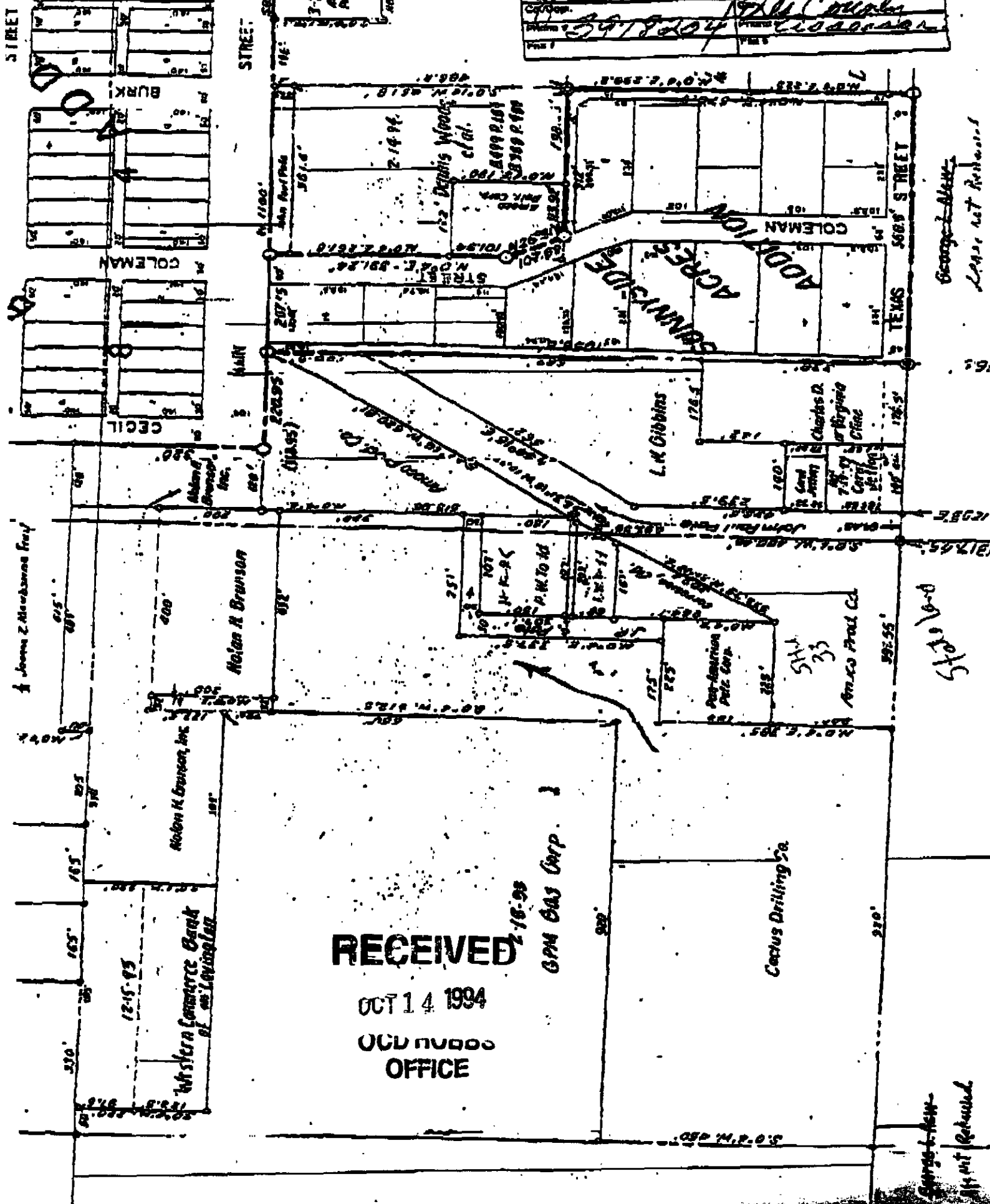
OCT 14 1994

OCU NODOL  
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10/11/94  
Find

OCT 14 1994 12:32PM APC 19TH FILE RM

John Henderson		P. 6/14	
3978204		P. 6/14	



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OFFICE

GPM GAS Corp. 1

Cactus Drilling Co.

George L. Allen  
Lester not returned

0-10-0  
475

George L. Allen  
not returned

Amoco Production Company

ENGINEERING CHART

FILE

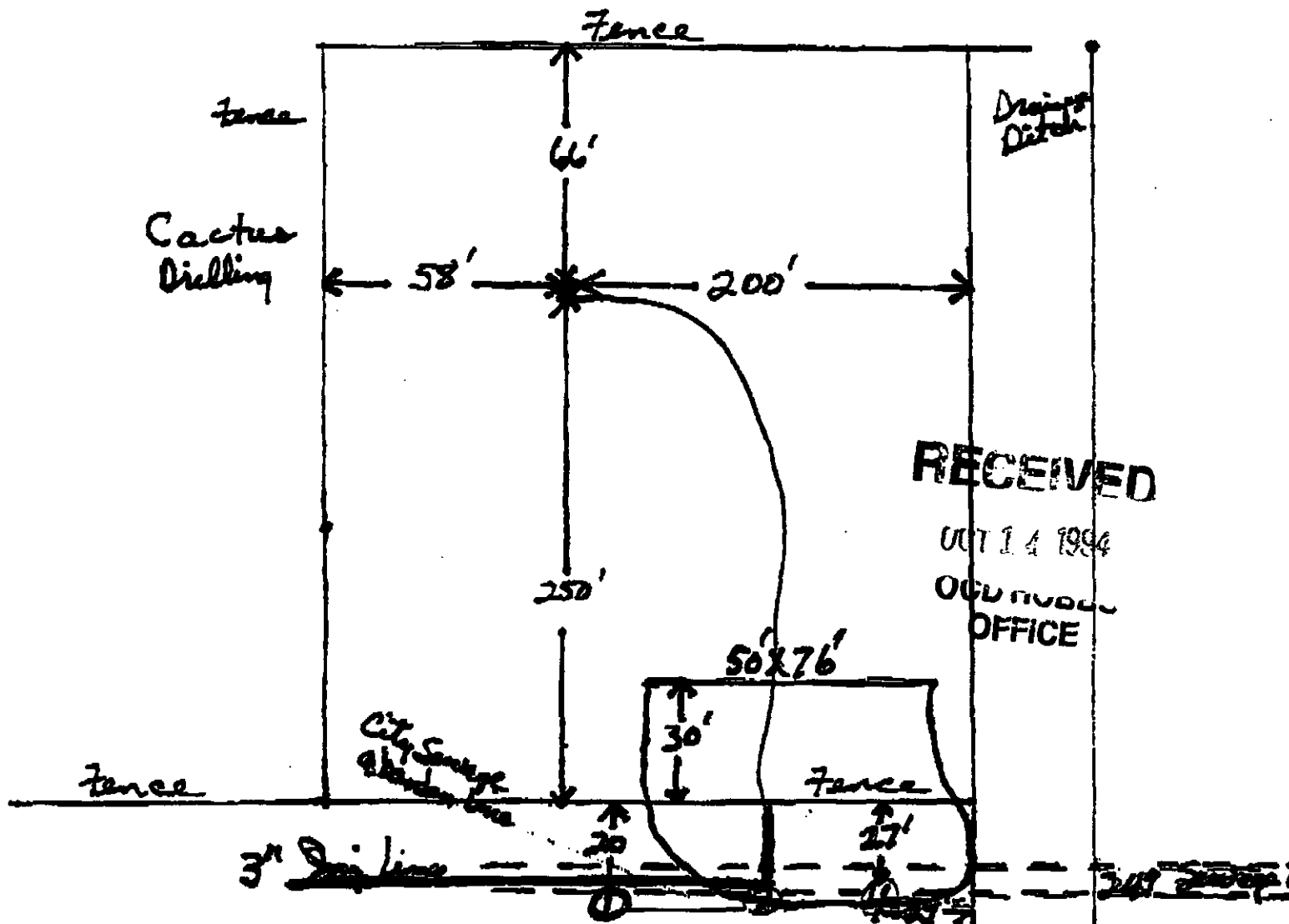
LOG

DATE 10-7-94

BY JMA

SUBJECT

SHU-33 Dry Well



Simplex Take

- #1 - 20' S of fence 10' West of Dig line
- #2 - 20' S of fence at head
- #3 - 42' S of fence + 48' West of ditch
- #4 - 26' Bore hole - 27' South of fence + 27' West of ditch

10/11/94  
Final



# Chain of Custody Record

Project I.D. Sm #33

Project Location Wash

Sampled By Jun. Adams

Client Name Amoco

Address St. John's

**Telephone**

# Environmental Analytical Services

# ARDINAL LABORATORIES

**8 S. Commercial Ave.**

**Armington, NM 87401**

**5-325-4669**

**X 505-326-4535**

**101 E. Marland.**

**Hobbs, NM 88240**

**505-399-2328**

**FAX 506-393-2476**

Time

DATE

**क्या**

**Sample Location**

Zorro

#1 South of Dig Line (5' dia) 3/6 + 1/2000

21st July 1971

#3 at 2; line 90'

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OCT 14 1984  
 OGD 100000  
 OFFICE

# 1990

**Conducting in professional practice**

# श्री

5761 10 11 345  
Kens Fowler

# Impressions

**Temporary:**  $\hat{\alpha}_i$  partitioned out

**STANDARD NOTE:** (Solvency and Guarantees. Cardholder's liability and offset's availability for any claim relating, whether based in tort, contract or otherwise, to the account paid by offset for the analyses. A claimant, including those for negligence and any other cause whatsoever in all claims, covered unless made or the writing and retained by medical within thirty (30) days after completion of the analysis shall be the basis for the claim.)



# **CARDINAL LABORATORIES**

PHONE (714) 813-7001 • 2111 BEECHWOOD • ARLING, TX 76010

PHONE (505) 383-2325 • 101 E. MARLAND • HOHEN, NE 68340

PHONE (800) 328-4588 • 110 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

## **FIELD ANALYSIS REPORT**

Company: Amoco Production Co.  
Address: P.O. Box 67  
City, State: Hobbs, NM  
Project Name: SWR #13  
Location: Hobbs  
Sampled by: JN  
Analyzed by: KP  
Sample Type: Soil

Date: 10/10/94  
Lab #: W1822

Date: 10/06/94 Time: 1200  
Date: 10/10/94 Time: 1300  
Sample Conditions: Cool, Intact

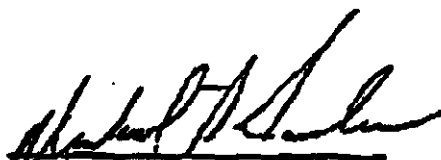
Units: mg/kg

SAMPLE NO.	FIELD CODE	CHLORIDES (ppm)
1	#1 S. of Inj Line 15'	880
2	#2 W. of Inj Line 10'	800
3	#3 at Inj Line	1,120

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OLD HOBBS  
OFFICE

  
Michael R. Fowler

10/10/94  
Date

10/11/94 *For*

PLEASE NOTE: Liability and Coverage. Cardinal's liability and coverage is limited to the analysis of samples submitted in accordance with the terms of the contract. All claims, including those for negligence and any other claims whatsoever, shall be deemed to have been waived by the client upon execution of the contract. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruption, loss of data, or loss of profits, even if such claims or damages arise out of or result from the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above-stated grounds or otherwise.



PHONE (512) 873-7201 • 2111 WILLOWOOD • ARLING, TX 79002

PHONE (505) 213-2328 • 101 E. WILLOW • HOBBBS, NM 87407

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED DATE 11-18-2010 BY 60322 UCBAW/STP

**FINAL ANALYSIS REPORT**

Date: 10/10/94  
Lab #3: 21822

Date: 10/06/94 Time: 1200  
Date: 10/10/94 Time: 0945  
Sample Condition: Cool, Intact

**DATE: 02/10/2017**

Samp #	Field Code	THP%	HEXANE	TOLUENE	BENZYL BENZENE	MAA- TOLUENE	MAA- TOLUENE	MAA- TOLUENE	MAA- TOLUENE
1	#1 S. of Inj Line 15'	589.3	0.160	0.038	0.133	0.117	0.041	0.021	0.021
2	#2 W. of Inj Line 10'	236.2	0.079	0.028	0.049	0.056	0.009	0.005	0.005
3	#3 at Inj Line	128.8	0.056	0.016	0.195	0.235	0.028	0.028	0.028

Q5 Recovery	405.9	0.975	0.853	0.940	0.925	0.910	0.97
Q6 Salts	427.7	0.881	0.865	0.869	0.866	0.860	0.86
Q7 Recovery	105.48	10.70	96.14	100.99	105.57	105.88	110
Q8 Salts	---	20.001	40.001	40.001	40.001	40.001	40.001

**OLD MODEL  
OFFICE**

Michael A. Lach  
Michael A. Lach

10/10/94

## Disc

10/11/94 Found

**PLEASE NOTE:** Liability and Damages. Company shall not be liable for any claim arising, whether based in contract or tort, against the Company or any agent or employee of the Company, including under the provisions of any workers compensation act, for any injury sustained or damages caused by or arising out of or from the use of the Company's products, in so far as such liability is limited by applicable law. The Company shall not be liable for any claim arising out of or from the use of the Company's products, in so far as such liability is limited by applicable law. The Company shall not be liable for any claim arising out of or from the use of the Company's products, in so far as such liability is limited by applicable law.

Amoco Production Company

ENGINEERING CHART

SUBJECT

SHU 33 Inj. Well

Drainage Ditch

SHEET NO. 1 of 1

FILE 10/11/94

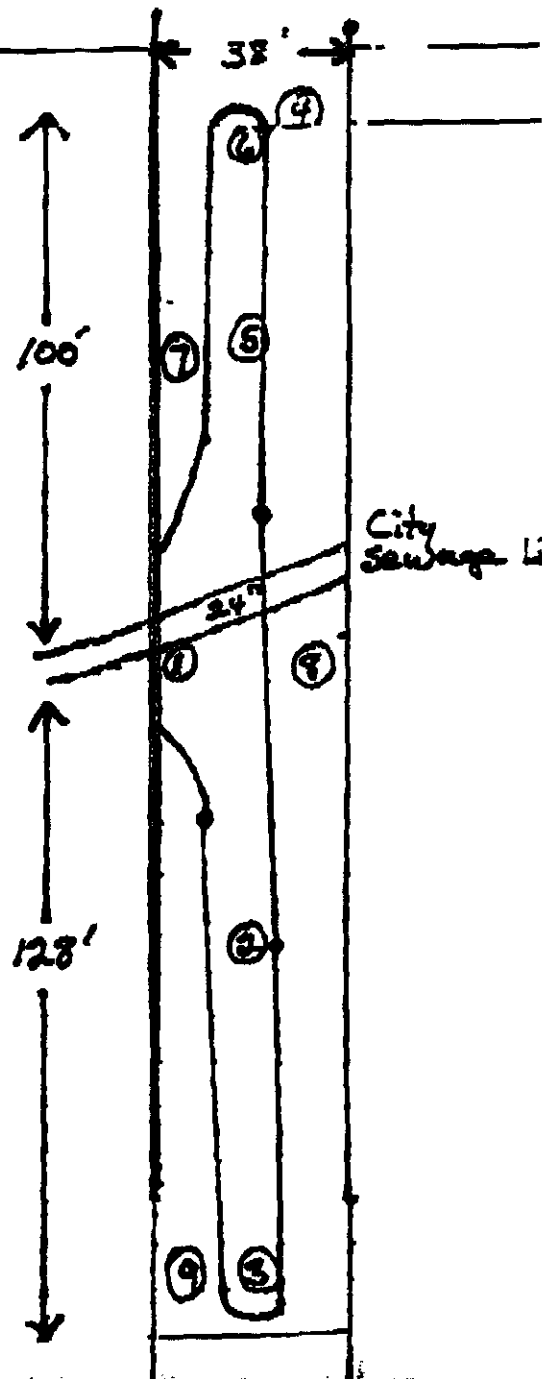
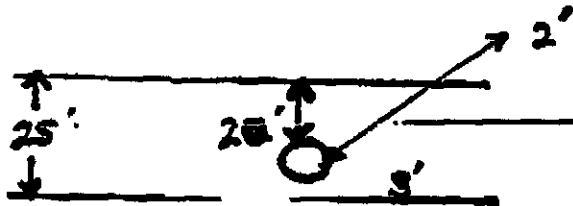
DATE 10-7-94

BY JMT

N  
W + E  
S

Side View

Top View



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OLD MOBILE  
OFFICE

City  
Sewage Li

① Spill area ② Sample holes

L x W x D

228' x 7' x 6"

Spill area

1  
2  
3  
5  
6

③ Sample holes Background

4, 7, 8, 9



# **CARDINAL LABORATORIES**

PHONE (512) 673-7001 • 2111 BEECHWOOD • ARLI FLD, TX 78003

SUITE 200 250-2125 • 101 E. MARLAND • DALLAS, TX 75246

PHONE (505) 520-4600 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

## **FINAL ANALYSIS REPORT**

Company: Amoco Production Co.  
Address: P.O. Box 67  
City, State: Hobbs, NM

Date: 10/10/94  
Lab #: H1821-12

Project Name: SW #33  
Location: Hobbs  
Sampled by: JA  
Analyzed by: KP  
Sample type: Water

Date: 10/06/94 Time: 5-7pm  
Date: 10/10/94 Time: 0745  
Sample Condition: Cool, Intact

Units: mg/g

Sample	Field Code	THFEC	BENZENE	TOLUENE	BENZENE	XYLENE	XYLENE	OTHER
12	Water sample	15.1	0.070	0.062	0.128	0.190	<0.001	0.021

GC Recovery  
CO Spikes  
Recovery  
21.5% alk

40.57	0.975	0.833	0.946	0.923	0.910	0.971
39.57	0.981	0.865	0.969	0.866	0.860	0.88
97.5%	110.7%	96.3%	102.5%	106.6%	105.8%	112.1%
<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00

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OCU NOBLL  
OFFICE

10/11/94  
Final

Methods - GAS CHROMATOGRAPHY, INFRARED SPECTROSCOPY  
- EPA SW-846, 8060, 118.1, 1631-1632

*Michael R. Fowler*  
Michael R. Fowler

10/12/94  
Date



# ARDINAL

PHONE (915) 673-7001 • 2111 BEECHWOOD • ARLENE, TX 79402

PHONE (505) 503-0326 • 101 E. MARLAND • MOORE, NM 88240

PHONE 224-7444 FAX 1125 COMMERCIAL AVE. • FARMINGTON, NM 87401

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.

Company: Amoco Production Co.  
Address: P.O. Box 67  
City, State: Hobbs, NM

Date: 10/10/94  
Lab #: 81821

|               |         |
|---------------|---------|
| Project Name: | AMU #33 |
| Location:     | Robbs   |
| Sampled by:   | JA      |
| Analyzed by:  | JP      |
| Sample Type:  | Soil    |

Date: 10/05/94 Time: 5-7 PM  
Date: 10/10/94 Time: 0745  
Sample Condition: Cool, Intact

**Date: 20/1**

| Camp # | Field Code               | TRASH  | REBAR | TOLUENE | SEMI-REBAR | PAGE-XYLENE | SEMI-XYLENE | OTHER |
|--------|--------------------------|--------|-------|---------|------------|-------------|-------------|-------|
| 1      | #1 Hole Entrance 1' Deep | 272.5  | 0.093 | 0.035   | 0.079      | 0.093       | 0.010       |       |
| 2      | #1 Hole Entrance 2' Deep | 25.6   | 0.008 | 0.001   | 0.014      | 0.012       | 0.012       |       |
| 3      | #1 Hole Middle 1' Deep   | 340.0  | 0.100 | 0.027   | 0.028      | 0.010       | 0.012       |       |
| 4      | #2 Hole Middle 1' Deep   | 30.4   | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |
| 5      | #2 Hole Mid 3" Deep      | 340.9  | 0.010 | 0.040   | 0.182      | 0.204       | 0.001       |       |
| 6      | #4 Hole Mid 1' Deep      | 1143.2 | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |
| 7      | #5 Hole Middle 1' Deep   | 34.2   | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |
| 8      | #6 Hole Mid 1' Deep      | 34.9   | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |
| 9      | #7 Hole Mid 1' Deep      | 2029.7 | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |
| 10     | #8 Hole Mid 1' Deep      | 2700.6 | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |
| 11     | #9 Hole Mid 4' Deep      | 1579.2 | 0.001 | 0.001   | 0.001      | 0.001       | 0.001       |       |

|             |        |         |        |        |        |        |         |
|-------------|--------|---------|--------|--------|--------|--------|---------|
| CG Recovery | 417.7  | 0.078   | 0.023  | 0.044  | 0.023  | 0.010  | 0.0     |
| CG Spike    | 405.9  | 0.081   | 0.045  | 0.049  | 0.046  | 0.060  | 0.0     |
| Recovery    | 108.44 | 1.0E-04 | 0.000  | 108.94 | 108.64 | 108.84 | 1.1E-04 |
| Air Blank   | ***    | <0.001  | <0.001 | <0.001 | <0.001 | <0.001 | 0.0     |

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OCT 14 1994

ALL INFORMATION CONTAINED  
HEREIN IS UNCLASSIFIED  
DATE 08-22-2011 BY 60322  
OFFICE

10/11/94  
Final

Methods - GAS CHROMATOGRAPHY; INFRARED SPECTROSCOPY  
- N/A 59-546; 5920, 415.1, 3640 OR 3510

Michael P. Fowler  
Michael P. Fowler

**DATE**

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# Environmental Analytical Services

## ARDINAL LABORATORIES

13 S. Commercial Ave. 101 E. Ma. land.  
 armington, NM 87401 Hobbs, NM 88240  
 505-326-4669 NO 505-393-2328 ✓  
 AX 505-326-4535 FAX 505-393-2476

## Chain of Custody Record

Project I.D. SHU # 33  
 Project Location Hobbs  
 Sampled By Jerry Adams  
 Client Name Amoco  
 Address SHU office  
 Telephone John H. Hensley

| Number | Date | Time | Composite | Sub | Sample Location                             | Number of Containers | Analysis Required | Remarks          |
|--------|------|------|-----------|-----|---|----------------------|-------------------|------------------|
| #1     |      |      |           |     | Spill area South of Sample Line (Reference) | 1                    | 1" deep           | for John Hensley |
| #2     |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #3     |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #4     |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #5     |      |      |           |     | " " " "                                     | 1                    | 3" deep           |                  |
| #6     |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #7     |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #8     |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #9     |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #10    |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #11    |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #12    |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #13    |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #14    |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #15    |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #16    |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #17    |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #18    |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |
| #19    |      |      |           |     | " " " "                                     | 1                    | 2" deep           |                  |
| #20    |      |      |           |     | " " " "                                     | 1                    | 1" deep           |                  |

FIELD USE: (Signature) \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by: (Signature) \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_

FIELD USE: (Signature) \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by: (Signature) \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_



# **CARDINAL LABORATORIES**

PHONE (615) 673-7001 • 2111 BRECKWOOD • AMI FMB, TX 78603

PHONE (615) 363-2222 • 101 E. MARLAND • MURFREESBORO, TN 38554

PHONE (609) 580-4600 • 115 E. COMMERCIAL AVE. • FARMINGTON, NM 87401

## **FINAL ANALYSIS REPORT**

Company: James Production Co.  
Address: P.O. Box 67  
City, State: Hobbs, NM

Date: 10/10/94  
Lab #: H1221-12

Project Name: SHV #33  
Location: Hobbs  
Sample ID: 2A  
Analyst By: JF  
Sample Type: Water

Date: 10/05/94 Time: 5-7pm  
Date: 10/10/94 Time: 6:45am  
Sample Condition: Cool, Intact

Units: mg/L

| Comp | Field Code   | THFHC | BENZENE | TOLUENE | XYLENE | XYLENE | XYLENE | XYLENE |
|------|--------------|-------|---------|---------|--------|--------|--------|--------|
| 12   | Water sample | 18.1  | 0.070   | 0.062   | 0.128  | 0.190  | <0.001 | 0.021  |

On Recovery  
No Spikes  
Accuracy  
At Blank

|        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|
| 40.59  | 0.975  | 0.833  | 0.946  | 0.923  | 0.910  | 0.978  |
| 39.57  | 0.881  | 0.845  | 0.869  | 0.866  | 0.860  | 0.888  |
| 97.5%  | 110.7% | 96.3%  | 108.9% | 108.6% | 108.8% | 112.0% |
| <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

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OFFICE

10/11/94  
Final

Methods - GAS CHROMATOGRAPHY, INFRARED SPECTROSCOPY  
- EPA SW-846, 8010, 118.1, 1240-1510

*Michael R. Fowler*  
Michael R. Fowler

10/12/94  
Date



PHONE 255-7744 • 1125 COMMERCIAL AVE. • FARMINGTON, NM 87401

**Exhibits** 100/100

DATE \_\_\_\_\_[illegible]



State of New Mexico  
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT  
Santa Fe, New Mexico 87505

STATE OF  
NEW MEXICO  
OIL  
CONSERVATION  
DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone

☐ Personal

Time 1610

Date 10/5/95

Originating Party

Other Parties

Jerry Adams - Amoco  
397-8245

Bill Olson - Envir. Bureau

Subject

Amoco injection line spill

Discussion

Spill (estimated 700 bbls) of produced water  
Ran down city drainage area west of Hobbs approx 200 feet  
Currently recovering fluid at far end  
Working with Wayne Price

I Recommend determining extent (vertical) of contamination

Conclusions or Agreements

Amoco will disk area and take samples for BTEX, TPH  
at source, 100', 200' with depth  
Will submit subsequent notice to OCD (original to Hobbs copy to S.F.)

Distribution

Signed

Bill Olson