

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: RAY WESTALL  
Address: P.O. Box 4 Loco Hills, NM 88255  
Contact party: RANDALL HARRIS Phone: (505) 677-2370
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: RANDALL HARRIS Title: GEOLOGIST

Signature: [Signature] Date: 9/6/58

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

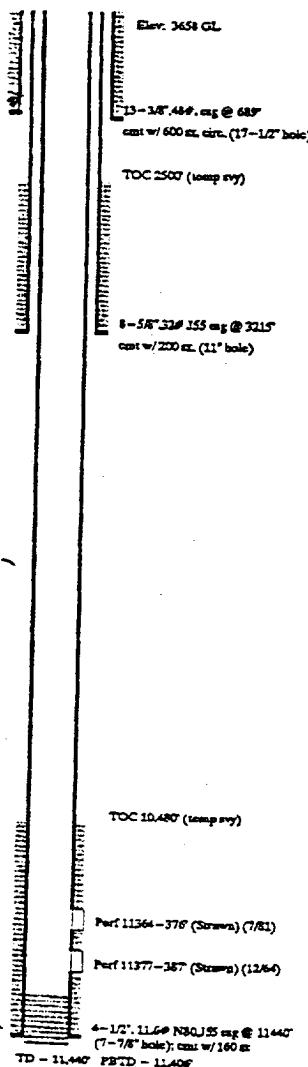
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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

# INJECTION WELL DATA SHEET

RAY WESTALL OPERATOR      FEDERAL SB NO. 1  
1980 FNL & 660' FWL SECTION 5, TOWNSHIP 19 SOUTH, RANGE 32 EAST

## SCHEMATIC



## TABULAR DATA

### Surface Casing

Size 13 3/8" Cemented with 600 sxs  
TOC Circulated Hole size 17 1/2"  
Set at 600

### Intermediate

Size 8 5/8" Cemented with 200 sxs  
TOC 2500' (temp svy) Hole size 11"  
Set at 3215

### Long String

Size 4 1/2" Cemented with 160 sxs  
TOC 10,480 (temp svy)  
Total Depth 11,440'

Injection Interval 11364-11387' Perforated

Tubing size 2 3/8" lined with plastic set in a BAKER LOC-SET packer at 11,300'

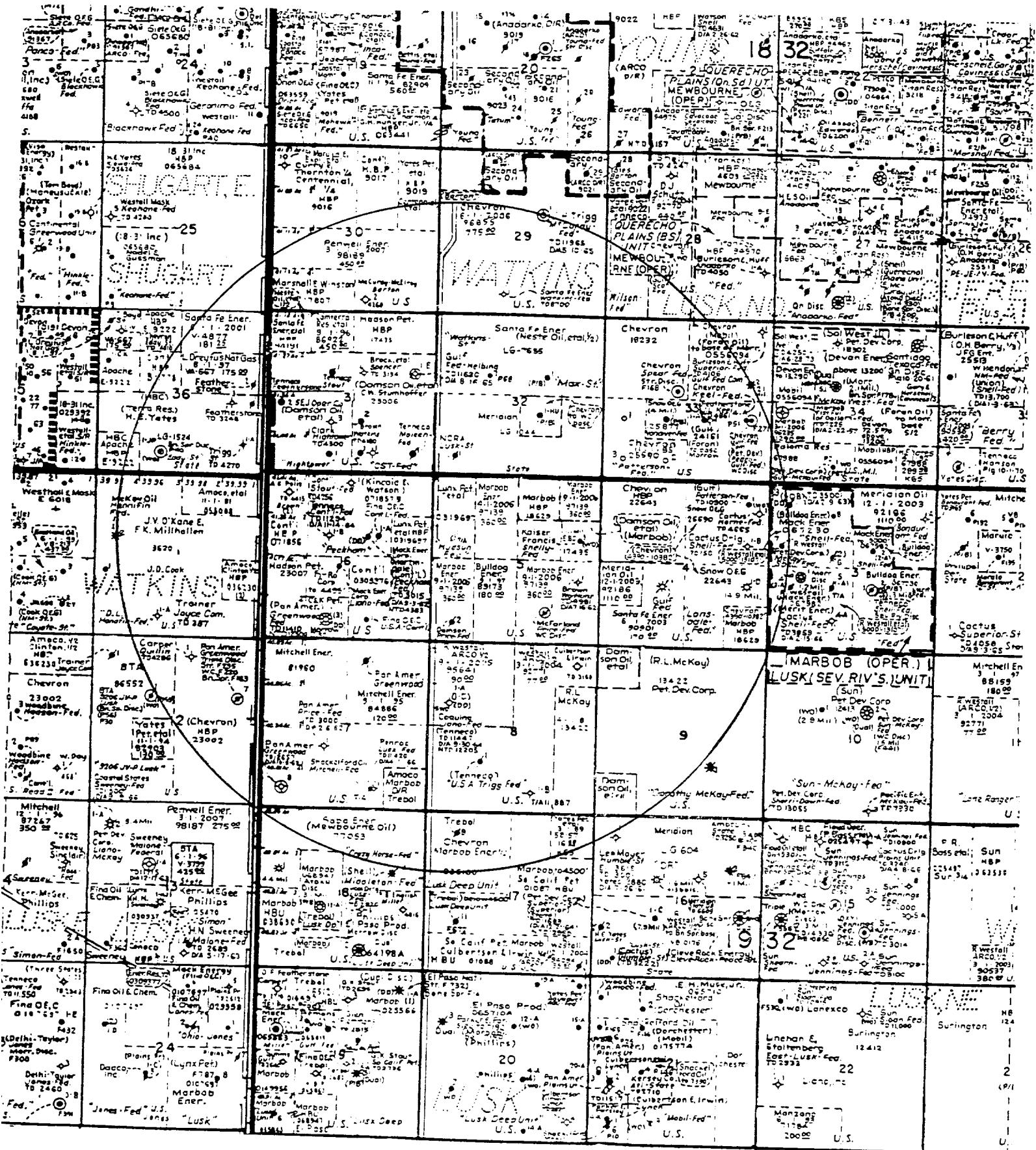
### Other Data

1. Name of the injection formation: STRAWN
2. Name of Pool: LUSK STRAWN
3. Original purpose of well: OIL & GAS PRODUCTION
4. Well is currently perforated 11364-11387.
5. Lusk Yates-Seven Rivers pools are overlying in this area at approximately 3000-4000'

**ATTACHMENT V**

Maps that identifies all wells of public record within two miles of each proposed injection well, and the area of review one-half mile radius around each proposed injection well.

30	96875 775.00	29	McCurdy Fed. TD11965 DMS 10-65	QUERECHO PLAINS (BS) 28	TITANICS JN/T chev HBP 94970
Penwell Ener. 3 98189 450.00				MEWBOUT, NO Burleson, Huff Anadarko - LA RNE (OPER))	168.
Marshall E. Winston McCurdy-Halligan Neste HBP Barton Disc. 17807	Watkins Fed U.S.		Santa Fe Ener Watkins-Fed TD8700 U.S.	Wilson Fed	"Fed."
Santa Fe Res. et al 9 1-96 HBP 86922 450.00	17433			LUSK, NO	
Brock, et al Spencer 1E TC 3194			Santa Fe Ener (Neste Oil, et al, y <sub>2</sub> ) St" LG-7655	Chevron 18232	Chevron (Mobil) (Foran Oil) to base of marr. 0556094
Tenneco Reefer Eng. Stout	(Domson Oil, et al) C.H. Stumhofer 23006		Gulf Fed.-Helbing TD11620 DM 8 16-65 P68 (P/B) "Max-St."		Chevron Spear fed Str. Disc. 1 F168
2 S.E.J Oper Co. (Domson Oil, et al) 3	2		32		Chevron Keel-Fed. -
Brown Clark Hightower TD4300	Tenneco Moileen-Fed	Meridian	I-HU (P/B) to WC base LG 1044	33	Snow O.G. (4 M.I.) 4.4 PSI
"Hightower" U.S. CST-Fed	NCRA Lusk-St			01	125877 Gulf nonverified 24161 Chevron 11-1-85 3 0 26690 02 "Patterson-Fed." U.S.
A.E Polis 1Stout-Fed TD 4415 TD4256 Tenneco Cont.-Fed TD11294 Centi 10/11-24-04 HBP 071856	(Kincaid E. Watson) 071857 9 Fina DEC Conti-Fed TD/11-24-04 HBP 071856	Lunx Pet. etal 0319697	MARB Ener 9-1-2006 97139 360.00	MARB Ener 9-1-2006 HBP 97139 360.00	Chevron HBP 22643
Hudson Pet. 23007 Fi-Ro Corp to 4495 Mock Ener Corp. STEK Pet. (Pan Amer.) Greenwood (3) Fed TD11410 Morrow NTD12204	1 Cont. (apple) 0303276 Feckham FED 10-3615 Lland-Fed TD/9-3-82 NTD4382 U.S.A. Conti	Marbob Ener 9-1-2006 97139 360.00	Kaiser Francis JES Shelly-Fed TD 10-10-82	Marbob Ener 9-1-2006 97139 360.00	Chevron HBP 22643
Mitchell Ener. 81960 Disc. H	1 Pan Amer. Greenwood Mitchell Ener. 9-1-95 84886 120.00	Marbob Bulldog Ener 9-1-2006 97139 360.00	Marbob Ener. 9-1-2006 97139 360.00	Marbob Ener 9-1-2006 97139 360.00	Chevron HBP 22643
Pan Amer. Price-Fed TD 3000 TD 26627	Penroc Lusk Fed TD 11420 Shackford Oil Disc. 11-66 Mitchell-Fed	52 Damson Price-Fed	5 McFarland Price-Fed WC Disc	Merid- ian Oil 12-1-2003 92186 1110.00	41 Snow O.G. 22643 14 9 Mil.
Pan Amer. Greenwood TD 11420 Disc. 11-66 Amoco Marbob DVR Trebol	1 R. Westall ARCO Y2 9-1-2005 95641 90.00 1-A O.C) SWD (DD) Coquing Liono-Fed (Tenneco) TD 11447 D/A 9-30-64 NTD 12205	Westall ARCO Y2 9-1-2004 92771 77.00	Westall Culbertson ARCO Y2 9-1-2004 92771 77.00	R.L. McKay	Santa Fe Ener 6 1-2003 90901 170.00 U.S.
	(Tenneco) "U.S.A. Trigs Fed"	8	8	Dom- son Oil, et al	Lons. odle- Fed. Chevron 4350-10382 Marbob HBP 18629
					Dorothy McKay Fed. U.S.
Sabco Ener (Mewbourne Oil) 77053	Trebol 9 Chevron Marbob Ener	1088 Per 3 1 89 158157 111629 L K65	1 Lea Moyer Humble St. EI 36.9 TD 300 Yates 2880 D/A 7-26-61	Meridion LG 604 DR	Amoco - State TD3250 0-0 F34C Flowd 0675 Sun Bona Sur Shear
"Crazy Horse-Fed." 4 mil Marbob U.S. 941 Atoku Middleton-Fed Disc. 18/11/95	036100	Marbob, to 4500' So Calif Pet 01087 HBU			
Lusk Deep Unit					



**ATTACHMENT VI**

Data on all wells of public record within the area of review. There are Three plugged wells that penetrated the proposed injection zone within the area of review.

Well name	Location	Spud date	Sur. Casing	Int. Casing	Prod. Casing	Completion
Damson Oil Lusk State #1	SWSW Sec 32 T18S-R32E	04/22/65	13 3/8" @ 638 510 sxs Circ.	8 5/8" @ 3211 900 sxs Circ.	5 1/2" @ 11,600 270sxs T/9600 est	11396-11476 Lusk Strawn. Oil-- <b>P&amp;A</b>
Damson Oil Price 5 Fed #1	SWSW Sec 5 T19S-R32E	09/05/64	11 3/4" @ 850 650 sxs Circ.	8 5/8" @ 3650 300 sxs Circ.	4 1/2" @ 11,347 5505 sxs T/	11295-11323 Lusk Strawn OIL-- <b>P&amp;A</b>
Fina Oil USA Continental #5	SWNE Sec 6 T22S-R28E	07/28/64	13 3/8" @ 650 320 sxs Circ.	8 5/8" @ 3599	5 1/2" @ 11,471 1385 sxs Circ	11143-11163 Lusk Strawn Oil-- <b>P&amp;A</b>

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410P.O. Box 2088  
Sar, New Mexico 87504-20885. Lease Type of Lease  
STATE  FEE 6. State Oil & Gas Lease No.  
L610447. Lease Name or Unit Agreement Name  
Lusk StateSUNDY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	8. Well No. 1
2. Name of Operator Damson Oil Corporation	9. Pool name or Wildcat Lusk Strawn
3. Address of Operator 3300 N "A", Building 8, Suite 100, Midland, Texas 79705	
4. Well Location Unit Letter M : 660 Feet From The South Line and 660 Feet From The West Line	
Section 32 Township 18S Range 32E NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3692' DF	

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

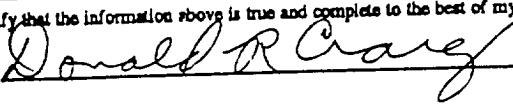
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: _____		OTHER: _____	<input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

WITNESSED BY: RAY SMITH &amp; JACK GRIFFIN OF N.M.O.C.D.

1. RIH with 5 1/2" CIBP to 9610', stopped by obstruction.
2. POH with CIBP.
3. RIH open ended with 2 3/8" tubing to 11,315'.
4. Spotted 50 sks. cement w/lost circ. material at 11,315', WOC, plug not there
5. Spotted 45 sks. cement w/lost circ. material at 11,315', WOC, tagged cement at 11,065'.
6. Loaded hole with brine and saltwater gel.
7. Cut and pull 4150' 5 1/2" casing.
8. RIH with tubing and spot 25.sks. cement at 6947'.
9. POH to 4200' and spot 45 sks. cement from 4200'-4080', WOC, tagged plug at 2604'.
10. Drilled out plug at 2604'.
11. RIH and spotted 45 sks. plug from 4190'-4090', WOC, plug not there.
12. Spotted 3rd-45 sks. plug from 4190-4090' WOC, tag at 4152', pump 10 sacks.
13. Spotted 45 sks. plug at 32- WOC, plug not there.
14. Spot 25 sks., WOC, tagged plug at 3178'.
15. Spot 25 sks. at 1000', WOC tagged at 887'.
16. Spot plug at 748', WOC, tagged at 547'.
17. Spot 50 sks. surface plug. P & A COMPLETE 4/26/90.

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

SIGNATURE 

TITLE District Engineer

DATE May 10, 1990

TELEPHONE NO.

TYPE OR PRINT NAME

(This space for State Use)

APPROVED BY 

CONDITIONS OF APPROVAL, IF ANY:

TITLE OIL & GAS INSPECTOR DATE 

NO. OF COPIES RECEIVED
DISTRIBUTION
SANTA FE
FILE
U.S.G.S.
LAND OFFICE
OPERATOR

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

O-7914

1. TYPE OF WELL

2. TYPE OF COMPLETION

NEW

WORK

RECOMPLETION

3. Name of Operator

United States Smelting Refining and Mining Company

4. Address of operator

Post Office Box 1877, Midland, Texas 79701

5. Location of Well

UNIT LETTER M located at 560 South

609

LINE West 32 Twp. 16-S Sec. 32-E

Lea

6. Date of initial completion

4-22-65 5-21-65 6-3-65

3692 DE

3678

7. Total Depth

11,600' 11,552'

0-11,600

24. Completing Interval(s) of this completion

Strawn Reef (Pennsylvania). Top - 11,390, bottom - 11,357

no

5. Type Electric and other Logging

Sonic Log - Gamma Ray: Continuous Dipmeter

no

25. Casing Report (Report all strings set or set)

CASING SIZE	WEIGHT LBS. FT.	DEPTH SET	OD IN.	INNER OD	AMOUNT SPACED
13 3/8"	48	638	17 1/2"	510 sacks	none
8 5/8"	32	3211	11"	900 sacks	None
5 1/2"	17 & 20	11600	7 7/8"	270 sacks	None

26. Tubing Report

SIZE	TOP	ENDS	OD IN.	AMOUNT SPACED
			7 3/8"	11,366 11,350

27. Cementing Information, see also section 28

1 hole each: 11,396, 11,399, 11,414, 11,424

11,436. P/11,470-11,476 with 6 holes

All 1 1/2" Dia. Holes.

11,396-11,476

Cemented with 5000 gals regular acid, low tension.

28.

Completion date

6-5-65

Flowing

Producing

Time "A" 6-5-65

6-5 to 6-6

16/64

326

754.2

none

2247:1

Time "B" 6-5-65

990

Pkr.

326

754.91

none

47 deg.

29. Temperature at the surface and bottom

Contract made to Phillips Petroleum Company  
for land lease.

Phillips Country

30. I hereby certify that the information contained in this report is true and correct.

SIGNED

Manager of Production

June 17, 1965

NAMSON OIL  
LUSK STATE #1  
660 FSL 660 FWL  
SECTION 32  
T 185 - R 32 E

50 SXS  
@ surface

TAG PLUG C  
547  
25 SXS  
TAG @ 687

13 1/8 C 638

TAG PLUG C 3178  
25 SXS  
45SX CMT PLUG  
4200-4080  
CUT & PULLED  
5 1/2" C 4150

8 1/8 C 3211

← 25 SXS PLUG CMT  
TOP 6947

TAGGED  
PLUG 11,065  
90 SXS

PERFS 11,396 - 11,476

5 1/2" C 11,600

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLE  
(Other Instruct  
verse side)

AMERICAN AUGUST 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

LC-071856-C (SW230)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	7. UNIT AGREEMENT BASIS
2. NAME OF OPERATOR Damson Oil Corporation	8. FARM OR LEASE NAME Price 5 Federal
3. ADDRESS OF OPERATOR 3300 N. "A", Building 8, Suite 100, Midland, Texas 79705	9. WELL NO. 2
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  660' FSL and FWL SW/SW M-5 <i>Unit M</i>	10. FIELD AND POOL, OR WILDCAT Lusk Strawn
14. PERMIT NO. API NO. 30-025-00889	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 5, T19S, R32E Unit
15. ELEVATIONS (Show whether DE, RT, GR, etc.) 3647' GL	12. COUNTY OR PARISH Lea
13. STATE N.M.	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF  
FRACTURE TREAT  
SHOOT OR ACIDIZE  
REPAIR WELL  
(Other)

PULL OR ALTER CASING  
MULTIPLE COMPLETE  
ABANDON\*  
CHANGE PLANS

WATER SHUT-OFF  
FRACTURE TREATMENT  
SHOOTING OR ACIDIZING  
(Other)

SUBSEQUENT REPORT OF:

REPAIRING WELL  
ALTERING CASING  
ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log Form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

1. RIH with 4 1/2" CIBP to 11,215 ft.
2. Load hole and pump 12 sacks cement on top of CIBP.
3. Cut and pull 3,000 ft. 4 1/2" casing, load hole.
4. Spot 15 sack plug at 3650'.
5. Spot 37 sack plug at 3050', WOC, tagged at 2883'.
6. Cut and pulled 948' of 8 5/8" casing.
7. RIH with tubing to 987' and pump 85 sack plug, WOC, tagged at 984'.
8. Pumped 120 sack plug at 978'.
9. Pumped 90 sack plug from 65' to surface.
10. Weld on dry hole marker.

WITNESSED BY: BILL McMANUS, OF B.L.M.  
P & A Complete 3/28/90

MAY 18 11 05 AM '90  
CAMP  
CAMP  
AREA  
RECEIVED  
RECEIVED

18. I hereby certify that the foregoing is true and correct

SIGNED *Donald R Craig*  
(This space for Federal or State office use)

TITLE District Engineer

DATE May 14, 1990

APPROVED BY: *Donald R Craig*  
CONDITIONS OF APPROVAL, IF ANY:

TITLE PETROLEUM ENGINEER

DATE 6-18-90

NOTWITHSTANDING THE FOREGOING, THE BLM IS NOT LIABLE  
Liability under bond is retained until  
surface restoration is completed.

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICAT

## WELL COMPLETION OR RECOMPLETION REPORT AND

1a. TYPE OF WELL:	OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	OTHER <input type="checkbox"/>			
1b. TYPE OF COMPLETION:	NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEPEN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DRILL OVER <input type="checkbox"/>	OTHER <input type="checkbox"/>
2. NAME OF OPERATOR	McFarland Corporation					

## 3. ADDRESS OF OPERATOR

3612 West Wall, Midland, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State or Federal Law)

At surface 660° FS &amp; ML of Sec. 5 - 19 - 32

At top prod. interval reported below

P E C

U. S. GEOLOGICAL SURVEY  
ROBBS, NEW MEXICO

At total depth

14. PERMIT NO. DATE ISSUED

Sec. 5,  
12. COUNTY OR PARISH  
LeeNew  
CABLE TOWER

15. DATE SPUNDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATION (OF. B.M., FT. O.G. ETC.)	19. ELEV. CASING
9-5-64	10-11-64	10-16-64	3647 C.L.	3657 D.F.
20. TOTAL DEPTH, MD & TVD	21. PLUG BACK T.D., MD & TVD	22. IF MULTIPLE COMPL. HOW MANY	23. INTERNALS ROTARY TOOLS DRILLED BY	24. CABLE TOWER
11,437	PBTD 11,355'			Yes

21. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)

Strawn 11,295' - 11,323'

25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN

No

Schlumberger E&amp;I-Induction, GR- sonic, &amp; MLL

CASING RECORD (Report all strings set in well)					AMOUNT PULLED
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	PIPE SIZE	CEMENTING RECORD	
11 3/4"	424	850	15"	650 sacks	None
8 5/8"	24 & 324	3650	11"	300 sacks	None
4 1/2"	11.64 & 13.54	11,347	7 7/8"	550 sacks	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30	TUBING RECORD	PACKER SET (MD)
					SIZE	DEPTH SET (MD)	
None					2 3/8"	11,263	11,260

31. PERFORATION RECORD (Interval, size and number)

11,295' - 11,323'

2 CJPP  
1/2" holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
11,295' - 11,323'	2500 gallons 15# NW

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
10-16-64	Flowing				Producing	
DATE OF TEST	HOURS TESTED	CHOLEN TEST	STOKE VOL TEST PERIOD	OIL + GAS	WATER VOL	GAS IN RATIO
10-16-64	8	15/64	—	115	189.8	-
TESTING TIME	TESTING PRESSURE	CALCULATED	TEST PERIOD	OIL + GAS	WATER VOL	TEST GRAVITY-API GRADE
1900	-0-	Packer	24 HOUR RATE	346	570.9	-0- 43 degrees API
TEST WITNESSED BY						

Will be sold to Phillips Petroleum Co.

Richard L. Subinser

EN-Induction log.

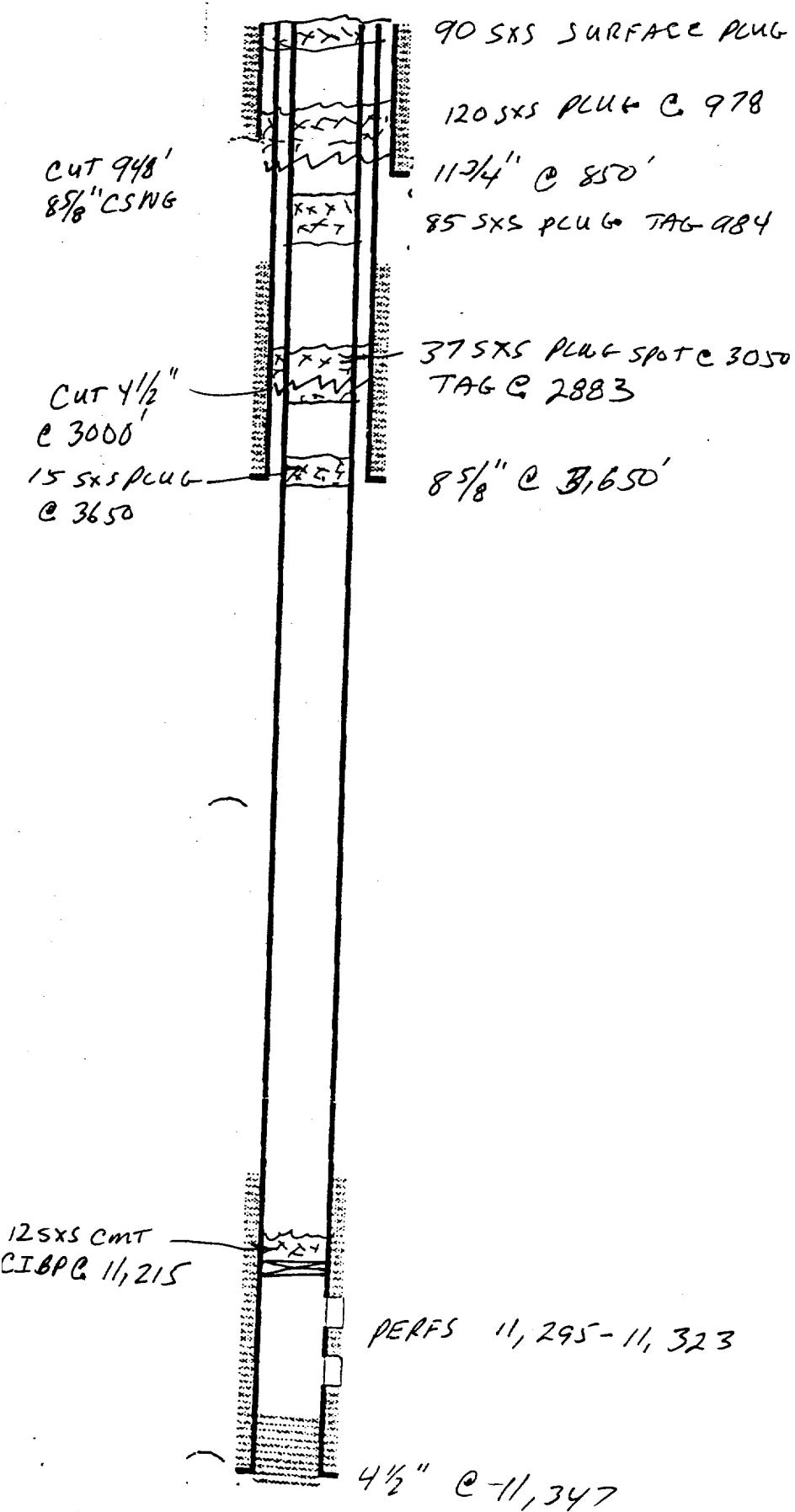
I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

Richard L. Subinser TITLE Vice President

DATE 10-19-64

(See Instructions and Spaces for Additional Data on Reverse Side)

VAMSON OIL  
FIG 5 FEDERAL  
660 FSL & 660 FWL  
SECTION 5  
T 195 - R 32 E



(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

FINA OIL & CHEMICAL COMPANY

3. ADDRESS OF OPERATOR

Post Office Box 2990, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

Unit Letter G, 1980' FNL and 1650' FEL,  
Section 6, Township 19<sup>o</sup>, Range 32E, NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DP, RT, GR, etc.)

3675'  
3676' RKB

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING  
MULTIPLE COMPLETE  
ABANDON\*  
CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF  
FRACTURE TREATMENT  
SHOOTING OR ACIDIZING.  
(Other)

REPAIRING WELL  
ALTERING CASING  
ABANDONMENT\*

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. MIRU PU. NU BOP.
2. PU workstring & TIH w/3.75" casing swage, 6-3 1/2" drill collars, bumper sub and hydraulic jars.
3. Work swage through collapsed casing @ 6993'; TOH w/workstring.
4. Change out casing swage, using 1/4" larger swage each trip, up to a maximum of 4.75". TIH w/same bottom hole assembly each trip and work through collapsed section.
5. TIH w/5 1/2" cement retainer on workstring. Set retainer @ 11,050'. Squeeze perfs (11,114'-11,554') w/100 sx Cl H cement.
6. Sting out of retainer. Circulate 10 ppg mud. Spot 25 sx Cl H cement on top of retainer.
7. PUH to 10,200' & spot 25 sx Cl H cement (across Wolfcamp).
8. PUH to 8,500' & spot 25 sx Cl H cement (across Bone Springs).
9. PUH to 3,650' & spot 25 sx Cl H cement (across Grayburg).
10. PUH to 2,900' & spot 25 sx Cl H cement (across 7 Rivers/Queen).
11. PUH & spot 5 sx Cl H cement from 50' to surface.
12. LD workstring. Weld on plate.
13. RD and MDL.
14. Restore location.

REC'D  
10-18-89  
10-18-89  
10-18-89  
10-18-89

RECEIVED

\* NOTIFY BLM --

PERF. - - -

18. I hereby certify that the foregoing is true and correct

SIGNED Ronald E. Smalley  
Ronald E. Smalley

(This space for Federal or State office use)

Orig. Signed by Adam Salameh

TITLE Division Mgr-Drlg & Production DATE Sep 08 1989

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

PETROLEUM ENGINEER

TITLE \_\_\_\_\_

DATE 10-11-89

\*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION DIVISION  
JUN 2 1989

Date Approved

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

SUBMIT IN PLATE  
(Other instructions on reverse side)

proved.

Bureau No. 1004-0135  
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

LC AM 071857 B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Continental A Com Bed  
Cont A Bed

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Lusk Strawn

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 6, T-19-S, R-32-E

12. COUNTY OR PARISH

Lea

13. STATE

N.M.

1. OIL  GAS  WELL  OTHER

RECEIVED  
Nov 15 4 1990

2. NAME OF OPERATOR

FINA OIL & CHEMICAL COMPANY

CAMP  
AREA

3. ADDRESS OF OPERATOR

P. O. Box 2990, Midland, TX 79702-2990

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

Unit Letter G, 1980' FNL & 1650' FEL

14. PERMIT NO.

API 30-025-20913

15. ELEVATIONS (Show whether DEP, RT, GR, etc.)

KB 3672.6, GL 3654.5

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

1) Circulated hole with 10# salt gel from 6919' to surface.

2) Pumped 20 sxs. C1 "H" plug from 6919'-6800'.

3) Pumped 100' plug between 5 1/2" & 8 5/8" casing @ 4089'-3989'.

4) Pumped 100' plug from 3300'-3200' outside and inside 5 1/2" casing.

5) Spot cement from 60' to surface, 10 sxs.

6) Remove wellhead and install marker, clean and rip location 6" deep.

7) Well P&A 1-17-90.

18. I hereby certify that the foregoing is true and correct

SIGNED Neva Herndon  
Neva Herndon  
(This space for Federal or State office use)

TITLE Senior Production Clerk

DATE 11-12-90

APPROVED BY Orig. Signed by Adam Salameh  
CONDITIONS OF APPROVAL, IF ANY:

Approved as to plugging of the well bore.

- Liability under bond is retained until  
surface restoration is completed.

TITLE PETROLEUM ENGINEER

DATE 11-27-90

\*See Instructions on Reverse Side

FINA OIL  
Co. CONTINENTAL A COM FED #1  
1980 FNL & 1650 FEC  
SECTION 6  
T 195 - R 32 E

10 SX  
SURFACE

13 3/8 @ 650

3200-3300  
100' PLUG  
INSIDE & OUTSIDE  
5 1/2" CSNG

8 5/8 @ 3599

100' PLUG 4089-3989  
INSIDE & OUTSIDE 5 1/2" CSNG

PLUG 6919-6800

PERFS 11,143-11,163

5 1/2" @ 11471

## **ATTACHMENT VII**

### PROPOSED OPERATION

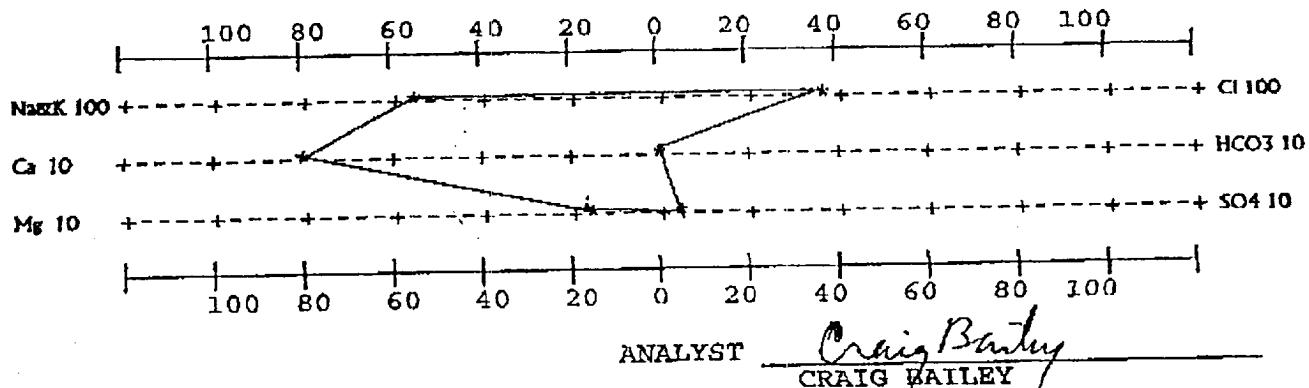
1. Plans are to inject 1000-1500 bbls of produced water per day per well.
2. The injection system is be a closed system.
3. The estimated injection pressure is 1500 psig. Maximum pressure will be 2000# psig.
4. Injection fluid will be produced water from oil and gas wells from the surrounding area.
5. A several samples of produced waters are attached.

**BJ SERVICES COMPANY****WATER ANALYSIS #FW01W052****ARTESIA LAB****GENERAL INFORMATION**

OPERATOR:	RAY WESTALL OPERATING	DEPTH:	7376-7386
WELL:	MAVERICK FEDERAL #1	DATE SAMPLED:	04/04/96
FIELD:	SUBMITTED BY: RANDY HARRIS	DATE RECEIVED:	04/04/96
WORKED BY:	CRAIG BAILEY	COUNTY:	EDDY STATE:NM
PHONE NUMBER:		FORMATION:	

**SAMPLE DESCRIPTION****PHYSICAL AND CHEMICAL DETERMINATIONS**

SPECIFIC GRAVITY:	1.165 @ 70°F	PH:	5.55
RESISTIVITY (CALCULATED):	0.025 ohms @ 75°F		
IRON (FE++) :	65 ppm	SULFATE:	1,030 ppm
CALCIUM:	16,153 ppm	TOTAL HARDNESS	48,956 ppm
MAGNESIUM:	2,086 ppm	BICARBONATE:	178 ppm
CHLORIDE:	130,443 ppm	SODIUM CHLORIDE(Calc)	214,578 ppm
SODIUM+POTASS:	84,610 ppm	TOT. DISSOLVED SOLIDS:	265,217 ppm
IODINE:		POTASSIUM CHLORIDE:	

**REMARKS****STIFF TYPE PLOT (IN MEQ/L)**

**BJ SERVICES COMPANY**  
**WATER ANALYSIS #AT01W013**  
**ARTESIA LAB**

**GENERAL INFORMATION**

OPERATOR:	RAY WESTALL	DEPTH:	
WELL:	PALADIN FED. #1	DATE SAMPLED:	05/07/96
FIELD:		DATE RECEIVED:	05/07/96
SUBMITTED BY:	RANDY HARRIS	COUNTY:	EDDY
WORKED BY :	ERIC HENDERSON	STATE:	NM
PHONE NUMBER:		FORMATION:	DELEWARE

**SAMPLE DESCRIPTION**

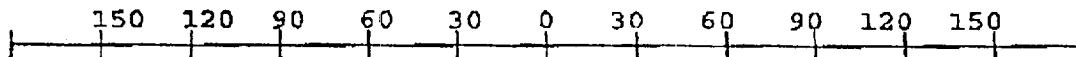
flow back sample

**PHYSICAL AND CHEMICAL DETERMINATIONS**

SPECIFIC GRAVITY:	1.165 @ 77°F	PH:	6.50
RESISTIVITY (CALCULATED):	0.015 ohms @ 75°F		
IRON (FE++) :	30 ppm	SULFATE:	343 ppm
CALCIUM:	29,901 ppm	TOTAL HARDNESS	111,655 ppm
MAGNESIUM:	8,969 ppm	BICARBONATE:	157 ppm
CHLORIDE:	240,289 ppm	SODIUM CHLORIDE(Calc)	395,276 ppm
SODIUM+POTASS:	141,462 ppm	TOT. DISSOLVED SOLIDS:	493,907 ppm
H2S: NO TRACE		POTASSIUM CHLORIDE:	450

**REMARKS**

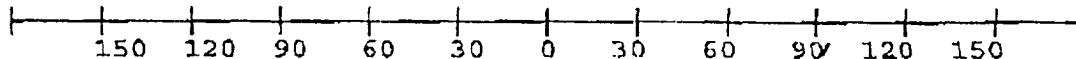
**STIFF TYPE PLOT (IN MEQ/L)**



Na+K+ 100 +---+\*---+---+---+---+---+---+\*---+---+---+---+---+---+---+ Cl- 100

Ca++ 10 +---+\*---+---+---+---+---+\*---+---+---+---+---+---+---+---+ HCO3 10

Mg++ 10 +---+---+---+---+---+\*---+---+---+\*---+---+---+---+---+---+---+ SO4 10



ANALYST

Eric Henderson  
ERIC HENDERSON

## THE WESTERN COMPANY

## WATER ANALYSIS

ANALYSIS NO.

## GENERAL INFORMATION

OPERATOR	RAY WESTALL	DATE SAMPLED	7/10/45
WELL	Amoco?	DATE RECEIVED	7/10/45
FIELD	-	SUBMITTED BY	J. L. APPS
FORMATION	-	WORKED BY	R. WILLIS
COUNTY	-	SAMPLE DESCRIPTION:	-
STATE	-		
DEPTH	-		

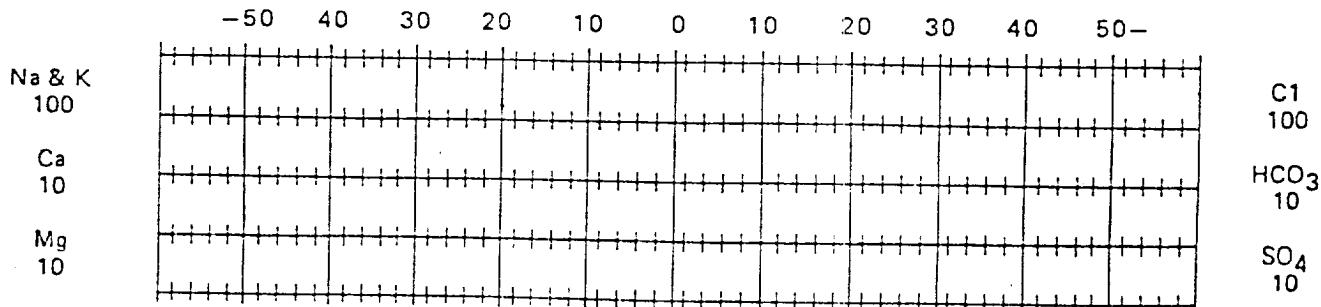
## PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY	1.025 AT 71° F	TOTAL DISSOLVED SOLIDS	PPM
PH	8.7	RESISTIVITY .25 @ 79° F	PPM
IRON	100 FERRIC TAHIE / FERROUS TAHIE	SULFATE 100-200 120 2900	PPM
HYDROGEN SULFIDE	VERY VERY STRONG	BICARBONATE 100-200 1500	PPM
HARDNESS	2.8	CHLORIDE 100-150 20000	PPM
CALCIUM	4800	SODIUM CHLORIDE 100-770 42,770	PPM
MAGNESIUM	3856 PPM	SODIUM 100-200 1000	PPM
SODIUM & POTASSIUM	6026 PPM	POTASSIUM 100-200 1000	PPM
PHOSPHATE	-	(0.0% KCl)	

## REMARKS:

723  
 240  
 241  
 220  
 50  
 560  
 832  
 3600,200

for Stiff type plot (in meq./l.)



## **ATTACHMENT VIII**

The proposed injection zone is a carbonate in the Strawn Formation. This is a reef carbonate. It has average thickness of 250 feet thick. There is possible drinking water overlying the injection in the surface sands at a depth of 0-250'. There is no known source underlying the injection interval.

**ATTACHMENT IX**

No proposed stimulation.

**ATTACHMENT XI**

There is no fresh water wells within one mile.

## **ATTACHMENT XII**

All available geologic and engineering data have been examined and there is no evidence of open faults or any other hydrologic connection between the disposal zone and any source of drinking water.

## **ATTACHMENT XIV**

### PROOF OF NOTICE

Leasehold operators within one-half mile of the well location are Marbob Energy, Burlington, Fina, Kaiser Francis and Tenneco. Each of these operators were provided a copy of our application by certified mail. Proof of notice is enclosed. The surface owner is the of United States of America, BLM.

### PROOF OF PUBLICATION

Proof of publication will be from the Hobbs News-Suns and will be forwarded.