CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: RAY WESTALL Well: TRIGG FEDERAL No. 4

Contact: RANDY HARRIS Title: GEOLOGIST Phone: 505-677-2370

DATE IN 6-12-95 RELEASE DATE 6-26-95 DATE OUT 7-18-95

Proposed Injection Application is for: __ WATERFLOOD __ Expansion __ Initial

Original Order: R- _____ __ Secondary Recovery __ Pressure Maintenance

SENSITIVE AREAS X SALT WATER DISPOSAL

__ WIPP __ Capitan Reef __ Commercial Operation

Data is complete for proposed well(s)? YES Additional Data _____

AREA of REVIEW WELLS

16 Total # of AOR 1 # of Plugged Wells

YES Tabulation Complete YES Schematics of P & A's

YES Cement Tops Adequate NO AOR Repair Required

INJECTION INFORMATION

Injection Formation(s) QUEEN (2ND SAND)

Source of Water AREA PRODUCTION Compatible YES

PROOF OF NOTICE

YES Copy of Legal Notice YES Information Printed Correctly

YES Correct Operators YES Copies of Certified Mail Receipts

NO Objection Received N/A Set to Hearing _____ Date

NOTES: _____

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact: __ Telephoned __ Letter _____ Date Nature of Discussion _____

2nd Contact: __ Telephoned __ Letter _____ Date Nature of Discussion _____

3rd Contact: __ Telephoned __ Letter _____ Date Nature of Discussion _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108 6-26-95
Revised 7-1-81

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: 6/7/95

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

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.

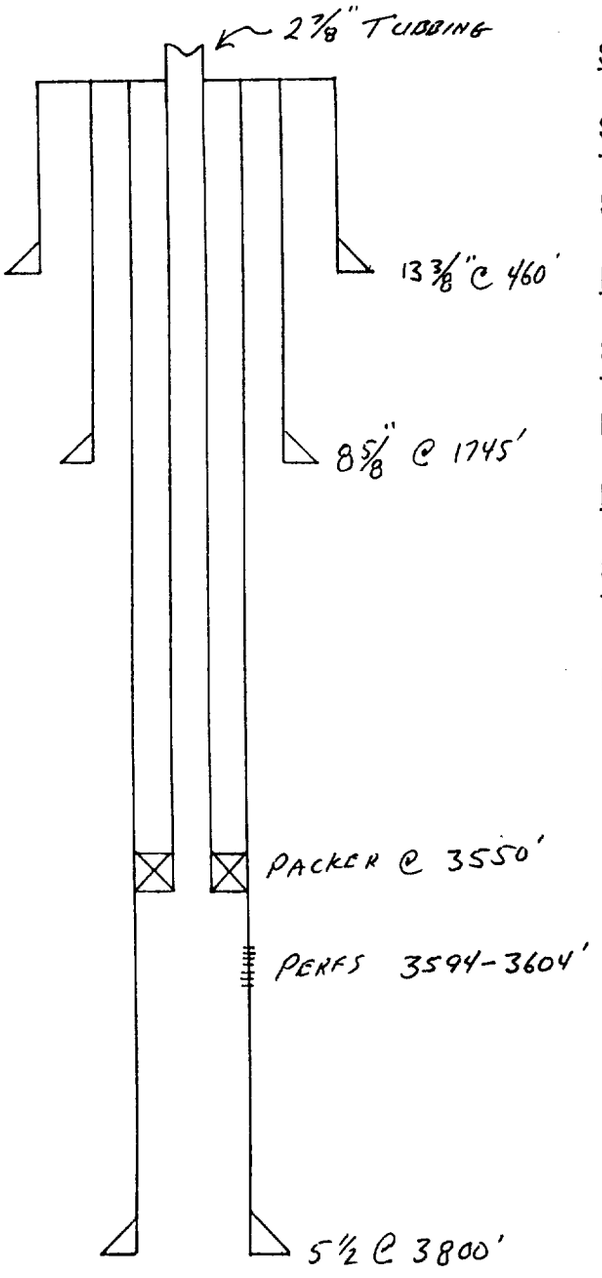
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

RAY WESTALL OPERATOR TRIGG FEDERAL WELL NO. 4

1210 ' FNL & 2600' FWL SECTION 35, TOWNSHIP-18-SOUTH, RANGE-30-EAST

Schematic



Tabular data

Surface Casing

Size 13 3/8" Cemented with 435 sxs
TOC Circulated Hole size 17 1/2"
Set at 460'

Intermediate Casing

Size 8 5/8" Cemented with 800 sxs
TOC Circulated.
Hole size 12 1/4"" Set at 1745'

Long string

Size 5 1/2" Cemented with 700 sxs
TOC Circulated. Total depth 3800'

Injection Interval 3594-3604 perforated

Tubing size 2 7/8" lined with plastic set in a BAKER LOC-SET packer at 3550'

Other Data

1. Name of the injection formation: QUEEN
2. Name of Pool: SHUGART-SEVEN RIVERS-QUEEN-GRAYBURG
3. Origional purpose of well: OIL & GAS PRODUCTION
4. Well has not been perforated in any other zone
5. There is no additional pools above or below in this area.

Dresser Atlas

DRESSER

COMPENSATED NEUTRON GAMMA RAY

FILE NO.

API NO.

FIELD PRINT

COMPANY RAY WESTALL

WELL TRIGG FEDERAL NO. 4

FIELD SHUGART

COUNTY EDDY STATE NEW MEXICO

LOCATION:
1210' FSL & 2600' FWL

SEC 35 TWP 18-S RGE 30 E

OTHER SERVICES
4" JUMBO JET

PERMANENT DATUM GROUND LEVEL ELEV. 3463'

LOGGING MEASURED FROM K.B. 10 FT. ABOVE P.D.

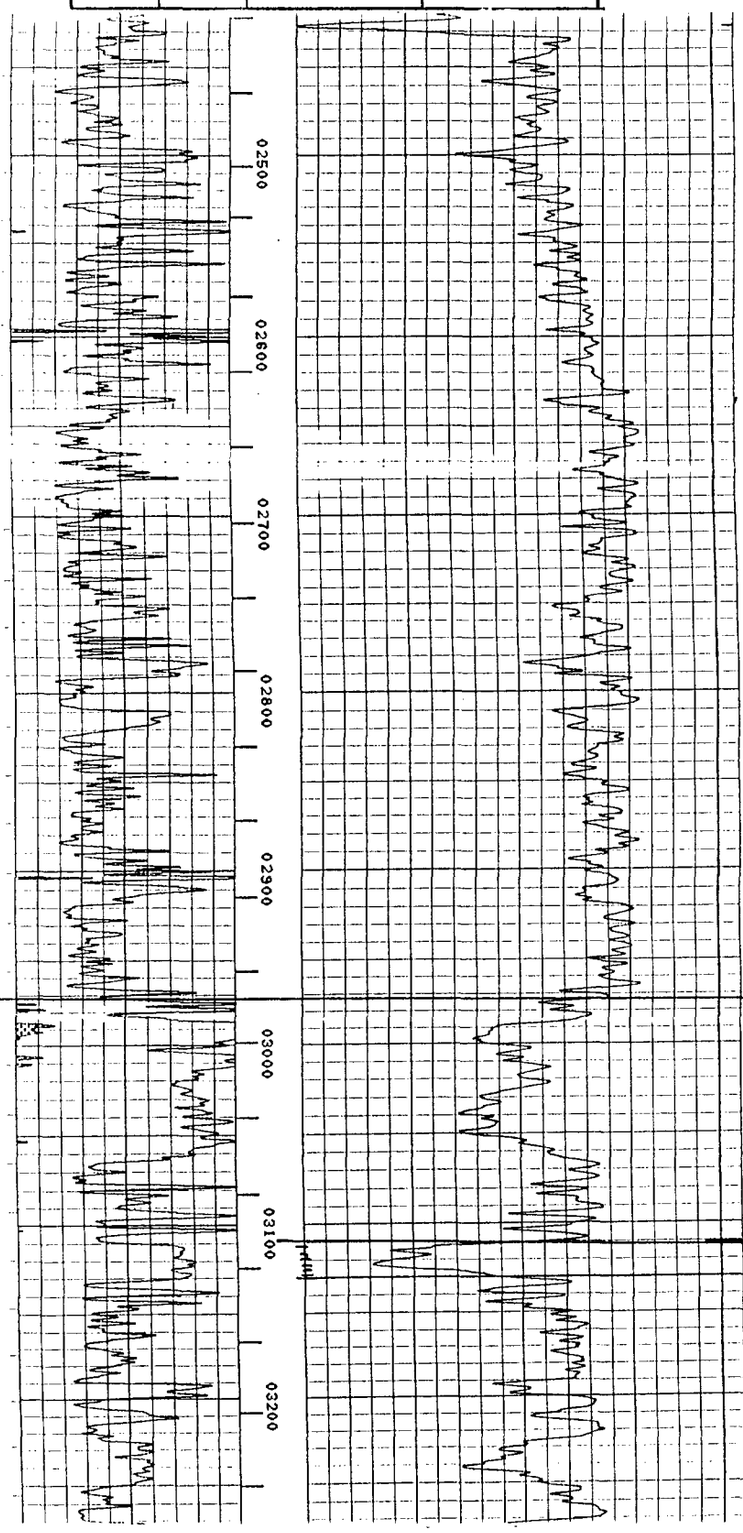
DRILLING MEASURED FROM K.B.

ELEVATIONS
KB 3473'
DF 3472'
GL 3463'

DATE	2/12/81	
RUN	1	
SERVICE ORDER	31315	
DEPTH-DRILLER	3000'	
DEPTH-LOGGER	3092'	
BOTTOM LOGGED INTERVAL	3090'	
TOP LOGGED INTERVAL	1800'	
TYPE FLUID IN HOLE	WATER	
SALINITY PPM CL.	#	
DENSITY LB/GAL.	#	
LEVEL	FULL	
MAX. REC. TEMP. DEG. F	#	
OPR. RIG TIME	PORTABLE MAST	
EQUIP. NO. / LOC.	HP 6305	HOBBS
RECORDED BY	BOGGS	
WITNESSED BY	RAY WESTALL	

BOREHOLE RECORD

NO.	BIT	FROM	TO
	17 1/2"	SURFACE	425'
	12 1/4"	425'	1100'
	7 7/8"	1100'	3000'



Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED BY
MAR 2 1987
ARTESIA, OFFICE

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ]	LEASE DESIGNATION AND SERIAL NO. NM-06245
b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR: Ray Westall	7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR: P.O. Box 4, Loco Hills, NM 88255	8. FARM OR LEASE NAME: Trice Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*:	9. WELL NO. 4
At surface: 1210 FSL & 2600 FWL	10. FIELD AND POOL, OR WILDCAT: Chugart-Y-SR-Q-G
At top prod. interval reported below: same	11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 35, 18S, 30E
At total depth: same	

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
		Eddy	N.M.

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
1-30-87	2-6-87	2-15-87	3463. GR	3464

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
3800'	3780'		→	All	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 3594-3604 Grayburg

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Compensated Neutron/GR

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	59#	460'	17½"	435 sxs-circulated	
8 5/8"	24#	1745'	12¼"	800 sxs- 1" @ 5/8 csg.	
5½"	17#	3800'	7 7/8"	700 sxs-circulated	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	3650'	

31. PERFORATION RECORD (Interval, size and number)

3594-3604 20 holes 2 per foot

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
Acidized w/1250	gal. 15% HCL
Frac'd w/20,000	gal WF-30 using 30,000# 20/40,
10,000#	21/20

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
2-15-87	Pumping	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-23-87	24			60	40	100	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

ACCEPTED FOR RECORD
MAR 25 1987
CARLSBAD, NEW MEXICO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): sold

TEST WITNESSED BY: Ray Westall

35. LIST OF ATTACHMENTS: Logs & Deviation Survey

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

SIGNED Ray Westall TITLE Operator DATE 2-13-87

*(See Instructions and Spaces for Additional Data 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.

THE WESTERN COMPANY OF NORTH AMERICA

WATER ANALYSIS

HOBBS, NEW MEXICO LAB — ANALYSIS #: HB010201

GENERAL INFORMATION

OPERATOR: RAY WESTALL	DEPTH: 0
WELL: TRIGG #4	DATE SAMPLED:
FIELD:	DATE RECEIVED:
FORMATION:	SUBMITTED BY:
COUNTY:	WORKED BY: SID COAN
STATE:	PHONE #: 505-392-5556

SAMPLE DESCRIPTION: WATER SAMPLE TAKEN FROM THE TRIGG #4

PHYSICAL AND CHEMICAL DETERMINATIONS

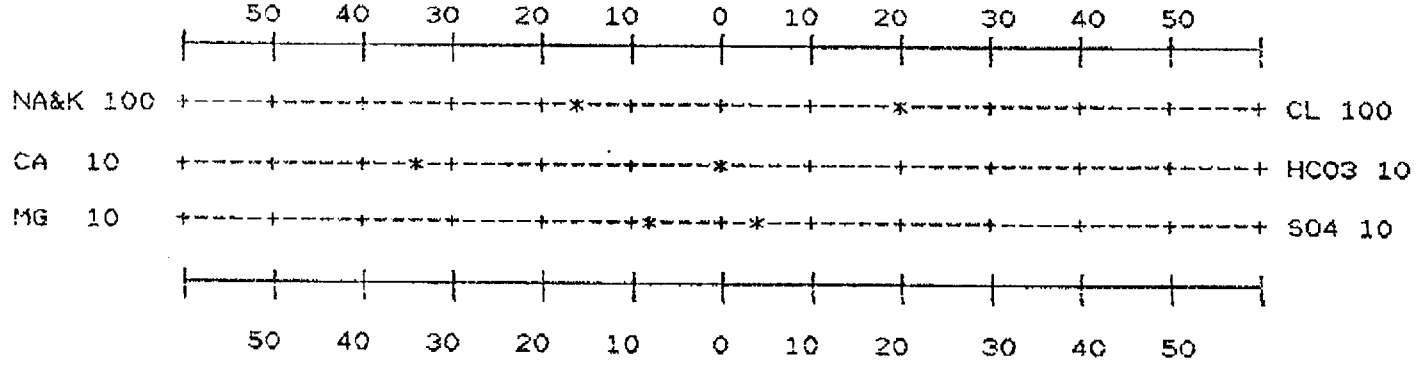
SPECIFIC GRAVITY: 1.090 @ 75 °F PH: 7.15

RESISTIVITY (CALC.): .065 OHMS @ 75 °F

IRON (FE++):	50 PPM	SULFATE:	2018 PPM
CALCIUM:	6972 PPM	TOTAL HARDNESS:	21101 PPM
MAGNESIUM:	892 PPM	BICARBONATE:	190 PPM
CHLORIDE:	73378 PPM	SODIUM CHLORIDE (CALC)	120707 PPM
SODIUM+POTASS:	38942 PPM	TOT. DISSOLVED SOLIDS:	135630 PPM
H2S	:NONE	KCL	:

REMARKS:

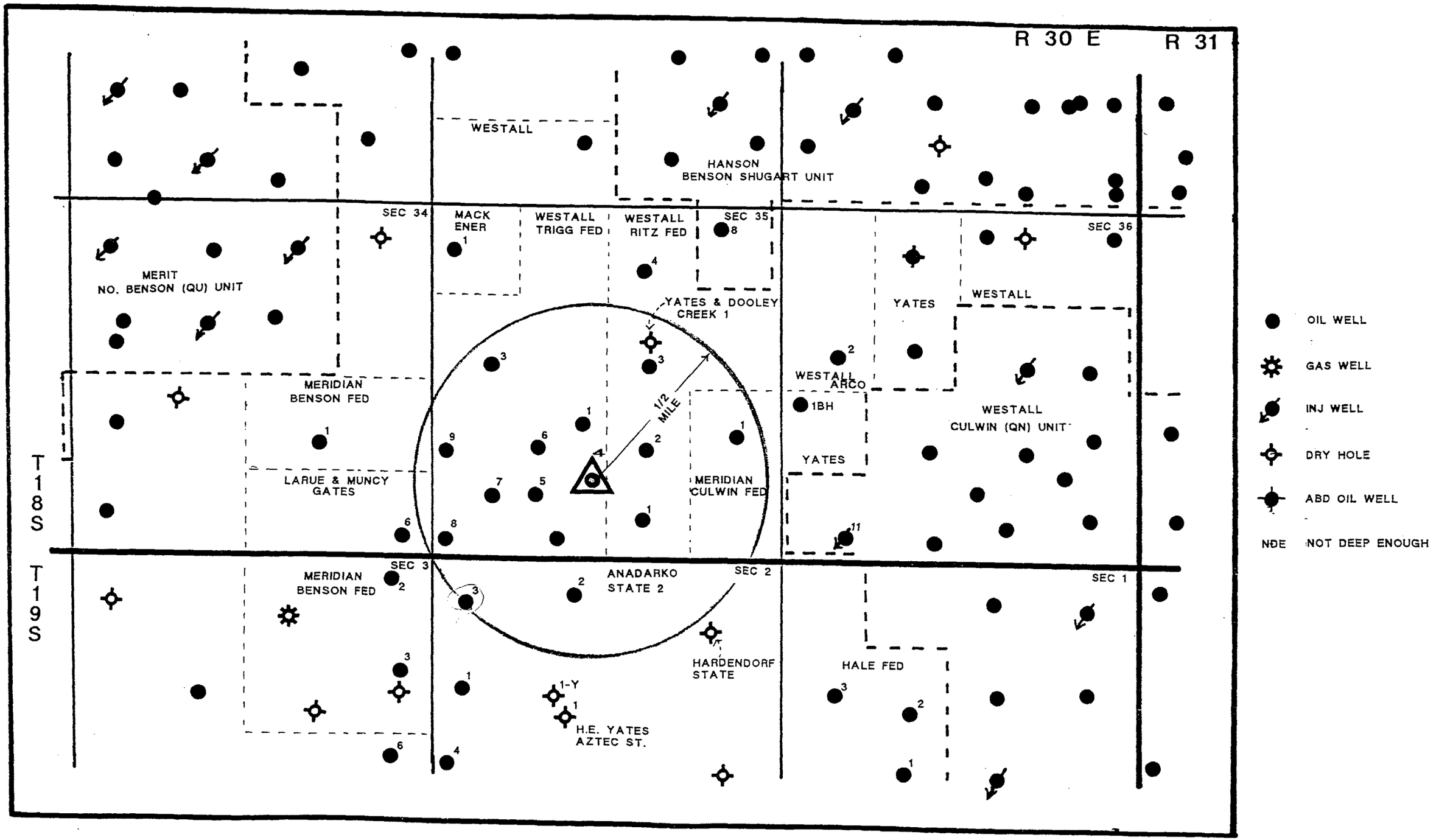
STIFF TYPE PLOT (IN MEQ/L)

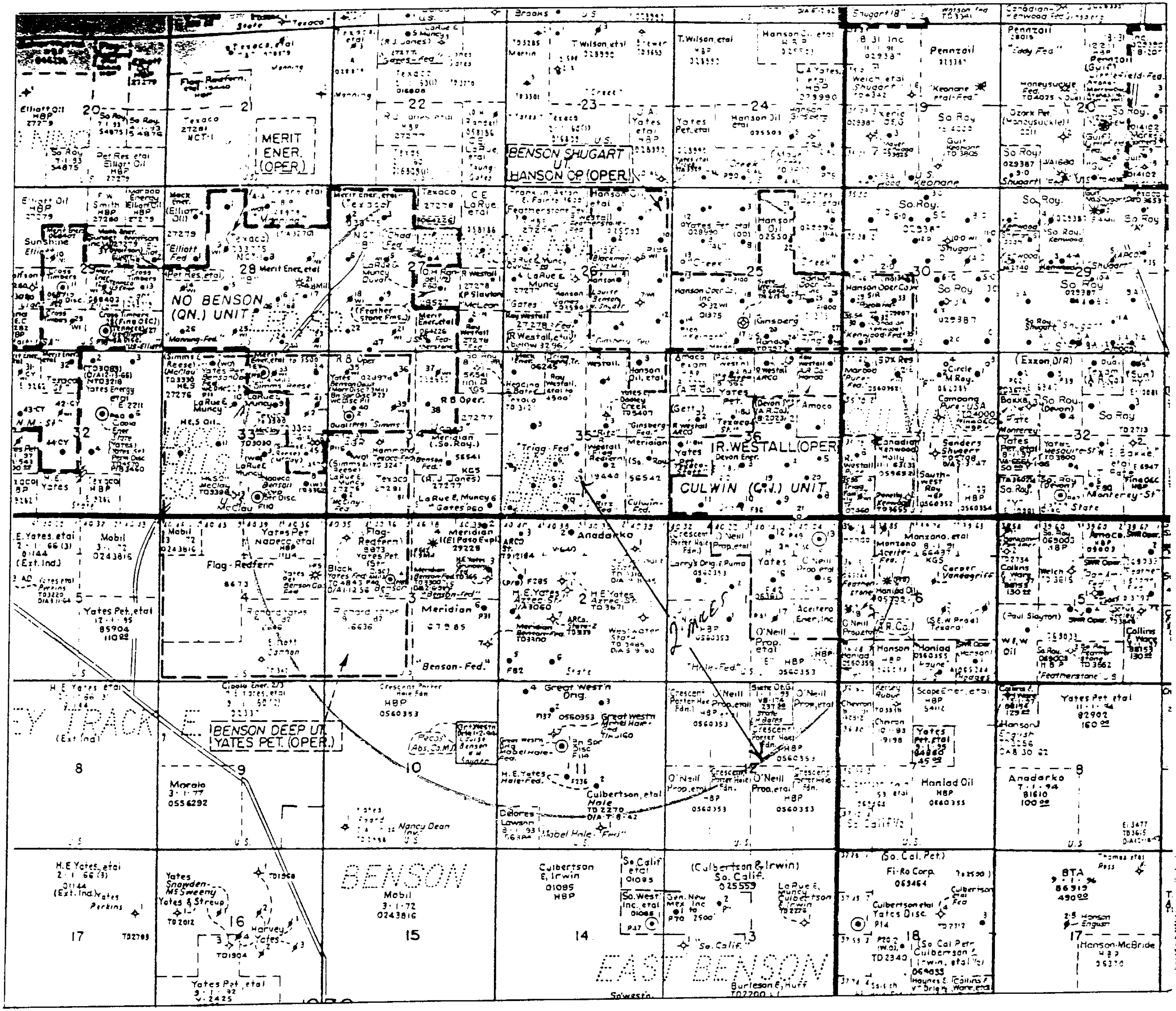


ANALYST SID COAN

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.


R 30 E
R 31
T 18 S
T 19 S
WESTALL
HANSON
BENSON SHUGART UNIT
SEC 34
MACK
ENER
WESTALL
TRIGG FED
WESTALL
RITZ FED
SEC 35
SEC 36
MERIT
NO. BENSON (QU) UNIT
YATES & DOOLEY
CREEK 1
YATES
WESTALL
MERIDIAN
BENSON FED
1/2
MILE
WESTALL
ARCO
1BH
WESTALL
CULWIN (QN) UNIT
YATES
LARUE & MUNCY
GATES
MERIDIAN
CULWIN FED
SEC 3
SEC 2
SEC 1
MERIDIAN
BENSON FED
ANADARKO
STATE 2
HARDENDORF
STATE
HALE FED
1-Y
H.E. YATES
AZTEC ST.
OIL WELL
GAS WELL
INJ WELL
DRY HOLE
ABD OIL WELL
NDE NOT DEEP ENOUGH



BENSON SHUGART UT. HANSON OP (OPER)
MERIT ENER. (OPER)
NO BENSON (QN.) UNIT
R.WESTALL (OPER)
CULWIN (Q.) UNIT
BENSON DEEP UT. YATES PET. (OPER.)
BENSON
EAST BENSON
Anadarko
Flag-Redfern
Meridian
Benson-Fed.
Great West'n Drlg.
Culbertson, etal Hale
Mobil 3-1-72 0243816
Yates Pet., etal
Hanson Oil
So. Roy
Pennzoil
Amoco
Manzano, etal
Hanlad Oil

ATTACHMENT VI

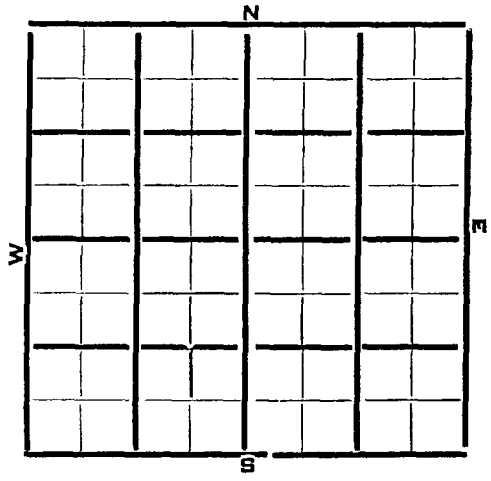
Data on all wells of public record within the area of review with schematic of plugged wells.

One well the Yater & Dooley Creek #1 has been P & A, schematic is attached.

Well Name	Operator	Surface Csng	Int Csng	Prod Csng	Total Depth	Perfs	Type	Date
Trigg Fed. 1	Ray Westall	8 5/8" @ 488' 300 sxs Circ.		5 1/2" @ 3405' 750 sxs Circ.	3405'	3054-3064 3167-3190	Oil	10/85
Trigg Fed. 3	Ray Westall	8 5/8" @ 517' 375 sxs Circ.		5 1/2" @ 4500' 2500 sxs Circ.	4500'	3138-3338	Oil	5/86
Trigg Fed. 5	Ray Westall	13 3/8" @ 583' 520 sxs Circ.	8 5/8" @ 1710' 810 sxs Circ.	5 1/2" @ 3598' 340 sxs Circ.	3612'	3056-3076	Oil	2/88
Trigg Fed. 6	Ray Westall	13 3/8" @ 540' 350 sxs Circ.	8 5/8" @ 1674' 600 sxs Circ.	5 1/2" @ 3500' 640 sxs	3500'	3033-3053	Oil	10/87
Trigg Fed. 7	Ray Westall	13 3/8" @ 560' 520 sxs/12 yds	8 5/8" @ 1756' 350 sxs Circ.	5 1/2" @ 4536' 725 sxs Circ.	4540'	3033-3333	Oil	8/88
Trigg Fed. 8	Ray Westall	13 3/8" @ 573' 960 sxs Circ.	8 5/8" @ 1713 1235 sxs Circ.	5 1/2" @ 4500' 600 sxs	4500'	2914-3049	Oil	3/90
Trigg Fed. 9	Ray Westall	13 3/8" @ 510' 400 sxs Circ.	8 5/8" @ 1675' 900 sxs Circ.	5 1/2" @ 4529 750 sxs top 1850	4529'	2896-2906 2196-2288	Oil	2/91
Trigg Fed. 10	Ray Westall	8 5/8" @ 595' 525 sxs Circ.		5 1/2" @ 3550' 850 sxs Circ.	3550'	3007-3056 3126-3141	Oil	5/91
Ritz Fed. 1	Ray Westall	8 5/8" @ 601' 350 sxs Circ.		5 1/2" @ 3906 580 sxs top 1700	3914'	3122-3248 3612-3622	Oil	12/83
Ritz Fed. 2	Ray Westall	13 3/8" @ 300' 300 sxs Circ.	8 5/8" @ 2000' 1800 sxs Circ.	5 1/2" @ 3800 600 sxs top 1850	3800'	3584-3596 3090-3220	Oil	5/84
Ritz Fed. 3	Ray Westall	8 5/8" @ 485' 280 sxs Circ.		5 1/2" @ 4000' 1400 sxs	4000'	3844-3874 3078-3213	Oil	12/84
Ritz Fed. 4	Ray Westall	8 5/8" @ 521' 300 sxs Circ.		5 1/2" @ 3972' 1113 sxs top 1700	3988'	3314-3342	Oil	6/85

o	8 5/8" @ 636' 450 sxs Circ.	5 1/2" @ 3860' 1250 sxs Circ.	3860'	3144-3156 3256-3260	Oil	10/87
o	8 5/8" @ 597' 475 sxs Circ.	5 1/2" @ 3300' 800 sxs	3300'	2966-3015 3083-3093	Oil	9/89
n	8 5/8" @ 526' 350 sxs Circ.	5 1/2" @ 3450' 1050 sxs Circ.	3450'	[3156-3414] 2350-2480	CIBP @ 3100' Oil	2/88
Dooley	8 1/4" @ 742' 50 sxs		3407'		P&A	10/38

SCOUT REPORT
NEW MEXICO
OIL CONSERVATION COMMISSION



Company Yates & Dooley

Farm Name Creek Permit Well No. 1

Land Classification Government

Sec. 35 Twp. 18 Range 30 County Eddy

Feet from Line: 1980 N. S. 1980 E. W.

Elevation Method Mach

Contractor F, W & Y Scout

Spudded 6-24-38 Completed Initial Production

Bond Status

AMOUNT CASING AND CEMENTING RECORD

SIZE	FEET	INCHES	SAX CEMENT
978	350		set
10	507		set pulled
8¼	742		50

TUBING RECORD

PACKER

ACID RECORD

Gals.

Top Pay TD

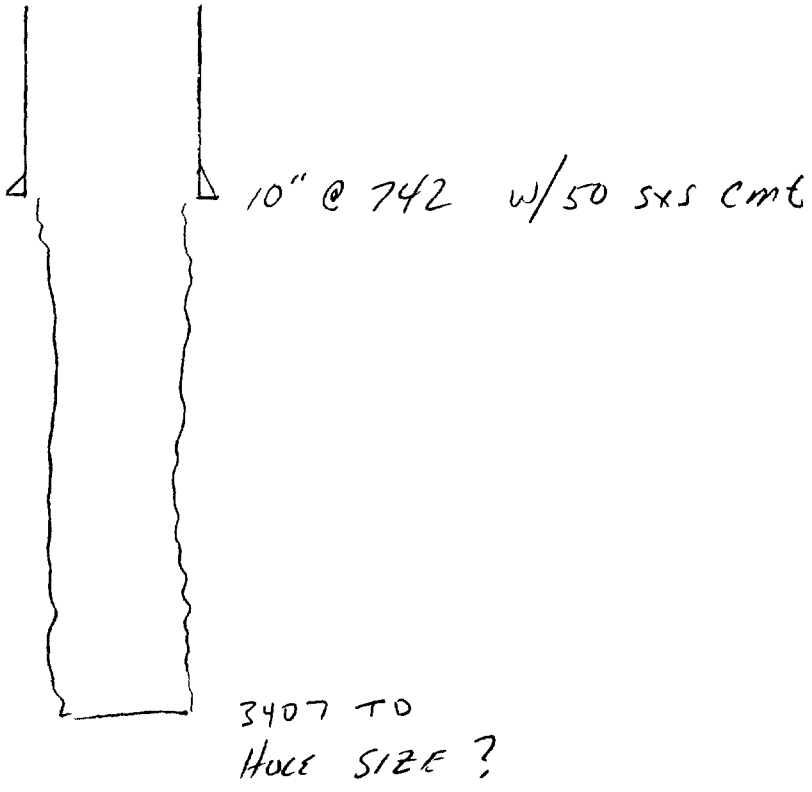
TA	
TX	
BX	
TRS	
TY	
TBL	
TWL	

SHOOTING RECORD

No. of Quarts	From	To
No. of Quarts	From	To
S/	S/	S/
S/	S/	S/

DATE		DATE	
6-14	Mach On Ground		
6-21	Loc		
6-28	TD 15' SD Repairs		
7-12	Ø 465 RR		
7-19	TD 565 RR Rng 8" csg		
7-26	TD 565 RR Rng 10"		
8-2	TD 570 RR Csng O 548		
8-9	Ø 695 RR		
8-16	Ø 960 X		
8-23	Ø 1720 A		
8-30	Ø 2167 A		
9-7	Ø 2435 A		
9-12	Ø 2750 L & A		
9-19	Ø 3007 L		
9-26	Ø 3070 L		
10-4	Ø 3383 L		
10-11	TD 3407 S 200' sulphur Wtr		
	2 hrs 3404-07		
	T.O. P & A		

YATES & DOOLEY
CREEK #1



ATTACHMENT VII

PROPOSED OPERATION

1. Plans are to inject 150-200 bbls of produced water per day per well.

2. The injection system is be a closed system.

3. The proposed injection pressure is 300 psig. Maximum pressure will be 600 psig.

4. Injection fluid will be reinjected produced water.

5. A sample of produced water is attached.

THE WESTERN COMPANY OF NORTH AMERICA

WATER ANALYSIS

HOBBS, NEW MEXICO LAB — ANALYSIS #: HB010201

GENERAL INFORMATION

OPERATOR:	RAY WESTALL	DEPTH:	0
WELL:	RITZ 3&4	DATE SAMPLED:	
FIELD:		DATE RECEIVED:	
FORMATION:		SUBMITTED BY:	
COUNTY:		WORKED BY:	SID COAN
STATE:		PHONE #:	505-392-5556

SAMPLE DESCRIPTION: WATER SAMPLE TAKEN FROM THE RITZ # 3&4

PHYSICAL AND CHEMICAL DETERMINATIONS

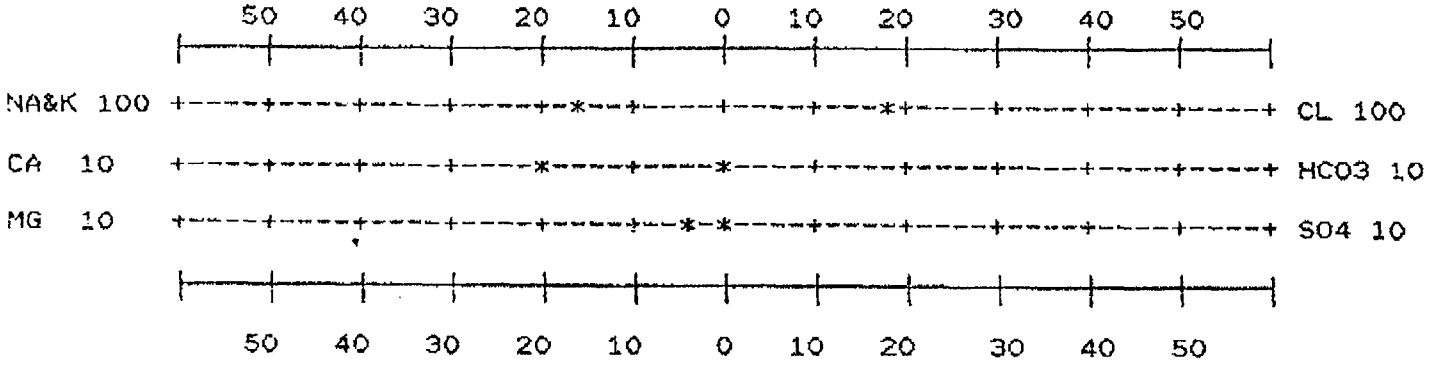
SPECIFIC GRAVITY: 1.070 @ 75 °F PH: 4.15

RESISTIVITY (CALC.): .065 OHMS @ 75 °F

IRON (FE++):	50 PPM	SULFATE:	187 PPM
CALCIUM:	4112 PPM	TOTAL HARDNESS:	12150 PPM
MAGNESIUM:	454 PPM	BICARBONATE:	46 PPM
CHLORIDE:	63537 PPM	SODIUM CHLORIDE (CALC)	104518 PPM
SODIUM+POTASS:	35739 PPM	TOT. DISSOLVED SOLIDS:	111658 PPM
H2S	:NONE	KCL	:

REMARKS:

STIFF TYPE PLOT (IN MEQ/L)



ANALYST _____

SID COAN

THE WESTERN COMPANY OF NORTH AMERICA

WATER ANALYSIS

HOBBS, NEW MEXICO LAB — ANALYSIS #: HB010201

GENERAL INFORMATION

OPERATOR:	RAY WESTALL	DEPTH:	0
WELL:	TRIGG BATTERY	DATE SAMPLED:	
FIELD:		DATE RECEIVED:	
FORMATION:		SUBMITTED BY:	
COUNTY:		WORKED BY:	SID COAN
STATE:		PHONE #:	505-392-5556

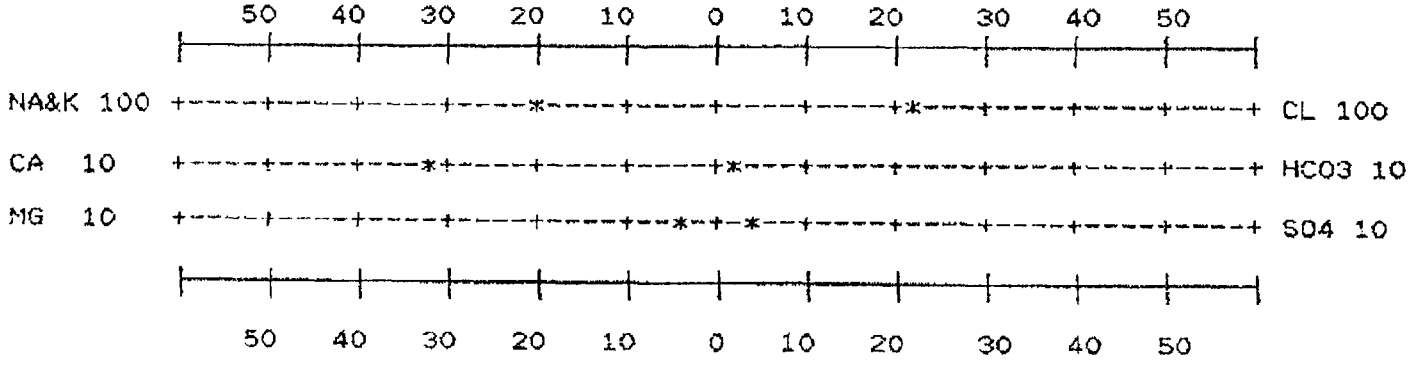
SAMPLE DESCRIPTION: WATER SAMPLE TAKEN FROM THE TRIGG BATTERY

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.085 @ 75 °F	PH:	7.65
RESISTIVITY (CALC.):	.055 OHMS @ 75 °F		
IRON (FE++):	100 PPM	SULFATE:	2304 PPM
CALCIUM:	6267 PPM	TOTAL HARDNESS:	17512 PPM
MAGNESIUM:	448 PPM	BICARBONATE:	1406 PPM
CHLORIDE:	79245 PPM	SODIUM CHLORIDE (CALC)	130358 PPM
SODIUM+POTASS:	44991 PPM	TOT. DISSOLVED SOLIDS:	145457 PPM
H2S	:NONE	KCL	:

REMARKS:

STIFF TYPE PLOT (IN MEQ/L)



ANALYST _____
SID COAN

ATTACHMENT VIII

The proposed injection zone is the 2nd sand of the Queen Formation. The 2nd Queen sand is a fine-grained quartz sand with varing amounts of shales. It is 18 feet thick, at a depth of 3112-3130'. There is no sources of drinking water overlying or underlying the injection interval.

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 Meridian, Anadarko, and LaRue & Muncy. Each of these operators were provided a copy of our application by certified mail. Proof of notice is enclosed. The United States of America is the surface owner.

PROOF OF PUBLICATION

Proof of publication from the Artesia Daily Press is enclosed.

Affidavit of Publication

No. 15041

STATE OF NEW MEXICO,

County of Eddy:

Gary D. Scott being duly sworn, says: That he is the Publisher of The Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 consecutive days weeks on the same day as follows:

First Publication March 29, 1995

Second Publication

Third Publication

Fourth Publication

Gary D. Scott

Subscribed and sworn to before me this 12th day of April 19 95

Barbara Ann Beans

Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1996

Copy of Publication

LEGAL NOTICE

Ray Westall-Operator, P.O. Box 4, Loco Hills, New Mexico 88255. Phone (505) 677-2370. Contact party for Ray Westall-Operator, Randall L. Harris, is seeking administrative approval from the New Mexico Oil Conservation Division to Utilize a well located, 1210' FSL & 2600' FWL, Section 35, Township 18 South, Range 30 East, Eddy County, New Mexico for salt water disposal. Proposed injection is in the Queen Formation through perforations 3594-3604'. Expected maximum injection rate of 200 BBLs per day, at 500 PSI. 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 of this notice. Published in the Artesia Daily Press, Artesia, N.M. March 29, 1995.

Legal 15041

Copies of this application has been sent to:

Meridian Oil Inc.
21 Desta Dr.
Midland, Tx. 79701

Certified Mail # P 122 788 344

Anadarko Petroleum Corp.
400 W Illinois, Ste 1300
Midland, Tx. 79701

Certified Mail # P 122 788 334

Oil Conservation Division
P.O. Drawer DD
Artesia, NM. 88210

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87505-2088

Bureau of Land Management
P.O. Box 1778
Carlsbad, NM 88220

P 122 788 334

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to ANADARKO PETROLEUM	
Street and No. 400. W. ILLINOIS, STE 1300	
P.O., State and ZIP Code MIDLAND TX 79701	
Postage	$1.24
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$2.24
Postmark or Date	JUN 7 1995 USPS HILLS, NM

PS Form 3800, June 1985

P 122 788 344

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to MERIDIAN OIL INC	
Street and No. 21 DESTA DR.	
P.O., State and ZIP Code MIDLAND TX 79701	
Postage	$1.24
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$2.24
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