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**ENERGY OPERATING CORPORATION**

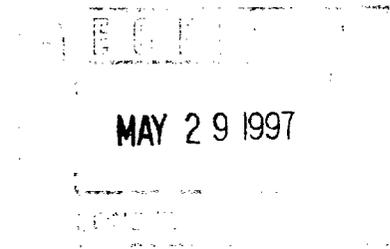
20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

May 23, 1997

**Certified Mail P 240 501 954**

NM Oil Conservation Division  
2040 S. Pacheco St.  
Santa Fe, NM 87505



Re: Application For Authorization To Inject  
Grayburg-Jackson Waterflood Project  
Turner "A" #14  
Section 19-T17S-R31E  
Eddy County, NM

Dear Sir:

Enclosed are two(2) copies of the "Application For Authorization To Inject" for the above referenced well.

Please direct any questions regarding this matter to the undersigned at (405) 552-4528.

Sincerely,  
Devon Energy Corporation

Charles H. Carleton  
Sr Engineering Technician

/chc  
enclosures

xc: Well File

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  Yes  No
- II. OPERATOR: Devon Energy Corporation (Nevada)  
ADDRESS: 20 N. Broadway, Suite 1500 Oklahoma City, OK 73102-8260  
CONTACT PARTY: Mr. Randy Jackson PHONE: 405/552-4560
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed 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 R-2268
- 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 sources 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: Mr. Randy Jackson TITLE: District Engineer  
SIGNATURE:  DATE: May 23, 1997
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be 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, PO Box 2088, Santa Fe, NM 87504-2088 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.**

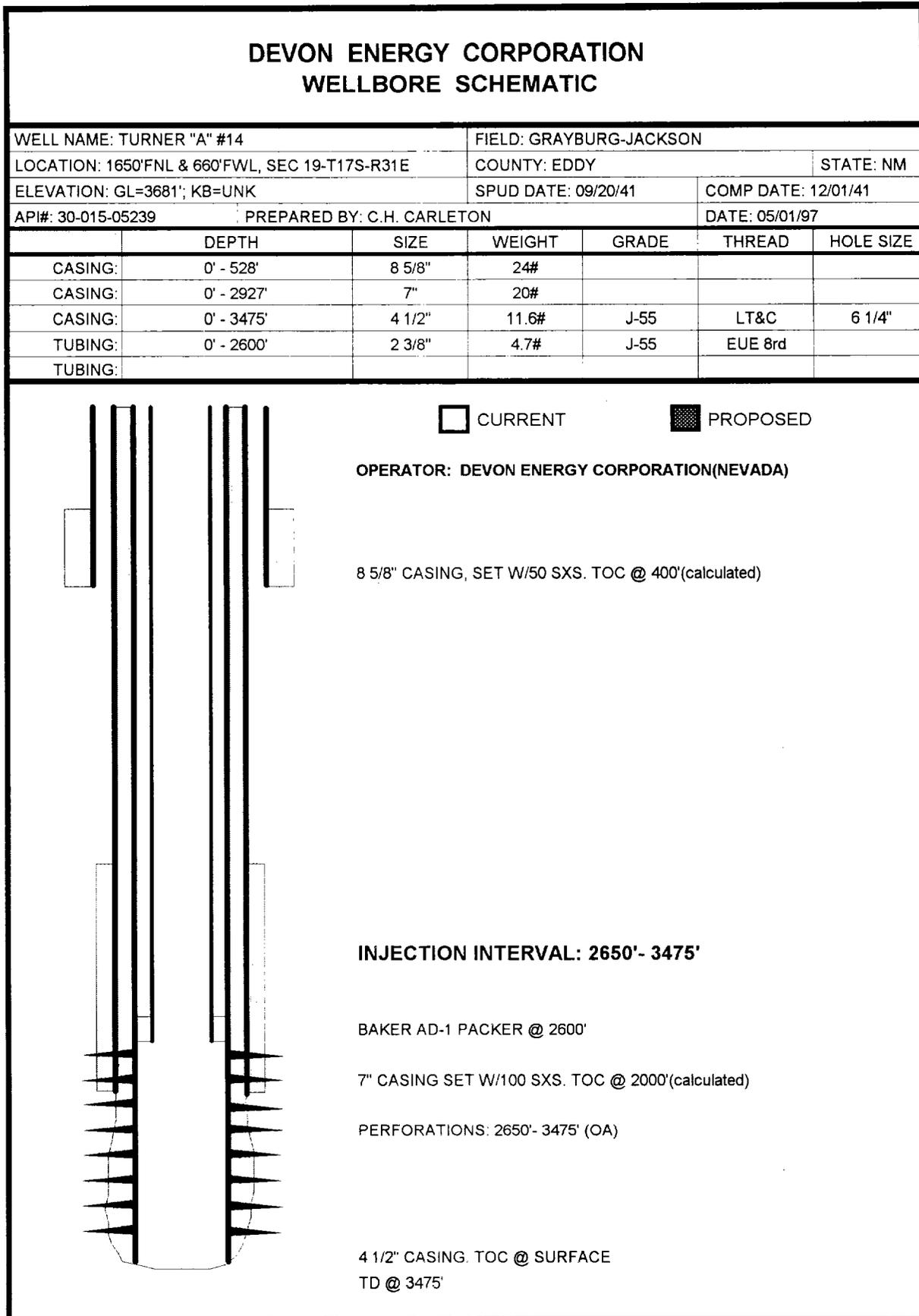
**DEVON ENERGY CORPORATION  
APPLICATION FOR AUTHORITY TO INJECT  
GRAYBURG-JACKSON WATERFLOOD**

**III Well Data:**

- A. (1) Turner "A" #14  
1650'FNL & 660'FWL  
Section 19-T17S-R31E  
Eddy County, NM
- (2) Surface Casing:  
8 5/8" 24# @ 528'. TOC @ 400'(calculated)  
Hole Size = 11"(estimated)
- Intermediate Casing:  
7" 20# @ 2927'. TOC @ 2000'(calculated)  
Hole Size: 7 7/8"(estimated)
- Production Casing:  
4 1/2" 11.5# J-55 LT&C @ 3475'. TOC @ surface  
Hole Size = 6 1/4"
- (3) Tubing will be 2 3/8" 4.7# J-55 EUE 8rd (IPC) set at 2600'.
- (4) 4 1/2" Baker AD-1 tension packer set at 2600'.
- B. (1) The injection formation will be the Grayburg/San Andres in the Grayburg-Jackson Field.
- (2) Water injection will be through perforations 2650'- 3475'(OA). **The injection interval is 2650'- 3475'.**
- (3) This well was originally drilled and completed as an oil well, producing from the Grayburg/San Andres formation.
- (4) Additional perforations may be added in the 2650'- 3475' interval.
- (5) The top of the Seven Rivers formation is at approximately 2300', there are no known lower oil zones



III Well Data:



NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.





VI Wells Within "Area Of Review"

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMP DATE</u>	<u>WELL TYPE</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
FREN OIL COMPANY #3	1980FSL & 1980FWL SEC 19-T17S-R31E EDDY COUNTY, NM	3/12/44	4/15/44	OIL PRODUCER	2002/2002'	8 5/8" @ 482' W/50 SXS 7" @ 1802' W/100 SXS OPEN HOLE COMPLETION: 1802'- 2002' IP=145 BOPD DEEPEN OPEN HOLE TO 3134' 5 1/2" @ 3074' W/80 SXS. - RETURN TO PRODUCTION PLUG BACK OPEN HOLE TO 3100' PERFORATE: 2950'- 3044'(OA) - RETURN TO PRODUCTION
FREN OIL COMPANY #8	2310FSL & 2970FEL SEC 19-T17S-R31E EDDY COUNTY, NM	11/27/46	12/28/46	OIL PRODUCER	2021/2021'	8 5/8" @ 505' W/75 SXS 7" @ 1792' W/130 SXS OPEN HOLE COMPLETION: 1792'- 2021' IP=60 BOPD DEEPEN OPEN HOLE TO 3615' 4 1/2" @ 3578' W/465 SXS PERFORATE: 2755'- 3562'- RETURN TO PRODUCTION PLUGGED & ABANDONED
FREN OIL COMPANY #18	1650FSL & 1750FWL SEC 19-T17S-R31E EDDY COUNTY, NM	1/2/62	5/11/62	OIL PRODUCER	7150/7120'	8 5/8" @ 1364' W/650 SXS. CEMENT TO SURFACE. 4 1/2" @ 7120' W/1200 SXS. TOC @ 1435'(CBL) PERFORATE: 7011'- 7022'(OA) IP=192 BOPD SQUEEZE PERFORATIONS W/200 SXS SET CIBP @ 3257' & CAP WITH CEMENT TO 3200' PERF & SQZ'D 4 1/2" CASING @ 1400'- 1402' W/550 SXS. CMT TO SURFACE. PERFORATE: 2975'- 3104'(OA) - RETURN TO PRODUCTION
TURNER "A" #4	660FSL & 660FWL SEC 18-T17S-R31E EDDY COUNTY, NM	3/7/38	5/22/38	OIL PRODUCER	3522/3522'	8 5/8" @ 580' W/50 SXS 5 1/2" @ 3399' W/100 SXS OPEN HOLE COMPLETION: 3399'- 3522' IP=68 BOPD PERFORATE: 3132'- 3142'(OA) - RETURN TO PRODUCTION PLUGGED & ABANDONED
			4/16/54 10/21/80			

VI Wells Within "Area Of Review"

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TURNER "A" #5	330FNL & 660FWL SEC 19-T17S-R31E EDDY COUNTY, NM	7/20/39	9/28/39	OIL PRODUCER	3518'/3518'	8 5/8" @ 550' W/50 SXS 7" @ 3014' W/100 SXS OPEN HOLE COMPLETION: 3014' - 3518' IP=257 BOPD PLUG BACK OPEN HOLE TO 3499' PERFORATE: 2804' - 2818'(OA) - RETURN TO PRODUCTION SQUEEZE OFF PERFORATIONS W/100 SXS CONVERT TO A WATER INJECTION WELL
			4/7/44 5/24/54 12/20/67	WATER INJECTOR	3518'/3499'	CONVERT TO A WATER INJECTION WELL 4 1/2" @ 3498' W/200 SXS. TOC @ 1020'(TEMP SURVEY) PERFORATE: 3364' - 3489'(OA) - RETURN TO INJECTION
TURNER "A" #6	660FSL & 1980FWL SEC 18-T17S-R31E EDDY COUNTY, NM	4/27/40	7/1/40	OIL PRODUCER	3494'/3494'	8 5/8" @ 571' W/50 SXS 7" @ 2945' W/100 SXS OPEN HOLE COMPLETION: 2945' - 3494' IP=105 BOPD CONVERT TO A WATER INJECTION WELL
			12/1/67 12/3/74 5/13/96	WATER INJECTOR	3494'/3489'	4 1/2" LINER @ 2891' - 3494' W/100 SXS PERFORATE: 3414' - 3483(OA) - RETURN TO INJECTION PLUGGED & ABANDONED
TURNER "A" #7	330FNL & 1980FWL SEC 19-T17S-R31E EDDY COUNTY, NM	5/24/40	8/4/40	OIL PRODUCER	3442'/3442'	8 5/8" @ 565' W/50 SXS 7" @ 2957' W/100 SXS OPEN HOLE COMPLETION: 2957' - 3442' IP=264 BOPD PLUGGED & ABANDONED
TURNER "A" #14	1650FNL & 660FWL SEC 19-T17S-R31E EDDY COUNTY, NM	9/20/41	12/1/41	OIL PRODUCER	3467'/3467'	8 5/8" @ 528' W/50 SXS 7" @ 2927' W/100 SXS OPEN HOLE COMPLETION: 2927' - 3467' IP=50 BOPD

VI Wells Within "Area Of Review"

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMP DATE</u>	<u>WELL TYPE</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
TURNER "A" #15	1650'FNL & 1980'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	10/6/41	2/13/42	OIL PRODUCER	3444'/3444'	8 5/8" @ 495' W/50 SXS 7" @ 2910' W/100 SXS OPEN HOLE COMPLETION: 2910- 3444' IP=60 BOPD CONVERT TO A WATER INJECTION WELL
			12/12/67 1/7/70	WATER INJECTOR	3444'/3437'	4 1/2" @ 3442' W/200 SXS. TOC @ 1100'(TEMP SURVEY) PERFORATE: 3321' - 3432'(OA) - RETURN TO INJECTION PERFORATE: 2945' - 3035'(OA) - RETURN TO INJECTION
			4/30/73			
TURNER "A" #17	1980'FNL & 1980'FEL SEC 19-T17S-R31E EDDY COUNTY, NM	8/29/44	10/24/44	OIL PRODUCER	1965'/1965'	7" @ 493' W/50 SXS 5 1/2" @ 1847' W/100 SXS OPEN HOLE COMPLETION: 1847'- 1965' IP=95 BOPD PLUGGED & ABANDONED
TURNER "A" #18	1980'FNL & 660'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	2/4/45	4/23/45	OIL PRODUCER	1966'/1966'	7" @ 493' W/50 SXS 5 1/2" @ 1859' W/100 SXS OPEN HOLE COMPLETION: 1859- 1966' IP=45 BOPD PLUGGED & ABANDONED
			10/6/86			
TURNER "A" #19	1980'FNL & 1980'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	1/28/45	4/28/45	OIL PRODUCER	1949'/1949'	7" @ 494' W/50 SXS 5 1/2" @ 1837' W/100 SXS OPEN HOLE COMPLETION: 1837- 1949' IP=85 BOPD PLUGGED & ABANDONED
			2/13/76			
TURNER "A" #21	2310'FNL & 2310'FEL SEC 19-T17S-R31E EDDY COUNTY, NM	10/10/48	11/29/48	OIL PRODUCER	1932'/1932'	8 5/8" @ 500' W/30 SXS 5 1/2" @ 1855' W/75 SXS OPEN HOLE COMPLETION: 1855- 1932' IP=10 BOPD PLUGGED & ABANDONED
			2/24/76			

VI Wells Within "Area Of Review"

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TURNER "A" #22	2310FNL & 1650FWL SEC 19-T17S-R31E EDDY COUNTY, NM	8/4/48	10/21/48	OIL PRODUCER	1940'/1940'	8 1/4" @ 491' W/30 SXS 7" @ 1855' W/75 SXS OPEN HOLE COMPLETION: 1855' - 1940' IP=10 BOPD SET CIBP @ 1811' - TEMPORARILY ABANDONED
TURNER "A" #24	990FNL & 1650FWL SEC 19-T17S-R31E EDDY COUNTY, NM	9/17/52	10/18/52	OIL PRODUCER	1925'/1925'	8 5/8" @ 519' W/50 SXS 7" @ 1860' W/100 SXS OPEN HOLE COMPLETION: 1860' - 1925' IP=16 BOPD SET CIBP @ 1835' - TEMPORARILY ABANDONED
TURNER "A" #25	990FNL & 2310FEL SEC 19-T17S-R31E EDDY COUNTY, NM	10/24/52	12/8/52	OIL PRODUCER	1915'/1915'	8 5/8" @ 508' W/50 SXS 7" @ 1848' W/100 SXS 5 1/2" LINER @ 1840' - 1915' (LANDED, NOT CEMENTED) PERFORATE: 1872' - 1915'(OA) IP=30 BOPD SET CIBP @ 1817' - TEMPORARILY ABANDONED PLUGGED & ABANDONED
TURNER "A" #26	660FNL & 660FWL SEC 19-T17S-R31E EDDY COUNTY, NM	2/15/53	3/16/53	OIL PRODUCER	1971'/1971'	8 5/8" @ 540' W/50 SXS 7" @ 1907' W/100 SXS 5 1/2" LINER @ 1898' - 1971' (LANDED, NOT CEMENTED) PERFORATE: 1930' - 1971'(OA) IP=21 BOPD SET CIBP @ 1871' - TEMPORARILY ABANDONED PLUGGED & ABANDONED
TURNER "A" #27	330FSL & 1398FWL SEC 18-T17S-R31E EDDY COUNTY, NM	3/18/53	4/13/53	OIL PRODUCER	1997'/1997'	8 5/8" @ 580' W/50 SXS 7" @ 1930' W/100 SXS 5 1/2" LINER @ 1925' - 1997' (LANDED, NOT CEMENTED) PERFORATE: 1956' - 1997'(OA) IP=30 BOPD SET CIBP @ 1900' - TEMPORARILY ABANDONED PLUGGED & ABANDONED
			8/29/85 7/2/86		1997'/1900'	

VI Wells Within "Area Of Review"

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TURNER "A" #31	560'FSL & 660'FWL SEC 18-T17S-R31E EDDY COUNTY, NM	6/7/53	7/8/53	OIL PRODUCER	1999'/1999'	9 5/8" @ 578' W/50 SXS 7" @ 1938' W/100 SXS 5 1/2" LINER @ 1925'- 1999' (LANDED, NOT CEMENTED) PERFORATE: 1954'- 1999'(OA) IP=3 BOPD PLUGGED & ABANDONED
TURNER "A" #36	1800'FNL & 1980'FEL SEC 19-T17S-R31E EDDY COUNTY, NM	11/18/67	12/10/67	OIL PRODUCER	3450'/3441'	9 5/8" @ 605' W/350 SXS. CEMENT TO SURFACE. 7" @ 3450' W/450 SXS. TOC @ 1800'(TEMP SURVEY) PERFORATE: 2934'- 3418'(OA) IP=61 BOPD
TURNER "A" #41	10'FSL & 1050'FWL SEC 18-T17S-R31E EDDY COUNTY, NM	3/22/96	5/2/96	OIL PRODUCER	3785'/3390'	8 5/8" @ 436' W/500 SXS. CEMENT TO SURFACE. 5 1/2" @ 3784' W/1450 SXS. TOC @ 250'(CBL) PERFORATE: 2768'- 3595'(OA) SET CIBP @ 3390' IP=129 BOPD
TURNER "A" #45	9'5'FNL & 1450'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	5/14/96	6/24/96	OIL PRODUCER	3684'/3638'	8 5/8" @ 352' W/350 SXS. CEMENT TO SURFACE. 5 1/2" @ 3683' W/2000 SXS. CEMENT TO SURFACE. PERFORATE: 2695'- 3400'(OA) IP=173 BOPD
TURNER "A" #46	925'FNL & 2600'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	4/30/96	5/27/96	OIL PRODUCER	3670'/3567'	8 5/8" @ 388' W/775 SXS. CEMENT TO SURFACE. 5 1/2" @ 3669' W/1125 SXS. CEMENT TO SURFACE. PERFORATE: 2703'- 3418'(OA) IP=400 BOPD
TURNER "A" #48	2350'FNL & 1330'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	5/21/96	6/29/96	OIL PRODUCER	3670'/3626'	8 5/8" @ 387' W/500 SXS. CEMENT TO SURFACE. 5 1/2" @ 3669' W/2000 SXS. CEMENT TO SURFACE. PERFORATE: 2726'- 3241'(OA) IP=136 BOPD

VI Wells Within "Area Of Review"

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TURNER "A" #49	2280'FNL & 2450'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	4/15/96	5/23/96	OIL PRODUCER	3670'/3622'	8 5/8" @ 353' W/350 SXS. CEMENT TO SURFACE. 5 1/2" @ 3669' W/2000 SXS. CEMENT TO SURFACE. PERFORATE: 2741' - 3243'(OA) IP=95 BOPD
TURNER "A" #56	585'FSL & 1800'FWL SEC 18-T17S-R31E EDDY COUNTY, NM	6/29/96	10/22/96	WATER INJECTOR	3795'/3745'	8 5/8" @ 431' W/580 SXS. CEMENT TO SURFACE. 5 1/2" @ 3794' W/2125 SXS. CEMENT TO SURFACE. PERFORATE: 2755' - 3443'(OA) COMPLETED AS A WATER INJECTION WELL
TURNER "A" #57	580'FNL & 1905'FWL SEC 19-T17S-R31E EDDY COUNTY, NM	7/11/96	10/2/96	WATER INJECTOR	3765'/3719'	8 5/8" @ 399' W/350 SXS. CEMENT TO SURFACE. 5 1/2" @ 3764' W/1675 SXS. CEMENT TO SURFACE. PERFORATE: 2711' - 3550'(OA) COMPLETED AS A WATER INJECTION WELL

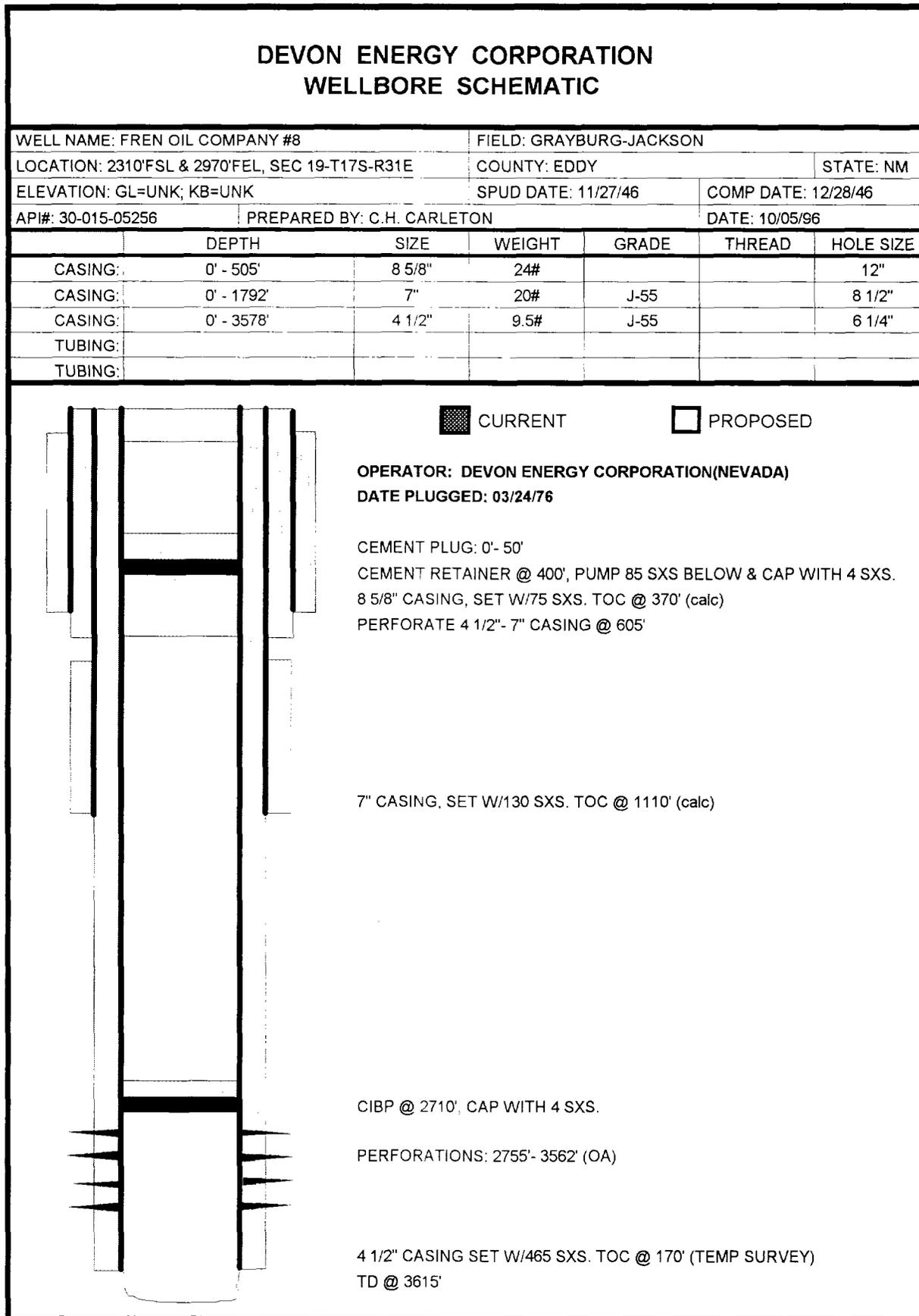
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GRYBRG-JCKSN SA UT #1 Burnett Oil Company	1650'FNL & 660'FEL SEC 24-T17S-R30E EDDY COUNTY, NM	7/2/41	9/13/41	OIL PRODUCER	3448/3448'	8 1/4" @ 565' W/50 SXS 7" @ 2968' W/100 SXS OPEN HOLE COMPLETION: 2968' - 3448' IP=300 BOPD
GRYBRG-JCKSN SA UT #1W Burnett Oil Company	1980'FNL & 660'FEL SEC 24-T17S-R30E EDDY COUNTY, NM	11/29/44	1/2/45	WATER INJECTOR	2000/2000'	8 1/4" @ 525' W/50 SXS 7" @ 1861' W/100 SXS OPEN HOLE COMPLETION: 1861' - 2000' COMPLETED AS A WATER INJECTION WELL
GRYBRG-JCKSN SA UT #2 Burnett Oil Company	1650'FNL & 1980'FEL SEC 24-T17S-R30E EDDY COUNTY, NM	9/20/41	12/3/41	OIL PRODUCER	3490/3490'	8 1/4" @ 561' W/20 SXS 7" @ 2915' W/100 SXS OPEN HOLE COMPLETION: 2915' - 3490' IP=456 BOPD
GRYBRG-JCKSN SA UT #3 Burnett Oil Company	330'FNL & 330'FEL SEC 24-T17S-R30E EDDY COUNTY, NM	7/17/39	10/1/39	OIL PRODUCER	3527/3527'	8 5/8" @ 549' W/50 SXS 7" @ 2949' W/100 SXS OPEN HOLE COMPLETION: 2949' - 3527' IP=1680 BOPD
GRYBRG-JCKSN SA UT #15 Burnett Oil Company	660'FSL & 660'FEL SEC 13-T17S-R30E EDDY COUNTY, NM	12/20/37	2/20/38	OIL PRODUCER	3518/3518'	8 1/4" @ 565' W/50 SXS 6" @ 2971' W/100 SXS OPEN HOLE COMPLETION: 2971' - 3518' IP=550 BOPD
JACKSON "B" #12 Burnett Oil Company	1980'FSL & 539'FEL SEC 24-T17S-R30E EDDY COUNTY, NM	6/15/44	8/5/44	OIL PRODUCER	1997/1997'	8 1/4" @ 530' W/100 SXS 7" @ 1826' W/100 SXS OPEN HOLE COMPLETION: 1826' - 1997' IP=110 BOPD
JACKSON "B" #37 Burnett Oil Company	2400'FSL & 567'FEL SEC 24-T17S-R30E EDDY COUNTY, NM	10/25/95	1/11/96	OIL PRODUCER	3211/3192'	8 5/8" @ 505' W/236 SXS 5 1/2" @ 3209' W/980 SXS PERFORATE: 2966' - 3124'(OA) IP=148 BOPD

VI Wells Within "Area Of Review"

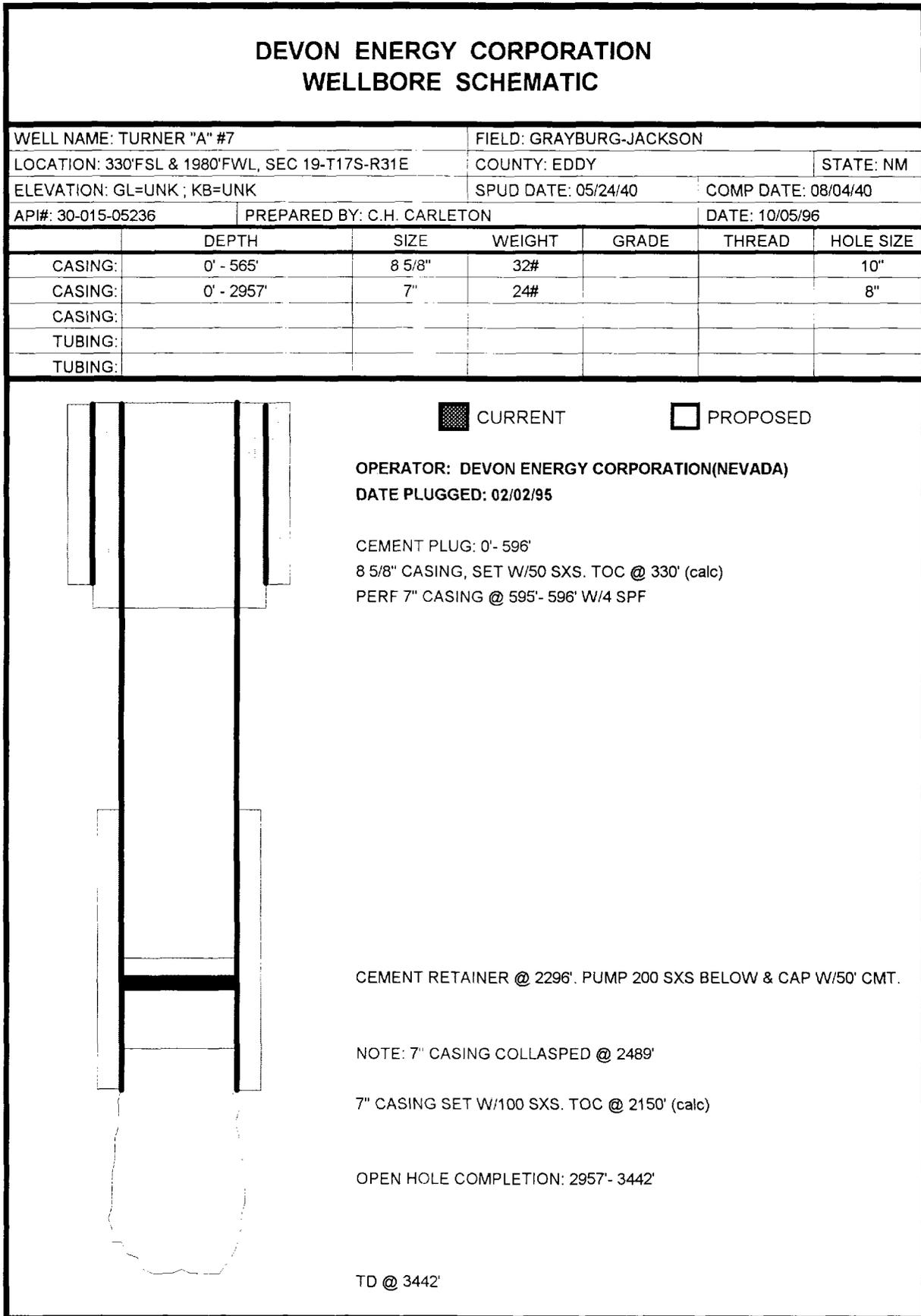
<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMP DATE</u>	<u>WELL TYPE</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
STATE #1 Mack Energy Corporation	1990FSL & 539FWL SEC 19-T17S-R31E EDDY COUNTY, NM	4/24/44	5/24/44	OIL PRODUCER	2002'/2002'	8 1/2" @ 495' W/50 SXS 7" @ 1836' W/100 SXS OPEN HOLE COMPLETION: 1836' - 2002' IP=180 BOPD DEEPEEN OPEN HOLE TO 3120' 5 1/2" @ 3053' W/65 SXS PERFORATE: 3045' - 3105'(OA) - RETURN TO PRODUCTION
STATE #3 Mack Energy Corporation	2310FSL & 906FWL SEC 19-T17S-R31E EDDY COUNTY, NM	4/15/47	6/3/47	OIL PRODUCER	1955'/1955'	8 5/8" @ 504' W/50 SXS 5 1/2" @ 1870' W/100 SXS OPEN HOLE COMPLETION: 1870' - 1955' IP=40 BOPD
STATE #4 Mack Energy Corporation	990FSL & 906FWL SEC 19-T17S-R31E EDDY COUNTY, NM	6/4/47	7/18/47	OIL PRODUCER	1998'/1998'	8" @ 604' W/50 SXS 5 1/2" @ 1905' W/75 SXS OPEN HOLE COMPLETION: 1905' - 1998' IP=30 BOPD
STATE #5 Mack Energy Corporation	1650FSL & 330FWL SEC 19-T17S-R31E EDDY COUNTY, NM	11/21/62	1/20/63	OIL PRODUCER	7125'/7125'	10 3/4" @ 452' 8 5/8" @ 1370' W/200 SXS 4 1/2" @ 7125' W/850 SXS PERFORATE: 7114' - 7120'(OA) IP=248 BOPD ABANDONED ABO FORMATION PERFORATE: 2841' - 3195'(OA) - RETURN TO PRODUCTION
STATE #6 Mack Energy Corporation	990FSL & 744FWL SEC 19-T17S-R31E EDDY COUNTY, NM	9/20/62	11/6/62	OIL PRODUCER	7090'/7090'	10 3/4" @ 460' 8 5/8" @ 1250' W/200 SXS 4 1/2" @ 7089' W/870 SXS PERFORATE: 7034' - 7046'(OA) IP=146 BOPD ABANDONED ABO FORMATION PERFORATE: 2857' - 3410'(OA) - RETURN TO PRODUCTION

# VI Wellbore Schematic of Plugged Wells:



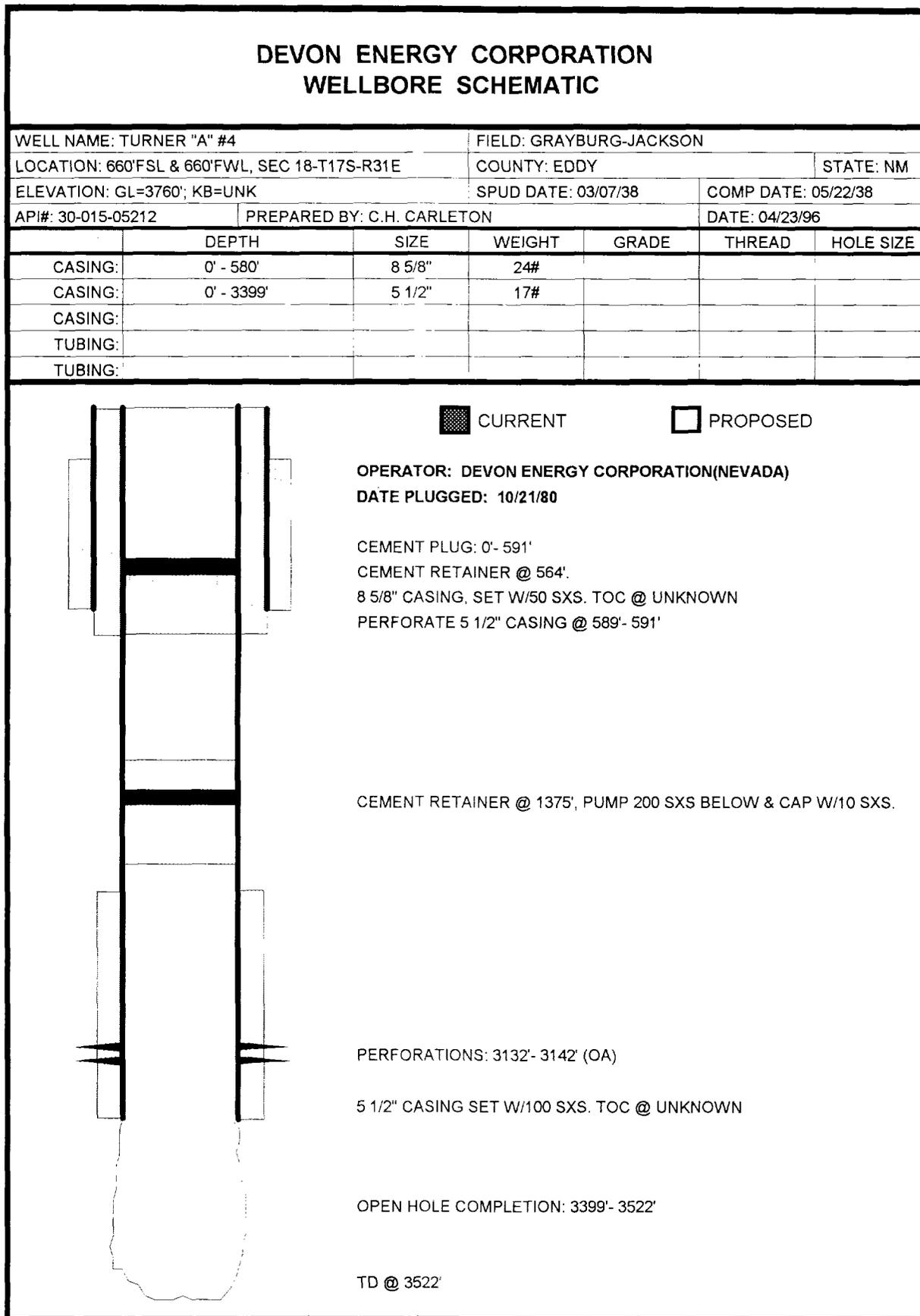
NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

VI Wellbore Schematic of Plugged Wells:

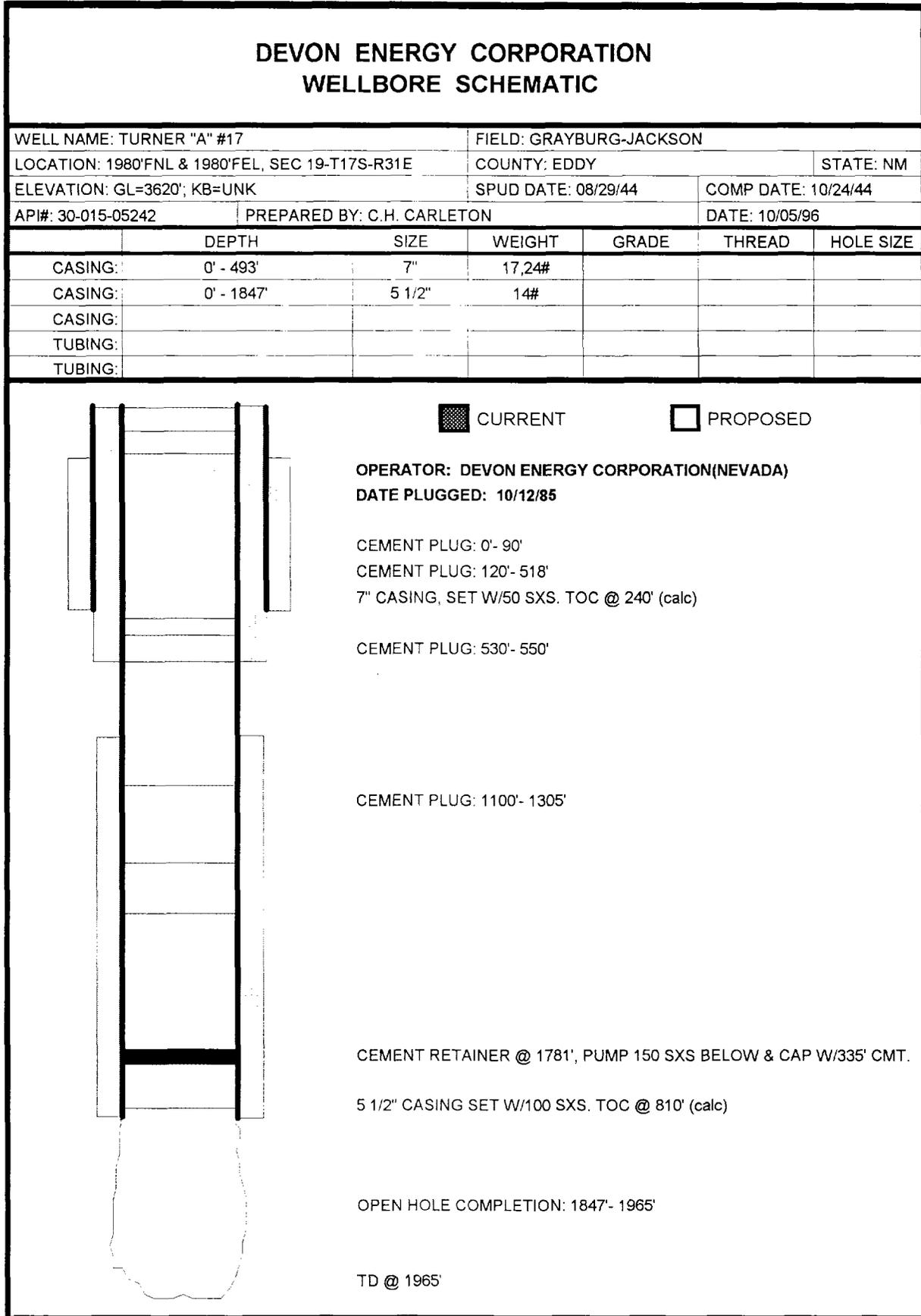


NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

# VI Wellbore Schematic of Plugged Wells:

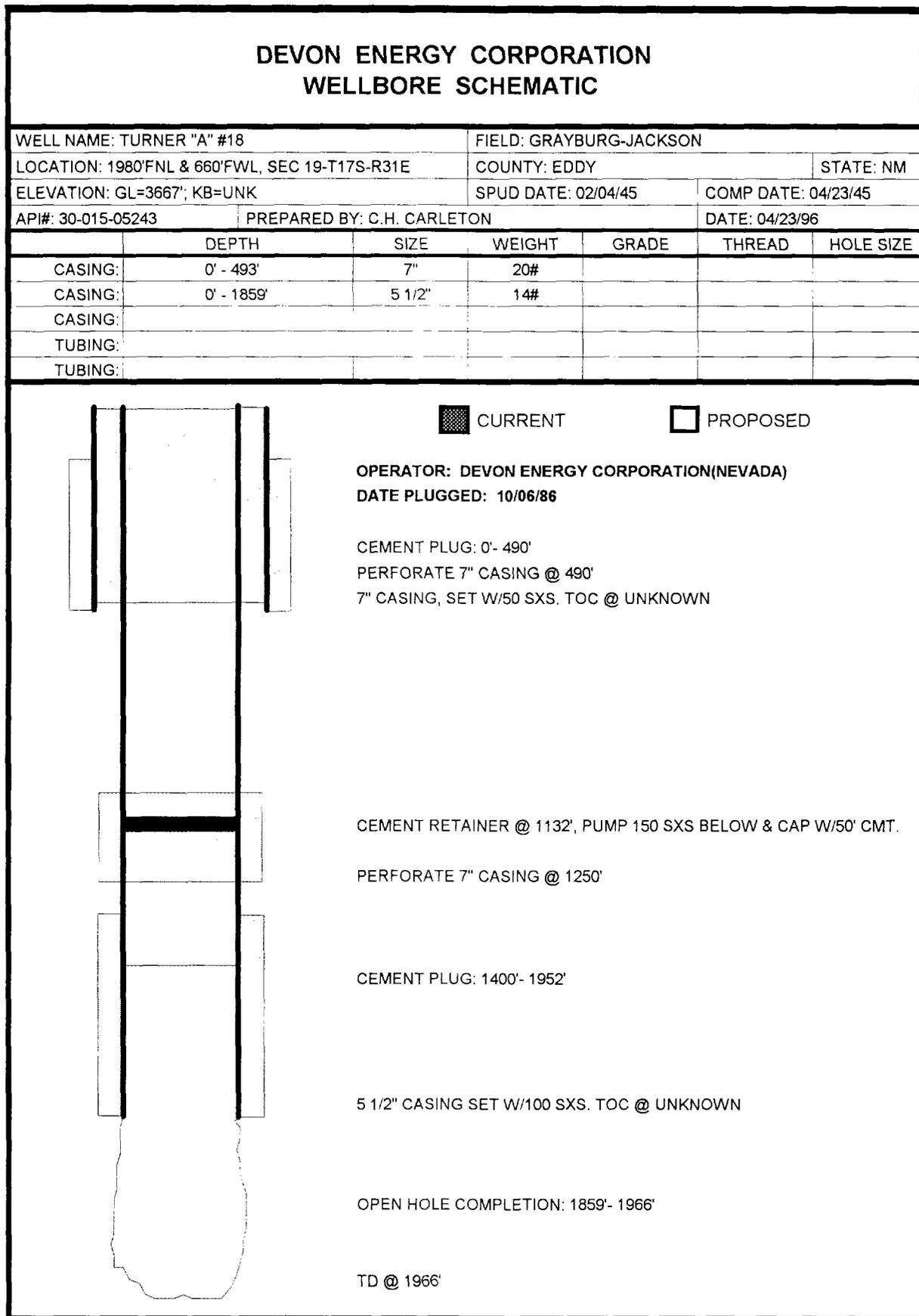


# VI Wellbore Schematic of Plugged Wells:

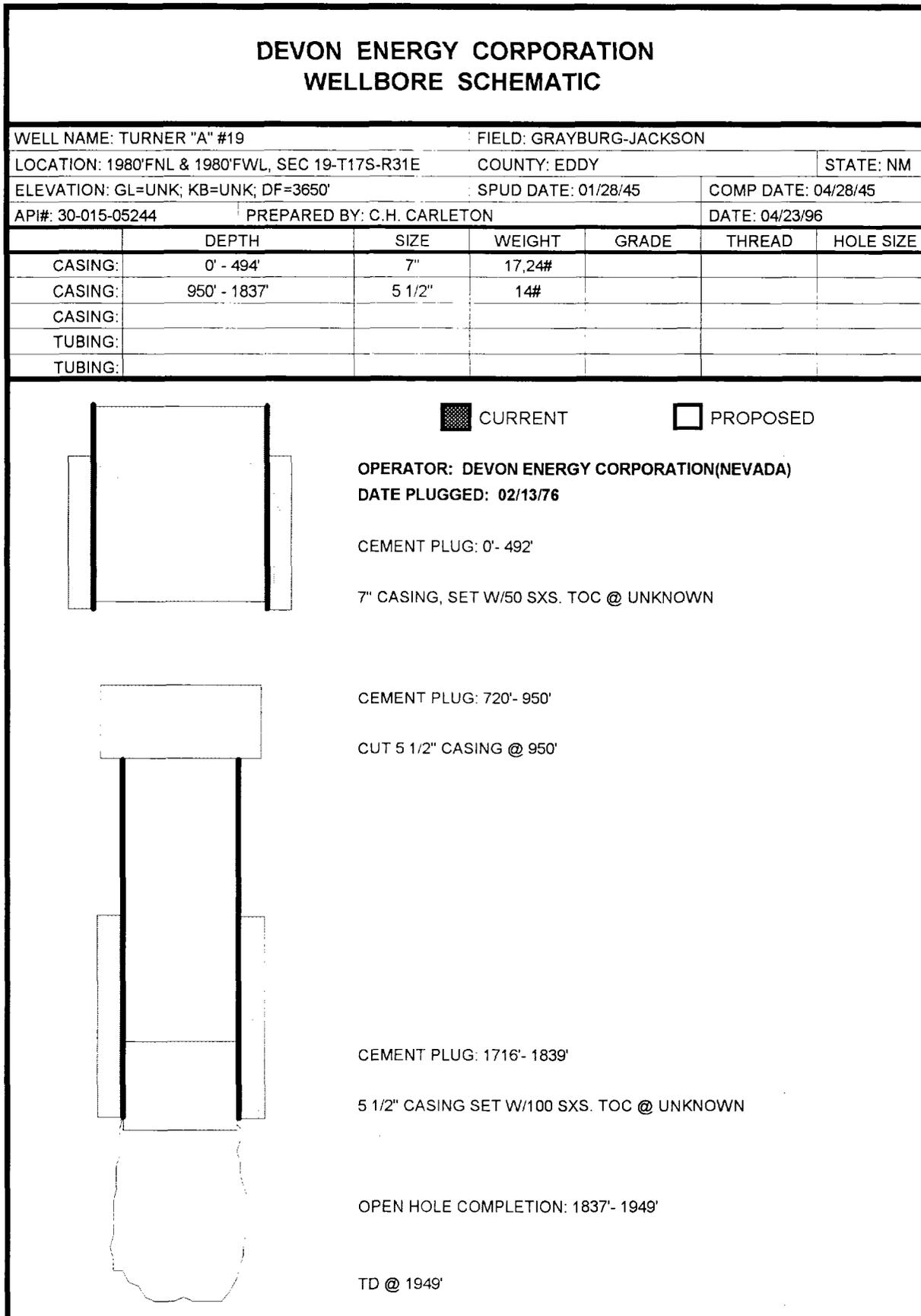


NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

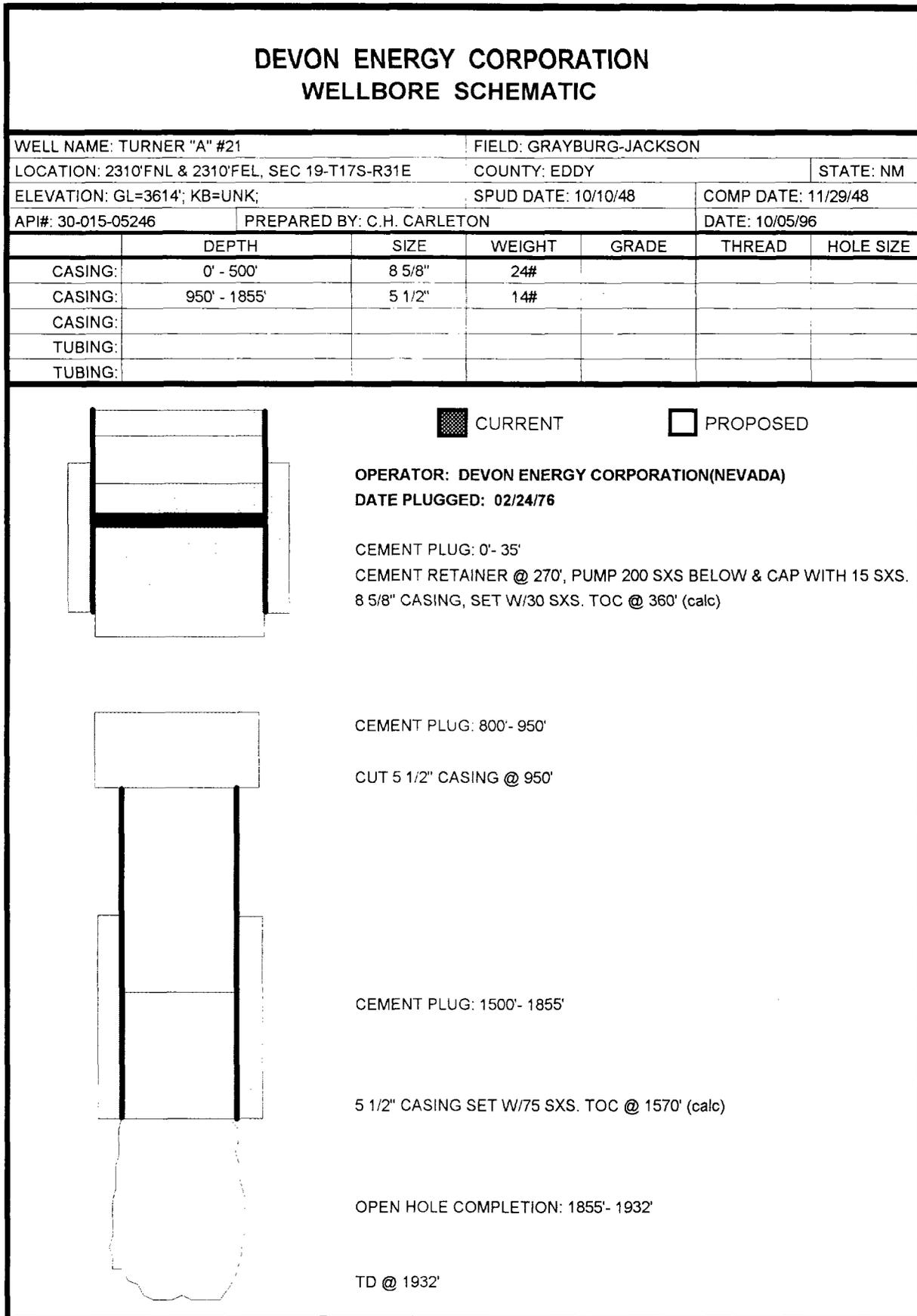
# VI Wellbore Schematic of Plugged Wells:



# VI Wellbore Schematic of Plugged Wells:

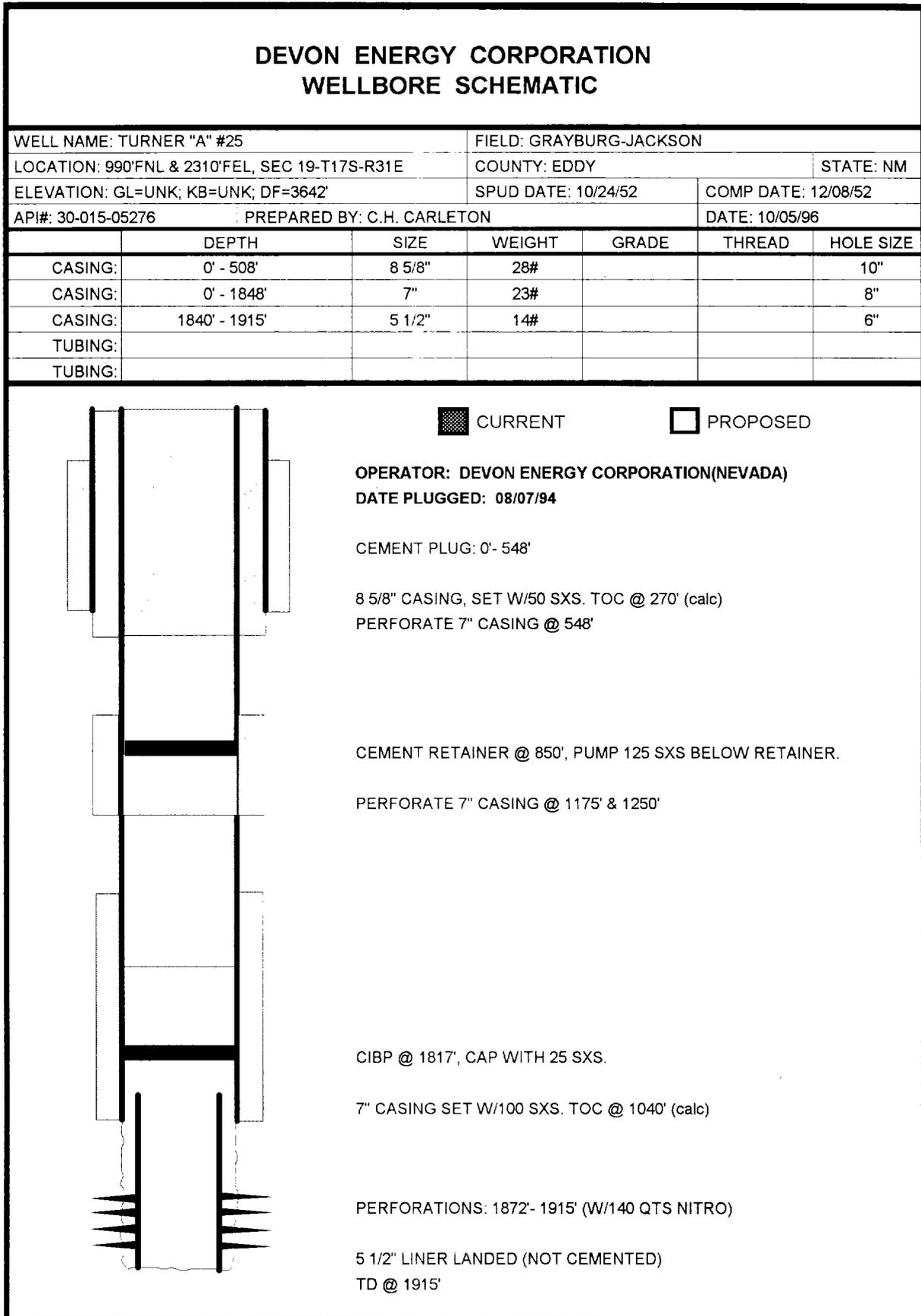


**VI Wellbore Schematic of Plugged Wells:**



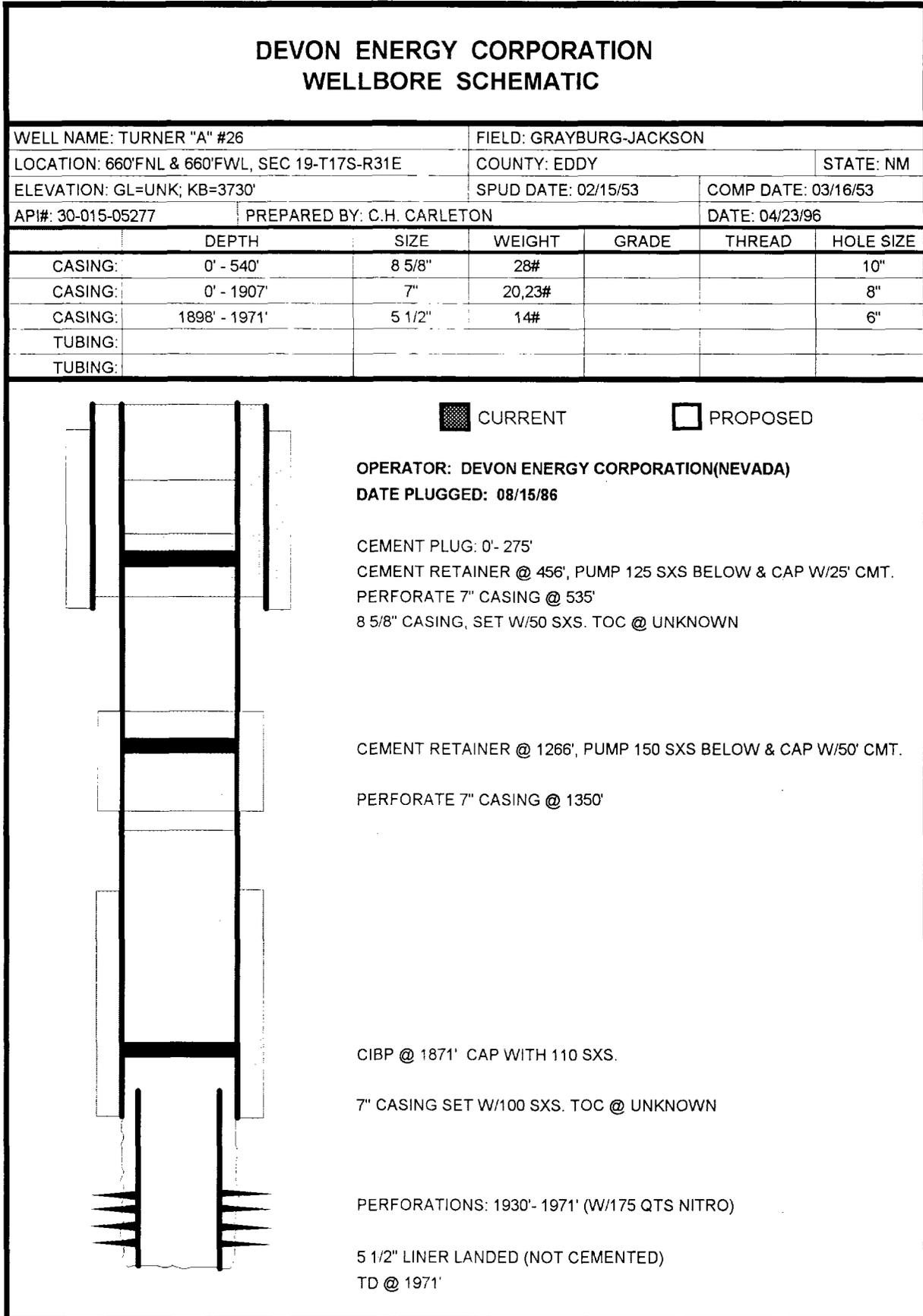
NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

## VI Wellbore Schematic of Plugged Wells:



NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

# VI Wellbore Schematic of Plugged Wells:

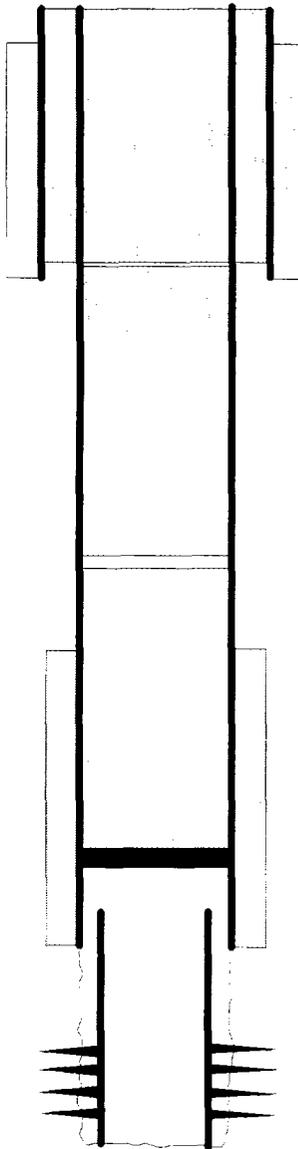


# VI Wellbore Schematic of Plugged Wells:

## DEVON ENERGY CORPORATION WELLBORE SCHEMATIC

WELL NAME: TURNER "A" #27		FIELD: GRAYBURG-JACKSON	
LOCATION: 330'FSL & 1398'FWL, SEC 18-T17S-R31E		COUNTY: EDDY	STATE: NM
ELEVATION: GL=3743'; KB=UNK		SPUD DATE: 03/18/53	COMP DATE: 04/13/53
API#: 30-015-05223	PREPARED BY: C.H. CARLETON		DATE: 04/23/96

	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 580'	8 5/8"	28#			10"
CASING:	0' - 1930'	7"	20#			8"
CASING:	1925' - 1997'	5 1/2"	14#			6"
TUBING:						
TUBING:						



CURRENT
  PROPOSED

**OPERATOR: DEVON ENERGY CORPORATION(NEVADA)**  
**DATE PLUGGED: 07/02/86**

CEMENT PLUG: 0'- 560'

PERFORATE 7" CASING @ 560'  
 8 5/8" CASING, SET W/50 SXS. TOC @ UNKNOWN

CEMENT PLUG: 560'- 1350'

PERFORATE 7" CASING @ 1350'

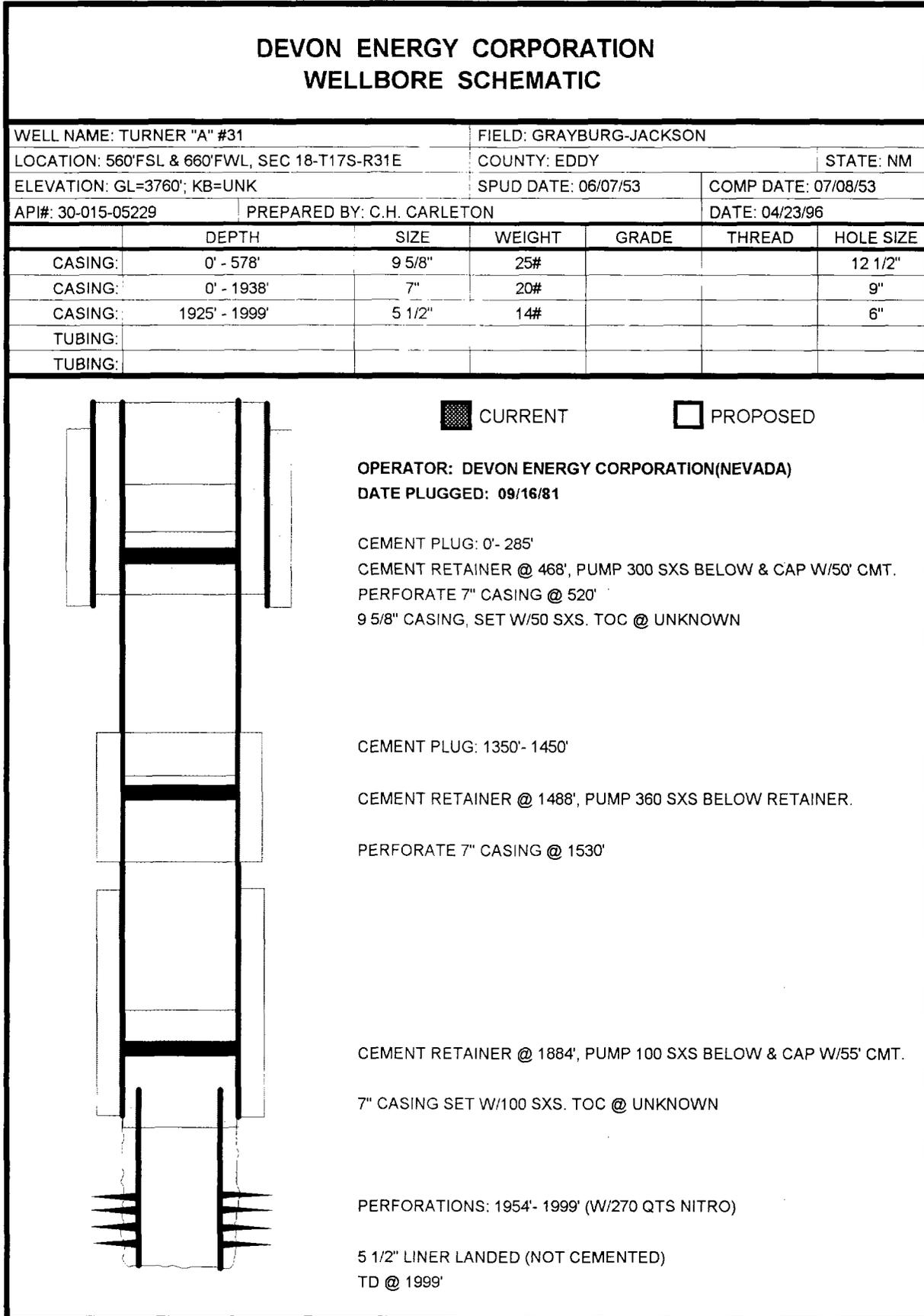
CIBP @ 1900', CAP WITH 115 SXS. TOC @ +/-1350'

7" CASING SET W/100 SXS. TOC @ UNKNOWN

PERFORATIONS: 1956'- 1997'

5 1/2" LINER LANDED (NOT CEMENTED)  
 TD @ 1997'

# VI Wellbore Schematic of Plugged Wells:



**DEVON ENERGY CORPORATION  
APPLICATION FOR AUTHORITY TO INJECT  
GRAYBURG-JACKSON WATERFLOOD**

**VII Proposed Operation Data:**

- (1) Average daily injection rates - 500 BWPD  
Maximum daily injection rates - 600 BWPD
- (2) Type of injection system - closed system
- (3) Average injection pressure - 2000 psig  
Maximum injection pressures - 2500 psig
- (4) Injection water will be reinjected produced water, plus makeup water from the Keel West fresh water system.
- (5) N/A

**VIII Geological Data:**

The proposed injection zone is in the Grayburg/San Andres formation from 2650' - 3475'. The Grayburg formation consists primarily of quartz sand with cementation. The San Andres formation consists primarily of dolomite with intermingled stringers of quartz sand with dolomite cementation.

Surface formation is Cretaceous and has no known source of drinking water. Additionally, there are no known underground sources of drinking water overlying or underlying the proposed injection interval.

**IX Stimulation Program:**

The proposed injection interval will be acidized with 15% NEFE acid prior to initial injection.

**X Well Logs:**

Copies of current well logs are on file with Oil Conservation Department.

**DEVON ENERGY CORPORATION**  
**APPLICATION FOR AUTHORITY TO INJECT**  
**GRAYBURG-JACKSON WATERFLOOD**

**XI Chemical Analysis of Fresh Water:**

There are no known producing fresh water wells within one mile of a proposed injection well.

**XII Affirmative Statement of Open Faults:**

Upon examination of the available geologic and engineering data, no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water was found.

**XIII “Proof of Notice” and “Proof of Publication”:**

The Bureau of Land Management is the surface owner. They have been notified by letter with a copy of our application.

Devon Energy Operating Corporation operates the Grayburg-Jackson Unit in Section 19 of T17S-R31E. Offset operators in the “Area of Review” are as follows:

(1) Burnett Oil Company  
801 Cherry Street, Suite 1500  
Ft. Worth, TX 76102

(2) Mack Energy Corporation  
P.O. Box 960  
Artesia, NM 88211-0960

Operator was provided a letter by certified mail. Proof of notice is attached.

“Proof of Publication” from the Carlsbad Current-Argus is attached.

# devon

**ENERGY CORPORATION**

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone: 405/235-3611  
FAX 405/552-4550

May 6, 1997

**Certified Mail P 240 501 948**

Burnett Oil Company  
801 Cherry Street, Suite 1500  
Ft. Worth, TX 76102

RE: Devon Energy Corporation  
Grayburg-Jackson Waterflood Project  
Turner "A" #14  
1650' FNL & 660' FWL  
Section 19 - T17S - R31E  
Eddy County, NM

Gentlemen:

Please consider this letter as official notification that Devon Energy Corporation is in the process of filing an application to convert the Turner "A" #14 to water injection in the above referenced section. Our records indicate that you are an offset operator. As an offset operator you must be notified by Devon and you must file any objections or requests for hearings of administrative applications with the Oil Conservation Division of New Mexico within fifteen (15) days of receiving this notification.

Please direct any questions regarding this matter to the undersigned at 405/552-4560.

Sincerely,  
Devon Energy Corporation



Randy Jackson  
District Engineer

/chc

xc: Well File

Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> <ul style="list-style-type: none"> <li>■ Complete items 1 and/or 2 for additional services.</li> <li>■ Complete items 3, 4a, and 4b.</li> <li>■ Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>■ Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>■ Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>■ The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
	3. Article Addressed to: BURNETT OIL COMPANY 801 CHERRY ST., SUITE 1500 FT. WORTH, TX 76102		4a. Article Number P 240 501 948
	5. Received By: (Print Name)		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
	6. Signature: (Addressee or Agent) X <i>Joyce Morgan</i>		7. Date of Delivery 5-8-97
		8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

# devon

**ENERGY CORPORATION**

20 North Broadway, Suite 1500  
 Oklahoma City, Oklahoma 73102-8260

Telephone: 405/235-3611  
 FAX 405/552-4550

May 6, 1997

**Certified Mail P 240 501 949**

Mack Energy Corporation  
 P.O. Box 960  
 Artesia, NM 88211-0960

RE: Devon Energy Corporation  
 Grayburg-Jackson Waterflood Project  
 Turner "A" #14  
 1650' FNL & 660' FWL  
 Section 19 - T17S - R31E  
 Eddy County, NM

Gentlemen:

Please consider this letter as official notification that Devon Energy Corporation is in the process of filing an application to convert the Turner "A" #14 to water injection in the above referenced section. Our records indicate that you are an offset operator. As an offset operator you must be notified by Devon and you must file any objections or requests for hearings of administrative applications with the Oil Conservation Division of New Mexico within fifteen (15) days of receiving this notification.

Please direct any questions regarding this matter to the undersigned at 405/552-4560.

Sincerely,  
 Devon Energy Corporation

  
 Randy Jackson  
 District Engineer

/chc

xc: Well File

Is your RETURN ADDRESS completed on the reverse side?	<b>SENDER:</b> ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
	3. Article Addressed to: MACK ENERGY CORPORATION P.O. BOX 960 ARTESIA, NM 88211-0960		4a. Article Number P 240 501 949	
			4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
			7. Date of Delivery 5-12-97	
	5. Received By: (Print Name) Sylvia Henzley		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) <input checked="" type="checkbox"/> Sylvia Henzley				

Thank you for using Return Receipt Service.

# Affidavit of Publication

No 18915

State of New Mexico,  
County of Eddy, ss.

Amy McKay

being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

May 8, 1997  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 23.36,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

13<sup>th</sup> day of May, 1997

Donna Crump

My commission expires 8/1/98

Notary Public

**May 8, 1997**

Notice is hereby given that Devon Energy Corporation is applying to the New Mexico Oil Conservation Division to convert one producing well to water injection for secondary recovery purposes in:

Section 19 of T17S - R31E,  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg/San Andres Formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK 73102  
(405) 552-4560