SWD 5/15/00
774

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

April 14, 2000

David Catanach
State of New Mexico
OIL CONSERVATION DIVISION
2040 S. Pacheco Street
Santa Fe, NM 87505-5472

Dear Mr. Catanach,

Enclosed please find a copy of form C-108 (Application for Authority to Inject) for the proposed Lusk #1 SWD located in Unit C of Section 11-T16S-R35E, Lea County, New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-4174.

Sincerely,

Albert R. Stall
Operations Engineer

ARS/sd

Enclosure

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505

FORM C-108
Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

VI. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance __X__ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: Yates Petroleum Corporation

ADDRESS: 105 S. 4th Street, Artesia, New Mexico 88210

CONTACT PARTY: Albert R. Stall PHONE: 505-748-4174

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 __X__ 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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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: Albert R. Stall TITLE: Operations Engineer

SIGNATURE: Albert R Stall DATE: 4/14/00

* 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 circumstances of the earlier submittal: _____

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

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 the 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, 2040 South Pacheco, Santa Fe, New Mexico 87505, 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.

C-108 Application for Authorization to Inject

YATES PETROLEUM CORPORATION
Lusk #1 SWD
C 11-16S-35E
Lea County, New Mexico

I. The purpose of completing this well is for disposal of produced Cisco, Strawn, Atoka, and Morrow water into the Wolfcamp.

II. Operator: Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
Albert R. Stall (505) 748-4174

III. Well Data: See Attachment A

IV. This is not an expansion of an existing project.

V. See attached map, Attachment B.

VI. Wells within the area of review penetrating the proposed injection zone. (Attachment C)

VII. 1. Proposed average daily injection volume approximately 1,000 BWPD.
Maximum daily injection volume approximately 5,000 BWPD.

2. This will be a closed system.

3. Proposed average injection pressure--unknown.
Proposed maximum injection pressure--6150 psi.

4. Sources of injected water would be produced water from the Cisco, Strawn, Atoka, and Morrow. No Atoka sample available at this time. (Attachment D)

5. See Attachment D.

VIII. The injection interval is Wolfcamp from 10262-10630'.
Underground water sources of drinking water are in the Ogalalla fill from surface to 250'.

IX. The proposed disposal interval may be acidized with 15-20% HCL acid.

X. Logs were filed at your office when the well was drilled.

XI. There are two fresh water wells that exists within a one-mile radius of the subject location. Chemical analysis attached. (Attachment E)

XII. Available engineering and geologic data have been examined, and no evidence of open faults or hydrologic connection between the disposal zone and any underground sources of drinking water has been found.

XIII. Proof of notice

A. Surface owners and offset operators have been notified. (Attachment F)

B. Copy of legal advertisement attached. (Attachment G)

XIV. Certification is signed.

ATTACHMENT A

Attachment A (1)

YATES PETROLEUM CORPORATION
Lusk #1 SWD
C Sec 11-T16S-R35E
Lea County

III. Well Data

A. 1. Lease Name/Location:
Lusk #1 SWD
C 11-16S-35E
660'FNL & 1980'FWL

2. Casing Strings: Proposed Well Condition:
13-3/8" 48# at 343'
8-5/8" 32# at 4661'
5-1/2" 15.5# & 17# at 10641'
2-7/8" J-55 plastic-coated tubing with nickel-plated packer at 10200'

3. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 10200'

B. 1. Injection Formation: Wolfcamp

2. Injection interval into 10262-10630'

3. Well was originally drilled as an exploratory Wolfcamp well. Well will be a Wolfcamp water disposal well when work is completed.

4. Next higher (shallower) oil or gas zone within 2 miles: None
Next lower (deeper) oil or gas zone within 2 miles: Cisco

Attachment A (2)

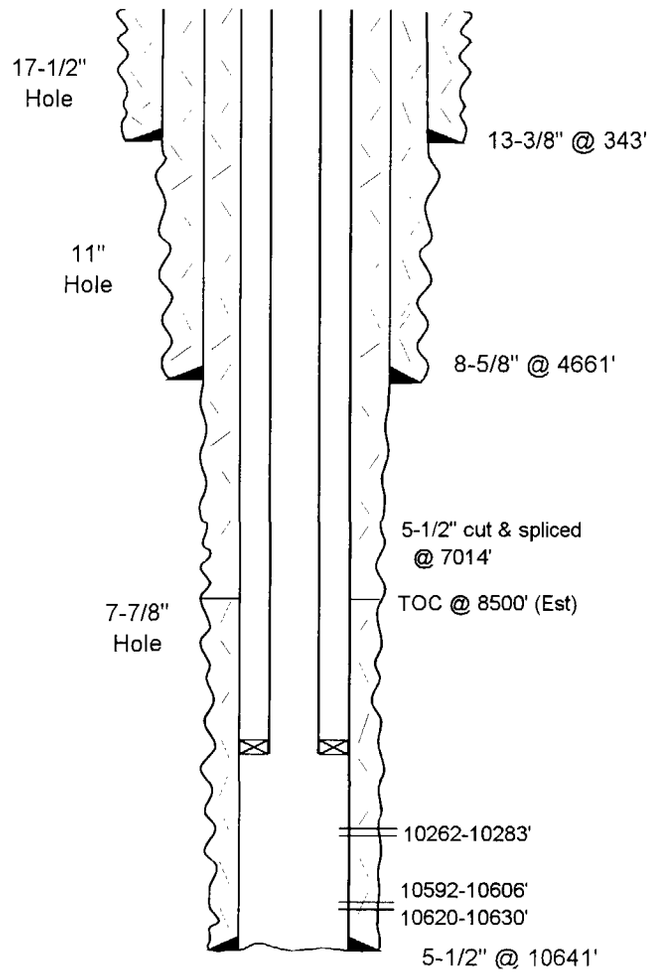
INJECTION WELL DATA SHEET

OPERATOR: Yates Petroleum Corporation

WELL NAME & NUMBER: Lusk #1 SWD

WELL LOCATION:	660'FNL & 1980'FWL	C	11	16S	35E
	FOOTAGE LOCATION	**UNIT LETTER**	**SECTION**	**TOWNSHIP**	**RANGE**

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" **Casing Size:** 13-3/8" @ 343'

Cemented with: 450 **sx.** **or** _____ **ft³**

Top of Cement: Surface **Method Determined:** Circulated

Intermediate Casing

Hole Size: 11" **Casing Size:** 8-5/8" @ 4661'

Cemented with: 1600 **sx.** **or** _____ **ft³**

Top of Cement: Surface **Method Determined:** Circulated

Production Casing

Hole Size: 7-7/8" **Casing Size:** 5-1/2" @ 10641'

Cemented with: 600 **sx.** **or** _____ **ft³**

Top of Cement: Surface **Method Determined:** Circulated

Total Depth: 10641'

Injection Interval

Perforated 10262 **feet** **to** 10630

(Perforated or Open Hole; indicate which)

Attachment C (9)

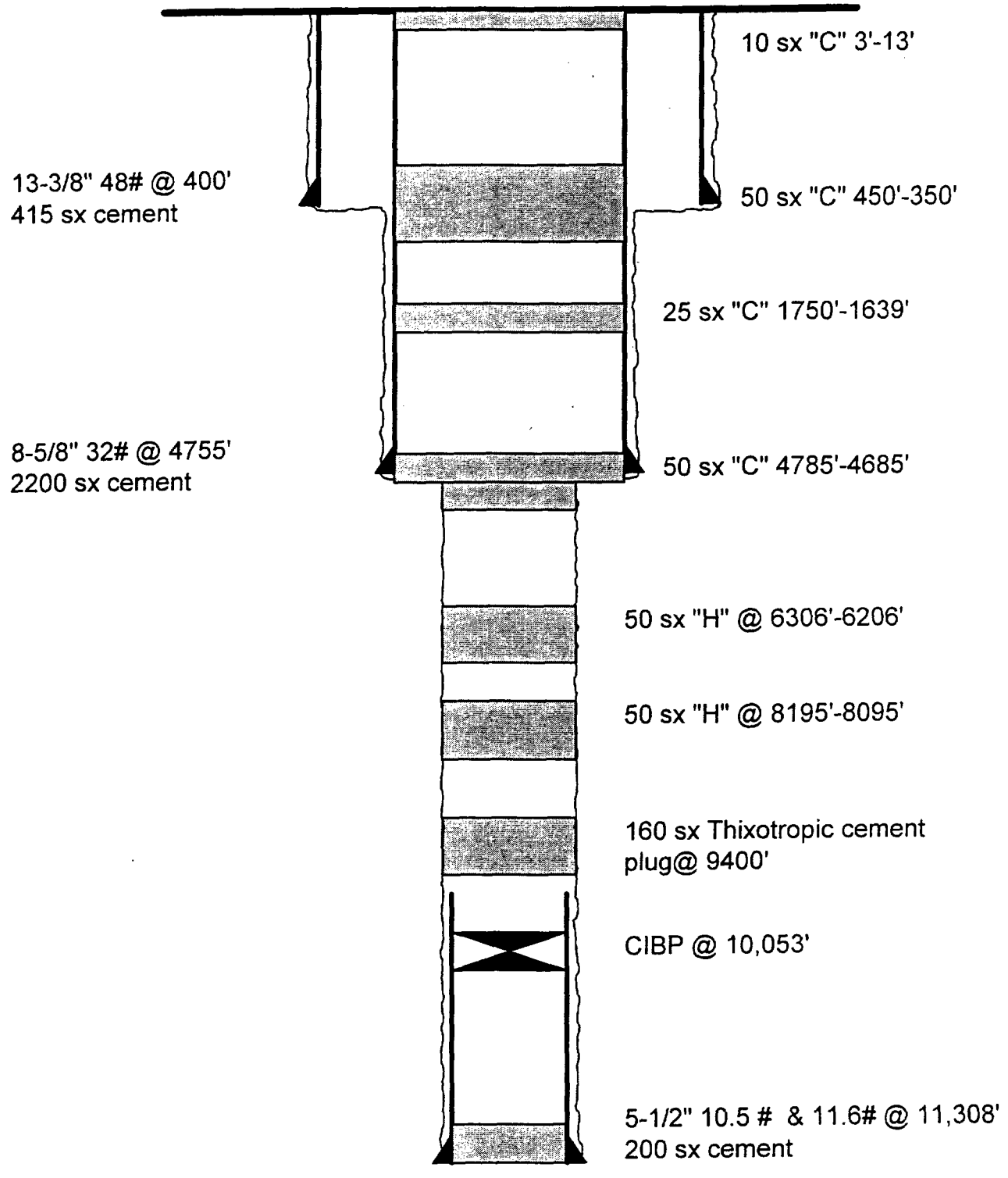
Townsend State #4

330' FSL & 1650' FEL

Unit W-2-16S-35E

Lea County, New Mexico

Final Plugging Diagram



Attachment A (4)

WELLNAME: Lusk #1 FIELD:

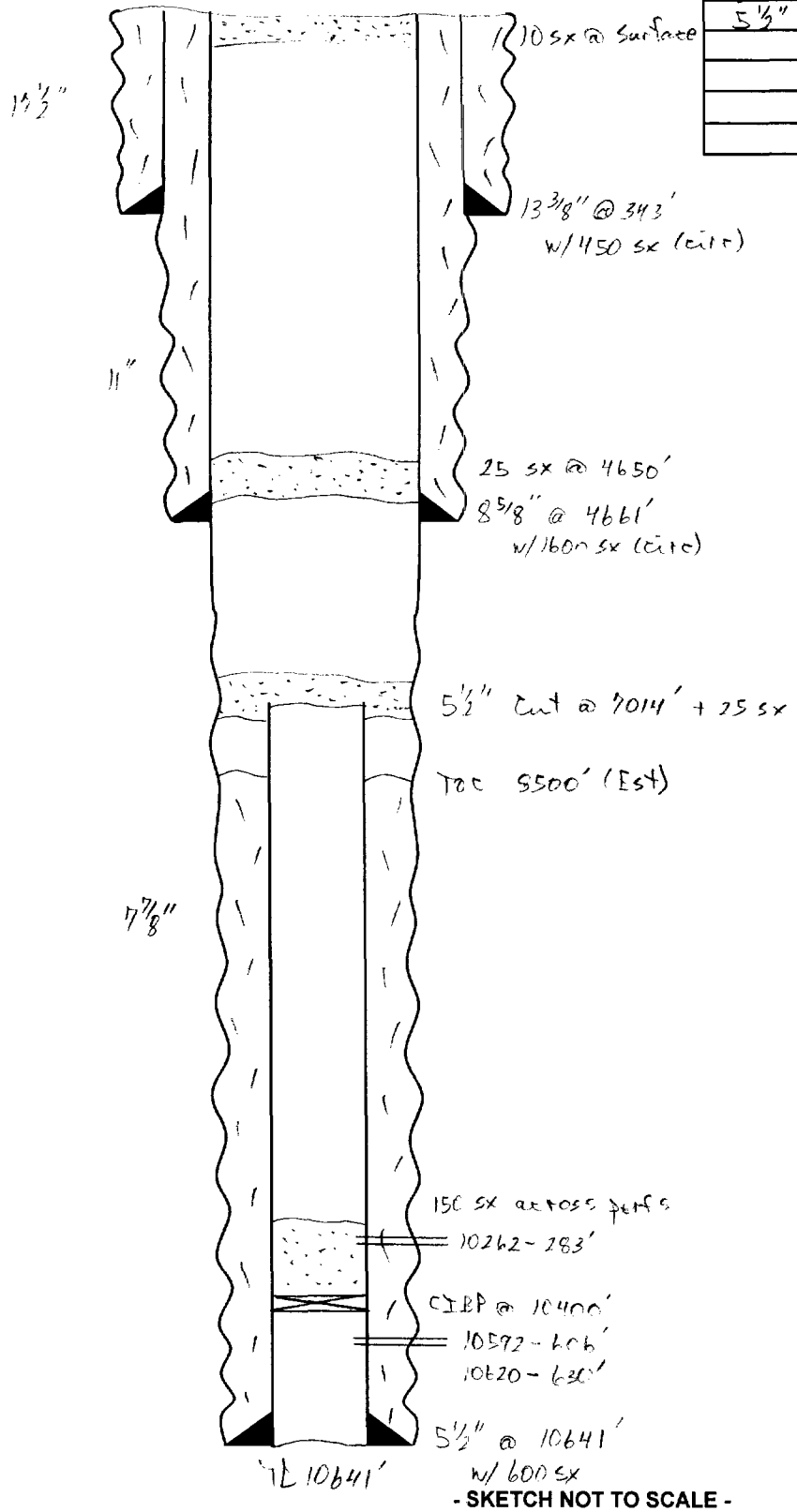
LOCATION: 660' FNL & 1980' FWL Sec 11 - 16S - 35E Lea County

GL: ZERO: AGL: KB:

SPUD DATE: COMPLETION DATE:

COMMENTS: P & A 3-28-65
(Shell O:L)

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48#	343'
8 5/8" 32#	4661'
5 1/2" 15.5#, 17#	10641'



Before

- SKETCH NOT TO SCALE -

DATE: 3-28-00 DD

WELLNAME: Lusk #1 SWD FIELD: _____

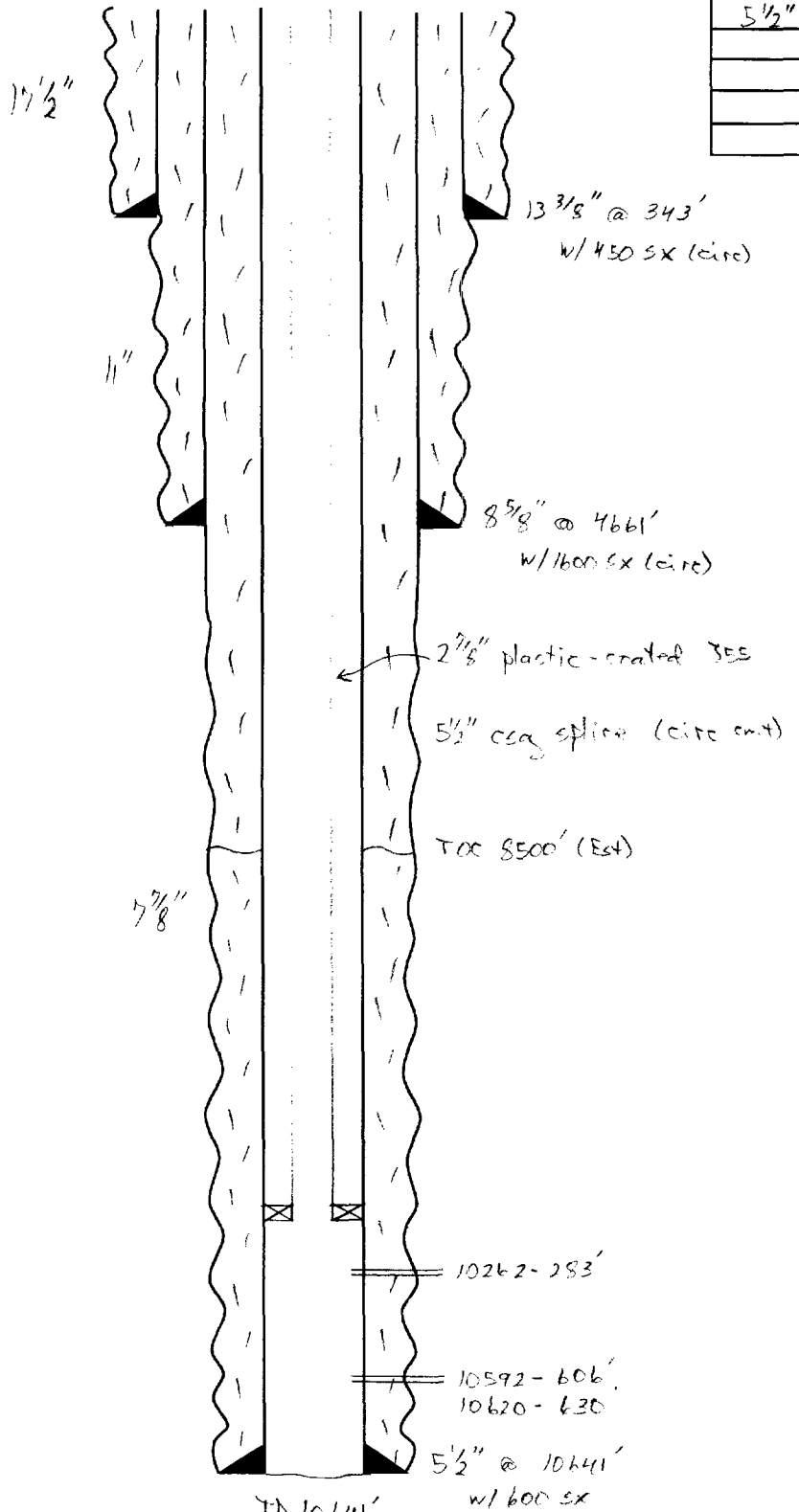
LOCATION: 660' FNL & 1980' FWL Sec 11 - 16S - 35E Lea County

GL: _____ ZERO: _____ AGL: _____ KB: _____

SPUD DATE: _____ COMPLETION DATE: _____

COMMENTS: _____

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48#	343'
8 5/8" 32#	4661'
5 1/2" 15.5#, 17#	10641'



After

- SKETCH NOT TO SCALE -

DATE: 3-28-00 SD

ATTACHMENT C

Attachment C (1)

AREA OF REVIEW WELL DATA

Lease	Well	Operator	API #	Location				Status	Spud Date	Compl Date	TD	Compl Interval	Prod Formation	Casing
R E HILBURN	3	SHELL WESTERN E&P INC	300250271800		2	16S	35E	P&A	12/27/54	2/28/55	10590			17½" 13-3/8" @ 343 W/350 SX 11" 8-5/8" @ 4678 W/2300 SX 7⅞" 5-1/2" @ 10578 W/600 SX
STATE TB	1	OCEAN ENERGY INC	300250271900		2	16S	35E	ACT	3/14/55	5/26/55	10850	10265-10584	WOLFCAMP	13-3/8" @ 354 W/400 SX 8-5/8" @ 4683 W/2908 SX 5-1/2" @ 10846 W/650 SX
STATE TB	2	CENARD OIL & GAS CO	300250272000		2	16S	35E	WD	4/28/55	6/25/55	10625			13-3/8" @353 W/400 SX 8-5/8" @ 4687 W/1900 SX 5-1/2" @ 10624 W/640 SX
STATE TD	1	OCEAN ENERGY INC	300250272100		2	16S	35E	ACT	6/28/55	8/5/55	10700	10530-10582	UPPER PENN	13-3/8" @ 339 W/400 SX 8-5/8" @ 4697 W/2100 SX 5-1/2" @ 10647 W/450 SX
STATE AG	2	AMOCO PRODUCTION CO	300250277300	A	10	16S	35E	P&A	10/23/54	1/2/55	10601			13-3/8" @ 358 W/310 SX 8-5/8" @ 4669 W/460 SX 5-1/2" @ 10497 W/200 SX
LUSK	1	RUNNELS HAROLD L	300250278000	B	11	16S	35E	P&A	1/29/55	4/13/55	10665			13-3/8" @ 358 W/350 SX 8-5/8" @ 4662 W/2345 SX 5-1/2" @ 10664 W/600 SX
G L LUSK	2	SHELL WESTERN E&P INC	300250278100	E	11	16S	35E	P&A	3/17/55	5/15/55	10655			13-3/8" @ 362 W/400 SX 8-5/8" @ 4701 W/2100 SX 5-1/2" @ 10654 W/600 SX
SHELL LUSK ANB COM	1	YATES PETROLEUM CORP	300250278200		11	16S	35E	ACT	8/29/97	12/14/97	12264	12029-12214	ATOKA	13-3/8" @ 353 W/450 SX 8-5/8" @ 4664 W/2400 SX 5-1/2" @ 12264 W/600 SX
RUNNELS ASP	1	YATES PETROLEUM CORP	300250278500	G	11	16S	35E	J&A	5/15/98	5/20/98	10667			13-3/8" @ 366 W/350 SX 8-5/8" @ 3670 W/2085 SX 5-1/2" @ 10664 W/600 SX
RUNNELS ASP	3	YATES PETROLEUM CORP	300250278600	A	11	16S	35E	ACT	3/9/99	5/15/99	12523	11550-12430	STRAWN	13-3/8" @ 350 W/300 SX 8-5/8" @ 3672 W/1900 SX 5-1/2" @ 11550 W/1270 SX
LUSK	4	SOUTHERN PETR EXPL INC	300250278700	A	11	16S	35E	P&A	1/14/56	3/21/56	10650			13-3/8" @ 350 W/350 SX 8-5/8" @ 4650 W/1900 SX 5-1/2" @ 10650 W/600 SX
SIMMONS WITT ASL	1	YATES PETROLEUM CORP	300250851800	J	11	16S	35E	J&A	4/25/98	5/6/98	10714			13-3/8" @ 365 W/275 SX 8-5/8" @ 4675 W/600 SX
SCHENCK ATP	1	YATES PETROLEUM CORP	300251258300	D	11	16S	35E	ACT	1/21/00		11712	11448-11460	STRAWN	13-3/8" @ 333 W/300 SX 8-5/8" @ 4659 W/2300 SX 5-1/2" @ 10490 W/500 SX 3-1/2" @ 11700 W/90 SX
TOWNSEND STATE	4	OCEAN ENERGY INC	300253415000	O	2	16S	35E	D&A	10/22/97	6/26/98	11340			13-3/8" @ 400 W/415 SX 8-5/8" @ 4755 W/2200 SX 5-1/2" @ 11308 W/200 SX
FIELD APK STATE COM	3	YATES PETROLEUM CORP	300253425200	K	2	16S	35E	ACT	12/4/98	2/20/99	12830	12301-12448	MORROW	13-3/8" @ 442 W/500 SX 9-5/8" @ 4600 W/1200 SX 5-1/2" @ 12830 W/1050 SX
TOWNSEND STATE	5	OCEAN ENERGY INC	300253450000		2	16S	35E	ACT	9/12/98	11/19/98	11851	11510-11541	STRAWN	13-3/8" @ 437 W/415 SX C 9-5/8" @ 4740 W/1795 SX C 7" @ 11298 W/260 SX 98% CALC 4-1/2" LINER 10900-11850 W/130 SX
SHELL LUSK ANB	2	YATES PETROLEUM CORP	300253463100	E	11	16S	35E	ACT	6/7/99	9/22/99	11659	10890-10912 11374-11445	STRAWN UPPER PENN	13-3/8" @ 394 W/415 SX C 9-5/8" @ 4725 W/1450 SX C 7" @ 11659 W/1375 SX DV TOOL CMT OK

WELLNAME: Hilburn #3 FIELD:

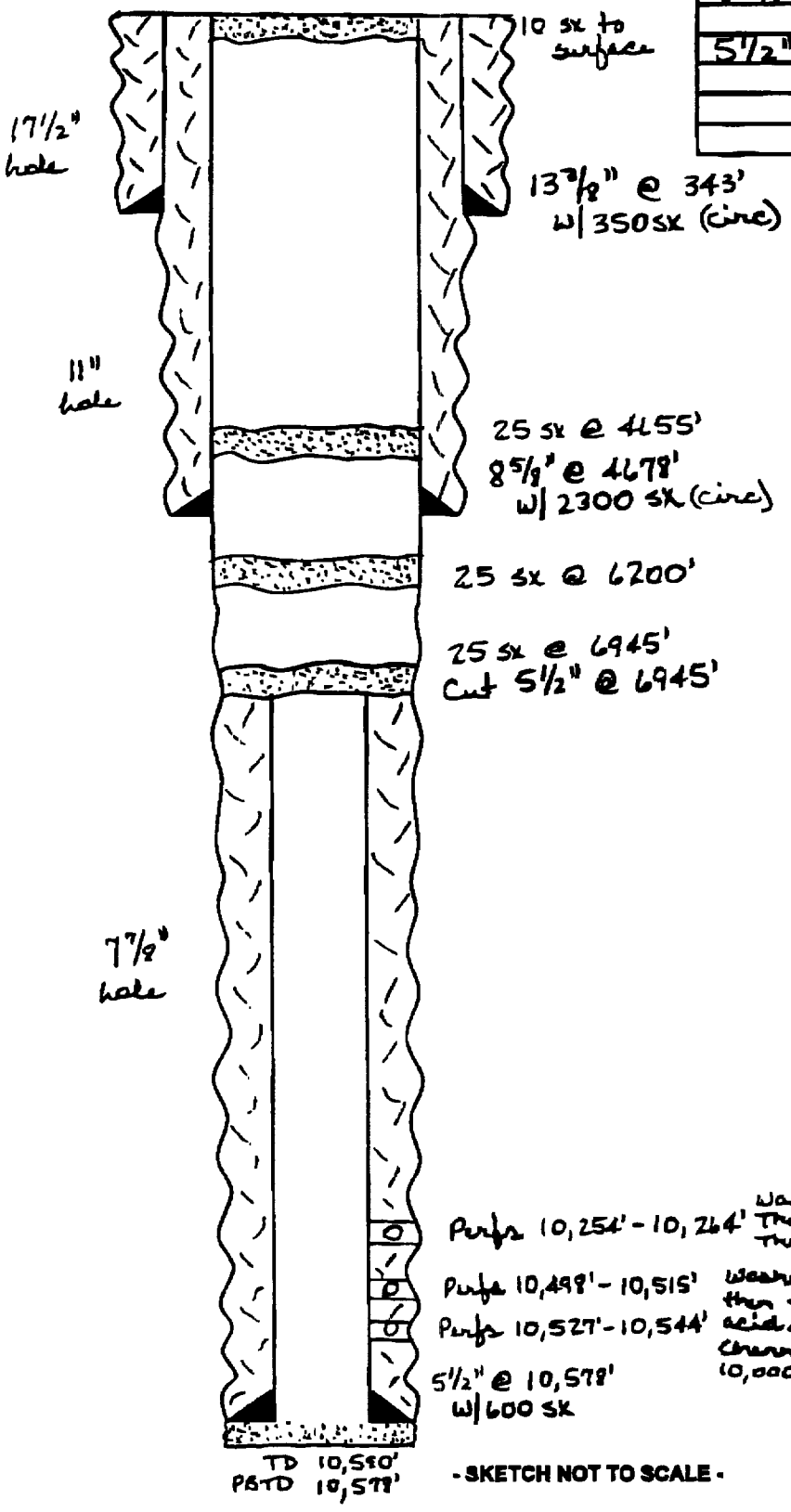
LOCATION: 660' FSL, 660' FWL 4-2-16S-35E Lea County

GL: 3999' ZERO: AGL: KB:

SPUD DATE: 12-27-54 COMPLETION DATE: 2-21-55

COMMENTS: Operator: Shell Oil Co.

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48 #	343'
8 5/8" 32#	4678'
5 1/2" 15.5#, 17#	10578'



Tops
Glorieta 6240'
Drinkard Silt 7400'
Abo 9142'
Wolfcamp 10,350'

Washed w/ 500 gals. 16% MCA. Treated w/ 1000 gals 15% MCA. Treated w/ 2000 gals. 15% N.E. acid.

Washed w/ 500 gals mud acid, then treated w/ 500 gals. mud acid. Acidized w/ 2000 gals. Chemical acid followed by 10,000 gals. 15% LST acid.

- SKETCH NOT TO SCALE -

DATE: 3-22-00 TH

WELLNAME: State AG 2 Amoco Production FIELD: Townsend Wolfcamp

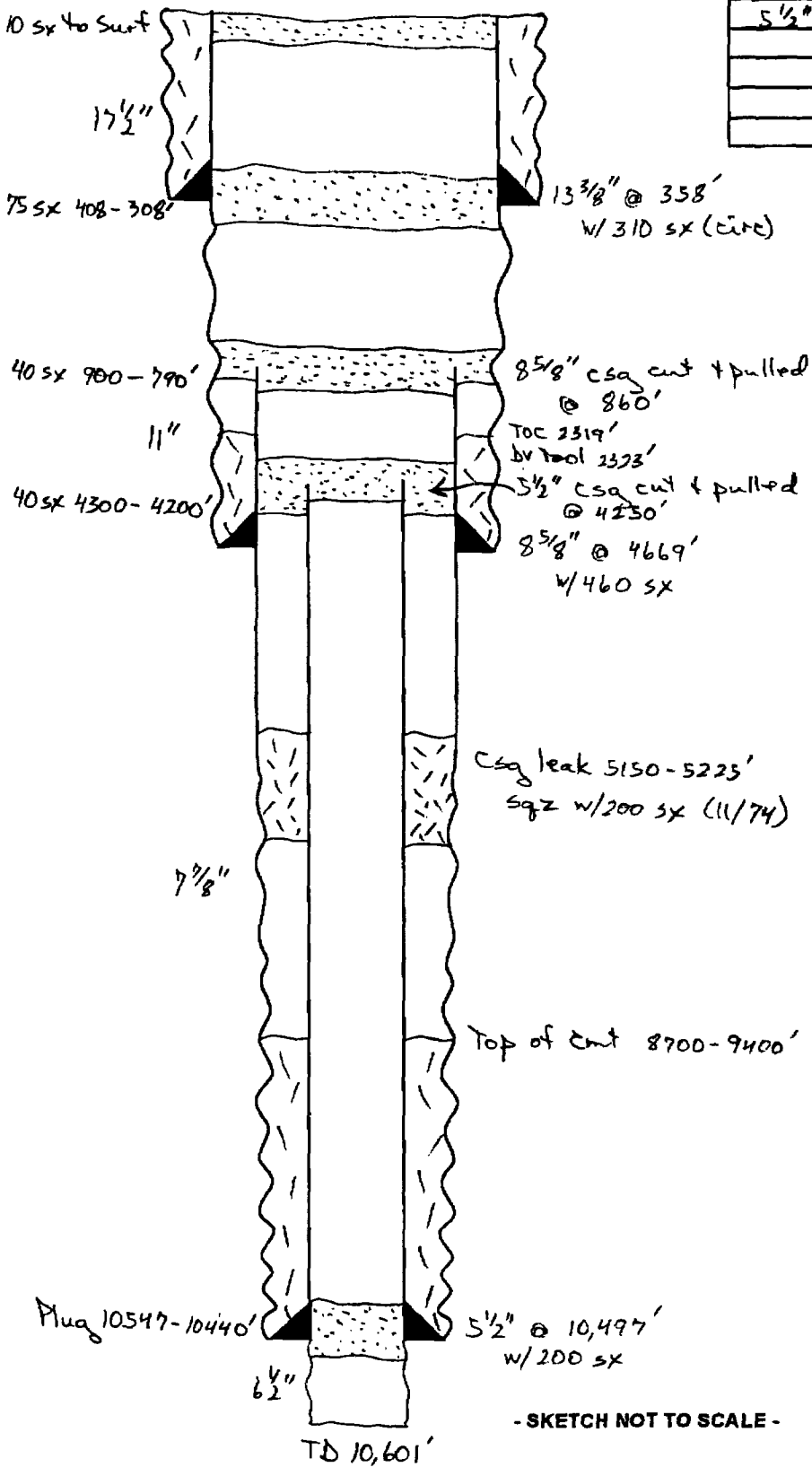
LOCATION: 660' FNL & 660' FEL Sec 10 - 16S - 35E Lea County

GL: _____ ZERO: _____ AGL: _____ KB: _____

SPUD DATE: _____ COMPLETION DATE: 1-2-55

COMMENTS: _____

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 36#	358'
8 5/8" 28#, 32#	4669'
5 1/2" 15#, 17#	10492'



- SKETCH NOT TO SCALE -

4/60 Acdz openhole w/500g 15% acid

11/74 Repair csg leak
Acdz openhole w/1000g 15% acid

Tops: Glorieta 6253'
Tubb 7320'
Abo 8050'

DATE: 8-18-99 sb

WELLNAME: Lusk 1 (Harold L. Runnels) FIELD: Townsend

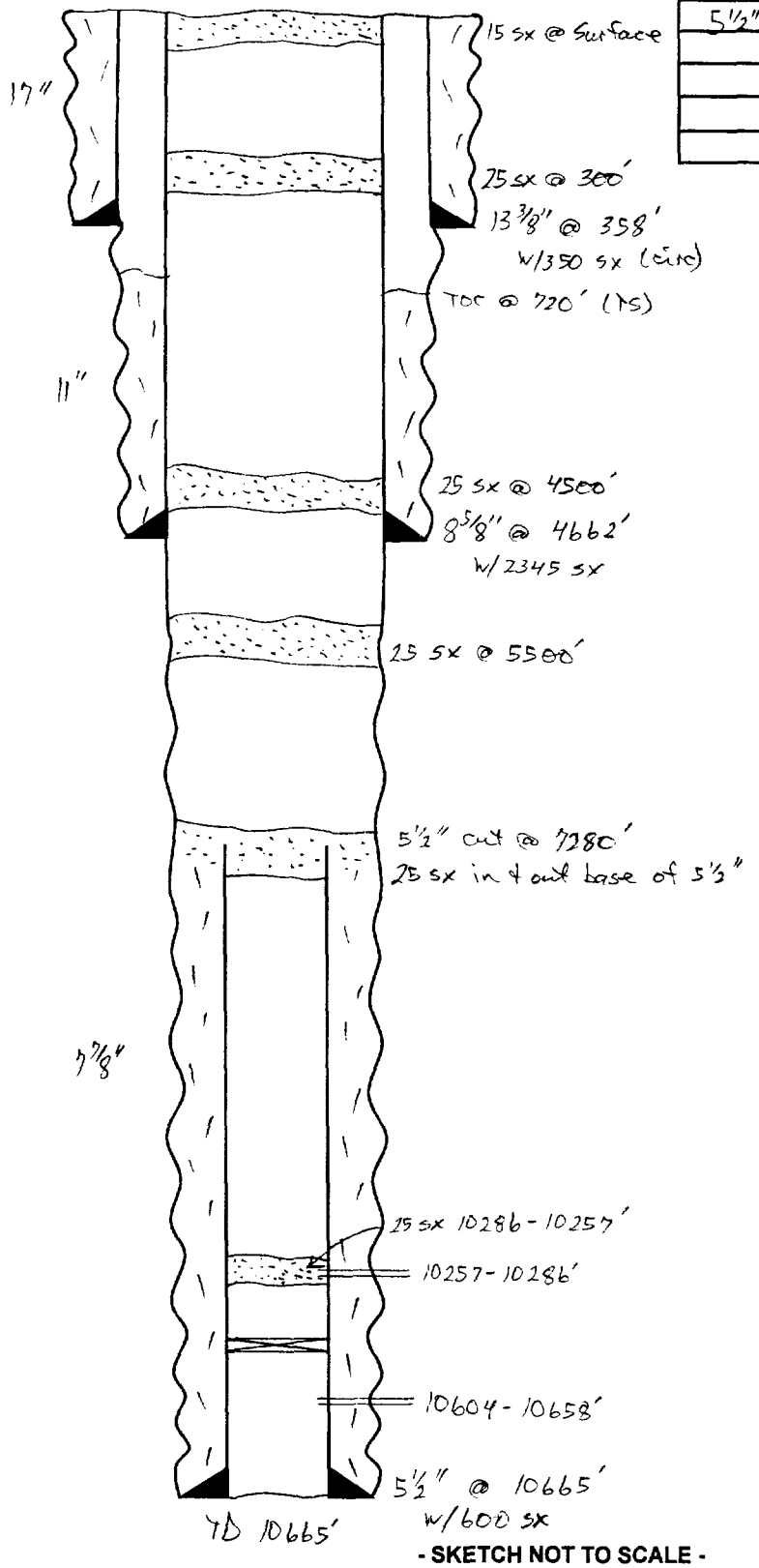
LOCATION: 660' FNL & 1980' FEL B 11-16S-35E Lea County

GL: _____ ZERO: _____ AGL: _____ KB: _____

SPUD DATE: 1-29-55 COMPLETION DATE: 4-13-55

COMMENTS: (Originally: Southern Petroleum) P&A 3/65

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48#	358'
8 5/8" 26#	4662'
5 1/2" 17#, 20#	10665'



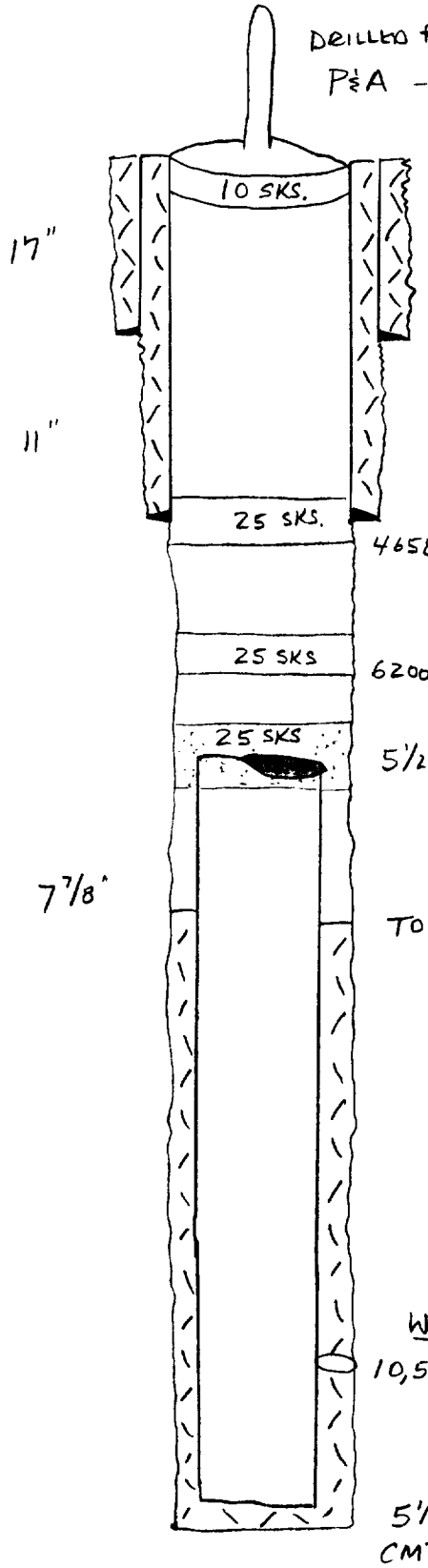
- SKETCH NOT TO SCALE -

DATE: 4-3-00 BD

Shell Oil Co. Lusk #2

E 1650' FNL & 990' FWL Sec 11 T16S R35E Lea Co.

GL: 3998'



DRILLED & CASED - 1955

P&A - 3/11/65

13 3/8"	48#	362'
8 5/8"	32#	4701'
5 1/2"	15.5# & 17#	10,654'

TOPS

GLORIETA - 6260'
ABO - 8154'
WOLFCAMP - 10,346'

IP - 475 BOPD

WELLNAME: Runnels ASP 1 FIELD: Townsend Morrow

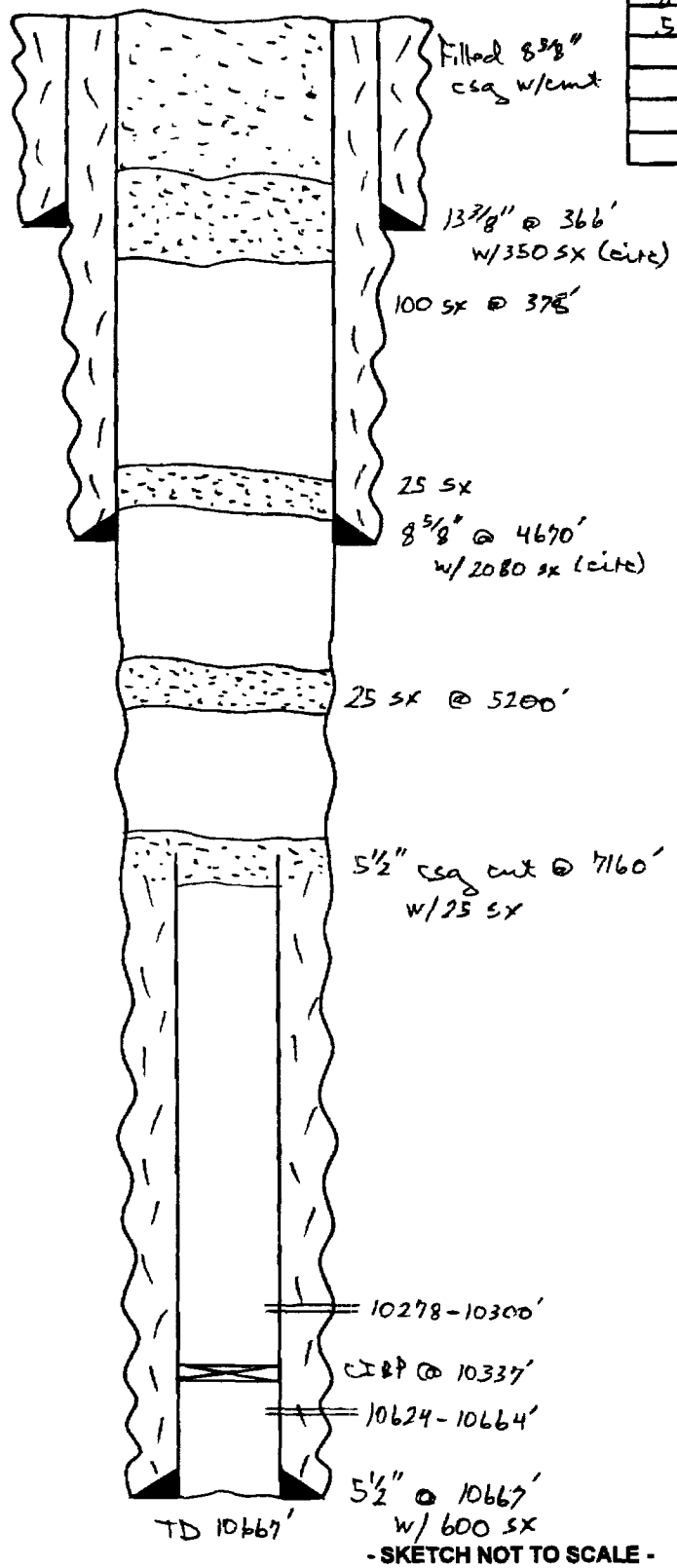
LOCATION: 1980' FNL & 1980' FEL G 11 - 16S - 35E

GL: ZERO: AGL: KB:

SPUD DATE: 5-15-98 COMPLETION DATE: 5-20-98

COMMENTS: Re-entered by Yates Petroleum PFA 5-20-98

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48#	366'
8 5/8" 26#	4670'
5 1/2" 17#, 20#	10677'



- SKETCH NOT TO SCALE -

DATE: 3-29-00

WELLNAME: Lusk 4 (Southern Petroleum) FIELD: Townsend Wolfcamp

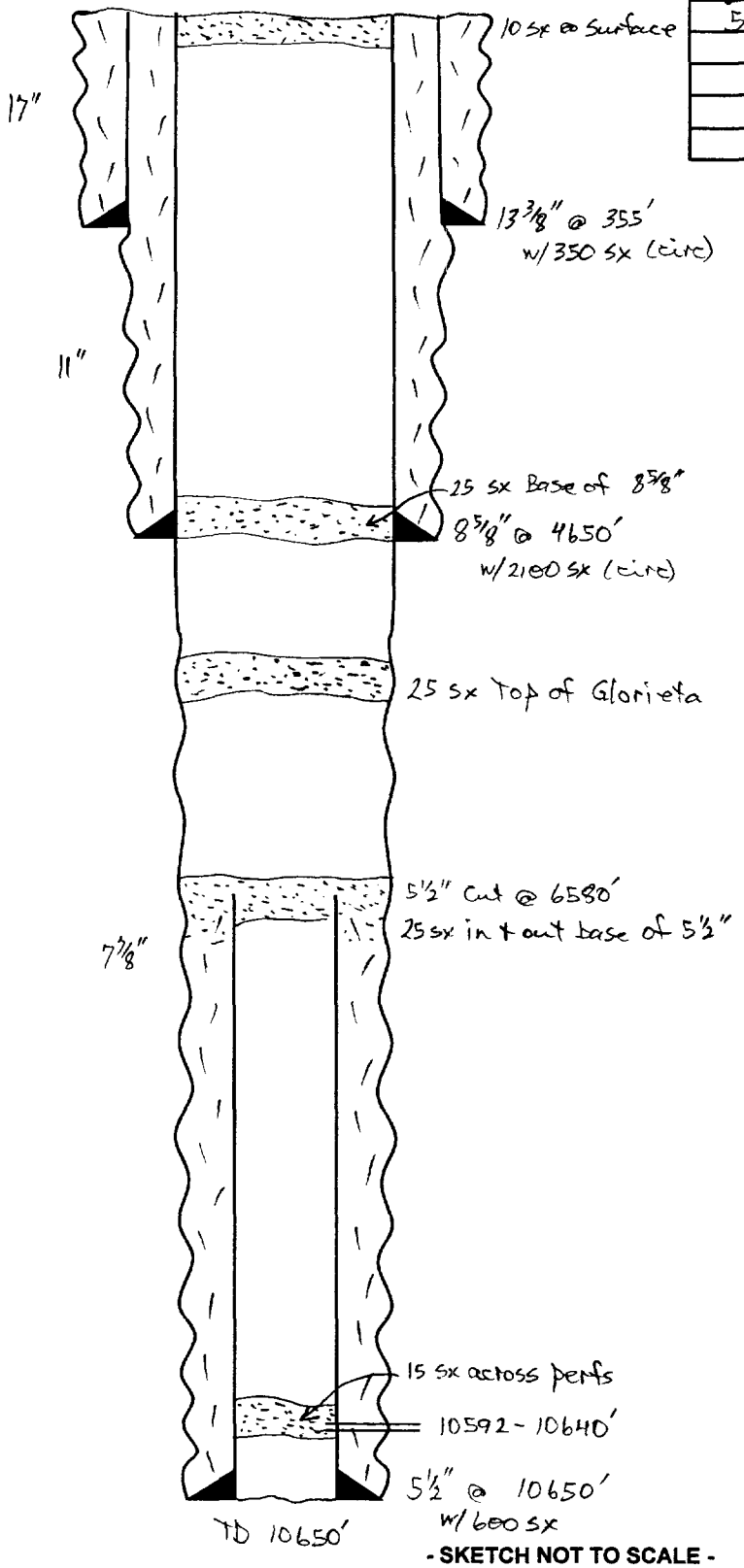
LOCATION: 330' FNL & 990' FEL A 11-16S-35E Lea County

GL: _____ ZERO: _____ AGL: _____ KB: _____

SPUD DATE: 1-14-56 COMPLETION DATE: 3-21-56

COMMENTS: P&A 12-30-66

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48 #	355'
8 5/8" 24 #	4650'
5½" 17#, 20#	10650'



- SKETCH NOT TO SCALE -

DATE: 4-3-00 SD

WELLNAME: Simmons Wilt ASL 1 FIELD: Townsend Morrow

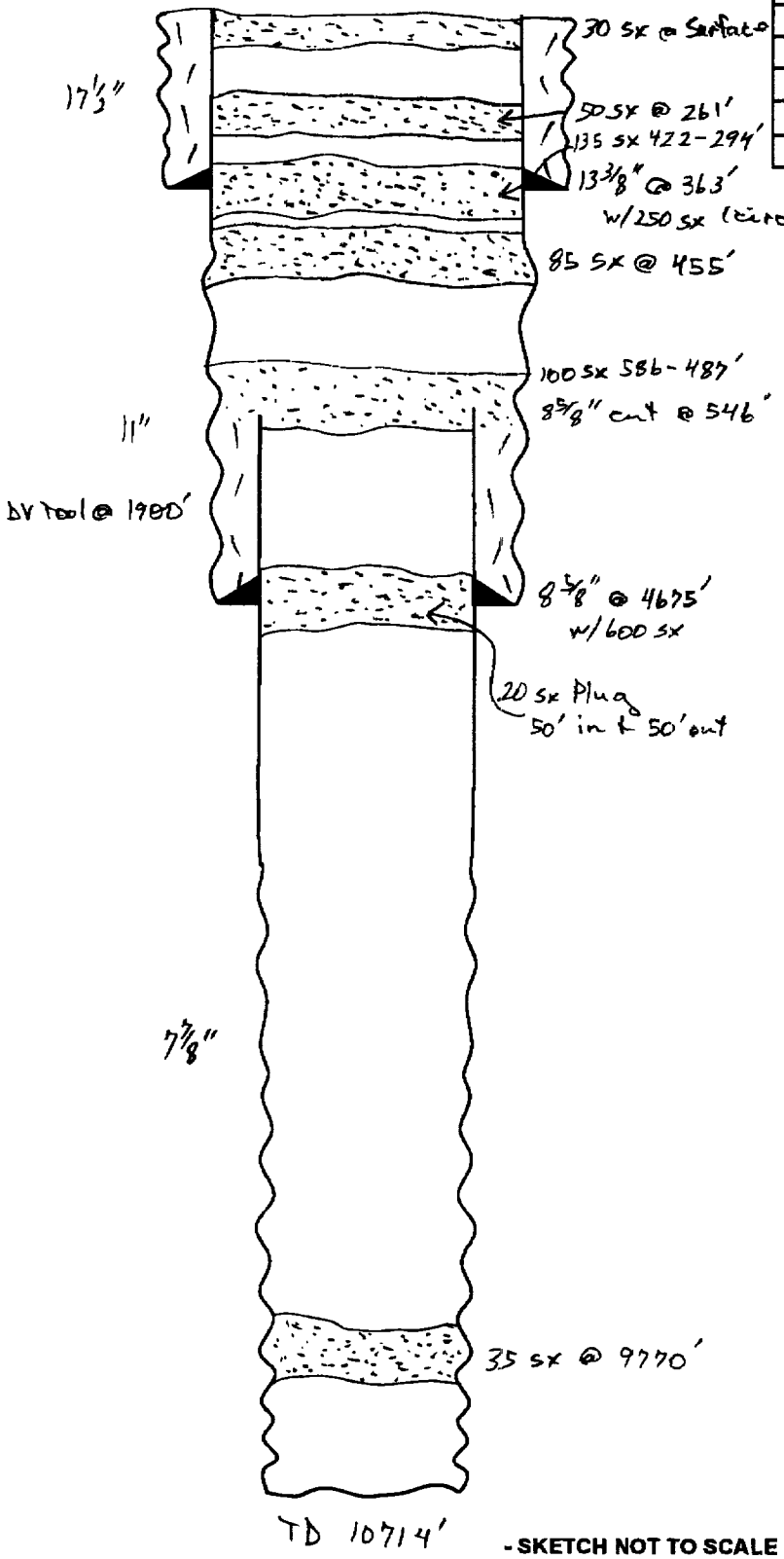
LOCATION: 2310' FSL & 2080' FEL S 11 - 16S - 35E

GL: 3980' ZERO: _____ AGL: _____ KB: _____

SPUD DATE: 4-25-98 COMPLETION DATE: 5-6-98

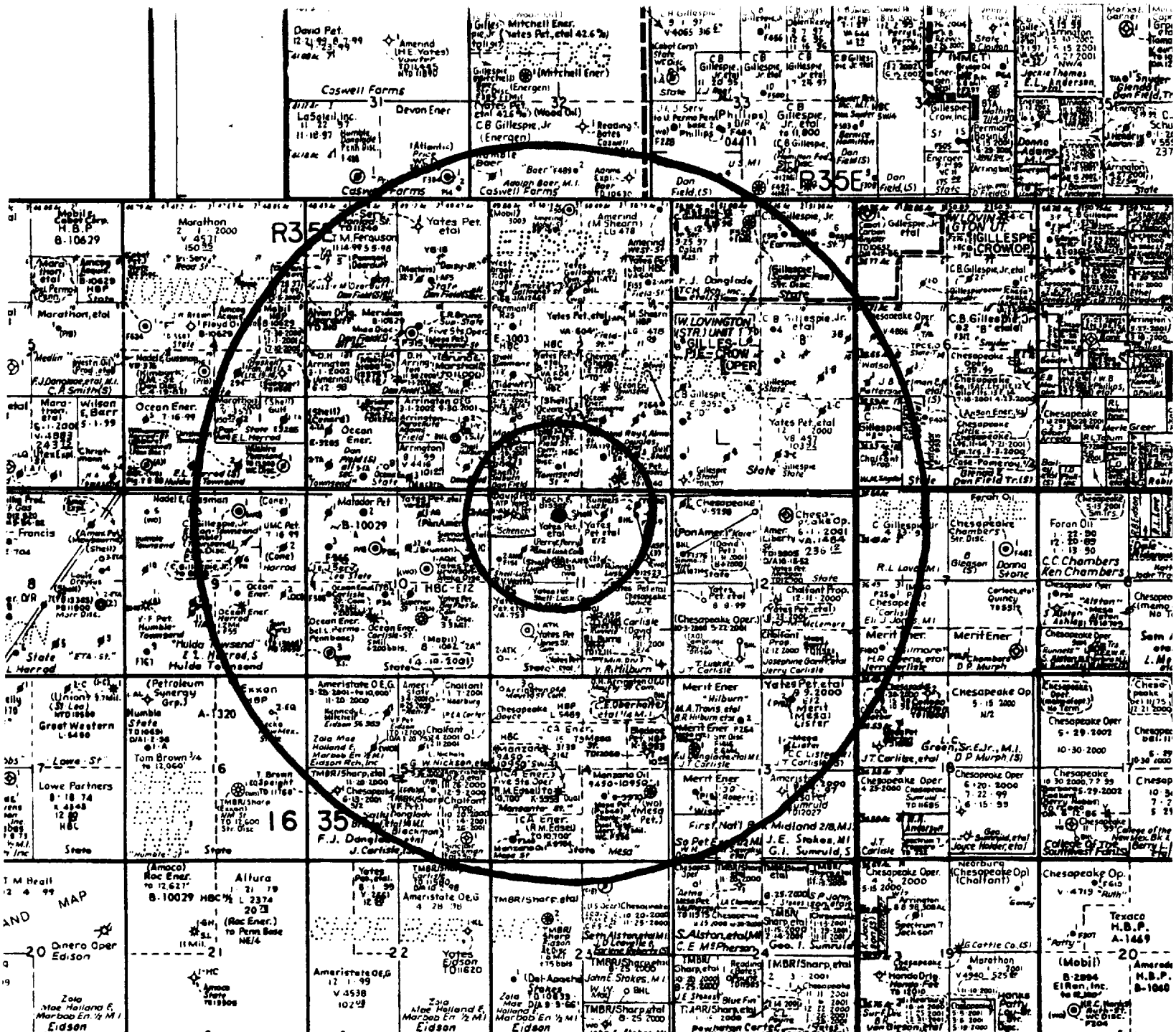
COMMENTS: Re-Entered by Yates Petroleum
P&A 5/98

CASING PROGRAM	
SIZE/WT/GR/CONN	DEPTH SET
13 3/8" 48# H40	363'
8 5/8" 32#, J55 + H40	4675'



- SKETCH NOT TO SCALE -

DATE: 3-29-00 SD



YATES PETROLEUM CORPORATION

Lusk #1 SWD

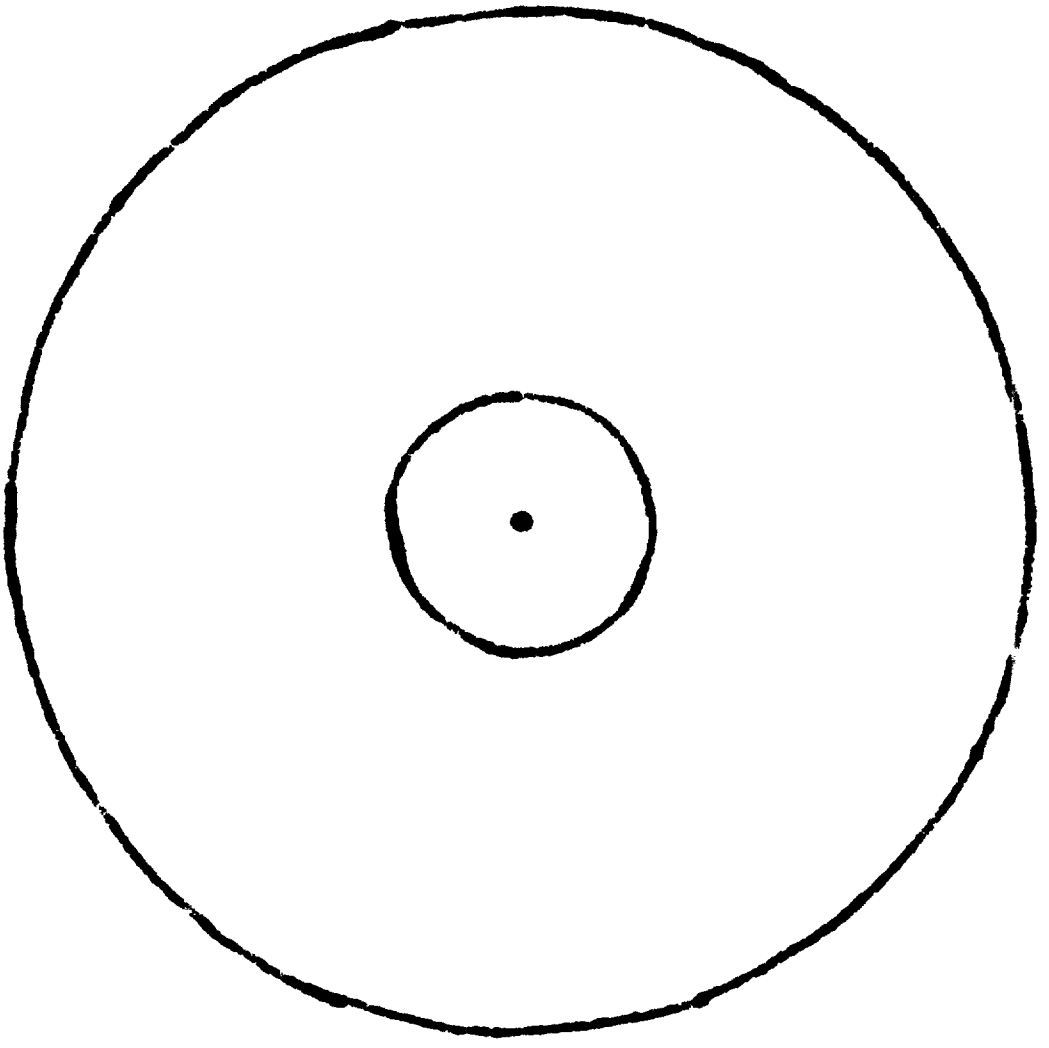
Proposed Salt Water Disposal Well

Sec 11-T16S-R35E

660'FNL & 1980'FWL

Lea County, New Mexico

Attachment B



ATTACHMENT D

M C I
CHEMICALS and CONSULTING

MILLER CHEMICALS, INC.
Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 393-2893 Hobbs Office
(505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM
Address :
Lease : BRUNSON
Well : #2
Sample Pt. : HEATER

Date : 4-8-00
Date Sampled : 4-7-00
Analysis No. :

	ANALYSIS		mg/L		* meq/L
1.	pH	5.7			
2.	H2S	0			
3.	Specific Gravity	1.070			
4.	Total Dissolved Solids		109880.4		
5.	Suspended Solids		NR		
6.	Dissolved Oxygen		NR		
7.	Dissolved CO2		NR		
8.	Oil In Water		NR		
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	183.0	HCO3	3.0
12.	Chloride	Cl	68160.0	Cl	1922.7
13.	Sulfate	SO4	125.0	SO4	2.6
14.	Calcium	Ca	18480.0	Ca	922.2
15.	Magnesium	Mg	279.5	Mg	23.0
16.	Sodium (calculated)	Na	22602.9	Na	983.2
17.	Iron	Fe	50.0		
18.	Barium	Ba	0.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		47300.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

922	*Ca <----- *HCO3	3
	/------->	
23	*Mg -----> *SO4	3
	<---------/	
983	*Na -----> *Cl	1923

Saturation Values Dist. Water 20 C
CaCO3 13 mg/L
CaSO4 * 2H2O 2090 mg/L
BaSO4 2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	3.0	243
CaSO4	68.1	2.6	177
CaCl2	55.5	916.6	50860
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	23.0	1095
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	983.2	57456

REMARKS: KCL 1%

SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	: 4-8-00
Address	:	Date Sampled	: 4-7-00
Lease	: BRUNSON	Analysis No.	:
Well	: #2	Analyst	: ANDY MILLER
Sample Pt.	: HEATER		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. =	-0.1	at	70 deg. F or	21 deg. C
S.I. =	0.0	at	90 deg. F or	32 deg. C
S.I. =	0.1	at	110 deg. F or	43 deg. C
S.I. =	0.1	at	130 deg. F or	54 deg. C
S.I. =	0.2	at	150 deg. F or	66 deg. C

****

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S =	845	at	70 deg. F or	21 deg C
S =	911	at	90 deg. F or	32 deg C
S =	957	at	110 deg. F or	43 deg C
S =	978	at	130 deg. F or	54 deg C
S =	982	at	150 deg. F or	66 deg C

Respectfully submitted,
ANDY MILLER

MCI
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WATER ANALYSIS REPORT

Company : YATES PETROLEUM
Address : ARTESIA, NM
Lease : C.O. JONES
Well : #2
Sample Pt. : HEATER

Date : 2/16/00
Date Sampled : 2/16/00
Analysis No. : 00114

	ANALYSIS		mg/L		* meq/L
1.	pH	6.3			
2.	H2S	0			
3.	Specific Gravity	1.010			
4.	Total Dissolved Solids		40832.5		
5.	Suspended Solids		NR		
6.	Dissolved Oxygen		NR		
7.	Dissolved CO2		NR		
8.	Oil In Water		NR		
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	950.0	HCO3	15.6
12.	Chloride	Cl	24000.0	Cl	677.0
13.	Sulfate	SO4	250.0	SO4	5.2
14.	Calcium	Ca	1160.0	Ca	57.9
15.	Magnesium	Mg	267.9	Mg	22.0
16.	Sodium (calculated)	Na	14204.6	Na	617.9
17.	Iron	Fe	NR		
18.	Barium	Ba	NR		
19.	Strontium	Sr	NR		
20.	Total Hardness (CaCO3)		4000.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

58	*Ca <----- *HCO3	16
	/------->	
22	*Mg -----> *SO4	5
	<---------/	
618	*Na -----> *Cl	677

Saturation Values Dist. Water 20 C
CaCO3 13 mg/L
CaSO4 * 2H2O 2090 mg/L
BaSO4 2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	15.6	1262
CaSO4	68.1	5.2	354
CaCl2	55.5	37.1	2059
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	22.0	1049
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	617.9	36108

REMARKS: 0 % KCL PRESENT

SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	: 2/16/00
Address	: ARTESIA, NM	Date Sampled	: 2/16/00
Lease	: C.O. JONES	Analysis No.	: 00114
Well	: #2	Analyst	: U.L. GARCIA
Sample Pt.	: HEATER		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. =	0.0	at	60 deg. F or	16	deg. C
S.I. =	0.1	at	80 deg. F or	27	deg. C
S.I. =	0.2	at	100 deg. F or	38	deg. C
S.I. =	0.2	at	120 deg. F or	49	deg. C
S.I. =	0.3	at	140 deg. F or	60	deg. C

****

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S =	3505	at	60 deg. F or	16	deg C
S =	3710	at	80 deg. F or	27	deg C
S =	3821	at	100 deg. F or	38	deg C
S =	3851	at	120 deg. F or	49	deg C
S =	3862	at	140 deg. F or	60	deg C

Respectfully submitted,
U.L. GARCIA

M C I
CHEMICALS and CONSULTING

MILLER CHEMICALS, INC.
Post Office Box 298
Artesia, N.M. 88211-0298
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(505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM
Address : ARTESIA, NM
Lease : GALLAGER "ATJ"
Well : #1
Sample Pt. : TANK

Date : 4/9/00
Date Sampled : 4/9/00
Analysis No. : 00143

	ANALYSIS		mg/L		* meq/L
1.	pH	5.8			
2.	H2S	0			
3.	Specific Gravity	1.030			
4.	Total Dissolved Solids		35904.1		
5.	Suspended Solids		NR		
6.	Dissolved Oxygen		NR		
7.	Dissolved CO2		NR		
8.	Oil In Water		NR		
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	366.0	HCO3	6.0
12.	Chloride	Cl	22578.0	Cl	636.9
13.	Sulfate	SO4	25.0	SO4	0.5
14.	Calcium	Ca	9680.0	Ca	483.0
15.	Magnesium	Mg	540.8	Mg	44.5
16.	Sodium (calculated)	Na	2664.3	Na	115.9
17.	Iron	Fe	50.0		
18.	Barium	Ba	0.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		26400.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

```
+------+                        +------+
|  483| *Ca <----- *HCO3       |     6|
|------|   /------->            |------|
|   44| *Mg -----> *SO4        |     1|
|------|     <---------/        |------|
|  116| *Na -----> *Cl         |   637|
+------+                        +------+
```

Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	6.0	486
CaSO4	68.1	0.5	35
CaCl2	55.5	476.5	26442
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	44.5	2118
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	115.9	6773

REMARKS:

SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	: 4/9/00
Address	: ARTESIA, NM	Date Sampled	: 4/9/00
Lease	: GALLAGER "AGJ"	Analysis No.	: 00143
Well	: #1	Analyst	: A. MILLER
Sample Pt.	: TANK		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. = 0.0 at 60 deg. F or 16 deg. C
S.I. = 0.1 at 80 deg. F or 27 deg. C
S.I. = 0.2 at 100 deg. F or 38 deg. C
S.I. = 0.2 at 120 deg. F or 49 deg. C
S.I. = 0.3 at 140 deg. F or 60 deg. C

****

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S = 870 at 60 deg. F or 16 deg C
S = 948 at 80 deg. F or 27 deg C
S = 993 at 100 deg. F or 38 deg C
S = 1006 at 120 deg. F or 49 deg C
S = 1011 at 140 deg. F or 60 deg C

Respectfully submitted,
A. MILLER

M C I
CHEMICALS and CONSULTING

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(505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : MERIT ENERGY
Address : MIDLAND, TX
Lease : HILLBURN
Well : #2
Sample Pt. : WELLHEAD

Date : 4/9/00
Date Sampled : 4/7/00
Analysis No. : 00144

	ANALYSIS		mg/L		* meq/L
1.	pH	6.9			
2.	H2S	4			
3.	Specific Gravity	1.040			
4.	Total Dissolved Solids		56969.2		
5.	Suspended Solids		NR		
6.	Dissolved Oxygen		NR		
7.	Dissolved CO2		NR		
8.	Oil In Water		NR		
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	488.0	HCO3	8.0
12.	Chloride	Cl	34506.0	Cl	973.4
13.	Sulfate	SO4	1.3	SO4	0.0
14.	Calcium	Ca	2240.0	Ca	111.8
15.	Magnesium	Mg	293.0	Mg	24.1
16.	Sodium (calculated)	Na	19438.5	Na	845.5
17.	Iron	Fe	2.5		
18.	Barium	Ba	NR		
19.	Strontium	Sr	NR		
20.	Total Hardness (CaCO3)		6800.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

112	*Ca <----- *HCO3	8
	/------->	
24	*Mg -----> *SO4	0
	<---------/	
846	*Na -----> *Cl	973

Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	8.0	648
CaSO4	68.1	0.0	2
CaCl2	55.5	103.8	5757
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	24.1	1147
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	845.5	49412

REMARKS:

SCALE TENDENCY REPORT

Company	: **MERIT ENERGY**	Date	: 4/9/00
Address	: MIDLAND, TX	Date Sampled	: 4/7/00
Lease	: HILLBURN	Analysis No.	: 00144
Well	: #2	Analyst	: A. MILLER
Sample Pt.	: WELLHEAD		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. = 0.6 at 60 deg. F or 16 deg. C
S.I. = 0.7 at 80 deg. F or 27 deg. C
S.I. = 0.7 at 100 deg. F or 38 deg. C
S.I. = 0.8 at 120 deg. F or 49 deg. C
S.I. = 0.9 at 140 deg. F or 60 deg. C

****

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S = 3053 at 60 deg. F or 16 deg C
S = 3277 at 80 deg. F or 27 deg C
S = 3404 at 100 deg. F or 38 deg C
S = 3443 at 120 deg. F or 49 deg C
S = 3461 at 140 deg. F or 60 deg C

Respectfully submitted,
A. MILLER

WATER ANALYSIS REPORT
fi .ished by TRETOLITE CHEMIC 3

Attachment D (5)

D/A

COMPANY:	YATES PET.
LEASE:	DAISY ST. #1
SAMPLE POINT:	WATER TANK
SAMPLE DATE:	8-8-90
SAMPLE TEMP.:	N/A
pH:	7.0
H2S:	POS.
SPECIFIC GRAVITY:	1.06

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO3	585.60	9.60
Cl	47499.00	1338.00
SO4	750.00	15.63
Ca	13600.00	680.00
Mg	729.00	59.75
Na	14339.83	623.47

IONIC STRENGTH = 1.74
TOTAL HARDNESS = 37000.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 77475.2 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO3)2	9.60	777.98
CaSO4	15.63	1063.59
CaCl2	654.78	36340.02
Mg(HCO3)2	0.00	0.00
MgSO4	0.00	0.00
MgCl2	59.75	2845.49
NaHCO3	0.00	0.00
Na2SO4	0.00	0.00
NaCl	623.47	36448.11

CALCULATED SCALING TENDENCIES

SCALING INDEX
CaCO3 @ 80 DEG F. = 1.2
CaCO3 @ 120 DEG F. = 1.7

SATURATION POINT
CaSO4 @ 80 DEG F. = 1038.3 MG/LTR.
CaSO4 @ 110 DEG F. = 1030.2 MG/LTR.

(THIS SAMPLE CONTAINED 1063.6 MG/LTR. CaSO4)

ATTACHMENT E

MCI
CHEMICALS and CONSULTING

MILLER CHEMICALS, INC.
Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 393-2893 Hobbs Office
(505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM
Address : ARTESIA, NM
Lease : NEAR BIG FLAT
Well : #2
Sample Pt. : UNKNOWN

Date : 4/13/00
Date Sampled : 4/13/00
Analysis No. : 00145

	ANALYSIS		mg/L		* meq/L
1.	pH	7.0			
2.	H2S	0			
3.	Specific Gravity	1.000			
4.	Total Dissolved Solids		5556.4		
5.	Suspended Solids		NR		
6.	Dissolved Oxygen		NR		
7.	Dissolved CO2		NR]		
8.	Oil In Water		NR		
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	220.0	HCO3	3.6
12.	Chloride	Cl	3408.0	Cl	96.1
13.	Sulfate	SO4	25.0	SO4	0.5
14.	Calcium	Ca	520.0	Ca	25.9
15.	Magnesium	Mg	364.7	Mg	30.0
16.	Sodium (calculated)	Na	1018.7	Na	44.3
17.	Iron	Fe	NR		
18.	Barium	Ba	NR		
19.	Strontium	Sr	NR		
20.	Total Hardness (CaCO3)		2800.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

```
+------+                          +------+
|   26| *Ca <----- *HCO3          |    4|
|------|   /------->               |------|
|   30| *Mg -----> *SO4           |    1|
|------|     <---------/           |------|
|   44| *Na -----> *Cl            |   96|
+------+                          +------+
```

Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	3.6	292
CaSO4	68.1	0.5	35
CaCl2	55.5	21.8	1211
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	30.0	1428
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	44.3	2590

REMARKS: FRESH WATER

SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	: 4/13/00
Address	: ARTESIA, NM	Date Sampled	: 4/13/00
Lease	: NEAR BIG FLAT	Analysis No.	: 00145
Well	: #2	Analyst	: A. MILLER
Sample Pt.	: UNKNOWN		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. = 0.1 at 60 deg. F or 16 deg. C
S.I. = 0.2 at 80 deg. F or 27 deg. C
S.I. = 0.2 at 100 deg. F or 38 deg. C
S.I. = 0.2 at 120 deg. F or 49 deg. C
S.I. = 0.3 at 140 deg. F or 60 deg. C

****

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S = 1549 at 60 deg. F or 16 deg C
S = 1624 at 80 deg. F or 27 deg C
S = 1650 at 100 deg. F or 38 deg C
S = 1644 at 120 deg. F or 49 deg C
S = 1631 at 140 deg. F or 60 deg C

Respectfully submitted,
A. MILLER

MILLER CHEMICALS, INC.
Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 393-2893 Hobbs Office
(505) 746-1918 Fax

WATER ANALYSIS REPORT

Company	: YATES PETROLEUM	Date	: 4/13/00
Address	: ARTESIA, NM	Date Sampled	: 4/13/00
Lease	: NEAR RUNNELS	Analysis No.	: 00146
Well	: #3		
Sample Pt.	: UNKNOWN		

	ANALYSIS		mg/L		* meq/L
1.	pH	7.0			
2.	H2S	0			
3.	Specific Gravity	1.000			
4.	Total Dissolved Solids		6659.9		
5.	Suspended Solids		NR		
6.	Dissolved Oxygen		NR		
7.	Dissolved CO2		NR		
8.	Oil In Water		NR		
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	207.0	HCO3	3.4
12.	Chloride	Cl	4167.0	Cl	117.5
13.	Sulfate	SO4	25.0	SO4	0.5
14.	Calcium	Ca	300.0	Ca	15.0
15.	Magnesium	Mg	546.7	Mg	45.0
16.	Sodium (calculated)	Na	1414.2	Na	61.5
17.	Iron	Fe	NR		
18.	Barium	Ba	NR		
19.	Strontium	Sr	NR		
20.	Total Hardness (CaCO3)		3000.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

15	*Ca <----- *HCO3	3
	/------->	
45	*Mg -----> *SO4	1
	<---------/	
62	*Na -----> *Cl	118

Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	3.4	275
CaSO4	68.1	0.5	35
CaCl2	55.5	11.1	614
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	45.0	2141
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	61.5	3595

REMARKS: FRESH WATER

SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	: 4/13/00
Address	: ARTESIA, NM	Date Sampled	: 4/13/00
Lease	: NEAR RUNNELS	Analysis No.	: 00146
Well	: #3	Analyst	: A. MILLER
Sample Pt.	: UNKNOWN		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. = -0.2 at 60 deg. F or 16 deg. C
S.I. = -0.1 at 80 deg. F or 27 deg. C
S.I. = -0.1 at 100 deg. F or 38 deg. C
S.I. = -0.1 at 120 deg. F or 49 deg. C
S.I. = -0.0 at 140 deg. F or 60 deg. C

****

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S = 1984 at 60 deg. F or 16 deg C
S = 2072 at 80 deg. F or 27 deg C
S = 2104 at 100 deg. F or 38 deg C
S = 2100 at 120 deg. F or 49 deg C
S = 2086 at 140 deg. F or 60 deg C

Respectfully submitted,
A. MILLER

ATTACHMENT F

YATES PETROLEUM CORPORATION
105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

April 14, 2000

David H Arrington
P.O. Box 2071
Midland, TX 79702

Gentlemen:

Enclosed please find a copy of form C-108 (Application for Authority to Inject) for the proposed Buffalo Valley QL Federal #1 located in Unit K of Section 11-T16S-R35E, Lea County, New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-4174.

Sincerely,

Albert R Stall

Albert R. Stall
Operations Engineer

ARS/sd

Enclosure

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

April 14, 2000

Ocean Energy Resources, Inc.
P.O. Box 201645
Houston, TX 77216-1645

Gentlemen:

Enclosed please find a copy of form C-108 (Application for Authorization to Inject) on the Buffalo Valley QL Federal #1 located in Unit K of Section 11-T16S-R35E of Lea County, New Mexico.

Should you have any questions, please feel free to contact me at (505) 748-4174.

Sincerely,

Albert R Stall

Albert R. Stall
Operations Engineer

ARS/sd

Enclosures

ATTACHMENT G

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

April 24, 2000

Hobbs News Sun
201 North Thorp
Hobbs, NM 88240

Gentlemen:

Yates Petroleum Corporation desires to place a public notice in your newspaper for one day. The notice is enclosed.

Please place this notice in your paper on Thursday, April 27, 2000, and forward a copy of it along with your billing as soon as possible to:

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
Attn: Albert R. Stall

If you have any questions, please contact me at 748-4174. Thank you for your cooperation in this matter.

Sincerely,

Albert R Stall

Albert R. Stall
Operations Engineer

ARS/sd

Enclosure

Legal Notice

Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, has filed form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for an injection well. The proposed well, the "Lusk #1 SWD" located 660'FNL & 1980'FWL of Section 11, Township 16 South, Range 35 East of Lea County, New Mexico, will be used for salt water disposal. Disposal waters from the Cisco, Strawn, Atoka, and Morrow formations will be re-injected into the Wolfcamp at a depth of 10262'-10630' with a maximum pressure of 6150 psi and a maximum rate of 5000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, 2040 S. Pacheco Street, Santa Fe, NM 87505-5472, within 15 days. Additional information can be obtained by contacting Albert R. Stall at (505) 748-4174.