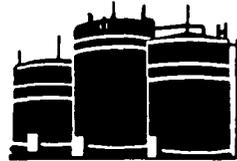


AVRA OIL COMPANY



December 11, 2001

DEC 17 2001

Oil Conservation Division
Attn: David Catanach
1220 South St. Francis Dr.
Santa Fe, NM 87504

Dear Mr. Catanach,

Enclosed please find the legal notice and sample of water for San Andres formation.

Hopefully this will complete the application. If you have any questions please call me at 915-682-4866.

Sincerely,

A handwritten signature in black ink, appearing to read 'Saeed Afghahi'. The signature is fluid and cursive, with a large initial 'S' and 'A'.

Saeed Afghahi
President

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated November 29 2001 and ending with the issue dated

December 4 2001



Publisher

Sworn and subscribed to before

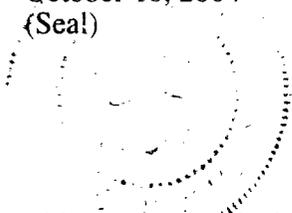
me this 4th day of

December 2001



Notary Public.

My Commission expires
October 18, 2004
{Seal!}



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE

December 4, 2001

This is to advise all parties concerned, Avra Oil Company is seeking administrative approval from the New Mexico Conservation Division to utilize a well located 660 FEL & 1980 FSL Section 11, Township 18 South Range 38 East, Lea County, New Mexico, known as the Charcia A. Taylor No. 1 for water injection. Proposed injection is in the Queen Sand formations through perforations of approximately 4,108-4,116 feet. Proposed average daily injection will be 500 bbs per day (Expected maximum injection rate of 1,000 bbs per day) at an average injection pressure of 1300 psi. Questions can be addressed to:

Avra Oil Company
PO Box 3193
Midland, Texas 79702
Attention: Mr. Saeed Afghahi
Phone (915)682-4866

Interested parties must file objections or request for hearing within 15 days of this notice to the: Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, NM 87504.
#18586

02105717000 02551953

Avra Oil Company
PO Box 3193
MIDLAND, TX 79702

SEACO Products

WATER ANALYSIS REPORT

SAMPLE

SAN ANDRES WATER

Oil Co. : **Avra Oil Co.**
 Lease : **Taylor**
 Well No. : **W I W**
 Lab No. : **082298.001**

Sample Loc. :
 Date Analyzed: **22-August-1998**
 Date Sampled : **20-August-1998**

ANALYSIS

1. pH 6.360
 2. Specific Gravity 60/60 F. 1.008
 3. CaCO₃ Saturation Index @ 80 F. +0.278
 @ 140 F. +1.088

File

Dissolved Gases

- | | MG/L | EQ. WT. | *MEQ/L |
|---------------------|----------------|---------|--------|
| 4. Hydrogen Sulfide | Present | | |
| 5. Carbon Dioxide | Not Determined | | |
| 6. Dissolved Oxygen | Not Determined | | |

Cations

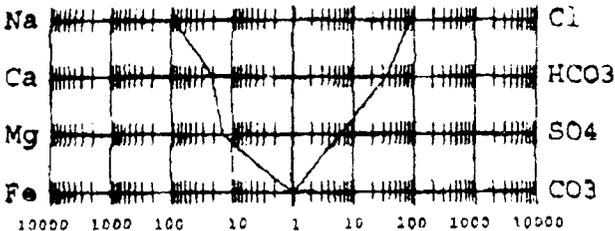
7. Calcium (Ca ⁺⁺)	396	//	20.1 =	19.70
8. Magnesium (Mg ⁺⁺)	171	//	12.2 =	14.02
9. Sodium (Na ⁺) (Calculated)	2,056	//	23.0 =	89.39
10. Barium (Ba ⁺⁺)	10	//	68.7 =	0.15

Anions

11. Hydroxyl (OH ⁻)	0	//	17.0 =	0.00
12. Carbonate (CO ₃ ⁼)	0	//	30.0 =	0.00
13. Bicarbonate (HCO ₃ ⁻)	1,992	//	61.1 =	32.60
14. Sulfate (SO ₄ ⁼)	2,290	//	48.8 =	85.94
15. Chloride (Cl ⁻)	2,999	//	35.5 =	84.48
16. Total Dissolved Solids	7,914			
17. Total Iron (Fe)	2	//	18.2 =	0.08
18. Total Hardness As CaCO ₃	1,692			
19. Resistivity @ 75 F. (Calculated)	0.867 /cm.			

LOGARITHMIC WATER PATTERN

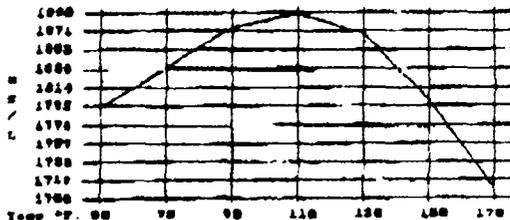
*meq/L.



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT. X	*meq/L	= mg/L.
Ca(HCO ₃) ₂	81.04	19.70	1,597
CaSO ₄	68.07	0.00	0
CaCl ₂	55.50	0.00	0
Mg(HCO ₃) ₂	73.17	12.90	944
MgSO ₄	60.19	1.12	67
MgCl ₂	47.62	0.00	0
NaHCO ₃	84.00	0.00	0
NaSO ₄	71.03	4.68	333
NaCl	58.46	84.48	4,939

Calcium Sulfate Solubility Profile



*Milli Equivalents per Liter

This water is slightly corrosive due to the pH observed on analysis.
 The corrosivity is increased by the content of mineral salts, and the presence of H₂S in solution.

ORIGINAL

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS

HOBBS OFFICE 050

(Submit to appropriate District Office as per Commission Rule 1103)

COMPANY W. R. Weaver - P. O. Box 1545, Midland, Texas
(Address)

LEASE Mrs. Charlcia A. Taylor WELL NO. 1 UNIT 1 S 11 T 18 S R 38 E

DATE WORK PERFORMED Nov. 20, 1956 POOL Wildcat

- This is a Report of: (Check appropriate block)
- Results of Test of Casing Shut-off
 - Beginning Drilling Operations
 - Remedial Work
 - Plugging
 - Other Plugging Back

Detailed account of work done, nature and quantity of materials used and results obtained.

Well drilled to depth of 6480', plugged back with heavy mud and cement plugs as follows, 102 sacks cement from 6480 to 6225', 100 sack cement from 5400 to 5150' and 80 sacks cement from 4950 to 4750'. 5-1/2" casing was set at 4272' (plug back depth) and cemented w/ 2-stage cement job. 1st stage with 300 sacks 4% Gel cement and 100 sacks neat cement. D.V. Tool set at 2065' and cemented with 300 sacks 4% Gel cement and 100 sacks Neat cement. After Wait on cement 48 hours, tested casing above D.V.Tool with 1200# PSI and held OK, drilled D.V. Tool and cement to 4244 and tested casing with 1200# PSI and held OK. Casing was perforated from 4108' to 4116' with 4 shots per foot.

Ran Temperature survey after casing was cemented and survey shows that cement came up to 1185' on outside of casing.

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev. _____ TD _____ PBD _____ Prod. Int. _____ Compl Date _____
 Tbng. Dia _____ Tbng Depth _____ Oil String Dia _____ Oil String Depth _____
 Perf Interval (s) _____
 Open Hole Interval _____ Producing Formation (s) _____

RESULTS OF WORKOVER:	BEFORE	AFTER
Date of Test	_____	_____
Oil Production, bbls. per day	_____	_____
Gas Production, Mcf per day	_____	_____
Water Production, bbls. per day	_____	_____
Gas-Oil Ratio, cu. ft. per bbl.	_____	_____
Gas Well Potential, Mcf per day	_____	_____

SEACO Products

WATER ANALYSIS REPORT

SAN ANDRES WATER

SAMPLE

Oil Co.: Avra Oil Co.
 Lease: Taylor
 Well No.: W T W
 Lab No.: 082398.001

Sample Loc.:
 Date Analyzed: 22-August-1998
 Date Sampled: 20-August-1998

ANALYSIS

1. pH 6.360
2. Specific Gravity 60/60 F. 1.008
3. CaCO₃ Saturation Index @ 80 F. +0.278
 @ 140 F. +1.088

File

Disolved Gases

	MG/L	EQ. WT.	*MEQ/L
4. Hydrogen Sulfide			Present
5. Carbon Dioxide			Not Determined
6. Dissolved Oxygen			Not Determined

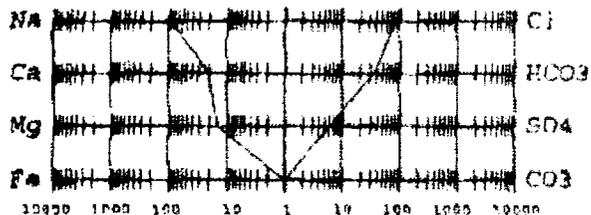
Cations

7. Calcium (Ca ⁺⁺)	386	/ 20.1 =	19.70
8. Magnesium (Mg ⁺⁺)	171	/ 12.3 =	14.02
9. Sodium (Na ⁺) (Calculated)	2,056	/ 23.0 =	89.39
10. Barium (Ba ⁺⁺)	10	/ 68.7 =	0.15

Anions

11. Hydroxyl (OH ⁻)	0	/ 17.0 =	0.00
12. Carbonate (CO ₃ ⁼)	0	/ 30.0 =	0.00
13. Bicarbonate (HCO ₃ ⁻)	1,592	/ 61.1 =	32.60
14. Sulfate (SO ₄ ⁼)	780	/ 48.8 =	5.94
15. Chloride (Cl ⁻)	2,999	/ 35.5 =	84.48
16. Total Dissolved Solids	7,914		
17. Total Iron (Fe)	2	/ 18.2 =	0.08
18. Total Hardness As CaCO ₃	1,692		
19. Resistivity @ 75 F. (Calculated)	0.857 /cm.		

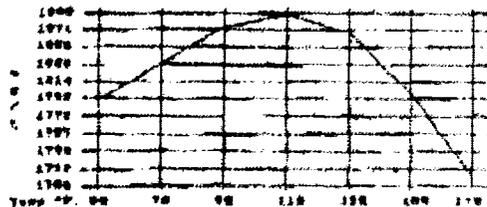
LOGARITHMIC WATER PATTERN *meq/L.



PROBABLE MINERAL COMPOSITION COMPOUND EQ. WT. X *meq/L = mg/L.

Ca(HCO ₃) ₂	81.04	19.70	1,592
CaSO ₄	68.07	0.00	0
CaCl ₂	55.50	0.00	0
Mg(HCO ₃) ₂	73.17	17.90	944
MgSO ₄	60.19	1.12	67
MgCl ₂	47.62	0.00	0
NaHCO ₃	64.00	0.00	0
NaSO ₄	71.03	4.68	333
NaCl	58.46	84.48	4,939

Calcium Sulfate Solubility Profile



*Milli Equivalents per Liter

This water is slightly corrosive due to the pH observed on analysis. The corrosivity is increased by the content of mineral salts, and the presence of H₂S in solution.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: AVRA OIL COMPANY
Address: P.O. BOX 3193, MIDLAND, TX 79702
Contact party: SAEED AFGHAHI Phone: (915)682-4866
- 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: SAEED AFGHAHI Title PRESIDENT

Signature: Saeed Afghani Date: 11/28/01

- * If the information required under Sections VI, VIII, 9, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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.

FORM C – 108 continued

Part III. A

- 1.) Charlcia A. Taylor No. 1
660 FEL & 1980 FSL
Section 11 – T18S – R38E
Unit J
Lea County, New Mexico
- 2.) See attached wellbore schematic
- 3.) Propose to run approximately 4050' of 2 7/8" plastic lined tubing.
- 4.) Propose to use a tension Packer (Baker AD-1) as a seal, and set at 50' above the top perforation. The casing annulus will be loaded with packer fluid.

Part III. B

- 1.) The injection interval will be in the Queen Sand (Bishop Canyon Queen Field).
- 2.) The injection interval will be approximately 4108' to 4116' and will be Selectively perforated.
- 3.) This well was originally drilled as an oil and gas well.
- 4.) See wellbore schematic.
- 5.) There is production from the San Andres at 4800' in this area. The Queen Produces within one mile of this location.

Part VII

- 1.) Proposed average daily injection will be 500 bbls/day. (Maximum will be 1,000 bbls/day)
- 2.) The system will be closed.
- 3.) The average injection pressure will be 1300psi. The maximum will not Exceed the limits set forth by the OCD.
- 4.) The source of the water be from the Williams No. 1 producer, operated by Avra Oil Company.
- 5.) The Queen is productive within one mile of the Williams No. 1 and 2 wells.

Part VIII

The injection interval is the Queen Sand, and is composed of primarily sandstone and sandy dolomite with occasional anhydrite stringers; and is approximately 40' thick. The top of the Queen is at approximately 4100'. This entire area is overlain by Quaternary Alluvium. The Ogallala is the major source of fresh water in this area, at a depth of 100' to 300' deep.

Part IX

The disposal interval will be treated with a breakdown acid job.

Part X

The logs have been previously submitted by W.R. Weaver in 1956.

Part XI

There is an active fresh water well within one mile of the Charlcia A. Taylor No. 1 location. The analysis for this well is attached.

Part XII

We have examined all available geologic and engineering data, and find no Evidence of open faults or any other hydrologic connection between the disposal Interval and any underground source of drinking water.

Part XIV

A copy of this application has been sent to the following:

- BP (Arco Permian), 600 N. Marienfeld, Midland, Texas 79701
- Beach Exploration, 800 N. Marienfeld, Suite 200, Midland, TX 79701
- Sun Valley Energy Corp., Box 1000, Roswell, NM 88202
- Charlcia A. Taylor (surface owner of Unit J. Sec. 11-T18S-R38E, Lea County, New Mexico: 1501 N. Seminole Hwy., Hobbs, NM 88240

LIST OF WELLS IN AREA OF REVIEW

List of Wells that penetrate Injection Interval:

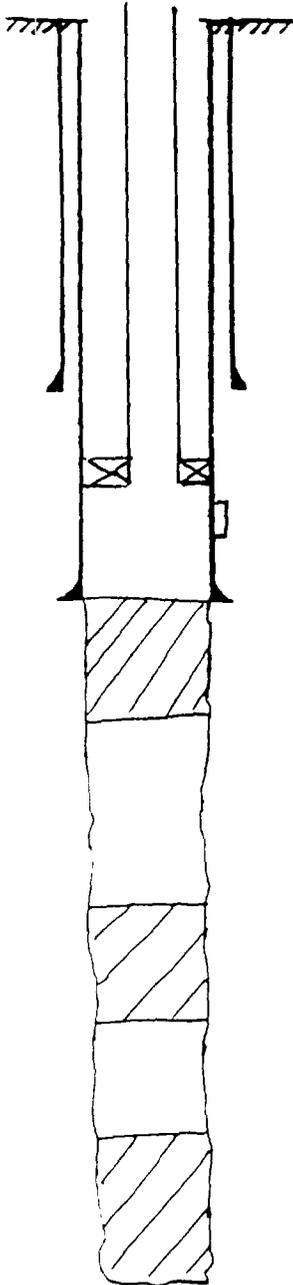
Company	Well	Unit	TD	Status
SEC 11-T18S – R38E				
Avra Oil Company	Forest A No. 1	A	5112'	Shut-In
Avra Oil Company	Williams No. 1	G	5100'	Producing
Avra Oil Company	Williams No. 2	H	5100'	Producing
Avra Oil Company	Charlcia A. Taylor No. 1	I	6480'	Producing
Avra Oil Company	C.A. Taylor	P	4150'	Active
W.R. Weaver	Charlcia A. Taylor No. 2	J	4165'	P&A
Sinclair Oil and Gas	Pearl Forest No. 1	H	4200'	P&A
SEC 12-T18S-R38E				
W.R. Weaver	Sunray – Taylor No. 1	L	4175'	P&A

OPERATOR AVRA Oil COMPANY	DATE 11-28-01	
LEASE CHARCIE A. TAYLOR	WELL NO. 1	LOCATION Sec 11-T185-R38E

UNIT I 1980' FSL + 660' FEL

PROPOSED CONFIGURATION

RUN 5 1/2" LOC-SET PACKER AND
2 7/8" LINED TUBING, SET PACKER
50' ABOVE PERFS.



13 3/8" casing set at 336' with 350 sx of _____ cement

Hole size 17 1/2" Cement Circulated

perf 4108 - 4110

5 1/2" casing set at 4272' with 800 sx of _____ cement

Hole size 8 3/4"

1st stage cmt w/ 400 sx

dv @ 2065'

2nd stage cmt w/ 400 sx

TOL by TS @ 1185'

80 sx @ 4950' - 4750'

100 sx @ 5400' - 5150'

102 sx @ 6480' - 6225'

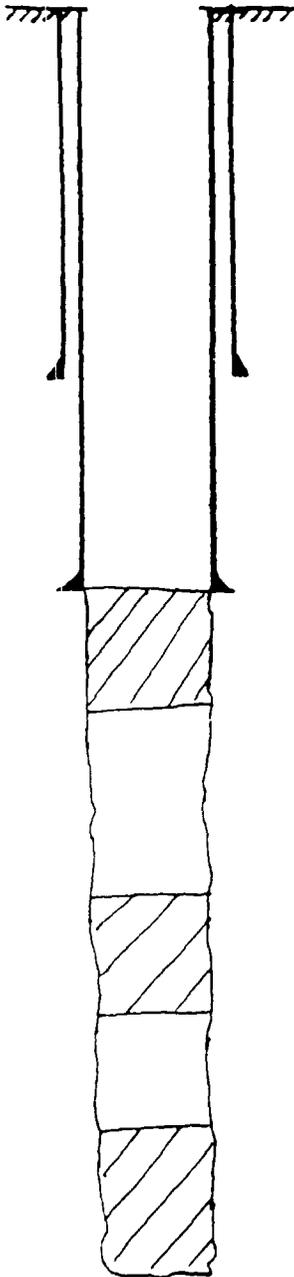
Total Depth 6480' Hole size 8 3/4"

OPERATOR	AVRA Oil Company		DATE	11-28-01	
LEASE	CHAUCIA A. TAYLOR	WELL NO.	1	LOCATION	Sec 11-7195-R38E

Unit I 1980' FSL + 660' FEL

Active Producer Bishop Canyon Queen

* CURRENT WELLBORE STATUS *



13³/₈ " casing set at 336 ' with 350 sx of _____ cement

Hole size 17¹/₂ " Cement Circulated

perf 4108 - 4116

5¹/₂ " casing set at 4272 ' with 800 sx of _____ cement

Hole size 8³/₄ "

1st stage cmt w/ 400 sx

dv @ 2065'

2nd stage cmt w/ 400 sx

TOL by TS @ 1195'

80 sx @ 4950' - 4750'

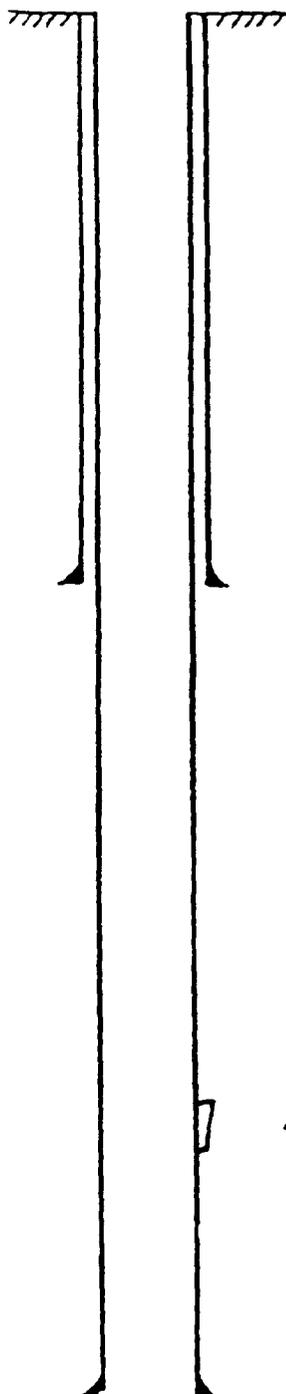
100 sx @ 5400' - 5150'

102 sx @ 6480' - 6225'

Total Depth 6480 ' Hole size 8³/₄ "

OPERATOR AVRA OIL COMPANY	DATE 11-28-01	
LEASE FOREST - A -	WELL No. 1	LOCATION SEC 11 - T185 - R 38 E

UNIT A 9906NL + 330 FEL



SHUT-IN INJECTION WELL

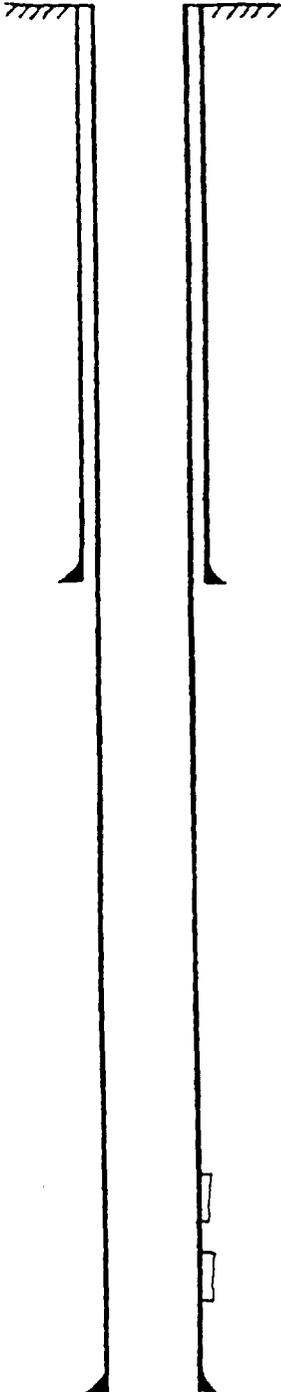
8 5/8" casing set at 347' with 225 sx of _____ cement
Hole size 11"

PERF 4882' - 4892'
(10')

5 1/2" casing set at 5060 with 450 sx of _____ cement
Total Depth 5060 Hole size 7 7/8"

OPERATOR <i>HVAA Oil COMPANY</i>		DATE <i>11-28-01</i>
LEASE <i>Williams</i>	WELL NO. <i>1</i>	LOCATION <i>Sec 11-T1B5-1238E</i>

*Unit G 1980' ENL &
1660' FE L
Active producer Bishop Canyon
San Andres*



*8 5/8" casing set at 369' with 300 sx of _____ cement
Hole size 11" Cement Circulated*

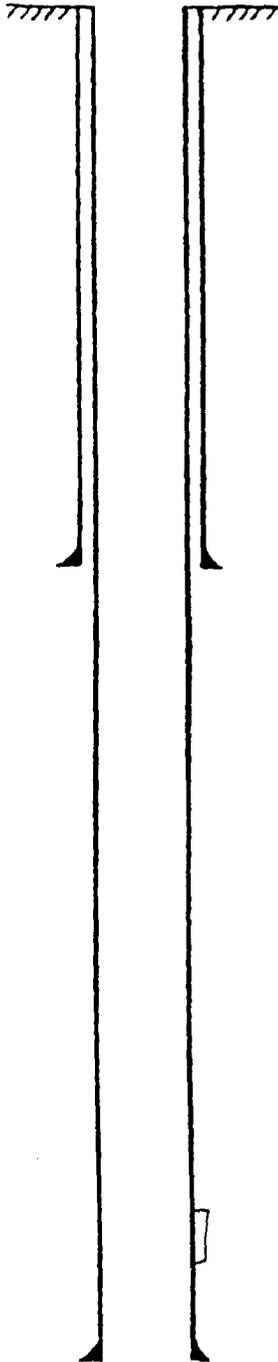
*perf 4876 - 4860
perf 5088 - 5060*

*4 1/2" casing set at 5100' with 1700 sx of _____ cement
Total Depth 5100' Hole size 7 7/8" TOC by TS
@ 600'*

OPERATOR AVKA Oil Company	DATE 11-28-01	
LEASE Williams	WELL No. 2	LOCATION Sec 11- T195-R38E

UNIT H 2310' FNL & SW' FEL

Active Producer Bishop Canyon San Andres



3 5/8 " casing set at 318 ' with 225 sx of _____ cement
Hole size 11 " Cement Circulated

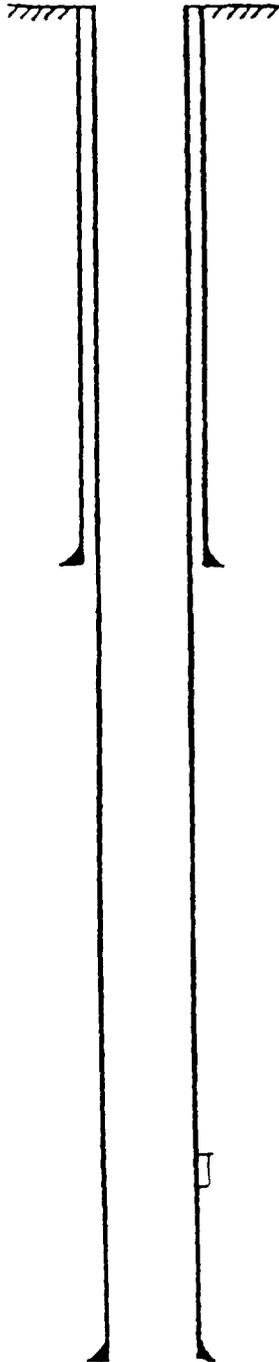
perf 4863 - 4873

4 1/2 " casing set at 5098 ' with 1000 sx of _____ cement
Total Depth 5100 ' Hole size 7 7/8 " TOC by TS
@ 300'

OPERATOR AURA Oil Company	DATE 11-28-01	
LESSEE C.A. Taylor	WELL NO. 1	LOCATION SEC 11-7185-138E

unit P

CURRENT Configuration



$8\frac{5}{8}$ " casing set at 270 ' with 200 sx of _____ cement
 Hole size $12\frac{3}{4}$ " Cement Circulated

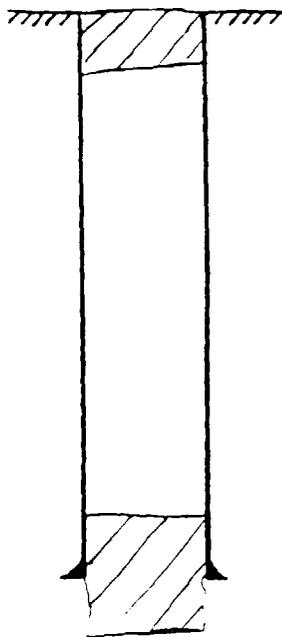
PACKER set @ approximately 50' ABOVE top perf.

perfs @ 4096 + Additional perfs in Queen SAND

$4\frac{1}{2}$ " casing set at 4147 ' with 225 sx of _____ cement
 Total Depth 4150 ' Hole size $6\frac{3}{4}$ " TOC by Calculation using 50% efficiency 3153'

OPERATOR	W. R. WEAVER		DATE	11-28-01
LEASE	CHARLIE A TAYLOR	WELL NO.	2	LOCATION

SEC 11-T18S-R38E
 Unit J 1980' FSL +
 1980' FEL

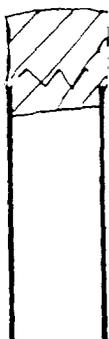


10 SX @ SURFACE

Plugged and Abandoned

25 SACK plug @ 342'

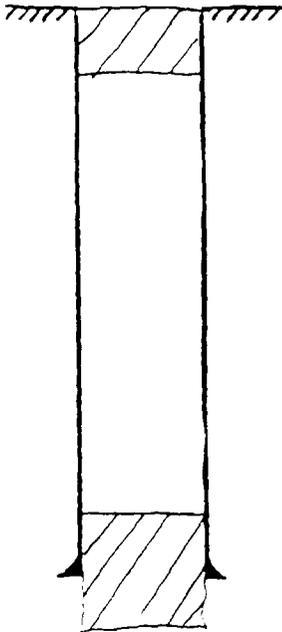
$8\frac{5}{8}$ " casing set at 342' with 200 sx of _____ cement
 Hole size $12\frac{1}{4}$ " Cement Circulated



25 SX plug @ 2000'
 SHOT + pulled $5\frac{1}{2}$ " @ 2700'
 25 SX plug @ 2700'

OPERATOR	Sindair Oil and Gas		DATE	11-28-01
LEASE	Pearl Forest	WELL No	1	
		LOCATION	SEC 11- T18S- R38E	

with H 1980' FNL + 660' FEL

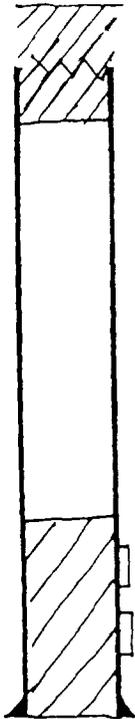


10 SXS @ surface

Plugged + ABANDONED
7-3-57

15 SX plug @ 280 - 320'

$10\frac{3}{4}$ " casing set at 306' with 275 sx of _____ cement
Hole size ?" Cement Circulated.



SHOT AND pulled 7" @ 1176'
15 SX plug @ 1150 - 1200

Set 25 SX plug @ 4060 - 4200

perf 4084 - 96, 4108 - 12

perf 4170 - 4180

7" casing set at 4200' with 200 sx of _____ cement

Total Depth 4200' Hole size $8\frac{3}{4}$ " / 1st stage 100 SX

AV @ 1914

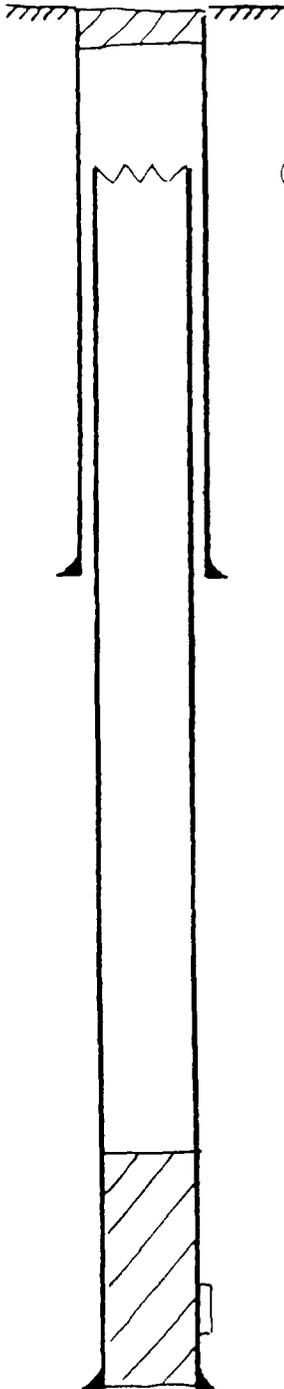
2nd stage 100 SX

TOC By TS @
1190'

OPERATOR W. R. Weaver		DATE 11-28-01
LEASE SUNRAY-TAYLOR	WELL NO. 1	LOCATION SEC 12-T18S-R38E

UNIT L 1980' FSL + 660' FWL

Plugged + Abandoned



10 SXS @ SURFACE

cut 5 1/2" CSg @ 220' pulled 220'

3 5/8" casing set at 279' with 100 sx of _____ cement

Hole size 12" Cement Circulated

40 sx plug @ 4175' - 3875'

perf 4108 - 4135'

5 1/2" casing set at 4175' with 800 sx of _____ cement

Total Depth 4175' Hole size 7 7/8" 1st stage 400 SXS
DV @ 2045'
2nd stage 400 SXS

Schumberger, Duwell
 Hobbs District Laboratory

Company: Aura Oil Company Report No.: HNMO1S267
 Lease & Well: Williams Lease (windmill) Service Point: HNM LAB
 County, State: Lea County, NM Prepared by: Monica Navarro
 Formation: fresh water source well Prepared for: Luis Granados
 DHT (F): _____ Date: 11/27/01

Specific gravity: 1.010 @ 78 degrees F ph 7.00

Anions

	Factor	ml	Sample	mg/l	Factor	me/l	Ionic Strength		
							(mg/l)	(me/l)	(ppm)
Chlorides	3545	0.60	10	213	0.0282	6.00	0.0030	0.0030	211
Sulfates	20			175	0.0208	3.64	0.0037	0.0036	173
Carbonates	492	0.4	10	0	0.0333	0.01	0.0000	0.0000	0
Bicarbonates	1000	1.10	10	110	0.0164	1.80	0.0009	0.0009	109

Cations

	Factor	ml	Sample	mg/l	Factor	me/l	Ionic Strength		
							(mg/l)	(me/l)	(ppm)
Calcium	401	1	10	40.1	0.0499	2.00	0.0020	0.0020	40
Magnesium	243	2.00	10	48.6	0.0823	4.00	0.0040	0.0040	48
Iron				0	0.0358	0.00	0.0000	0.0000	0
Sodium	0	0	0	125	0.0435	5.45	0.0028	0.0027	124

Total Dissolved Solids: 712.1952 22.91
 Total Ionic Strength: 0.0163 0.0163

Calcium Carbonate Deposition

Stiff-Davis Equation: Stability Index(SI) = pH - pCa - pAlk - K

pH= 7.00
 pCa= 2.90
 pAlk= 3.03
 K= 1.31

Total Ion Equivalent NaCl Concentration= 585.2418 ppm

SI= -0.33

The Stiff-Davis equation predicts this water does not have a tendency toward calcium carbonate deposition.

Calcium Sulfate Deposition

CaSO4 Solubility: $S = 1000 (\text{SQRT}(X^2 + 4K) - X)$

Total Ionic Strength= 0.0163
 Solubility Constant, K= 0.00290
 X= -0.0008

S= 108.52 me/l

Laboratory analysis shows that this water contains 3.64 me/l, therefore the tendency towards calcium sulfate deposition does not exist.

Legal Notice
December 4, 2001

This is to advise all parties concerned. Avra Oil Company is seeking administrative approval from the New Mexico Conservation Division to utilize a well located 660 FEL & 1980 FSL Section 11, Township 18 South, Range 38 East, Lea County, New Mexico, known as the Charlcia A. Taylor No. 1 for water injection. Proposed injection is in the Queen Sand formations through perforations of approximately 4,108-4,116 feet. Proposed average daily injection will be 500 bbs per day (Expected maximum injection rate of 1,000 bbs per day) at an average injection pressure of 1300psi. Questions can be addressed to:

Avra Oil Company
P.O. Box 3193
Midland, Texas 79702
Attention: Mr. Saeed Afghahi
Phone (915) 682-4866

Interested parties must file objections or request for hearing within 15 days of this notice to the: Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe. NM 87504.