

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Continental Oil Company		ADDRESS Box 460, Hobbs, New Mexico	
LEASE NAME Bell Lake Unit	WELL NO. 7	FIELD Bell Lake	COUNTY Lea
LOCATION UNIT LETTER A ; WELL IS LOCATED 660 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 1 TOWNSHIP 24S RANGE 33E NMPM.			

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8"	817	650	surface	Circ.
INTERMEDIATE	8 5/8"	6000'	8102'	surface	Circ.
LONG STRING Liner	5 1/2" 5 1/2"	11,687 6310	2055 210	6450 5902	Temp. Survey Top of liner
TUBING	2 7/8"	5190'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Tension Model AD or equivalent @ 5190'		

NAME OF PROPOSED INJECTION FORMATION Delaware	TOP OF FORMATION 5192'	BOTTOM OF FORMATION 8750'
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IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing	PERFORATIONS OR OPEN HOLE? perforations	PROPOSED INTERVAL(S) OF INJECTION 5205-5361'
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IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Development gas well	HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? yes
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LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH
See attachment "A"

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 600'	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA Bone Spring 8750'
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ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 450	MINIMUM 2500	MAXIMUM closed	OPEN OR CLOSED TYPE SYSTEM pressure	IS INJECTION TO BE BY GRAVITY OR PRESSURE? 500 (est)	APPROX. PRESSURE (PSI) 500 (est)
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ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes	WATER TO BE DISPOSED OF Yes	NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? Yes
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NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)
State of N.M. Lessee: Carl Johnson, Jr. Box 787, Lovington, New Mexico

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL
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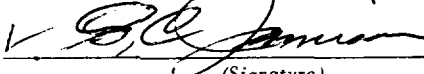
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HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes	SURFACE OWNER Yes	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER No
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ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes	PLAT OF AREA Yes	ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes
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I hereby certify that the information above is true and complete to the best of my knowledge and belief.

 (Signature)	Assistant Division Manager (Title)	7-23-68 (Date)
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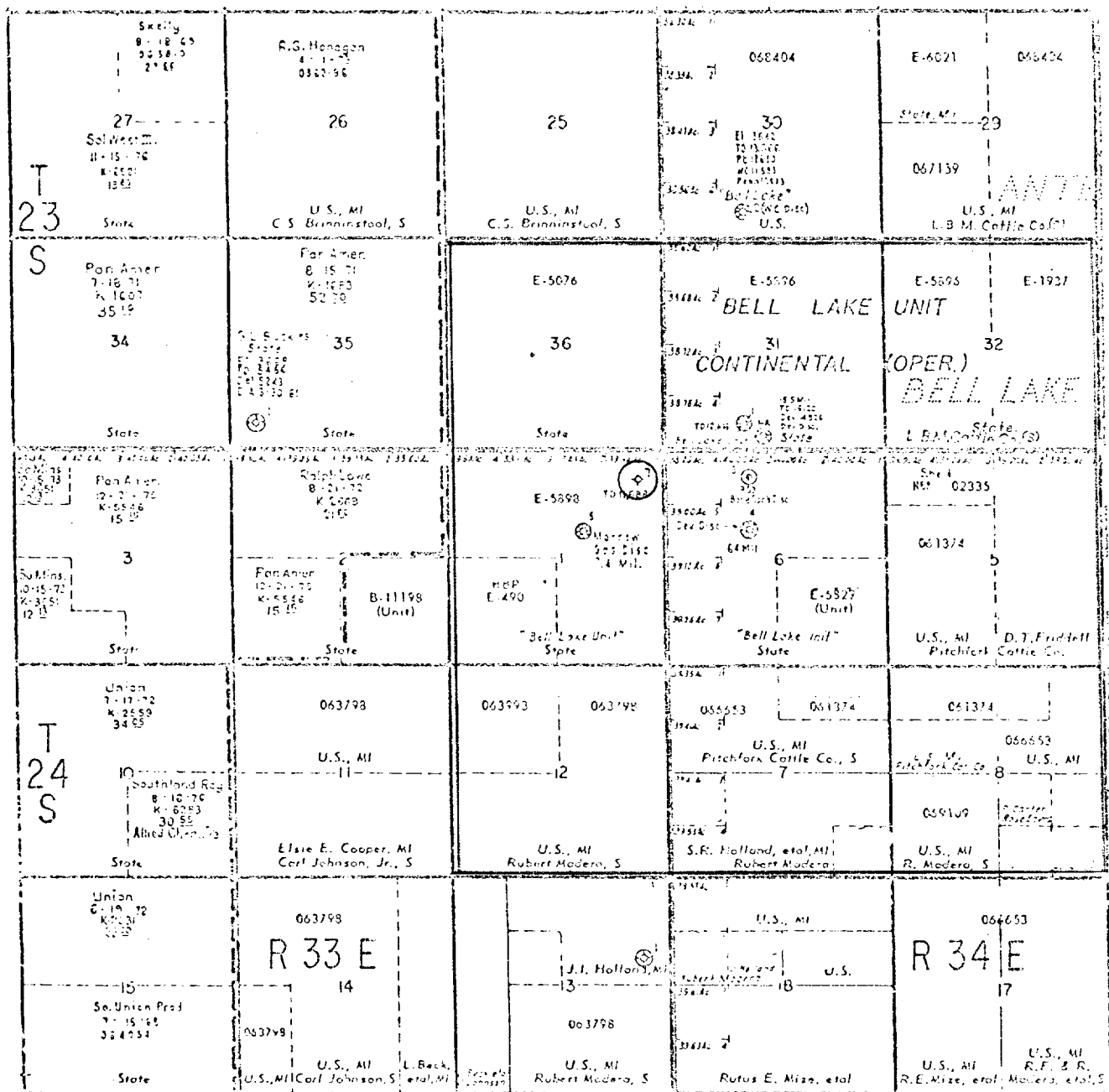
NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

ATTACHMENT "A"

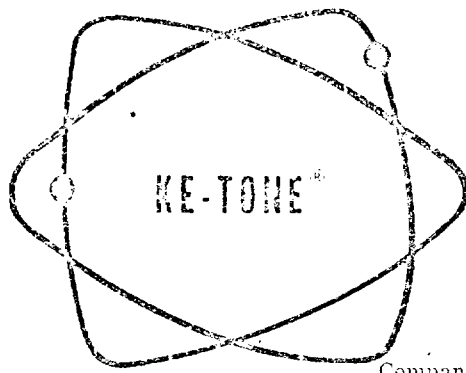
BELL LAKE UNIT NO. 7

List of all perforated intervals and sacks of cement to seal or squeeze each:

11,600-08, 11,616-30:	CIBP at 11,580'
11,540-54:	CIBP at 11,510'
11,145-80, 11,098-11,112'	Retrievable bridge plug 10,405' (left in hole)
10,336-68, 10,232-78, 9632-72', 9506-90, 9390-9405', 9372-80':	Retrievable bridge plug 9245', left in hole
9167-74, 9114-9150, 8860-8876, 8800-8856, 8772-8782	Squeezed w/274 sx. Cement drilled out to 8845'
8830-8840	CIBP at 8820'
8802-8812, 8772-8782	25 sx cement plug 8550-8820'
5 1/2' casing cut at 6385 & pulled	50 sx cement plug 6310-6450
5 1/2" liner 5902-6310'	Cemented w/210 sx.
6073-74, 6084-85	Squeezed w/100 sx and drilled out.
6077-6083	CIBP at 5300'
5198-5206	30 sx plug 5106-5210
	10 sx plug at surface.



CONTINENTAL OIL COMPANY
LOCATED BY DEPT. OF THE INTERIOR
LOCATION PLAT
LEA COUNTY, NEW MEXICO



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company Continental Oil CompanyField Bell Lake - Penn.Lease Bell Lake #5Sampling Date 6/21/68

Type of Sample _____

WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	1.30	26
Magnesium (Mg++)	0.66	8
Sodium (Na+) (cal.)	10.48	241
Iron		144
Bicarbonate (HCO ₃ -)	3.70	225
Carbonate (CO ₃ -)	NOT	FOUND
Hydroxide (OH-)	NOT	FOUND
Sulphate (SO ₄ -)	0	0
Chloride (Cl-)	8.74	310
6.7 pH @ 68° F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	1.96	98
Carbonate Hardness, as CaCO ₃ (temporary)	3.70	185
Non-Carbonate Hardness as CaCO ₃ (permanent)	-	-
Alkalinity as CaCO ₃	3.70	185
Specific Gravity @ 68° F	1.000	

* mg/l = milligrams per Liter

* me/l = milliequivalents per Liter

Makes Water Work



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company Continental Oil Company

Field Bell Lake Bone Springs

Lease Bell Lake #3

Sampling Date 6/21/68

Type of Sample _____

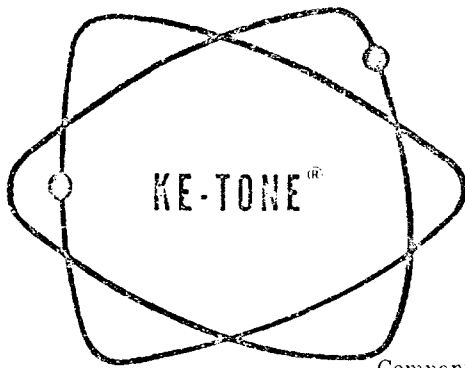
WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	499.00	10,000
Magnesium (Mg++)	313.17	3608
Sodium (Na+) (cal.)	2375.09	54,603
Iron		288
Bicarbonate (HCO ₃)	7.00	427
Carbonate (CO ₃ -)	NOT	FOUND
Hydroxide (OH-)	NOT	FOUND
Sulphate (SO ₄ -)	21.86	1050
Chloride (Cl-)	3158.40	112,000
6.4 pH @ 68 ° F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	812.17	40,609
Carbonate Hardness, as CaCO ₃ (temporary)	7.00	350
Non-Carbonate Hardness as CaCO ₃ (permanent)	805.17	40,259
Alkalinity as CaCO ₃	7.00	350
Specific Gravity @ 68° F	1.115	

* mg/l = milligrams per Liter

* me/l = milliequivalents per Liter

Makes Water Work



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

W.A. Fico

Company Continental Oil CompanyField DEVONIANLease Bell Lake #6Sampling Date 10/3/67Type of Sample Gas wells

WATER ANALYSIS

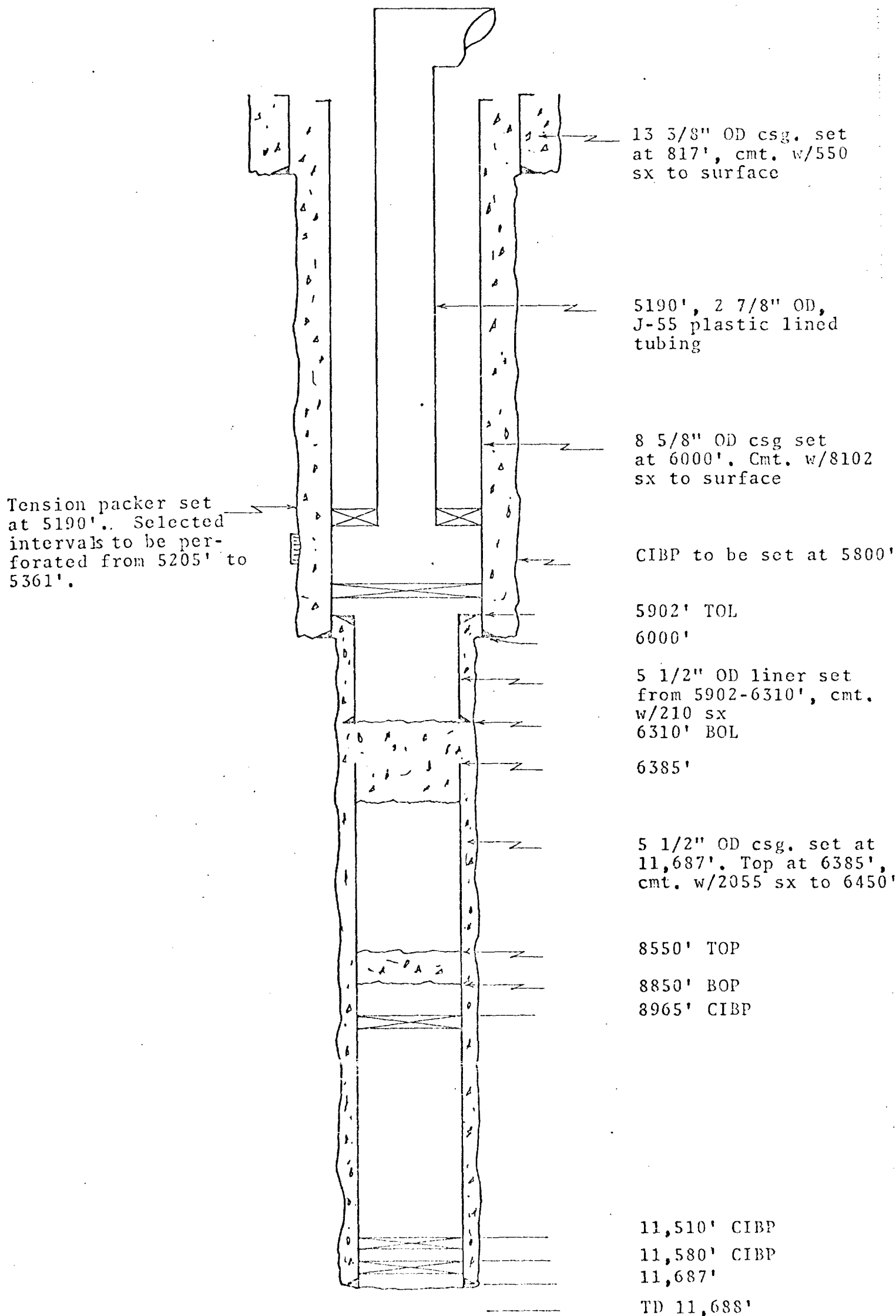
IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	123.75	2480
Magnesium (Mg++)	23.93	291
Sodium (Na+) (calculated)	1136.64	26,131
Bicarbonate (HCO ₃ -)	10.73	658
Carbonate (CO ₃ -)	Not Found	
Hydroxide (OH-)	Not Found	
Sulphate (SO ₄ -)	32.79	1575
Chloride (Cl-)	1240.80	44,000
pH c 7.1 ° F 68		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	147.68	7384
Carbonate Hardness, as CaCO ₃ (temporary)	10.73	5365
Non-Carbonate Hardness as CaCO ₃ (permanent)	136.95	6848
Alkalinity as CaCO ₃	10.73	5365
Specific Gravity c 68° F	1.045	

* mg/l = milligrams per Liter

* me/l = milliequivalents per Liter

Makeas Water Works

Bell Lake Unit No. 7
660' FNL & 660' FEL, Section 1, T-24S, R-33E



BELL LAKE UNIT NO. 7

5000

5100

TOP of LAMAR

TOP of DELAWARE SAND

5200

INTERVAL
TO BE
PERF.
5192'-
5360'

5300

5400

5500

5600

