YATES PETROLEUM CORPORATION
YATES BUILDING – 207 SOUTH 4TH ST.
ARTESIA, NEW MEXICO – 88210

June 14, 1971

SWD – 122
Jackson AT #2 N
14-17S-25E

SWD – 123
Eagle Creek BL #2 N
23-17S-25E

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Salt Water Disposal Wells
Eagle Creek S. A. Pool Eddy County New Mexico

Dear Sir:

Further to our telephone conversation of June 3rd, application is hereby submitted for Administrative Approval for the conversion of two additional wells to salt water disposal in the Eagle Creek Field, Eddy County, approximately two miles west of Artesia, New Mexico. We have one disposal well at this time, permitted under NMOCC Order 3603, dated 27th day of November, 1968.

Attached hereto are plat showing location of proposed disposal wells with respect to other wells within a radius of two miles, electric logs and diagrammatic sketches of the proposed injection wells and a copy of water analyses by Dowell & Halliburton, also Form C-108. Please note that Yates Petroleum is the Operator of all wells within one-half mile of the proposed disposal wells.

Yours truly,

YATES PETROLEUM CORPORATION

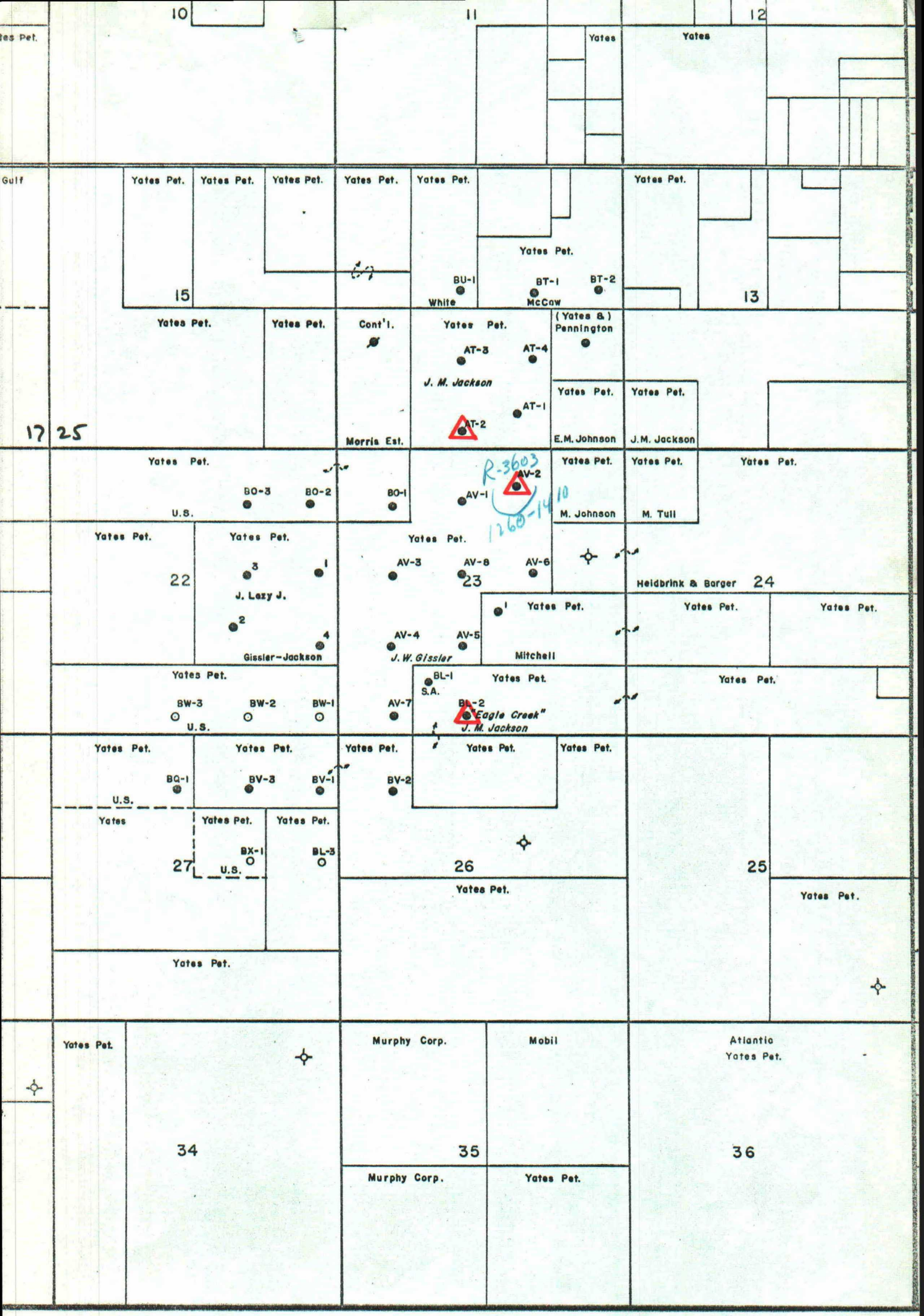
Eddie M. Mahfood

Eddie M. Mahfood - Engineer

EM: CT

ENCL.

cc: Mr. Reynolds, State Engineer, Roswell
Mr. Gressett, NMOCC, Artesia



△ Salt Water Disposal Well

Yates Petroleum Corp
Eagle Creek Field
Eddy County, New Mexico
2-3 miles West of Artesia, N.M.

Form C-108
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR	ADDRESS
Yates Petroleum Corporation	207 South 4th Street-Artesia, N.M.

LEASE NAME	WELL NO.	FIELD	COUNTY
Eagle Creek BL	2	Eagle Creek S.A.	Eddy

LOCATION

UNIT LETTER N ; WELL IS LOCATED 330 FEET FROM THE South LINE AND 2310 FEET FROM THE West LINE, SECTION 23 TOWNSHIP 17S RANGE 25E NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	10 3/4"	201 RT	50	Surface	Circulated
INTERMEDIATE	7"	1167 RT	600	Surface	Circulated
LONG STRING	4½&5½"	1452 RT	125	Surface	Circulated
TUBING	2 3/8"	1300	NAME, MODEL AND DEPTH OF TUBING PACKER: Guiberson Shorty Tension Pkr. @Approx. 1300'		

NAME OF PROPOSED INJECTION FORMATION	TOP OF FORMATION	BOTTOM OF FORMATION
San Andres-Slaughter	1290 RT 1277 GL	1464 RT 1451'GL

IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?	PERFORATIONS OR OPEN HOLE?	PROPOSED INTERVAL(S) OF INJECTION
Tubing	Perforations	1340-1422 RT

IS THIS A NEW WELL DRILLED FOR DISPOSAL?	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?	HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?
No	Oil Production	No

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH

N.A.

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA
1066 RT	1167 RT	Not Penetrated

ANTICIPATED DAILY INJECTION VOLUME (BBLS.) MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSI)
50	200	Open	Pressure	700-900

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 —	WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
	Yes	Yes	Yes

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)

Bill Gissler Artesia, New Mexico

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (½) MILE OF THIS INJECTION WELL

Yates Petroleum Corporation

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? SURFACE OWNER	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	THE NEW MEXICO STATE ENGINEER
Yes	SAme	Yes

ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) PLAT OF AREA	ELECTRICAL LOG	DIAGRAMMATIC SKETCH OF WELL
Yes	Yes	Yes

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

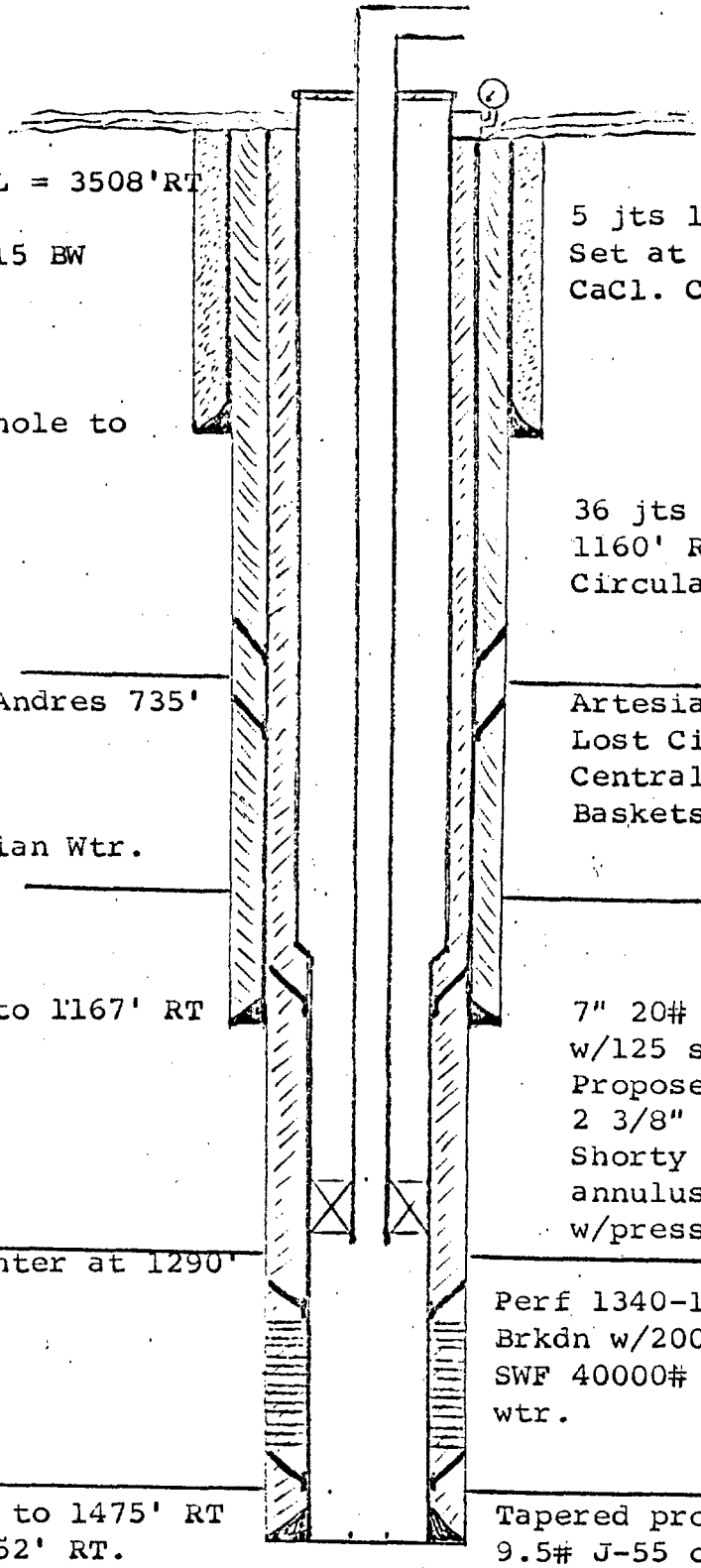
Edwin L. Kirk

(Signature) Engineer (Title) 6-14-71 (Date)

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.

DIAGRAMMATIC SKETCH OF PROPOSED DISPOSAL WELL

Yates Petroleum Corporation - Eagle Creek BL #2
330' FSL & 2310' FWL - Sec. 23-T17S-R25E
Eagle Creek (S.A.) Eddy County, N.M.



Elev: 3495' GL = 3508'RT
Comp: 6-4-71
IP: 15 BO, 15 BW

5 jts 10 3/4" 32.75# J-55 (188')
Set at 201' with 50 sxs Neat 2%
CaCl. Cement Circulated

13 3/4: hole to
201' RT

36 jts 7" 20# J-55 csg. set at
1160' RT w/600 sxs Incor Cemt,
Circulated.

Top of San Andres 735'

Artesian Water Zone
Lost Circulation at 737'
Centralizers at 1067,752 &688'
Baskets at 720 & 653'

Base of Artesian Wtr.
@ 1066'

9 7/8" hole to 1167' RT

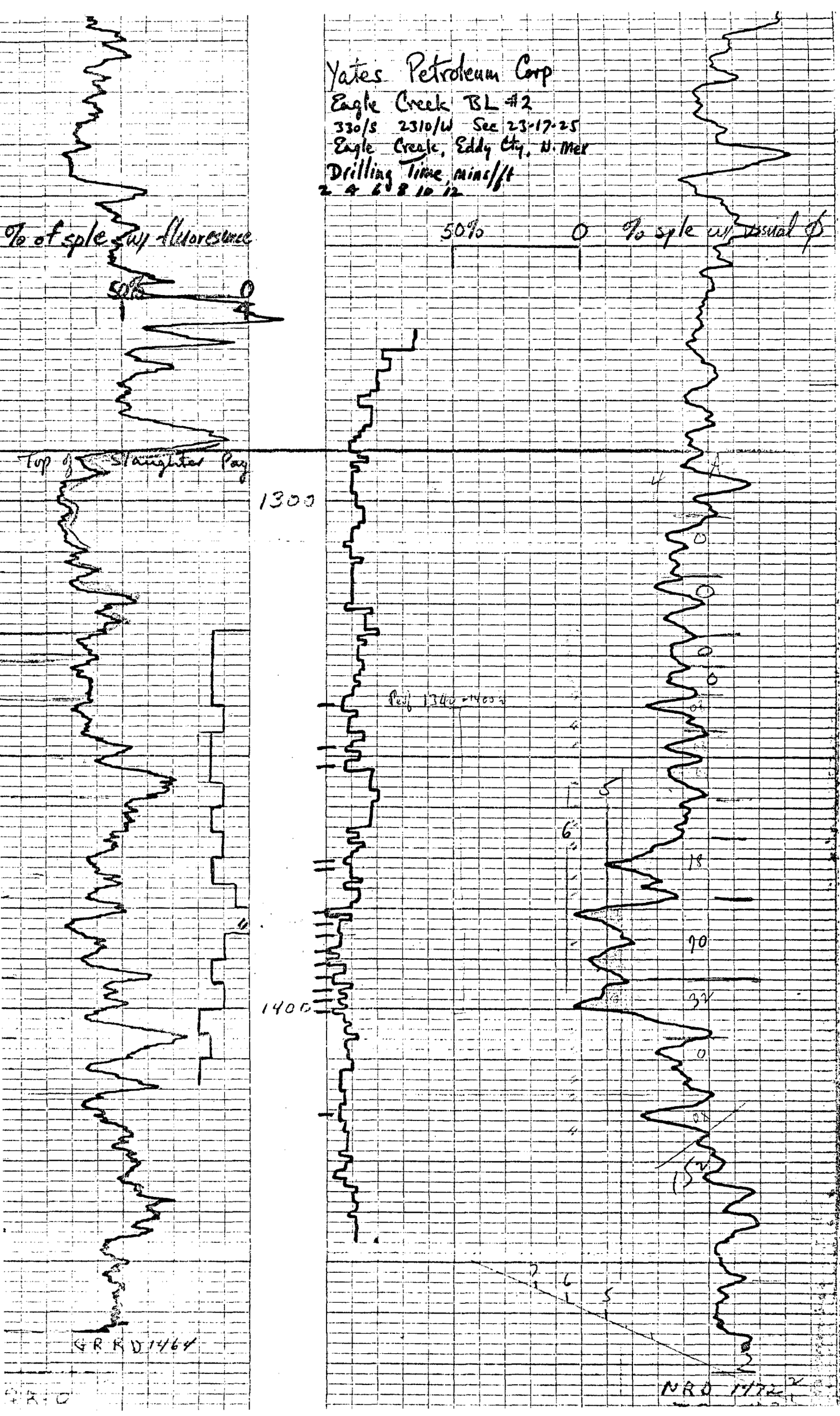
7" 20# J-55 csg. set at 1160' RT
w/125 sxs Incor Neat
Proposed: to set approx. 1300' of
2 3/8" cement lined tbg. on Guiberso
Shorty Tension Packer, to fill
annulus w/inhibited fresh wtr.
w/pressure gauge on bradenhead.

Top of Slaughter at 1290'

Perf 1340-1400½ w/15 0.51 jets
Brkdn w/2000 gal 15% HCL
SWF 40000# 20-40 sd in 80000 gal trtd
wtr.

6 1/8" hole to 1475' RT
TD; PBTD 1452' RT.

Tapered production string, 525' of 4½"
9.5# J-55 csg & 914' of 5½" J-55 csg.
Set at 1452' RT w/125 sxs Neat,
Centralizers on 4½" @ 1420,1329,1237,
&1116'.


Yates Petroleum Corp
Eagle Creek BL #2
330/s 2310/w Sec 23-17-25
Eagle Creek, Eddy Cty, N. Mex
Drilling Time, mins/ft
2 4 6 8 10 12
% of sple w/ fluorescence
50%
0
% sple w/ visual Φ
Top of Slaughter Pay
1300
Perf 1340-1400
1400
GRD 1464
NRD 1472

1342-A

HALLIBURTON DIVISION LABORATORY

HALLIBURTON COMPANY
LOVINGTON, NEW MEXICO

LABORATORY WATER ANALYSIS No. W1-287-71

To Yates Petroleum Company

207 South 4th

Artesia, New Mexico 88210

Date 6/8/71

Submitted by _____ Date Rec. _____

Well No. B O # 3 Depth _____ Formation San Andres

County _____ Field _____ Source _____

Resistivity	.048 @ 76 F			
Specific Gravity	1.130			
pH	6.4			
Calcium (Ca)	3,150			*MPL
Magnesium (Mg)	990			
Chlorides (Cl)	116,500			
Sulfates (SO_4)	4,400			
Bicarbonates (HCO_3)	734			
Soluble Iron (Fe)	Nil			

Remarks:

*Milligrams per liter

Respectfully submitted,

Analyst: Robert Lansford

cc:

HALLIBURTON COMPANY

By _____
CHEMIST

NOTICE

DØWELL DIVISIØN ØF THE DØW CHEMICAL CØMPANY

WATER ANALYSIS REPØRT

TØ: YATES PETRØLEUM CØRPØRATIØN
207 SØUTH 4TH STREET
ARTESIA, NEW MEXICØ 88210

LABØRATØRY NØ.: HØBBS 801
DATE: MAY 26,1971

WELL NAME + NØ.:	BL 2	DEPTH:	1400 FT
FIELD:	CREEK	FØRMATIØN:	SAN ANDRES
CØUNTY:	EDDY	STATE:	NEW MEXICØ
SAMPLE PT.:	WELL HEAD	SAMPLE ID:	LØAD

DISSØLVED SØLIDS

CATIØNS	MG/L	MEQ/L
SØDIUM, NA	39409	1710
CALCIUM, CA	2000	99
MAGNESIUM, MG	851	70
ANIØNS		
CHLØRIDES, CL	62049	1749
SULFATES, SØ4	5500	114
BICARBØNATES, HC03	975	15

ØTHER PRØPERTIES

PH =	6.55
SP GR =	1.080
RESISTIVITY=	.0000

THE CALCIUM CARBØNATE STABILITY INDEX= 1.77984

THE CALCIUM SULFATE STABILITY INDEX IS .63

A NEGATIVE NUMBER INDICATES THE SCALE IN SØLUTIØN DØES NØT EXCEED THE SATURATIØN VALUE AND SHØULD NØT PRECIPITATE.

REMARKS AND RECØMMENDATIØNS:
IRØN = 12.25 PPM
H2S = PRESENT
THIS WATER IS LØAD WATER AFTER FRAC JØB BY HALCØ.
CAN THIS WATER BE USED AGAIN FØR ANØTHER FRAC JØB?

JACK SARFF