HEYCO **HARVEY E. YATES COMPANY**

PETROLEUM PRODUCERS

P.O. BOX 1933 ONE SUNWEST CENTRE 505/623-6601
FAX 505/622-4221
ROSWELL, NEW MEXICO 88202-1933

January 29, 1993

William J. LeMay
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Amended Request of 1/7/93 to Convert Caviness 11 Fed. #3 to a Water Disposal Well

Dear Mr. LeMay,

Please find enclosed three (3) copes of the revised portions of the original application of 1/7/93 for administrative approval to convert the above well to a water disposal well. HEYCO proposes to dispose of Bone Spring formation water into the upper Bone Spring formation instead of the lower Bone Spring.

Copies are being sent to each of the original mailing list. If there are any questions regarding this application for administrative approval, please contact my office at 505/623-6601.

Sincerely,

Tim W. Gum

Tim Gum
Engineer

enclosures
TG/vt

TGOCD

28-Jan-93

HARVEY E. YATES COMPANY

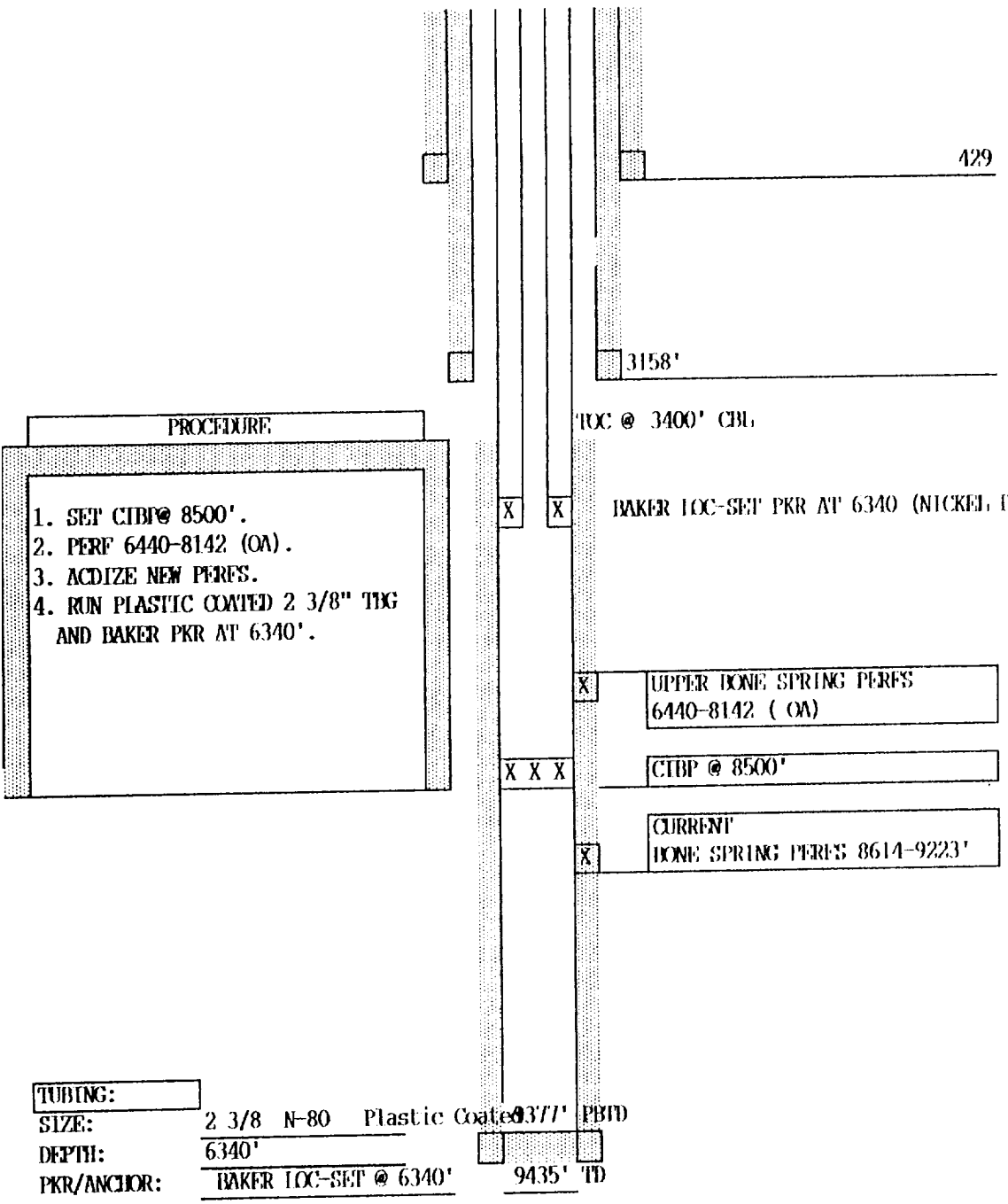
WELLBORE SCHEMATIC & PROCEDURE SHEET

BY Tim Gum

OPERATOR: HARVEY E. YATES COMPANY
WELL NAME: CAVINESS 11 FEDERAL NO. 3
LEASE #: NM-53381
LOCATION: 990'FNL & 330' FWL
SEC 11, T18S, R33E, NMPM
FIELD: MESCALERO ESCARPE
ELEVATION: 4043.4 GL, 4056 KB

SPUD DATE: 6/26/89
COMP DATE: 7/17/89
TD: 9,435
PBTD: 9377'

REVISED PROPOSAL



SURFACE	
WT & GRD	13 3/8 48# J-55
SXS CMT	425
TOC	SURFACE
BIT SIZE	17 1/2"

INTERMEDIATE	
WT & GRD	85/8" 24 & 34# J-55
DEPTH	3158'
SXS CMT	1600
TOC	CIRC
BIT SIZE	12 1/4"

PROCEDURE

1. SET CIBP@ 8500'.
2. PERF 6440-8142 (OA).
3. ACDIZE NEW PERFS.
4. RUN PLASTIC COATED 2 3/8" TBG AND BAKER PKR AT 6340'.

TUBING:	
SIZE:	2 3/8 N-80 Plastic Coated
DEPTH:	6340'
PKR/ANCHOR:	BAKER LOC-SET @ 6340'

PRODUCTION:	
WT & GRD	51/2 17# & 20 # N-(
DEPTH	9435'
SXS CMT	1675
TOC	3400' CBL
BIT SIZE	7 7/8"
DV TOOL @	
MARKER JOINT	

REVISED

SECTION III (B)

WELL DATA

1. Bone Spring, Mescalero Escarpe Pool
2. Injection Interval: 6440-8142' (oa)
3. Perfs: 8614-9223' (oa); Origianl PBTD: 9377'
4. No producing zones above or below injection interval.

REVISED

SECTION VII

INJECTION DATA

1. Estimated maximum daily rate of 500 BW
2. Closed system - Gas blanket
3. Maximum surface pressure of 1628 psig at maximum rate
4. See attached water analysis
5. HEYCO proposes to dispose of produced Bone Spring formation water from operated leases.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

1-12-93

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:
MC
DHC
NSL
NSP
SWD X
WFX
PMX

Gentlemen:

I have examined the application for the:

Harvey E. Yates Co. Cavenes II Federal #3-D 11-18-33
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed

HEYCO **HARVEY E. YATES COMPANY**

PETROLEUM PRODUCERS

P.O. BOX 1933 ONE SUNWEST CENTRE 505/623-6601
FAX 505/622-4221
ROSWELL, NEW MEXICO 88202-1933

January 7, 1993

William J. LeMay
Oil Conservation Division
P.O. Box 2088
Santa Fe, new Mexico 87501

Re: Request to Convert Caviness 11 Federal #3
to a Water Disposal Well

Dear Mr. LeMay,

Please find enclosed three (3) copies for application for administrative approval to convert the aforementioned well to a water disposal well. HEYCO proposes to dispose of Bone Spring formation water from it's operated leases.

Copies are being sent to the Oil Conservation Division District 1 Office in Hobbs, New Mexico, the Bureau of Land Management in Carlsbad and the attached mailing list.

If there are any questions regarding this application for administrative approval, please contact my office at 505/623-6601.

Sincerely,

Tim Gum
Engineer

enclosures

TG/vt
ODCCAV.TG

MAILING LIST
(CAVINESS 11 FEDERAL NO.3 APPLICATION)

CAVINESS CATTLE CO.
HERSHAL CAVINESS
A STAR ROUTE
MALJAMER,NM
88264

SANTA FE ENERGY RESOURECES,INC.
1616 S.VOSS RD. STE. 1000
HOUSTON,TX. 77057

SIETE OIL AND GAS CORPORATION
P.O. BOX 2523
ROSWELL,NM 88202

KERR-MCGEE CORPORATION
1 MARIENFELD PLACE
110 NORTH MARIENFELD STREET SUITE 330
MIDLAND,TEXAS 79701

MERIDIAN OIL PRODUCTION COMPANY
P.O. BOX 1492
EL PASO, TEXAS 79978

MOBIL PRODUCING TEXAS & NEW MEXICO, INC.
12450 GREENSPOINT DRIVE
HOUSTON,TEXAS 77060

OXY U.S.A.
P.O.BOX 300
TULSA,OKLAHOMA 74102

BISON PETROLEUM CORPORATION
5809 S. WEATERN,SUITE 200
AMARILLO,TEXAS 79110

BLM
P.O.BOX 1778
CARLASBAD,NM 88220

OIL CONSERVATION DIVISION
P.O.BOX 1980
HOBBS,NM 88240

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: Harvey E. Yates Company

Address: P.O. Box 1933, Roswell, N.M. 88202

Contact party: Tim Gum Phone: 505/623-6601

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: Tim Gum Title Engineer

Signature: Tim W. Gum Date: 1/8/93

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

SECTION 111 (A)
WELL DATA

3-Dec-92

HARVEY E. YATES COMPANY

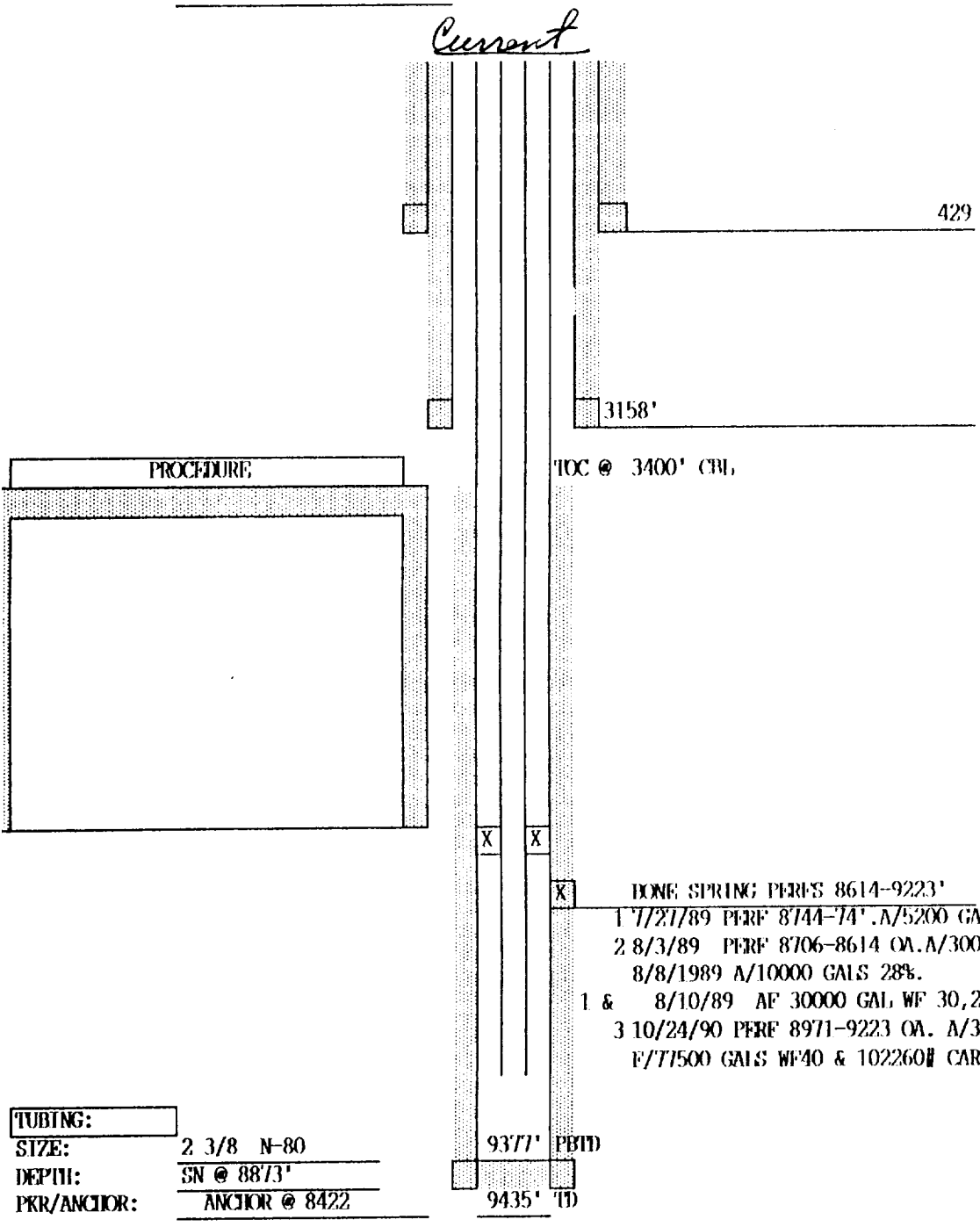
WELLBORE SCHEMATIC & PROCEDURE SHEET

BY Tim Gum

OPERATOR: HARVEY E. YATES COMPANY
WELL NAME: CAVINESS 11 FEDERAL NO. 3
LEASE #: NM-53381
LOCATION: 990'FNL & 330' FWL
SEC 11, T18S, R33E, LEA NM.
FIELD: MESCALERO ESCARPE
ELEVATION: 4043.4 GL 4056 KB

SPUD DATE: 6/26/89
COMP DATE: 7/17/89
TD: 9,435
PBTD: 9377'

Current



SURFACE	
WT & GRD	13 3/8 48# J-55
SXS CMT	425
TOC	SURFACE
BIT SIZE	17 1/2"

INTERMEDIATE	
WT & GRD	85/8" 24 & 34# J-55
DEPTH	3158'
SXS CMT	1600
TOC	CIRC
BIT SIZE	12 1/4"

PROCEDURE

DONE SPRING PERFS 8614-9223'

1 7/27/89 PERF 8744-74'.A/5200 GALS 20% SRA.
2 8/3/89 PERF 8706-8614 OA.A/3000GALS 20%SRA.
8/8/1989 A/10000 GALS 28%.
1 & 8/10/89 AF 30000 GAL WF 30,20000# 100MESH, & 20000 GAL 28% X-LINK.
3 10/24/90 PERF 8971-9223 OA. A/3000 GALS 15%.
F/77500 GALS WF40 & 102260# CARB.

TUBING:	
SIZE:	2 3/8 N-80
DEPTH:	SN @ 8873'
PKR/ANCHOR:	ANCHOR @ 8422

PRODUCTION:	
WT & GRD	51/2 17# & 20 # N-80
DEPTH	9435'
SXS CMT	1675
TOC	3400' CBL
BIT SIZE	7 7/8"
DV TOOL @	
MARKER JOINT	

3-Dec-92

HARVEY E. YATES COMPANY

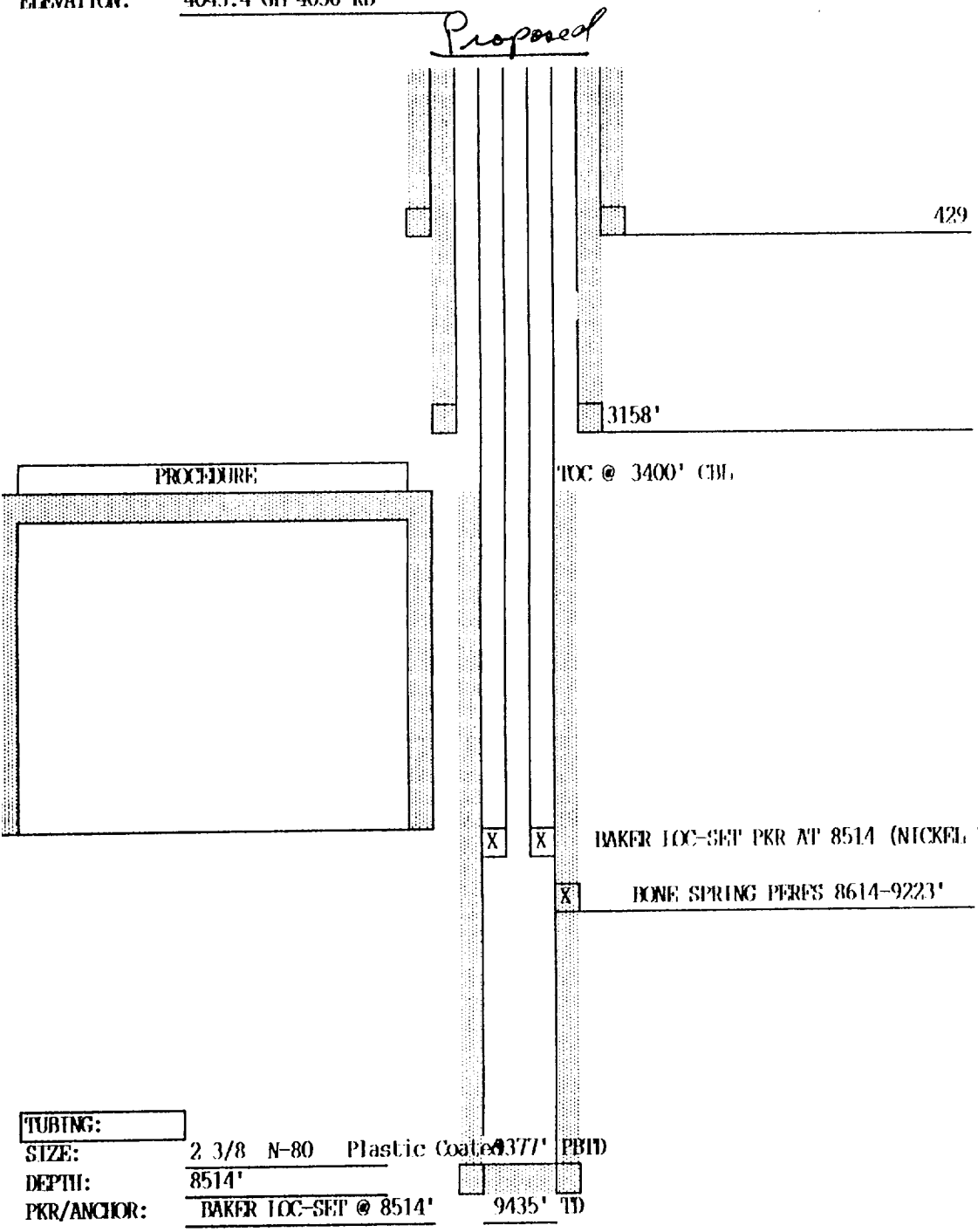
WELLBORE SCHEMATIC & PROCEDURE SHEET

BY Tim Gum

OPERATOR: HARVEY E. YATES COMPANY
WELL NAME: CAVINESS 11 FEDERAL NO. 3
LEASE #: NM-53381
LOCATION: 990'FNL & 330' FWL
SEC 11, T18S,R33E,LEA NM.
FIELD: MESCALERO ESCARPE
ELEVATION: 4043.4 GL 4056 KB

SPUD DATE: 6/26/89
COMP DATE: 7/17/89
TD: 9,435
PBTD: 9377'

Proposed



SURFACE	
WT & GRD	13 3/8 48# J-55
SXS CMT	425
TOC	SURFACE
BIT SIZE	17 1/2"

INTERMEDIATE	
WT & GRD	85/8" 24 & 34# J-55
DEPTH	3158'
SXS CMT	1600
TOC	CIRC
BIT SIZE	12 1/4"

PROCEDURE

TUBING:	
SIZE:	2 3/8 N-80 Plastic Coated
DEPTH:	8514'
PKR/ANCHOR:	BAKER LOC-SET @ 8514'

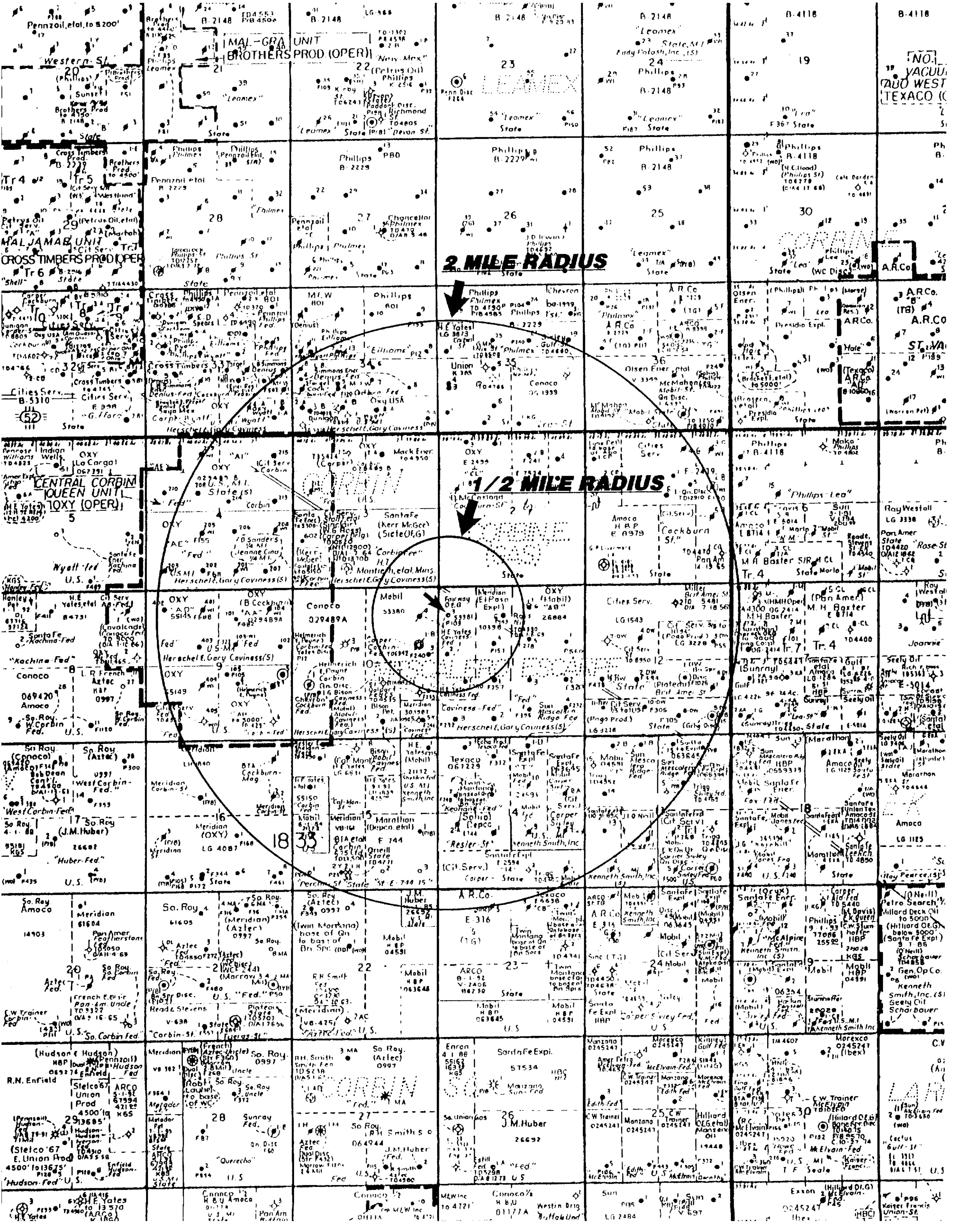
PRODUCTION:	
WT & GRD	51/2 17# & 20 # N-80
DEPTH	9435'
SXS CMT	1675
TOC	3400' CBL
BIT SIZE	7 7/8"
DV TOOL @	
MARKER JOINT	

SECTION III (B)

WELL DATA

1. Bone Spring, Mescalero Escarpe Pool
2. Injection Interval: 8614-9223'
3. Perfs: 8614-9223' (oa); Original PBTD: 9377'
4. No producing zones above or below injection interval.

SECTION V
MAPS



2 MILE RADIUS
1/2 MILE RADIUS
MAL-GRA UNIT
BROTHERS PROD (OPER)
MALJAMAR UNIT
CROSS TIMBERS PROD (OPER)
CENTRAL CORBIN
QUEEN UNIT
OXY (OPER)
Pennzoil, etal, to 5200'
Western St.
LEAMEX
CORBIN
Phillips
Herschel E. Gary Coviness (S)
So. Corbin Fed.
Hudson-Fed

SECTION VI
WELL DATA

COMPANY NAME	HEYCO	HEYCO
WELL NAME	Caviness 11 Fed. #3	Caviness 10 Fed. #3
LEGAL LOCATION	990' FNL & 330' FWL Sec. 11, T18S, R33E	2310' FNL & 330' FEL Sec. 10, T18S, R33E
FIELD POOL	Mescalero Escarpe	Mescarlero Escarpe
SPUD DATE	6/26/92	8/4/92
COMPLETION DATE	7/17/92	8/27/92
TYPE COMPLETION	producer	producer
TD	9435'	9660'
PBTD	9377'	9600'
COMPLETION INTERVAL	8614-9223'	8573-8646'
CASING DESIGN	13 3/8" @ 429' w/425 sks 8 5/8' @ 3158' w/1600 sks 5 1/2" @ 9435' w/1675 sks	13 3/8" @ 406' w/400 sks 8 5/8" @ 3152' w/1030 sks 5 1/2" @ 9660' w/2010 sks
TUBING	2 3/8" @ 8873'	2 3/8" @ 8736'
TOP OF CEMENT	3400'	1800'

COMPANY NAME	MERIDIAN	MERIDIAN
WELL NAME	4 Caviness Fed.	6 Caviness Fed.
LEGAL LOCATION	1980' FNL & 1980' FWL	990' FNL & 2310' FWL
FIELD NAME	Mescalero Escarpe	Mescalero Escarpe
SPUD DATE	4/7/87	3/3/88
COMPLETION DATE	6/5/87	4/17/88
TYPE COMPLETION	producer	producer
TD	9000'	9000'
PBTD	8911'	8910'
COMPLETION INTERVAL	8655-8720'	8630-8840'
CASING DESIGN	13 3/8" @ 367' w/350 sks 8 5/8" @ 3100' w/1450 sks 5 1/2" @ 9000' w/1700 sks	13 3/8" @ 375' w/350 sks 8 5/8" @ 3100' w/1500 sks 5 1/2" @ 9000' w/1425 sks
TUBING	2 7/8" @ 8757'	2 7/8" @ 8880'
TOP OF CEMENT	n/a	n/a

COMPANY NAME	HEYCO	HEYCO
WELL NAME	Caviness 11 Fed. #1	Caviness 11 Fed. #2
LEGAL LOCATION	1980' FSL & 990' FWL Sec. 11, T18S, R33E Lea County, N.M.	2310' FNL & 330' FWL Sec. 11, T18S, R33E Lea County, N.M.
FIELD POOL	Mescalero Escarpe	Mescalero Escarpe
SPUD DATE	10/18/86	10/2/87
COMPLETION DATE	12/2/86	10/31/87
TYPE COMPLETION	producer	producer
TD	9926'	9400'
PBTD	9802'	9350'
COMPELTION INTERVAL	8644-70'	8620-8838'
CASING DESIGN	13 3/8' @ 400' w/400 sks 8 5/8" @ 3230' w/1300 sks 5 1/2" @ 9926' w/1975 sks	13 3/8" @ 400' w/425 sks 8 5/8" @ 3143' w/1300 sks 5 1/2" @ 9400' w/1550 sks
TUBING	2 3/8" @ 8765'	2 3/8" @ 8976'
TOP OF CEMENT	3255'	3176'

SECTION VII

INJECTION DATA

1. Estimated maximum daily rate of 500 BW
2. Closed system - Gas blanket
3. Maximum surface pressure of 1844 psig at maximum rate
4. See attached water analysis
5. HEYCO proposes to dispose of produced Bone Spring formation water from operated leases.

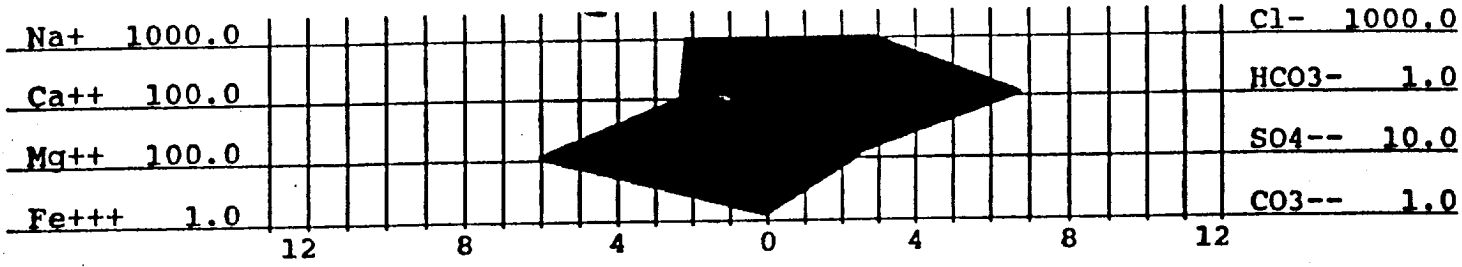
BAKER PERFORMANCE CHEMICALS
A Baker Hughes company

WATER ANALYSIS
for
HEYCO

Date of Analysis:	MARCH 3, 1992	**Analysis #:**	1293
Company:	HEYCO	**Company Address:**	ROSWELL
State:	NEW MEXICO	**Field:**	N/D
Lease:	CAVINESS 11 FED. #2	**Well #:**	#2
Oil (bbl/day):	N/D	**Water (bbl/day):**	N/D
Type of Water:	PRODUCED	**Temp.,C:**	20
Sample Source:	WELL HEAD	**Date of Sampling:**	MARCH 1, 1992
Representative:	STEVE STROUD	**Analysis By:**	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS		me/l	mg/l
Total Hardness	:	860.00	
Calcium, (Ca++)	:	240.00	4811.55
Magnesium, (Mg++)	:	620.00	7533.87
Iron, (Fe+++)	:	0.03	0.50
Barium, (Ba++)	:	N/D	N/D
Sodium, Na+(calc)	:	2243.41	51598.33
Manganese, (Mn++)	:	0.00	0.00
ANIONS			
Chloride, Cl-	:	3070.42	108996.09
Sulfate, SO4--	:	26.01	1250.00
Carbonate, CO3--	:	0.00	0.00
Bicarbonate, HCO3-	:	7.00	427.09
Hydroxyl, OH-	:	0.00	0.00
Sulfide, S--	:	0.00	0.00
TOTAL SOLIDS (quant.)	:		174617.40

DISSOLVED GASES

Hydrogen sulfide	:	1.00	mg/l
Carbon dioxide	:	23.76	mg/l
Oxygen	:	N/D	mg/l

PHYSICAL PROPERTIES

pH	:	6.45
Spec Grav.	:	1.110
TDS (calc.)	:	174624.44

SCALE STABILITIES

Temp.,C	CaCO3	CaSO4	BaSO4
20.0	0.43	3683	0
30.0	0.64	3925	0
40.0	0.90	4422	1
Max entity, (calc.)	1869		0

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

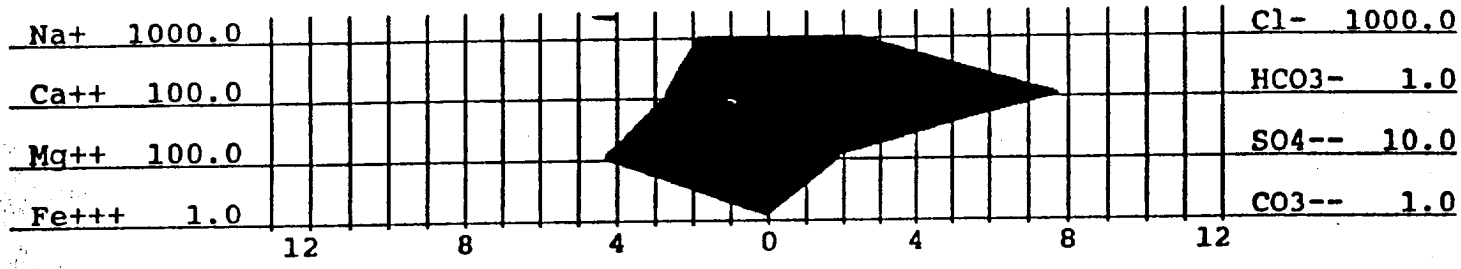
@20'C...Calcium sulfate scaling is unlikely.
@20'C...Slight carbonate scaling.

BAKER PERFORMANCE CHEMICALS
A Baker Hughes company

WATER ANALYSIS
for
HEYCO

Date of Analysis:	FEBRUARY 25, 1992	**Analysis #:**	1276
Company:	HEYCO	**Company Address:**	ROSWELL
State:	NEW MEXICO	**Field:**	N/D
Lease:	CAVINESS 10 FED. #3	**Well #:**	# 3
Oil (bbl/day):	N/D	**Water (bbl/day):**	N/D
Type of Water:	PRODUCED	**Temp.,C:**	20
Sample Source:	WELL HEAD	**Date of Sampling:**	FEBRUARY 25, 1992
Representative:	STEVE STROUD	**Analysis By:**	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN
(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness :	720.00	
Calcium, (Ca++) :	280.00	5613.47
Magnesium, (Mg++):	440.00	5346.62
Iron, (Fe+++) :	0.03	0.50
Barium, (Ba++) :	N/D	N/D
Sodium, Na+(calc):	1899.28	43683.50
Manganese, (Mn++):	0.00	0.00
ANIONS		
Chloride, Cl- :	2591.54	91996.45
Sulfate, SO4-- :	19.77	950.00
Carbonate, CO3-- :	0.00	0.00
Bicarbonate,HCO3-:	8.00	488.10
Hydroxyl,OH- :	0.00	0.00
Sulfide, S-- :	0.00	0.00
TOTAL SOLIDS (quant.):		148078.60

DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide :	31.68	mg/l
Oxygen :	N/D	mg/l

PHYSICAL PROPERTIES

pH :	6.70
Spec Grav. :	1.115
TDS (calc.) :	148086.64

SCALE STABILITIES

Temp.,C	CaCO3	CaSO4	BaSO4
20.0	0.68	3158	0
30.0	0.89	3347	1
40.0	1.13	3721	1
Max entity, (calc.)	1409		0

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

@20'C...Calcium sulfate scaling is unlikely.
@20'C...Moderate carbonate scaling.

SECTION VIII
GEOLOGICAL COMMENTS

Geological Evaluation for Caviness "11" Fed. #3
Water Disposal Application

I have examined all available State Engineer documents such as water level depths in domestic, commercial, and stock wells within the two mile radius of the proposed disposal well location. I have also analyzed well logs and drillers logs for identification of shallow and deeper water sands or gravels. I find no connection either by faulting or fracturing from the disposal interval to the defined underground water resources. Mechanically, the injection interval is isolated from the underground water resources by three strings of casing and cement, ie, surface casing (cmt. circ.), intermediate casing (cmt. circ.), and long string (T.O.C. @ 3400').

The aquifers within the two mile radius are the Tertiary-Ogallala (Tog) and Quaternary Alluvium (Qal). The Ogallala wells range from 200-270' deep with water levels 190-140' from surface. The Quaternary-Alluvium wells range from 50-150' deep with water levels 30-123' from surface. Some of these shallow alluvium wells in the two mile radius have been dry since 1976.

The proposed Bone Spring injection interval is from 8600-9250'. This interval is composed of fractured vuggy dolomite with good matrix porosity. The fractures are contained within the Bone Spring formation, and they are blanketed by Delaware Sandstone and cyclothemic upper Permian Carbonates and Sands. The injection interval has approximately 7300' of overburden above it to separate it from Ogallala and Alluvial aquifers as described in the Capitan water basin, by the State Engineer's Office.

Sincerely,

Larry L. Brooks

Larry L. Brooks
CPG #4028

SECTION VIII, CONT'

(AREA FRESH WATER WELLS)

There are no active fresh water wells within the review area as determined from the New Mexico State Engineer's Office in Roswell, New Mexico.

Section IX

None

SECTION X

Logs have been submitted previously to the N.M.O.C.D.

SECTION XI AND XII

Not applicable.

SECTION XIII

Please note the attached Affidavit of Publications. A copy of the application has been furnished to each name on the attached mailing list by certified mail.

Attorney

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a daily 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

one weeks.
Beginning with the issue dated

Dec. 11, 19 92
and ending with the issue dated

Dec. 11, 19 92

Kathi Bearden
General Manager

Sworn and subscribed to before me this 17th day of December, 19 92

Regina Smith
Notary Public.

My Commission expires

July 6, 19 94
(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 11, 1992

Harvey E. Yates Company proposes to convert the Caviness 11 Federal No. 3 to a Water Disposal well. The legal location is Unit D, 990' FNL & 330' FWL, Sec. 11, T18S, R33E, N.M.P.M., Lea County, New Mexico.

Produced water will be injected at a rate of approximately 500 barrels per day, at a surface pressure not to exceed 1844 PSIG into the Mescallero Escarpe Pool at a depth of 8614-9223'.

Interested parties must file objections or request a hearing with the New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

MAILING LIST
(CAVINESS 11 FEDERAL NO.3 APPLICATION)

CAVINESS CATTLE CO.
HERSHAL CAVINESS
A STAR ROUTE
MALJAMER,NM
88264

SANTA FE ENERGY RESOURECES,INC.
1616 S.VOSS RD. STE. 1000
HOUSTON,TX. 77057

SIETE OIL AND GAS CORPORATION
P.O. BOX 2523
ROSWELL,NM 88202

KERR-MCGEE CORPORATION
1 MARIENFELD PLACE
110 NORTH MARIENFELD STREET SUITE 330
MIDLAND,TEXAS 79701

MERIDIAN OIL PRODUCTION COMPANY
P.O. BOX 1492
EL PASO, TEXAS 79978

MOBIL PRODUCING TEXAS & NEW MEXICO, INC.
12450 GREENSPOINT DRIVE
HOUSTON,TEXAS 77060

OXY U.S.A.
P.O.BOX 300
TULSA,OKLAHOMA 74102

BISON PETROLEUM CORPORATION
5809 S. WEATERN,SUITE 200
AMARILLO,TEXAS 79110

BLM
P.O.BOX 1778
CARLASBAD,NM 88220

OIL CONSERVATION DIVISION
P.O.BOX 1980
HOBBS,NM 88240