BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION OF UNION PACIFIC RESOURCES COMPANY, AS UNIT OPERATOR OF THE SPEAKER UNIT, SPEAKER FIELD, CHEYENNE AND KIT CARSON COUNTIES, COLORADO FOR AN ORDER FROM THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO AUTHORIZING UNIT DEVELOPMENT AND OPERATION OF THE SPEAKER UNIT AREA, SPEAKER FIELD, CHEYENNE AND KIT CARSON COUNTIES, COLORADO

CAUSE NO. ____

APPLICATION

COMES NOW the Applicant, Union Pacific Resources Company, by and through Gorsuch Kirgis L.L.C., its attorneys, and respectfully applies to the Oil and Gas Conservation Commission of the State of Colorado for an order authorizing unit operation and development of the Morrow "V-11" Sandstone within the Speaker Field, Cheyenne and Kit Carson Counties, Colorado, and in support of this application states as follows:

1. Attached as Exhibit "A" is a plat showing the Speaker Unit Area ("Unit Area") together with the wells located thereon, including unit producing wells, the proposed unit injection wells, dry and abandoned wells and a salt water disposal well. Also shown on Exhibit "A" is the plotted zero hydrocarbon boundary for the Morrow V-11 Sandstone. The Unit Area is described as:

Township 11 South, Range 50 West
Section 31; Lots 1, 2, 3 and 4 A/D/A W/2W/2

Township 11 South, Range 51 West
Section 36; NE/4NE/4,S/2NE/4,SE/4

Kit Carson County, Colorado

Township 12 South, Range 50 West
Section 6; Lots 11, 12, 19 and 20, A/D/A W/2W/2

Section 18; Lot 7, A/D/A SW/4SW/4

Section 19; Lot 1, A/D/A NW/4NW/4

Township 12 South, Range 51 West
Section 1; Lots 1 and 2 (A/D/A N/2NE/4), S/2NE/4, SE/4NW/4, SW/4SW/4, E/2SW/4, SE/4

Section 11; E/2E/2

Section 12; Lots 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, and 15 A/D/A N2, SW/4, W/2SE/4

Section 13; NW/4NE/4, S/2NE/4, NW/4, SE/4, N/2SW/4, SE/4SW/4

Section 14; E/2NE/4, NE/4SE/4

Section 24; Lots 1, 2 and 8 A/D/A N/2NE/4, SE/4NE/4

Cheyenne County Colorado

Attached as Exhibit "B" is a list of all working interest, mineral interest and surface interest owners located within one-quarter mile of the proposed injection wells.

There are no wells penetrating the injection zone within one-quarter mile of the injection well.

2. Attached as Exhibit "C" is a detailed description of the proposed operations for which authorization is required.

3. Attached as Exhibits "D" and "E" are copies of the Speaker Unit Agreement and the Speaker Unit Operating Agreement, respectively. Such Agreements constitute the plan of unitized operations for which approval is requested and include provisions for allocation of unitized production of oil and gas among separately owned tracts within the Unit Area, provisions for adjustment

of investment among owners and provisions for the conduct of unitized operations and for the allocation of costs.

4. Injection of fluids is proposed.

(a) The formation to be unitized (the "Unitized Formation") is the Morrow V-11 Sandstone of Pennsylvanian Age encountered between 6,452 feet and 6,476 feet, inclusive, measured from the Kelly Bushing which is 10 feet above ground level, in the Speaker #5-13 Well located in the SW/4NW/4 of Section 13, Township 12 South, Range 51 West, Cheyenne County, Colorado, as shown on the dual induction log for said well. The Unit Area encompasses the boundaries of the Unitized Formation as defined by drilling operations to be productive of oil.

A type log of the Speaker #5-13 Well is attached as Exhibit "F."

Exhibit "G" attached sets forth the name, description, thickness and depth of the following intervals: (i) those from which wells are producing in the Unit Area or have produced; (ii) those from which wells in the Unit Area will receive any fluids to be injected; and (iii) those in the Unit Area which are capable of limiting the movement of any fluids to be injected.

(b) Exhibit "H" attached lists the names and depths to the bottoms of all known underground sources of drinking water which may be affected by the proposed unit operations.

(c) Attached as Exhibit "I" are copies of the resistivity logs, run from the bottom of the surface casing to the total depth, for each injection well.

(d) Attached as Exhibit "J" is a schematic diagram describing the casing of the injection wells and showing surface and subsurface construction details and a description of the cement jobs already in place or proposed.

(e) Attached as Exhibit "K" is a statement of the type of fluid to be injected, the source of the fluid, the estimated amount to be injected, the anticipated injection pressure, the available data on the compatibility of the fluid with the receiving formation and known or calculated fracture gradient. Exhibit "K" also shows a chemical analysis of the fluids to be injected.

(f) Due to high reservoir permeability, no reservoir stimulation is anticipated.

(g) Attached as Exhibit "L" is a list of the names and last known addresses of all persons owning mineral interests within the boundaries of the Unit Area. Also included is the name and address of the Unit Operator.

5. Unitization of the Morrow V-11 Sandstone within the Unit Area is reasonably necessary to increase the ultimate recovery of oil and associated hydrocarbons.

6. The value of the estimated additional recovery of oil and associated hydrocarbons exceeds the estimated additional costs incident to conducting unit operations.

7. The proposed plan of unit operations for which Commission authorization is requested is established by the Speaker Unit Agreement and the Speaker Unit Operating Agreement. Applicant anticipates that such plan will have been approved in writing prior

to the date of the Commission's hearing on this Application by those persons who will be required to pay at least eighty percent (80%) of the costs of the unit operation and the owners of at least eighty percent (80%) of the production or proceeds thereof which will be credited to interests which are free of costs. In the event that eighty percent (80%) of each such group has not approved the proposed plan of unit operations by the time this Application is heard by the Commission, Applicant requests that the Commission enter its Order authorizing the plan for unit operations, contingent upon Applicant obtaining approval of eighty percent (80%) of each group within a period of six (6) months from the date on which the order providing for unit operations is made.

8. The proposed plan for unit operation of the Morrow V-11 Sandstone within the Unit Area is necessary for the effective, efficient and economical development of the Unit Area within the Speaker Field and will result in the protection of correlative rights and the prevention of waste.

9. In the public interest and for the prevention of waste, the protection of correlative rights, and because of the increased ultimate recovery of oil and associated hydrocarbons made possible by the unit operation proposed herein, Applicant submits that this Commission may properly enter its Order approving the Speaker Unit Agreement and the Speaker Unit Operating Agreement as constituting a plan for the unitized operation and development of the Morrow V-11 Sandstone within the Speaker Unit Area and providing for the

pooling of all interests within the Morrow V-11 Sandstone within the Unit Area under the terms and conditions of such agreements.

WHEREFORE, Applicant requests this matter be set for hearing at the December 1994 meeting of the Commission, that notice hereof be given as required by law and, that upon the evidence introduced at the hearing, the Commission enter an Order (i) approving the Speaker Unit Agreement and the Speaker Unit Operating Agreement as constituting a plan for unitized operation and development of the said Morrow V-11 Sandstone within the Unit Area; (ii) providing for the pooling of all interests within said formation within the Unit Area under the terms of such Agreement; (iii) providing for the vacating of the Commission's spacing orders as they apply to the Unit Area; and (iv) providing for such further findings and orders as the Commission may deem proper and advisable.

Respectfully submitted,

GORSUCH KIRGIS L.L.C.

By: William A. Keefe

William A. Keefe
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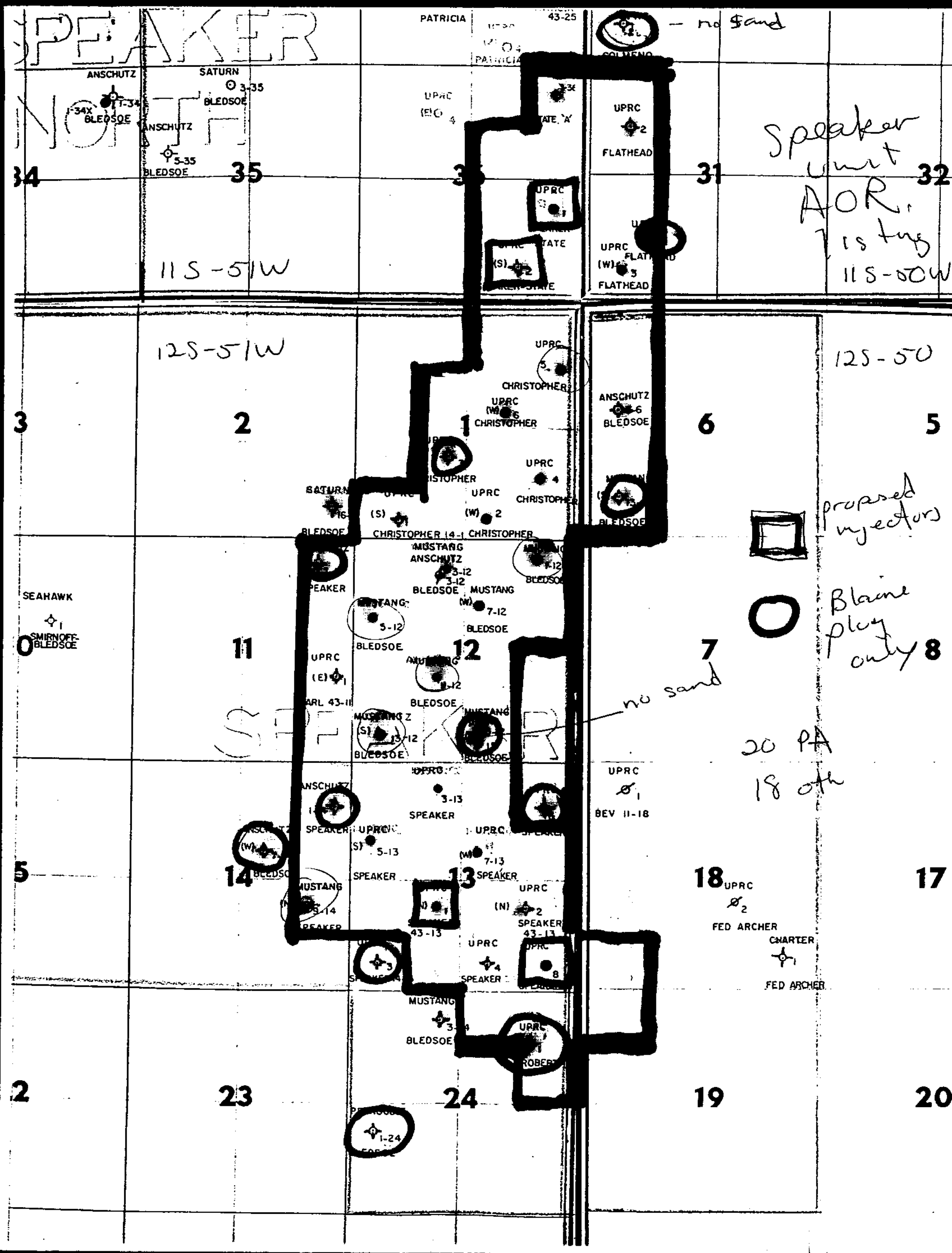
Denver, Colorado 80217-0180
303/299-8900

Address of Applicant:
Union Pacific Resources Company
801 Cherry Street
P.O. Box 7
Ft. Worth, TX 76101-0007
Attn: Dave Kyte


SPEAKER
NORTH
no sand
Speaker unit AOR. 7 is tug 11S-50W
11S-51W
12S-51W
12S-50
proposed injectors
Blaine play only
no sand
20 PA
18 oth
SPEAKER
PATRICIA
43-25
ANSCHUTZ
SATURN
3-35
BLEDSOE
1-34X
1-34
ANSCHUTZ
5-35
UPRC
FLATHEAD
STATE
UPRC
CHRISTOPHER
ANSCHUTZ
BLEDSOE
MUSTANG
SATURN
CHRISTOPHER 14-1
SEAHAWK
SMIRNOFF-BLEDSOE
5-12
7-12
3-12
SPEAKER
3-13
5-13
7-13
43-13
BEV 11-18
FED ARCHER
CHARTER
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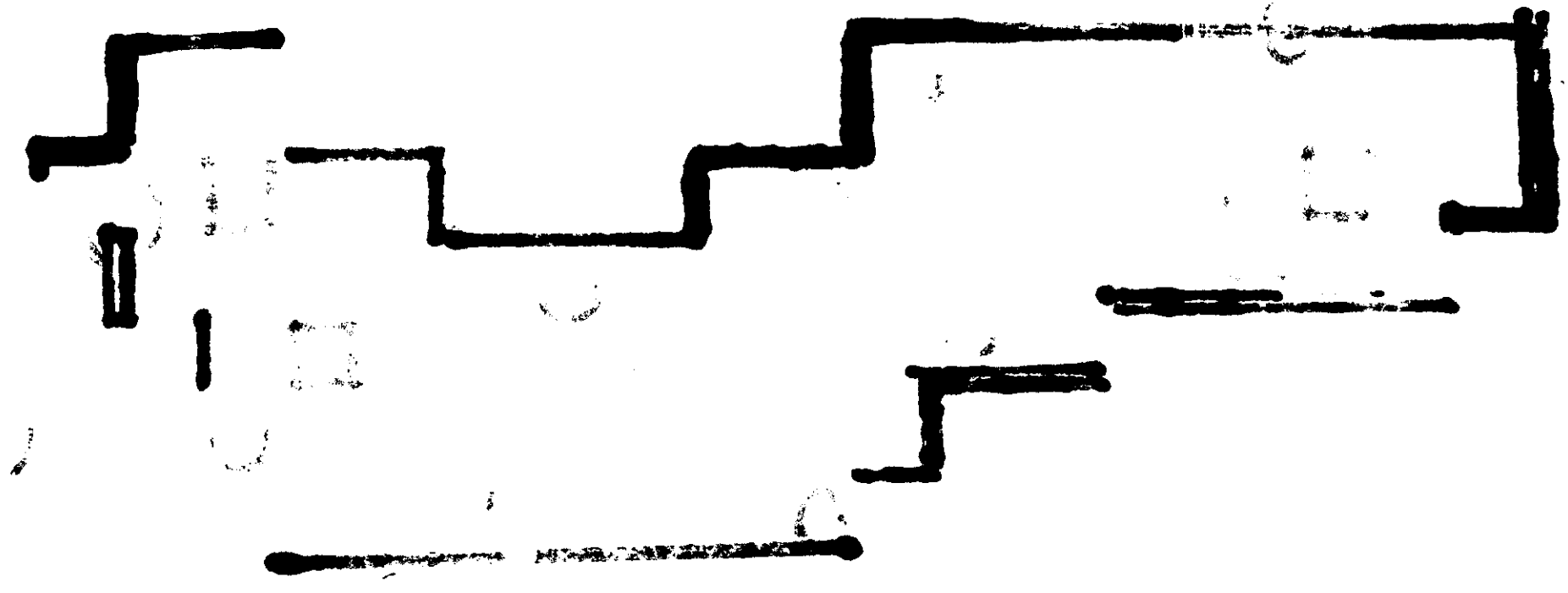

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AREA OF REVIEW WELL LIST

API # 017 7205		WELL NAME 3-13 Speaker	
LOCATION NE NW 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrow 6305			
7" csg cmtd w/ 300 sks TOC 5310			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 7236		WELL NAME #1 Speaker 23-13	
LOCATION NE SW 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrow @ 6309			
5½ csg cmtd w/ 250 sk TOC 5450			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 07217		WELL NAME 5-13 Speaker	
LOCATION SWNW 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrow @ 6276			
5½ csg cmtd w/ 225 sk TOC 5700			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 7405		WELL NAME 8 Speaker 44-13	
LOCATION SESE 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR V-11 @ 6375			
5½ csg cmtd w/ 375 sk TOC 4920			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 7234		WELL NAME 2 Speaker 43-13	
LOCATION NESE 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA V-11 @ 6422 plug at 6300			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 7218		WELL NAME 7-13 Speaker	
LOCATION SWNE 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR - intent to PA CIBP @ 6410			
perfs 6446 -- 6457			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

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AREA OF REVIEW WELL LIST

API # 017 07235		WELL NAME #1 Carl 43-11	
LOCATION NESE 11 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA V-11 @ 6551 plug @ 6560-6460			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 7249		WELL NAME 1-14 Bledsoe	
LOCATION SENE 14 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA Mrrw @ 6573 1st plug @ 3817			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

API # 017 07230		WELL NAME 7-14 Bledsoe	
LOCATION SWNE 14 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA Mrrw @ 6490 1st plug @ 3795			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

API # 017 7267		WELL NAME #4 Speaker 34-13	
LOCATION SWSE 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA V-11 @ 6383 plug @ 6400-6300			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 7318		WELL NAME #6 Speaker 41-13	
LOCATION NENE 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA Mrrow not present 1st plug @ 3320			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

API # 017 7266		WELL NAME #3 Speaker 14-13	
LOCATION SWSW 13 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA Mrrw 6467 1st plug @ 3600			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

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AREA OF REVIEW WELL LIST

API # 017 07397	WELL NAME #6 Christopher 32-1
LOCATION SW NE 1-12S-5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS PR U-11 @ 6628-6637 TOC ~~3324~~ 5700	
5 1/2 csg cmtd @ 6780 w/ 84 sks	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 017 7320	WELL NAME 15-12 Bledsoe
LOCATION SW SE 12 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS PA U-11 - no sand 1st plug @ 3200	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 017 07312	WELL NAME #15 Bledsoe 34-12
LOCATION SW SE 12 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS None	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED X
INJECTION ZONE ISOLATED	Abandoned Location

API # 017 7271	WELL NAME 3-12 Bledsoe
LOCATION NE NW 12 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS None	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED X
INJECTION ZONE ISOLATED	Abandoned Location

API # 017 7386	WELL NAME 7-12 Bledsoe
LOCATION SW NE 12 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS PR U-11 @ 6546	
5 1/2 csg @ 6665 cmtd w/ 250 sks	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 017 7216	WELL NAME 1-11 Speaker
LOCATION NENE 11 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS PA Morrow @ 6634 1st plug @ 3816	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED	

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AREA OF REVIEW WELL LIST

API # 017 7407		WELL NAME Bledsoe 13-6	
LOCATION SWSW 6 12S 5ÇW		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA 1st plug @ 3500'			
U-11 @ 6532 DST 60' mud			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

API # 063 06237		WELL NAME #1 Flathead 14-31	
LOCATION SWSW 31 11S 5ÇW		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS DA plug @ 3900' DST 6400 - 70' mud			
U-11 @ 6400 - 6639			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

API # 063 06240		WELL NAME 2 Flathead 12-31	
LOCATION SWNW 31-11S-5ÇW		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS DA Mrrw @ 6450 1st plug @ 6400'			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 063 06242		WELL NAME 3 Flathead 14-31	
LOCATION SWSW 31 11S 5ÇW		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR MRRW U-11 6612-6621			
cmtd @ 6780 w/ 215 sks 5½ x 7⅞			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 063 06238		WELL NAME Speaker State 43-36 #1	
LOCATION NE SE 36 11S 5ÇW		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Morrow top @ 6430 TOC 5958			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 063 06252		WELL NAME Speaker State 34-36 #2	
LOCATION SWSE 36 11S 5ÇW		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PA U-11 @ 6632 1st plug @ 6350			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

AREA OF REVIEW WELL LIST

API # 017 >241	WELL NAME 1-24 Bledsoe
LOCATION NW SW 24 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS ~~PA~~ Morw 6174 1st plug @ 3688	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED	

API # 017 7364	WELL NAME Bledsoe 3-24
LOCATION NE NW 24 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS PA Morw [redacted] V-11 @ 6411 1st plug @ 5960	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 017 7412	WELL NAME Bledsoe 5-6
LOCATION SW NW 6 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS PA V-11 @ 6606 1st plug @ 6300	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 063 06245	WELL NAME Colmeng 14-30 #2
LOCATION SW SW 30 11S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS no Morw sand 1st plug @ 3900	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 017 >393	WELL NAME #5 Christopher 41-1
LOCATION NE NE 1-12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS Morw Pr @ 6602	
5½ csg cmtd w/ 170 sks	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

API # 017 >232	WELL NAME #9-14 Bledsoe
LOCATION NE SE 14 12S 5W	OPERATOR
TOTAL DEPTH	DEPTH OF INJ ZONE
CASING/CEMENT DETAILS Disposal well in Arbuckle	
5½ csg @ 6731 cmtd w 250 sks TOC 5860	
INJECTION ZONE NOT ISOLATED	INJECTION ZONE NOT PENETRATED
INJECTION ZONE ISOLATED X	

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AREA OF REVIEW WELL LIST

API # 017 07388		WELL NAME Bledsoe 1-12	
LOCATION NE NE 12 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrrw @ 6525			
5½ csg cmtd w/ 155 sks @ 6072			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 07215		WELL NAME Bledsoe 5-12	
LOCATION SW NW 12 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrrw @ 6414			
5½ csg cmtd w/ 325 sk TOC 5690			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 07227		WELL NAME Bledsoe 11-12	
LOCATION NE SW 12 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrrw @ 6304			
5½ csg @ 6679 cmtd w/ 245 sk TOC 5830			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 07194		WELL NAME Bledsoe 13-12	
LOCATION SW SW 12 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS PR Mrrw @ 6356			
5½ csg @ 6640 cmtd w/ 210 sk TOC 5700			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED	X		

API # 017 07424		WELL NAME Robert 41-24 #1	
LOCATION NE NE 24 12S 5W		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS DA Mrrw @			
1st Plug @ 3300			
INJECTION ZONE NOT ISOLATED	X	INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

API #		WELL NAME	
LOCATION		OPERATOR	
TOTAL DEPTH		DEPTH OF INJ ZONE	
CASING/CEMENT DETAILS			
INJECTION ZONE NOT ISOLATED		INJECTION ZONE NOT PENETRATED	
INJECTION ZONE ISOLATED			

STATE OF COLORADO
OIL & GAS
CONSERVATION COMMISSION

DEPARTMENT OF NATURAL RESOURCES
Roy Romer, Governor
1120 Lincoln St., Suite 801
Denver, CO 80203
Phone: (303) 894-2100
FAX: (303) 894-2109

April 12, 1995

Mr. William Brazelton
Union Pacific Resources Company
P.O. Box 7 MS 3006
Fort Worth, Texas 76101-0007

Re: Proposed Injection Wells in the Speaker Unit

Dear Sir,

During review of the wellbores in and around the Speaker Unit, it was determined that there are eleven plugged and abandoned wells which do not have a plug that isolates the Morrow Formation. Three of these wellbores are in the Unit and relatively close to the proposed gas and water injectors. This could cause a problem with the approval of the injectors if the wellbores are in hydraulic communication. Before any injectors can be approved, this condition must be addressed in writing or the wellbores need to be replugged to isolate the Morrow. Please supply a response as soon as possible and try to address all wellbores surrounding the Unit.

If you have any questions please contact me at (303) - 894-2100.

Sincerely yours,

Ed DiMatteo

Ed DiMatteo
Sr. Petroleum Engineer

Union Pacific Resources

A Subsidiary of Union Pacific Corporation

May 2, 1995

Ed DiMatteo, Sr. Petroleum Engineer
State of Colorado
Oil & Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

Re: Speaker Unit, Proposed Injection Wells
Condition of Well bores Surrounding Unit

Dear Mr. DiMatteo:

Below is a list of wells with the information that the State of Colorado requested.

The following wells on the list logged no sand and therefore are not in communication with the Morrow sand of Speaker Field (my nomenclature in parentheses):

Robert #1
Speaker 14 (#3 Speaker 14-13)
Flathead #1
Speaker #6 (#6 Speaker 41-13)
Bledsoe 15-12
Bledsoe 7-14
Speaker 1-11
Christopher #3

The following wells logged some sand but are not in pressure communication with the field:

Bledsoe 1-14: This well was drilled and operated by The Anschutz Corporation (not UPRC). An extensive logging program showed about one foot of sand with essentially no primary or secondary porosity or permeability, hence there is no pressure communication with the reservoir.

Bledsoe 13-6 (SWSW Sec 6 on your map, well name not labeled): This well was drilled and operated by Mustang Oil and Gas (not UPRC). Again, an extensive logging program showed about three feet of sand with no primary or secondary porosity or permeability, hence there is no pressure communication with the reservoir.

Finally, you asked about the "Colmeno 14-30". This well was proposed but never drilled. There are no plans to drill it in the future. The well located in the NENW Sec 30 on your map (which you thought might be the "Colmeno 14-30") is the #2 Colmeno 21-30. It was drilled but logged no sand and was plugged and abandoned.

Please let me know if you need further information on these wells.

Respectfully submitted,

UNION PACIFIC RESOURCES COMPANY

Chris Bean

Chris Bean
Senior Regulatory Analyst

CB/lac

Union Pacific Resources Company
P.O. Box 7
Fort Worth, Texas 76101-0007
817 / 877-6000
TWX 910 893 5024
Telex 758-447

STATE OF COLORADO
OIL & GAS
CONSERVATION COMMISSION

DEPARTMENT OF NATURAL RESOURCES
Roy Romer, Governor
1120 Lincoln St., Suite 801
Denver, CO 80203
Phone: (303) 894-2100
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April 12, 1995

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P.O. Box 7 MS 3006
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If you have any questions please contact me at (303) - 894-2100.

Sincerely yours,

Ed DiMatteo

Ed DiMatteo
Sr. Petroleum Engineer

VS Virtual Terminal

COGIMS - WATER DISPOSAL

INJECTION PERMIT - UPDATE MODE C03IP

FAC# 377 STAT A FLD 77825 SPEAKER CTY -17 CHEYENNE
DISP/ENHAN RECOVERY E CAUSE # 490 ORDER # -4
OPER 91100 UNION PACIFIC RESOURCES C UNIT/WELL NM SPEAKER-UNIT-----------
RCVD DT 102494 STATUS DT 011795 INIT INJ DT 010101 ANT INJ PRES -850
AQUIFER EXMPT N AQUIFER DT 000000 EPA NOTIFIED N
EXMPT AREA ----------
AOR WELLS: PA 20 OT 18 CORRECTIVE ACTION: CR -- PA -8 RP -- OT --
S/M WELL PRMTS M OWNRS NOTFD Y LOGS RCVD Y SURF EQP SCHM N PLATS RCVD Y CDWR Y
MIN VOL -----1000 MAX VOL -----1500 WTR CUM ---------- GAS CUM ----------
(PRESYSTEM CUMS THRU 1985)

INJ ZONE	FORM	TDS	FRAC	OGCC SRC	LN	TDS	FORM	NAME
	MRRW-	127662	-.85		----1	127662	JSND	LEWTON H UNIT #1
	-----	------	----		-----	------		
	-----	------	----		-----	------		
	-----	------	----		-----	------		
	-----	------	----		-----	------		

COMMENTS: GAS-1000-1500-&-WATER-INJECTION-400--PA-PROBLEM-ZONAL-ISOLA-
4-INJ-PROPOSED,-NEED-NEW-NOTIFICATION-IF-OTHER-INJ-PROPOSED-

CHANGE DATA PRESS ENTER / PF 16 TO EXIT

Well in a around unit do not have plug isolating Mrw
requested more info or replug wells. 4/12/95
talked to Brazelton 4/11/95 sent letter

May add additional injector, other than proposed

Don O'Brien Nichols 2-26 } 980 234 ... 4628

VS Virtual Terminal

*** COGIMS ***

*** WELL MASTER INQUIRY *** C01WPI

```
API NUMBER        WELL   CAT    COUNTY          BASIN          USER   MODDT
05 017 07383 0     O      F     CHEYENNE        LAS ANIMAS     SML     52494
OPERATOR/NAME                         M'OWN DRILLER/CONT NAME
91100 UNION PACIFIC RESOURCES CO       P    61650 MURFIN DRILLING CO
PL S/PTY    SUR S/PTY   OGCC#   LEASE/NAME                     WELL NUMBER
B  91100    A           11174   CHRISTOPHER 43-1               4
FIELD/NAME                      FORM/NAME                      #ACRES   DRLG UT
77825 SPEAKER                   MRRW  MORROW                     80       E
SPA/ORD     PERMIT#     APPROV     EXPIRE    SPUDDT     FM5    FT/(NS) FT/(EW)
490         930673      060393     100393     71993      Y      1400 S   900 E
QTR    SEC  TOWN        RANGE      N/S  PM   LATITUDE   LONGITUDE        DEV CERT
NESE    1   12.0 S       51.0 W          6                                  N
1ST OIL     1ST GAS     FORM10     OIL GRAV  GAS GRAV   BTU        O/C  GAS   FAC#
 81693                  100593                                           W
WLSTAT   STATDT   IS   PA INSPDT  ST LSE   FED LSE#     NGPA1     NGPA2    NGPADT
  PR     81693    PR      92493
DWREC     MILTR    MIDATE          BRADENHEAD INFO: MY 0000 CD     PR
COMMENTS: ND 71593, DIGGING PITS; PR 92493, R PIT OPEN, FL TO #2 T-B;

F2-COMPLETION  F3-SUNDRY  F4-LEASE  F6-PRODUCTION  F7-INSPECTN  F16-EXIT
```

fac # 377

initially gas - may use outside gas

then gas & water

gas #1 Speaker 23-13 or #8 Speaker 44-13

water #1 Speaker-State 43-36 or reenter #2 Speaker State 34-36

Charlie Goldbin - 733-3232

817-877-7952

719-767-3320

5661 water

894 200

.346

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND ESTABLISHMENT OF FIELD RULES TO GOVERN OPERATIONS IN THE SPEAKER UNIT, SPEAKER FIELD, KIT CARSON AND CHEYENNE COUNTIES, COLORADO	)))))	CAUSE NO. 490 DOCKET NO. 1-12-5

REPORT OF THE HEARING OFFICER

This cause came on for hearing before the Hearing Officers on January 13, 1995 at 1:00 p.m. in Suite 801, 1120 Lincoln Street, Denver, Colorado on the amended application of Union Pacific Resources Company, for an order approving a certain Unit Agreement and Unit Operating Agreement for the Speaker Unit, providing for unit operations of the Morrow V-11 Sandstone Formation underlying certain lands in Kit Carson and Cheyenne Counties, Colorado.

Those present were:

William A. Keefe	Attorney, UPRC
Charles Traxler	Landman, UPRC
Mark Germinario	Geologist, UPRC
Robert Grantz	Engineer, UPRC
David Dillon	Hearing Officer, OGCC
Patricia C. Beaver	Hearing Officer, OGCC

FINDINGS

The Hearing Officers find as follows:

1. That a minor error appeared on the second page of the application under the lands described as Section 18, Township 12 South, Range 50 West, 6th P.M., Lot 7 (SW1/4 SW1/4). The application should be amended to correct the description of the lot to Lot 17.

2. That the Commission entered Order Nos. 490-1 and 490-3 which established 80-acre drilling and spacing units for production from the Morrow Formation for various lands in the Speaker Field.

3. That Mr. Traxler testified using Exhibit A that 99.83% of those with cost-bearing interests have approved in writing the Unit Agreement and Unit Operating Agreement, and that 93.64% of those with non-cost bearing interests have approved the same agreements, and that no protests have been received by the applicant, nor have any been filed with the Commission. He further testified that the terms contained within the agreements were just and equitable to all concerned.

4. That Mr. Germinario testified using Exhibits M through P as to the unit area, the extent of the pool to be unitized, the structure and isopach of the Morrow V-11 Sandstone, the production to be expected, and the necessity for water and gas injection.

5. That Mr. Grantz testified using Exhibits R through U as to the production history of the Speaker Field, the equity parameter tables, the secondary unit production forecasts, and the project economics. He further testified that the increased revenue from the enhanced production will exceed the costs associated with unitization.

6. That the statutory requirements of Colorado Revised Statute 34-60-118, 1984, providing for development and unit operations have been met in all regards.

7. That the Hearing Officers should recommend to the Oil and Gas Conservation Commission at its hearing on January 17, 1995 that the application, as amended, be approved.

RECOMMENDATION

NOW, THEREFORE, IT IS RECOMMENDED that the Oil and Gas Conservation Commission enter an order approving the Speaker Unit Agreement and Unit Operating Agreement as an involuntary unit and that the Speaker Unit become effective on February 1, 1995.

RECOMMENDED this 16th day of February, 1995 as of January 13, 1995.

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

By Patricia C. Beaver
Patricia C. Beaver, Hearing Officer

Dated at Suite 801
1120 Lincoln Street
Denver, Colorado 80203
February 16, 1995

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND ESTABLISHMENT OF FIELD RULES TO GOVERN OPERATIONS IN THE SPEAKER UNIT, SPEAKER FIELD, KIT CARSON AND CHEYENNE COUNTIES, COLORADO	)	CAUSE NO. 490 ORDER NO. 490-4

REPORT OF THE COMMISSION

This cause came on for hearing before the Commission on January 17, 1995 at 8:30 a.m. in Room 801, The Chancery Building, 1120 Lincoln Street, Denver, Colorado, after giving Notice of Hearing as required by law, on the application of Union Pacific Resources Company, for an order approving a certain Unit Agreement and Unit Operating Agreement for the Speaker Unit, providing for unit operations and development of the reservoir consisting of the Morrow V-11 Sandstone Formation underlying certain lands in Kit Carson and Cheyenne Counties, Colorado.

FINDINGS

The Commission finds as follows:

1. Union Pacific Resources Company as applicant herein, is an interested party in the subject matter of the above-referenced hearing.

2. Due notice of the time, place and purpose of the hearing has been given in all respects as required by law.

3. The Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order.

4. A written protest to the application was filed by Pogo Producing Company on December 13, 1994, and subsequently withdrawn on January 12, 1995.

5. The Morrow V-11 Sandstone Formation was encountered in the stratigraphic interval between the depths of 6452 feet and 6486 feet measured from the Kelly Bushing, in the UPRC Speaker No. 5-13 Well located in the SW¼ NW¼ of Section 13, Township 12 South, Range 51 West, 6th P.M., Cheyenne County, Colorado, and as so encountered, is a common source of supply and has been defined and determined by drilling to be productive underlying the following described lands in Kit Carson and Cheyenne Counties, Colorado:

Township 11 South, Range 50 West, 6th P.M.
Section 31: Lots 1, 2, 3 and 4 (W½ W½)

Township 11 South, Range 51 West, 6th P.M.
Section 36: NE¼ NE¼, S½ NE¼, SE¼

Kit Carson County

Township 12 South, Range 50 West, 6th P.M.
Section 6: Lots 11, 12, 19 and 20 (W½ W½)
Section 18: Lot 17 (SW¼ SW¼)
Section 19: Lot 1 (NW¼ NW¼)

Township 12 South, Range 51 West, 6th P.M.
Section 1: Lots 1 and 2 (N½ NE¼),
S½ NE¼, SE¼ NW¼, SW¼, SW¼,
E½ SW¼, SE¼
Section 11: E½ E½
Section 12: Lots 1-8, 10-15 (N½, SW¼, W½ SE¼)
Section 13: NW¼ NE¼, S½ NE¼, NW¼, SE¼
N½ SW¼, SE¼ SW¼
Section 14: E½ NE¼, NE¼ SE¼
Section 24: Lots 1, 2, and 8 (N½ NE¼, SE¼ NE¼)

Cheyenne County

6. Testimony presented at the administrative hearing indicated that the applicant proposes an enhanced recovery project in which produced gas will be injected into a well structurally located in the up-dip portion of the reservoir, and in which all produced water may be injected into a well structurally located in the down-dip portion of the reservoir.

7. The terms and conditions provided by the Speaker Unit Agreement and Unit Operating Agreement meet the requirements of the statute and are just and reasonable to all interests contained within said unit area. The plan for unit operations as presented by the Applicant, as described herein is necessary to increase the ultimate recovery of oil and gas and the value of the estimated additional recovery of oil and gas exceeds the estimated additional cost incident to conducting such operations.

8. The provisions contained in said Unit Agreement and Unit Operating Agreement are just and reasonable and include the following:

a. The description of the pool to be so operated;

b. The nature of said operation;

c. The allocation to the separately owned tracts in the Speaker Unit Area of all the oil and gas that is produced from said Unit Area and is saved;

d. The provision for the credits and charges to be made in the adjustment among the owners in the Speaker Unit Area for their respective investments in wells, tanks, pumps, machinery, materials, and equipment contributed to the unit operations;

e. The provision providing how the costs of unit operations, including capital investments, shall be determined and charged to the separately owned tracts, and how said costs shall be paid, including the provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the cost of unit operations charged to such owner, or the interest of such owners, may be sold and the proceeds applied to the payment of such costs;

f. The provision for the supervision and conduct of the unit operations, in respect to which person shall have a vote with a value corresponding to the percentage of the costs of unit operations chargeable against the interest of such person; and

g. The time when the unit operations shall commence, and the manner in which, and the circumstances under which the unit operations shall terminate.

9. At the time of the administrative hearing before the Commission, Union Pacific Resources Company indicated that those persons having approximately ninety-nine percent (99%) of the working interests and those persons having approximately ninety-three percent (93%) of the non-cost bearing interests had approved in writing the aforementioned plan of unit operations.

10. Based on the facts stated in the verified application, having been heard by the Hearing Officer who recommends approval, the Commission should enter an order approving the Speaker Unit Agreement and Unit Operating Agreement with an effective date of February 1, 1995.

ORDER

NOW, THEREFORE, IT IS ORDERED, that:

1. The Speaker Unit Agreement and Unit Operating Agreement, covering lands in the Speaker Field, which agreements are attached to, and made a part of the original order of this Commission on file in the office of the Commission, are approved as being in the public interest for conservation.

2. The Morrow V-11 Sandstone reservoir, a common source of supply, underlies the following lands in Kit Carson and Cheyenne Counties, Colorado:

Township 11 South, Range 50 West, 6th P.M.
Section 31: Lots 1, 2, 3 and 4 (W½ W½)

Township 11 South, Range 51 West, 6th P.M.
Section 36: NE¼ NE¼, S½ NE¼, SE¼

Kit Carson County

Township 12 South, Range 50 West, 6th P.M.
Section 6: Lots 11, 12, 19 and 20 (W½ W½)
Section 18: Lot 17 (SW¼ SW¼)
Section 19: Lot 1 (NW¼ NW¼)

Township 12 South, Range 51 West, 6th P.M.
Section 1: Lots 1 and 2 (N½ NE¼),
S½ NE¼, SE¼ NW¼, SW¼, SW¼,
E½ SW¼, SE¼
Section 11: E½ E½
Section 12: Lots 1-8, 10-15 (N½, SW¼, W½ SE¼)
Section 13: NW¼ NE¼, S½ NE¼, NW¼, SE¼
N½ SW¼, SE¼ SW¼
Section 14: E½ NE¼, NE¼ SE¼
Section 24: Lots 1, 2, and 8 (N½ NE¼, SE¼ NE¼)

Cheyenne County

3. The provisions contained in said Unit Agreement and Unit Operating Agreement as they pertain to C.R.S. Section 34-60-118, as amended, of the Oil and Gas Conservation Act are just and reasonable, and are incorporated herein as the Commission's plan of involuntary unit operations for such lands.

4. Any injection well to be located in the Unit Area shall be approved by the Director in accordance with the rules and regulations of the Commission.

IT IS FURTHER ORDERED, that the provisions contained in the above order shall become effective February 1, 1995, and that the Unit Operator shall submit all documentation required including Form 10, Certificate of Clearance, for each well, and further that the Unit Operator shall advise the Commission in writing as to the termination of the unit.

IT IS FURTHER ORDERED, that the Commission expressly reserves it rights, after notice and hearing, to alter, amend or repeal any and/or all of the above orders.

ENTERED this 14th day of February, 1995, as of January 17, 1995.

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

By Patricia C. Beaver
Patricia C. Beaver, Secretary

Dated at Suite 801
1120 Lincoln Street
Denver, Colorado
February 9, 1995

Exhibit "G"

Within the Unit area, the Morrow V-11 Sandstone has produced hydrocarbons and the Arbuckle Formation has received salt water from disposal operations. The UPRC Speaker #5-13 is used as a reference for the depths and thickness of the productive Morrow V-11 Sandstone within the Unit area. The Morrow V-11 Sandstone was deposited in a fluvial environment. The sandstone thickness ranges from 2 to 17 feet. In general, the sandstone is a white to light gray, subangular, poorly sorted, coarse to fine grained quartzose sand. Porosities range from 8 to 24 percent with permeabilities ranging from 50 millidarcies to 8 darcies.

The Morrow V-11 Sandstone is isolated above and below by the non-porous, non-permeable Morrow shales. The Arbuckle Formation is isolated above by the non-porous Gilmore City Limestone and below by pre-Cambrian igneous rocks.

In summary, the foremention formations are expected to be isolated each other in any wellbore by their immediately adjacent beds and cemented production or injection casing.

EXHIBIT A

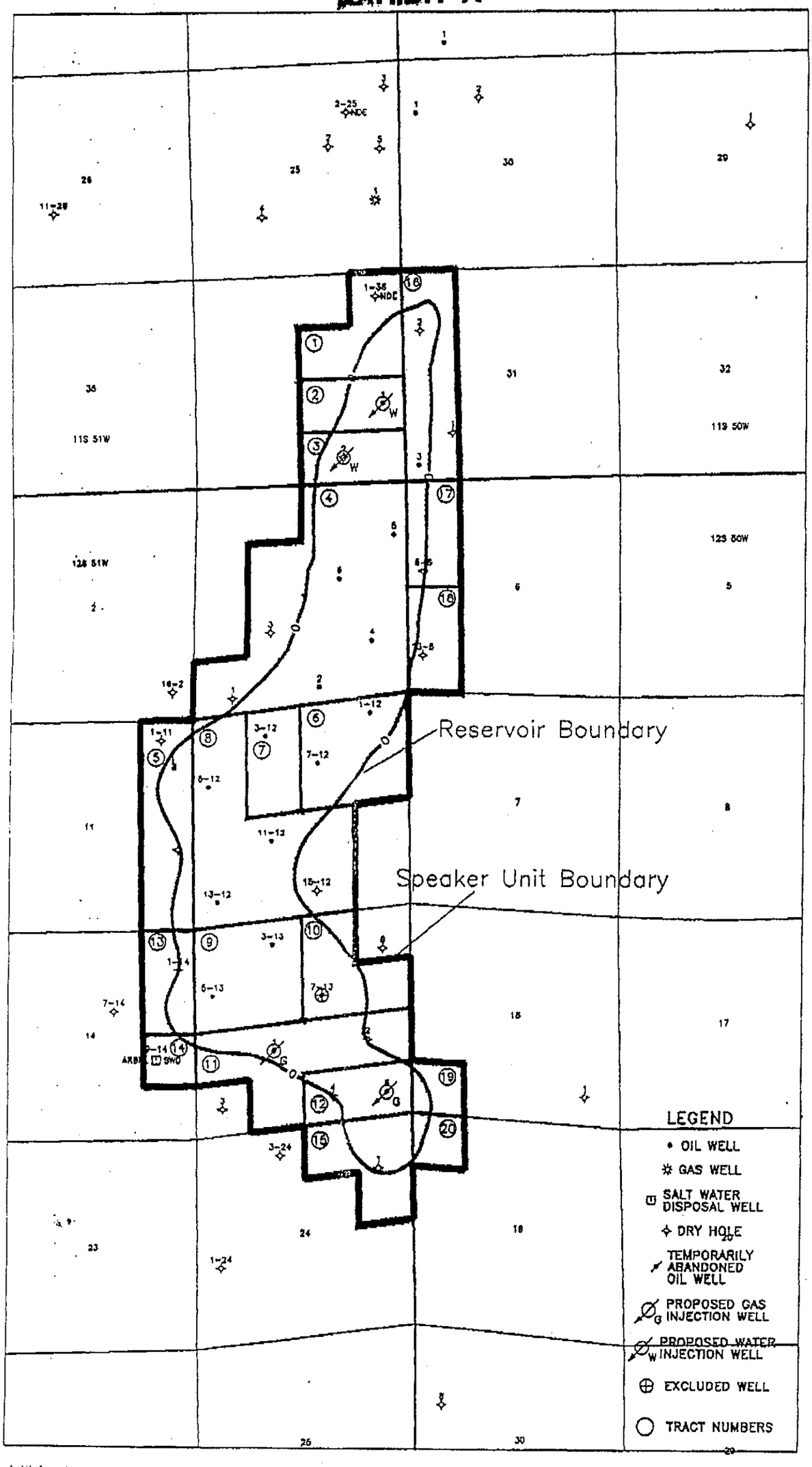

Reservoir Boundary
Speaker Unit Boundary
LEGEND
OIL WELL
GAS WELL
SALT WATER DISPOSAL WELL
DRY HOLE
TEMPORARILY ABANDONED OIL WELL
PROPOSED GAS INJECTION WELL
PROPOSED WATER INJECTION WELL
EXCLUDED WELL
TRACT NUMBERS

Exhibit "B"

Union Pacific Resources Company
P.O. Box 7
Fort Worth, TX 76101

Robert C. Bledsoe and Catherine L. Bledsoe
P.O. Box 435
Hugo, Colorado 80821

Christopher L. Bledsoe and Patricia A. Bledsoe
Rt 3, Box 22
Flagler, Colorado 80815

Carl B. Bledsoe and Alice E. Bledsoe
P.O. Box 516
Hugo, Colorado 80821

Thomas B. Bledsoe
16329 County Road 394
LaSalle, Colorado 80645

STATE OF COLORADO
Colorado State Board of Land Commissioners
Department of Natural Resources
1313 Sherman Street, Suite 620
Denver, CO 80203

United States of America
c/o Bureau of Land Managment
2850 Youngfield Street
Lakewood, CO 80215

Sinclair Oil Corporation
Exploration/Production Dept.
550 East South Temple
Salt Lake City, UT 84102
Attn: Mr. Jeff Young

Mustang Oil and Gas Corporation
100 S. Main, Suite 300
Wichita, Kansas 67202
Attn: Mr. Stan Brady

Saturn Land Company
624 W. Independence, Suite 115
Shawnee, OK 74801
Attn: Mr. Buddy Wade

Murfin Drilling Company
250 N. Wate, Suite 300
Wichita, KS 67202
Attn: Mr. Jim Daniels

Pogo Producing Company
500 West Illinois, Suite 600
Midland, TX 79702
Attn: Mr. Tery Gant

The Anschutz Corporation
555 17th St., Suite 2400
Denver, CO 80202
Attn: Mr. Todd Kalstrom

Wiepking-Fullerton Energy
1801 Broadway, Suite 1420
Denver, CO 80202
Attn: Mr. Jeff Wiepking

Wexford Resources, Inc.
1801 Broadway
Denver, CO 80202
Attn: Mr. Donald McKena

George Broome
Ed M. Gavin
Pena Blanca Corporation
T. H. McElvain Oil and Gas Ltd.
c/o T. H. McElvain Oil and Gas L.P.
P.O. Box 2148
Santa Fe, NM 87504

Donald G. Parsons
223 Oakee
Barrington, IL 60010

Colmeno of Colorado Inc.
760 Whalers Way
Building C, suite 120
Fort Collins, CO 80525
Attn: John Angeli

William E. Bledsoe and Helen Bledsoe
P.O. Box 186
Hugo, Colorado 808221

Timson Investments Inc.
40 Penny & Penny
P.O. Box 399
Burlington, Colorado 80809

EXHIBIT "C"

PLAN OF OPERATION / PLAN OF DEPLETION

The Morrow V-11 sandstone reservoir being unitized into the Speaker Unit has been produced under primary depletion during development and throughout unit negotiations. The primary production has been driven by solution gas drive and limited water drive. Pressures in the field have declined from 1175 psi at discovery and currently range from 175 psi to 750 psi throughout the field.

Reservoir studies are currently underway to determine the details of the optimum secondary recovery plan. Well performance to date is being matched in a reservoir simulator. The calibrated model will be used to predict various depletion scenarios and choose the optimum plan of operation for secondary recovery. Scoping economics evaluations have shown that the expected incremental oil recovery will provide an economic return on the required investment. The plan of operation for unitized secondary recovery operations will most likely be partial pressure maintenance by injection of produced gas. If feasible, produced water and supplemental gas will also be injected.

It is anticipated that the recommended plan of depletion for the Speaker Unit will entail the following:

1. All produced gas will be injected into a well structurally located in the up-dip portion of the reservoir. Either the #1 Speaker 23-13 or the #8 Speaker 44-13 will be a gas injection well.

2. Supplemental gas from an outside source may be added to the injection stream to replace voidage produced during primary production. A potential outside gas source is the associated gas produced with oil from the Morrow V-7 Sandstone in High Point Field. The optimal volume and duration of supplemental gas will be determined.

3. All produced water may be injected into a well structurally located in the down-dip portion of the reservoir. Potential water injection locations would be available by converting the #1 Speaker-State 43-36 to water injection or by re-entering the P&A'd #2 Speaker-State 34-36.

The unit application is being filed with the aforementioned four wells as injection wells. If the reservoir studies indicate the need for additional injection wells, they will be applied for at a later date.

EXHIBIT F

UNION PACIFIC RESOURCES COMPANY
#5-13 Speaker
1750' FNL/ 450' FWL
Section 13, T12S-R51W
Cheyenne County, Colorado
4983' KB

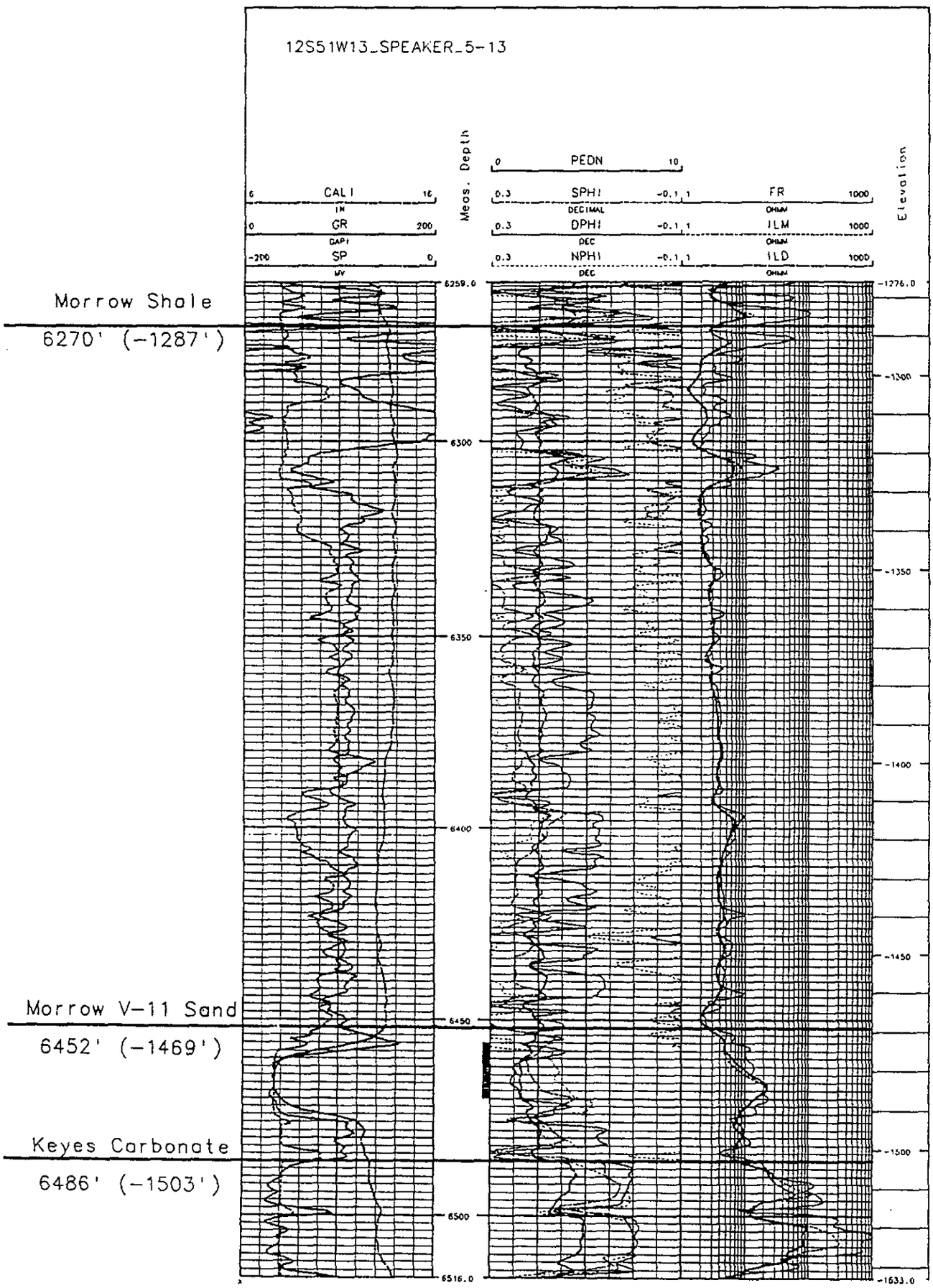


EXHIBIT "H"

NAME AND DEPTH TO BOTTOM OF ALL UNDERGROUND SOURCES OF DRINKING WATER WHICH MAY BE AFFECTED BY THE PROPOSED ACTIVITY OR OPERATION.

A review of records of the State of Colorado division of Water Resources reveals a number of fresh water wells in the four township area of proposed operations (T12S-R50W, T12S-R51W, T11S-R50W, T11S-R51W). Well depths range from 12 feet to 215 feet and the aquifer sources are surface alluvium or aeolian formations of Tertiary/Quarternary Age or fractured Pierre Shale of Cretaceous Age.

Surface casing strings of all proposed injection wells extend to an average depth of 520'. That is well below the average area water well depths detailed above. Additional protection is afforded through production casing and tubing strings whose mechanical integrity is to be verified as per state regulations during recompletion operations.

Based on the above information, no underground source of fresh water will be affected by the proposed activity or operation.

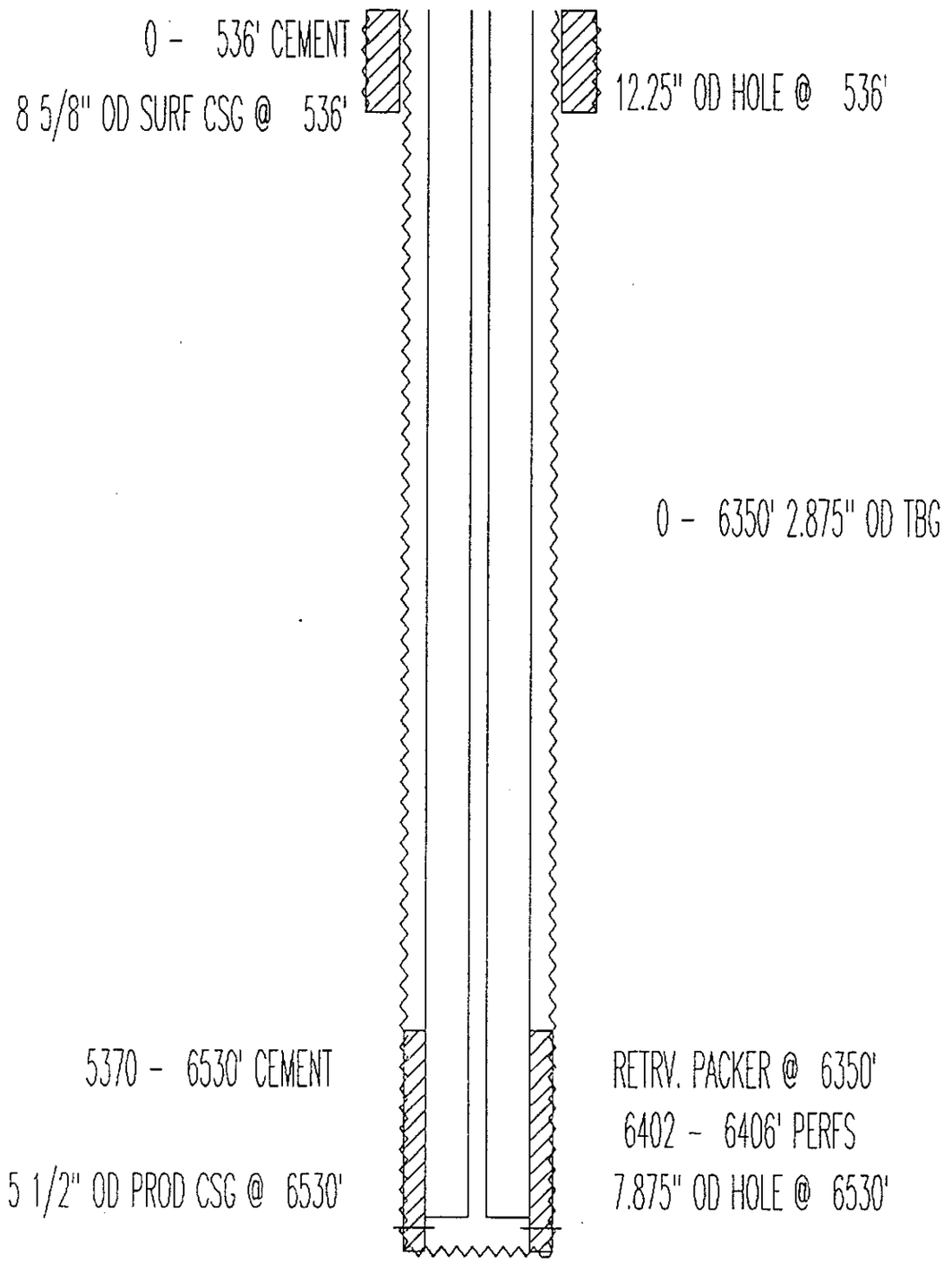
crt\exhbt.h

EXHIBIT J-1

WELLBORE DIAGRAM
UPRC #1 SPEAKER 23-13
NE SW Sec. 13-T12S-R51W
SPEAKER FIELD
CHEYENNE COUNTY, COLORADO

Surface Casing:
12 Jts 8 3/4" Csg 24# JFU4 set @ 536' w/ 200 Sx LITEWATE and 75 Sx Class A.
Good returns thought job, cement circ to surface.

Production Casing:
151 Jts 5 1/2" Csg 15.5# & 17# J-55,K-55 set @ 6533' w/ 100 Sx 50/50 Poz and 150 Sx Class A.
Good mud returns thought job.



KB ELEV: 4913'
PBTD: 6486'
TD: 6530'

Cement top for production casing are calculated from displaced volumes.

EXHIBIT J-2

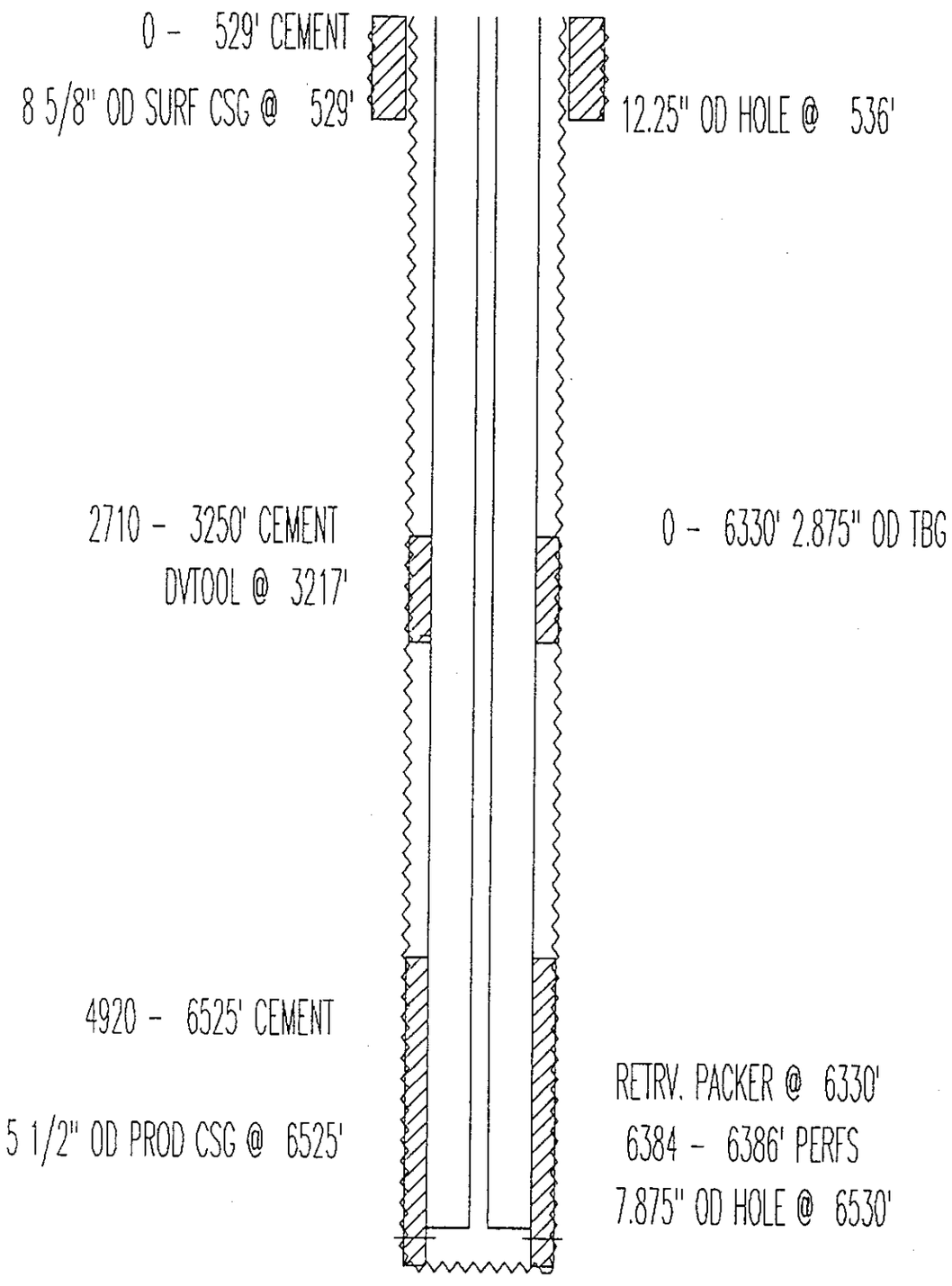
WELLBORE DIAGRAM
UPRC #8 SPEAKER 44-13
SE SE Sec. 13-T12S-R51W
SPEAKER FIELD
CHEYENNE COUNTY, COLORADO

Surface Casing:

12 Jts 8 3/4",24# Csg set @ 529' w/ 230 Sx 65/35 POZMIX and 80 Sx Class A.
Good returns thought job, cement circ to surface.

Production Casing:

151 Jts 5 1/2" Csg set @ 6525'. DV Tool set @ 3217'. Cement 1st stage w/ 275 Sx Premium.
Cement 2nd stage w/ 105 Sx HLC and 50 Sx STD.



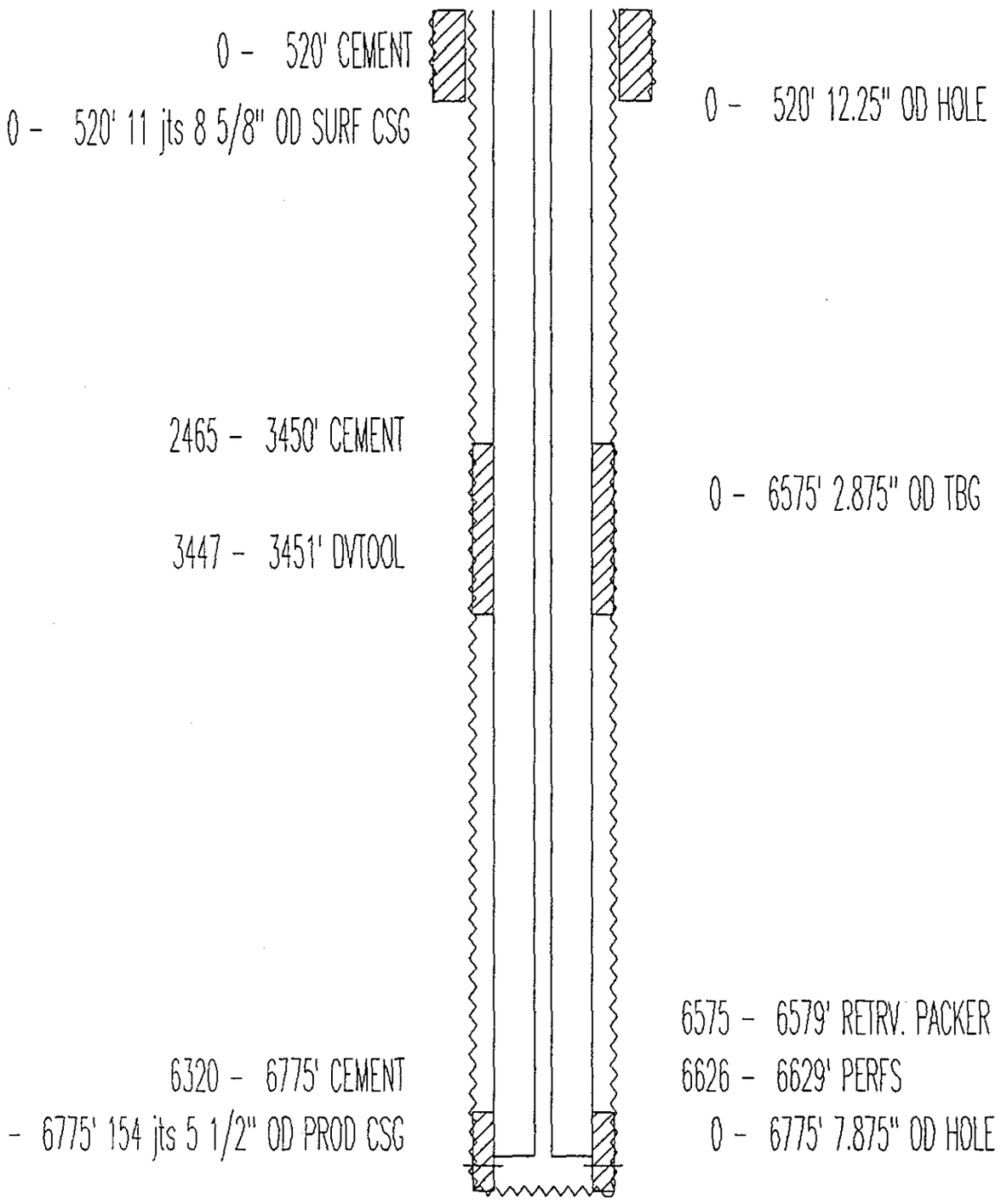
Cement tops for production casing were detected by cement bond log.

EXHIBIT J-3

WELLBORE DIAGRAM
UPRC #1 SPEAKER-STATE 43-36
NE SE Sec. 36-T11S-R51W
SPEAKER FIELD
KIT CARSON COUNTY, COLORADO

Surface Casing:
11 Jts 8 3/4" Csg set @ 520' w/ 230 Sx HLC and 80 Sx STD A.
Good returns thought job, cement circ to surface.

Production Casing:
154 Jts 5 1/2" Csg set @ 6775'. DV Tool set @ 3447'. Cement 1st stage w/ 120 Sx Class H.
Cement 2nd stage w/ 75 Sx HLC and 50 Sx Class A.



Cement tops for production casing are calculated from displaced volumes.

EXHIBIT J-4

WELLBORE DIAGRAM
UPRC #2 SPEAKER-STATE 34-36
SW SE Sec. 36-T11S-R51W
SPEAKER FIELD
KIT CARSON COUNTY, COLORADO

Surface Casing:

12 Jts 8 3/4" Csg set @ 520' w/ 230 Sx 65/35 POZMIX and 80 Sx Class A.
Good returns thought job, cement circ to surface.

Production Casing:

No production casing as the well is currently P&A'd

Proposed Injection Casing/Cementing/Tubing Program:

Set 154 Jts 5 1/2" Csg @ 6785'. Set DV Tool @ 3420'. Cement 1st stage w/ 250 Sx STD.
Cement 2nd stage w/ 100 Sx HLC and 50 Sx STD.
Set 2 7/8" injection string on retreivable Packer @ 6580'.

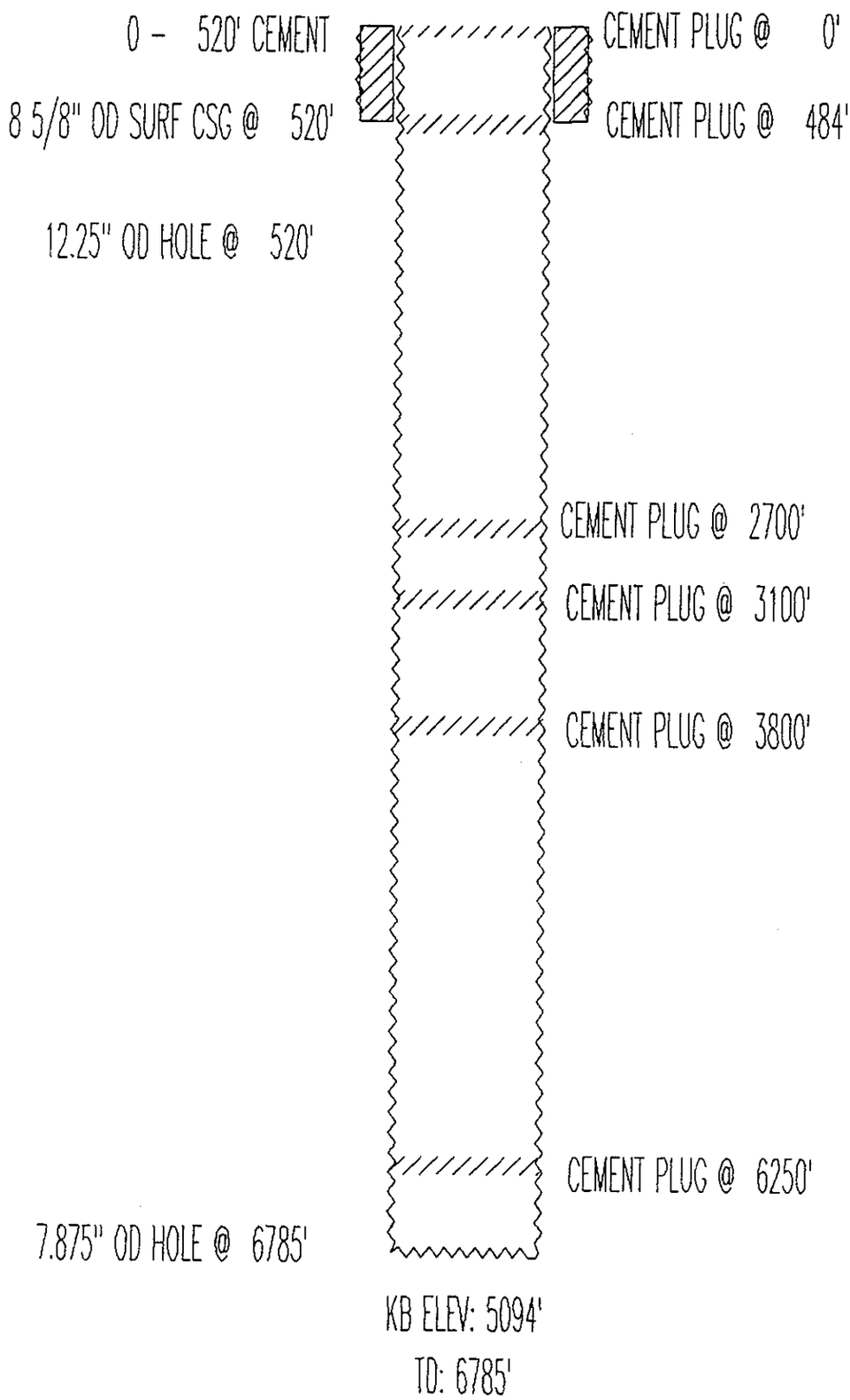


EXHIBIT "K"

Gas Injection. Gas associated with oil produced from the Morrow V-11 Sandstone will be reinjected into the Morrow V-11 Sandstone. If economically viable, a gas plant may be used to remove NGL's from the gas stream prior to injection. Gas analyses from three wells in the Speaker field are included as Exhibits K-1, K-2 and K-3. These analyses are representative of the gas that will be gathered from all unitized wells and reinjected into the unitized reservoir. Supplemental gas from the Morrow V-7 Sandstone reservoir in High Point Field may also be injected into the unitized Morrow V-11 Sandstone reservoir. Exhibit K-4 is a gas analysis representative of that supplemental gas.

Total gas injection rate is expected to be approximately 1000 MCFD to 1500 MCFD. The wellhead injection pressures are anticipated to be approximately 850 psi. with a corresponding sandface injection pressure of approximately 950 psi. The known fracture gradient for the area is 0.85 psi/ft., which represents a sandface fracture pressure of approximately 5500 psi.

Water Injection. Produced water, after being filtered, may be injected into the Morrow V-11 Sandstone reservoir. Water analyses from three wells in the Speaker field are included as Exhibits K-5, K-6 and K-7. These analyses are representative of the water that will be gathered from all unitized wells and reinjected into the unitized reservoir. No water compatibility problems are expected since no water from formations outside the Morrow V-11 Sandstone will be injected.

Total water injection rate is expected to be approximately 400 BWPD. The wellhead injection pressures are anticipated to be approximately 0 psi. with a corresponding sandface injection pressure of approximately 2850 psi. The known fracture gradient for the area is 0.85 psi/ft., which represents a sandface fracture pressure of approximately 5500 psi.

EXHIBIT K-3

UNION PACIFIC RESOURCES COMPANY
NATURAL GAS ANALYSES

SAMPLE DATA:

STATION #	
DESCRIPTION	CHRISTOPHER #6 32-1
LOCATION	SEC. 1, T12S, R51W, Cheyenne County, Colorado
SOURCE	TREATER FLARE
BOTTLE #	10
PSIG	22
SAMP. TEMP DEG F	147
AMOS.TEMP DEG F	110
DATE SAMPLED	06/20/94
DATE ANALYZED	06/21/94
SAMPLER	GEORGE HARGIS

COMPONENT		Mole %	GPM
HELIUM	(HLM)	0.63%	
HYDROGEN	(H2)	0.00%	
NITROGEN	(N2)	26.91%	
CARBON DIOXIDE	(CO2)	1.76%	
METHANE	(C1)	45.65%	
ETHANE	(C2)	7.78%	1.981
PROPANE	(C3)	9.19%	2.412
ISO-BUTANE	(IC4)	1.37%	0.428
N-BUTANE	(NC4)	4.21%	1.265
ISO-PENTANE	(IC5)	0.96%	0.334
N-PENTANE	(NC5)	1.22%	0.420
HEXANES	(C6+)	0.33%	0.137
	TOTAL	100.00%	6.977

GROSS HEATING VALUE PER CU.FT.@60F & 14.65 PSIA DRY.	1075	BTU
GROSS HEATING VALUE PER CU.FT.@60F & 14.65 PSIA SAT.	1007	BTU
CALCULATED SPECIFIC GRAVITY (AIR = 1.000)	0.936	
RANEREX SPECIFIC GRAVITY	0.990	

REMARKS:

ANALYZED BY:

EXHIBIT K-4

UNION PACIFIC RESOURCES COMPANY
NATURAL GAS ANALYSES

SAMPLE DATA:

STATION #	
DESCRIPTION	COLMENO #1 12-30
LOCATION	SEC. 30, T11S, R50W, KIT CARSON COUNTY, COLORADO
SOURCE	TREATER FLARE
BOTTLE #	11
PSIG	27
SAMP. TEMP DEG F	130
AMOS.TEMP DEG F	74
DATE SAMPLED	4/18/94
DATE ANALYZED	4/19/94
SAMPLER	GEORGE HARGIS

COMPONENT		Mole %	GPM
HELIUM	(HLM)	1.74%	
HYDROGEN	(H2)	0.01%	
NITROGEN	(N2)	48.74%	
CARBON DIOXIDE	(CO2)	1.05%	
METHANE	(C1)	39.49%	
ETHANE	(C2)	3.78%	0.983
PROPANE	(C3)	2.48%	0.666
ISO-BUTANE	(IC4)	0.36%	0.113
N-BUTANE	(NC4)	1.04%	0.319
ISO-PENTANE	(IC5)	0.32%	0.112
N-PENTANE	(NC5)	0.43%	0.151
HEXANES	(C6+)	0.58%	0.244
	TOTAL	100.00%	2.588

GROSS HEATING VALUE PER CU.FT.@60F & 14.65 PSIA DRY.	605	BTU
GROSS HEATING VALUE PER CU.FT.@60F & 14.65 PSIA SAT.	595	BTU
CALCULATED SPECIFIC GRAVITY (AIR = 1.000)	0.848	
RANEREX SPECIFIC GRAVITY	0.897	

REMARKS: Morrow V-7 , PERFS. 6588' To 6595'.

ANALYZED BY: _____

EXHIBIT K-5

PETROLITE

TRETOLITE DIVISION

WATER ANALYSIS REPORT

Mid Continent Region
Technical Services
5601 West 10th Street
Great Bend, Kansas 67530
(316) 792-7726

Company : UPRC
Address :
Lease : Speaker
Well : #3-13
Sample Pt. :

Date : 09/28/93
Date Sampled : 09/23/93
Analysis No. :

	ANALYSIS		mg/L		* meq/L
1.	pH	5.9			
2.	H2S				
3.	Specific Gravity	1.080			
4.	Total Dissolved Solids		127662.8		
5.	Suspended Solids				
6.	Dissolved Oxygen				
7.	Dissolved CO2				
8.	Oil In Water				
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)		59.0		
11.	Bicarbonate	HCO3	72.0	HCO3	1.2
12.	Chloride	Cl	77974.3	Cl	2199.6
13.	Sulfate	SO4	625.0	SO4	13.0
14.	Calcium	Ca	6757.5	Ca	337.2
15.	Magnesium	Mg	1055.1	Mg	86.8
16.	Sodium (calculated)	Na	41146.4	Na	1789.8
17.	Iron	Fe	32.5		
18.	Barium	Ba	0.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		21219.1		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

337	*Ca <------ *HCO3	1
	/-------->	
87	*Mg ------> *SO4	13
	<----- ---/	
1790	*Na ------> *Cl	2200

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	1.2	96
CaSO4	68.1	13.0	886
CaCl2	55.5	323.0	17924
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	86.8	4132
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	1789.8	104593

REMARKS: Grover Hill
Sales Engineer

Petrolite Oilfield Chemicals Group
Mid-Continent Region
5601 Northwest 72nd, Suite 324
Oklahoma City, OK 73132

Respectfully submitted,

R. Rush Blaz

EXHIBIT K-6

PETROLITE
TRETOLITE DIVISION

Mid-Continent Region
Technical Services
5601 West 10th Street
Great Bend Kansas 67530
(316) 792-7728

WATER ANALYSIS REPORT

Company : Mustang Oil & Gas
Address :
Lease : Bledsoe
Well : #5-12
Sample Pt. :

Date : 08/03/93
Date Sampled : 07/28/93
Analysis No. :

	ANALYSIS		mg/L		* meq/L
1.	pH	6.5			
2.	H2S	Positive			
3.	Specific Gravity	1.080			
4.	Total Dissolved Solids		130423.4		
5.	Suspended Solids				
6.	Dissolved Oxygen				
7.	Dissolved CO2				
8.	Oil In Water				
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)		106.0		
11.	Bicarbonate	HCO3	129.3	HCO3	2.1
12.	Chloride	Cl	79535.2	Cl	2243.6
13.	Sulfate	SO4	800.0	SO4	16.7
14.	Calcium	Ca	7026.0	Ca	350.6
15.	Magnesium	Mg	1217.9	Mg	100.2
16.	Sodium (calculated)	Na	41647.9	Na	1811.6
17.	Iron	Fe	50.0		
18.	Barium	Ba	17.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		22560.3		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

351	*Ca <----- *HCO3	2
	/------->	
100	*Mg -----> *SO4	17
	<----------/	
1812	*Na -----> *Cl	2244

Compound	Equiv wt	X meq/L	= mg
Ca(HCO3)2	81.0	2.1	17
CaSO4	68.1	16.7	113
CaCl2	55.5	331.8	1841
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	100.2	477
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	1811.6	10586

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

REMARKS: Grover Hill
Sales Engineer

Petrolite Oilfield Chemicals Group
Mid-Continent Region
5601 Northwest 72nd, Suite 324
Oklahoma City, OK 73132

Respectfully submitted,

R. Rush Blaz

EXHIBIT K-7

FORMATION WATER ANALYSIS

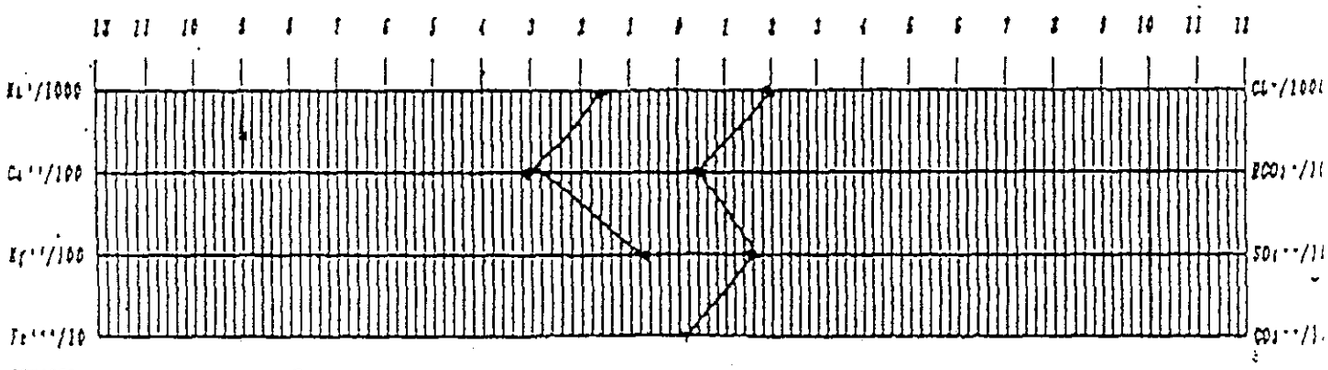
NO.: 4716 — COMPLETED: 7/14/94
PANY: UPR — SAMPLED: 6/20/94
. BY: George Hargis — RECEIVED: 6/30/94
L NAME: Christopher#6 32-1 — LOCATION: Sec.1T.12SR.51W — STATE: CO
NTY: Cheyenne — FORMATION: Morrow U-11 — DEPTH: 6636-6637
P.FROM: Treter Water Dump — SAMP. BY: Client

pH 6.36 — SPECIFIC GRAVITY 1.085 @ 60 F
RESISTIVITY (Calc.) 0.052 OHM METERS @ 60 F

CATIONS	Mg/L	PPM	Me/L	RV %
SODIUM, Na (Calc.)	37252.0	34333.7	1620.36	40.54
CALCIUM, Ca	6093.7	5616.3	304.08	7.61
MAGNESIUM, Mg	900.0	829.5	74.07	1.85
IRON, Fe				
BARIUM, Ba				
STRONTIUM, Sr				
ANIONS				
CHLORIDE, Cl	70200.0	64700.5	1980.25	49.54
BICARBONATE, HCO3	148.4	136.7	2.43	0.06
CARBONATE, CO3	0.0	0.0	0.00	0.00
HYDROXIDE, OH	0.0	0.0	0.00	0.00
SULFATE, SO4	760.0	700.5	15.82	0.40
TOTAL	115354.1	106317.1	3997.02	100.00

PRIMARY SALINITY	81.08	% Total Reaction Value
SECONDARY SALINITY	18.80	% Total Reaction Value
PRIMARY ALKALINITY	0.00	% Total Reaction Value
SECONDARY ALKALINITY	0.12	% Total Reaction Value
CaCl2/MgCl2 RATIO	4.79	

REACTION VALUES
MILLIEQUIVALENTS PER LITER

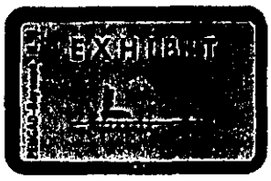


REMARKS:

cc: INVOICE

Conref Inorganic Dept.
ANALYST

ConrefLabs



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Colorado State Board of Land Commissioners
Department of Natural Resources
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Denver, CO 80203

United States of America
c/o Bureau of Land Managment
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Lakewood, CO 80215

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