Apot of first injection 11-26-75

## FILL NOTATIONS

Checked by Chief

2-18-175

COMPLETION DATA: Date Well Completed .11-10-75 DW..... WW..V.. TA..... W..... OS..... PA.....

Location Inspected . Bond released State or Fee Land .....

LOGS FILED

Form DOGC-1a			SUBMIT	IN TE LICAT	E*	
/	STATE OF	UTAH	(Othe	r instructions on		
	DEPARTMENT OF NA	TURAL RESOURCES			- · · · · ·	
		OIL & GAS		-	5. Lease Designation	and Serial No.
	DIVISION OF					
APPLICATION	FOR PERMIT TO	D DRILL, DEEPEN	N, OR PLUC	<b>BACK</b>	6. If Indian, Allotte	e or Tribe Name
In Two of Work			······································	<u></u>	- 11 1 A	
DRI	LL 🛛	DEEPEN	PLUG	ВАСК 🗌	1. Unit Agreement N	ame
b. Type of Well Oil Ga Well W	as Cother T	lt Water	Single X	Multiple	8. Farm or Lease N	ame
2. Name of Operator		1000041			Salt Water	Disposal Well
Charman 011 (	omnony - Wosterr	Division			9. Well No.	
3 Address of Operator	Joupany - western	DIVISION			#3-31A3	
D 0 D <b>FO</b>		1			10. Field and Pool, o	or Wildcat
4. Location of Well (Rep.	ort location clearly and in a	ccordance with any State r	equirements.*)		Altamont-Du	chesne River
1109' FNL & 9	64' FEL (NELNEL)			. •	and Survey or A	Area
At proposed prod. zone		•				
	2				Soo 31 T1	S RAW HSB&M
same		an nort office#			Sec. 31, T1	S, R3W USB&M
Same 14. Distance in miles and	direction from nearest town	or post office*	, 		Sec. 31, T1 12. County or Parrie	S, R3W USB&M sh 13. State
Same 14. Distance in miles and	direction from nearest town	or post office*	, 		Sec. 31, T1 12. County or Parris Duchesne	S, R3W USB&M sh 13. State Utah
Same 14. Distance in miles and 15. Distance from propos location to nearest	direction from nearest town	n or post office* 16. No.	of acres in lease	17. No. o to this	Sec. 31, T1 12. County or Parris Duchesne f acres assigned s well	S, R3W USB&M sh 13. State Utah
Same 14. Distance in miles and 15. Distance from propose location to nearest property or lease line (Also to nearest drlg.	direction from nearest town sed* , ft. line, if any) 964 '	n or post office* 16. No. fa	of acres in lease	17. No. o to this fac	Sec. 31, T1 12. County or Parrie Duchesne f acres assigned s well ility well	S, R3W USB&M sh 13. State Utah
Same 14. Distance in miles and 15. Distance from proposi- location to nearest property or lease line (Also to nearest drig. 18. Distance from proposi- line dright drift drif	direction from nearest town red* , ft. line, if any) 964! ed location*	n or post office* 16. No. fa 19. Pro	of acres in lease cility well posed depth	17. No. 0 to this <u>fac</u> 20. Rotary	Sec. 31, T1 12. County or Parris Duchesne f acres assigned s well ility well y or cable tools	S, R3W USB&M sh 13. State Utah
Same 14. Distance in miles and 15. Distance from propose location to nearest property or lease line (Also to nearest drlg. 18. Distance from propos to nearest well, drillin or applied for, on this	direction from nearest town sed* , ft. line, if any) 964' ed location* ng, completed, s lease, ft. +50'	1 or post office* 16. No. fa 19. Pro 48	of acres in lease cility well posed depth 00'	17. No. o to this fac 20. Rotary	Sec. 31, T1 12. County or Parris Duchesne f acres assigned s well ility well v or cable tools arv	S, R3W USB&M sh 13. State Utah
SAME 14. Distance in miles and 15. Distance from propose location to nearest property or lease line (Also to nearest drlg. 18. Distance from propose to nearest well, drillin or applied for, on this 21. Elevations (Show whe	idirection from nearest town ied* , ft. line, if any) 964' ed location* ng, completed, s lease, ft. +50' ther DF, RT, GR, etc.)	1 or post office* 16. No. fa 19. Pro 48	of acres in lease cility well posed depth 00'	17. No. o to this <u>fac</u> 20. Rotary <b>rot</b>	Sec. 31, T1 12. County or Parris Duchesne f acres assigned well ility well or cable tools ary 22. Approx. date v	S, R3W USB&M sh 13. State Utah
Same 14. Distance in miles and 15. Distance from propos location to nearest property or lease line (Also to nearest drlg. 18. Distance from propos to nearest well, drilli or applied for, on this 21. Elevations (Show whe 6406' ungrade	direction from nearest town sed* (ft. line, if any) 964' ed location* ng, completed, s lease, ft. +50' ther DF, RT, GR, etc.) ed ground	n or post office* 16. No. fa 19. Pro 48	of acres in lease cility well posed depth 00'	17. No. o to this fac 20. Rotar <b>rot</b>	Sec. 31, T1 12. County or Parris Duchesne f acres assigned well ility well v or cable tools ary 22. Approx. date v March 15,	S, R3W USB&M sh 13. State Utah work will start* 1975
Same 14. Distance in miles and 15. Distance from propos location to nearest property or lease line (Also to nearest drlg. 18. Distance from propos to nearest well, drillin or applied for, on this 21. Elevations (Show whe 6406 <sup>†</sup> ungrade 23.	direction from nearest town sed* , ft. line, if any) 964' ed location* ed location* is lease, ft. +50' ther DF, RT, GR, etc.) ed ground	n or post office* 16. No. fa 19. Pro 48 PROPOSED CASING AND	of acres in lease cility well posed depth 00' CEMENTING PRO	17. No. o to this <u>fac</u> 20. Rotary <b>rot</b> GRAM	Sec. 31, T1 12. County or Parris Duchesne f acres assigned s well ility well or cable tools ary 22. Approx. date March 15,	S, R3W USB&M sh 13. State Utah work will start* 1975
Same 14. Distance in miles and 15. Distance from propos location to nearest property or lease line (Also to nearest drig. 18. Distance from propos to nearest well, drillin or applied for, on this 21. Elevations (Show whe <u>6406</u> <sup>†</sup> ungrade 23. Size of Hole	direction from nearest town sed* (, ft. line, if any) 964' ed location* ng, completed, s lease, ft. +50' ther DF, RT, GR, etc.) ed ground Size of Casing	n or post office* 16. No. fa 19. Pro 48 PROPOSED CASING AND Weight per Foot	of acres in lease cility well posed depth OO' CEMENTING PRO Setting Depth	17. No. o to this fac 20. Rotar <b>rot</b> GRAM	Sec. 31, T1 12. County or Parris Duchesne f acres assigned well ility well v or cable tools ary 22. Approx. date v March 15, Quantity of Cer	S, R3W USB&M sh 13. State Utah work will start* 1975 ment
Same 14. Distance in miles and 15. Distance from propose location to nearest property or lease line (Also to nearest drlg., 18. Distance from propose to nearest well, drilling or applied for, on this 21. Elevations (Show whe <u>6406' ungrade</u> 23. Size of Hole <u>12-1/4''</u>	direction from nearest town sed* (f. 1) (ine, if any) 964' (ed location* ng, completed, s lease, ft. +50' (ther DF, RT, GR, etc.) (ed ground) Size of Casing 8-5/8''	n or post office* 16. No. fa 19. Pro 48 PROPOSED CASING AND Weight per Foot 24#	of acres in lease cility well posed depth OO' CEMENTING PRO Setting Depth 300	17. No. o to this <u>fac</u> 20. Rotar <b>rot</b> GRAM	Sec. 31, T1 12. County or Parris Duchesne f acres assigned well ility well v or cable tools ary 22. Approx. date v March 15, Quantity of Cer to surfa	S, R3W USB&M sh 13. State Utah work will start* 1975 ment CCE

EI

We propose to drill and complete a 4800' produced water disposal well in the Duchesne River formation.

Attachments: Drilling Procedure Certified Plat 12 pt Surface Use Plan w/attachments

STATE

0565

JAD

ALF FILE

13/X

1

APPROVED BY DIVISION OF OIL & GAS CONSERVATION

DATE \_\_\_\_\_B \_1 8.1975 By Clean D Jughan

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

meventee mogram, it any.		
24. Signed Itsellach	R. B. Wacker <sub>Title</sub> Division Drilling Supt.	Date 1-30-75
(This space for Federal or State office use)		
Permit No	Approval Date	
Approved by Conditions of approval, if any:	Title	Date

\*See Instructions On Reverse Side

## CHEVR N OIL COMPANY WLSTERN DIVISION Salt Water Disposal Well #3-31A3 NE¼ NE¼, Sec. 31, TIS, R3W, USB&M Duchesne County, Utah



Scale: 1.5" = 100'

Salt Water Disposal Well #3-31A3 DRILLSITE LOCATION PLAT MANNING RIG No. 7

## CHEVRON OIL COMPANY DEVELOPMENT PLAN FOR SURFACE USE SALT WATER DISPOSAL WELL #3-31A3 NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, Sec 31, T1S, R3W, USB&M Duchesne County, Utah

#### 1. EXISTING ROADS

Existing roads shown on attached topo map.

#### 2. PLANNED ACCESS ROADS

Access road shown on attached topo map. Road construction will be kept to a minimum.

#### 3. LOCATION OF EXISTING WELLS

One existing well within half-mile radium shown on attached topo map.

4. LATERAL ROADS TO WELL LOCATION

All existing and proposed roads shown on attached topo map.

## 5. LOCATION OF TANK BATTERY AND FLOW LINE

No tank battery - disposal well. Salt water disposal lines to be included in existing bundle.

6. SOURCE OF WATER SUPPLY

Water supply will be from nearest canal where water is obtainable.

7. METHOD FOR HANDLING WASTE DISPOSAL

Waste material will be disposed of in a surface pit at the drill site. When well is completed, pit will be closed and covered.

8. LOCATION OF CAMPS

No permanent camp type structures will be constructed.

9. LOCATION OF AIRSTRIPS

No airstrip will be constructed.

#### 10. LOCATION OF LAYOUT

Rig orientation layout shown on 1.5'' = 100' drawing attached. Also see attached topo map.

11. PLAN FOR RESTORATION OF THE SURFACE

All disturbed surface not needed for future operations will be restored to be in conformance with the appropriate regulatory agency requirements.

## 12. OTHER PERTINENT INFORMATION

This well site has been located on as flat an area as possible, consistent with reasonable geological requirements, to minimize cut and fill for location site access road and disposal line. All reasonable precautions will be taken to protect the surface environment and wildlife habitat.



↓ 1 ≤ 6		
	RESEARCH LABORATORIES	
P.O. Box 119	Fort Duchesne, Utab 84026 (801) 722-2254	

W-2822 LABORATORY NUMBER SAMPLE TAKEN\_ 11-10-75 SAMPLE RECEIVED\_ 11-12-75 RESULTS REPORTED\_\_\_\_ SAMPLE DESCRIPTION FIELD NO. COMPANY \_\_\_\_\_CHEVRON Oil Co.\_\_\_\_\_LEASE \_\_\_\_\_Hartman WELL NO. 3-301A3 3-3143 \_\_\_\_\_ STATE \_\_\_\_\_ \_\_\_\_ COUNTY \_\_\_\_ FIELD SAMPLE TAKEN FROM <u>3576</u>тор <u>3686</u> PRODUCING FORMATION \_ REMARKS S.W.D.W. SAMPLE TAKEN BY\_ CHEMICAL AND PHYSICAL PROPERTIES SPECIFIC GRAVITY @60/60° F. \_\_\_\_\_ 1.0647 pH \_\_\_\_\_ 7.35 RES. \_\_\_\_\_ 0.12 OHM METERS @\_\_\_\_\_ 77°F mg/L as CaCO3 TOTAL HARDNESS 6618.0 mg/L as CaCO3 TOTAL ALKALINITY 83.0 MILLIGRAMS **MILLEQUIVALENTS** CONSTITUENT REMARKS PER LITER PER LITER mg/L. MEQ/L CALCIUM - Ca + + 1850.0 92.50 MAGNESIUM - Mg + + 481.0 39.43 30000.0 SODIUM - Na + 1304.35 BARIUM (INCL. STRONTIUM) - Ba + + 0 0 11.50 TOTAL IRON - Fo+ + AND Fo + + + 0.41 1436.69 83.0 BICAREONATE - HCO3 1.36 CARBONATE - CO3 0 0 SULFATE - SOA ---4700.0 97.92 CHLORIDE - CL-48980.4 1379.73 11479.01 85160 TOTAL DISSOLVED SOLIDS ----- MILLEQUIVALENTS PER LITER -LOGARITIMIC **STANDARD** Na



ANALYST \_\_\_\_\_

DRILLING PROCEDURE
Field Altamont Well Salt Water Disposal Well #3-31A3
Location 1109' FNL & 954' FEL, NELLE, Sec 31, TIS, R3W, USBEM, Duchesne County, Utab
Drill X Deepen Elevation: GL 6406 KB Total Depth 4800
Non-Op Interests Shell, Gulf, Barber, Duncan et al
1. Casing Program (0 = old, N = new)       Oil String/         Surface       0/N       Intermediate       0/N         Hole Size       12-1/4       7-7/8       7-7/8         Pipe Size       8-5/8       N       5-1/2       0         Grade       K       14#       14#       14#         Depth       300       4800       4800       14#         Cement       to surface       to surface       + 6 hrs       3000 psi         Time WOC       + 6 hrs       3000 psi       5-900 Hydril       3000 psi         BOP       None       S-900 Hydril
2. Mud Program
Depth Interval       Type Gel Water       Weight       Viscosity       Water Loss         300-4800       Gel Water
Total Depth
4. <u>Mud Logging Unit</u> <u>None</u> Scales: 2" = 100' to; 5" = 100' to
5. Coring & Testing Program       Approximate         Formations       Approximate Depth         Core       DST         DST       DST
6. Objectives & Significant Tops: Objectives: <u>Duchesne River Sands</u>
Formations Approximate Depth Formations Approximate Depth
<ul> <li>7. Anticipated Bottom Hole Pressure &lt; 2075 psi</li> <li>8. Completion &amp; Remarks: Perf csg*, break perfs down. Run plastic coated packer on</li> </ul>
new plastic lined tbg and flange well up. *Swab to recover water for analysis/
Division Development Geologist (177-1/3/75 Division Drilling Superintendent 1866) Chief Development Geologist Date 17175

## CHEVRON OIL COMPANY

Well location located as shown in the NEV4 NE1/4 Section 31, T1S, R3W, U.S.B.&M. Duchesne County, Utah. SWD No. 3-3/A3

## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR REGISTRATION № 2454 STATE OF UTAH

UINTAH ENGINEERING	& LAND SURVEYING
P. O. BOX Q 110 H	EAST - FIRST SOUTH
Vernal, U	Jtah - 84078
SCALE	DATE
l'' = 1000'	Jan. 22, 1975
PARTY	REFERENCES
B.R. B.H. T.F.	GLO Plat
WEATHER	FILE
Cold	CHEVRON OIL CO.

## TIS, R3W, U.S.B.&M.







## PROJECT

Xer .

## CHEVRON OIL COMPANY

Well location located as shown in the NE1/4 NE1/4 Section 31, TIS, R3W, U.S.B.&M. Duchesne County, Utah. EXHIBIT "A"

## TIS, R3W, U.S.B.&M.



#### CERTIFICATE

THIS IS TO CERTIFY THAT. THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR REGISTRATION Nº 2454 STATE OF UTAH

Uintah Engineering	& Land Surveying
p 0. box q - 110	east - first south
Vernal,	Utah - 84078
SCALE	DATE
[" = 1000'	Jan. 22, 1975
B.R. B.H. T.F.	REFERENCES GLO Plot
WEATHER Cold	FILE CHEVECH OIL CO.

## BEFORE THE BOARD OF OIL AND GAS CONSERVATION DEPARTMENT OF NATURAL RESOURCES IN AND FOR THE STATE OF UTAH

)

)

)

)

IN THE MATTER OF THE APPLICATION OF CHEVRON OIL COMPANY, WESTERN DIVISION FOR ADMINISTRATIVE APPROVAL, PURSUANT TO RULE C-11, AUTHORIZING THE DRILLING OF AN INJECTION WELL FOR DISPOSING OF WATER PRODUCED WITH OIL IN THE ALTAMONT FIELD, DUCHESNE COUNTY, UTAH

APPLICATION

Comes now applicant, CHEVRON OIL COMPANY, WESTERN DIVISION, by and through its undersigned attorney, and in support of this application respectfully shows:

(1) Chevron Oil Company is a corporation organized and existing under the laws of the State of California, and is duly authorized to and is doing business in the State of Utah.

(2) Applicant is an operator in the Altamont Field, DuchesneCounty, Utah.

(3) Applicant is now utilizing surface pits to retain the salt water produced at the battery sites until hauled by truck to the Chevron owned Salt Water Disposal well located in Section 3, TIS, R2W in the Bluebell Field. This disposal well and its facilities are reaching their injection capacities. Therefore this proposed well will provide additional capacity to adequately and safely dispose of this increased salt water production.

(4) Unless sub-surface disposal is provided, the salt water accompanying further production of oil could cause surface damage and possible pollution of potable surface water.

(5) That Applicant proposes to drill a well for disposing of produced salt water by injection into the lower portion of the Duchesne River formation. The proposed well will be drilled in the NE½NE½ Section 31, T1S, R3W, USB&M as shown on attached plat marked Exhibit "A".

(6) Pursuant to Rule C-11, of the General Rules and Regulations of the Board, the following information is submitted:

- (a) Attached hereto as Exhibit "B", "C", "D", and "E" and by this reference made a part hereto, are the following respectively.
  - Names of lessees of record within one-half mile of the proposed disposal well.

- Plat of all wells within one-half mile of proposed disposal well.
- 3. A copy of a log of the Duchesne River formation showing the interval proposed for injection. This log was obtained in the Shell Oil Company Hansen No. 2-4B3 well located approximately 2.25 miles from the proposed disposal well as shown on Exhibit "C" next above.
- 4. A water analysis of the water recovered from the Duchesne River formation in the well from which the log next above was obtained.
- (b) Applicant proposes to inject produced salt water into the lower Duchesne River formation. The lower Duchesne River formation is of the Tertiary age and consists of sandstones, white to tan, which appear in drill cuttings as unconsolidated sand grains, very fine to medium and occasionally coarse to very coarse grained, subround and poorly sorted. In places the sandstones are porous and permeable and occur in thinner interbeds of soft, varicolored shale, predominantly ocher with lesser red, graygreen and lavender, slightly calcareous, occasionally very finely sandy.
- (c) Prior to injection electrical and radioactive logs will be run throughout the Duchesne River formation in the proposed disposal well. From the information obtained from such logs, the well will be perforated in the lowermost zones of capacity for disposal of the produced salt water.

## (d) The description of the proposed disposal well casing is as follows:

(a) 30' - 18" pipe cemented to surface.

(b) 300' - 8-5/8'' surface casing cemented to surface.

(c) 4800' - 5-1/2'' casing cemented to surface.

Before use of the well for injection, the casing will be tested to 3000 psi.

(e) The minimum estimated amount of water to be injected, produced in association with oil from the Wasatch

-2-

STATE OF COLORADO ) ) SS CITY AND COUNTY OF DENVER )

I, W. M. Balkovatz, Attorney for Chevron Oil Company, Western Division, hereby certify that on the 31st day of January, 1975, I deposited in the United States Post Office at Denver, Colorado by certified mail postage thereon fully prepaid, a sealed envelope containing a copy of the Application of Chevron Oil Company, Western Division, to the Board of Oil and Gas Conservation of the State of Utah to which this Certificate is attached, addressed to the following:

> Shell Oil Company 1700 Broadway Denver, Colorado 80202

> Pennzoil P. O. Box 1139 Denver, Colorado 80201

Sabine Exploration Corp. 2627 Tenneco Building Houston, Texas 77002

Tenneco Oil Co. Suite 1200 - Lincoln Tower Bldg. 1860 Lincoln Street Denver, Colorado 80203

King Silver Corporation P. O. Box 666 Vernal, Utah 84078

Hiko Bell Mining and Oil Co. Bank of Vernal Building Vernal, Utah 84078

W. 711.

STATE OF COLORADO ) ) SS CITY AND COUNTY OF DENVER )

÷,

The foregoing instrument was subscribed and sworn to before me this 31st day of January, 1975.

Witness my hand and official seal.

Lenore Lencre L. Modacy . Notarv Notary Fublic In and For State of Colorada

Residing at Lenver, Colorado My Commission Expires My Commission expires May 3, 1975

> Chevron Oil Company Exhibit "B"

formation, is  $\pm$  1,000 BWPD. The present designed capacity of pumping facilities are capable of injecting 3,000 BWPD.

(7) As shown on Exhibit "E" the waters native to the Duchesne River formation are extremely brackish with the total dissolved solids of 60,000 ppm. The salt water produced from the Wasatch formation varies from 8,000 to 20,000 ppm total solids. Thus the water Applicant proposes to dispose of is of better quality than that already present in the Duchesne River formation at the selected disposal well site.

WHEREFORE, Applicant respectfully requests that the Board of Oil and Gas Conservation, pursuant to Rule C-11 administratively approve the disposal of water produced with oil all as more fully set forth herein.

DATED this 31st day of January, 1975.

CHEVRON OIL COMPANY, WESTERN DIVISION

Its Attorney P. O. Box 599 Denver, Colorado 80201

## VERIFICATION

I, W. M. Balkovatz, do solemnly swear that I have read the foregoing Application by me subscribed, and that I have been reliably informed and verily believe the facts therein stated to be true.

iel. m. Ba.

STATE OF COLORADO ) ) SS CITY AND COUNTY OF DENVER )

Subscribed and sworn to before me this 31st day of January, 1975.

Lenore J. Moomey Notary Public

Lencra L. Mocmey Notary Public In and For State of Colorado Residing at Lenver, Colorado Ny Commission expires May 3, 1975



## EXHIBIT "C"

PLAT SHOWING ALL WELLS WITHIN 1/2 MI. OF CHEVRON SWD WELL DUCHESNE CO., UTAH SCALE: ["= 2000"

R3W



# **ESTE RESEARCH LABORATORIES**

P-O Box 119

Fort Duchesne, Utah 84026

(801) 722-2254

EXHIBIT "E"

LABORATORY NUMBER	W-1602
SAMPLE TAKEN	11-19-74 10:45 am
SAMPLE RECEIVED	11-21-74
RESULTS REPORTED	11-26-74

SAMPLE D	ESCRIPTION COMPANY	Vancon	FIELD NO	0 (53
COMPANY	SHELL OIL COFFANI	LEASE	UNC	WELL NO
FIELD	COUNTY	STATE		
SAMPLE TA	KEN FROM		:	
PRODUCING	FORMATION	TOP		<b>~</b>
REMARKS	Sample from Gross Perfora	ations 3000' - 3292'		
		SAMPLE TAKEN BY		
SPECIFIC G	CHEMICA RAVITY #60/60° F977	L AND PHYSICAL PROPE	RTIES	

6363.6 TOTAL HARDNESS A Mg/L as CaCO3

TOTAL ALKALINITY 36 Mg/L as CaCO3

CONSTITUENT	MILLIGRANS PER LITER Mg/L.	MILLEQUIVALENTS PER LITER MEQ/L		REMARKS
CALCIUM - Ca + +	1790.0	89.5		
MAGNESIUM - Mg + +	460.0	37.7		
SODIUM - Na +	17526.0	762.0		
			· · · · ·	
BARIUM (INCL. STRONTIUM) - Ba + +	28,9	0.42	[]	
TOTAL IRON - Fo+ + AND Fo+++	· 0.32	0.01	889.6	
BICARBONATE - HCO3	20	0.33		
CARBONATE - CO3	16	0.53		
SULFATE - SO4	7500.	156.25		
CHLORIDE - CL-	25989.6	732.10	889.21	
TOTAL DISSOLVED SOLIDS	\$9,720.0			

## - MILLEQUIVALENTS PER LITER

CHECKED\_







## Chevron Oil Company Western Division

1700 Broadway, P.O. Box 599, Denver, CO 80201

January 31, 1975

## AIRMAIL

State of Utah Department of Natural Resources Board of Oil and Gas Conservation 1588 West North Temple Salt Lake City, Utah 84116

Attention C. B. Feight, Esq., Director

Gentlemen:

Pursuant to Rule C-11 of the Board's General Rules and Regulations, enclosed herewith, in duplicate, are Chevron Oil Company, Western Division's applications requesting administrative approval to drill two water disposal wells - one in Bluebell Field and the other in the Altamont Field, all as more particularly set forth in the enclosed applications. Also enclosed is an Application for Permit to Drill each of said wells.

A copy of the application has been mailed to the lessees within one-half mile of each of the proposed wells.

Very truly yours,

W. M. Balkovátz Staff Attorney

 $O^{n}$ 

WMB:dw

Enclosures

February 18, 1975

Chevron Oil Company Box 599 Denver, Colorado 80202

ATTENTION: William M. Balkovatz, Staff Attorney

Re: Well No's: SWD #2-10B1 Sec. 10, T. 2 S, R. 1 W, SWD #3-31A3 Sec. 31, T. 1 S, R. 3 W, Duchesne County, Utah

Dear Mr. Balkovatz:

Pursuant to Rule C-11, General Rules and Regulations and Rules of Practice and Procedure, no objections having been received within a 15 day period, administrative approval to drill the above water disposal wells is hereby granted.

Should you have any questions relative to the above please do not hesitate to call or write.

## Very truly yours,

DIVISION OF OIL AND GAS CONSERVATION

CLEON B. FEIGHT DIRECTOR

CBF:sw

cc: U.S. Geological Survey

March 20, 1975

Chevron Oil Company P.O. Box 599 Denver, Colorado 80202

ATTENTION: William M. Balkovatz, Staff Attorney

Re: Well No's: SWD #2-10Bl Sec. 10, T. 2 S, R. 1 W, SWD #3-31A3 Sec. 31, T. 1 S, R. 3 W, Duchesne County, Utah

Dear Mr. Balkovatz:

Pursuant to our letter of February 18, 1975, pertaining to the above referred to malt water disposal wells; you are hereby advised that said approval letter should have had the following provisions of the Order issued in Cause No. 139-9 outlined as follows:

- 1) Applicant will take two samples of formation water by production swab tests, one from the upper interval and one from a lower interval.
- Applicant will notify this office prior to taking such samples in order that a member of our staff may be present to witness such tests, and take independent samples.
- 3) Applicant will provide continuous monitoring of the salt water dipposal well as to the volume of fluids injected and injection pressures. (This provision also applies to your Disposal #1 well located in Sec. 3, T. 1 S, R. 2 W, )

Should you have any questions relative to the above, please do not hesitate to call or write.

Very truly yours,

CLEON B. FEIGHT DIRECTOR FORM OGC-8-X FILE IN QUADRUPLICATE



STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL AND GAS CONSERVATION 1588 West North Temple Salt Lake City, Utah 84116 'A5, ₽

## REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name and Number
Operator <u>Chevron Oil Company</u>
Address P. O. Box 599 Denver, Colorado 80201
Contractor Willard Pease Drilling Co
Address P. O. Box 548 Grand Junction, Colorado 81501
Location <u>NE</u> 1/4, <u>NE</u> 1/4, Sec. <u>31</u> ; T. <u>1 XM</u> ; R. <u>3 XR</u> ; <u>Duchesne</u> County S W
Water Sands:
Depth:Volume:Quality:From-To-Flow Rate or Head -Fresh or Salty -
1
2
3.
4.
5.

(Continue on Reverse Side if Necessary)

Formation Tops: The well was drilled with mud as a salt water disposal well. The above interval was perforated and tested through casing.

NOTE: (a) Upon diminishing supply of forms, please inform this office. (b) Report on this form as provided for in Rule C-20, General Rules

And Regulations and Rules of Practice and Procedure,

(c) If a water quality analysis has been made of the above reported zone, please forward a copy along with this form.

CC - TR

		STATE	OF UTAH	000211	(See o struct	ther in-	ASE DESIGNA	TION AND BERIAL
	01L & GA	S CONSERV	ATION CO	MMISSION	revers	e side) 0. LL		
WELL CO	MPLETION	OR RECO	MPLETION	REPORT A	ND LOO	6. IF	INDIAN; ALL	OTTEE OR TRIBE NA
A TYPE OF WEL	L: OIL WE	LL GAS WELL	DRY D	Other Wate	r Disposa	1 7. UN	IT ACREEME	NT NAME
NEW WELL	WORK DE OVER EN	EP- PLUG BACK	DIFF. RESVR.	Other		<u> </u>	RM OB LEASI 1+ Wate	r Disposal V
Chevror	n Oil Compa	any - Weste	rn Divisio	n,		9. WI	ELL NO.	L DISPOSAL !
3. ADDRESS OF OPE	RATOR		• -				31A3	
P. O. 1	Box 599	Denver	Colorado	80201		10. F	IELD AND PO	DL, OR WILDCAT
At surface 71	OQ TENT &	Q64 FFT	NELNEL)	any state requirer	nents)*		tamont-	OR BLOCK AND SURV
At top prod. ini	erval reported be	How Same	(ME-4ME-4)			0	R AREA	•
At total doubh	•						•	
At total deput	Sa	ame	14. PERMIT N	i0. D/	TE ISSUED	<u> </u>	UNTY OR	R3W. USB&M
	•	•		· 1		P. Duo	ARISE hoene	Iltab
DATE SPUDDED	16. DATE T.D. I	REACHED   17. DAT	TE COMPL. (Ready	to prod.)   18. 1	LEVATIONS (DE	, RKB, RT, GR, I	TC.)•   19.	ELEV. CABINGHEAD
9-24-75	10-2-7	75	11-10-75		641	le KB		
. TOTAL DEPTH, MD	A TVD 21. PLU	IG, BACK T.D., MD 4	TVD 22. IF MI	LTIPLE COMPL.,	23. INTEL	AVALS ROTA	RY TOOLS	CABLE TOOLS
4800'		4700 PBTD				▶	Yes	No
. PRODUCING INTE	WAL(S), OF THIS	COMPLETION-TO	P, BOTTOM, NAME	(MD AND TVD)*			1	SURVEY MADE
							an t	· · · · · · · ·
3576-4660	ND OTHER LOGS	Duchesne	River	···· ··· ··· · · ·	<u> </u>	·····	27	NO WAS WELL CORD
		<b>A</b> U.17	• *					NT -
DIFL, BHC/A	L/GR/CAL	CAS	ING RECORD (R	eport all strings s	et in spell)			<u>NO</u>
CASING SIZE	WEIGHT, LB.	TT.   DEPTH S	ET (MD)   F	IOLE SIZE	CEMI	NTING RECORD		AMOUNT PULLE
8-5/8"	24	¥	319'	12-1/4"	350	sx		
5-1/2"	14	₿ <u></u>	800'	7-7/8"	1419	sx	•	
· · · · · · · · · · · · · · · · · · ·		·					<u> </u>	
		LINER RECORD	<u> </u>		1 20	TUDING	BROORD	
812E	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)		DEPTH	RECORD	DACKER SET (MI
					2-7/8	3 3	546'	3541
NONE	· · · · · · · · · · · · · · · · · · ·			-				
. PERFORATION REC	CORD (Interval, et	ize and number)	- <u></u>	32.	ACID, SHOT.	FRACTURE, C	EMENT SQU	JEEZE, ETC.
3576-3592,	3626-3640	, 3675-3686	, 3856-387	2 DEPTH INTER	AVAL (MD)	AMOUNT A	ND KIND OF	MATEBIAL USED
3912-3924,	4268-4282	, 4390-4441	. <b>,</b> '4630–466	0				
w/4 shots/1	t.				SEE AT	TACHED		
		DISPOSAL	D-B-					
.•	LALT WATER	WWW WEEKON (	Flowing, gas lift,	pumping-size an	d type of pum	)	WELL STATU	8 (Producing or
. S	ALT WATER	AVENNA MELHOD (					ehut-in) Tı	niecting
• 5 TR FIRST 98803029 11-20-75	ALT WATER	J. Tri	plex					GAS-OIL BATIO
.• 5 TR FIRST 96400229 11-20-75 TE OF TEST	ALT WATER	Tri	plex PROD'N. FOR	OILBÉL.	GAS-MCI	. WATE	RBBL.	
.• 5 TR FIRST PRODUCT 11-20-75 TR OF TEST 11-21-75	ALT WATER	CHOKE SIZE	plex PROD'N. FOR TEST PERIOD	OILBÉL.	GA8-MCI	WATE	r881. 750	_
.• 5 TE FIRST PERDUCE 11-20-75 TE OF TEST 11-21-75 MAK TUBING PRESS.	ALT WATER BOOK In	Tri CHOKE SIZE	DIL-BBL.	OILBŚL.	GAS-MCI	VATER-BBL.	n	
2.• 5 TR FIRST BEADCORP 11-20-75 TE OF TEST 11-21-75 MAK TUBING PRESS. 1200-1800	ALT WATER BOOK In	Tri CHOKE SIZE	plex PROD'N. FOR TEST PERIOD OIL—BBL. TE	01LBŚL. 	GAS-MCI	WATER-BBL.	RBBL. 750	CREATITY-API (CORE.)
	ALT WATER BOOK IN	RE CALCULATED 24-HOUR BAT	plex PROD'N. FOR TEST FERIOD OIL—BBL. TE	01LBŚL. 	G48—MCI   _ 	WATER-BDL.	R-BBL. 750 OIL O	JRAVITY-API (CORR.)
	ALT WATER BOOK IN	RE CALCULATED 24-ROUE BAT 24-ROUE BAT	plex PROD'N. FOR TEST PERIOD OIL—BBL. TE	01LBŚL.   GASMG 	GASMCI 	WATER-BBL.	R-BEL. 750 01L C WITNESSED	SRAVITY-API (CORR.)
B.•         S           TH FIRST PENDUCT           11-20-75           THE OF TEST           11-21-75           XXX TUBING PRESS.           1200-1800           I. DISPOSITION OF G           LIST OF ATTACH           Actidizing F	ALT WATER BOOK In ] . 66200 In ] HOURS TESTED 24 CASING PRESSU - AS (Sold, used for MENTS Rectod	RE CALCULATED 24-HOUR RAT	plex PROD'N. FOR TEST PERIOD OIL—BBL. TE	01LBŚL. 	GASMCI - -	WATER-BBL.	R-BEL. 750 01L 0 WITNESSED 1 . H. Dag	JEAVITT-API (CORE.)
TE FIRST BRADUCE? TE FIRST BRADUCE? 11-20-75 TE OF TEST 11-21-75 MK TUBING PRESS. 1200-1800 DISPOSITION OF G LIST OF ATTACH Acidizing F . I hepeby certify	ALT WATER BOOK IN	RE CALCULATED 24-HOUR BAX 1 Juel, venited, etc.	plex PROD'N. FOR TEST PERIOD OIL—BBL. TE	01LBŚL. 	GAS-MCI	VATER-BBL.	R-BEL. 750 01L 0 WITNESSED 1	BRAVITY-API (CORB.)
A. S.	ALT WATER BOOK IN	RE CALCULATED 24-HOUR RAT 24-HOUR RAT 24-HOUR RAT 24-HOUR RAT 24-HOUR RAT 24-HOUR RAT 24-HOUR RAT	plex PROD'N. FOR TEST PERIOD OIL—BBL. P Rformation is con	OIL-BÉL. GAS-MC GAS-MC J. A. MISh	GAS-MCI	WATER-BBL.	R-BEL. 750 01L 0 WITNESSED 1 . H. Dag	SRAVITY-API (CORR.)
A. S TH FIRST PRODUCT 11-20-75 TH OF TEST 11-21-75 XXX TUBING PRESS. 1200-1800 DISPOSITION OF G LIST OF ATTACH Acidizing H LIST OF ATTACH SIGNED	ALT WATER BOOK IN	RE CALCULATED 24-ROUR RAT 1 July vented, etc.	plex PROD'N. FOR TEST PERIOD OIL-BBL. TE -	oil-Bál. GAS-MG GAS-MG J. A. MISh Engineerin	GAS-MCI GAS-MCI F.	WATER-BBL. TEST J I from all avai	R-BEL. 750 01L 0 WITNESSED 1 . H. Day lable records	

**INSTRUCTIONS** 

## SALT WATER DISPOSAL WELL 3-31A3 ALTAMONT FIELD ACIDIZING RECORD

} -

ZONES	AMOUNT
4630-4660	1700 gals 15% HCl
4390-4441	2860 gals 15% HC1
4268-4282	825 gals 15% HC1
3856-3924	1650 gals 15% HCl
3675-3686	660 gals 15% HC1
3626-3640	825 gals 15% HC1
3576-3592	935 gals 15% HC1

		ሮ ጥ ል ጥ ነ	C OF 11 7 A 11				
	011 & 6	SIAII	VATION O		(See othe structions reverse s	r in- s on 5. LEASE DES	IGNATION AND SERIAL NO.
<u>, ,,, , , , , , , , , , , , , , , , , </u>							
WELL CC	OMPLETION	N OR RECO	OMPLETION	I REPORT	AND LOG*	G. IF INDIAN;	ALLOTTEE OR TRIBE NAME
1a. TYPE OF WE	LL: 0 W	II. GAS		Other Wat	er Disposal	7. UNIT AGREE	MENT NAME
b. TYPE OF COP	MPLETION:			/ Other			
WELL	OVER D	EEP- PLOG N BACK	DIFF. EESVR.	Other		S. FARM OR L	LASE NAME
NAME OF OPERA	TOR				······	Salt Wa	ter Disposal We
Chevro	n Oil Comp	oany - West	ern Divisio	on .		9. WELL NO.	
ADDRESS OF OPI	ERATOR		•-	• .	· .	3-31A3	·
P. O.	Box 599	Denver	, Colorado	80201		10. FIELD AND	POOL, OR WILDCAT
At surface 7	1001 ENT C	Con clearly and s	(accordance with	any state requir	ements)*	Altamon	t-Duchesne Rive
.۲. مراجع میں میں م	109 FNL Q	904 FEL	(NEZNEZ)			II. BEC., T., R. OR AREA	, M., OR BLOCK AND BURYET
At top prod. in	terval reported i	below Same	۰.			•	
At total depth	s	ame				S 31 TIS	DAN HEBEN
		• • • • •	14. PERMIT	NO. 1	DATE ISSUED	12. COUNTY OF	13. STATE
						Duchesne	Iltah
. DATE SPUDDED	16. DATE T.D.	REACHED 17. D	TE COMPL. (Ready	( to prod.) 18.	ELEVATIONS (DF. BI	68, RT, GR, ETC.)*	19. ELEV. CABINGHEAD
2-24-75	10-2-	-75	11-10-75	5	6416	KB	1999 - Arian Arian Arian - Arian Arian - Arian Arian - Ari
TOTAL DEPTH, MD	A TVD 21. PI	LUG, BACK T.D., MD	A TVD 22. IF M HOW	ULTIPLE COMPL., MANI*	23. INTERVAL DRILLED	S BOTARY TOOLS	CABLE TOOLS
4800 '		4700 PBTD		·	<u> </u>	Yes	No
FRODUCING INTE	AVAL(S), OF THIS	S COMPLETION-T	JP, BOTTOM, NAME	(MD AND TVD)*			25. WAS DIRECTIONAL SURVEY MADE
							and the second second
TIPE ELECTRIC	AND OTHER LOGS	Duchesne	River				No
			• #			2	7. WAS WELL CORED
DIFL, BHC/I	AL/GR/CAL		SING BEGORD (F			<u> </u>	No
CASING SIZE	WEIGHT, LB	./FT.   DEPTH S	SING RECORD (R	eport all strings	set in well)	NG RECORD	
8-5/8"	24	#	3191	12-1/4"	250 a		AMOUNT PULLED
5-1/2"	14	#	4800	7-7/8	1/10 0	X	
······································							
		LINER RECOR	D		30.	TUBING RECOR	 D
•		BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD	) SIZE	DEPTH SET (MD)	PACKER SET (MD)
BIZE	TOP (MD)		The second secon		2_7/01		
812E	TOP (MD)			1	1 2-110	3546 '	3541'
BIZE IONE	TOP (MD)		_			35461	
SIZE IONE PERFORATION REC	TOP (MD) COBD (Interval, s	lize and number)	_	32.	ACID, SHOT. FRA	3546 '	3541'
BIZE	TOP (MD) CORD (Interval, s 3626-3640	ise and number) , 3675-3689	5, 3856-387	2 DEFTE INTE	ACID, SHOT, FRA	3546 CTURE, CEMENT &	QUEEZE, ETC.
812E	TOP (MD) CORD (Interval, s 3626-3640 4268-4282	size and number) , 3675-3689 , 4390-444	5, 3856-387 , 4630-466	2 DEFTR INTE	ACID, SHOT. FRA	3546 T	QUEEZE, ETC.
8122 NONE PERFORATION REG 3576-3592, 3912-3924, 1/4 shots/f	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t.	se and number) , 3675-368 , 4390-444	5, 3856-387 1, 4630-466	2 32. DEFTE INTE 0	ACID, SHOT. FRA	3546 T CTURE. CEMENT & AMOUNT AND KIND	QUEEZE, ETC.
812E NONE PERFORATION REG 3576-3592, 3912-3924, 1/4 shots/f	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t.	ise and number) , 3675-3684 , 4390-444	5, 3856-387 L, 4630-466	2 32. DEFTH INTE 0	ACID. SHOT. FRA	3546 T	QUEEZE, ETC.
8122 NONE PERFORATION REG 3576-3592, 3912-3924, 1/4 shots/f	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t.	ise and number) , 3675-3684 , 4390-444	5, 3856-387 1, 4630-466	2 . DEFTH INTE 0	ACID, SHOT. FRA	3546 T	3541 '
8122 NONE PERFORATION RE( 3576-3592, 3912-3924, 7/4 shots/f	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. SALT WATER BALT WATER	52e and number) , 3675-3686 , 4390-444 DISPOSAL	6, 3856-387 1, '4630-466 R08	32.           2           DEFTE INTE           0	ACID, SHOT. FRA	3546 T	3541'
812E IONE PERFORATION REG 3576-3592, 3912-3924, 1/4 shots/f SE FIRST PERMIXEN 1-20-75	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. CALT WATER SALT WATER	DISPOSAL	5, 3856-387 1, 4630-466 R0s Flowing, gas lift,	2 32. DEFTE INTE 0 MUXEXIONS pumping—size at	ACID, SHOT. FRA	3546 T CTURE, CEMENT S AMOUNT AND KIND CHED	ATUS (Producing or
812E IONE PERFORATION REG 5576-3592, 912-3924, 7/4 shots/f 2 S E FIRST PEROUXER 1-20-75 E OF TEST	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. SALT WATER SALT WATER In HOURS TESTED	DISPOSAL (XERON METHOD ( CHORE SIZE	5, 3856-387 1, 4630-466 Flowing, gas lift, [plex   PBOD'N, FOR	2 32. 2 DEFTH INTE 0 MHXXXXXX pumping—size at 0U—net	ACID. SHOT. FRA	3546 T	3541' QUEEZE, ETC. DP MATERIAL USED ATUS (Producing or )) Injecting
SIZE NONE PERFORATION REG 3576-3592, 3912-3924, 7/4 shots/f SE FIRST PERMUSER 1-20-75 E OF TEST 1-21-75	TOP (MD) CORD (Interval, e 3626-3640 4268-4282 t. CALT WATER SALT WATER SALT WATER In HOURS TESTED 24	DISPOSAL CHOKE SIZE	5, 3856-387 1, 4630-466 Flowing, gas lift, tplex PROD'N. FOR TEST PERIOD	2 32. DEFTE INTE 0 	ACID, SHOT, FRA IEVAL (MD) SEE ATTA nd type of pump) GAB-MCP.	3546 T	3541' QUEEZE, ETC. DP MATERIAL USED ATUS (Producing or ) Injecting GAS-OIL BATIO
BIZE IONE PERFORATION REG 3576-3592, 3912-3924, 4 shots/f 4 shots/f 5 E FIRST PERFORMANCE 1-20-75 E OF TEST 1-21-75 K TUBING FREES.	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. SALT WATER SALT WATER In HOURS TESTED 24 CASING PRESSU	DISPOSAL CHOKE SIZE RE CALCULATED	5, 3856-387 1, '4630-466 Flowing, gas lift, Lplex PROD'N. FOR TEST PERIOD OIL-BBL.	2 . 2 . DEPTE INTE 0 	ACID, SHOT. FRA           EEVAL (MD)           SEE ATTA           nd type of pump)           GABMCF.           -	3546 T ATURE, CEMENT S AMOUNT AND KIND CHED WELL ST oAut-in WATER-BBL. 750	3541' QUEEZE, ETC. OF MATERIAL USED ATUS (Producing or )) Injecting GAS-OIL EATIO -
BIZE IONE PERFORATION RE( 576-3592, 912-3924, 7/4 shots/f 9 2 F FIRST PERFORMATION 1-20-75 F OF TEST 1-21-75 X TUBING PRESS. 200-1800	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. SALT WATER SALT WATER SALT WATER 10 10 10 10 10 10 10 10 10 10	DISPOSAL CHOKE SIZE CALCULATED CALCULATED CALCULATED CALCULATED CALCULATED CALCULATED	5, 3856-387 1, '4630-466 Flowing, gas lift, Lplex PROD'N. FOR TEST PERIOD OIL-BBL. CE	2	ACID, SHOT. FRA           EEVAL (MD)           SEE ATTA           nd type of pump)           GAB-MCF.           -           CF.	3546 T AMOUNT AND KIND CHED WELL ST SAME-is WATER-BDL. 750 R-BBL. 01	ATUS (Producing or ) Injecting CAS-OIL EATIO L CRAVITY-API (COBE.)
BIZE IONE PERFORATION REG 5576-3592, 912-3924, 7/4 shots/f 5 5 5 5 6 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 8 8 8 9 12-3924, 7 9 12-3924, 7 9 12-3924, 7 9 12-3924, 7 9 12-3924, 7 14 1-20-75 8 7 1-21-75 8 7 1-20-1800 1-20 1-2	TOP (MD) CORD (Interval, a 3626-3640 4268-4282 t. SALT WATER SALT WATER SALT WATER In HOURS TESTED 24 CASING PRESSU - AS (Sold, used for	DISPOSAL CALCULATED RE CALCULATED CALC	5, 3856-387 1, '4630-466 R08 Flowing, gas lift, Lplex TEST PERIOD DIL-BBL. TE OIL-BBL.	2	ACID. SHOT. FRA           SEE ATTA           SEE ATTA           nd type of pump)           GAB-MCF.           -           CF.	AMOUNT AND KIND CHED WELL BT WATER-BBL. 750 R-BBL. T	3541' QUEEZE, ETC. OF MATERIAL USED ATUS (Producing or )) Injecting GAS-OIL BATIO - L GRAVITY-API (COBE.)
BIZE ONE PERFORATION REG 576-3592, 912-3924, /4 shots/f 200-75 E OF TEST 1-21-75 K TUBING PRESS. 200-1800 DISPOSITION OF G.	TOP (MD) CORD (Interval, e 3626-3640 4268-4282 Et. CALT WATER SALT WATER SALT WATER Inj. HOURS TESTED 24 CASING PRESSU - AS (Sold, used for	DISPOSAL (XERON METHOD ( CHOKE SIZE CHOKE SIZE CHO	5, 3856-387 1, '4630-466 Flowing, gas lift, Lplex PROD'N. FOR TEST FERIOD OIL-BBL. TE )	2         32.           DEFTH INTE         DEFTH INTE           0	ACID, SHOT, FRA EVAL (MD) SEE ATTA add type of pump) GAB-MCF. CF. WATE	AMOUNT AND KIND CHED WELL ST eAwst-is WATER-BBL. 750 R-BBL. I IN D	3541 '
BIZE ONE PERFORATION REA 576-3592, 912-3924, 74 shots/f 2576-3592, 912-3924, 74 shots/f 5576-3592, 912-3924, 74 shots/f 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 912-3924, 5576-3592, 5576-3592, 912-3924, 5576-3592, 5576-3576, 5576-3576, 5	TOP (MD) CORD (Interval, e 3626-3640 4268-4282 Et. SALT WATER SALT WATER SALT WATER In CASING PRESSU - AS (Sold, used for MENTS	Ize and number) , 3675-3684 , 4390-444 DISPOSAL CENTRON METHOD ( 	5, 3856-387         1, '4630-466         REW         Flowing, gas lift,         Lplex         PBOD'N. FOR         TEST PERIOD         OIL-BBL.         COIL-BBL.	2 32. DEFTE INTE 0 	2-770           ACID, SHOT, FRA           IEVAL (MD)           SEE ATTA           nd type of pump)           GAB-MCF.           -           CF.           WATE	3546 T ATURE, CEMENT S AMOUNT AND KIND CHED WALL ST eAus-is WATER-BBL. 750 R-BBL. I TEST WITNESSE J. H. D	ATUS (Producing or Injecting CAS-OIL EATIO L GRAVITY-API (COER.) D BT aggett
SIZE NONE PERFORATION RE( 3576-3592, 3912-3924, 1/4 shots/f 2012-3924, 1/4 shots/f 2012-3924, 1/4 shots/f 2012-3924, 1-20-75 E FIRST PERFORMET 1-20-75 E OF TEST 1-21-75 X TUBING PRESS, 200-1800 DISPOSITION OF G. LIST OF ATTACHY CIDIZING R	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. SALT WATER SOCK Inj.esso In HOURS TESTED 24 CASING PRESSU  AS (Sold, used for MENTS Secrod	ISE and number) , 3675-3689 , 4390-444 DISPOSAL DISPOSAL CHOKE SIZE CHOKE SIZE CHOK	5, 3856-387 1, '4630-466 Flowing, gas lift, Lplex PROD'N. FOR TEST PERIOD OIL-BBL. TE OIL-BBL.	32.           DEFTE INTE           0	ACID, SHOT. FRA           EEVAL (MD)           SEE ATTA           nd type of pump)           GAB-MCF.           -           CF.         WATE	3546 T ATURE, CEMENT S AMOUNT AND KIND CHED WELL ST SAUG-15 WATER-BBL. 750 R-BBL. I TEST WITNESSE J. H. D	ATUS (Producing or ) Injecting CAS-OIL EATIO L GRAVITY-API (COBE.) D BI aggett
BIZE NONE PERFORATION RE- 3576-3592, 3912-3924, 7/4 shots/f 2012-3924, 7/4 shots/f 200-75 E FIRST PEREVIXE 1-20-75 E OF TEST 1-21-75 X TUBING FRESS. 200-1800 DISPOSITION OF G LIST OF ATTACHN Cidizing R I hereby certify	TOP (MD) CORD (Interval, s 3626-3640 4268-4282 t. SALT WATER SALT WATER SALT WATER SALT WATER AS (Sold, used for MENTS Lecrod that the foregol	DISPOSAL CALCULATED RE CALCULATED CALC	6, 3856-387         1, '4630-466         RCM         Flowing, gas lift,         Lplex         TEST PERIOD         OIL-BBL.         TE	2 32. DEFTH INTE 0 	ACID. SHOT. FRA SEVAL (MD) SEE ATTA ad type of pump) GAB-MCF. CF. WATE	3546 T ATURE. CEMENT S AMOUNT AND KIND CHED WATER-BBL. 750 R-BBL. J. H. D M all available reco	3541' QUEEZE, ETC. OF MATERIAL USED ATUS (Producing or ) Injecting GAS-OIL BATIO - L GRAVITY-API (COBE.) - D BT aggett
SIZE NONE PERFORATION REC 3576-3592, 3912-3924, 1/4 shots/f 576-3592, 3912-3924, 1/4 shots/f 576-3592, 3912-3924, 1/4 shots/f 576-3592, 3912-3924, 1/4 shots/f 576-3592, 3912-3924, 1/4 shots/f 1-20-75 E OF TEST 1-21-75 X TUBING PRESS. 200-1800 DISPOSITION OF G. LIST OF ATTACHY CIDIZING R I hereby certify SYLVEN	TOP (MD) CORD (Interval, e 3626-3640 4268-4282 Et. CALT WATER BALT WATER BALT WATER In	ISE and number) , 3675-3684 , 4390-444 DISPOSAL CXENCE NETHOD ( - RE CALCULATED 24-HOUR BAT Provide Size - RE CALCULATED - RE CALCULATED - RE CALCULATED - - RE CALCULATED - - RE CALCULATED - - - - - - - - - - - - -	6, 3856-387 1, 4630-466 R08 Flowing, gas lift, tplex TEST PERIOD DIL-BBL. TE OIL-BBL. TE Aformation is com	2 32. DEFTH INTE 0 MHXXXXXX pumping—size a 0IL—BÉL. 0IL—BÉL. - CAS—M - - - - - - - - - - - - -	ACID, SHOT, FRA SEVAL (MD) SEE ATTA add type of pump) GAB-MCF. CF. WATE Las determined fro	3546 T CTURE. CEMENT S AMOUNT AND KIND CHED WATER-BBL. 750 R-BBL. J. H. D m all available reco	3541' QUEEZE, ETC. OP MATERIAL USED ATUS (Producing or ) Injecting GAS-OIL EATIO - L GRAVITY-API (COBE.) - D BY aggett rds

و به بهت المراجعة المراجعة المراجعة المراجعة

Form OGCC-3

3-STATE, 2-USGS, 1-2HD, 1-DBB, 1-ALF, 3-FILE

Z	
О	
_	
-	
$\underline{\circ}$	
2	
5	
_	

or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 23, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), forma-tion and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments abouid be listed on this form, see item 35. Hem 4: If there are no applicable State required notes of the extent required by applicable Federal and/or State laws and in any attachments abouid be listed on this form, see item 35. Hem 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Ferme 32: and 24: If this well is completed for separate production from more interval sone (multiple completion), so state in the more and in any attachments. Items 22 and intervals, torices), buttom (s) and name(s) (if any) for only the interval sone (multiple completion), so state in the producing interval, or intervals, topics), buttom (s) and name(s) (if any) for only the interval souch interval. Interval: well is completed or separately produced, showing the additional data pertinent to such interval. Item 27: "Sack Cement": Attached supplemental records for this well should show the details of any multiple stage completion of the cementing tool. General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency

item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

	TRUE VERT. DEPTH	(+3156)	(+1516)	
	NUT MEAB. DEPTH	3260	4800	
	RANB	ł Uintah	f300	
PER, FLOWING AND BRUT-IN PERSURAS, AND ECOVERIDS	DESCRIPTION, CORTERATO, BIC.			
JED, TIME TOOL OF	HOLLOG		1997 - 1997 -	
L TESTED, CUSHION UI	101	NONE		
DEPTH INTERVA	CORP.			

## SALT WATER DISPOSAL WELL 3-31A3 ALTAMONT FIELD ACIDIZING RECORD

ZONES	AMOUNT
4630-4660	1700 gals 15% HCl
4390-4441	2860 gals 15% HCl
4268-4282	825 gals 15% HCl
3856-3924	1650 gals 15% HC1
3675-3686	660 gals 15% HC1
3626-3640	825 gals 15% HCl
3576-3592	935 gals 15% HCl

- 942 -							0	Drornell
n OGCC-3 🗸					OUDMIT IN	DIPLICATE*	J with	NELEIVEU
7	$\sim$	STATE	OF UTAH	ł	SUBMIT IN	(See other is structions o		HELENN OF PHERIAL
	OIL & GA	S CONSER	VATION C	соммі	SSION	reverse side	) 5. LEAST DES	AS, & MINING
		OR RECO	OMPLETIO	N REP	PORT AN	D LOG*	6. IF INDON,	ALLOTTEE OR TRUE NAL
Ia. TYPE OF WELL		GAS WELL	DRY	Othe	<sub>er</sub> Water	Disposal	7. UNIT AGREE	DALENT NAME
b. TYPE OF COMP	LETION:	P- PLUG	DIFF.				S. FARM OB L	EASE NAME
WELL A 2. NAME OF OPERATO	OVER L EN	BACK	RESVR.				Salt Wa	ter Disposal W
Chevron	Oil Compa	any - West	ern Divis		·		- 3-31A3	
P. O. Be	ox 599	Denver	, Colorad	lo 802	201	4a) #	10. FIELD AND	POOL, OR WILDCAT
4. LOCATION OF WELL At surface 11	L (Report locati	on clearly and i 964' FEL	n accordance wi (NE <sup>1</sup> /NE <sup>1</sup> /2)	ith any st	ate reguiremen		11. SEC., T., R OR AREA	., M., OH BLOCK AND SURV
At top prod. inte	erval reported be	elow same	(					
At total depth	Sé	ame					<u>S 31, T15</u>	R 13. STATE
			14. PERMI	IT NO.	DATE	ISSUED	Duchesne	Utah
5. DATE SPUDDED	16. DATE T.D. I	REACHED 17. I	ATE COMPL. (Re	eady to pr	od.) 18. ELE	VATIONS (DF. RK	B, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-24-75	10-2-	75 UG, BACK T.D., MD	11-107	F MULTIPL	LE COMPL.,	23. INTERVAL	S ROTARY TOOL	S CABLE TOOLS
4800		4700 PBTD	B	HOW MANY			Yes	NO
24. PRODUCING INTER	VAL(S), OF THIS	S COMPLETION-	TOP, BOTTOM, NA	ME (MD A	AND TVD)*			SURVEY MADE
3576-4660		Duchesn	e River					27. WAS WELL CORED
3576-4660 26. TYPE ELECTRIC A	ND OTHER LOGS	Duchesn RUN	e River	*				NO 27. WAS WELL CORED NO
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 28.	ND OTHER LOGS	Duchesn RUN C	e River	* D (Report	all strings set	in well) Cementi	NG RECOBD	I NO 27. WAS WELL CORED NO
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 28. CASING SIZE 8-5/8"	ND OTHER LOGS	Duchesn BUN C /FT. DEPTH #	e River	t D (Report HOLE 12-	all strings set	in well) CEMENTI 350 S	NG RECORD	NO 27. WAS WELL CORED NO AMOUNT PULLE
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 28. CASING SIZE 8-5/8" 5-1/2"	ND OTHER LOGS	Duchesn BUN C /FT. DEPTH #	e River	t D (Report HOLE 12- 7-	all strings set size -1/4'' -7/8''	in well) CEMENTI 350 s 1419 s	NG RECORD	NO 27. WAS WELL CORBD NO AMOUNT PULLE
<u>3576-4660</u> 26. type electric a DIFL, BHC/A 28. casing size 8-5/8'' 5-1/2''	ND OTHER LOGS	Duchesn RUN C /FT. DEPTH # #	e River	t D (Report HOLE 12- 7-	all strings set SIZE -1/4'' -7/8''	in well) CEMENTI 350 s 1419 s	NG RECORD	I NO 27. WAS WELL CORED NO AMOUNT PULLE
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 28. CASING SIZE 8-5/8'' 5-1/2'' 29.	ND OTHER LOGS	Duchesn BUN C /FT. DEPTH # # LINER RECO	ASING RECORI SET (MD) 319' 4800'	t D (Report HOLE 12- 7-	all strings set SIZE	in well) CEMENTI 350 s 1419 s 30.	NG RECORD SX SX TUBING RECO DEPTH SET (M	I NO 27. WAS WELL CORED NO AMOUNT PULLE DRD D) PACKEE SET (M
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 23. CASING SIZE 8-5/8'' 5-1/2'' 29. SIZE	ND OTHER LOGS	Duchesn RUN C /FT. DEPTH # # LINER RECO BOTTOM (MD	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM	* D (Report HOLE 12- 7- Tenter S	all strings set SIZE -1/4" -7/8" SCREEN (MD)	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8"	NG RECORD SX SX TUBING RECO DEPTH SET (M 3546	I NO 27. WAS WELL CORED NO AMOUNT PULLE DRD D) PACKEE SET (M 3541 <sup>4</sup>
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 23. CASING SIZE 8-5/8'' 5-1/2'' 29. 8IZE NONE	ND OTHER LOGS	Duchesn RUN C /FT. DEPTH # LINER RECO BOTTOM (MD Lize and number	e River	* D (Report HOLE 12- 7- KENT* S	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR	NG RECORD SX SX TUBING RECO DEPTH SET (M 3546 ACTURE. CEMEN	I NO 27. WAS WELL CORED NO AMOUNT PULLE DRD D) PACKER SET (M 3541 <sup>4</sup> T SQUEEZE, ETC.
<u>3576-4660</u> 26. TYPE ELECTRIC A DIFL, BHC/A 28. CASING SIZE 8-5/8'' 5-1/2'' 29. SIZE NONE 31. PERFORATION REG 3576-3592,	ND OTHER LOGS L/GR/CAL 24 24 14 TOP (MD) CORD (Interval, 3626-3640	Duchesn RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM 	* D (Report HOLE 12- 7	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV	in well) CEMENTI 350 s 1419 s 30. size 2-7/8" CID, SHOT. FR. AL (MD)	NG RECORD SX TUBING RECO DEPTH SET (M 3546 <sup>†</sup> ACTURE, CEMEN <sup>†</sup> AMOUNT AND KIN	I NO 27. WAS WELL CORED NO AMOUNT PULLE DRD D) PACKEE SET (M 3541' T SQUEEZE, ETC. D OF MATERIAL USED
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 23. CASING SIZE 8-5/8'' 5-1/2'' 29. SIZE NONE 31. PERFORATION REG 3576-3592, 3912-3924,	ND OTHER LOGS L/GR/CAL 24 14 TOP (MD) CORD (Interval, 3626-3640 4268-4282	Duchesn           BUN           C           /FT.         DEPTH           #	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM 86, 3856- 41, 4630-	* D (Report HOLE 12- 7	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATT	NG RECORD SX TUBING RECO DEPTH SET (M 3546 T ACTURE, CEMENT AMOUNT AND KIN ACHED	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541' T SQUEEZE, ETC. D OF MATERIAL USED
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 28. CASING SIZE 8-5/8" 5-1/2" 29. SIZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, w/4 shots/1	ND OTHER LOGS L/GR/CAL 24 24 14 TOP (MD) CORD (Interval, 3626-3640 4268-4282 Et.	Duchesn           RUN           C           /FT.         DEPTH           #	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM 386, 3856- 41, 4630-	* D (Report HOLE 12- 7- 7- 15,NT* 8 3872 4660	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID, SHOT. FR. AL (MD) SEE ATTA	NG RECORD SX TUBING RECO DEPTH SET (M 3546 T ACTURE, CEMENT AMOUNT AND KIN ACHED	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541' T SQUEEZE, ETC. ID OF MATERIAL USED
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 23. CASING SIZE 8-5/8" 5-1/2" 29. SIZE NONE 31. PERFORATION REC 3576-3592, 3912-3924, w/4 shots/f	ND OTHER LOGS L/GR/CAL 24 24 14 24 14 26 14 26 26 26 26 26 26 26 26 26 26	Duchesn BUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM 	* D (Report HOLE 12- 7- 7- 18- 3872 4660	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA	NG RECOED SX TUBING RECO DEPTH SET (M 3546 V ACTURE, CEMENY AMOUNT AND KIN ACHED	I NO 27. WAS WELL CORED NO AMOUNT PULLE DRD D) PACKEE SET (M 3541 <sup>4</sup> T SQUEEZE, ETC. D OF MATERIAL USED
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 28. CASING SIZE 8-5/8" 5-1/2" 29. 8IZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, w/4 shots/1 33.* CASING SIZE CASING SIZE CASING SIZE CASING SIZE 8-5/8" 5-1/2" 29. 8IZE 0 8IZE 8IZE 0 8IZE 8IZE 8IZE 8IZE 8	ND OTHER LOGS L/GR/CAL 24 24 14 24 14 25 26 24 24 24 24 24 24 24 24 24 24	Duchesn BUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 C DISPOSAI MORMON METHON	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM 	* D (Report HOLE 12- 7- 7- 8	all strings set SIZE -1/4'' -7/8'' SCREEN (MD) SCREEN (MD) 32. A DEPTH INTERV SCREEN (MD) SCREEN (MD	in well) CEMENTI 350 s 1419 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SUPPE of pump)	NG RECORD SX SX TUBING RECO DEPTH SET (M 3546 T ACTURE, CEMENT AMOUNT AND KIN ACHED WELL SAU	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKER SET (M 3541 <sup>7</sup> T SQUEEZE, ETC. ID OF MATERIAL USED STATUS (Producing or if-in) T D d oct i po
<u>3576-4660</u> 26. TYPE ELECTRIC A DIFL. BHC/A 28. CASING SIZE 8-5/8" 5-1/2" 29. 8IZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, W/4 shots/1 33.* CASING SIZE 11-20-75 DATE OF TEST	ND OTHER LOGS L/GR/CAL 24 24 14 24 14 26 14 26 24 24 24 24 24 24 24 24 24 24	Duchesn RUN RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 R DISPOSAI CHOKE S	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM ) SACKS CEM ) SACKS CEM ) SACKS CEM ) SACKS CEM ) CFlowing, gas Criplex IZE PROD'N.	* D (Report HOLE 12- 7- 7- 12- 7- 12- 7- 12- 7- 12- 7- 12- 7- 12- 7- 12- 7- 12- 12- 12- 12- 12- 12- 12- 12- 12- 12	all strings set SIZE 1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV CXINNK ping—size and OIL—BBL.	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SEE ATTA SEE ATTA SEE ATTA	NG RECOBD SX TUBING RECO DEPTH SET (M 3546 ACTURE, CEMENT AMOUNT AND KIN ACHED WELL SAU WATER-BBI	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541 T SQUEEZE, ETC. D OF MATERIAL USED STATUS (Producing or it-in) Injecting L. GAS-OIL BATIO
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 23. CASING SIZE 8-5/8" 5-1/2" 29. SIZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, w/4 shots/1 33.* CASING SIZE CASING SIZE 0 812 812 812 812 812 812 812 812	ND OTHER LOGS L/GR/CAL WEIGHT, LB 24 14 TOP (MD) CORD (Interval, 3626-3640 4268-4282 Et. SALT WATEF NOXX Inj.658 HOURS TESTE 24	Duchesn RUN RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 C DISPOSAI CHOKE S	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM C SACKS CEM ASING RECORI SET (MD) 319' 4800' 86, 3856- 41, 4630- C Criplex IZE PROD'N. TEST PLOT	* D (Report HOLE 12- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7-	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV CRENK: ping—size and OIL—BÉL.	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SEE ATTA SUPP of pump) GAS-MCF. -	NG RECORD SX TUBING RECO DEPTH SET (M 3546 T ACTURE, CEMENT AMOUNT AND KIN ACHED WELL SAU WATER-BBI 750 TER-BBI	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541' T SQUEEZE, ETC. D OF MATERIAL USED STATUS (Producing or STATUS (Produci
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 23. CASING SIZE 8-5/8" 5-1/2" 29. SIZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, w/4 shots/1 33.* SIZE 11-20-75 DATE FIRST PERFORMATION 11-21-75 HASK TUBING PRESS. 1200-1800	ND OTHER LOGS L/GR/CAL WEIGHT, LB. 24 14 TOP (MD) CORD (Interval, 3626-3640 4268-4282 Et. SALT WATEF NOWK Inj. 3626 LT HOURS TESTE 24 CASING PRESS -	Duchesn RUN RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 R DISPOSAI MORTON METHON 1]. D CHOKE E CALCULA 24-HOUE	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM ) SACKS	* D (Report HOLE 12- 7- 7- 6.00 12- 7- 7- 12- 7- 7- 12- 7- 7- 12- 12- 7- 7- 12- 12- 12- 12- 12- 12- 12- 12- 12- 12	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV XXIXNK ping—size and OIL—BBL. - GAS—MCE	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID, SHOT. FR. AL (MD) SEE ATTA SEE ATTA SUPP of pump) GAS-MCF. WA'	NG RECORD SX TUBING RECO DEPTH SET (M 3546 V ACTURE, CEMEN' AMOUNT AND KIN ACHED WELL SAU WATER-BBI 750 TER-BBL.	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKER SET (M 3541 T SQUEEZE, ETC. D OF MATERIAL USED STATUS (Producing or If-in) Injecting C. GAS-OIL BATIO - OIL GRAVITY-API (CORE
<u>3576-4660</u> 26. TYPE ELECTRIC A DIFL. BHC/A 28. CASING SIZE 8-5/8" 5-1/2" 29. 8IZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, w/4 shots/1 33.* CASING SIZE 11-20-75 DATE FIRST PERIONOR 11-21-75 HAGK TUBING PRESS. 1200-1800 34. DISPOSITION OF G	ND OTHER LOGS L/GR/CAL VEIGHT, LB. 24 14 TOP (MD) COED (Interval, G 3626-3640 4268-4282 Et. SALT WATEF NOW Inj.ess L HOURS TESTE 24 CASING PRESS - GAS (Sold, used f	Duchesn RUN RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 C DISPOSAI anoremon Method J	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM ) SACKS CEM ) SACKS CEM ) 86, 3856- 41, 4630- Criplex IZE PROD'N. TEST PL Criplex IZE COD'	* D (Report HOLE 12- 7- 7- 8 8 3872 4660 - 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV CTIONK ping—size and OIL—BÉL. - GAS—MCE	in well) CEMENTI 350 s 1419 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SEE ATTA SUPP of pump) GAS-MCF. - WAT	NG RECOED SX TUBING RECO DEPTH SET (M 3546 ' ACTURE, CEMEN' AMOUNT AND KIN ACHED WATER-BBI 750 TER-BBL. TEST WITNE T H	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541 T SQUEEZE, ETC. D OF MATERIAL USED STATUS (Producing or Injecting C. GAS-OIL BATIO OIL GRAVITY-API (CORE SSED BT Daggett
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 23. CASING SIZE 8-5/8" 5-1/2" 29. 8IZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, W/4 shots/1 33.* DATE FIRST PENDOX 11-20-75 DATE OF TEST 11-21-75 HAMK TUBING PRESS. 1200-1800 34. DISPOSITION OF G 35. LIST OF ATTACE	ND OTHER LOGS L/GR/CAL VEIGHT, LB 24 14 TOP (MD) COED (Interval, CASSAC 3626-3640 4268-4282 Et. SALT WATEF NOXK INJ. 488 IT HOURS TESTE 24 CASING PRESS - GAS (Sold, used for the second sec	Duchesn RUN RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number o, 3675-36 2, 4390-44 R DISPOSAI MCRHON METHO 1 D CHOKE S CALCULA 24-HOUB CALCULA 24-HOUB	e River ASING RECORI SET (MD) 319 ' 4800 ' RD ) SACKS CEM ) SA	* D (Report HOLE 12- 7-  7-  12- 7-  12- 7-  12- 7-  12- 7-  12- 7-  12- 7-  12- 7- 7-  12- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7-	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV CTIONK ping—size and OIL—B\$L. - GAS—MCH	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SEE ATTA SUPP of pump) GAS-MCF.	NG RECORD SX TUBING RECO DEPTH SET (M 3546 T ACTURE, CEMENT AMOUNT AND KIN ACHED WELL SAU WATER-BBL 750 TER-BBL. TEST WITNE J. H.	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541 T SQUEEZE, ETC. D OF MATERIAL USED BTATUS (Producing or II. GAS-OIL BATIO OIL GRAVITY-API (CORE SSED BT Daggett
3576-4660 26. TYPE ELECTRIC A DIFL. BHC/A 23. CASING SIZE 8-5/8" 5-1/2" 29. SIZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, W/4 shots/1 33.° DATE FIRST PENDOXXI 11-20-75 DATE OF TEST 11-21-75 HAGK TUBING PRESS. 1200-1800 34. DISPOSITION OF G 35. LIST OF ATTACE Acidizing	ND OTHER LOGS L/GR/CAL WEIGHT, LB 24 14 TOP (MD) CORD (Interval, 3 3626-3640 4268-4282 Et. SALT WATEF NOWK Inj.ess L CASING PRESS - GAB (Sold, used f HMENTS Recrod	Duchesn RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 R DISPOSAI MCHMON METHO 1	e River ASING RECORI SET (MD) 319' 4800' RD ) SACKS CEM ) SACKS CEM ) SACKS CEM ) 86, 3856- 41, 4630- C C (Flowing, gas Criplex IZE PROD'N. TED OIL-BE BATE - etc.)	* D (Report HOLE 12- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7- 7-	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV CTINNK ping—size and OIL—BBL. - GAS—MCE	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SEE ATTA SUPP of pump) GAS-MCF. WA	NG RECORD SX TUBING RECO DEPTH SET (M 3546 V ACTURE, CEMENT AMOUNT AND KIN ACHED WELL chu WATER—BBI 750 TER—BBL. TEST WITNE J. H.	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541' T SQUEEZE, ETC. ID OF MATERIAL USED STATUS (Producing or If-in) Injecting L. GAS-OIL BATIO OIL GRAVITY-API (CORE SSED BT Daggett
3576-4660 26. TYPE ELECTRIC A DIFL, BHC/A 28. CASING SIZE 8-5/8" 5-1/2" 29. 81ZE NONE 31. PERFORATION REG 3576-3592, 3912-3924, w/4 shots/1 33.° CASING SIZE 11-20-75 DATE FIRST PENDOXXI 11-21-75 HANK TUBING FRESS 1200-1800 34. DISPOSITION OF C 35. LIST OF ATTACE Acidizing 36. I hereby certify	ND OTHER LOGS L/GR/CAL WEIGHT, LB. 24 14 TOP (MD) CORD (Interval, 13 3626-3640 4268-4282 Et. SALT WATEF NOWK Inj.ess L CASING PRESS CASING PRESC CASING PRESS CASING PRESC CASING PRESC CASING PRE	Duchesn RUN RUN C /FT. DEPTH # LINER RECO BOTTOM (MD size and number 0, 3675-36 2, 4390-44 R DISPOSAL MONHON METHON 1]. D CHOKE S LURE CALCULA 24-HOUB CALCULA 24-HOUB	e       River         ASING RECORI         SET (MD)         319'         4800'         B         ASING RECORI         SET (MD)         319'         4800'         B         ASING RECORI         SET (MD)         319'         4800'         B         B         ASING RECORI         B         B         B         B         B         B         C         B         B         B         B         C         Flowing, gas         C         S         C         Flowing, gas         C         Flowing, gas         C         C         Flowing, gas         C         Flowing, gas         C         S         C         B         C         B         C         B         C         B	* D (Report HOLE 12- 7- 7- 6.00 6.00 7.00 7.00 7.00 7.00 7.00 7.00	all strings set SIZE -1/4" -7/8" SCREEN (MD) 32. A DEPTH INTERV CRIDNK ping—size and OIL—BÉL. - GAS—MCE - te and correct. A. MISD	in well) CEMENTI 350 s 1419 s 30. SIZE 2-7/8" CID. SHOT. FR. AL (MD) SEE ATTA SEE ATTA Sype of pump) GAS-MCF.	NG RECORD SX TUBING RECO DEPTH SET (M 3546 V ACTURE, CEMENT AMOUNT AND KIN ACHED WATER—BBI 750 TER—BBL. TEST WITNE J, H, Fom all available	I NO 27. WAS WELL CORED NO AMOUNT PULLE AMOUNT PULLE DRD D) PACKEE SET (M 3541 T SQUEEZE, ETC. D OF MATERIAL USED STATUS (Producing or STATUS (Producing or Injecting C. GAS-OIL EATIO OIL GRAVITY-API (CORE SSED BT Daggett Tecords

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal If not fled prior to the time this summary record is submitted, versaring separate reports for separate completions. If not fled prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and intectional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments from the record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and intectional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments will be required to applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local loca

**Hem 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Hem 22:** and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval. **Hem 29:** "Sacks Coment": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Hem 33:** Submit a separate completion report on this form for each interval to be separately produced. Showing the separately produced. (See instruction for items 22 and 24 above.)

BHOW ALL MPOI	RTANT ZONES OF PO	ROSITT AND CONTEN USED, TIME TOOL O	TS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING PEN, FLOWING AND SHUT-IN PRESSUEDS, AND RECOVERIES	38. GBOLO	OIC MARKERS	
FORMATION	AOL	BOTTOM	DESCRIPTION, CONTENTS, ETC.		TO	
					MEAS. DEPTH	TRUE VERT. DEPTH
	NONE			Uintah	3260	(+3156)
				TD 4800	4800	(+1516)

## SALT WATER DISPOSAL WELL 3-31A3 ALTAMONT FIELD ACIDIZING RECORD

ZONES	AMOUNT
4630-4660	1700 gals 15% HC1
4390-4441	2860 gals 15% HC1
4268-4282	825 gals 15% HC1
3856-3924	1650 gals 15% HC1
3675-3686	660 gals 15% HC1
3626-3640	825 gals 15% HC1
3576-3592	935 gals 15% HC1

70



STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING 1588 West North Temple Salt Lake City, Utah 84116 (801) 533-5771 July 30, 1976

CALVIN L. RAMPTON Governor

1

GORDON E. HARMSTON Executive Director, NATURAL RESOURCES

> CLEON B. FEIGHT Director

> > Chevron Oil Company P. O. Box 599 Denver, Colorado 80201

> > > Re: Well No. SWD 3-31A3 Sec. 31, T. 1S, R. 3W Duchesne County, Utah

Gentlemen:

Our records indicate that you have not filed a " Report of Water Encountered during Drilling" for the above referred to well.

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed with the Commission.

In order that we may complete our records, please file this report and any water analysis reports as soon as possible.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER RECORDS CLERK OIL, GAS, AND MINING BOARD

GUY N. CARDON Chairman

CHARLES R. HENDERSON ROBERT R. NORMAN JAMES P. COWLEY HYRUM L. LEE





P.O. Box 119

•

Fort Duchesne, Utah 84026

(801) 722-2254

			-	*	
SAMPLE TAK	(EN	W-2822			
SAMPLE REC	EIVED	11-10-7	5		
RESULTS RE	PORTED	11-12-7	5		· · · ·
SAMPLE DESCRIPTION COMPANYCHEVTON Oil Co.	LEAS	SE Hartm	FIEL	D NO	wet t
FIELD COUNTY		STATE	au		. WELL NO. <u>3-3</u>
SAMPLE TAKEN FROM		_ JIAIC		· - ·'	5-3
PRODUCING EXPLATION	3576		2000		
		10P	3686		
S.W.D.W.					
	SAMDI E	TAKEN ON			
	JAMPLE	TAKEN BY			
C	HEMICAL AND F	PHYSICAL PROPE	RTIES		· · · · · · · · · · · · · · · · · · ·
SPECIFIC GRAVITY @60/60° F	0647рн		0.12 04	W HETERS	770
	•			m MEIERS @	
TOTAL HARDNESS 6618.0 mg/L	as CaCO3	TOTAL AL	KALINITY	02.0	mall as Caco.
				83.0	
CONSTITUENT	MILLIGRAMS	MILLEQUIVALENTS			
CONSTITUENT		PER LITER		R	EMARKS
CALCIUM - Ca + +	1850 0		<u> </u>		·
MAGNESIUM - Mg + +	101 0	92.50	<u> </u>		
SODIUM - No +		1204 25	<u> </u>	ļ	
-		1304.35	<u> </u>		
BARIUM (INCL. STRONTILIM) - Ba + +		~	<u>  </u>		
TOTAL IRON - Fet + AND Fet + +		0	<u>  </u>		
BICARDONATE HCO.	<u></u>	0.41	1436.69	)	
CAPRONATE CO. 27	83.0	1.36			
CARDGNATE - CO3	0	0			
SULFATE - SUA	4700.0	97.92		******	
CHLORIDE - CL -	48980.4	1379 73	1470 01		
TOTAL DISSOLVED SOLIDS	85160			· ·	
			l		
		NTS DED LITED			
		NIS FER LHER			
		Na		STANDARD	
			N		
╋╋╋╾╋╬╬╦╝ <b>╪╾╋╫╫┼╢╪╴┨╓╦╬╪╩╱╞╌┨╽┧╢╝║╸</b> ╽╽╽		∭ C₀ []]			
		10		*****	<del>┍╻╹┊┊╹╞┊┊┊╹┊┊╹┊┊</del> ┾
				1111111111	
╆╉╄╾╉┿┼╎╎╎┞┥╼┫╱╧┇╃╄╉╕╼┨╝╢╿╿╿╿╴╸┠╴╴╡╕╕╡╿╢║╸╴╿┚╝	┟╅╢╢╏═╾┫┥┥┥┥┥┥╢				
		10			Ŋ <u>Ţ</u> ġ <del>ĨĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬĬ</del>
					7
	<u> </u>	Ш Fo ЦЦЦЦЦЦ			
8 5 7 7 6	50 <u>5</u> 0	810 		0	
	1,0	0,0			
					·
		ANALVOT			
		AUALISI			
		AUFAUFA			
		UNECKED			•

CIRCULATE TO DIRECTOR PETROLEUM ENGINEER MINE COOPDINATOR-ADMINISTRATIVE ASSISTAN Memos To File FMA FILING

July 8, 1977

Re: Saltwater Disposal Wells Greater Bluebell-Altamont Area

Chevron Oil Co. SDW #3 (1-31A3) Sec. 31, T. 1 S., R. 3 W.

This disposal well was in operation at the time of the visit. The maximum pressure was recorded at 1,250 pounds psi, and the cumulative meter reading was 348,806 barrels. This locations is undoubtedly the dirtiest within the greater Bluebell-Altamont field.

\* \* \*

Shell Oil Co. SDW #2-4B3 Sec. 4, T. 2 S., R. 3 W.

At the time of the visit, the recording meter was broken and apparently had been in this condition for some time. The pressure gauge on the well indicated a pressure of 800 pounds psi. There was a valve leaking in the engine house and spilling a considerable amount of water within the area. This location is not consistent with typical Shell operations.

\* \* \*

Mapco Inc. Allred 2-16 (SDW) Sec. 16, T. 1 S., R. 3 W.

At the time of the visit, the well was being actively operated and injecting produced water at 900 pounds psi. The cumulative meter reading was 242,101 barrels. As usual, Mapco's housekeeping was exceptionally high.

\* \* \*

Chevron Oil Co. SWD Well #1-3A2 Sec. 3, T. 1 S., R. 2 W.

This location was visited and, at the time of the visit, the well was not operating. No pressure gauge was evident and a cumulative meter reading was 664,882 barrels.

This is a relatively dirty and poorly kept facility.

PATRICK L. DRISCOLL CHIEF PETROLEUM ENGINEER

PLD/src

FORM OGC-8-X FILE IN QUADRUPLICATE

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL AND GAS CONSERVATION 1588 West North Temple Salt Lake City, Utah 84116

## REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name and Number
Operator Chevron Oil Company
Address P. O. Box 599 Denver, Colorado 80201
Contractor Willard Pease Drilling Co.
Address P. O. Box 548 Grand Junction, Colorado 81501
Location <u>NE 1/4</u> , <u>NE 1/4</u> , Sec. <u>31</u> ; T. <u>1 XX</u> ; R. <u>3 XX</u> ; <u>Duchesne</u> County S $W$
Water Sands:
Depth:Volume:Quality:From-To-Flow Rate or Head -Fresh or Salty
1. 3576 - 3686 Swabbed 4 bbls/hr. Salty (see attached)
2.
3
4.
5.
(Continue on Reverse Side if Necessary)

Fermation Tops: The well was drilled with mud as a salt water disposal well. The above interval was perforated and tested through casing.

NOTE: (a) Upon diminishing supply of forms, please inform this office. (b) Report on this form as provided for in Rule C-20, General Rules

And Regulations and Rules of Practice and Procedure. (c) If a water quality analysis has been made of the above reported

zone, please forward a copy along with this form.

TR file CC -DG

Ĺ



ł

RESEARCH LABORATORIES ζ

١

P.O. Box 119 

Fort Duchesne, Utah 84026

(801) 722-2254

LABORATORY	NUMBER	W-2822				
SAMPLE TAKE	N	11-10-7	5	<u> </u>		
RESULTS REPO	DRTED	11-12-7	5			
SAMPLE DESCRIPTION			FIEL	) NO		
COMPANY CHEVRON Oil Co.	LEAS	EHartm	an		WELL NO	). <u>3-3</u>
FIELD COUNTY	· .	_ STATE				3-3
SAMPLE TAKEN FROM						-
	3576	TOP	3686			
REMARKS						
S.W.D.W.						
	SAMPLE	TAKEN BY			· · ·	
CH	IEMICAL AND I	PHYSICAL PROPER	KTIES			
SPECIFIC GRAVITY @60/60° F	<u>164/</u> pH	<u>/.35</u> _RES	<u> </u>	MMETERS	@	
	• [a[]	TOTAL	PAT INITY	02.0	mg/L as	CaCO <sub>2</sub>
TOTAL HARDNESS 6618.0	3 CBCU3			83.0		
CONSTITUENT	MILLIGRAMS					
CONSTITUEN	mg/L.	MEQ/L			REMARKS	
CALCIUM - Ca + +	1850.0	92.50				
MAGNESIUM - Mg + +	481.0	39,43				
SODIUM - Na +	30000.0	1304.35				
•				L		
BARIUM (INCL. STRONTIUM) - Ba + +	0	0	1	ļ	·····	
TOTAL IRON - Fo+ + AND Fo + + +	11.50	0.41	1436.69	<u>)</u>		
BICAREONATE - HCO3	83.0	1.36	ļ			
CARBONATE - CO3	0	0	<u></u>			
SULFATE - SOA	4700.0	97.92		L		
CHLORIDE - CL -	48980.4	1379.73	1479_03	<u></u>		
TOTAL DISSOLVED SOLIDS	85160	L		L		
d	MILLEQUIVAL	ENTS PER LITER				
				677 A N.D. A D.D.		
LUGARITHMU		Na		STARDARD	J	
		100	IINTIII		111111111	
		Co IIII			441111	
┿┿┿┽╶╴╋╫╢┍╖┽┝╶╴╋╢╋╢┥┝┍╴╋╢╢╢┇╧┾╼╄╶┥┽┥┼╢╖╼╼┽┥	╫╢╠┫╅┥		┟┥┥┥┥┥		<u>╎</u> ╎ ╎ ╎ ╎ ╎ ╎ ╎ ╎ ╎ ╎ / / / / / / / / /	<del>╏╏┥┥┥┥┥</del>
		10		INTI	IIIIAIIII	
				IIINILL	H111111	
				min		
	ě Š	8 io		U		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0				
		······································			,	
		ANALYST.	· · · · · · · · · · · · · · · · · · ·			
		CHECKEN				
		CHECKED				•

SCOTT M. MATHESON Governor

GORDON E. HARMSTON Executive Director, NATURAL RESOURCES

CLEON B. FEIGHT

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple

Salt Lake City, Utah 84116

(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON Chairman

JOHN L. BELL C. RAY JUVELIN THADIS W. BOX CONSTANCE K. LUNDBERG EDWARD T. BECK E. STEELE McINTYRE

TO: All Water Disposal Well Operators

DATE: September 30, 1980

FROM: CLEON B. FEIGHT

SUBJECT: Waste Water Disposal WEll's

A recent survey of the WDW'S in the Uintah Basin was made and the following apparent deficiencies were noted:

(1) If a high-low pressure shut-off switch was installed, in most instances the high shut-off was far above the formation break-down pressure. Also, on many wells, a pressure chart or gauge for injection pressure had not been installed.

(At this point we'd like to remind all operators that one of the conditions for the utilization of WDW'S was the selection of 0.5/lb. square inch/ft. of depth as the overall formation fracture gradient).

(2) In numerous cases we were unable to determine the presence of a recording device or meter for daily volume injected. (This Division does not at this time specify the type of recording device to be utilized, however, in the case of continued absence of any recorder, it shall and will be the perogative of the Division to shut the WDW in until such time a working recording device is installed).

(3) Housekeeping in many areas is totally inadaquate, and results in unnecessary pollution.

(4) Well identification signs were missing on several locations.

This Division would appreciate if all operators would take immediate steps to put these wells in proper operating order no later than October 30, 1980.

Due to the recent adoption of Rules & Regulations for underground injection of produced water, as well as secondary recovery, etc. by the EPA, a representative from said agency will accompany a member of this Division on our November inspection. Memo September 30, 1980 Page Two

So at this time we ask and hope that these wells be in First Class condition.

THANK YOU

DIVISION OF OIL, GAS AND MINING

CLEON B. FEIGHT DIRECTOR

CBF/bjh
T. LEE

Form OGC-1b SUBM., IN	Harlet ALE
STATE OF UTAH (Other inst	tructions on er side)
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	5. LEASE DESIGNATION AND BERIAL NO.
SUNDRY NOTICES AND DEPONTS ON VEHICLE	6. IP INDIAN, ALLOTTER OR TRIBE NAME
JUINDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepes or plug back to a different reservoir. Use "APPLICATION FOR PERMIT-" for each proposal.)	
OIL UAS WELL OTHER Water Disposal	7. URIT AGREENENT NAME
CHEVRON U.S.A. INC.	Salt Water Disposal Well
	9. WELL NO.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.	
At surface	Altamont - Duchesne River
1109' FNL and 964' FEL NENE	11. BEC., T., B., M., OB BLK. AND SURVEY OR AREA
14. PERMIT TO	Sec. 31, T1S, R3W, USB&M
18. HLEVATIONS (Show whether DF, BT, GR, etc.)	12. COUNTY OR PARISME 18. STATE
	Duchesne Utah
Check Appropriate Box To Indicate Nature of Notice, Report, or	Other Data
NOTICE OF INTENTION TO: SUBSE	QUENT REPORT OF :
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF	REPAIRING WELL
BHOUT OR ACHURE X ARADINA	ALTERING CABINO
REPAIR WELL CHANGE PLANS	
(Other) (Note: Report result	ts of multiple completion on Well
(Other) 17. DERCRIDE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is directionally drilled give subsurface locations and give pertinent date	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any
(Other) 17. DESCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent defails, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true verti- nent to this work.)*	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting nny cal depths for all markers and zones perti-
(Other) 17. DESCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well plotion Report and Log form.) s. including estimated date of starting any ical depths for all markers and zones perti-
(Other) 17. DERCRIDE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well plotion Report and Log form.) a. including estimated date of starting nny ical depths for all markers and zones perti- edure.
(Other) 17. DERCRIDE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure.
(Other) 17. DESCRIPT PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure. 3-State
(Other) 17. DESCRIPT PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any ical depths for all markers and zones perti- edure. 3-State 2-USGS
(Other) 17. DESCRIPTE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH
(Other) 17. DESCRIBE PHOPORED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true verti- It is proposed to acidize this well as per the attached proce	ts of multiple completion on Well pletion Report and Log furm.) s. including retimated date of starting nny cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723
(Other) 17. DERCEIBLE PROPORED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce APPROVED BY THE STATE OF UTAH DIVISION OF	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DESCRIBE PHOPPISED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b>	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCRIBE PHOPORED OR COMPLETED OPERATIONS (Clearly state all pertinent defails, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true verti- It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b>	ts of multiple completion on Well pletion Report and Log form.) s. including retimated date of starting nny cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true verti- It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY:	ts of multiple completion on Well pletion Report and Log form.) a. including estimated date of starting nny ical depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCRIPT PROPORTION OR COMPLETED OPERATIONS (Clearly state all pertinent defails, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY:	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCEDE PROPORED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is nent to this work.)* It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY:	ts of multiple completion on Well pletion Report and Log form.) s. including retimated date of starting nny cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) IT. DERCRIPT PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true vertine It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY:	ts of multiple completion on Well pletion Report and Log form.) a. including estimated date of starting any ical depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCRIBE PHOPORED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true vertine It is proposed to acidize this well as per the attached proce OF UTAH DIVISION OF OIL, GAS, AND MINING DATE: BY:	ts of multiple completion on Well pletion Report and Log form.) s. including retimated date of starting nny cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DEACRIDE PHOPOSED OR CONTENTION (Clearly state all pertinent derails, and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true vertine nent to this work.)* It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY:	ts of multiple completion on Well pletion Report and Log form.) a. including retimated date of starting nny ical depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCAIDE PHOPORED OR COMPLETED DEPENDENTIONS (Clearly state all pertinent details and give pertinent data proposed work.) <sup>1</sup> directionally drilled, give subsurface locations and measured and true verti- nent to his work.) <sup>2</sup> It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY: <b>No additional surface</b> disturbances required	ts of multiple completion on Well pletion Report and Log form.) s. including estimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCEIBE PROPORTION OF COMPACTIONS (Clearly state all pertinent defails and give pertinent date proposed work. If well is directionally drilled, give subsurface locations and measured and true verti- nent to this work.)* It is proposed to acidize this well as per the attached proce <b>APPROVED BY THE STATE</b> <b>OF UTAH DIVISION OF</b> <b>OIL, GAS, AND MINING</b> <b>DATE:</b> BY: No additional surface disturbances required for tills activity.	ts of multiple completion on Well pletion Report and Log form.) a. including retimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other) 17. DERCENCE From Completion of Completion of the second state and from the second state and the seco	ts of multiple completion on Well plotion Report and Log form.) a. including resimated date of starting any cal depths for all markers and zones perti- edure. 3-State 2-USGS 1-LRH 1-Sec. 723 1-File
(Other)  I. DERCEDE From the construction of the activity state all pertinent details, and give pertinent details and give subsurface locations and measured and true vertine to this work.)*  It is proposed to acidize this well as per the attached proce  APPROVED BY THE STATE  OF UTAH DIVISION OF OIL, GAS, AND MINING DATE: BY:  It is activity that the toppolag is true and correct  BICNED  WWWWM  Details activity and toppolag is true and correct  It is proposed is true and correct  It is proposed to activity that the toppolag is true and correct  Details activity and the toppolag is true and correct  It is proposed to activity	December 1 1091
(Other) IT. DEACHIEF PHOPPERTY OR CONFERENCES INCLUSIVELY STATE AND PERTURANT AND ACCOMPLETED UPREATIONS INCLUSIVE SUBJECTIONS and EXCEPTION OF A formation of the activity of the second directionally drilled, give subsurface locations and measured and true verifient during the activity of the activit	<pre>ts of multiple completion on Well plotion Report and Log form.) s. including resimated date of starting nny cal depths for all markers and zones perti- edure.</pre>
(Other)       (Norst: Report result         17. DEACABLE Propersion on constrained interventions into a propertion of the method of the method in the method intervention of themethod intervention of	<pre>ts of multiple completion on Well pletion Report and Log form.) s. including restimated date of starting nny cell depths for all markers and zones perti- edure.</pre>
(Other)       INTE: Report result         17. DPREADE PROVED IN CONTRICT DEPENDIONS (Charles and pertinent derails and give pertinent der Artellen and set pertinent der and teller of and teller of the pertinent der and teller of telle and teller of teller of telle and teller of teller of teller of teller of teller of telle	<pre>is of multiple completion on Well plotion Report and Log form.) s. including resimated date of starting nny ceil depths for all markers and zones perti- edure.</pre>

Well Data: TD: 4800' PBTD: 4700' Csg: 5-1/2" 14# J-55 @ 4800' Tbg: 2-7/8" 6.5# N-80 @ 3546' Pkr: Baker 5-1/2" Ret. D @ 3541 Perfs: 3576'-4660' (164 levels, 656 holes)

Procedure:

···· 2 3 2 4 · · · ·

- 1. MIR & RU
- 2. POOH w/ tbg. & pkr.
- 3. RIH w/ bit and scraper and circulate hole clean to PBTD w/ produced water.
- 4. POOH w/ tools & RIH w/ pkr & RBP to isolate and acidize the following intervals (test tbg to 5000 psig):

	Interval	Acid Volume	# Balls
1)	3576'-3592'	1000 gal	75
2)	3626'-3640'	1400 gal	65
3)	3675'-3686'	1100 gal	15
4)	3856'-3872' 1	1000 gal	75
5)	3912'-3924' 💥	1200 gal	55
6)	4268'-4282'	1400 gal	65
7)	4390'-4441' 🖄	1400 gal	200
8)	4630'-4660' 🐄	1400 gal	100

Fluids:Acid:15% HCl plus necessary additivesFlush:Produced waterNitrogen:+ 500 scf/bbl throughout all fluids

Pump	Requirements:	Pressure:	5000 psig max
		Rate:	Max rate @ 5000 psig
		HHP:	2000 should be available

Pumping Procedure (all zones):

 Pump 50 bbls produced water
 Follow w/ acid containing 7/8", 1.1 S.G. balls throughout
 Flush to top of perfs

Procedure: (continued)

, , , , , ,

- 5. Flow/swab back complete load from each zone 15-30 minutes after shut down. Haul dirty acid water away - do not dispose of water into Chevron's system.
- 6. POOH w/ all tools after final zone is treated.
- 7. RIH w/ ret. pkr on tbg. Test tbg to 5000 psig while RIH. Displace annulus w/ 2% KCl water containing 1 drum Champion R 228 corrosion inhibitor (or equivalent) & set pkr @ 3541'. Fill annulus to surface w/ Diesel.
- 8. RD WOR & return well to injection.
- 9. Arrange for a temp/tracer survey to be run on this well within a few days after returning the well to injection.

WELL NAME: SWD 3-31A3

FIELD: <u>Altamont</u>

#### PROPOSED TREATMENT PROCEDURE

- 1. Objective: Open up perfs to increase disposal capacity.
- 2. Size and type of treatment: 9,900 gals 15% HCL.
- 3. Intervals to be treated: 3576-4660
- 4. Treatment down casing or tubing: Tubing
- 5. Method of localizing its effects: Packer and retrievable bridge plug to straddle intervals.
- 6. Disposal of treating fluid: Spent acid will be swabbed back to fractank.
- 7. Name of company to do work: Dowell, Halliburton or Western
- 8. Anticipated additional surface disturbances: None
- 9. Estimated work date: December 18, 1981
- 10. Present status, current production and producing interval:

Date	BOPD	MCFD	BWPD

Nov 1-16, 1981

1355 Injecting

SCOTT M. MATHESON Governor

GORDON E. HARMSTON Executive Director, NATURAL RESOURCES

> CLEON B. FEIGHT Director



### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING 1588 West North Temple Salt Lake City, Utah 84116 (801) 533-5771

August 11, 1981

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON Chairman

JOHN L. BELL C. RAY JUVELIN THADIS W. BOX CONSTANCE K. LUNDBERG EDWARD T. BECK E. STEELE McINTYRE

Chevron USA Inc. P.O. Box 266 Neola, UT 84053

> Re: <u>SWD 3-31A3</u> Sec. 21, T. 1S, R. 3W <u>Water Disposal #1 (44-3C)</u> Sec. 3, T. 1S, R. 2 W <u>SWD #2-10B1</u> Sec. 10, T. 2S, R. 1W Duchesne County, UT

Gentlemen:

Please be advised that an inspection was made on the above mentioned disposal facilities, at which time a few deficiencies were noted:

- 1) SWD 3-31A3 and W.D. #1 (44-3C) need to have the pits cleaned up and burned-off.
- 2) The SWD #2-10B1 pumping facility needs to be cleaned up and a cumulator needs to be installed.

Your prompt attention to the above matters will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

THALIA R. PRATT UNDERGROUND INJECTION SPECIALIST

Form OGC(1b)		SUBM. N	1RI ALE	
	STATE OF UTAH	(Other insi revers	eruchons on e side)	
DEI	PARTMENT OF NATURAL RE	ESOURCES		
Ľ	DIVISION OF OIL, GAS, AND	MINING	5. LEASE DESIGNATION	LND BARIAL NO.
(Do not use this form for	NOTICES AND REPORTS	S ON WELLS ug back to a different reservoir.	8. IF INDIAN, ALLOTTS	8 OS TBIBE MAME
			7. UNIT AGEREMENT HA	MB
WBLL WBLL OT	### Water Disposal			
2. FAME OF OFERATOR			8. FARM OR LEASE HAN	í B
CHEVRON U.S.A. I	NC.		Salt Water Dis	sposal Well
I. ADDRESS OF OPERATOR			9. WELL NO.	
<u>P. O. Box 599, D</u>	enver, CO 80201		3-31A3	
<ol> <li>LOCATION OF WELL (Report locs 800 also space 17 below.)</li> </ol>	ation clearly and in accordance with a	ny State requirements.*	10. PIELD AND POOL, OF	WILDCAT
At surface			Altamont - Duc	hesne Rive
1109' FNL and 96	4'FEL NENE		11. SBC., T., B., M., OB B SURVET OR ABBA	LE. AND
			Sec. 31, T1S,	R3W, USB&M
14. FEBMIT RO.	15. BLEVATIONS (Show whether	DF. RT. GR. sta.)	12. COUNTY ON PARISM	18. STATE
	KB 6416		Duchesne	Utah
.6. Chec	k Appropriate Box To Indicate	Nature of Notice, Report, or	Other Data	
NOTICE OF	DT KOITKETKI	aU343	QUENT REPORT OF :	
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER ANUTOPE		
PRACTURE TREAT	NULTIPLE COMPLETE	FRACTURE TREATMENT		****
BHOUT OR ACIDIZE X	ABANDON+	SHOUTING OR ACIDIZING		
REPAIR WELL	CHANGE PLANS	(Other)		•
(Other)		(NOTE: Report result Completion or Recom	ts of multiple completion of	well

It is proposed to acidize this well as per the attached procedure.

APPROVED BY TH OF UTAH DIVIS OIL, GAS, AND I DATE: BY:	HE STATE ION OF MINING	3-State 2-USGS 1-LRH 1-Sec. 723 1-File
	No additional surface disturbances required for this activity.	
18. I breeby certify that the foregoing is true and c SIGNED	TITLE Engineering Assistant	DATE December 1, 1981
(This space for Federal or State office use) APPROVED BY CONDITIONS OF APPROVAL, IF ANY :	TITLE	DATE

;

Well Data: TD: 4800' PBTD: 4700' Csg: 5-1/2" 14# J-55 @ 4800' Tbg: 2-7/8" 6.5# N-80 @ 3546' Pkr: Baker 5-1/2" Ret. D @ 3541 Perfs: 3576'-4660' (164 levels, 656 holes)

Procedure:

- 1. MIR & RU
- 2. POOH w/ tbg. & pkr.
- 3. RIH w/ bit and scraper and circulate hole clean to PBTD w/ produced water.
- 4. POOH w/ tools & RIH w/ pkr & RBP to isolate and acidize the following intervals (test tbg to 5000 psig):

	Interval	Acid Volume	# Balls
1)	3576'-3592'	1000 gal	75
2)	3626'-3640'	1400 gal	65
3)	3675'-3686'	1100 gal	15
4)	3856'-3872'	1000 gal	75
5)	3912'-3924'	1200 gal	55
6)	4268'-4282'	1400 gal	65
7)	4390'-4441'	1400 gal	200
8)	4630'-4660'	1400 gal	100

Fluids:Acid:15% HCl plus necessary additivesFlush:Produced waterNitrogen:+ 500 scf/bbl throughout all fluids

Pump Requirements:	Pressure:	5000 psig max
	Rate:	Max rate @ 5000 psig
	HHP:	2000 should be available

Pumping Procedure (all zones):

- Pump 50 bbls produced water
   Follow w/ acid containing 7/8",
   1.1 S.G. balls throughout
- 3. Flush to top of perfs

Procedure: (continued)

. . .

- 5. Flow/swab back complete load from each zone 15-30 minutes after shut down. Haul dirty acid water away - do not dispose of water into Chevron's system.
- 6. POOH w/ all tools after final zone is treated.
- 7. RIH w/ ret. pkr on tbg. Test tbg to 5000 psig while RIH. Displace annulus w/ 2% KCl water containing 1 drum Champion R 228 corrosion inhibitor (or equivalent) & set pkr @ 3541'. Fill annulus to surface w/ Diesel.
- 8. RD WOR & return well to injection.
- 9. Arrange for a temp/tracer survey to be run on this well within a few days after returning the well to injection.

WELL NAME: SWD 3-31A3

FIELD: Altamont

### PROPOSED TREATMENT PROCEDURE

- 1. Objective: Open up perfs to increase disposal capacity.
- 2. Size and type of treatment: 9,900 gals 15% HCL.
- 3. Intervals to be treated: 3576-4660
- 4. Treatment down casing or tubing: Tubing
- 5. Method of localizing its effects: Packer and retrievable bridge plug to straddle intervals.
- 6. Disposal of treating fluid: Spent acid will be swabbed back to frac tank.
- 7. Name of company to do work: Dowell, Halliburton or Western
- 8. Anticipated additional surface disturbances: None
- 9. Estimated work date: December 18, 1981
- 10. Present status, current production and producing interval:

Date	BOPD	MCFD	BWPD

Nov 1-16, 1981

1355 Injecting

Form OGC-15 DEP	STATE OF UTAH ARTMENT OF NATURAL RES	SUBM ST (Other instru- reverse OURCES	RT. ATLA uctions on side)	
וס	VISION OF OIL, GAS, AND M	NNING	5. LEASE DESIGNATION	TAD BRAILL NO.
SUNDRY N (Do not use this form for Use "AP	OTICES AND REPORTS	ON WELLS back to a different reservoir. proposala)	6. IF INDIAN, ALLOTISS	OS TRIDE NAME
1. OIL UAR UAR OTH	** Water Disposal		7. URIT AGEREMENT MAD	
2. NAME OF OPERATOR			S. PARM OR LEASE HAND	
CHEVRON U.S.A. IN	C.		Salt Water Dis	posal Well
3. ADDRESS OF OPERATOR			9. WELL NO.	From House
P. O. Box 599, De	nver, CO 80201		3-31A3	
4. LOCATION OF WELL (Report locat	ion clearly and in accordance with any	Blate requirements.*	10. FIELD AND FOOL, OR	WILDCAT
At surface			Altamont - Duc	hesne River
1109' FNL and 964	'FEL NENE		11. BBC., T., B., M., OR BL BURVET OR ASSA	E. AND
			Sec. 31, T1S, 1	R3W, USB&M
14. PERMIT NO.	15. REBVATIONS (Show whether D	F. RT. OR. M. )	12. COUNTY ON PARIEN	18. STATE
	KB 6416		Duchesne	Utah
16. Check	Appropriate Box To Indicate N	Nature of Notice, Report, or C	Other Data	
NOTICE OF 1	TBNTION TO :	SUBSEQ	CENT ABPOAT OF :	
TEST WATER SHUT-OFF	FULL OB ALTER CASING	WATER BHUT-OFF		
FRACTURE TREAT	NULTIPLE COMPLETE	FRACTURE TREATMENT		
SHOOT OR ACIDIZE X	ABANDON			
REPAIR WELL	CHANGE PLANS	(Other)		·
(Other)		(Nors; Report results Completion or Recommi	of multiple completion or	a Well
17. DERCRIBE PROPOSED OR COMPLETED proposed work. If well is dir nent to this work.) *	OPERATIONS (Clearly state all pertinen sectionally drilled, give subsurface local	I details, and give pertinent dates, tions and measured and true vertice	including estimated date al depths for all markers	of starting any and zones perti-

It is proposed to acidize this well as per the attached procedure.

3-State 2-USGS 1-LRH 1-Sec. 723 1-File

No additional surface disturbances required for this activity.

18. I bereby certify that the foregoing is true and correct BIGNED	TITLE _ Engineering Assistant	DATD December 1, 1981
(This space for Federal or State office use) APPROVED BY CONDITIONS OF APPROVAL, IF ANY :	TITLE	DATE

Well Data: TD: 4800' PBTD: 4700' Csg: 5-1/2" 14# J-55 @ 4800' Tbg: 2-7/8" 6.5# N-80 @ 3546' Pkr: Baker 5-1/2" Ret. D @ 3541 Perfs: 3576'-4660' (164 levels, 656 holes)

Procedure:

in a 1 .

- 1. MIR & RU
- 2. POOH w/ tbg. & pkr.
- 3. RIH w/ bit and scraper and circulate hole clean to PBTD w/ produced water.
- 4. POOH w/ tools & RIH w/ pkr & RBP to isolate and acidize the following intervals (test tbg to 5000 psig):

	Interval	Acid Volume	# Balls
1)	3576'-3592'	1000 gal	75
2)	3626'-3640'	1400 gal	65
3)	3675'-3686'	1100 gal	15
4)	3856'-3872'	1000 gal	75
5)	3912'-3924'	1200 gal	55
6)	4268'-4282'	1400 gal	65
7)	4390'-4441'	1400 gal	200
8)	4630'-4660'	1400 gal	100

Fluids:Acid:15% HCl plus necessary additivesFlush:Produced waterNitrogen:+ 500 scf/bbl throughout all fluids

Pump Requirements:	Pressure:	5000 psig max
	Rate:	Max rate @ 5000 psig
	HHP:	2000 should be available

Pumping Procedure (all zones):

 Pump 50 bbls produced water
 Follow w/ acid containing 7/8", 1.1 S.G. balls throughout
 Flush to top of perfs

Procedure: (continued)

**1 1 1 1** 

- 5. Flow/swab back complete load from each zone 15-30 minutes after shut down. Haul dirty acid water away - do not dispose of water into Chevron's system.
- 6. POOH w/ all tools after final zone is treated.
- 7. RIH w/ ret. pkr on tbg. Test tbg to 5000 psig while RIH. Displace annulus w/ 2% KCl water containing 1 drum Champion R 228 corrosion inhibitor (or equivalent) & set pkr @ 3541'. Fill annulus to surface w/ Diesel.
- 8. RD WOR & return well to injection.
- 9. Arrange for a temp/tracer survey to be run on this well within a few days after returning the well to injection.

Form UIC 10 August, 1982

# STATE OF UTAH DIVISION OF OIL, GAS AND MINING 4241 State Office Building Salt Lake City, Utah 84114

### WELL INTEGRITY REPORT

	Date 11/4/82
Water Disposal Well X Enhanced	d Recovery Well Other
DOGM/UIC Cause Number	
Company Chevron U.S.A., Inc.	
Address 700 South Colorado Blvd.	
City and State	Zip Code 80201
Lease Name or Number	Well Name or Number SWD #3-31A3
API Well Number 43-013-30021	Location1/4 of1/4 of
Section 31 Township 1.5	Range 3 W County Duchesne
Present at Completion:Yes	
Casing Tested in My Presence: X Yes	s No Pressure / DD PSI / D Minutes
Packer Tested in My Presence: X Ye	s No Pressure /カック PSI ノク Minutes
Surface $Prod$ (as Appulus $PSI$ )	Brod Cag - Tubing Appulus (0 - DST
Disposed/Injected Water Sample Taken: YesNo (Attach This well seems to be completed in acco YesNo If NO,	water analysis when obtained) ordance with DOGM Rule I: write report.
Remarks: Not Disch - + +	ve prose internet int
I hereby certify that this report is the knowledge.	rue and complete to the best of my $A = A$
Name of operator <u>Kallohno</u> (Signature) (Title)	n Fuld Engeneer
	DOGM Field Inspector

DOGM Field Inspector

### STATE OF UTAH **DIVISION OF OIL, GAS, AND MINING ROOM 4241 STATE OFFICE BUILDING** SALT LAKE CITY, UTAH 84114 (801) 533-5771 (RULE I-5)

FORM NO. DOGM-UIC-1

.

•

#### IN THE MATTER OF THE APPLICATION OF II S A

SEC 31		WP.	15		ANGE	3W
INJECT FL	JID INTO	THE	S.W.	D3.	-31A3	WELL
FOR ADMI	NISTRATI	IVE A	PPRO	VAL TO	D DISPO	SE OR
INDIVIDUA	LPAR	TNER	SHIP_	COF	PORTA	TION X
	Denver	<b>,</b> Co	olora	do	ZIP	80201
ADDRESS	P, O.	Box	599			<u></u>

CAUSE NO. \_

ENHANCED RECOVERY INJ. WELL DISPOSAL WELL

#### APPLICATION

Comes now the applicant and shows the Division the following:

1. That Rule 1-5 (b) 6 authorizes administrative approval of enhanced recovery injections or disposal operations.

2. That the applicant submits the following information.

Lease Name	Well N	0.		Field		County		
Salt Water Disposal	3-31	A3		Altamo	nt	Duch	esne	
Location of Enhanced Recovery Injection or Disposal Well <u>NE NE</u>		Sec. <u>31</u>		<u>-</u>	Twp. <u>15</u>		Rge3W	
New Well To Be Drilled Yes 🗆 No 🖾	Old	Well To Be Conve Yes 🗌	nted No 🖾		Casing Test Yes	121 No [	] Date <u>11-4-</u> 82	
Depth-Base Lowest Known Fresh Water Within ½ Mile 2310	Doe Oil-	s Injection Zone C Gas-Fresh Water V	iontain Within	½ Mile YES I			State What	]
location of Injection Source(s) Altamont Fi	eld		Geolo and	gic Name(s) Depth of Sour	wasatc	h ± 15	,000	
Geologic Name of Injection Zone Uintah Form	ation		Depth Interv	of Injection al <u>3576</u>	<u>to_4660</u>			
a. Top of the Perforated Interval: 3576		b. Base of Fresh 2310	Water:	: c.	Intervening This 1266	ckness (a r	ninus b)	
is the intervening thickness sufficient t without additional data?	o show f	resh water will be	YES	ted NO				
Lithology of Intervening Zones Sand	and	Shale					•	
Injection Rates and Pressures	Max	imum		<u>30</u> 15	00	B/D		
The Names and Addresses of Those To	Whom C	Copies of This App	lication	and Attachm	ients Have Been S	Sent		
are of <u>Celoraslo</u>		)			Liff. Elled	H -	Chevron USA, Inc	4/25
ounty of	••	)		RI	+. ELLID			
nown to me to be the person whose no uthorized to make the shows report of	iny, on f ime is su	nis day personally bscribed to the ab	ove ins	trument, who	being by me du	y sworn o	n oath states, that he is duly	- 1
Suscribed and sworn to before	me this .	day of	ap	rel , 19 8.			is frue and correct.	
SEAL My commission expire	es July	5, 1 <b>983.</b>		-Z	in J. J	hamp	Den	-
My husiness address My commission experies	is: Sivel.			Notary	// Public in and for	State	- J Colorado	-
Denver, CO 80222				N/691			-	



1.18 × 675 = 796 794 × 6-6533 = 5296 12,060 5,296 6,764 Lop of Camo Das moto conci. perform affect SWO



R 3 W

•

ι

#### LAND OWNERS

- A. BUCHANAN FEED CO. BOX 1998 ROOSEVELT, UT BODES 1 AL
- 8. NELSON-RICKS CREAMERY CO. 314 WEST 3RD SALT LAKE CITY, UT 84101 0.81 Ac.
- C. WILLIAM C. JESSEN ET UX ALTAMONT, UT 84081 0.81 AL
- D. E. MAX HARTMAN BOX 26 Altamont, UT 84001 37.88 Ac.
- E, E, MAX HARTMAN ET UX BOX 28 ALTAMONT, UT, 84881 18,13 As.
- P. PAUL R. MONSON ET UX ALTAMONT, UT 84001 0,34 As.
- G. WILLIAM J. CHRISTENSON ET UX ALTAMONT, UT 84004 23.53 Ac.
- H. NEIL BINGHAM BOX 167 ALTAMONT, UT 56001
- I, RANDY B. HARTMAN ET UX BOX 95 ALTAMONT, UT B4081 0,38 Ac.
- J. JAMES E. BOBCOCK ALTAMONT, UT 9.89 As.
- K. MAX L. FARNOWORTH ET UX 9.00 AL
- L. WILLIAM W. WALL ALTAMONT, UT 1.34 AL
- M. DONALD B. WALL ET AL ALTAMONT, UT 84091 1.33 AL
- N. LAMAR BIBEL ET UX BOX 15 ALTAMONT, UT 11.8 Ac.
- O. VIRGINIA H. SLAGLE BOX 70 ALTAMONT, UT 84001 1.25 Ac.

3

- P. VAL MCOONALD ET UIL 8.38 AL
- Q. JOSEPH NOPHI NOMELKA 683 8. 1300 W, SALT LAKE CITY, UT 84104
- R. LEONARD J. WALL ET UX 3088 S. 400 W. BOONTIPUL, UT \$4018

\$

- S. LAWRENCE YOUNG ET UX 0.19 As.
- T. MT. EMMONS TOWNSITE 38.3 Ac.
- U. BRENY E. FIBHER ET UX BOX 82 ALTAMONT, UT BIDDS
- V. LAWRENCE YOUNG ET AL BOX 365 SPRINGDALE, UT 84787 081 AL
- W. GEORGE ROGERS ALTAMONT, UT BIODI
- X. BRENT E. FIGHER ET UX BOX 82 ALTAMONT, UT B1000
- Y. MAX L. FARNONORTH ET UX BOX 61 MT. HOME, UT \$4051 0.26 Ac.
- 2. RANDY 8. HARTMAN ET UX BOX 96 ALTAMONT, UT 84001 38.74 As,

'n

(Rule 1-5 (1)	b) 2 1(-2	(To be filed	within 30 d	ays after dri	lling is com	PLE pleted)	ASE ITTE UK USE	BLACK INK UNLY	PLETION & TEST DATA BY	PRODUCING FORMATIC	DN 3
( - •	1	DEPARTMEN	T OF NATUR DIVISION OF O	RAL RESOUR IL, GAS, AND	CES AND	ENERGY	LEASE NO.	FORMATION	Hintah	T	1
API NO	) \$40 Acres		Room 4241 S Salt Lake COUNTY DIC	itate Office Bu City, Utah 841 hesnesso	ilding 14 31 1	we 1S	RGE 3W	SPACING & SPACING ' ORDER NO.			
FFF		<b>-----</b>	COMPANY OP	ERATING(	Chevron ). Box 5	U.S.A. 599	Inc.	CLASSIFICATION (Oil; Gas; Dry; Inj. Well)	Dispessi Hell		
			town <u>Denv</u> Farm name	er Water Di	STA	TE ZIP	0 80201 -31A3	PERFORATED	3576'-4660'		
			DRILLING STAI DATE OF FIRST WELL LOCATER	RTED <u>9-24</u> PRODUCTION <u>NE 14</u>	. 19 <u>75</u> dri N <u>NE %</u>	ILLING FINI: COM 4 6 76	SHED <u>10-2</u> 19 <u>75</u> PLETED <u>11-10-75</u>	INTERVALS			
Loci an	8 are Well Correctly rel Outline Lease	1	ELEVATION DE	FROM SLOF	6416	GRO	IND,	ACIDIZED?	9455 gal 15% F	IC1	
TYPE CO Single Zo Multiple	MPLETION	_X	Order N Order N	lo		•		FRACTURE TREATED?			
OCATION E			Order N Order N	lo	·	Per	nalty	INITIAL TEST DATA			
•			OIL OR	GAS ZONES				Date			
1	Name	From	To		Name		From To	Oil. bbl./day	· · · · ·		
	<u> </u>							Oil Gravity Gas Cu. Et /day			
									CF	CF	
				-	<u></u>			Gas-Oil katio Cu. Fr./Bbl. Water-Bbl./day			
			CASING	& CEMENT		1		Pumping or Flowing			
	Con	ing Set		Csg. Test		Cerne	nt	CHOKE SIZE	· · · · · ·		-
Size	Wgt	Grade	Feet	Psi	Sax	Fillup	Тор	FLOW TUBING PRESSURE			•
8-5/8	24#	J-55	319'		350		surface	A record of the formation	ns drilled through, and per	tinent remarks are prese side)	ented on the reverse.
5-1/2	14#	K-55	4800'		1419		surface	I, the undersigned, being first d according to the records of this	luly sworn upon oath, stat office and to the best of m	e that this well record is y knowledge and belief	true, correct and comp
								Telephone	Name a	nd title of representative	of company
	1				1	1	1	1			





### ACIDIZING • FRACTURING • 4.

160 SEL • 11 LES 7

A DIVISION OF BIG THREE INDUSTRIES INC.

P.O. BOX 472 • VERNAL, UTAH 84076 • (801) 759-8810

### WATER ANALYSIS

Chevron	SAMPLE NO. SWD #3 D.	ATE SAMPLE	10/6/82	_DATE RE	FORTED1	0/7/	82
Bluebell COUNTY	/PAPISHDuchesn	e	STATE_Utah				<u>.</u>
Green / Wasstel WEI	LL		DEPTH				
D WATTER Formation	S	AMPLING PO	INTWellhe	ad .			
FLIED BY Carl Johnson	R	EPORT BY:	Roy Palmer				
		<u></u>	***				
	<del>***</del> *********************************	*****					•
·	DISSOLVED	SOLIDS					
CATIONS		é.P		ANIONS			
SOUTHM AND POTASSIUM	310 ppm		CHLORIDE	_	10,63	37_1	ppm ,
			SULFATE		2(	00 7	ppm
MAGNESTIM			CARBONATE	-	12	20	ppm
	_ DDm		BICARBONATE	-	91	15 ]	ppm
STRONTIUM	DTM		SULFIDE	-	<del>Good Tra</del>	:e	22m
I HON (TOTAL)	0 DLai						
	TOTAL HARDNESS		650 <sub>ppm</sub> ,				
TOTAL	DISSOLVED SOLIDS	12	.378 ppm				
	<del>****</del> **************	****	***				
	OTHER PROP	PERTIES			、		
7.5							
FEDERIC GRAVITY1.00	4 <sup>AT</sup> 67 <sup>O</sup> F						
o do transferencia de la composición de	<u>A</u>	 Or					

Figure 5

•

\*\*\*\*

-----



2517 MESEARCH LA DORATORIES

PO. Box 119 ...

.

•

Fort Duchesne, Utah 84026

(801) 722-2254

SAMPLE TAKE	NUMBER	<u>W-2822</u>			
SAMPLE RECE	IVED	11-10-7	5		
RESULTS REPO	DRTED	11-12-7	5		
SAMPLE DESCRIPTION			FIELD	D NO	
COMPANY <u>CHEVION 011 Co.</u>	LEAS	E <u>Hartma</u>	an		WELL NO. 3-3
COUNTY		_ STATE		• •	3-3
PRODUCING FORMATION	3576	700	3606		
REMARKS		, IOP			
S.W.D.W.					
	SAMPLE	TAKEN BY			
Cu					
	EMICAL AND P	7 25 TROPE	(11E2		
SPECIFIC GRAVITY #60/60" F	04/ pH	RES	<u>0_12</u> OH	MMETERS	e77ºF
TOTAL HARDNESS 6610 0 mg/La	s (n(0)	TOTAL	M A 1 151		mn/) en 6-60
			LALINIIT	83.0	mg/ L us caco3
CONSTITUENT	MILLIGRAMS	MILLEQUIVALENTS			
CONSTITUENT	mg/L.	MEQ/L			REMARKS
CALCIUM - Ca + +	1850.0	92,50	1		
MAGNESIUM - Mg + +	481.0	39.43			
SODIUM - No +	30000.0	1304.35			
$\frac{\text{BARIUM}(\text{INCL. STRUNTIUM}) - \text{Bot } + 1}{\text{TOTAL IPON - East + AND East + 1}}$		0		ļ	
RICARDONATE HCOD	<u> </u>	0.41	1436.69	<u>)</u>	
CARBONATE CO		1.36		<u> </u>	
	4700 0	0		ļ	
	4700.0	97.92	ļ	ļ	
	48980.4	1379.73	1479.0	<u> </u>	
TOTAL DISSOLVED SOLIDS	85160	l			
	HILL CONVERT				
	MILLEQUIVALI	ENTS PER LITER			
	MILLEQUIVALI	ENTS PER LITER			
LOGARITHMIC	MILLEQUIVALI	ENTS PER LITER		STANDARD	)
		ENTS PER LITER		STANDARD	
	MILLEQUIVALI	No 1CO		STANDARE	
	MILLEQUIVAL	N° LITER			
		ENTS PER LITER		STANDARE	
		ENTS PER LITER		STANDARE	
		ENTS PER LITER			
		ENTS PER LITER			
		ENTS PER LITER			
		ENTS PER LITER $ \begin{array}{c} N_{0} \\ \hline 1C0 \\ C_{0} \\ \hline 10 \\ \hline M_{2} \\ \hline 10 \\ F_{0} \\ \hline 810 \\ \end{array} $			
		ENTS PER LITER No 1CO Ca 10 Mg 10 Fo $g_{10}$ $g_{10}$ $g_{10}$		STANDARE	
		ENTS PER LITER $ \begin{array}{c} N_{0} \\ \hline 100 \\$		STANDARE	
		ENTS PER LITER $ \begin{array}{c} N_{0} \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \\ \\ \\ \\ \\ \\$			
		ENTS PER LITER			
LOGARITHMIC		ENTS PER LITER		STANDARE	
LOGARITHMIC		ENTS PER LITER			

### SALT WATER DISPOSAL #3-31A3 1S-3W-31 DUCHESNE COUNTY, UTAH

### APPLICATION INFORMATION

Below is the required data needed as outlined in Rule I-5 of Cause No. 190-3.

#### Rule I-5

- A. Form DOGM-UIC-1 has been completed
- B. l. The necessary plat is given in Figures 1 and 2 and a list of the surface owners is given in Figure 3.
  - 2. Form DOGM-UIC-2 has been completed.
  - 3. i, ii, iii, iv, v. A schematic diagram of the well is given in Figure 4.
    - vi. The cement bond log indicates a good bond up to 3,100 ft.
    - vii. S.W.D. #3-31A3 was drilled as a straight hole. Therefore, bottom hole location is given as approximately surface location.
  - 4. The distance between the top of the disposal zone and the fresh water zone is approximately 1,266 feet. Therefore, there should be no danger of fracturing through the confining strata and contaminating the fresh water zone.
  - 5. i. The maximum injection pressure and rate expected are 1,500 psi and 3,000 BWPD. The injection system is designed with a safety shut-off gauge which will shut down the pump if the pressure exceeds 1,600 psi.
    - ii. The source of the injection water is from the Wasatch (+15,000 feet) Formation in the area of Township 1S, Range 3W, Duchesne County, Utah.
    - iii. A chemical analysis of water to be injected is given in Figure 5.
    - iv. The injection zone is the Uintah Formation which is made up of shaly sandstone. The injection zone is from 3,576 feet to 4,660 feet deep and has an approximate lateral extent of 5 square miles. The confining zone is made up of sandy shale with an approximate lateral extent of 50 square miles.

### SALT WATER DISPOSAL #3-31A3 1S-3W-31 DUCHESNE COUNTY, UTAH Page 2

- v. The Upper Duchesne River Formation contains fresh water which extends from the surface to approximately 2,310 feet deep.
- vi. The analysis of injection formation water is given in Figure 6.
- 6. In the case of a well failure, the well will be shut-in and repaired as the situation warrants.
- 7. No formation testing program was done on this well.
- 8. The casing/tubing annulus was pressure tested to a 1,000 psi on 11/4/82.

The above information should satisfy the requirements for the approval of Chevron's Salt Water Disposal #3-31A3 as a Class II injection well.

	4	
--	---	--

•

SUNDRY	NOTICE	OF	NA	HANGE	
	EXHIBI	۲ ۱	Δ		

ENTITY NUMBER	LEASE NAME	LEGAL DESC.	API #	REMARKS	2
•	HAMBLIN 2-26A2 SWD	1S 2W 26	4301399993	SALT WATER DISPOSAL WEI	L 43-013-30389 WSTC
	SWD 1-3A2	1S 2W 3	4301399997	SALT WATER DISPOSAL WEI	L 43-013-30021 UNTA
	SWD 4-11A2	1S 2W 11	4301399994	SALT WATER DISPOSAL WEI	L 43-013-20255 GRAV
	SWD 3-31A3	1S 3W 31	4301399995	SALT WATER DISPOSAL WEI	L 43-013-30368 KNTA
	SWD 2-10B1	2S 1W 10	4301399996	SALT WATER DISPOSAL WEI	L 43-013-30367 UNTA
1	Boren 4-15A2	152W15	43-013-31181	6 - Drl. (conf.)	
1	Reynolds 2-7BIE	25 IE 7	43-047-3181	40 - Drl. (conf.)	



June 14, 1983

State of Utah Natural Resources Oil, Gas & Mining 4241 State Office Building Salt Lake City, Ut 84114

> RE: Your Letter of June 6, 1983 Well No. 3-31A3 SWD Sec. 31, T 1 S, R 3 W Duchesne County, Utah

We don't know the cause or source of the high tubing-casing annulus pressure in the subject injection well. However, we don't suspect a packer leak because we bled off the ±575 psi into a water truck in 20 seconds. Hopefully, this high pressure resulted from thermal expansion of the tubing after injecting hot water.

Field personnel will check the casing pressure daily and we will notify you if excessive pressure again builds up. In this event, our engineering department in Denver will immediately prepare a workover to check the casing and repair any leaks.

L. R. Hamilton

L. R. Hamilton Bluebell/Altamont Field Foreman

KRJ/1m



DIVISION OF DIL, GAS & MINING

-1-			1-715-R3W
	Penzoi	1 Step RAte	Test 2/19/87
3	RATE (RPM)	PSI	Time (min)
1	. 3	1300	5. min
	.3	1300	10. min
	.3	(300	15 min
2		1305	5 ''
SQUARE	.5	1315	10
SHEETS 5 SHEETS 5 SHEETS 5 SHEETS 5	.5	1315	15
5 3883	.8	/330	5
4455 4757 4757	. 8	1340	Ю
- Alexandre	. 8	1340	15
2 4		1365	5
,	1.1	1375	10
计算机		1375	15
्रु 5	16	1425	5
	1.6	1445	10
	1.6	1445	15
6	2.6	1605	5
	2.6	1605	10
	2.6	1615	15
7	3.6	1835	5
-			~.15 min.
8	3. 4.6	2/15	5
	1.34 4.6	2125	10
1. (). (). (). ().	9 5.6	2485	5
	5.6 2.30	2490	10
•.	5-6	2490	155 × 15 min
e e tra a tempe	<ul> <li>Menter and the state of the sta</li></ul>	n frederika sebagai na baharata kita sa katapatén sa sa	en gegenen geseren en sjoeren en de gesteren en en gegenen were gebeert werde geberen en gebeert weren en een e

Penzoil - Step i te : page 2 Time (min) RATE (BPM) PSI ک 2850 6.6 10. 10 2850 3.30 6.6 15 2865 6.6 3025 MATIONAL 22.381 50 SHEETS 5 SOUARE 42.389 200 SHEETS 5 SOUARE 42.389 200 SHEETS 5 SOUARE 7 7 7.1 ک 11. 10 3010 3.55 7.1 2975 15 7.1 AUA 3055 7.6 5 3065 10 7.6 3,80 3095 15 7.6 3250 5 8.1 13 8.1 3.24 3245 10 run out of nation is min 8.1 5 8.5 2770 14 10 2785 8.5 4.25 15 2805 8.5 0 ۰,

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Chenn	Well No. 3-3/A3
County: Ordesne T 15 R 3	₩ Sec. 31 API# <u>43-013-30368</u>
New Well X Conversion Disposal	Well Enhanced Recovery Well
	YES NO
UIC Forms Completed	
Plat including Surface Owners, and wells of available record	Leaseholders,
Schematic Diagram	
Fracture Information	
Pressure and Rate Control	
Adequate Geologic Information	
Fluid Source	Freenner - Wosation
Analysis of Injection Fluid	Yes No TDS
Analysis of Water in Formation to be injected into	Yes No TDS
Known USDW in area	Andreme Rice Depth 2310
Number of wells in area of revi	ew 2 Prod. 2 P&A 0
	Water 🖉 Inj. 🔗
Aquifer Exemption	Yes NA
Mechanical Integrity Test	Yes No
	Date 11-4-82 Type 1000PS1-10 m
Comments: Jap of Comet Sur	face Bollon 4800

Reviewed by:

.

### STATE OF UTAH DIVISION OF OIL, GAS AND MINING RECORD OF ABANDONMENT OPERATIONS

4

COMPANY NAME:PENNZOIL COMPANY
WELL NAME: SALT WATER DISPOSAL 3-31A3
QTR/QTR: NE/NE SECTION: 31 TOWNSHIP: 015 RANGE: 03W
COUNTY: DUSHENSE API NO: 43-013-30369
INSPECTOR: DENNIS L. INGRAM TIME: 6:00 PM DATE: 8/4/95
SURFACE CASING SHOE DEPTH 319 FEET CASING PULLED YES NO X
CASING PULLED: SIZE N/A CUT DEPTH N/A FT/CSG RECOVERED N/A
CASING TESTED YES X NO TESTED TO: 660 PSI TIME: 15 MIN:
CEMENTING COMPANY: SCHLUMBERGER DOWELL
CEMENTING OPERATIONS: P&A WELL: X
PLUG 1. SET: FROM 3525 FT. TO 3325 FT. TAGGED YES X NO
SLURRY: 4.5 BBBLS (25 SXS) 'H' @ 3.57 GPS WAS 17.0 PPG, YIELD 1.00
PLUG 2. SET <u>FROM 415 FT. TO O FT.</u> TAGGED YES NO X
SLURRY: <u>60 SACK SLURRY OF 'H' CEMENT @15.8PPG.</u>
PLUG 3. SET <u>FROM N/A FT. TO FT.</u> TAGGED YES NO
SLURRY:
PLUG 4. SET FROM N/A FT. TO FT. TAGGED YES NO
SLURRY:
SURFACE PLUG: FROM N/A FT. TO FT.
ALL ANNULUS CEMENTED TO SURFACE: YES X NO
PLUGGING FLUID TYPE:
PERFORATIONS:FROM4660FT.TO3576FT.FROMFT.TOFT.
# 1 CIBP SET:
# 2 CIBP SET:
ABANDONMENT MARKER: PLATE: PIPE: CORRECT INFORMATION: _X
COMMENTS: CUT OFF TUBING AT 3162 FEET (INSIDE TUBING PLUG @3527'- TAGGED
CEMENT WITH WIRE LINE @3217 FEET). BACKSIDE CASING WAS ALREADY FULL OF
CEMENT (SEE PHOTO).

Form OGC 1b		SI – CIN TRI	PLICATE*	
rom ooc-rb	STATE OF UTAH	, er instruc	tions on	
05	DADTMENT OF NATURAL PES	TEVERSE SI	le)	
DE	PARTMENT OF NATURAL RES		5. LEASE DESIGNATION AND SERIAL NO.	
	DIVISION OF OIL, GAS, AND N	in the second se		
			6. IF INDIAN, ALLOTTES OR TRIVE NAME	
SUNDRY	NOTICES AND REPORTS	ON WELLS		
(Do not use this form fo Use "A	r proposals to drill or to deepen or plug	; back to a different reservoir. proposals.)		
1.			7. UNIT AGREEMENT NAME	
OIL UAS	Water Dienogal			
2. NAME OF OPERATOR	THE WALCE Disposal	······································	8. FARM OR LEASE NAME	
	_			
Chevron II.S.A.	nc.		9. WALL NO.	
	20,00001		2 21 4 2	
- P. O. BOX 599, 1 4. LOCATION OF WELL (Report lo	cation clearly and in accordance with an	y State requirements.*	10. FIELD AND FOOL, OR WILDCAT	
See also space 17 below.) At surface			Altamont-Duchesne River	
			11. SEC. T., B., M., OB SLE. AND	
1109' FNL & 964	FEL NENE		SUBVET OF AREA	
			Sec 31. TIS. R3W. USBAN	
14. PERMIT NO.	15. ELEVATIONS (Show whether	DF. RT. GR. etc.)	12. COUNTY OF PARISH 13. STATE	
			Duchespe IItah	
	<u>  _ KB 0410</u>			
16. Che	ick Appropriate Box To Indicate	Nature of Notice, Report, or C	)ther Data	
NOTICE	P INTENTION TO:	SUBSSQU	ENT REPORT OF:	
			BEPAIRING WELL	
TEST WATER SHUT-OFF	FULL OR ALTER CASING		ALTERING CABING	
FRACTURE TREAT	MULTIPLE COMPLETE			
SMOOT OR ACIDIZE		(Other) cancelled a	cid proposal	
REPAIR WELL	CHANGE PLANS	(Note: Report results of multiple completion on Well		
(Uther)		Completion or Recompl	etion Report and Log form.)	

proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones per nent to this work.) \*

Please cancel Chevron's proposal to acidize well as submitted by Sundry Notice dated December 1, 1981. The work was not done and there are not any plans to acidize well at present time.

3-State
2-BLM
1-LRH
1-File

18. I hereby certify that the stregoing is true and correct SIGNED	TITLEEngineering Assistant	DATE July 8, 1983
(This space for Federal or State office use)		
CONTINUES OF APPROVAL, IF ANY:	TITLE	DATE

.



Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

May 29, 1985

Chevron U.S.A., Incorporated P.O. Box 266 Neola, Utah 84053

Gentlemen:

### RE: Salt Water Disposal Well #3-31A3

The guage on the casing tubing annulus of the above mentioned well does not appear to be working. Would you please remove it from the valve, so that the Division's guage can be attached.

Also, in checking the data filed with this Division as required by Rule I-5, the maximum authorized injection pressure for this well is 1500 psi. At 2:53 P.M. on May 21, 1985, the Murphy guage indicated an injection pressure of 1600 psi and the pressure chart an injection pressure of 1700 psi. Since no formation testing program was done on this well, it well be necessary to reduce the injection pressure to 1500 psi or request that a higher pressure be authorized by this Division; any higher injection pressure must not exceed an estimated formation fracture pressure gradient.

Thank you,

clen X

Cleon B. Feight UIC Manager

mfp 0009U-15



**Chevron** U.S.A. Inc. P.O. Box 266, Neola, UT 84053 • Phone (801) 353-4397

## RECEIVED

**JUN 1** 2 1985

DIVISION OF OIL GAS & MINING

Mr. Cleon B. Feight
UIC Manager
355 West North Temple
3 Triad Center - Suite 350
Salt Lake City, Utah 84180-1203

Dear Mr. Feight:

June 7, 1985

In response to your May 29, 1985 letter regarding Chevron's Salt Water Disposal Well #3-31A3 in the Bluebell Field, the following information is submitted.

A tee will be installed on the casing-tubing annulus riser allowing a point for Division personnel to check pressure. Also, regarding operating pressure exceeding maximum authorized injection pressure noted by Division personnel on May 23, 1985, immediate action will be taken to reduce operating pressure to within allowable pressure. Plans are to accomplish this by backflowing and possibly acidizing the well to increase injectivity. Results of the aforementioned work will be promptly reported back to the Division.

Please feel free to contact me if you require additional information.

Sincerely,

G. D. Eckerdt

Production Foreman Bluebell Group

GDE:RS:jh cc: R. H. Elliott Ş

FORM OGC-8-X FILE IN QUADRUPLICATE

15-3w - 31

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL AND GAS CONSERVATION 1588 West North Temple Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Vell Name and Number SWD 3-31A3			
Operator Chevron Oil Company			
Address P. O. Box 599 Denver, Colorado 80201			
Contractor Willard Pease Drilling Co.			
Address P. O. Box 548 Grand Junction, Colorado 81501			
Location <u>NE</u> 1/4, <u>NE</u> 1/4, Sec. <u>31</u> ; T. <u>1 XX</u> ; R. <u>3 XE</u> ; <u>Duchesne</u> County S $W$			
Water Sands:			
Depth: Volume: Quality: From- To- Flow Rate or Head - Fresh or Salty			
1, 3576 - 3686 Swabbed 4 bbls/hr. Salty (see attached)			
2			
3.			
4			
5.			

(Continue on Reverse Side (f Necessary)

Formation Tops: The well was drilled with mud as a salt water disposal well. The above interval was perforated and tested through casing.

NOTE: (a) Upon diminishing supply of forms, please inform this office. (b) Report on this form as provided for in Rule C-20, General Rules And Regulations and Rules of Practice and Procedure.

(c) if a water quality analysis has been made of the above reported zone, please forward a copy along with this form.

- TR file



July 15, 1985

Mr. Cleon B. Feight, UIC Manager Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center - Suite 350 Salt Lake City, Utah 84108-1203

RECEIVED

JUL 1 8 1985

GAS & MINING

Dear Mr. Feight:

Regarding Chevron's Salt Water Disposal Well #3-31A3 in the Altamont Field and as a follow up to my letter of June 7, 1985 regarding same, please be informed of the following.

19 3W Sec 31

On June 18, SWD #3 was backflowed, acidized and backflowed again to increase injectivity. As shown on the attaced copy of the pressure chart, injection pressure dropped from 1700 psi to 1500 psi, which is the maximum authorized injection pressure for this well. Note that on July 12, injection pressure according to the chart was still 1500 psi.

If you require additional information, don't hesitate to contact me.

Sincerely,

20 Eckendt

G.D. Eckerdt Production Forman Bluebell Group

GDE:RS:cb

ATTACHMENT



# RECEIVED

JUL 2 3 1985

DIVISION OF OIL GAS & MINING

Mr. Cleon B. Feight,UIC Manager Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center - Suite 350 Salt Lake City, Utah 84108-1203

Dear Mr. Feight:

July 17, 1985

Enclosed is a copy of the pressure chart mentioned in my letter of July 15th concerning Chevron's Salt Water Disposal Well #3-31A3 in Altamont. The attachment was inadvertently omitted.

Sincerely,

G. D. Eckerdt Production Foreman Bluebell Group

Dec. 31 15 3W

GDE:RS:jh

Attachment

PENNZOIL EXPLORATION AND PRODUCTION COMPANY

P.O. DRAWER 1139 • DENVER, COLORADO 80201-1139 • (303) 832-6060

December 23, 1985

RECEIVED

DEC 26 1985

DIVISION OF OIL

GAS & MINING

State of Utah Division of Oil, Gas and Mining Room 4241 State Office Building Salt Lake City, UT 84114

Attn: Gil Hunt

Re: Notice of Transfer of Ownership Disposal Wells Bluebell/Altamont Area Duchesne County, Utah

Gentlemen:

Please find attached copies of those certain Transfers of Ownership affecting the following disposal wells which Pennzoil has recently purchased from Chevron, U.S.A. Inc.

- A) SWD 2-26A2 43-013-30389 26-15-2W
- B) SWD 2-17C5 -43-013-305%で 17-3S-5W
- C) SWD 3-31A3 43-013 30368 31-18-3W
- D) SWD 2-10B1-43-013-30367 10-2S-1W

E) SWD 1-3A2 43-013-30021 3-15-2W

F) SWD 1-11A2 48-203-2025で 11-15-2W

G) SWD 2-28A2 - 43-03- 30346 28-15-2W

As indicated on the attached materials, the Order No. Authorizing Injection has been left blank affecting the SWD 2-26A2, SWD 2-17C5, and the SWD 2-28A2 wells, due to the fact that same could not be found during our initial review of Chevron's records.

If you should have any questions, please do not hesitate to contact this office.

Sincerely,

PENNZOIL COMPANY

Robert E. Burton, Jr. Land Project Supervisor

REB/cm

Attachments
### FORM NO. DOGM-UIC-7

### STATE OF UTAH DIVISION OF OIL, GAS, AND MINING Room 4241 State Office Building Salt Lake City, Utah 84114

RECEIVED

DEC 2 6 1985

### RULE I-9

		DIVISION OF OIL
· ·	NOTICE OF TRANSFER (	OF OWNERSHIP GAS & MINING
Classification of Well Transfered:	Disposal Well 🛛	Enhanced Recovery Injection Well
Name of Present OperatorChevr	on U.S.A. Inc.	
Address 700 S	outh Colorado Boulevar	:d
Denve	r, Colorado 80222	
Well Being Transferred:		
Name:	r Disposal)	
Location: Sec. <u>31</u> Twp. <u>15</u>	Rng Cour	ntyDuchesne
Order No. Authorizing Injection	UIC 190-3	Date April 20, 1983
Zone Injected Into:Duchesne_Riv	ver-Uinta Formation	
Effective Date of TransferDecember	er 2, 1985	· · · · · · · · · · · · · · · · · · ·
	Signa	ature Dec 2 (555
	Date	
} fame of New Operator Pennzoi	il Company	
Address 700 Mil	lam, Houston, Texas 77	002
-	Signa	SECANSA ature of New Operator 12-2-85
	Date	
FOR DOGM USE ONLY It is acknowledged by the Di- is the new operator of the at Continue to inject fluids a 2. not inject fluids until after Signature	vision of Oil, Gas, and Mini pove-named well and may: is authorized by Order No. Notice, Hearing, and Appro Date	ing that <u>Pennzoil</u> <u>190 - 3</u> oval by the Division <u>13186</u>

Form OGC-1b	STATE OF UTAH	21 BMIT IN TR )ther instru	APLICATE* ctions on	J'the X
DEPA DIV	RTMENT OF NATURAL RESOU 'ISION OF OIL, GAS, AND MIN	JRCES IING	5. LEASE DESIGNATION	AND BERIAL NO.
SUNDRY NO (Do not use this form for pr Use "APP	OTICES AND REPORTS C opposals to drill or to deepen or plug be LICATION FOR PERMIT- for such pro	DN WELLS ack to a different reservoir. oposais.)	6. IF INDIAN, ALLOTTI	S OR TRIBE NAME
I. OIL GAS WELL OTHE	WATER DISPOSAL		7. UNIT AGREEMENT N	4 M B
2. NAME OF OPERATOR			8. PARM OR LEASE NA	MB
PENNZOIL COM	PANY	······································	SALT WATER DUS	POSAL WELL
3. IDDEED OF OFFEATOE	CALA UTAIL GUAGE	•	9. WELL NO.	
4. LOCATION OF WELL (Report location	Don clearly and in accordance with any S	ltate requirements.*	3-3/H3 10. FIELD AND POOL. 0	E WILDCAT
See also space 17 below.) At surface			ALTAMONT-DUCH	FSAIL RIVIER
1109' FNL 8	- 964 FEL NEN	E	11. SEC. T., B., M., OB SUBVET OR AREA	BLE. AND
14. PERMIT NO.	15. BLEVATIONS (Show whether DF.	RT, GR. etc.)	12. COUNTY ON PARIAN	K 5 VV
	KB 6416		DUCHESNIE	UTAH
16. Check	Appropriate Box To Indicate No	ature of Notice Report or C	)the Data	
NOTICE OF IN	TENTION TO :		INT ASPORT OF :	
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING C	ABING
SHOOT OR ACIDIZE	ABANDON®	SHOUTING OR ACIDIZING	ABANDONME	•TM
REPAIR WELL	CHANGE PLANS	(Other)	of multiple completion	
(Other)	(IPERATIONE (Clearly state all particent	Completion or Recompl	etion Report and Log fo	rm.)
proposed work. If well is dire nent to this work.) *	ectionally drilled, give subsurface locatio	ons and measured and true vertics	il depths for all marker	s and zones perti-
PLAN TO ACIDIZE P	YEKFS 3516-4660(65	6 HOCES) ON 3-22-	36 AS FOLCOU	2.
1. BACKFLOW FOR	? ONE DAY.			
Z. PRESSURE TB	G-CSG ANNULUS TO	1000 PSi.		
3. TIE ONTO TB	G AND TREAT PERFS	WITH 16,000 GA	LS OF DOWEL	L'S
U, A, D, ACTO	(7 PARIS 7'L TO ACIL	AND 3 PARTS TO	OLUENE ARON	MATIC
SOLVENT). R	OCK SALT WILL BE U	USED AS THE DIV	ERTING AGE	NT.
4. PLACE WELL	BACK ON INJECTION	SERVICE,		
NOTE VE	RBAL PERMISSION 7	O PERFORM THIS	WORK GRA	NTED
<i>ب</i> ح	Y GIL HUNT ON 3	3-19-86 APPROY OF UT OIL, G DATE:	VED BY THE AH DIVISION AS, AND MIN 3/25/8/6	STATE OF ING
18. I hereby certify that the foregoin	g is true and correct	BY:	×1.74 +	
SIGNED Jess	ulling TITLE EA	IG INEER	DATE 3-2	:1-86
(This space for Federal or State	office use)			
APPROVED BY	TITLE	·	DATE	
CUMDINE 'S OF APPROVAL, I	F ANY :			

٣

\*See Instructions on Reverse Side

Form OGC-1b	STATE OF UTAH DEPARTMENT OF NATURAL RES DIVISION OF OIL, GAS, AND M	SUPART IN TRI ther instruc- reverse si INNING	PLICATE* tions on de) <b>5. LEASE DESIGNATION</b>	AND SERIAL NO.
SUNDI (Do not use this for	RY NOTICES AND REPORTS m for proposals to drill or to deepen or plug se "APPLICATION FOR PERMIT_" for such	ON WELLS back to a different reservoir. proposals.)	6. IF INDEAN, ALLOTTE	B OR TRIBE NAME
1. OIL UAS WELL	OTHER WATER DISPOSAL	# <b>****</b> • • • • • • • • • • • • • • • • •	7. UNIT AGREEMENT NA	MS
2. NAME OF OPERATOR			8. PARM OR LEASE NAM	(3
PENNZOIL C	OMPANY		SALT WATER DISA	SAL WELL
8. ADDRESS OF OPERATOR			9. WELL NO.	
DA BAY 79A	NENIA LITAH 84053		3-31 A3	
4. LOCATION OF WELL (Répo See also space 17 below.) At surface //09 FML	$\epsilon$	y State requirements."	10. FIELD AND FOOL, O <u>ALTAMONT-DUCHE</u> 11. EBC., T., S., M., OB I BUEVET OR ABBA	E WILDCAT SNE RIVER ILE. AND
14. PERMIT NO.	15. BLEVATIONS (Show whether t	DF, RT, GR, etc.)	12. COUNTY OR PARIAH	18. STATE
	KB 6416		OUCHESNE	UTAH
16. Not:	Check Appropriate Box To Indicate	Nature of Notice, Report, or O	ther Data set isport of:	<u> </u>
TEET WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other)	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON® CHANGE PLANS	WATER SHUT-OFF FRACTURE TERATMENT SHOUTING OR ACIDIZING (Other) (Note: Report results Completion or Recomple	ALTERING C. ABANDONMEN of multiple completion etion Report and Log for	VELL

17. DESCRIDE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

SEE ATTACHED REPORT

~



DIVISION OF OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct SIGNED	TITLEENGINEER	DATE 3-23-86
(This space for Federal or State office use)		
APPROVED BY	TITLE	DATE

\*See Instructions on Reverse Side

### FIELD SERVICE REPORT

1-24

1

•

Y----

.

Date Started <u>3-21-86</u> Date Completed <u>3-22-86</u>
3-21-86: BACKFLOWED WELL TO PIT FOR 6 HRS. SHUT WELL IN OVERNIGHT.
3-22-86: RU DOWELL AND TREATED PERFS 3576-4660'(656 HOLES) WITH 16,000 GAD OF 7 1/2 90 D.A.D. ACID (DOWELL ACID DISPERSION - 7 PARTS 71/2 90 HCL+
3 PARTS P-121 TOLLIENE AROMATIC SOLVENT) CONTAINING   GAL/1000
A-ZOO CORROSION INHIBITOR AND 2 GAL /1000 W.27 N.E. AGENT, PUMPE
ACID SOLUTION AS FOLLOWS:
A). PUMPED 2000 GALS ACID.
B), PUMPED 500 # ROCK SALT IN 500 GALS GELLED 10 # BRINE.
C), PUMPED ZOOO GALS ACID.
D), PUMPED 750# ROCK SALT IN SOO GALS GELLED 10# BRINE,
E), PUMPED 2000 GALS ACID.
F), PUMPED 1000 # ROCK SALT IN SOO GALS 10 # BRINE,
G), PUMPED ZOUD GALS ACID,
H), PUMPED 1500 # ROCK SALT IN 1000 GALS GELLED 10 # BRINE.
I), PUMPED 2000 GALS ACID,
J), PUMPED 1000 # ROCK SALT IN SOO GALS GELLED 10 # BRINE.
K), PUMPED 2000 GALS ACID,
L), PUMPED 1000 # ROCK SALT IN SOO GALS GELLED 10 # BRINE,
M.) PUMPED 2000 GAL ACID,
N), PUMPED 2080 # ROCK SALT IN 1000 GALS GELLED 10# BRINE.
0), PUMPED ZOUO GALS ACID,
P), FLUSHED WITH 10 # BRINE WATER,
SAW SLIGHT DIVERSION. AVG INJ. RATE - 6 BPM. MIN PRES- 1650 #
MAX PRES- 2750 #, AVG PRES- 2100 # ISIP - 1530 #, 5 MIN-149
10 MIN - 1470 #, 15 MIN - 1460 # TOTAL LOAD - 554 BBLS. RD
DOWELL, CLEAN OUT DISPOSAL TANK. WILL RESUME INJECTION
AS SOON AS POSSIBLE.
TOTAL COST - # 21,000
Jess Galling
Neola, Ut

Page 2



P. O. BOX 290 • NEOLA, UTAH 84053 • (801) 353 - 4397

R 1 2 198

**DIVISION OF** 

**OIL GAS & MINING** 

March 2, 1987

Gilbert Hunt State of Utah Natural Resources, Oil, Gas & Mining 3 Triad Center, Suite 350 Salt lake City, Utah 84180-1203

Re: Request to increase maximum surface injection pressure on the Hartman 3-31A3 disposal well located in sec. 31,T1S,R3W.

Dear Mr. Hunt

Pennzoil is requesting that the maximum allowable surface injection pressure on the subject well be increased from 1500 psi to 2500 psi.

This request is based on results of a step rate test run on 2-19-87 (see attachment) which showed the formation parting pressure of the Duchesne River formation (injection zone) to be approximately 2850 psi surface or 4150 psi at the formation wall. A maximum surface injection pressure of 2500 psi would provide a safe operating margin below the formation parting pressure and allow Pennzoil to increase its water disposal capacity considerably.

Should there be any questions about the above request please do not hesitate to call.

Sincerely, Pennzoil Company Tten Peter W. Hagist

Petroleum Engineer

Enclosure

cc. George Sanfilippo Ralph Williams Harold Stromgren

Form OGC-15	STATE OF UTAH	SUBMI1 ( Other sastri reverse	RIPLICATE: actions on side)	
C	VIVISION OF OIL, GAS, AND N	AINING	5. LEARE DESIGNATION	AND BERIAL NO.
SUNDRY (Do not use this form for Use "A	NOTICES AND REPORTS	ON WELLS 5 back to a different reservoir. 1 proposala.)	S. IF INDIAN, ALLOTTE	B OR TRIBE NAME
1. WELL XXX WELL CT	inse الم	<b>E</b> AEN 28m	7. UNIT AGREEMENT NA	E M.S
Pennzoil Company			8. FARM OR LEASE NAM S.W.D. Wel	«» 1
P.O. Box 290 Neol	a, Utah 84053	MAR 1 2 1987	3-31A3	
<ol> <li>LOCATION OF WELL (Report loc See also space 17 below.) At surface</li> </ol>	ation clearly and in accordance with an	oil, gas & mining	Altamont-Duc	R WILDCAT hesne RV.
			Sec. 31,T1	S,R3W
14. PERMIT NO.	15. BLEVATIONS (Show whether 6416' GR	D7, K7, C2, 425.)	12. COUNTY OF PARISH Duchesne	18. STATE UT
16. Che	ck Appropriate Box To Indicate	Nature of Notice, Report, or (	Other Data	
NOTICE OF	' INTENTION TO :	Dass us	UENT ASPORT OF :	
TEST WATER SEUT-037 FRACTURE TREAT SHOOT OR ACIDIZE	PUIL OR ALTER CLEING NULTIPLE COMPLETE ABANDON®	WATER SHUT-OFF FRACTURE TREATMENT SHOUTING OR ACIDIZING		SING
(Other)	CHANGE PLANS	(Other) (Other) (NotE: Report results (Completion or Recomp	of multiple completion of letion Report and Log for	m.)
<ol> <li>DESCRIBE PROPOSED ON COMPLET proposed work. If well is nent to this work.)*</li> </ol>	IND OPERATIONS (Clearly state all pertine directionally drilled, give subturface loc	ent details, and give pertinent dates, cations and measured and true vertic	, including estimated date al depths for all markers	e of starting any and zones perti-

A step rate test was performed on the subject well on 2-19-87. The purpose of the test was to determine the parting pressure of the injection zone between 3776' and 4660'(Duchesne River). The pressure and rate information gathered is attached. Analysis of the information showed the formation parted at approximately 2850 psi surface pressure or 4150 psi at the formation. The test was performed according to state specifications and with state officials present.

A request will be submitted along with this sundry to increase the maximum allowable surface injection pressure on this well from 1500 psi to 2500 psi.

18. I hereby certify the fortroing of true and correct SIGNED h hereby	TITLE	Office 801-353-4397 Petroleum Engineer	DATE	3-2-87
(This space for There i of the Hagi St.)		na ana amin'ny fanisa dia mampika amin'ny fanisa dia mandritra dia mandritra dia dia dia dia dia dia dia dia da		
APPPOVED ET Complete VS CD engelsetter, 21-2294:	89.77 (1977) 2.77 (1977)		DACE	



### HARTMAN 3-31A3 WATER DISOPASAL WELL

Results of step rate test performed on 2-19-87.

RATE BPM	PRESSURE PSI	TIME MIN
.3	1300	15
.5	1315	15
.8	1340	15
1.1	1375	15
1.6	1445	15
2.6	1605	15
3.6	1835	15
4.6	2125	15
5.6	2485	15
6.6	2865	15
7.1	2975	15
7.6	3095	15
8.1	3226	15
8.5	2770	15



355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 23, 1987

Mr. Peter W. Hagist Pennzoil Exploration and Production Company P.O. Box 290 Neola, Utah 84053

Dear Mr. Hagist:

### RE: <u>Request to Increase Injection Pressure</u>, Hartman 3-31A3 Disposal Well, Sec. 31, TIS, R3W, Duchesne County, Utah

This letter is written in response to the above referenced request and to present to you our analysis and interpretation of the step-rate test performed on the Hartman 3-31A3 disposal well. Also, recommendations are made concerning future increase of the maximum allowable surface injection pressure for the well.

### Step-Rate Test

The test was performed on February 19, 1987. Halliburton was the contractor who performed the test and the test was witnessed by two Division employees, Dorothy Swindel and Dan Jarvis.

The data indicates a fracture or breakdown of some kind occurred between 1615 and 2125 psi surface injection pressure. Subsequent breakdowns are suggested at approximately 2850 and 3250 psi. These could indicate fracturing of different lithologic units and/or cement failure. The breakdown between 1615 and 2125 psi cannot be accurately determined because of an invalid data point at 1835 psi. The time period corresponding to this step was cut short because of inadequate water supply. The lower part of the pressure-rate plot (attachment #2) displays a curving upward which is common when time steps did not allow a reasonable level of rate and pressure stabilization during each step.

Another method of analysis (after Felsenthal) is illustrated with attachment #3. This technique is a multi-rate analysis for which the principle of superposition is used to calculate the variables. This plot shows a definite breakdown between 1835 and 2125 psi and possibly between 1615 and 2125 psi due to the short time period at 1835 psi displacing and invalidating point 7. Attachment #4 presents the data in another form, this plot shows pressure change vs. rate. There is an obvious break in slope at approximately 2.1 bpm which corresponds to an injection pressure of about 1530 psi, this also corresponds to the instantaneous shutin pressure (ISIP) of 1530 psi which was attained during an acid job performed on the well on March 22, 1986.

Attachment #5 is a pressure-rate plot from a previous step-rate test performed on a well approximately 3.6 miles from the 3-31A3 well and which has technical characteristics very similar to the 3-31A3 well. This test showed a fracturing pressure of approximately 1618 psi. It may be more than coincidental that both tests show a breakdown slightly above 1600 psi.

#### Conclusions and Recommendations

All evidence seems to suggest that the first breakdown pressure for this disposal well occurs at around 1600 psi. This being the case, this Division cannot approve a maximum surface injection pressure of 2500 psi as requested.

If Pennzoil disagrees with our conclusions the Division recommends two possible courses of action:

- -Rerun the step-rate test utilizing an adequate water supply to avoid cutting time periods short and make time periods longer to allow for better stabilization at each step.
- 2) Use existing injection equipment to perform a step-rate test of sort by injecting at increasing pressure intervals, each interval lasting a day, and knowing volumes injected calculate an average rate and pressure for each day. This data could be plotted and hopefully would show a fracturing pressure.

If you have questions or comments concerning our conclusions and recommendations, please contact me.

Sincerely,

Gil Hunt UIC Program Manager

mfp 0134U/48,49

N	t(hrs.)	q(b/d)	Ptf(psi)	(Pi-Ptf)/q	SUM <b>term</b>
О	0	О	1300	0	
.1.	0.25	-432	1300	0	-0.6019516
2	0.5	-720	1315	0.0208	-0.4213661
3	0.75	-1150	1340	0.0348	-0.3473774
4	1	-1580	1375	0.0475	-0.2685029
5	1.25	-2300	1445	0.063	-0.2498614
6	1.5	-3740	1615	0.0842	-0.2762738
7	1.58	-5180	1835	0.103	-0.4520724
8	2	-2650	2125	0.311	0.2479609
9	2.5	-4030	2490	0.295	0.1115976
$1\mathrm{O}$	3	-4750	2865	0.33	0.1838518
11	3.5	-5110	2975	0.328	0.2781418
12	4	-5470	3095	0.328	0.3457244
13	4.42	-4670	3245	0.4165	0.5698012
14	4.92	-6120	2805	0.246	0.3901177

# STEP-RATE TEST (PENNZOIL 3-31A3)



rate (bpm)



## STEP-RATE TEST (PENNZOIL 3-31A3)



rate (bpm)

#### STATE OF UTAH

DIVISION OF OIL, GAS AND MINING

3:00 pm

 TEST DATE:
 ///10/87 WELL OWNER/OPERATOR:
 Pennzoil 

 DISPOSAL WELL:
 V ENHANCED RECOVERY WELL:
 OTHER:

 API NO: 43 0/3 - 30368 WELL NAME/NUMBER:
 3 - 3/43 

 SECTION:
 3/ TOWNSHIP:
 / 5 RANGE:
  $3 \omega$ 

INITIAL CONDITIONS:

TUBING - rate:	pressure:	1500 psi
CASING/TUBING ANNULUS - press	ure:	0

CONDITIONS DURING TEST:

TUBING pressure: 1500 psi f	or	minutes
CASING/TUBING ANNULUS pressure:	1000	psi
annulus pressure drop during test:	1000	psi

CONDITIONS AFTER TEST:

TUBING pressure: \_\_\_\_\_ psi

CASING/TUBING ANNULUS pressure: \_\_\_\_\_ psi

REMARKS: Will was press	ure is twice and
pressure bled off, Will	Frild MIT
Pennicit was gaing to	Shut will in
Jass Dullnig	D. James
OPERATOR REPRESENTATIVE	DOGM WITNESS

ATTACHMENT #5 1S-3W-16

## Allred 2-16A3 Salt Water Disposal



i.

Injection Pressure, PSI (Thousands)

J





355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 12, 1987

Pennzoil Exploration and Production Company P O. Box 290 Neola, Utah 84053

Dear Sirs:

#### Re: Mechanical Intergrity Tests

On November 10, 1987, pressure tests were conducted on six of Pennzoils' water disposal wells in the Altamont-Bluebell field, Duchesne County, Utah. The tests were witnessed by Mr. Jess Dolnig of Pennzoil and myself. The following five wells demonstrate adequate mechanical intergrity:

- 1. Lenorard Boren Fee 1-11A2
- 2. SWD 1-3A2
- 3. Bluebell SWD 2-28A
- 4. C D SWD 2-26A2
- 5. SWD 2-10B1

The SWD 3-31A8 Well located in Section 31, Township 1 South, Range 3 West was pressured up to 1000 PSI and would not hold pressure, indicating mechanical failure. Please notify this office of your plans to correct this problem.

Thank you for your cooperation. If you have any questions, feel free to contact me at (801)- 538-5340

í i s UIC Geologist

bd 0131N-1

### DIVISION OF OIL, GAS AND MINING UNDERGROUND INJECTION CONTROL PROGRAM

Pressure Test INSPECTION REPORT

A MARK STATE

「高田の御田寺」「今

DATE OF INSPECTION 12/15/87 TIME: 120
WELL NAME SWD 3-31A3 OPERATOR: Penniol
FIELD Altament Rue bel LEASE
LEGAL DESCRIPTION:1/41/4 SEC. 3/ T. /S R. SU
COUNTY Duchesme
DISPOSAL WELL ENHANCED RECOVERY OTHER
INJECTION PRESSURE 1500 @ sorten
PRESSURE CHART READING ACCUMULATOR
INJECTION RATE
REMARKS: <u>Hilling un pressured up to 1000 pS1</u> by Forry 1007 Dil the pressure held for 15 min Well Passed MTT, witnessed by Jess Dolnig & Venazoil and myself
RECOMMENDATIONS: This will have recently fulle MLI.
the surface casery putch and been pot m
INSPECTOR

.:

Form OGC-1b	.ATE OF UTAH	SUP (C	IN TRIPLICA instructions or reverse side)	ГЕ* n	$\int \mathcal{V} dt$
DIVISI	ON OF OIL, GAS, AND M	MINING	5. LEA	SE DESIGNATION	AND BERIAL NO.
SUNDRY NOT	ICES AND REPORTS	ON WELLS	6. 1F	INDIAN, ALLOTTE	E OR TRIVE NAME
1. OIL UAS OTHER	WATER DISPOSAL	DIE	7. UNI	IT AGREEMENT N	AMB
2. NAME OF OPERATOR		DEC 21 1097	8. 747	IN OR LEASE NAI	48
PENNZOIL COMPANY	·	DEC 21 130/	SALT	- WTR DISP	OSAL WELL
P.O., BOX 290, NEOLA	1_UT 84053	UIVISIUN OF	9. 98	<u>3-31A3</u>	
<ol> <li>LOCATION OF WELL (Report location ci See also space 17 below.)</li> </ol>	early and in accordance with an	ay State the UNDetta MININ	10. #1	ELD AND POOL, O	R WILDCAT
At surface			ALTAN	noNIT - DUCH	ESNE RIVER
1109 FNL - 96	FEL (NE NE)	J	11	C., T., E., M., OB   BURVET OR AREA	BLE. AND
14 PERMIT NO			SEC	31, TIS, R3V	<u>~,</u>
11. FRANIL AV.	KB 6416	DF, RT, GR, <b>416.</b> )	DUC	UNTY ON PARIAN HESNE	UTAH
16. Check Ap	propriate Box To Indicate	Nature of Notice, Repo	ort, or Other D	ata	
NOTICE OF INTEN	TION TO:		AUBABQUENT ESS	ORT OF:	
TEST WATER SHUT-OFF	ULL OB ALTER CASING	WATER SHUT-OFF		REPAIRING T	
FRACTUBE TREAT	ULTIPLE COMPLETE	FRACTURE TREATME	NT	ALTERING C.	BING
SHOOT OR ACIDIZE	BANDON*	SHOUTING OR ACIDI	LING	ABANUONME	4T.
REPAIR WELL C	HANGE PLANS	(Other)	الاستنبا		
(Other)		(NOTE: Repor	t results of mult	iple completion	on Well
17. DESCRIBE PROPOSED OR COMPLETED OPER proposed work. If well is direction nent to this work.) *	LATIONS (Clearly state all pertine sally drilled, give subsurface loc	ent details, and give pertine cations and measured and tru	nt dates, includin ne vertical depths	g estimated data for all markers	e of starting any and zones perti-

PLEASE SEE ATTACHED EXPLANATION .

.

•

18. I hereby certify that the foregoing is true and correct SIGNED	TITLE <u>PETROLEUM ENGR</u> ,	DATE 12-18-87
(This space for Federal or State office use)		
APPPOVED BY CUNDING IS OF APPROVAL, IF ANY:	TITLE	DATE

.

\*See Instructions on Reverse Side

Sw0 3-31 A3 REPAIR WORK - NOV. 1987 ATTEMPTED TO PRESSURE TEST 5 1/2" X 2 1/8" ANNULUS TO 1000 PSi'. FOUND LEAK IN 5"/2" (SEVERAL CORROSION HOLES) ABOUT 13' DOWN FROM SURFACE. DUG OUT DIRT AROUND CSG DOWN TO 15', CUT AWAY 16" CONDUCTOR AND 85/8" SURFACE PSG. PATCHED S'12" WITH A 5' PIECE OF 6" PIPE. TESTED 5/2" X 2 1/8" ANNULUS TO 1000 PSi. HELDOK. RE-INISTALLED SURFACE CSG AS SHOWN BELOW, FILLED SURFACE CSG WITH CMT, BUILT CELLAR AND RESUMED NORMAL OPERATIONS. TBG HEAD GROUND LEVEL 95/0" 5 1/2" IcmT NELDED PATCH 6" LEAK 5 85/8 CMT WAS PUMPED DOWN 70 35

18. I hereby certify that the foregoing is intrue and c BIGNED	TITLE	DRN JRB DTS 1- TA-5 Q- 3- 2 iv. Production N	RJF GLH SLS MICROFILM FILE G-9-88 DATE
18. I hereby certify that the foregoing is true and c SIGNED	TITLE Western D	DRN JRB DTS (- TAS (- TAS 	RJF GLH SLS MICROFILM FILE
8. I hereby certify that the foregoing is true and c BIGNED	orrect TITLE Western D	DRN JRB DTS 1-7A5 Q- 3-2 iv. Production N	RJF GLH SLS MICROFILM / FILE
8. I hereby certify that the foregoing is true, and c	Offect	DRN JRB DTS - TAS 	RJF GLH SLS MICROFILM
		DRN JRB DTS (- 7A5 (- 3- 2	RJF GLH SLS MICROFILM //
		DRN JRB DTS (	RJF GLH SLS MICROFILM //
· · · · · · · · · · · · · · · · · · ·		DRN JRB DTS (	
		DRN JRB DTS (- TA-5	RJF GLH SLS MICROFILM
· · · · · · · · · · · · · · · · · · ·	· · ·	DRN JRB DTS (	RJF GLH SLS
		DRN JRB DTS TA-5	RJF GLH SLS
		DRN JRB DTS	RJF GLH SLS
		DRN JRB DTS	RJF GLH SLS
		DRN JRB	RJF GLH
		DRN	RJF
		L	
See Attached List of we	ells	OIL	AND GAS
Production Company, eff	fective June 1, 198	8.	
nent to this work.) • Change of operator name	e from Pennzoil Com	pany to Pennzoi	l Exploration &
DESCRIBE PROPOSED OR CUMPLETED OPERATIONS (Ch proposed work. If well is directionally drilled	enriv state all pertinent details, give subsurface locations and	Completion or Recomple and give pertinent dates, i measured and true vertical	tion Report and Log form.) ncluding estimated date of starting depths for all markers and zones o
REPAIR WELL CHANGE PLAN	из (0	(Norm: Report results of	of multiple completion on Well
FRACTURE TREAT MULTIPLE CO SHOOT OR ACIDIZE ABANDON*	MPLETE PR.	ACTURE TREATMENT	ALTERING CABING
TEST WATER SHUT-OFF PULL OR ALT	ER CASING	ATER SHUT-OFF	REFAIRING WELL
NOTICE OF INTENTION TO :		EUDEREUR	INT REPORT OF :
· Check Appropriate	Box To Indicate Nature of	Notice, Report, or O	-Uintah Iher Data
API NUMBER 15. BLEVA	TIONS (Show whether DF, ST, GR, etc	5.)	12. COUNTY OF PARISH 13. STATE Duchesne & Utah
At surface See Attached List	t of Wells		Bluebell/Altamont
LOCATION OF WELL (Report location clearly and in See also apace 17 below )	n accordance with any State requ	lirements.*	10. FIELD AND FOOL, OR WILDCAT
DOBRES OF OPERATOR	Houston TY 77252	2967	9. WELL NO.
NAME OF OFFEATOR Pennzoil Company	y Utah Acct. # NO7	05	8. FARM OR LEASE HAMB See Attached List
			7. UNIT AGREEMENT NAME
(Do not use this form for proposals to drill The "APPRICATION FOR	ND REPORTS ON W	ELLS different reservoir.	6. IF INDIAN, ALLOTTER OR TRIES NA
CUNDRY NOTICES AN	يتفاد المتحال الأبارات والمحاوية النتي التحديد المتحديد والمتحديد والمتحدين التخار ووالم	- <b>C</b> S - A - A - A - A - A - A - A - A - A -	
	IL, GAS, AND MINING	UNISION OF	5. LEASE DESIGNATION AND SERIAL
STAT DEPARTMENT OF DIVISION OF O	NATURAL RESOURCES	UNISION OF	5. LEASE DESIGNATION AND SERIAL
STAT DEPARTMENT OF DIVISION OF O	E OF UTAH NATURAL RESOURCES	JUN 1 3 1988	5. LEASE DESIGNATION AND SERIAL

SUNDRY NOTICE OF NAM ANGE

ENTITY NUMBER	LEASE NAME	LEGAL DESC.	API #	REMARKS	
	HAMBLIN 2-26A2 SWD SWD 1-3A2 SWD 4-11A2 SWD 3-31A3 SWD 3-21091	1S 2W 26 1S 2W 3 1S 2W 11 1S 3W 31	4301399993 4301399997 4301399994 4301399995 4301399995	SALT WATER DISPOSAL WELL SALT WATER DISPOSAL WELL SALT WATER DISPOSAL WELL SALT WATER DISPOSAL WELL SALT WATER DISPOSAL WELL	43-013-30389 WSTC 43-013-30021 WNTA 43-013-20255 GRAN 43-013-20255 GRAN 43-013-30368 KNTA
	Boren 4-15A2 Reynolds 2-7BIE	25 IN 10 15 2W15 25 IE 7	43013-3118( 43-047-3184	o - Drl. (conf.) 10-Drl. (conf.)	43-013-30361 UNTA

DogM. Form 5 May 5, 1987			CENTR	
~	STATE OF UTA DEPARTMENT OF NATURAI DIVISION OF OIL, GAS, A	H (2) L RESOURCES	JUN 1 3 1988	5. LEASE DESIGNATION AND SERIAL NO.
(Do not use this	IDRY NOTICES AND REPO	or plug back to a differ	L, GAG & MINING S rent reservoir.	6. IF INDIAN, ALLOTTER OR TRIBE NAME
1. OTL GAS WELL WELL	07HEE			8. FARM OR LEASE MAMB
	Pennzoil Company Utah	Acct. # N0705		See Attached List
	P.O. Box 2967 Houston,	TX 77252-29	67 nents.*	10. FIELD AND FOOL, OR WILDCAT
See also space 17 bei At surface	See Attached List of Wel	ls		Rluebell/Altamont
14. API NUMBER	15. BLEVATIONS (Show )	whether DF, RT, GR, etc.)		12. COUNTY OF PARISH 18. STATS Duchesne & Utah Uintah
16.	Check Appropriate Box To Inc	dicate Nature of No	otice, Report, or O	ther Data
TEST WATER SHUT-O FRACTURE TREAT SHOOT OR ACIDIZE REFAIR WELL (Other) OP 17. DESCRIBE PROPOSED O proposed work. I nent to this work.) Change Produc	NOTICE OF INTENTION TO: PULL OB ALTER CASING MULTIPLE COMPLETE ABANDON® CHANGE PLANS erator Name Change R COMPLETED OPERATIONS (Clearly State at f well is directionally drilled, give subsuu of operator name from P tion Company, effective tached List of wells	WATES PRACT SHOOT (Othe X il pertinent details, and frace locations and mea Pennzoil Compa June 1, 1988.	A SHUT-OFF URE TREATMENT TING OR ACIDIZING T) NOTE : Report results of ompletion or Recomple give pertinent dates, f sured and true vertical ny to Pennzoi	REFAIRING WELL ALTERING CLEING ABANLON MENT <sup>®</sup> of multiple completion on Well tion Report and Log form.) Including estimated date of starting any depths for all markers and zones perti- 1 Exploration &
			OIL DRN JRB DTS - TAS OU- 3-	AND GAS RJF GLH SLS MICROFILM MICROFILM K
18. I hereby certify the BIGNED	at the foregoing is true and correct right San flight Tr deral or State office use)	TLEWestern Div	. Production	Mgr. DATE <u>G - 9- 88</u>
APPROVED BY CONDITIONS OF	APPROVAL, IF ANT:	turitara on David	Sida	

Form OGC-16	DEPART DIVIS	STAR OF UT MENT OF NATUR ION OF OIL, GAS,	TAH AL RESOU , AND MIN	SUB RCES ING	MIT (1) Other pr reverse	RIPLICATE actions (0) sole()	BEDERATION	AND BERIAL R
SUNI		TICES AND REP	PORTS O	N WELLS	rteit.	6. 18 181 7. UNIT	AGREENENT NA	MB
NIL C CAS ( WELL WELL (	07835	water dispo	sal	DECI			OR LEASE NAM	13
ADDALGE OF OFBLATCE O. Box 2967.	ation and Houston,	TX 77252	mpany	NOV :	<del>} 0-1989</del>	- <b>SVI</b>	Wtr Dispo 1A3	sal Well
Location of well (R See also space 17 belo At current 09' FNL, 964'	FEL (NEN	clearly and in accordan	ice with any I	itate requirements (GAS	ion of & Minini	G Altam	D AND FOOL, ON ont/Duche	sne Rive
PERMIT NO. -013-99995-00	303/05	15. BLEVATIONS (Sb KB 6416	w whether DF.	17. G2. etc.)		Secti 12. cou Duche	on 31, Tl	5, R3W 18. 07475 UT
	Check A	Appropriate Box To	Indicate N	ature of Notice, I	Report, or	Other Do	11G 987 97:	
TEST WATER SEUT-O PRACTURE TREAT Smoot or acidise Repair well	<b>77</b>	PULL OR ALTER CASING MULTIPLE COMPLETE Abandon® Change plans		WATER SHUT-O PRACTURE THE SHOUTING OR (Other)	ATMENT ACIDIZING Report_resu	X	REPAIRING C ALTERING C ABANUONME ple completion	WELL ABING
DESCRIBE FROMOSED O proposed work. In nent to this work.) SUMMARY OF ST	R COMPLETED C well is direct	PERATIONS (Clearly stat stionally drilled, give a I TREATMENT PER	te all pertinent abourface locat	derails, and give particular and measured at	ertigent det nd true ver	res, inclusin tical depths	for all marker	and sones ;
RU Dowell and with 1000 bal Flowed back 5 1000 ball sea Flowed back 4 11/15/89.	treated 1 sealers 00 bbls c 1ers. Av 50 bbls a	disposal perfs Avg injecti of xylene and w vg injection ra acid water and	3576-466 on rate, ater. Th te, 7 BPN formation	60' down 2-7/8 4 BPM @ 2000 ceated perfs w 1 @ 2400 psi. h water. Retu	3" tbg v psi. ( ith 10 Observ Irned we ND GAS	with 500 Observed ,000 gal ved slig ell to d	0 gallons no ball lons 15% ht ball a isposal s	xylene action. HCL with action. service
Jess Dullnig 11/15/89					R. GI	JF H LS	GLH DJJ BGH COM MICE FILE	UIC PUTER COFILM
		M		3-UC	FILE			

(This space for foderal or State office use)

TITLE \_

DATE \_

٠





Michael O. Loavitt Governor Ted Stewart Executive Director James W. Carter Division Director 355 West North Temple 3 Triad Contor, Suito 350 Salt Lake City, Utah 84180-1203 801-538-5340 801-359-3940 (Fax) 801-538-5319 (TDD)

NECEIVED JUL 7 1994 FIELD OFFICE

June 30, 1994

Pennzoil P.O. Box 290 Neola, Utah 84053



# Re: <u>Pressure Test for Mechanical Integrity, Boran Fee 4-11A2, SWD 1-3A2 and the 3-31A3, Injection Wells, Located in Duchesne County, Utah</u>

Gentlemen:

The Underground Injection Control Program which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five year period beginning October, 1982. Our records indicate the above referenced wells are due for testing. Please make arrangements and ready the well for testing during the week of July 18, 1994 as outlined below:

- 1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
- 2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
- 3. If mechanical difficulties or workover operations make it impossible for the wells to be tested on this date the tests may be rescheduled.



Page 2 Pressure Test June 30, 1994

- 4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
- 5. All bradenhead valves with exception of the tubing on the injection wells must be shut in 24 hours prior to testing.

. c /

Please contact Dan Jarvis at (801)538-5340 to arrange a meeting time and place or negotiate a different date if this one is unacceptable.

Sincerely,

Ail Juit

Gil Hunt UIC Program Manager

\$

ldc Attachment WOI52





Michael O. Leavitt Governor Ted Stewart Executive Director James W. Carter Division Director

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340 801-359-3940 (Fax) 801-538-5319 (TDD)

June 30, 1994

Pennzoil P.O. Box 290 Neola, Utah 84053

# Re: <u>Pressure Test for Mechanical Integrity, Boran Fee 4-11A2, SWD 1-3A2 and the 3-31A3, Injection Wells, Located in Duchesne County, Utah</u>

Gentlemen:

The Underground Injection Control Program which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five year period beginning October, 1982. Our records indicate the above referenced wells are due for testing. Please make arrangements and ready the well for testing during the week of July 18, 1994 as outlined below:

- 1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
- 2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
- 3. If mechanical difficulties or workover operations make it impossible for the wells to be tested on this date the tests may be rescheduled.



Page 2 Pressure Test June 30, 1994

- 4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
- 5. All bradenhead valves with exception of the tubing on the injection wells must be shut in 24 hours prior to testing.

Please contact Dan Jarvis at (801)538-5340 to arrange a meeting time and place or negotiate a different date if this one is unacceptable.

Sincerely,

Stil Fuit

Gil Hunt UIC Program Manager

ldc Attachment WOI52





Michael O. Leavitt Governor Ted Stewart Executive Director

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340 801-359-3940 (Fax) James W. Carter Division Director 801-339-3940 (Fax) 801-538-5319 (TDD)

June 30, 1994

Pennzoil P.O. Box 290 Neola, Utah 84053

#### Pressure Test for Mechanical Integrity, Boran Fee 4-11A2, SWD 1-3A2 and the 3-Re: 31A3. Injection Wells, Located in Duchesne County, Utah

Gentlemen:

The Underground Injection Control Program which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five year period beginning October, 1982. Our records indicate the above referenced wells are due for testing. Please make arrangements and ready the well for testing during the week of July 18, 1994 as outlined below:

- Operator must furnish connections, and accurate pressure gauges, hot oil 1. truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
- The casing-tubing annulus shall be filled prior to the test date to expedite 2. testing, as each well will be required to hold pressure for a minimum of 15 minutes.
- If mechanical difficulties or workover operations make it impossible for the 3. wells to be tested on this date the tests may be rescheduled.

Page 2 Pressure Test June 30, 1994

- 4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
- 5. All bradenhead valves with exception of the tubing on the injection wells must be shut in 24 hours prior to testing.

Please contact Dan Jarvis at (801)538-5340 to arrange a meeting time and place or negotiate a different date if this one is unacceptable.

Sincerely,

Nil Hunt

Gil Hunt UIC Program Manager

ldc Attachment WOI52 PENNZOIL EXPLORATION AND PRODUCTION COMPANY

Interoffice correspondence

July 13, 1994

TO: File

FROM: Jess Dullnig

SUBJECT: State of Utah -Department of Natural Resources, Division of Oil, Gas & Mining Mechanical Integrity Testing of Pennzoil's SWD wells

On 6-30-94, the State of Utah sent Pennzoil a letter requesting that we schedule Mechanical Integrity Tests (annular pressure tests) at three of our company operated SWD wells in the Bluebell-Altamont Field. A copy of the letter is attached. The three wells is question are listed below:



On 7-13-94, I phoned the State representative, Dan Jarvis, and reminded him that successful Mechanical Integrity Tests were conducted at all three wells in July of 1992 as per EPA requirements. He said the State would accept the EPAs results and would not require new tests at this time. I thanked Dan and mailed him copies of the EPA tests on 7-13-94.

Jers Dulling

pc Joel Pettit - Pennzoil, Neola, Utah Dan Jarvis - State of Utah, Salt Lake City, Utah



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION VIII 999 18th STREET - SUITE 500 DENVER, COLORADO 80202-2466

APR 20 1995

RECEIVED APR 2 5 1995 FRELD OFFICE

Ref: 8WM-DW

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Jess Dullnig Pennzoil Company P.O. Box 290 Neola, Utah 84053

> RE: UNDERGROUND INJECTION CONTROL (UIC) Approval of P & A Plans Bennion #1-25A4 (EPA #2662-02718) Altamont #3-31A3 (EPA #2663-02719) Duchesne County, Utah

Dear Mr. Dullnig:

We received your proposed plugging and abandonment plans for the Bennion #1-25A4 and Altamont #3-31A3 SWD wells on April 13, 1995. The plans have been reviewed and approved, with one exception. One additional balanced plug will be required inside the 7" casing in the Bennion #1-25A4 well. The plug is to be set from 3,800 to 3,850 feet, opposite the indicated base of possible underground sources of drinking water (USDWs).

Please contact this office prior to plugging the wells so that we can arrange to witness the operations. Within sixty (60) days of plugging each well, please complete and submit one of the enclosed Plugging Records (EPA Form 7520-13).

If you have any questions or comments concerning this letter, you may contact John Carson at (303) 293-1435. <u>Also</u>, <u>please direct all correspondence to the attention of John Carson</u> <u>at Mail Code 8WM-DW</u>. Thank you for your continued cooperation.

Sincerely,

northonlas

Max H. Dodson Director Water Management Division

Enclosures: EPA Form 7520-13



STATE FUTAH DEPARTMENT OF NATURAL RES DIVISION OF OIL, GAS, AND MI	OURCES NING MAY 1 5 1995 7. Indian Allottee or Tribe Name
SUNDRY NOTICES AND REPORTS ON Do not use this form for proposals to drill new wells, deepen extering well, or to Use APPLICATION FOR PERMIT - for such pro-	WELLS a reenter plugged and abendoned write. 8. Unit or Communitization Agreement possile
Type of Well     Gas well     Gas well     X     Other (specify)     Water Dispose	9. Well Name and Number SAI SWD 3-31A3
2. Name of Operator Pennzoil Company	10. API Well Number 43 <u>-013-999</u> 95-00 or 43-013-30368-00
3. Address of Operator P.O. Box 290 Neola, Utah 84053	4. Telephone 11. Field and Pool, or Wildcat 801-353-4397 Altamont
5. Location of Well Footage : 1109' FNL & 964' FEL QQ, Sec, T., R., M. : Section 31, T1S, R3W 32 CHECK APPROPRIATE BOXES TO INDICATE NAT NOTICE OF INTENT	county : Duchesne State : Utah URE OF NOTICE, REPORT, OR OTHER DATA
(Submit in Duplicate)	(Submit Orginal Form Only)
X       Abandonment       New Construction         Casing Repair       Pull or Alter Casing         Change of Plans       Recompletion         Conversion to Injection       Shoot or Acidize         Fracture Treat       Vent or Flare         Multiple Completion       Water Shut-Off         Other	Abandonment     New Construction     Casing Repair     Pull or Alter Casing     Change of Plans     Shoot or Acidize     Conversion to Injection     Vent or Flare     Fracture Treat     Water Shut-Off     Other     Date of Work Completion     Report results of Multiple Completion and Recompletion to different reservoirs     on WELL COMPLETION OR RECOMPLETION AND LOG form     * Must be accompanied by a cement verification report.
13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertin location and measured and true vertical depths for all markers and zones pertinent	ent details, and give pertinent dates. If well is directionally drilled, give subsurface It to this work.)

Please see attached plugging proposal dated 4-12-95. Also attached a is letter from the EPA dated 4-20-95 granting

approval to plug the subject well in this manner.

	APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING DATE: BY:
14. I hereby certify that the foregoing is true and correct Name & Signature Jess Dullnig Jess Very	
(State Use Only)	



## Mechanical Integrity Test Casing/Annulus Pressure Test

U.S. Environmental Protection Agency Underground Injection Control Program, UIC Implementation Section, 8WM-DW 999 18th Street, Suite 500, Denver, CO 80202-2466

EPA Witness: <u>CHUCK WHILIAMS / JOHN CARSON</u> Date 7 / 15 /92 Time 10:25 (am/pm) Test conducted by: <u>REBEL HOT OIL SERVICE FOR PENNZOIL</u> Others present: <u>J.C. HYDER (REBEL) AND JESS DULLNIG (PENNZOIL</u>)

Well name <u>SWA 3-3/A3 43-0/3-30368 W</u> OW EPA Number	<u>ut 02719</u>
Field name <u>ALTAMONIT</u>	
Location qtr qtr; <u>3(</u> Section; <u>/S</u> Townshi	p; <u>3W</u> Range
Owner/Operator PENNIZOIL EXPLORATION AND PRODUCTION	

Time	Test #1		Test #2		Test #3	
0 min	550	psig		psig		psig
5						-
<b>10</b> .	550					-
15					·	-
20						-
25	550					-
30 min	·			·		-
35					••••••••••••••••••••••••••••••••••••••	-
40		•		, 		-
45			<u></u>		. <u></u>	-
50			e			-
55	, 				<u></u>	-
60 min						-
Tubing press		psig		psig		_ psig
Result (circle)	Pass Fai	1	Pass I	Fail	Pass Fa	il

See back of page for any additional comments & compliance followup.

This is the front side of two sides



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VIII, 999 18TH STREET - SUITE 500 DENVER, COLORADO 80202-2405

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.). Date: 7/15/92

د الدر <sup>الم</sup>اجعة وهو الرويد و الماهوية في المراجع المراجع المراجع والمراجع المراجع المراجع المراجع المراجع المراجع

Hour:

Firm Name: Hungard Fridar along & Production Co.

Firm Address: P.O. Bar 893, Nenia 117 AUG BU.053

Witness Mits (4) **REASON FOR INSPECTION:** 

Chentation Inspections

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Inspector's Name & Title (Print)

I'm l'alcer

EPA R8 3560-1 (8-89)

Original - Regional Office Copy Yellow Copy - Operator Copy
STATE F UTAH DEPARTMENT OF NATURAL RESO DIVISION OF OIL, GAS, AND MI SUNDRY NOTICES AND REPORTS ON Do not use this form for proposals to drill new wells, deepen existing well, or to Use APPLICATION FOR PERMIT - for such prop	AUG 1 4 1995 7. Indian Allottee or Tribe Name AUG 1 4 1995 7. Indian Allottee or Tribe Name AUG 1 4 1995 8. Unit or Communitization Agreement osais					
1. Type of Well Oil Well Gas well Cother (specify) Water Dispos	9. Well Name and Number SWD 3-31A3					
2. Name of Operator	10. API Well Number 43-013-30368-00					
Pennzoil Company 3. Address of Operator P.O. Box 290 Neola, Utah 84053	4. Telephone 11. Field and Pool, or Wildcat 801-353-4397 Altamont					
5. Location of Well Footage : 1109' FNL & 964' FEL QQ, Sec, T., R., M. : Section 31, T1S, R3W 12 CHECK APPROPRIATE BOXES TO INDICATE NAT	County : Duchesne State : Utah					
	SUBSEQUEN I REPORI (Submit Orginal Form Only)					
Abandonment       New Construction         Casing Repair       Pull or Alter Casing         Change of Plans       Recompletion         Conversion to Injection       Shoot or Acidize         Fracture Treat       Vent or Flare         Multiple Completion       Water Shut-Off	X       Abandonment *       New Construction         Casing Repair       Pull or Alter Casing         Change of Plans       Shoot or Acidize         Conversion to Injection       Vent or Flare         Fracture Treat       Water Shut-Off         Other					
	Date of Work Completion 4-Aug-95					
Approximate Date Work Will Start <u>17-May-95</u>	Report results of Multiple Completion and Recompletion to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form • Must be accompanied by a cement verification report.					

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface location and measured and true vertical depths for all markers and zones pertinent to this work.)

Please see attached EPA Plugging Record for description of completed plugging information.

14. I hereby certify that the fo Name & Signature	bregoing is true and correct Jess Dullnig	Jers Cuelling	Title	Petroleum Engineer	Date	9-Aug-95
(State Use Only)						

					S ENVIDON								
	<b>—</b> •				WASHING	GTON,	DC 20460						
E	PA			PL	UGGIN	NG F	RECORD						
			TTEE								IV.		
Per	nzoil Comp	200 M C PERM 20V					Dowell	Schlumbern	er Incor	norat	red		
P.C	. Box 290						1170 East Main Box 940						
Nec	ola UT 840!	53					Vernal	LIT 84078					
				STATE	COUNTY	,	Formal,	01 040/0	PE			UT02719	
LOC	ATE WELL AND C		N	Utah			Duchesn	е	·-	AP	No. 43-013	-30368-00	
SECT	TION PLAT - 640	ACRES	-	SURFACE LO	CATION	DESC	RIPTION	-					
	1	N		SW 1/4 OF	NE 1/4 0	F	NE 1/4 SECTION	N 31	TOWNSHIP	•	1S RANG	se 3W	
				OCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT									
				Surface Lo	cation	<u>11</u>	09 ft. from (N/3	s) <u>N</u>	Line of quarter section				
				and 9	<u>64</u> ft. fro	m (E/V	<u> </u>	line of quarter se	of quarter section				
w	1 1 1	1 1	E	Т	YPE OF AU	THOR	IZATION	Describe i	Describe in detail the manner in which the fluid was placed				
	<u>_</u>			X Indiv	idual Permit			and the m	and the method used in introducing it into the hole.				
	 			Area	Permit			Backflowe	d well; H2S	too hig	h. Got verbal app	proval from St	
	! <u>-</u>			Rule				& EPA (Jo	hn Carson)	to alter	r procedure to elin	ninate need to	
				<b>.</b>				backflow.	Set 2-7/8" (	CIBP in	tog at 3527' abov	e pkr. Perf'd	
1075	All =1	5 - 41		Number of	wells	-		4 circulatir	ng holes at :	3521-3	525' & spotted cm	t from 3525' to	
NOTE:	All plugging open	ations witnessed	by Mr.					3325' in 5.	o csg. Wa	nted 48	nrs & tagged cmt	at 3220'. Cut off	
ioh •	nam (St of UT, DO	GM). Permission	to begin					tbg at 316	Z. Tested :	o.5" csg	10 580 psi for 15	o min., lost 15 psi.	
		25 granted by Mr.	John					Circulated	hole w/ 9.2	ppg m	ud, pulled end of t	ibg to 400° &	
Carson (EP	A) 7-31 & 6-1-95	and Mr. Frank Ma	anews					spotted cn	nt from 400	to sur	. Cut off wellhead		
(St or UT, L	JUGN) on same ( from 8-2 05 through	ates. Mugging op	erations	1 and Nor		S/V	D 2.34A3	marker. D	id not pump	cmt d	own 5.5" x 8.625"	annulus because	
look place	1011 0-2-95 11100	SING AND TURIN				511	D 3-31A3			05 DI	/ during csg repai	IF JOD.	
SIZE		TO BE PUT IN		TO BE LEFT IN	WELL (ET)	н			METHOD	OFFL		nce Method	
8-5/8*	24			319	WEEE (( 1)		12-1/4"					n Bailer	
5-1/2"	14			4800	)		7-7/8"		a Disnosal			plug Method	
2-7/8"	6.5	· · · · · · · · · · · · · · · · · · ·		384' (from 316)	2' to 3546')	5-1/2	2". 14# csa	Enh:	ance Recov	erv	X Othe	r	
5-1/2*	Baker AD-1			Packer at	3546'	5-1/2	2", 14# csg	Hvdr	ocarbon St	orace	(CIBI	· P&tokr)	
	tension pkr					1				0	•	• •	
CEME	NTING TO PLUG	AND ABANDON	DATA:	PLUG #1	PLUG	#2	PLUG #3	PLUG #4	PLUG	#5	PLUG #6	PLUG #7	
Size of Hole	e or Pipe in which	Plug Will Be Plac	ed (in.)	2-7/8" tbg	inside 5-1/	2" csg	inside 5-1/2" csg						
Depth to Bo	ottom of Tubing or	Drill Pipe (ft.)			3525	•	400'						
Sacks of C	ement To Be Use	d (each plug)		2-7/8" CIBP	25		60						
Slurry Volu	me To Be Pumpe	d (cu. ft.)			25		69		1				
Calculated	Top of Plug (ft.)			3527	3325	•	Surface						
Measured 1	Fop of Plug (if tag	ged ft.)		3527	3220	t i	Surface						
Slurry Wt. (	(Lb./Gal.)				17.0		15.8						
Type Ceme	ent or Other Mater	iel (Class III)			Class	G	Class G						
				LIST ALL OPE	N HOLE ANI	D/OR F	PERFORATED IN	ITERVALS	· · · · · · ·				
	From			To			From			То			
	3576			4660' (perforat	ions)								
0:													
Signature o	of Cementer of Au			/			Signature of EPA	Representative					
	G C	. Adard	' Y	1									
		Jun		ana			7.011						
	)	I certify und	er penaltv o	f law that this doo	UTER Ument and	niriCA all atta	chmente were er	anared under me					
l	/	direction or	supervision	in accordance w	ith a system	desin	ned to assure the	t qualified nereon	-				
		nel propert	gather and	evaluate the info	rmation sub-	mitted	Based on my in	uiv of the nereo	n				
		or persons	who manad	e the system. or t	hose person	ns direc	ctly responsible fo	r gathering the	-				
	information, the information submitted is to the best of my knowledge and belief true												
	accurate, and complete. I am aware that there are significant penalties for submitting false												
information, including the possibility of fine and imprisonment for knowing violations. (REF. 40 CER 122 22)													
NAME AND	OFFICIAL TITLE	(Please tvo	e or print)	SIGN	ATURE		~						
	Je	ess Dullnig			ζ	A.	en hal	this			9-Aua-	-95	
					Ć	<u> </u>					3		