CASE 7082: MARALO, INC. AND DALPORT OIL CORPORATION FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO

Case No.

280

Application

Transcripts

Small Exhibits

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE HATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 7082 Order No. R-6533

APPLICATION OF MARALO, INC. AND DALPORT OIL CORPORATION FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 12, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 11th day of December, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicants, Maralo, Inc. and Dalport Oil Corporation, seek authority to institute a joint waterflood project on Dalport's Winters Lease offsetting Maralo's Jalmat Yates Unit waterflood project, by the injection of water into the Yates formation through a well to be jointly drilled at an unorthodox location 1260 feet from the South line and 1250 feet from the West line of Section 7, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

- (5) That the operators should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.
- (6) That the injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 575 psi, but the Division Director should have suthority to increase said pressure limitation. should circumstances warrant.
- (7) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

- (1) That the applicants, Maralo, Inc. and Dalport Oil Corporation, are hereby authorized to institute a joint water-flood project on Dalport's Winters Lease offsetting Maralo's Jalmat Yates Unit waterflood project by the injection of water into the Yates formation through a well to be jointly drilled at an unorthodox location 1260 feet from the South line and 1250 feet from the West line of Section 7, Township 25 South, Range 36 East, NMPM, Jalmat Pool, Lea County, New Mexico.
- (2) That injection into said well shall be through internally coated tubing, set in a packer which shall be located as near as practiceble to the uppermost perforation; that the casing-tubing annulus of the injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.
- (3) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing or packer in said injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.
- (4) That the injection well herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 575 psi, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

-3-Casa No. 7082 Order No. R~6533

- (5) That the subject waterflood project is hereby designated the Maralo-Dalport Jalmat Yates Cooperative Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations,
- (6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.
- (7) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO PIL CONSERVATION DIVISION

JOE D. RAMEY Director

SEAL



LARRY KEHOE SECRETARY

Aztec OCD_

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

December 15, 1980

POST OFFICE BUX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

CASE NO._ ORDER NO. - R-6533 Mr. Conrad E. Coffield Hinkle, Cox, Eaton, Coffield & Hensley Applicant: Attorneys at Law P. O. Box 3580 Midland, Texas 79702 Inc. and Dalport Oil Maralo, Corporation Dear Sir: Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case. Rours very truly, JOE D. RAMEY Director JDR/fd Copy of order also sent to: Hobbs OCD Artesia OCD

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		For the Oil Conservation	Ernest L. Padilla, Esq.
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* 4	20	For the Applicant:	Conrad E. Coffield, Esq.
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Applicant Exhibit One, Plat 5 -Applicant Exhibit Two, Plat Applicant Exhibit Three, Table Applicant Exhibit Four, Schematics Applicant Exhibit Five, Log Applicant Exhibit Six, Water Analysis 

RICHARD A. LOWRY

MR. STAMETS: Call next Case 7082.

MR. PADILLA: Application of Maralo, Inc., and Dalport Oil Corporation for a waterflood project, Lea County, New Mexico.

MR. COFFIELD: I'm Conrad Coffield with the Hinkle Law Firm in Midland, Texas, appearing on behalf of Maralo, Inc., and Dalport Oil Corporation.

I have one witness.

(Witness sworn.)

#### RICHARD A. LOWRY

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

#### DIRECT EXAMINATION

BY MR. COFFIELD:

Mr. Lowry, for the record would you please state your name, address, occupation, and employer?

A. I am Richard A. Lowry, presently reside in Midland, Texas, and currently employed as Production Manager for Maralo, Incorporated.

Mr. Lowry, have you previously testified before the Division as a petroleum engineer?

A. I have. 3 Were your qualifications made a matter Q. of record and accepted by the Division? They were. And are you familiar with the application 7 of Maralo and Dalport in this case? 8 9 I am. 10 Further, are you familiar with the 11 area involved, the unit area involved, and the proposed well 12 locations involved in this case? 13 14 MR. COFFIELD: Mr. Examiner, any other 15 questions of Mr. Lowry? 16 MR. STAMETS: The witness is considered 17 18 qualified. 19 Mr. Lowry, would you please state what 20 it is that Maralo and Dalport seek in this application? 21 We seek authority to institute a joint 22 waterflood with Dalport on Dalport's 80-acre Winters lease, 23 which is a direct east offset to the Maralo operated Jalmat 24 Yates waterflood unit. 25 We also request approval to drill the 26 27 Dalport B-10 Well at an unorthodox location; also to inject 28 water into that well, and eventually to convert Dalport Winters

formations in that well.

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MR. COFFIELD: Mr. Examiner, I would draw your attention to the fact that the matters that Mr. Lowry has just recited as to what Dalport and Maralo seek is slightly at variance with the way the matter is set out in the docket,

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that was included in the application.

MR. STAMETS: Lists either of them, okay

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readvertise this case and pick up the other well, or allow
Maralo to file for the second well administratively at a later
date, whichever you prefer.

A. I think it's fine to file administratively at a later date. It happens to be a regular location so all we'd be asking for is permission to inject water.

MR. STAMETS: All right.

Mr. Lowry, would you please refer to what we've marked as Exhibit One and explain that exhibit to

the Examiner?

A. Exhibit One is a plat showing the outline of the Jalmat Yates Unit in yellow. It -- it shows all the wells within two miles of the boundaries of the Jalmat Yates Unit. It shows the original seven injection wells drilled on the Jalmat Yates Unit in red. It shows the additional ten wells that were planned in green around the line -- boundary of the unit.

It further shows the 80-acre Dalport lease outlined in blue, and it shows the two wells that we ultimately plan to inject on the Dalport lease in blue.

It also shows that two of the original ten line wells are "Xd" out. What we plan to do is drill the Dalport B-10 and convert the Dalport Winters 2 in lieu of drilling what was originally approved as the Jalmap Yates Unit No. 5 and 10 on the east boundary of the unit.

on Mr. Lowry, with respect to Maralo's interests and position in this area as operator of the various wells, would you please explain that matter to the Examiner, both as to the Jalmat Yates Unit itself, of which Maralo is the operator, but also explain the relationship that Maralo has relative to the two new wells that you'd like to complete.

A. Well, Maralo, of course, is the operator of the Jalmat Yates Unit and owns approximately 70 percent of

it.

When the unit was originally formed there was an effort made to include the 80-acre Dalport Winters lease in the original waterflood, but there were --- we were never able to work out parameters that were acceptable to both Dalport and to the rest of the operators within the Jalmat Unit. So the effort to include that failed, and as an alternative it was decided that we would drill the Jalmat Yates Unit 5 and No. 10 injection wells on the line between Dalport's lease and the Jalmat Unit.

been unsuccessful in trying to work out a line agreement with Dalport. And finally we attempted to buy Pulport's 80-acre lease and were unsuccessful in that effort, but in the end we were able to work out an operating agreement with them which allowed us to drill a jointly owned new well which we're going to call the Jalmat Unit Dalport B-10, and in which they would pay half the cost and also they will eventually give us their Dalport Winters B-2 and allow us to convert it to an injection well so that we would inject into those two wells in lieu of the original two planned on -- on the line between our unit and Dalport.

MR. COFFIELD: Mr. Examiner, I would -- reference has been made here several times already to the

 Jalmat Yates Unit and the waterflood operations conducted thereon. I'd respectfully request that you take administrative notice of Case Number 6313, which resulted in Order R-5816, which related to the authority to conduct the waterflood operations in connection with the unit itself. A number of the exhibits that we introduced there will be matters with which you should concern yourself by reference to matters that we will talk about here today.

MR. STAMETS: What was the order number?

MR. COFFIELD: 5816.

MR. STAMETS: Thank you.

Mr. Lowry, one more point of clarification, I believe, if you will, probably you've covered this but, is it your opinion that the addition of the 80-acre Dalport tract, of which you've spoken, completes the inclusion of the geologic anomaly with which you're involved in connection with the Jalmat Yates Unit operations generally?

A. Yes. We, as I stated earlier, tried to include this 80 acres in the beginning, because we feel it definitely has secondary recovery possibilities, and we feel that if we're not allowed to drill the -- to drill the B-10 and convert the No. 2 Well, that something on the order of 40 or 50,000 barrels of oil would be lost, and if we don't drill those, or continue to be unable to work out a line

agreement with Dalport, then we think we're talking about probably 70 to 80 acres of Yates oil-bearing formation that will not be flooded, and we feel like that this represents 120,000 barrels of oil that would never be produced, if we fail in this effort.

Q All right, Mr. Lowry, I suppose generally that gets to the -- to the reason as to why the B-10 Well is located where it is. Do you have anything further to add on that matter?

A. Well, we located it, of course, on Dalport's east boundary, which happens to be where we -- we think
the original gas/oil contact was located in the Yates Field,
and that gives us an optimum location to sweep for the maximum amount of oil back towards the Yates producing wells.

There are no Yates oil wells to the east of Dalport's east line. The -- the Yates wells to the east are gas wells and for the most part depleted gas wells.

O Do you have a line agreement with the operator on the acreage offsetting the Dalport acreage to the east?

A. We do. We do have a line agreement between Dalport, Maralo, and Getty Reserve, who operates the South Langlie Jal Unit to the east of us.

Q. Do you have anything further on this?

A. I do not.

Q Let's go to Exhibit Two and please explain that to the Examiner.

tion of the Jalmat Yates Unit and the boundaries outlined in yellow. We have once again the Dalport 80-acre tract outlined in blue, and then we've shown a red line around the outside of Jalmat Unit, which represents the area included within a half a mile of the original seven interior injection wells. Then we show a green-line, which represents the area included within a half mile of the line injection wells that we plan, and then a little area up to the northeast outlined in blue includes the additional area taken in that would be one-half mile from the new planned injection wells on Dalport's lease.

Q Let's go now to Exhibit Three. Would you please describe that exhibit?

A. Okay. Exhibit -- Exhibit Three is a continuation of a table that was originally included in the hearing two years ago that listed all the wells within a half mile of the Jalmat Yates Unit. The three wells shown on our Exhibit Three were not drilled or completed at the time that the previous exhibit was prepared.

O The exhibit you're making reference

to is the tabular summary of the wells within the half mile radius?

A. Right, and the three wells that we list on this table include, first of all, an ARCO Oil and Gas Hanagan No. 5, which is located in Section 12 over on the northwest corner of the Jalmat Yates Unit. It really doesn't have any bearing on the proposed expansion, other than it's a well that according to our records was drilled in 1980, completed dry and abandoned, and I haven't been able to find out whether casing was pulled in it or not, but it's definitely a well that's located within a half mile of the Jalmat Unit and was not included on the previous tabulation.

Then the next well on that Exhibit Three is the Doyle Hartman X No. 3, which is located in Section 7 up to the north, directly north of the Dalport Winters 80-acre lease that we've been discussing, and we have the pertinent information on it.

It's a newly drilled well.

And then the third one we show is the Tahoe Oil and Cattle Company Judy No. 3, also located in Section 7, just northeast of the Dalport Winters lease, and we show on that Exhibit Two a Hartman X No. 4 Well, which is currently drilling, to the best of our knowledge, and we don't have any completion date on it.

Q. Okay, now we're ready for Exhibit Number Four.

MR. STAMETS: Let me ask you a question. You indicated the ARCO Well was spudded and abundoned, and you don't have detail on the pressure.

A. I don't think the casing's been pulled on it.

MR. STAMETS: But in any event, they did the top of cement back up to 950 feet? That seems to be what the exhibit indicates there.

A. The --

MR. STAMETS: Or that's the calculated top.

A. Okay, now that's -- that's a calculated top based on the sacks of cement that were used and what we would -- we would calculate the size of the hole to be for a well drilled in this area. Now I'm sure that they have a cement top on that well but their office was closed yesterday when I was trying to get that information and so I -- that's strictly a calculated top by our calculations and not the official top at all.

MR. STAMETS: Okay, if you could get some additional detail on that well forthe record and submit that at any later date, that would be helpful.

A. We'll do that.

Now we're ready for Exhibit Number Four, Mr. Lowry. Let's look at that and describe that for the Examiner's benefit.

three wells that -- the first one is the B-10 that we're seeking approval to inject water into, and this schematic shows that the TD of the well is 3497; that we cemented 5-1/2 inch casing with 1800 sacks of cement; that we did circulate cement on the production string. We also circulated cement on the 8-5/8ths casing string, which was set at 416 feet. It shows that we have plastic-coated tubing in the well; a packer, which is nickel-plated, packer set at 2855. It also shows that the proposed perforations that we intend to inject into are from 2873 to 3106, which is in the Yates formation.

The second sketch on Exhibit Four is just a diagrammatic sketch of Dalport's B-2 Well, which is currently a producing Yates well but ultimately will be converted to a water injection well if our request is granted here today.

And the third diagram is --- is a sketch on the ARCO well that I discussed earlier, that was drilled this year, in 1980, and the best of our knowledge it's shut-in or it shows completed and abandoned. But I'll get you some

more information on that well.

Okay, next is Exhibit Five. Would you please describe that exhibit?

And we go to Exhibit Six --

 $\mathfrak Q$  Do you want to talk about Exhibit Five first? That's the log.

A. Oh, I'm -- yeah. Exhibit Five is a copy of the log that was run on the Dalport B-10 Well, and it shows the top of the Yates at 2871 and we have the perforations marked on the well.

And that's -- I have no further comments on that.

Okay, now go on to Exhibit Six, if you would please, Mr. Lowry.

A. Exhibit Six is a copy of a water analysis run on the produced water from the Jalmat Yates Unit, and our source water, which is the Santa Rosa formation, is about 600 feet, and the source wells are located in the northeast 160 acres of Section 13.

And what this does, it just demonstrates the compatibility of the two -- two waters, so that while we're initially injecting Santa Rosa water in the flood, we intend to also include produced water once we start getting some response, and we're further considering the use of pro-

duced water from Tenneco up to the north, which they've offered to make available to us, and we're currently running compatibility tests on it to see whether it's feasible to -- to mix that water with our produced water and source water.

Q.

Mr. Lowry, if this application of Maralo

A. Well, if we're unable to convert the two wells in question to injection wells, we'll have no backup on the northeast side of our unit, and as I said earlier, we feel like there will be 80 acres of Yates formation that's certainly floodable that will not be flooded at all and the end result of that will be that we'll lose out on 120,000 barrels of oil that could have been produced that would not be if we do not convert those two wells to injection and give our flood some backup.

Q Did you have anything further to add to your testimony?

A. I have nothing further.

Q Were these Exhibits One through Six prepared by you or under your supervision?

A. They were.

Q And in your opinion will the approval of this application of Maralo and Dalport be in the best interests of conservation and the prevention of waste and pro-

16 tection of correlative rights? It will. MR. COFFIELD: Mr. Examiner, I move the admission of Exhibits One through Six. MR. STAMETS: These exhibits will be admitted. 10 CROSS EXAMINATION 11 BY MR. STAMETS: 12 Mr. Lowry, who will operate the injection 13 wells? 14 The Jalmat Yates Unit will operate the 15 injection wells, and the source water will come from the same 16 place that the Jalmat Unit water is coming. 17 Who will operate the producing wells on 18 19 the mentioned lease? 20 Okay, Dalport Oil Company will operate 21 the producing wells and they in turn will receive no income 22 from oil produced on the Jalmat Yates Unit. The Jalmat Yates 23 Unit will not receive any income from oil or gas produced on 24 the Dalport 80-acre Winters lease. 25 Okay. I see from some of the exhibits 26 27 that the intention is at least to call the injection wells by the unit name and this is even though they aren't actually

within the unit boundary.

Well, that was the intention, since they are replacing 5 and 10. We thought we'd try and keep the --- keep those numbers in the well somewhere. Now we're certainly agreeable to changing those names to anything that the Commission would wish.

Q. I'm not sure what to do with them but we'll worry about that later.

A All right.

MR. STAMETS: Are there any other questions of the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

And the hearing will recess until 1:30.

(Hearing concluded.)

CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Solly W. Boyd C.S.R

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case do. 2002. heard by me on 11-12 1980.

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Oil Conservation Division

CASE

7082

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO 12 November 1980 EXAMINER HEARING IN THE MATTER OF: Application of Maralo, Inc., and Dalport Oil Corporation for a water- ) flood project, Lea County, New Mexico.) BEFORE: Richard L. Stamets TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 87501

For the Applicant:

Conrad E. Coffield, Esq. HINKLE LAW FIRM P. O. Box 3580 Midland, Texas 79701

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MR. STAMETS: Call next Case 7082. 3 MR. PADILIA: Application of Maralo, Inc., and Dalport Oil Corporation for a waterflood project, Lea County, New Mexico. MR. COFFIELD: I'm Conrad Coffield with the Hinkle Law Firm in Midland, Texas, appearing on behalf 8 of Maralo, Inc., and Dalport Oil Corporation. 9 I have one witness. 10 11 12 (Witness sworn.) 13 14 RICHARD A. LOWRY 15 being called as a witness and having been duly sworn upon his 16 oath, testified as follows, to-wit: 17 18 DIRECT EXAMINATION 19 20 BY MR. COFFIELD: 21 Mr. Lowry, for the record would you Q. 22 please state your name, address, occupation, and employer? 25 I am Richard A. Lowry, presently reside 24 in Midland, Texas, and currently employed as Production Man-25 ager for Maralo, Incorporated. 26 Mr. Lowry, have you previously testified 27

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MR. STAMETS: All right.

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A. Exhibit One is a plat showing the outline of the Jalmat Yates Unit in yellow. It -- it shows all the wells within two miles of the boundaries of the Jalmat Yates Unit. It shows the original seven injection wells drilled on the Jalmat Yates Unit in red. It shows the additional ten wells that were planned in green around the line --

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And subsequent to that decision we've been unsuccessful in trying to work out a line agreement with Dalport. And finally we attempted to buy Dalport's 80-acre lease and were unsuccessful in that effort, but in the end we were able to work out an operating agreement with them which allowed us to drill a jointly owned new well which we're going to call the Jalmat Unit Dalport B-10, and in which they would pay half the cost and also they will eventually give us their Dalport Winters B-2 and allow us to convert it to an injection well so that we would inject into those two wells in lieu of the original two planned on -- on the line between our unit and Dalport.

MR. COFFIELD: Mr. Examiner, I would -- reference has been made here several times already to the

Jalmat Yates Unit and the waterflood operations conducted thereon. I'd respectfully request that you take administrative notice of Case Number 6313, which resulted in order R-5816, which related to the authority to conduct the waterflood operations in connection with the unit itself. A number of the exhibits that we introduced there will be matters with which you should concern yourself by reference to matters that we will talk about here today.

MR. STAMETS: What was the order number?

MR. COFFIELD: 5816.

MR. STAMETS: Thank you.

Mr. Lowry, one more point of clarification, I believe, if you will, probably you've covered this but, is it your opinion that the addition of the 80-acre Dalport tract, of which you've spoken, completes the inclusion of the geologic anomaly with which you're involved in connection with the Jalmat Yates Unit operations generally?

A Yes. We, as I stated earlier, tried to include this 80 acres in the beginning, because we feel it definitely has secondary recovery possibilities, and we feel that if we're not allowed to drill the -- to drill the B-10 and convert the No. 2 Well, that something on the order of 40 or 50,000 barrels of oil would be lost, and if we don't drill those, or continue to be unable to work out a line

agreement with Dalport, then we think we're talking about probably 70 to 80 acres of Yates oil-bearing formation that will not be flooded, and we feel like that this represents 120,000 barrels of oil that would never be produced, if we fail in this effort.

All right, Mr. Lowry, I suppose generally that gets to the -- to the reason as to why the B-10 Well is located where it is. Do you have anything further to add on that matter?

A. Well, we located it, of course, on Dalport's east boundary, which happens to be where we -- we think the original gas/oil contact was located in the Yates Field, and that gives us an optimum location to sweep for the maximum amount of oil back towards the Yates producing wells.

There are no Yates oil wells to the east of Dalport's east line. The -- the Yates wells to the east are gas wells and for the most part depleted gas wells.

O Do you have a line agreement with the operator on the acreage offsetting the Dalport acreage to the east?

A. We do. We do have a line agreement between Dalport, Maralo, and Cetty Reserve, who operates the South Langlie Jal Unit to the east of us.

Q Do'you have anything further on this?

A. I do not.

Q Let's go to Exhibit Two and please explain that to the Examiner.

tion of the Jalmat Yates Unit and the boundaries outlined in yellow. We have once again the Dalport 80-acre tract outlined in blue, and then we've shown a red line around the outside of Jalmat Unit, which represents the area included within a half a mile of the original seven interior injection wells. Then we show a green line, which represents the area included within a half mile of the line injection wells that we plan, and then a little area up to the northeast outlined in blue includes the additional area taken in that would be one-half mile from the new planned injection wells on Dalport's lease.

Q Let's go now to Exhibit Three. Would you please describe that exhibit?

A. Okay. Exhibit -- Exhibit Three is a continuation of a table that was originally included in the hearing two years ago that listed all the wells within a half mile of the Jalmat Yates Unit. The three wells shown on our Exhibit Three were not drilled or completed at the time that the previous exhibit was prepared.

O. The exhibit you're making reference

-3 -

-21

 to is the tabular summary of the wells within the half mile radius?

A. Right, and the three wells that we list on this table include, first of all, an ARCO Oil and Gas Hanagan No. 5, which is located in Section 12 over on the north-west corner of the Jalmat Yates Unit. It really doesn't have any bearing on the proposed expansion, other than it's a well that according to our records was drilled in 1980, completed dry and abandoned, and I haven't been able to find out whether casing was pulled in it or not, but it's definitely a well that's located within a half mile of the Jalmat Unit and was not included on the previous tabulation.

Then the next well on that Exhibit Three is the Doyle Hartman X No. 3, which is located in Section 7 up to the north, directly north of the Dalport Winters 80-acre lease that we've been discussing, and we have the pertinent information on it.

It's a newly drilled well.

And then the third one we show is the Tahoe Oil and Cattle Company Judy No. 3, also located in Section 7, just northeast of the Dalport Winters lease, and we show on that Exhibit Two a Hartman X No. 4 Well, which is currently drilling, to the best of our knowledge, and we don't have any completion date on it.

top.

Q. Okay, now we're ready for Exhibit Number Four.

MR. STAMETS: Let me ask you a question.
You indicated the ARCO Well was spudded and abandoned, and
you don't have detail on the pressure.

A. I don't think the casing's been pulled on it.

MR. STAMETS: But in any event, they did the top of cement back up to 950 feet? That seems to be what the exhibit indicates there.

A. The --

MR. STAMETS: Or that's the calculated

A. Okay, now that's -- that's a calculated top based on the sacks of cement that were used and what we would -- we would calculate the size of the hole to be for a well drilled in this area. Now I'm sure that they have a cement top on that well but their office was closed yesterday when I was trying to get that information and so I -- that's strictly a calculated top by our calculations and not the official top at all.

MR. STAMETS: Okay, if you could get some additional detail on that well forthe record and submit that at any later date, that would be helpful.

____

**

:12

M We'll do that.

Now we're ready for Exhibit Number Four, Mr. Lowry. Let's look at that and describe that for the Examiner's benefit.

three wells that -- the first one is the B-10 that we're seeking approval to inject water into, and this schematic shows that the TD of the well is 3497; that we cemented 5-1/2 inch casing with 1800 sacks of cement; that we did circulate cement on the production string. We also circulated cement on the 8-5/8ths casing string, which was set at 416 feet. It shows that we have plastic-coated tubing in the well; a packer, which is nickel-plated, packer set at 2855. It also shows that the proposed perforations that we intend to inject into are from 2873 to 3106, which is in the Yates formation.

The second sketch on Exhibit Four is just a diagrammatic sketch of Dalport's B-2 Well, which is currently a producing Yates well but ultimately will be converted to a water injection well if our request is granted here today.

And the third diagram is -- is a sketch on the ARCO well that I discussed earlier, that was drilled this year, in 1980, and the best of our knowledge it's shut-in or it shows completed and abandoned. But I'll get you some

more information on that well.

Okay, next is Exhibit Five. Would you please describe that exhibit?

And we go to Exhibit Six --

O Do you want to talk about Exhibit Five first? That's the log.

A. Oh, I'm -- yeah. Exhibit Five is a copy of the log that was run on the Dalport B-10 Well, and it shows the top of the Yates at 2871 and we have the perforations marked on the well.

And that's -- I have no further comments on that.

Okay, now go on to Exhibit Six, if you would please, Mr. Lowry.

A. Exhibit Six is a copy of a water analysis run on the produced water from the Jalmat Yates Unit, and our source water, which is the Santa Rosa formation, is about 600 feet, and the source wells are located in the northeast 160 acres of Section 13.

And what this does, it just demonstrates the compatibility of the two -- two waters, so that while we're initially injecting Santa Rosa water in the flood, we intend to also include produced water once we start getting some response, and we're further considering the use of pro-

 duced water from Tenneco up to the north, which they've offered to make available to us, and we're currently running compatibility tests on it to see whether it's feasible to -- to mix that water with our produced water and source water.

Mr. Lowry, if this application of Maralo

A Well, if we're unable to convert the two wells in question to injection wells, we'll have no backup on the northeast side of our unit, and as I said earlier, we feel like there will be 80 acres of Yates formation that's certainly floodable that will not be flooded at all and the end result of that will be that we'll lose out on 120,000 barrels of oil that could have been produced that would not be if we do not convert those two wells to injection and give our flood some backup.

Q Did you have anything further to add to your testimony?

A. I have nothing further.

Q Were these Exhibits One through Six prepared by you or under your supervision?

A. They were.

Q. And in your opinion will the approval of this application of Maralo and Dalport be in the best interests of conservation and the prevention of waste and pro-

16 2 tection of correlative rights? λ. It will. MR. COFFIELD: Mr. Examiner, I move the admission of Exhibits One through Six. MR. STAMETS: These exhibits will be admitted. 8 9 10 CROSS EXAMINATION 11 BY MR. STAMETS: 12 Mr. Lowry, who will operate the injection 13 wells? 14 The Jalmat Yates Unit will operate the 15 injection wells, and the source water will come from the same 16 place that the Jalmat Unit water is coming. 17 Who will operate the producing wells on 18 19 the mentioned lease? 20 Okay, Dalport Oil Company will operate 21 the producing wells and they in turn will receive no income 22 from oil produced on the Jalmat Yates Unit. The Jalmat Yates 23 Unit will not receive any income from oil or gas produced on 24 the Dalport 80-acre Winters lease. 25 Okay. I see from some of the exhibits 26 27 that the intention is at least to call the injection wells by 28 the unit name and this is even though they aren't actually

within the unit boundary. Well, that was the intention, since they are replacing 5 and 10. We thought we'd try and keep the -keep those numbers in the well somewhere. Now we're certainly agreeable to changing those names to anything that the Commission would wish. I'm not sure what to do with them but we'll worry about that later. All right. MR. STAMETS: Are there any other questions of the witness? He may be excused. Anything further in this case? The case will be taken under advisement. And the hearing will recess until 1:30. (Hearing concluded.) 

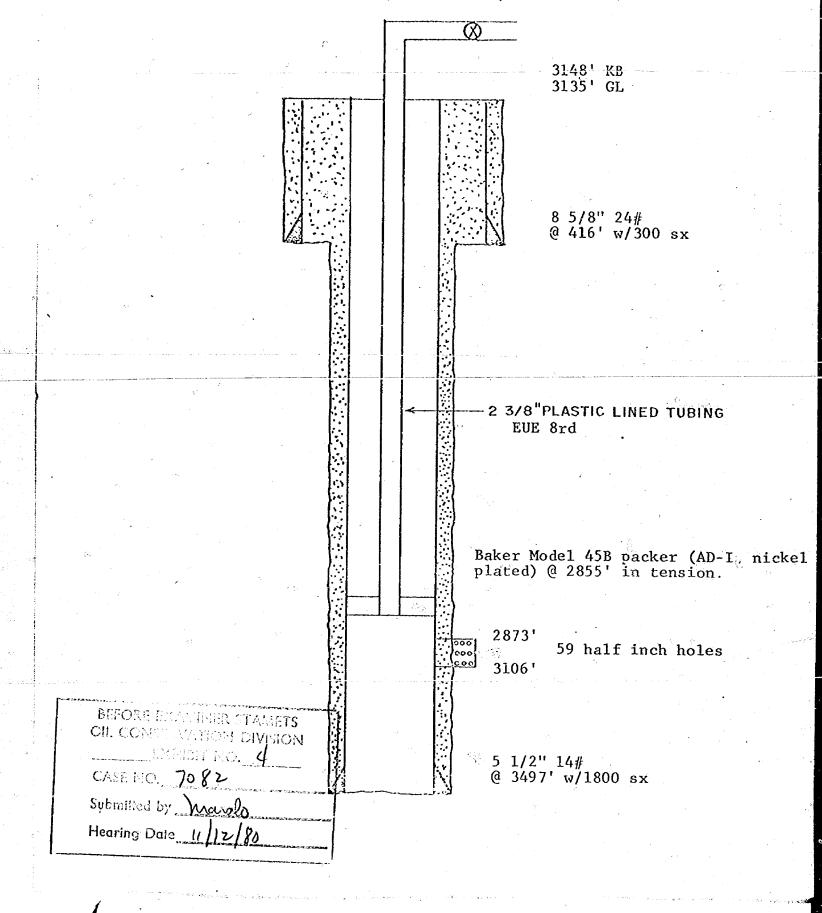
CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

I do hereby certify that the foregoing is a complete remark of the proceedings in the Examiner hearing of Case No. heard by me on 19.

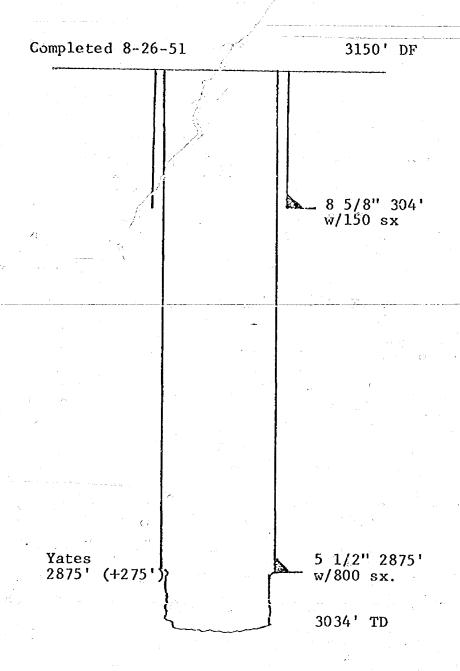
Oll Conservation Division

JALMAT YATES WATERFLOOD UNIT #B-10 JALMAT FIELD, LEA COUNTY, NEW MEXICO

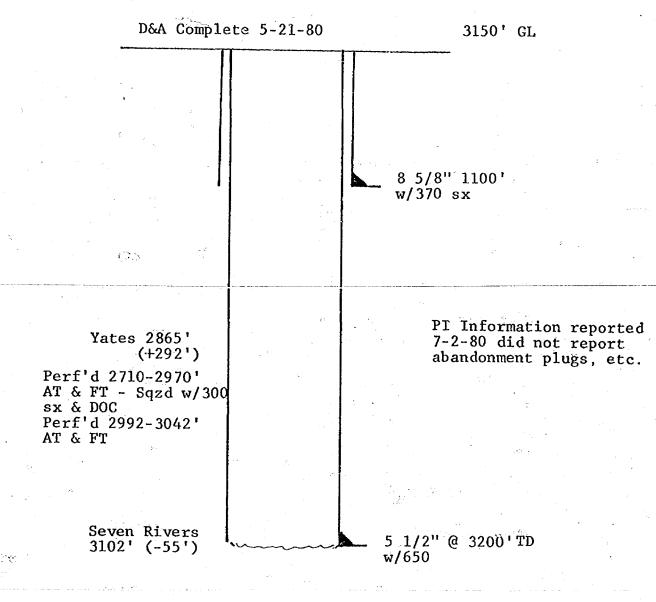


# DALPORT OIL CORPORATION

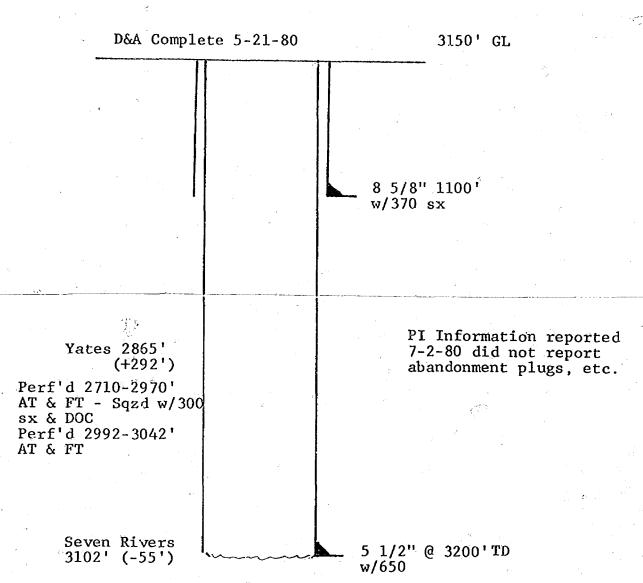
DALPORT "B" #2
DRILLED AS HUMBLE WINTERS O&R CO. #2
ELYDIA C. WINTERS ETAL
1980' FSL & 660' FSL, SEC. 7-25S-37E
COOPER JAL FIELD
LEA COUNTY, NEW MEXICO



W. F. HANAGAN NO. 5 760' FSL & 2080' FWL, SEC. 12-25S-36E JALMAT FIELD, LEA COUNTY, NEW MEXICO



W. F. HANAGAN NO. 5 760' FSL & 2080' FWL, SEC. 12-25S-36E JALMAT FIELD, LEA COUNTY, NEW MEXICO



709 W. INDIANA MIDLAND, TEXAS 79701 PHONE 683-4821

ì	RESULT	ÖF	WATER	CLE BRUKAA	

TO: Mr. R. A. Lowery Hearth For Regular Results Reported 6-11-80

P.O. Box 832, Midland, Texas RESULTS REPORTED 6-16-80

NO. 1 Santa Rosa water - taken from water supply well. 6-9-80

NO. 2 Produced water - taken from storage tank. 6-9-80

NO. 3 ...

#### REMARKS:

	NO. 1			
	170.	NO. 2	NO. 3	NO. 4
pecific Gravity at 60° F.	1.0021	1.0375		
H When Sampled				
H When Received	8.0	6.9		
icarbonate as HCO3	368	1,025		
Supersaturation as CaCO3	6	70	41	
Undersaturation as CaCO3		-		
otal Hardness as CaCO3	253	15,100		
alcium as Ca	38	_1_560		
lagnesium as Mg	38	2,722		V
odium and/or Potassium	171	13,668		
ulfate as SO4	252	2,805		
hloride as CI	41	29,118		K
ron as Fe	4.7	4.7		
larium as 8a				
urbidity, Electric				
Color as Pt				1
otal Solids, Calculated	908	50,898		<del> </del>
emperature °F.			/	1
arbon Disxide, Calculated				
Dissolved Oxygen, Winkler				1
lydrogen Sulfide	0.0	0.0		
lesistivity, ohms/m at 77° F.	9.20	0.157		
uspended Oil				
iltrable Solids as mg/1				
Volume Filtered, ml				
arbonate, as CO,	0	0		1

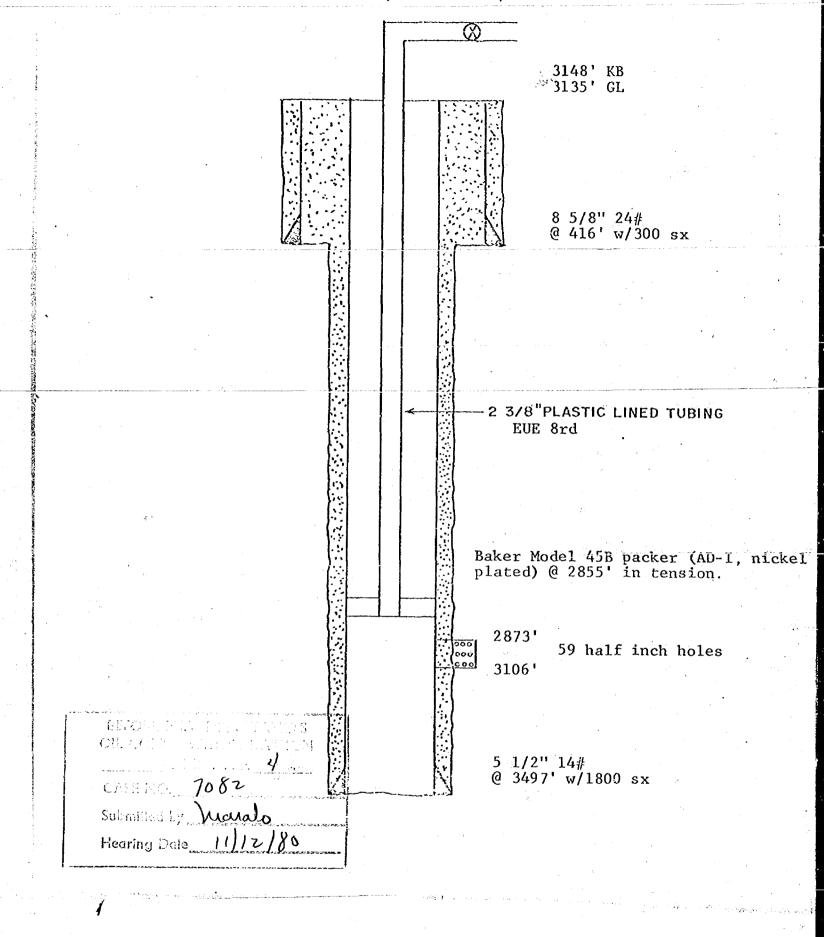
Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The above results show no evidence of any clear-cut incompatibility between these two waters. It should be clarified that we are assuming that there is no oxygen in the supply water though we could not test for this. We would not expect the iron encountered here in the supply water to be present in a nor mal producing water well; therefore, if air got into the water, we would expect iron precipitation from what is likely a normal soluble iron content in the produced water We would also suggest consideration be given to testing a combination of these waters under actual field conditions for a possible calcium carbonate scaling tendency in the mixture of waters, but we doubt seriously that it will warrant any attention.

Ferm No. 3

Wavlan C. Martin M

JALMAT YATES WATERFLOOD UNIT #B-10 JALMAT FIELD, LEA COUNTY, NEW MEXICO



# DALPORT OIL CORPORATION

DALPORT "B" #2

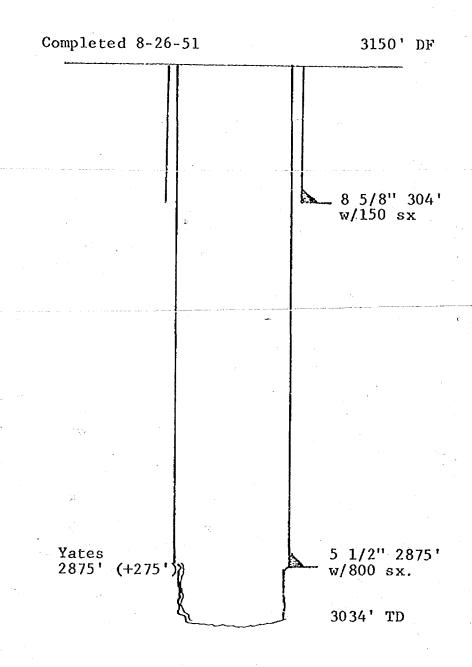
DRILLED AS HUMBLE WINTERS OAR CO. #2

ELYDIA C. WINTERS ETAL

1980' FSL & 660' FSL, SEC. 7-25S-37E

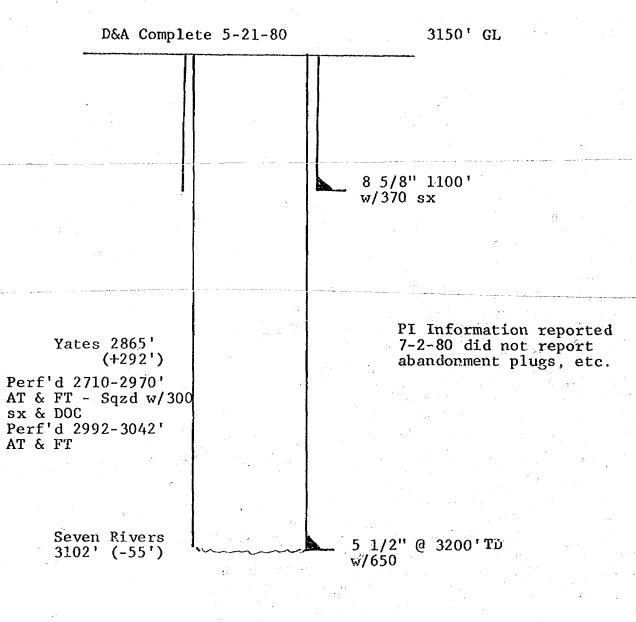
COOPER JAL FIELD

LEA COUNTY, NEW MEXICO



# ARCO OIL & GAS COMPANY

W. F. HANAGAN NO. 5 760' FSL & 2080' FWL, SEC. 12-25S-36E JALMAT FIELD, LEA COUNTY, NEW MEXICO



MONAHANS, TEXAS 79786

14

Martin Water Laboratored Tax

709 W. INDIANA MIDLAND, TEXAS 7970 PHONE 683-4521

RESULT OF WATER AL

то:	Mr. 1	R. A.	Lowe	ry	17)	Caraj	 SAMPLE RECEIVED 6-11-80
	P.O.	Box 8	832,	Midland,			RESULTS REPORTED 6-16-80

Jalmat Yates Unit Jalmat. FIELD OR POOL . STATE New Mexico SOURCE OF SAMPLE AND DATE TAKEN:

Santa Rosa water - taken from water supply well. 6-9-80 NO. 2 Produced water - taken from storage tank. 6-9-80

NO. 4

CHEMICAI	L AND PHYSICAL P	ROPERTIES		
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0021	1.0375		
pH When Sampled				
pH When Received	8.0	6.9		
Bicarbonate as HCO3	368	1,025		
Supersaturation as CaCO3	6	70	A	
Undersaturation as CaCO3				
Total Hardness as CaCO3	253	15,100		
Calcium as Ca	38	1,560		
Magnesium às Mg	38	2,722		
Sodium and/or Potassium	171	13,668		
Sulfate as SO4	252	2.805		
Chloride as CI	41	29,118		
fron as Fe	4.7	4.7		
Barium as Ba				
Turbidity, Electric				
Cotor as Pt				
Total Solids, Calculated	908	50.898		
Temperature °F.				
Carbon Dioxide, Calculated			N	
Dissolved Oxygen, Winkler	3			
Hydrogen Sulfide	0.0	0.0		e.
Resistivity, ohms/m at 77° F.	9,20	0.157		
Suspended Oil	535			
Filtrable Solids as mg/1				
Volume Filtered, ml				jāj v.
Carbonate, as CO	0	0		
3				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The above results show no evidence of any clear-cut incompatibility between these two waters. It should be clarified that we are assuming that there is no exygen in the supply water though we could not test for this. We would not expect the iron encountered here in the supply water to be present in a nor mal producing water well; therefore, if air got into the water, we would expect iron precipitation from what is likely a normal soluble iron content in the produced wate We would also suggest consideration be given to testing a combination of these water under actual field conditions for a possible calcium carbonate scaling tendency in t mixture of waters.

Form No. 3

(Wavlan C Martin

Dockets Nos. 37-80 and 38-80 are tentatively set for November 25 and December 10, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 12, 1980

9 A.H. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for December, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
  - (2) Consideration of the allowable production of gas for December, 1980, from four prorated pools in San Juan, Rio Arriba, and Sanuoval Counties, New Mexico.
- CASE 7076: Application of Vista Resources, Inc. for an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its John H. Dashko Federal Well No. 1 to be drilled 2510 feet from the South line and 790 feet from the East line of Section 11, Township 24 North, Range 7 West, Basin-Dakota Pool, the E/2 of said Section 11 to be dedicated to the well.
- CASE 7077: Application of Threshold Development Company for a dual completion, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the dual completion of its Concco "10"

  State Com Well No. 1 located in Unit I of Section 10, Township 19 South, Range 29 East, Turkey

  Track Field, to produce oil from the Wolfcamp formation and gas from the Atoka formation through parallel strings of tubing.
- CASE 7046: (Continued from October 15, 1980, Examiner Hearing)

Application of Cotton Petroleum Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Chacra and Pictured Cliffs production to the wellbores of wells in the South Blanco-Pictured Cliffs Pool located in Sections 1, 2, 3, 4, 9, 10, 11, 13, 23, and 24, Township 24 North, Range 4 West.

- CASE 7078: Application of Conoco Inc. for a dual completion, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks approval for the dual completion of its Warren Unit Well No. 82 located in Unit G of Section 35, Township 20 South, Range 38 East, to produce oil from the Blinebry Oil and Gas or Warren-Tubb Pools and the D-K Abo Pool.
- CASE 7079: Application of HNG Oil Company for the amendment of Order No. R-5727, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks the amendment of Order No. R-5727 to include the entire Pennsylvanian formation under the compulsory pooling order rather than only the Morrow formation as previously ordered.
- Application of Franks Petroleum, Inc. for an unorthodox gas well location, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 660 feet from the North and East lines of Section 9, Township 21 South, Range 32 East, Hat Mesa-Morrow Gas Pool, the E/2 of said Section 9 to be dedicated to the well.
- CASE 7081: Application of Belco Petroleum Corporation for compulsory pooling, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 19, Township 23 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7070: (Continued from October 29, 1980, Examiner Hearing)

Application of Tesoro Petroleum Corporation for a pilot caustic flood project, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a one-acre pilot caustic flood project in the Hospah Field by the injection of caustic fluid into the Seven Lakes Sand of the Upper Hospah Field at an approximate depth of 300-500 feet through four injection wells in Gait K of Section 1, Township 17 North, Range 9 West.

CASE 7082:

Application of Marelo, Inc. and Dalport Oil Corporation for a waterflood project, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to institute a joint waterflood project on Dalport's Winters Lease offsetting Maralo's Jalmat Yates Unit waterflood project by the injection of water into the Yates-Seven Rivers-Queen formations through a well to be jointly drilled at an unorthodox location 1260 feet from the South line and 1250 feet from the West line of Section 7, Township 25 South, lange 36 East, Jalmat Pool.

Memo

Set for Hearing R. L. STAMETS
Technical
Support Chief

Application for Cooperative waterflood project,

Bes unor the dox well Location

(#10 at 1260 FSL 1250 FWL

7-253-37E) and two

injection wells.

Delport will operate any producing wells on the Winters lease and Maralo will operate the injection wells

OIL CONSERVATION DIVISION



October 7, 1980

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey

Re: Application to drill non-standard location, Jalmat Field, Lea County, New Mexico Case 7082

#### Gentlemen

Maralo, Inc. requests approval to drill an unorthodox location 1250' FWL & 1260' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico. This well will be used as a water injection well in the Yates Jalmat Unit Waterflood. Order No. R-5816 authorized drilling Jalmat Yates Unit #5 and #10 at the following locations:

Approved Location

#5 #10 1550' FSL & 70' FEL Sec 12 25-S 36-E 400' FSL & 50' FEL Sec 12 25-S 36-E

Dalport objected to drilling these two wells on their lease line. After several months of negotiations, we have worked out an agreement with Dalport to drill #10, 1250' FWL & 1260' FSL of Section 7-25S-37E and eventually to convert their Dalport B No. 2, 660' FWL & 1980' FSL, Section 7-25S-37E to injection service in lieu of drilling Jalmat Yates Unit #5 and #10 at the line locations listed above.

Attached for your consideration are copies of the following:

- 1. An ownership plat showing who the offset operators are, where Jalmat Yates Unit No. 5 and No. 10 were originally located, and where we plan to locate these two injection wells now.
- 2. A list of all offset operators.
- 3. A copy of the operating agreement between Dalport and Maralo as operator of the Jalmat Yates Unit.



A Subsidiary of M. Ralph Lowe Inc. / P. O. Box 832 / Midland, Texas 79701 / (915) 684-7441

4. A copy of the line agreement with Getty Reserve waiving objections to drilling well No. 10 on their lease line.

R. A. Lowery

RAL/dmc

3>

cc: NMOCC - Hobbs Conrad Coffield

00T 0 9 1980 )



Re: Water Injection Wells Effecting the Jalmat Yates Unit and the South Langlie Jal Unit, Lea County, New Mexico

Case 7082

Gentlemen: Sint

Getty Reserve Oil, Inc. is the operator of the South Langlie Jal Unit in Lea County, New Mexico which covers, among other lands, the E/2 SW/4 of Section 7, T-25-S, R-37-E.

Subject to Maralo, Inc., as operator of the Jalmat Yates Unit (covering among other lands the SE/4 Section 12, the NE/4 Section 13 and the NW/4 Section 18, T-25-S, R-37-E, Lea County, New Mexico) obtaining the necessary rights and permission from Dalport Oil Company, then Maralo, Inc. proposes to drill and operate, at no cost to you, a water injection well to be located 1280' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico for the purpose of injecting water into the YATES FORMATION, and in the SEVEN RIVERS-QUEEN FORMATION at the intervals of 3390' to 3460' as indicated on the attached copy of the Density Neutron Log run on September 4, 1979 in the Maralo Jalmat Yates Unit well #20 located 1250' FNL and 70' FWL of Section 18, T-25-S, R-37-E, Lea County, New Mexico.

It is further agreed that:

- (1) In addition to Maralo, Inc. drilling and operating the above proposed water injection well, it will at convenient times once each year run a survey in said injection well to determine that water is being injected into the Seven Rivers-Queen formation at intervals set forth above and the results of such survey shall be furnished Getty Reserve Oil, Inc. and
- (2) Getty Reserve Oil, Inc. agrees, at their sole cost and expense to continue the injection of water into the Seven Rivers-Queen formation of the South Langlie Jal Unit, Lea County, New Mexico; and
- (3) The parties hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any water input well if such operation is no longer economically profitable to the operating party

By your acceptance and execution in the space provided below, Getty Reserve Oil, Inc. as operator of the South Langlie Jal Unit, and insofar as you have the legal right to do so, does hereby valve any objections it might have and does hereby consent to Maralo, Inc. drilling and operating the above-described water injection well to be located 1230' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico, subject, however, to the terms, conditions and covenants hereinabove set forth.

Dalport Oil Corporation is being requested to show their approval of the above described proposed operations by their execution of a duplicate of this letter. The parties hereto do hereby agree this letter may be executed in counterpart, each of which shall be considered an original for all purposes.

AGREED TO and ACCEPTED this Zoday of March, 1980
GETTY RESERVE OIL, INC.

By: Simple

Yours very truly, MARALO, INC.

By: M.a. Lawery

AGREED TO and ACCEPTED this 20 ""
of SEPT: 1980

DALPORT OIL CORPORATION

By: Le. Dona

> Re: Water Injection Wells Effecting the Jalmat Yates Unit and the South Langlie Jal Unit, Lea County, New Mexico

## Gentlemen:

Getty Reserve Oil, Inc. is the operator of the South Langlie Jal Unit in Lea County, New Mexico which covers, among other lands, the E/2 SW/4 of Section 7, T-25-S, R-37-E.

Subject to Maralo, Inc., as operator of the Jalmat Yates Unit (covering among other lands the SE/4 Section 12, the NE/4 Section 13 and the NW/4 Section 18, T-25-S, R-37-E, Lea County, New Mexico) obtaining the necessary rights and permission from Dalport Oil Company, then Maralo, Inc. proposes to drill and operate, at no cost to you, a water injection well to be located 1280' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico for the purpose of injecting water into the YATES FORMATION, and in the SEVEN RIVERS-QUEEN FORMATION at the intervals of 3390' to 3460' as indicated on the attached copy of the Density Neutron Log run on September 4, 1979 in the Maralo Jalmat Yates Unit well #20 located 1250' FNL and 70' FWL of Section 18, T-25-S, R-37-E, Lea County, New Mexico.

It is further agreed that:

- (1) In addition to Maralo, Inc. drilling and operating the above proposed water injection well, it will at convenient times once each year run a survey in said injection well to determine that water is being injected into the Seven Rivers-Queen formation at intervals set forth above and the results of such survey shall be furnished Getty Reserve Oil, Inc. and
- (2) Getty Reserve Oil, Inc. agrees, at their sole cost and expense to continue the injection of water into the Seven Rivers, Queen formation of the South Langlie Jal Unit, Lea County, New Mexico; and
- (3) The parties hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any water input well if such operation is no longer economically profitable to the operating party.

By your acceptance and execution in the space provided below, Getty Reserve Oil, Inc. as operator of the South Langlie Jal Unit, and insofar as you have the legal right to do so, does hereby waive any objections it might have and does hereby consent to Maralo, Inc. drilling and operating the above-described water injection well to be located 1270' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico, subject, however, to the terms, conditions and covenants hereinabove set forth.

Dalport Oil Corporation is being requested to show their approval of the above described proposed operations by their execution of a duplicate of this letter. The parties hereto do hereby agree this letter may be executed in counterpart, each of which shall be considered an original for all purposes.

AGREED TO and ACCEPTED this Zn=day of March, 1980
GETTY RESERVE OIL, INC.

By:

Yours very truly, MARALO, INC.

By: R. H. Jaweres

AGREED TO and ACCEPTED this 234 of SEPT., 1980

DALPORT OIL CORPORATION

By: Le. Dona

> Re: Water Injection Wells Effecting the Jalmat Yates Unit and the South Langlie Jal Unit, Lea County, New Mexico

Gentlemen;

Getty Reserve Oil, Inc. is the operator of the South Langlie Jal Unit in Lea County, New Mexico which covers, among other lands, the E/2 SW/4 of Section 7, T-25-S, R-37-E.

Subject to Maralo, Inc., as operator of the Jalmat Yates Unit (covering among other lands the SE/4 Section 12, the NE/4 Section 13 and the NW/4 Section 18, T-25-S, R-37-E, Lea County, New Mexico) obtaining the necessary rights and permission from Dalport Oil Company, then Maralo, Inc. proposes to drill and operate, at no cost to you, a water injection well to be located 1280' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico for the purpose of injecting water into the YATES FORMATION, and in the SEVEN RIVERS-QUEEN FORMATION at the intervals of 3390' to 3460' as indicated on the attached copy of the Density Neutron Log run on September 4, 1979 in the Maralo Jalmat Yates Unit well #20-located 1250' FNL and 70' FWL of Section 16, T-25-S, R-37-E, Lea County, New Mexico.

It is further agreed that:

- (1) In addition to Maralo, Inc. drilling and operating the above proposed water injection well, it will at convenient times once each year run a survey in said injection well to determine that water is being injected into the Seven Rivers-Queen formation at intervals set forth above and the results of such survey shall be furnished Getty Reserve Oil, Inc. and
- (2) Getty Reserve Oil, Inc. agrees, at their sole cost and expense to continue the injection of water into the Seven Rivers-Queen formation of the South Langlie Jal Unit, Lea County, New Mexico; and
- (3) The parties hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any water input well if such operation is no longer economically profitable to the operating party

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By:

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By: f.a. Jaweres

AGREED TO and ACCEFTED this 27

of SEPT., 1980

DALPORT OIL CORPORATION

By: Les. D. Tana

521

Re: Water of the Wells Est ching the Yates Unit and the Soura Labelia of Unit,
Lea County, New York

#### Gentlemen;

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Subject to Maralo, Inc., as operator of the Jalmat Yates Unit (covering among other lands the SE/4 Section 12, the NE/4 Section 13 and the NW/4 Section 18, T-25-S, R-37-E, Lea County, New Mexico) obtaining the necessary rights and permission from Dalpert Oil Company, then Maralo, Inc. proposes to drill and operate, at no cost to you, a water injection well to be located 1280' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico for the purpose of injecting water into the YATES FORMATION, and in the SEVEN RIVERS-QUEEN FORMATION at the intervals of 3390' to 3460' as indicated on the attached copy of the Density Neutron Log run on September 4, 1979 in the Maralo Jalmat Yates Unit well #20 located 1250' FNL and 70' FWL of Section 18, T-25-S, R-37-E, Lea County, New Mexico.

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- (2) Getty Reserve Oil, Inc. agrees, at their sole cost and expense to continue the injection of water into the Seven Rivers-Queen formation of the South Langlie Jal Unit, Lea County, New Mexico; and
- (3) The parties hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any water input well if such operation is no longer economically profitable to the operating party.

By your acceptance and execution in the space provided below, Getty Reserve Oil, Inc. as operator of the South Langlie Jal Unit, and insofar as you have the legal right to do so, does hereby waive any objections it might have and does hereby consent to Maralo, Inc. drilling and operating the above-described water injection well to be located 1270' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico, subject, however, to the terms, conditions and covenants hereinabove set forth.

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By: Silli Jah

Yours very truly, MARALO, INC.

By: All Janery

AGREED TO and ACCEPTED this 222 of SEPT., 1980

DALPORT OIL CORPORATION.

By: Lis Fordall

## AGREEMENT

## KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, Dalport Oil Corporation, Mobil Oil Corporation, Fluor Oil & Gas Corporation and Edward Wright, Jr., et ux (sometimes herein collectively referred to as "Dalport, et al"), are the owners of the leasehold estate under the WiSW Section 7, Township 25 South, Range 37 East, Lea County New Mexico; and,

WHEREAS, Maralo, Inc. (hereinafter referred to as "Maralo") is the Operator of the Jalmat Yates Unit covering the SE% Section 12, NE% Section 13, Township 25 South, Range 36 East, and the NW%, N%SW% Section 18, Township 25 South, Range 37 East, Lea County, New Mexico; and,

WHEREAS, it is the desire of the parties hereto to enter into an agreement for the conservation and production of oil and/or gas from all of the above described lands.

NOW, THEREFORE, in consideration of the premises and the mutual benefits to be divided by the parties hereto, and subject to approval by any affected mineral owners, royalty owners, owners of the surface rights, any regulatory body having jurisdiction over the premises, and the consent of "Non-Operators" under the Jalmat Yates Unit Agreement, the parties hereto agree as follows:

## DALPORT, ET AL, AGREE AS FOLLOWS:

- (1) They do hereby give their consent and permission for Maralo to drill and operate a water injection well at a location approximately 1280 FWL and 1320 FSL of Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, for the purpose of injecting water into the interval described as the "Unitized Zone" in said Jalmat Yates Unit Agreement. The costs to drill and complete said injection well, including water flow lines, easements, roadways and damages shall be borne 50% by Dalport, et al, and 50% by Maralo but Dalport, et al, shall not be required to pay any of the operating costs of said well as a water injection well.
- Dalport, et al's Winters #2 Well which is located approximately 660' FNL and 660' FWE of the SW½ Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, becomes uneconomical to operate as a producing well then, Dalport, et al, shall execute such instrument or instruments in form suitable for recording as may be necessary or desirable to assign and transfer to Maralo an undivided one-half (1/2) interest in and to the casing and wellhead equipment (excluding any other above-ground production equipment) in and on said Winters #2 Well together with an undivided one-half (1/2) leasehold estate and operating rights that may be required for the purpose of permitting Maralo to operate said well for the injection of water into the interval defined as the

"Unitized Zone" in the Jalmat Yates Unit Agreement. Provided, however, Dalport, et al, shall be required to pay one-half (1/2) of the costs and expenses incurred by Maralo to recomplete and convert said Winters #2 well to a water injection well, including one-half of the costs of any water flow lines to said well and any costs of roadways, easements and damages incurred in connection therewith. Dalport, et al, shall not be required to pay any of the costs to operate said well as a water injection well.

- (3) Dalport, et al, shall not, from and after the effective date of this Agreement, drill any new production test well or wells on the W\SW\\ Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, which well or wells would be completed in such manner as to permit production from the interval defined as the "Unitized Zone" in the Jalmat Yates Unit Agreement.
- (4) All expenses incurred under operations for the production of oil or gas, or both, from any now existing wells located on said W\SW\xi Section 7, Township 25 South. Range 37 East, shall be borne by Dalport, et al.
- (5) Subject to the provisions of Paragraph (C) following, Dalport, et al, hereby give their consent, insofar as they have the legal right to do so, for Maralo to drill and operate a water injection well to be located approximately 1350' FWL and 122' FNL of Section 18, Township 25 South, Range 37 East, Lea County, New Mexico, for the purpose of injecting water into the interval defined as the "Unitized Zone" in the Jalmat Yates Unit Agreement. Likewise Dalport, et al, agree that they will cooperate fully by giving their consent in connection with any application which Maralo may file with the New Mexico Oil Conservation Commission, or other apropriate governmental agency having jurisdiction, seeking approval of such a project.

# MARALO AGREES AS FOLLOWS:

Subject to the consent and approval of any governmental agency having jurisdiction over the premises, any required lessor's consent and the necessary required consent of Non-Operators under the Jalmat Yates Unit Agreement, Maralo, as Operator of said Jalmat Yates Unit, will,

(A) On or before October 1, 1980, commence the drilling of a water injection well to be located approximately 1280' FWL and 1320' FSL of Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, and drill said well only to a depth sufficient to permit injection of water through said well into the interval defined as the "Unitized Zone" in the Jalmat Yates Unit Agreement, and thereafter, at Maralo's sole cost, risk and expense, operate said well so as to inject water into the interval defined as the "Unitized Zone" in the Jalmat Yates

Unit Agreement in a manner compatible to the efficient operations of the Jalmat Yates Unit. The costs to drill and complete said injection well, including one-half of the costs of any water flow lines to said well and any costs for roadways, easements and damages incurred in connection therewith shall be borne 50% by Maralo and 50% by Dalport, et al, but Dalport, et al, shall not be required to pay any of the operating costs of said well; and

- (B) Take over and operate the Dalport-Winters #2 Well

  -- fully described in Paragraph (2) above -- at

  such time and in the manner hereinabove provided,
  and thereafter, at Maralo's expense, operate said

  well as a Water injection well for injection of

  water into the interval defined as the "Unitized

  Zone" in the Jalmet Yetes Unit Agreement. Water

  for such injection into said well shall be supplied

  by Maralo at its expense; and
- (C) Within thirty (30) days after final completion of the well provided to be drilled in Paragraph (5) above, Maralo shall commence drilling operations for a water injection well to be located approximately 1350' FWL and 127' FRI, of Section 18, Township 25 South, Range 37 bast, Lea County, New Mexico, and shall drill and operate said injection well at no costs or expenses to Dalport, et al.
- (D) Maralo, acting as Operator of the Jalmat Yates
  Unit, does hereby agree not to drill the two
  previously proposed water injection wells which
  were proposed to be drilled along the extreme East
  line of the LE's Section 12, Township 25 South,
  Range 37 East, Lea County, New Mexico.
- (E) Agrees to take and dispose of Dalport, et al's, produced water from their Winters "B" #1 and "B" %2 Wells which are located on the WSSWk Section 7, Township 25 South, Range 37 East, Lea County, New Mexico. Provided, however, Dalport, et al, at their sole cost, risk and expense shall install and operate the necessary facilities to deliver said produced water to Maralo at the nearest Jalmat Yatks Unit disposal system.
- (F) To furnish to Dalport, et al, copies of periodic reports reflecting the volumes of water being injected into the Jalmat Yates Unit.
- It is further agreed between the parties hereto that:
- (i) Should any party hereto be prohibited by legal action, force majeure, or for any other reason beyond such party's control, to carry out or perform its

respective covenant and/or agreement as herein provided, then in such event such delay shall not be deemed a default under the provisions of this Agreement and the parties heretoragree that a good faith effort shall be exercised to remedy such cause or delay; and

- (ii) The right of ingress and egress necessary for Maralo's operations on the Dalport, et al lease(s) shall be given by Dalport, et al, to Maralo insofar as they have the legal right to do so.
- (iii) Should it be determined that instruments of a legal nature should be required to accomplish and perform any terms, conditions or covenants herein provided, then said instrument shall forthwith be prepared and executed by each party hereto; and
- (iv) Any notices or correspondence required under the provisions of this Agreement shall be deemed to be properly given by directing same to:

Maralo, Inc.
P. O. Box 832
Midland, Texas 79702
Telephone: 915-684-7441

Dalport Oil Corporation 3471 First National Bank Building Dallas, Texas 75202 Telephone: 214-748-7609

Mobil Oil Corporation Nine Greenway Plaza Suite 2700 Houston, Texas 77046 Fluor Oil & Gas Corporation 615 Midland Tower Midland, Texas 79701

Edward Wright, Jr. c/o Dalport Oil Corporation 3471 First National Bank Building Dallas, Texas 75202 Telephone: 214-748-7609

This Agreement shall be binding upon Dalport Oil Corporation, Mobil Oil Corporation, Fluor Oil & Gas Corporation and Edward Wright, Jr., et ux, and upon Maralo, Inc., and shall inure to the benefit of each party and their respective heirs, successors and assigns and shall constitute covenants running with the land and any leasehold estate affected hereby. Provided, however, any covenant or agreement made by Maralo under the provisions hereof, and as Operator of the Jalmat Yates Unit Agreement, shall be subject to any required ratification, confirmation or consent as same might be required under the terms and provisions of the Jalmat Yates Unit Agreement; and provided, however, further that any covenant or agreement made by Dalport, et al, under the provisions hereof shall not be binding upon any party constituting "Dalport, et al" until executed by all parties constituting "Dalport, et al".

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Presid on behalf of sai	ent of Maralo, d d corporation.	Inc., a		còrporati	on p
My Commission Ex	pires:		•		

STATE OF TEXAS

Notary Public

# JALMAT YATES UNIT

# Offset Operators

WECO P. O. Box 2377 Midland, Texas 79702

Tahoe Oil P. O. Box 3084 Midland, Texas 79702

Doyle Hartman Oil P. O. Box 10426 Midland, Texas 79702

Arco P. O. Box 1610 Midland, Texas 79702

Exxon
P. O. Box 1600
Midland, Texas 79702

Maralo, Inc. P. O. Box 832 Midland, Texas 79702

Getty Oil P. O. Box 1231 Midland, Texas 79702

# JAIMAT YATES UNIT

# Offset Operators

WECO P. O. Box 2377 Midland, Texas 79702

Tahoe Oil P. O. Box 3084 Midland, Texas 79702

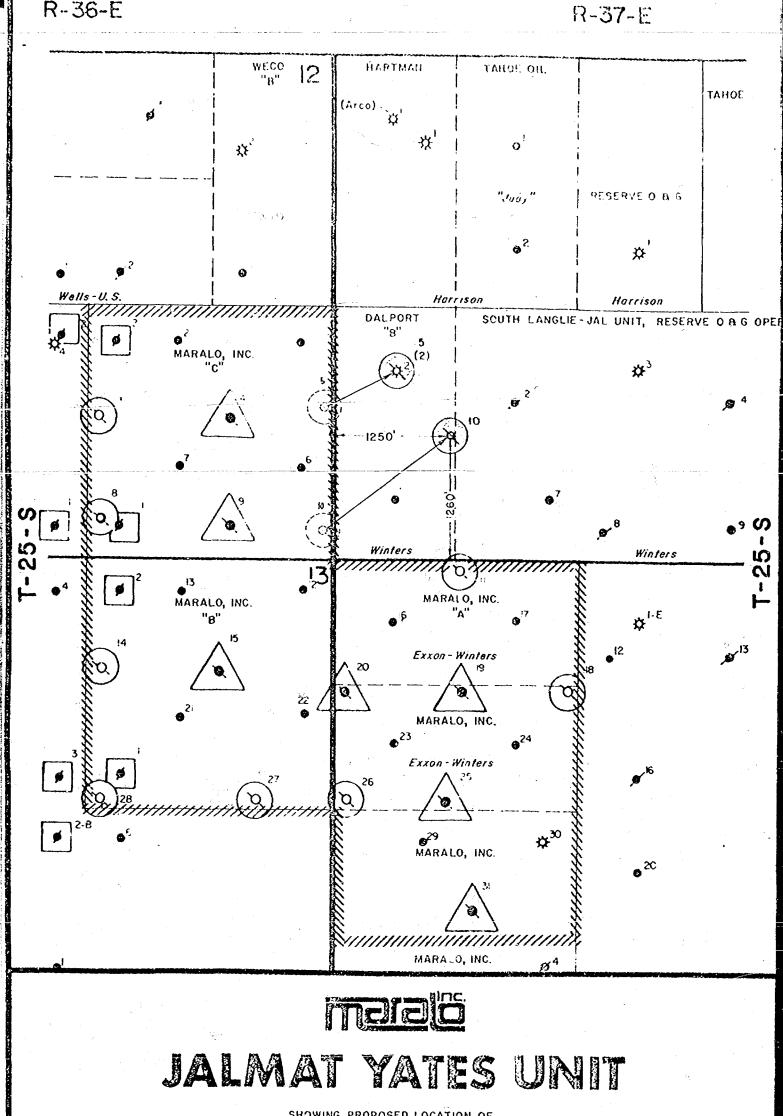
Doyle Hartman Oil P. O. Box 10426 Midland, Texas 79702

Arco P. O. Box 1610 Midland, Texas 79702

Exxon P. O. Box 1600 Midland, Texas 79702

Maralo, Inc. P. O. Box 832 Midland, Texas 79702

Getty Oil P. O. Box 1231 Midland, Texas 79702



R-36-E

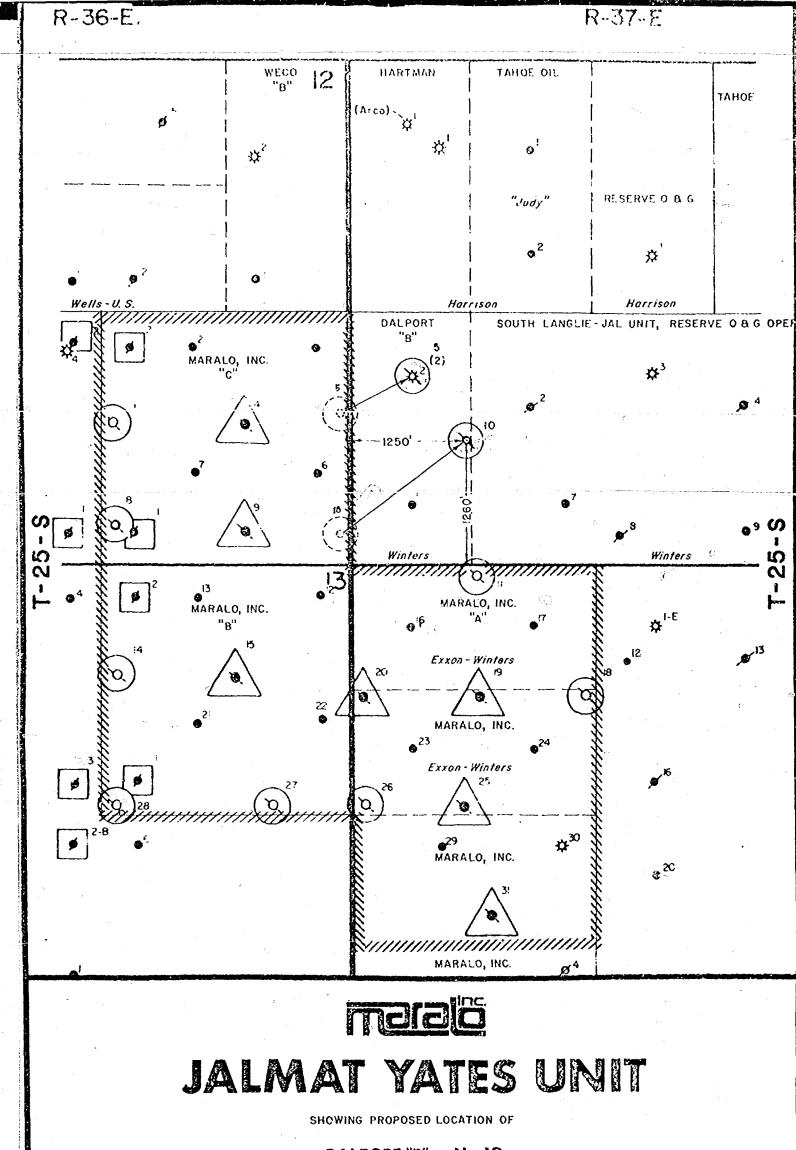
SHOWING PROPOSED LOCATION OF

DALPORT "B"-- No 10

LEA COUNTY, NEW MEXICO

SCALE 1"= 1000"

DATE



DALPORT "B"-- No 10

LEA COUNTY, NEW MEXICO

SCALE 1"= 1000"

DATE

Case 7082

Re: Water Injection Wells Effecting the Jalmat Yates Unit and the South Langlie Jal Unit, Lea County, New Mexico

Gentlemen:

Getty Reserve Oil, Inc. is the operator of the South Langlie Jal Unit in Lea County, New Mexico which covers, among other lands, the E/2 SW/4 of Section 7, T-25-S, R-37-E.

Subject to Maralo, Inc., as operator of the Jalmat Yates Unit (covering among other lands the SE/4 Section 12, the NE/4 Section 13 and the NW/4 Section 18, T-25-S, R-37-E, Lea County, New Mexico) obtaining the necessary rights and permission from Dalport Oil Company, then Maralc, Inc. proposes to drill and operate, at no cost to you, a water injection well to be located 1280' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico for the purpose of injecting water into the YATES FORMATION, and in the SEVEN RIVERS-CUEEN FORMATION at the intervals of 3390' to 3460' as indicated on the attached copy of the Density Neutron Log run on September 4, 1979 in the Maralo Jalmat Yates Unit well #20 located 1250' FNL and 70' FWL of Section 18, T-25-S, R-37-E, Lea County, New Mexico.

It is further agreed that:

- (1) In addition to Maralo, Inc. drilling and operating the above proposed water injection well, it will at convenient times once each year run a survey in said injection well to determine that water is being injected into the Seven Rivers-Queen formation at intervals set forth above and the results of such survey shall be furnished Getty Reserve Oil, Inc. and
- (2) Getty Reserve Oil, Inc. agrees, at their sole cost and expense to continue the injection of water into the Seven Rivers-Queen formation of the South Langlie Jal Unit, Lea County, New Mexico; and
- (3) The parties hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any water input well if such operation is no longer economically profitable to the operating party.

By your acceptance and execution in the space provided below, Getty Reserve Oil, Inc. as operator of the South Langlie Jal Unit, and insofar as you have the legal right to do so, does hereby waive any objections it might have and does hereby consent to Maralo, Inc. drilling and operating the above-described water injection well to be located 1230' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico, subject, however, to the terms, conditions and covenants hereinabove set forth.

MI)

Dalport Oil Corporation is being requested to show their approval of the above described proposed operations by their execution of a duplicate of this letter. The parties hereto do hereby agree this letter may be executed in counterpart, each of which shall be considered an original for all purposes.

AGREED TO and ACCEPTED this 3 1980

Zo day of March, 1980
GETTY RESERVE OIL, INC.

By: Stit

Yours very truly, MARALO, INC.

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AGREED TO and ACCEPTED this 22

of SEPT., 1930
DALPORT OIL CORPORATION_

By: 🗡

Re: Water Injection Wells Effecting the Jalmat Yates Unit and the South Langlie Jal Unit, Lea County, New Mexico

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By: Mr. Jehn

Yours very truly, MARALO, INC.

By: A. C. Lawerey

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DALPORT OIL CORPORATION

no les Diland

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of SEPT., 1980

DALPORT OIL CORPORATION

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- (2) Getty Reserve Oil, Inc. agrees, at their sole cost and expense to continue the injection of water into the Seven Rivers-Queen formation of the South Langlie Jal Unit, Lea County, New Mexico; and
- (3) The parties hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any water input well if such operation is no longer economically profitable to the operating party.

By your acceptance and execution in the space provided below, Getty Reserve Oil, Inc. as operator of the South Langlie Jal Unit, and insofar as you have the legal right to do so, does hereby waive any objections it might have and does hereby consent to Maralo, Inc. drilling and operating the above-described water injection well to be located 1270' FWL and 1320' FSL of Section 7, T-25-S, R-37-E, Lea County, New Mexico, subject, however, to the terms, conditions and covenants hereinabove set forth.

Dalport Oil Corporation is being requested to show their approval of the above described proposed operations by their execution of a duplicate of this letter. The parties hereto do hereby agree this letter may be executed in counterpart, each of which shall be considered an original for all purposes.

AGREED TO and ACCEPTED this day of March, 1980 GETTY RESERVE OIL, INC.

By: Sim Salar

Yours very truly, MARALO, INC.

By: 1. (1. Saucere,

AGREED TO and ACCEPTED this 222 of SEPT., 1980

DALPORT OIL CORPORATION

By: Les to Tanal

wel'

#### AGREEMENT

## KNOW ALL MEN BY THESE PRESENTS:

WHEREAS Dalport Oil Corporation, Mobil Oil Corporation, Fluor Oil & Gas Corporation and Edward Wright, Jr., et ux (sometimes herein collectively referred to as "Dalport, et al"), are the owners of the leasehold estate under the Waswa Section 7, Township 25 South, Range 37 East, Lea County, New Mexico; and,

WHEREAS, Maralo, Inc. (hereinafter referred to as "Maralo") is the Operator of the Jalmat Yates Unit covering the SE% Section 12, NE% Section 13, Township 25 South, Range 36 East, and the NW%, N%SW% Section 18, Township 25 South, Range 37 East, Lea County, New Mexico; and,

WHEREAS, it is the desire of the parties hereto to enter into an agreement for the conservation and production of oil and/or gas from all of the above described lands.

NOW, THEREFORE, in consideration of the premises and the mutual benefits to be divided by the parties hereto, and subject to approval by any affected mineral owners, royalty owners, owners of the surface rights, any regulatory body having jurisdiction over the premises, and the consent of "Non-Operators" under the Jalmat Yates Unit Agreement, the parties hereto agree as follows:

### DALPORT, ET AL, AGREE AS FOLLOWS:

- (1) They do hereby give their consent and permission for Maralo to drill and operate a water injection well at a location approximately 1280 FWL and 1320 FSL of Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, for the purpose of injecting water into the interval described as the "Unitized Zone" in said Jalmat Yates Unit Agreement. The costs to drill and complete said injection well, including water flow lines, easements, roadways and damages shall be borne 50% by Dalport, et al, and 50% by Maralo but Dalport, et al, shall not be required to pay any of the operating costs of said well as a water injection well.
- Dalport, et al's Winters #2 Well which is located approximately 660' FNL and 660' FWL of the SW½ Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, becomes uneconomical to operate as a producing well then, Dalport, et al, shall execute such instrument or instruments in form suitable for recording as may be necessary or desirable to assign and transfer to Maralo an undivided one-half (1/2) interest in and to the casing and wellhead equipment (excluding any other above-ground production equipment) in and on said Winters #2 Well together with an undivided one-half (1/2) leasehold estate and operating rights that may be required for the purpose of permitting Maralo to operate said well for the injection of water into the interval defined as the

"Unitized Zone" in the Jalmat Yates Unit Agreement. Provided, however, Dalport, et al, shall be required to pay one-half (1/2) of the costs and expenses incurred by Maralo to recomplete and convert said Winters #2 well to a water injection well, including one-half of the costs of any water flow lines to said well and any costs of roadways, easements and damages incurred in connection therewith. Dalport, et al, shall not be required to pay any of the costs to operate said well as a water injection well.

- (3) Dalport, et al, shall-not, from-and after the effective date of this Agreement, drill any new production test well or wells on the W\2SW\2 Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, which well or wells would be completed in such manner as to permit production from the interval defined as the "Unitized Zone" in the Jalmat Yates Unit Agreement.
- (4) All expenses incurred under operations for the production of oil or gas, or both, from any now existing wells located on said W\2SW\2 Section 7, Township 25 South, Range 37 East, shall be borne by Dalport, et al.
- (5) Subject to the provisions of Paragraph (C) following, Dalport, et al, hereby give their consent, insofar as they have the legal right to do so, for Maralo to drill and operate a water injection well to be located approximately 1350' FWL and 122' FNL of Section 18, Township 25 South, Range 37 East, Lea County, New Mexico, for the purpose of injecting water into the interval defined as the "Unitized Zone" in the Jalmat Yates Unit Agreement. Likewise Dalport, et al, agree that they will cooperate fully by giving their consent in connection with any application which Maralo may file with the New Mexico Oil Conservation Commission, or other appropriate governmental agency having jurisdiction, seeking approval of such a project.

#### MARALO AGREES AS FOLLOWS:

Subject to the consent and approval of any governmental agency having jurisdiction over the premises, any required lessor's consent and the necessary required consent of Non-Operators under the Jalmat Yates Unit Agreement, Maralo, as Operator of said Jalmat Yates Unit, will,

(A) On or before October 1, 1980, commence the drilling of a water injection well to be located approximately 1280' FWL and 1320' FSL of Section 7, Township 25 South, Range 37 East, Lea County, New Mexico, and drill said well only to a depth sufficient to permit injection of water through said well into the interval defined as the "Unitized Zone" in the Jalmat Yates Unit Agreement, and thereafter, at Maralo's sole cost, risk and expense, operate said well so as to inject water into the interval defined as the "Unitized Zone" in the Jalmat Yates

Unit Agreement in a manner compatible to the efficient operations of the Jalmat Yates Unit. The costs to drill and complete said injection well, including one-half of the costs of any water flow lines to said well and any costs for roadways, easements and damages incurred in connection therewith shall be borne 50% by Maralo and 50% by Dalport, et al, but Dalport, et al, shall not be required to pay any of the operating costs of said well; and

- (B) Take over and operate the Dalport-Winters #2 Well
  -- fully described in Paragraph (2) above -- at
  such time and in the manner hereinabove provided,
  and thereafter, at Maralo's expense, operate said
  well as a water injection well for injection of
  water into the interval defined as the "Unitized
  Zone" in the Jalmat Yates Unit Agreement. Water
  for such injection into said well shall be supplied
  by Maralo at its expense; and
- (C) Within thirty (30) days after final completion of the well provided to be drilled in Paragraph (5) above, Maralo shall commence drilling operations for a water injection well to be located approximately 1350' FWL and 122' FNL of Section 18, Township 25 South, Range 37 East, Lea County, New Mexico, and shall drill and operate said injection well at no costs or expenses to Dalport, et al.
- (D) Maralo, acting as Operator of the Jalmat Yates
  Unit, does hereby agree not to drill the two
  previously proposed water injection wells which
  were proposed to be drilled along the extreme East
  line of the SE% Section 12, Township 25 South,
  Range 37 East, Lea County, New Mexico.
- (E) Agrees to take and dispose of Dalport, et al's, produced water from their Winters "B" #1 and "B" #2 Wells which are located on the W2SW2 Section 7, Township 25 South, Range 37 East, Lea County, New Mexico. Provided, however, Dalport, et al, at their sole cost, risk and expense shall install and operate the necessary facilities to deliver said produced water to Maralo at the nearest Jalmat Yates Unit disposal system.
- (F) To furnish to Dalport, et al, copies of periodic reports reflecting the volumes of water being injected into the Jalmat Yates Unit.

It is further agreed between the parties hereto that:

(i) Should any party hereto be prohibited by legal action, force majeure, or for any other reason beyond such party's control, to carry out or perform its

respective covenant and/or agreement as herein provided, then in such event such delay shall not be deemed a default under the provisions of this Agreement and the parties hereto agree that a good faith effort shall be exercised to remedy such cause or delay; and

- (ii) The right of ingress and egress necessary for Maralo's operations on the Dalport, et al lease(s) shall be given by Dalport, et al, to Maralo insofar as they have the legal right to do so.
- (iii) Should it be determined that instruments of a legal nature should be required to accomplish and perform any terms, conditions or covenants herein provided, then said instrument shall forthwith be prepared and executed by each party hereto; and
- (iv) Any notices or correspondence required under the provisions of this Agreement shall be deemed to be properly given by directing same to:

Maralo, Inc.
P. O. Box 832
Midland, Taxas 79702
Telephone: 915-684-7441

Dalport Oil Corporation
3471 First National Bank Building
Dallas, Texas 75202
Telephone: 214-748-7609

Mobil Oil Corporation Nine Greenway Plaza Suite 2700 Houston, Texas 77046 Fluor Oil & Gas Corporation 615 Midland Tower Midland, Texas 79701

Edward Wright, Jr. c/o Dalport Oil Corporation 3471 First National Bank Building Dallas, Texas 75202 Telephone: 214-748-7609

This Agreement shall be binding upon Dalport Oil Corporation, Mobil Oil Corporation, Fluor Oil & Gas Corporation and Edward Wright, Jr., et ux, and upon Maralo, Inc., and shall inure to the benefit of each party and their respective heirs, successors and assigns and shall constitute covenants running with the land and any leasehold estate affected hereby. Provided, however, any covenant or agreement made by Maralo under the provisions hereof, and as Operator of the Jalmat Yates Unit Agreement, shall be subject to any required ratification, confirmation or consent as same might be required under the terms and provisions of the Jalmat Yates Unit Agreement; and provided, however, further that any covenant or agreement made by Dalport, et al, under the provisions hereof shall not be binding upon any party constituting "Dalport, et al" until executed by all parties constituting "Dalport, et al".

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth below opposite its signature.

	MARALO, INC.
Date:	Ву
	DALPORT OIL CORPORATION
Date: 10/1/50	BY (C) TO TO THE PRESIDENT
	MOBIL OIL CORPORATION
Date:	Ву
	FLUOR OIL & GAS CORPORATION
Date:	Ву
Date:	
	EDWARD WRIGHT, JR.
	of Edward Wright, Jr.
STATE OF TEXAS	
COUNTY OF	
The foregoing instrument this day of	t was acknowledged before me, 1980, by corporation,
on behalf of said corporation	o, inc., a corporation,
My Commission Expires:	
	Notary Public

### JALMAT YATES UNIT

# Offset Operators

WECO P. O. Box 2377 Midland, Texas 79702

Tahoe 0il P. O. Box 3084 Midland, Texas 79702

Doyle Hartman Oil P. O. Box 10426 Midland, Texas 79702

Arco P. O. Box 1610 Midland, Texas 79702

Exxon P. O. Box 1600 Midland, Texas 79702

Maralo, Inc. P. O. Box 832 Midland, Texas 79702

Getty Oil P. O. Box 1231 Midland, Texas 79702

# JALMAT YATES UNIT

# Offset Operators

WECO P. O. Box 2377 Midland, Texas 79702

Tahce Oil P. O. Box 3084 Midland, Texas 79702

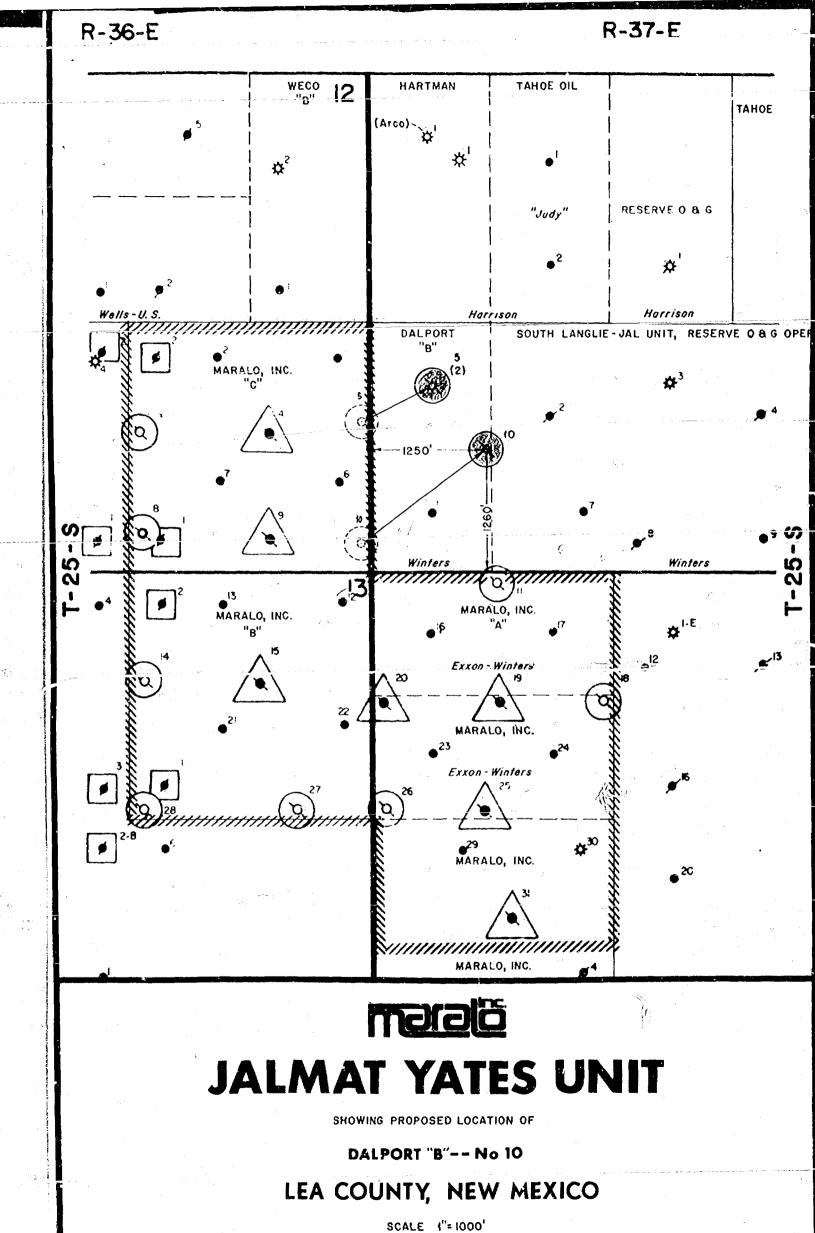
Doyle Hartman Oil P. O. Box 10426 Midland, Texas 79702

Arco P. O. Box 1610 Midland, Texas 79702

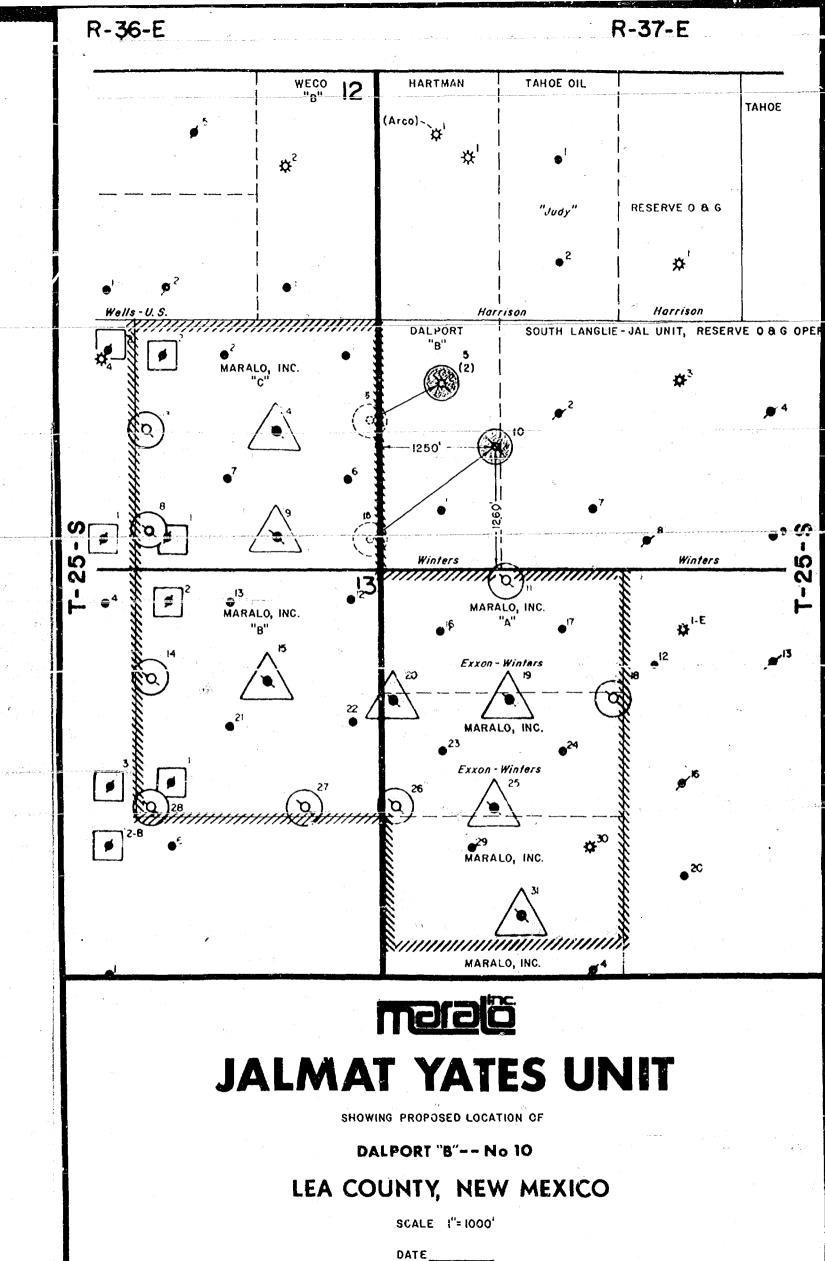
Exxon P. O. Box 1600 Midland, Texas 79702

Maralo, Inc. P. O. Box 832 Midland, Texas 79702

Getty 0i1 P. O. Box 1231 Midland, Texas 79702



DATE_



DRAFT

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#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CONSIDERING:
CASE NO. 7082
Order No. R- 633
APPLICATION OF MARALO, INC. and DALPORT OIL CORPORATION
FOR A WATERFLOOD PROJECT, LEA
ORDER OF THE DIVISION
BY THE DIVISION:
This cause came on for hearing at 9 a.m. on November 12
1980 , at Santa Fe, New Mexico, before Examiner Richard L. Stamets.
NOW, on this day of November, 1980, the Division
Director, having considered the testimony, the record, and the
ecommendations of the Examiner, and being fully advised in the
premises,
FINDS
(1) That due public notice having been given as required
by law, the Division has jurisdiction of this cause and the
subject matter thereof.
(2) That the applicants, Maralo, Inc. and Dalport Gil Corporation
seeks authority to institute a/waterflood project on xxxx  offsetting Maralo's Jalmat Yates Unit waterflood project port's Winters Lease/ Lease,
be jointly drilled at an unorthodox location formation through a well to/ injection wellsxinx sections
ofeet from the South line and 1250 feet from the West line of Sec. 7, Township 25 South, Range 36 East, NMPM, Lea
County, New Mexico.
(3) That the wells in the project area are in an advanced

- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

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- (5) That the operators should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.
- (6) That the injection well# or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 575 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.
- (7) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

### IT IS THEREFORE ORDERED:

	(1) That the applicant, Maralo, Inc. and Dalport Oil Corpor
- 1	joint
a n	els hereby authorized to institute a/waterflood project on itsx
Da	lport's Winters Lease offsetting Maralo's Jalmat Yates Unit waterflo
рij	piect by the injection xxxxxxxx of water into the Yates xxxxx xx
K	kessqueen formations through a well to be inintly drilled at an
	PYX \$P\$X X X X X X X X X X X X X X X X X X
fц	om the South line and 1250 feet from the West line of Section 7, formation the west line of Section 7,
	formations three tollowing described wells size Township
ı	Jaimat Pool,
	25 South , Range 36 East , NMPM, / Lea County,
	New Mexico:

- through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.
- (3) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing or packer in any of said injection wells,

the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

- (4) That the injection wells herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than <u>575</u> psi, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.
- (5) That the subject waterflood project is hereby designated the Mara lo-Do port Jalmut la tes Coope Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.
- (6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.
- (7) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.