

2R - 50

**GENERAL
CORRESPONDENCE**

YEAR(S):
2003-1987

Olson, William

From: Wrotenberg, Lori
Sent: Wednesday, October 01, 2003 11:50 AM
To: Gum, Tim
Cc: MacQuesten, Gail; Olson, William; Barton, Van; Bratcher, Mike; Anderson, Roger; Phillips, Dorothy
Subject: RE: STATE PLUGGING - REMUZ

I'm just confirming in writing (I think e-mail counts as writing??) what you, Roger, Willie and I concluded this morning. We will close out our work on the Ramuz well. Please thank your staff for the time, effort and expertise they contributed on both the Ramuz and the DeVito.

-----Original Message-----

From: Gum, Tim
Sent: Friday, September 26, 2003 3:20 PM
To: Wrotenberg, Lori
Cc: MacQuesten, Gail; Olson, William; Barton, Van; Bratcher, Mike
Subject: RE: STATE PLUGGING - REMUZ

Lori,

We believe that we gave it the best shot. However we can do one or both (aerially and/or deeper) ,we believe we will just spend money and for no better results. Please advise how much lager/deeper you would like to go and we will line up the equipment.

-----Original Message-----

From: Wrotenberg, Lori
Sent: Friday, September 26, 2003 1:21 PM
To: Gum, Tim
Cc: MacQuesten, Gail; Olson, William; Barton, Van; Bratcher, Mike
Subject: RE: STATE PLUGGING - REMUZ

Yesterday Mike and I discussed the possibility of excavating a little ways beyond the 20'X26' area. What is your current thinking about that possibility?

Also, thank you Mike and Van for taking time to shuttle me to and from the conference center. It was good to see you both. And thanks for the book, Van. I'm deep into it now, so don't expect to get it back until I'm finished.

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From: Gum, Tim
Sent: Friday, September 26, 2003 9:41 AM
To: Wrotenberg, Lori
Cc: MacQuesten, Gail; Olson, William; Barton, Van
Subject: STATE PLUGGING - REMUZ

Lori,

as per our discussion of last week , we have not located the wellbore at this time. A hole the size of 20'X26'X 26' deep has been excavated without any signs of the old wellbore and/or any contamination.

It is the District recommendation to stop work on this project.

To go any deeper it will require larger equipment ,increased cost and less chance of being successful.

Please advise.

Olson, William

From: Gum, Tim
Sent: Friday, September 26, 2003 3:20 PM
To: Wrotenbery, Lori
Cc: MacQuesten, Gail; Olson, William; Barton, Van; Bratcher, Mike
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It is the District recommendation to stop work on this project.

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Please advise.

Olson, William

From: Gum, Tim
Sent: Tuesday, September 23, 2003 10:12 AM
To: MacQuesten, Gail
Cc: Brooks, David K; Wrottenbery, Lori; Olson, William
Subject: STATE PLUGGING -- REMUZ

Because of delay in getting larger dirt moving equipment , Mayo-Marrs has moved of to an other location and will return when we locate the Remuz wellbore.

The first of next week is the best guess at this time of getting the equipment.

TWG



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop
Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

September 9, 2003

Mrs. Arvil Johnson
c/o Ms. Barbara Killion
132 Sumit
Pismo Beach, CA 93449

Re: NE/4 NW/4 Section 18, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico

Dear Mrs. Johnson

Based on the files of the local tax office, we believe you may be the owner of the referenced property.

The Oil Conservation Division must enter this property for the purpose of re-plugging an abandoned oil and gas well called the Ramuz Well No. 1, located 660 feet from the North line and 1980 feet from the West line of the referenced section. This entry will take place probably within the next three to four weeks. The duration of the operation on your property is uncertain, but it may last from a few day up to as long as two to three weeks. Inasmuch as the intent is to finally plug the referenced well, no further entry upon, or operations upon, your property should thereafter be necessary, and nothing will be left on your property except a sign indicating the location of the abandoned well.

If you will furnish us with a telephone contact, we will advise you of the exact date and time when our contractor will be entering the premises.

Should you have questions, please feel free to call the undersigned at (505)-476-3450.

Very truly yours,

David K. Brooks
Assistant General Counsel

cc.

✓ William C. Olson, OCD Santa Fe
Van Barton, OCD Artesia

Olson, William

From: Gum, Tim
Sent: Friday, September 05, 2003 9:13 AM
To: Wrottenbery, Lori
Cc: Brooks, David K; Olson, William
Subject: STATE PLUGGING WELLS- RAMUZ AND DE VITO EDDY COUNTY

FYI,

Mayo Mars moved in on the De Vito well this AM.

TWG.

Olson, William

From: Brooks, David K
Sent: Tuesday, February 18, 2003 2:00 PM
To: Olson, William
Subject: FW: DeVito & Ramuz P & A

-----Original Message-----

From: Barton, Van
Sent: Friday, February 14, 2003 7:46 AM
To: Brooks, David K
Cc: Gum, Tim
Subject: DeVito & Ramuz P & A

David,

First I would like you to know I am looking at this as a re-entry not a common plugging. The reason is because of the need to get a good sample for the Environmental Department.

The wells were drilled in the early and mid 1940's and we have little information about the wells. Do to natural deterioration of hole and casing we will not only have to enter the well but condition the hole for the isolation tools. These tools will be needed for the tests. The big problem is "to condition" the hole. This is very important because we do not want to end up having to cement the packers in the hole. (very costly) We have no idea at this point what all that will take. On the Ramuz well we will have to drill out a plug in open hole and enter a stub below. The process we will attempt is not an ordinary type of plugging. We will need specialized tools and expertise.

Contractors:

1. The plugging company can do much of the work and supply some equipment.
2. We will need a rental & fishing company for such things as:
 - A. Drill collars, change-overs, reverse unit, etc..
 - B. Csg. scraper, bit, or mill depending on hole conditions.
3. We will have to utilize special packers (open hole) to get the samples. Example Backer packers.
4. Someone to analyze the samples. As we talked yesterday, maybe the E. D. will have someone on contract.

I fully expect to exceed the estimate given to Ms. Phillips, by a large amount. The problem is we do not know what we will encounter.

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**CASE NO. 12982
ORDER NO. R-11899**

IN THE MATTER OF THE HEARING CALLED BY THE NEW MEXICO OIL CONSERVATION DIVISION ("DIVISION") ON ITS OWN MOTION FOR AN ORDER AUTHORIZING THE DIVISION TO PLUG TWO WELLS LOCATED IN EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on January 9, 2003, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 10th day of February, 2003, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) E. Paul Moran is the last known operator of the Ramuz Well No. 1 (API No. 30-015-00375) located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 18, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico. This well was drilled during the period from January-August, 1940 to a total depth of approximately 1,808 feet. The well was subsequently plugged and abandoned by this operator in November 1940.
- (3) Turner and De Vito is the last known operator of the De Vito Well No. 1 located 330 feet from the South line and 1650 feet from the East line (Unit O) of Section 12, Township 23 South, Range 25 East, NMPM, Eddy County, New Mexico. This well was drilled during the period from October-December, 1940 to a total depth of approximately 1,758 feet. The well was presumably plugged and abandoned by this operator at or about the time it was drilled.
- (4) At this time, the New Mexico Oil Conservation Division ("Division") seeks authority to re-enter and re-plug the Ramuz Well No. 1 and the De Vito Well No. 1 in a manner that will ensure that fresh water will be protected.
- (5) The Division has very limited data concerning these wells; however, the

well data presented by the Division concerning the Ramuz Well No. 1 demonstrate that:

- (a) 8 ¼-inch surface casing was set at a depth of 150 feet and cemented with 25 sacks of cement. The top of cement is located at a depth of approximately 50 feet from the surface;
- (b) after encountering water at a depth of 1,563 feet, 7-inch casing was set at approximately this depth and cemented with an unknown volume of cement; and
- (c) after encountering salt water at total depth, the well was plugged and abandoned as follows:
 - (i) a ten sack cement plug was set at 1,808 feet;
 - (ii) approximately 1,328 feet of 7-inch casing was cut and pulled and the hole was filled with mud from the top of the bottom cement plug to a depth of 225 feet;
 - (iii) a ten sack cement plug was set at a depth of 225 feet; and
 - (iv) 50 feet of 8 ¼-inch casing was cut and pulled and the hole was filled with mud from approximately 187 feet to the surface.

(6) The well data presented by the Division concerning the De Vito Well No. 1 demonstrate that:

- (a) 10-inch surface casing was set at a depth of 451 feet and cemented with an unknown volume of cement;
- (b) 7-inch casing was set at a depth of 1,533 feet and mudded in;
- (c) the well was drilled to a total depth of 1,758 feet; and

- (d) the well was subsequently plugged and abandoned; however no plugging detail for this well is on record with the Division.
- (7) E. Paul Moran and Turner and De Vito do not currently operate any wells in New Mexico and, according to Division testimony, it is presumed that these individuals are deceased.
- (8) There is currently no plugging bond in effect for these operators.
 - (9) The Division presented hydrologic data that demonstrate that:
 - (a) the Ramuz Well No. 1 and the De Vito Well No. 1 are located within the City of Carlsbad's Sheep Draw Well Field Wellhead Protection Area, and are also located approximately 2500 feet from the City of Carlsbad's fresh water well field;
 - (b) the City of Carlsbad obtains its fresh water from the Capitan Reef limestone which is present in this area at a depth of approximately 350-400 feet;
 - (c) there is also fresh water present in this area in a shallow alluvial interval that occurs at a depth of approximately 20-200 feet;
 - (d) the Ramuz Well No. 1 and the De Vito Well No. 1 were drilled into the top of the Delaware formation. Native Delaware formation water in this area contains 59,000-190,000 parts per million of chlorides, and 220,000-290,000 parts per million of total dissolved solids; and
 - (e) inadequately plugged wells in this area may provide an avenue by which Delaware formation water, or other native brine water, may escape into the Capitan Reef or shallow alluvial fresh water aquifers.
- (10) The City of Carlsbad has expressed concern to the Division about this situation and the Division is now working in conjunction with the City of Carlsbad to resolve the problem.

(11) The evidence presented demonstrates that in their current condition, the Ramuz Well No. 1 and the De Vito Well No. 1 may provide an avenue by which fluid from the Delaware formation or other brine-bearing formation(s) can migrate into the Capitan Reef or shallow alluvial fresh water aquifers.

(12) The funds necessary to re-enter and re-plug the Ramuz Well No. 1 and the De Vito Well No. 1 are currently available to the Division through the oil and gas reclamation fund.

(13) In order to protect fresh water resources, the Division should be authorized to re-enter and re-plug the Ramuz Well No. 1 and the De Vito Well No. 1 in a manner that will ensure that these wellbores will not provide an avenue whereby brine water or other contaminants may migrate into fresh water aquifers.

IT IS THEREFORE ORDERED THAT:

(1) The New Mexico Oil Conservation Division is hereby authorized to re-enter and re-plug the Ramuz Well No. 1 (API No. 30-015-00375) located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 18, Township 23 South, Range 26 East, NMPM, and the De Vito Well No. 1 located 330 feet from the South line and 1650 feet from the East line (Unit O) of Section 12, Township 23 South, Range 25 East, NMPM, Eddy County, New Mexico, in such a manner that will ensure that these wells will not provide an avenue whereby brine water or other contaminants may migrate into fresh water aquifers.

(2) Jurisdiction of this case 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.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrottenbery
LORI WROTENBERY
Director

DOCKET: EXAMINER HEARING - THURSDAY - JANUARY 9, 2003

8:15 A.M. - 1220 South St. Francis
Santa Fe, New Mexico

Docket Nos. 02-03 and 03-03 are tentatively set for January 23, 2003 and February 6, 2003. Applications for hearing must be filed at least 23 days in advance of hearing date. The following cases will be heard by an Examiner:

CASE 12963: Continued from November 14, 2002, Examiner Hearing.

Application of Seely Oil Company for statutory unitization, Lea County, New Mexico. Applicant seeks an order unitizing, for the purpose of establishing an enhanced recovery project, all mineral interests in the Penrose formation, EK Yates-Seven Rivers-Queen Pool, underlying 1469.25 acres, more or less, of Federal and Fee lands in the following acreage:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM

Section 24: SE/4
Section 25: NE/4

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM

Section 19: S/2
Section 20: S/2 SW/4, NW/4 SW/4
Section 29: NW/4, N/2 SW/4
Section 30: N/2, N/2 SE/4, E/2 SW/4

Said unit is to be designated the EK Penrose Sand Unit.

Among the matters to be considered at the hearing will be the necessity of unit operations; the designation of a unit operator; the designation of horizontal and vertical limits of the unit area; the determination of the fair, reasonable, and equitable allocation of production and costs of production, including capital investment, to each of the various tracts in the unit area; the determination of credits and charges to be made among the various owners in the unit area for their investment in wells and equipment and such other matters as may be necessary and appropriate for carrying on efficient unit operations; including but not limited to, unit voting procedures, selection, removal or substitution of unit operator, and time of commencement and termination of unit operations. Applicant also requests that any such order issued in this case include a non-consent penalty for risk to be charged against carried working interests within the unit area upon such terms and conditions to be determined by the Division as just and reasonable.

Said unit area is located approximately 14 miles southwest of Lovington, New Mexico.

CASE 12964: Continued from November 14, 2002, Examiner Hearing.

Application of Seely Oil Company for approval of a waterflood project and qualification of the Project Area for the Recovered Oil Tax rate pursuant to the Enhanced Oil Recovery Act, Lea County, New Mexico. Applicant seeks approval of its EK Penrose Sand Unit Waterflood Project by injection of water into the San Andres formations through 9 injection wells located in the following described area:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM

Section 24: SE/4
Section 25: NE/4

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM

Section 19: S/2
Section 20: S/2 SW/4, NW/4 SW/4

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Section 29: NW/4, N/2 SW/4
Section 30: N/2, N/2 SE/4, E/2 SW/4

The applicant requests that the Division establish procedures for the administrative approval of additional injection wells within the unit area without the necessity of further hearings and the adoption of any provisions necessary for such other matters as may be appropriate for said waterflood operations.

CASE 12983: Application of Seely Oil Company for approval of a Unit Agreement, Lea County, New Mexico. Applicant seeks approval of the EK Penrose Sand Unit for an area comprising 1469.75 acres of federal and fee lands in Sections 24 and 25 of Township 18 South, Range 33 East, and Sections 19, 20, 29 and 30 of Township 18 South, Range 34 East. Said unit area is located approximately 14 miles southwest of Lovington, New Mexico.

CASE 12984: Application of Yates Petroleum Corporation for approval of a Unit Agreement, Lea County, New Mexico. Applicant seeks approval of the Dempster State Exploratory Unit for an area comprising 3840 acres of State of New Mexico lands in Sections 28 through 33 of Township 11 South, Range 36 East, which is located approximately 5 miles north of Tatum, New Mexico.

CASE 12972: Continued from December 5, 2002, Examiner Hearing.

Application of Paladin Energy Corp. for amendment of the Special Pool Rules and Regulations for the Bagley Siluro-Devonian Pool to assign a special depth bracket allowable, Lea County, New Mexico. Applicant seeks the amendment of Special Pool Rules and Regulations for the Bagley Siluro-Devonian Pool located in portions of Sections 33 through 36 of Township 11 South, Range 33 East, and Sections 1 through 4, and 10 through 12 of Township 12 South, Range 33 East, to include the assignment of a special depth bracket allowable of 1000 barrels of oil per day for each 80-acre spacing and proration unit in the pool. Said pool is located approximately 17 miles west of Tatum, New Mexico.

CASE 12973: Continued from December 5, 2002, Examiner Hearing.

Application of Paladin Energy Corp. for a non-standard oil spacing unit, Lea County, New Mexico. Applicant seeks an exception to the Special Pool Rules and Regulations for the Bagley Siluro-Devonian Pool for a 40-acre non-standard oil spacing unit in the Devonian formation comprised of the NW/4 SW/4 of Section 35, Township 11 South, Range 33 East. This non-standard spacing and proration unit is to be dedicated to the State BTC Well No. 3 which Paladin proposed to re-enter at a surface location 1980 feet from the South line and 660 feet from the West line and sidetrack, drill and re-complete in the Devonian formation at a standard bottomhole oil well location 1880 feet from the South line and 660 feet from the West line of said Section 35. Said spacing unit is located approximately 17 miles west of Tatum, New Mexico.

CASE 12985: Application of Chesapeake Operating, Inc. for compulsory pooling, Eddy County, New Mexico. Applicant, in accordance with Division Rule 1207.A(1)(b), seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying the N/2 of Section 7, Township 23 South, Range 28 East, forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools spaced on 320-acre spacing, including but not limited to the North Loving-Morrow Gas Pool. This unit is to be dedicated to its Will "7-A" Well No. 1 which has been drilled and completed at a standard well location in Unit A of this section. Also to be considered will be the costs of drilling and completing said well and the allocation of the costs thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in this well. This unit is located approximately 3 miles northwest of Loving, New Mexico. **IN THE ABSENCE OF OBJECTION THIS MATTER WILL BE TAKEN UNDER ADVISEMENT.**

CASE 12986: Application of Apache Corporation for an unorthodox oil well location, Lea County, New Mexico. Applicant seeks exceptions to: (i) Rule 4 of the “*Special Rules and Regulations for the Hobbs-Drinkard Pool*” set forth in Division Order No. R-3811, as amended; and (ii) Rule 4 of the “*Special Rules and Regulations for the Hobbs-Lower Blinebry Pool*” set forth in Division Order No. R-9696, as amended, for the existing (spud on May 26, 2002) State “A” Well No. 6 (API No. 30-025-35304), located at an unorthodox infill oil well location for both the Hobbs-Drinkard (31730) and Hobbs-Lower Blinebry (31650) Pools 990 feet from the North line and 1817 feet from the East line (Unit B) of Section 32, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico. The N/2 NE/4 of Section 32, being a standard 80-acre lay-down oil spacing and proration unit for both pools, is currently dedicated to the applicant’s State “A” Well No. 5 (API No. 30-025-23116) located at a standard oil well location for both zones 660 feet from the North and East lines (Unit A) of Section 32. The State “A” Well No. 6 is to be included within this existing 80-acre unit and will be a replacement well for Apache Corporation’s State “A” Well No. 4 (API No. 30-025-23076), located at a standard oil well location for both zones 660 feet from the North line and 2130 feet from the East line (Unit B) of Section 32, which well was the subject of Division Administrative Order SD-98-04, dated July 28, 1998. This unit is located approximately one mile west of Hobbs, New Mexico.

CASE 12977: Continued from December 19, 2002, Examiner Hearing.

Application of McElvain Oil & Gas Properties, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant seeks an order pooling all uncommitted mineral interests in all formations from the surface to the base of the Pictured Cliffs formation underlying the NE/4 of Section 1, Township 29 North, Range 13 West, to form a standard 159.85-acre gas spacing and proration unit for all formations and/or pools developed on 160 acres within that vertical extent, which includes but is not necessarily limited to the Fulcher Kutz-Pictured Cliffs Gas Pool. Said unit is to be dedicated to applicant’s proposed Hutchinson Well No. 1R to be drilled at a previously approved unorthodox well location at a point 2050 feet from the North line and 1190 feet from the East line in the NE/4 of said Section 1. 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. Said area is located approximately one-quarter (1/4) mile south and east of the intersection of U. S. Highway 516 and Gila Street in the town of Farmington located in San Juan County, New Mexico.

CASE 12962: Continued from December 19, 2002, Examiner Hearing.

Application of David H. Arrington Oil and Gas, Inc. for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order pooling all mineral interests underlying the W/2 of Section 12, Township 18 South, Range 24 East to form a standard 320-acre stand-up gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, which presently include but are not necessarily limited to the Penasco Draw Permo-Penn Gas Pool. Said unit is to be dedicated to Applicant’s proposed Gold Stonefly Fed. Com. “12” No. 1 well to be drilled at a standard 320-acre spacing and proration unit gas well location 665 feet from the South line and 1032 feet from the West line in the SW/4 of said Section 24. 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 or its designee as operator of the well and a charge for risk involved in drilling said well. The proposed well location is approximately 5 miles northwest of Arkansas Junction, New Mexico.

CASE 12987: Application of Mewbourne Oil Company for compulsory pooling and an unorthodox oil well location, Eddy County, New Mexico. Applicant seeks an order pooling all mineral interests from the surface to the base of the Atoka formation underlying the following described acreage in Section 35, Township 23 South, Range 28 East, and in the following manner: The S/2 of Section 35 to form a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, including but not limited to the Undesignated South Culebra Bluff-Wolfcamp Gas Pool, Undesignated South Culebra Bluff-Strawn Gas Pool, and South Culebra Bluff-Atoka Gas Pool; the SE/4 of Section 35 to form a standard 160-acre

gas spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing within that vertical extent; the N/2 SE/4 of Section 35 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within that vertical extent, including but not limited to the Undesignated South Culebra Bluff-Bone Spring Pool; and the NE/4 SE/4 of Section 35 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within that vertical extent, including but not limited to the Undesignated Malaga-Bone Spring Pool. The units are to be dedicated to applicant's Layla "35" Fee Com. Well No. 1, to be drilled at an unorthodox oil well location/orthodox gas well location 1650 feet from the South line and 1241 feet from the East line (Unit I) of Section 35. Also to be considered will be the cost of drilling and completing the 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 the risk involved in drilling and completing the well. The unit is located approximately 2½ miles northeast of Malaga, New Mexico.
IN THE ABSENCE OF OBJECTION THIS MATTER WILL BE TAKEN UNDER ADVISEMENT.

CASE 12988: **Application of Mewbourne Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying the following described acreage in Section 9, Township 17 South, Range 35 East, and in the following manner: The W/2 of Section 9 to form a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, including the Undesignated North Vacuum Atoka-Morrow Gas Pool; and the NW/4 of Section 9 to form a standard 160-acre gas spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing within that vertical extent. The units are to be dedicated to applicant's Eureka "9" State Com. Well No. 1, to be drilled at an orthodox well location in the NE/4 NW/4 of Section 9. Also to be considered will be the cost of drilling and completing the 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 the risk involved in drilling and completing the well. The units are located approximately 9½ miles southwest of Lovington, New Mexico.

CASE 12979: **Continued from December 19, 2002, Examiner Hearing.**

Application of Nadel and Gussman Permian, L.L.C. for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying the following described acreage in Section 6, Township 23 South, Range 28 East, in the following manner: Lots 1-5, the S/2 NE/4, and the SE/4 NW/4 (the N/2 equivalent) to form a standard 317.26-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, including but not limited to the Undesignated Loving-Upper Pennsylvanian Gas Pool, Undesignated North Loving-Atoka Gas Pool, and Undesignated North Loving-Morrow Gas Pool; and Lots 1, 2, and the S/2 NE/4 (the NE/4 equivalent) to form a standard 159.40-acre gas spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing within that vertical extent. The units are to be dedicated to applicant's Julius Well No. 1, to be drilled at an orthodox location in the SW/4 NE/4 (Unit G) of Section 6. Also to be considered will be the cost of drilling and completing the 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 the risk involved in drilling and completing the well. The units are located approximately 2½ miles southeast of Otis, New Mexico.

CASE 12989: **Application of Devon Energy Production Company, L. P. for an unorthodox infill well location, Eddy County, New Mexico.** Applicant seeks an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("Division") Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, R-9922-D, and R-9922-E and the "*General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico*", as promulgated by Division Order No. R-5353, as amended, for an unorthodox location within an existing 320-acre lay-down spacing and proration unit in the Indian Basin-Upper Pennsylvanian Associated Pool (33685) comprising the S/2 of Section 8, Township 22 South, Range 24 East,

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which is located approximately 17 miles west of Carlsbad, New Mexico. The applicant's proposed Old Ranch Knoll "8" Federal Com. Well No. 9 is to be drilled 810 feet from the South line and 350 feet from the East line (Unit P) of Section 8. This unit is currently dedicated to Devon Energy Production Company, L. P.'s Old Ranch Knoll "8" Federal Com. Well No. 2 (API No. 30-015-27674), located at a standard location 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 8.

CASE 12967: Continued from December 5, 2002, Examiner Hearing.

Application of BP America Production Company for Surface Commingling, Eddy County, New Mexico. Applicant seeks authority to surface commingle gas production from the Little Box Canyon-Morrow, Indian Loafer Draw-Upper Pennsylvanian, Strychnine Draw-Atoka and Strychnine Draw-Strawn Gas Pools within certain wells it operates located on Federal Leases No. NMNM-93457 and NMNM-25336, which comprise all or portions of Sections 22, 25, 26 and 35, Township 20 South, Range 21 East, and on the Little Box State Lease, located on all or portions of Section 36, Township 20 South, Range 21 East. These wells are located approximately 18 miles south of Hope, New Mexico.

CASE 12968: Continued from December 5, 2002, Examiner Hearing.

Application of BP America Production Company for Surface Commingling, Eddy County, New Mexico. Applicant seeks authority to surface commingle gas production from the Little Box Canyon-Morrow and Indian Loafer Draw-Upper Pennsylvanian Gas Pools within certain wells it operates located on Federal Leases No. NMNM-82831, NMNM-88085, and NMNM-27451 which comprise all or portions of Section 31, Township 20.5 South, Range 22 East, Section 6, Township 21 South, Range 22 East, and Section 1, Township 21 South, Range 21 East, and on the Little Box State and Sweet Thing "36" State Leases, located on all or portions of Section 36, Township 20 South, Range 21 East, and Section 36, Township 20.5 South, Range 21 East. These wells are located approximately 18 miles south of Hope, New Mexico.

CASE 12976: Continued from December 5, 2002, Examiner Hearing.

Application of the New Mexico Oil Conservation Division for an Order Requiring Paul D. Bliss to Properly Plug One (1) Well, Imposing Civil Penalties in Event of Failure to Comply, Authorizing the Division to Plug Said Well in Default of Compliance by Operator, and Ordering a Forfeiture of Applicable Security, if Any, Roosevelt County, New Mexico. The Applicant seeks an order requiring Paul D. Bliss, the operator of One (1) inactive well in Roosevelt County, New Mexico, to properly plug and abandon the same, imposing civil penalties in event of failure to comply, authorizing the Division to plug said well or wells if the operator fails to do so, forfeiting Operator's plugging security, if any, and providing for such other relief as the Director deems appropriate. The affected well is the following:

Rhonda PG State V-39 Well No. 1 (API No. 30-041-20615) located 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 35, Township 7 South, Range 35 East, NMPM, Roosevelt County, New Mexico.

CASE 12981: Continued from December 19, 2002, Examiner Hearing.

Application of the New Mexico Oil Conservation Division for an Order Requiring Jimmy Roberson Energy Corporation to Properly Plug Sixteen (16) Well(s), Imposing Civil Penalties in Event of Failure to Comply, Authorizing the Division to Plug Said Well(s) in Default of Compliance by Operator, and Ordering a Forfeiture of Applicable Security, if Any, Lea and Roosevelt County, New Mexico. The Applicant seeks an order requiring Jimmy Roberson Energy Corporation, the operator of sixteen (16) inactive wells, fourteen (14) of which are located in Lea County, and two (2) of which are in Roosevelt County, New Mexico, to properly plug and abandon the same, imposing civil penalties in event of failure to comply,

Examiner Hearing – January 9, 2003

Docket No. 01-03

Page 6 of 8

authorizing the Division to plug said well or wells if the operator fails to do so, forfeiting Operator's plugging security, if any, and providing for such other relief as the Director deems appropriate. The affected wells are the following:

<u>API NO.</u>	<u>WELL NAME</u>	<u>ULSTR</u>	<u>N/S FTG</u>	<u>E/W FTG</u>
30-025-05442	Rice #1	H-13-18S-37E	2310 N	330 E
30-025-05443	Rice #2	G-13-18S-37E	2310 N	1650 E
30-025-05444	Rice #3	A-13-18S-37E	990 N	480 E
30-025-07351	Hardin B #1	2-18-18S-38E	1980 N	621 W
30-025-07352	Hardin B #2	F-18-18S-38E	2310 N	2230 W
30-025-07353	Hardin B #3	1-18-18S-38E	990 N	660 W
30-025-07354	Hardin B #4	C-18-18S-38E	990 N	1650 W
30-025-09875	Rice #4	B-13-28S-37E	990 N	1650 E
30-025-11930	G D Riggs B #7	H-1-26S-37E	1650 N	330 E
<u>API NO.</u>	<u>WELL NAME</u>	<u>ULSTR</u>	<u>N/S FTG</u>	<u>E/W FTG</u>
30-025-12414	C E Penny Federal NCT-4 #3	C-19-25S-38E	660 N	330 W
30-025-12415	C E Penny Federal NCT-4 #2	F-19-25S-38E	1980 N	1650 W
30-025-12417	C E Penny Federal NCT-4 #5	D-19-25S-38E	990 N	330 W
30-025-20067	G D Riggs A #3	C-1-26S-37E	330 N	2310 W
30-025-26828	G D Riggs A #4	F-1-26S-37E	1650 N	2290 W
30-041-10021	Hutcherson #1	E-21-8S-34E	1980 N	660 W
30-041-20407	W V Hutcherson #1	F-21-8S-34E	1980 N	1980 W

CASE 12982: Continued from December 19, 2002, Examiner Hearing.

Application of the New Mexico Oil Conservation Division for an Order Authorizing the Division to Plug Two (2) Wells; Eddy County, New Mexico. The Applicant seeks an order authorizing the Division to plug two abandoned wells in Eddy County, New Mexico, as to which the whereabouts of the operators are unknown, and providing for such other relief as the Director deems appropriate. The subject wells are the following:

Operator: E. Paul Moran
 Well Name: Ramuz No. 1
 Location: 660 feet from the North line and 1980 feet from the West line
 (Unit C) of Section 18, Township 23 South, Range 26 East.

Operator: Turner and Devito (also listed as Fred Turner on other paperwork)
 Well Name: Devito No. 1
 Location: 330 feet from the South line and 1650 feet from the East Line
 (Unit O) of Section 12, Township 23 South, Range 25 East

CASE 12990: In the matter of the hearing called by the Oil Conservation Division for an order creating and assigning discovery allowables for certain pools in Lea County, New Mexico.

(a) CREATE a new pool in Lea County, New Mexico classified as an oil pool for Strawn production and designated as the West Anderson Ranch-Strawn Pool (Pool Code 97233). The discovery well is the EOG Resources Inc. Ponderosa State Well No. 1 (API No. 30-025-35916) located in Unit L of Section 9, Township 16 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM

Examiner Hearing – January 9, 2003

Docket No. 01-03

Page 7 of 8

Section 9: SW/4

(b) CREATE a new pool in Lea County, New Mexico classified as a gas pool for Mississippian production and designated as the Northwest Big Dog-Mississippian Gas Pool (**Pool Code 97215**). The discovery well is the Yates Petroleum Corporation Big Baer ATN Well No. 2 (**API No. 30-025-35261**) located in Unit L of Section 29, Township 15 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM

Section 29: S/2

(c) CREATE a new pool in Lea County, New Mexico classified as a gas pool for Morrow production and designated as the Big Dog-Morrow Gas Pool (**Pool Code 97214**). The discovery well is the Yates Petroleum Corporation Big Baer ATN Well No. 2 (**API No. 30-025-35261**) located in Unit L of Section 29, Township 15 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM

Section 29: S/2

(d) CREATE a new pool in Lea County, New Mexico classified as a gas pool for Austin production and designated as the South Four Lakes-Austin Gas Pool (**Pool Code 97164**). The discovery well is the Yates Petroleum Corporation Koala AXZ State Well No. 1 (**API No. 30-025-35410**) located in Unit A of Section 19, Township 12 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 12 SOUTH, RANGE 35 EAST, NMPM

Section 19: N/2

(e) CREATE a new pool in Lea County, New Mexico classified as a gas pool for Austin production and designated as the Grassland-Austin Gas Pool (**Pool Code 97235**). The discovery well is the Yates Petroleum Corporation New Grass State Unit Well No. 1 (**API No. 30-025-35842**) located in Unit A of Section 22, Township 15 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM

Section 22: N/2

(f) CREATE a new pool in Lea County, New Mexico classified as an oil pool for Delaware production and designated as the Southeast Hat Mesa-Delaware Pool (**Pool Code 97210**). The discovery well is the Samson Resources Company Minis 2 Federal Well No. 1 (**API No. 30-025-34449**) located in Lot 16, Unit H of Section 2, Township 21 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM

Section 2: Lots, 9, 10, 15 and 16

Further, the discovery well for said Southeast Hat Mesa-Delaware Pool should be assigned a bonus discovery allowable of 39,465 barrels to be produced over a two-year period.

(g) CREATE a new pool in Lea County, New Mexico classified as an oil pool for Abo production and designated as the Northwest Hobbs-Abo Pool (**Pool Code 97212**). The discovery well is the Chevron USA Inc. New Mexico EA State Well No. 1 (**API No. 30-025-34788**) located in Unit A of Section 24, Township 18 South, Range 37 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

Examiner Hearing – January 9, 2003

Docket No. 01-03

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Section 24: NE/4

(h) CREATE a new pool in Lea County, New Mexico classified as an oil pool for Drinkard production and designated as the Northwest Hobbs-Drinkard Pool (**Pool Code 97184**). The discovery well is the Chevron USA Inc. New Mexico EA State Well No. 1 (**API No. 30-025-34788**) located in Unit A of Section 24, Township 18 South, Range 37 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

Section 24: NE/4

(i) CREATE a new pool in Lea County, New Mexico classified as a gas pool for Tubb production and designated as the Hobbs-Tubb Gas Pool (**Pool Code 96946**). The discovery well is the Saga Petroleum, LLC State Land Sec 32 Well No. 9 (**API No. 30-025-23309**) located in Unit J of Section 32, Township 18 South, Range 38 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM

Section 32: SE/4

(j) CREATE a new pool in Lea County, New Mexico classified as an oil pool for Tubb production and designated as the Northwest Hobbs-Tubb Pool (**Pool Code 97211**). The discovery well is the Chevron USA Inc. New Mexico EA State Well No. 1 (**API No. 30-025-34788**) located in Unit A of Section 24, Township 18 South, Range 37 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 37 EAST, NMPM

Section 24: NE/4

IN THE ABSENCE OF OBJECTION, THIS CASE WILL BE TAKEN UNDER ADVISEMENT.

January 9, 2003
Devito Federal #1 and Ramuz #1 Plugging Hearing
Bill Olson Testimony

Exhibits

- City Wellhead Protection Area Map
- Geologic cross-section
- Locality Map

Replugging reason

PROTECTION OF SHALLOW AND DEEP GROUND WATER

HydroGeology

- Devito #1 and Ramuz #1 drilled into the Delaware Formation (See X-section)
- Pressurized water in Devito #1
 - 1200 feet in hole
 - 558 feet from surface
- Pressurized water in Ramuz #1
 - 1500 feet in hole
 - 308 feet from surface
- Delaware Formation water quality
(59,000 – 190,000 ppm Chloride)
(220,000 – 290,000 ppm TDS)
- Capitan reef limestone complex located approximately 2000 feet west
- Large quantity of high quality drinking water in Capitan Reef at depth
- Shallow alluvial ground water in area

Proximity to City of Carlsbad Water Supply

- Approximately 2500 feet from water wells in the City of Carlsbad water well field (see locality map)
- Water well field is source of the city public water supply
- Water at approx. 400 feet

Wells Located in City of Carlsbad Wellhead Protection Area

- City of Carlsbad has defined an area around the city water wells necessary for long term protection of the city water supply
- City Wellhead Protection Area (see map)

Protection of Shallow Ground Water

- Shallow alluvial ground water wells in area at 20-200 feet (see Locality map)
- Protectable water
(712-1680 ppm TDS)
(2-172 ppm Chloride)
- Water used for livestock and domestic purposes

Existing plugging not protective of ground water according to current standards

BENNETT EXAMINER CATANACH

OIL COMPANY UNION TRUSTION

OCD

EXHIBIT NO.

1

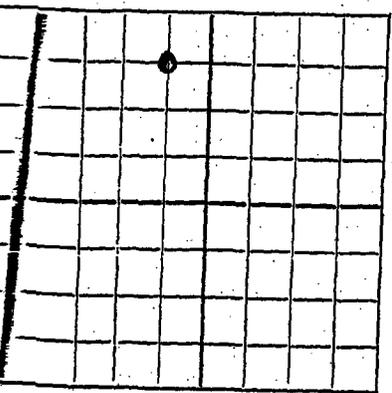
CASE NO.

12982

Must be given to the Oil C...
 If changes in the propos...
 to the sender. Submit...
 onal instructions in Rules ar...

CONSERVATION COMMISSION
 Santa Fe, New
 You are hereby notified that

18 T. 23 S
 R



AREA 640 ACRES
 LOCATE WELL CORRECTLY

Model Super D

status of a bond for this well
 follows: Appld f
 propose to use the following

Size of Hole	Size of Casing	Weight
10 "	8 1/2 "	31
8 "	7 "	21

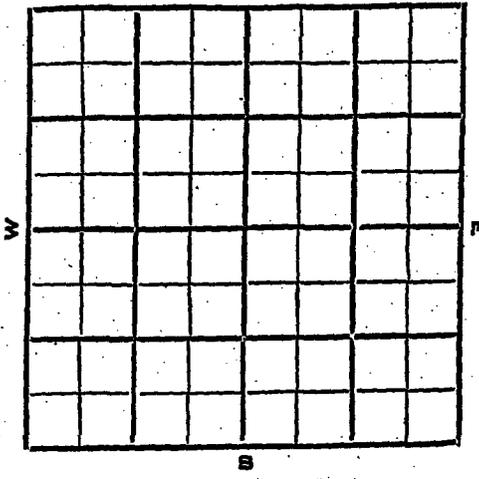
changes in the above plan bec...
 the first productive oil or g...
 additional information:
 Although the salt
 will be protected
 encountered.

MAY 3

approved...
 as follows:

OIL CONSERVATION
 By Roy ga

30-015-00375



SCOUT REPORT
 NEW MEXICO
 OIL CONSERVATION COMMISSION

Company E.P. Moran
 Farm Name Ramuz
 Land Classification State
 Sec. 18 Twp. 23 Range
 Feet from Line: 660 N. S
 Elevation
 Contractor Moran Drilling Company
 Spudded 1-18-40 Completed 8-17
 Bond Status

Amount
 Casing and Cementing Record

Size	Feet	Inches	Sex Cement

Tubing Record

Size	Feet	Inches	Weight

ACID RECORD

Top Pay	TD

SHOOTING RECO

No. of Quarts	Shot at

DATE		DATE	
1-14-40	Spudded	JUL 10	TD 1660 L
JAN 3 1940	✓	JUL 17	TD 1660 L
FEB 7 40	TD 375 S (SD bond)	JUL 24	TD 1660 L
FEB 14 40	✓	JUL 31	T.D. 15
FEB 21 40	✓		S.G
FEB 28 40	✓	AUG 7	T.D. 15
MAR 6 40	✓		131
MAR 13 40	✓		unc. 15
MAR 20 40	✓	AUG 14	✓
MAR 27 40	✓	AUG 21	T.D. 18
APR 3	✓		
APR 10	✓		
APR 17	✓		
APR 24	✓		
MAY 1	✓		
MAY 8	4587 A		HFX 2
MAY 15	4800 A		
MAY 22	TD 1460 A SDO		
MAY 28	41160 A & L		
JUN 5	TD 1373 L		
JUN 12	41400 L		

Form 302
DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

RECEIVED
JUL 12 1940
RECEIVED
CORPS OFFICE

MISCELLANEOUS NOTICES

Submit this notice in triplicate to the Oil Conservation Commission or its proper agent before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of notice by checking below:

NOTICE OF INTENTION TO TEST CASING SHUT-OFF	<input checked="" type="checkbox"/>	NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL	
NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
NOTICE OF INTENTION TO REPAIR WELL		NOTICE OF INTENTION TO PLUG WELL	
NOTICE OF INTENTION TO DEEPEN WELL			

Carlsbad, New Mexico. July 7 1940

Place

Date

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Following is a notice of intention to do certain work as described below at the _____

E. Paul Moran, Ramuz Well No. 1 in NE 1/4 NW 1/4
Company or Operator Lease

of Sec. 18, T. 23 south R. 26 east, N. M. P. M., Wildcat Field,
Eddy County.

FULL DETAILS OF PROPOSED PLAN OF WORK

FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

Running 7 inch O.D. to shut-off water. Halliburton doing the cementing job, on ~~Wed~~ Tuesday, July 9th. Will drill cement plug on Friday, July 12th., and test for shut-off.

Estimated to use 14 sacks of cement.

JUL 12 1940

Approved _____, 19____
except as follows:

E. Paul Moran,
Company or Operator

By E. Paul Moran

Position _____
Send communications regarding well to

Name E. Paul Moran

Address Carlsbad, New Mexico.

OIL CONSERVATION COMMISSION,
By Ray J. Yarbrough
Title OIL & GAS INSPECTOR

DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

AUG 8 - 1940
HOBBS

MISCELLANEOUS REPORTS ON WELL

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut-offs, result of plugging of well and other important operations, even though the work was witnessed by an agent of the commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF	X	REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Carlsbad, New Mexico. August 1 1940
Place Date

OIL CONSERVATION COMMISSION
Santa Fe, New Mexico.
Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

E. Paul Moran Ramuz Well No. 1 in the
Company or Operator Lease
NE 1/4 NW 1/4 of Sec. 18 T. 23 south, R. 26 east, N. M. P. M.,
Wildcat Field, Eddy County

The dates of this work were as follows: July 23-25

Notice of intention to do the work was ~~(cross out)~~ submitted on Form C-102 on July 7 1940 1940
and approval of the proposed plan was ~~(cross out)~~ obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

After drilling plug, 2 bailers of water came in per hour, prepared well for Halliburton to test for shut off. Halliburton placed 600 lbs. pressure at the casing head and declared it to be a perfect shutoff. Water coming in is what water was absorbed by the open formation. Now bailing and water exhausting.

Witnessed by D. G. De Vito Independent
Name Company Title

Subscribed and sworn to before me this 1st
day of August, 1940

[Signature]
Notary Public

My Commission expires August 5, 1941

I hereby swear or affirm that the information given above is true and correct.

Name E. Paul Moran

Position Owner

Representing _____
Company or Operator

Address _____

Remarks:

Roy Underwood
Name
OIL CONSERVATION COMMISSION
DIRECTOR

DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

RECEIVED
AUG 14 1940
OFFICE

MISCELLANEOUS NOTICES

Submit this notice in triplicate to the Oil Conservation Commission or its proper agent before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of notice by checking below:

NOTICE OF INTENTION TO TEST CASING SHUT-OFF		NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL	
NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	X
NOTICE OF INTENTION TO REPAIR WELL			
NOTICE OF INTENTION TO DEEPEN WELL		NOTICE OF INTENTION TO PLUG WELL	X

_____ Galisbad, New Mexico _____ August 9 1940
Place Date

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Following is a notice of intention to do certain work as described below at the _____
E Paul Moran #1 Ramuz Well No. 1 in NE 1/4 NW 1/4
Company or Operator Lease
of Sec. 18, T. 23 S, R. 26 E, N. M. P. M., Wildcat Field,
Eddy County.

FULL DETAILS OF PROPOSED PLAN OF WORK

FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

Struck water (salt) at 1808' and came up approximately 1500' in the hole. We are cementing this water with 10 sacks of cement. Will leave in the hole between 200 and 250' of cemented pipe which we ran to shut off water encountered at 1563'. After balance of pipe is pulled will fill hole with mud up to 2008 from the surface and cement with 10 sacks of cement to protect whatever surface waters there may be above, then will mud hole up to near the surface and place a cement cap with regulation 4" pipe as marker for this well

AUG 14 1940

Approved _____, 19____
except as follows:

E Paul Moran
Company or Operator

By _____

Position _____
Send communications regarding well to

OIL CONSERVATION COMMISSION,
By *Ray Garbrough* Name _____
Address _____
Title OIL & GAS INSPECTOR

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

NOV 18 1940
RECEIVED
BOBBS OFFICE

MISCELLANEOUS REPORTS ON WELL

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut-offs, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL	X		

Carlsbad, New Mexico Nov 7 1940
Place Date

OIL CONSERVATION COMMISSION
Santa Fe, New Mexico.
Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

E. Paul Moran Ramiz Well No. 1 in the
Company or Operator Lease
Center NE 1/4 NW 1/4 of Sec. 18 T. 23 south, R. 26 east, N. M. P. M.,
Wildcat Field, Eddy County

The dates of this work were as follows: August 10-15th., Nov. 5-6th., 1940

Notice of intention to do the work was (~~was not~~) submitted on Form C-102 on August 9 1940
and approval of the proposed plan was (~~was not~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Cemented bottom water at 1808 feet with 10 sacks. Left 235 feet of 7 inch which was cemented to shut off water encountered at 1563-66. Filled hole with mud up to 225 feet from the surface and cemented with 10 sacks of cement in order to protect any surface waters. Left 100 feet of 8 1/2 inch surface pipe. Filled hole up with mud and placed a cement cap with regulation 4" pipe as marker.

Witnessed by D. C. De Vito and George Roundey, Independent Operators.
Name Company Title

Subscribed and sworn to before me this 12
day of November, 1940

I hereby swear or affirm that the information given above is true and correct.

Name E. Paul Moran

Position Owner

Representing _____
Company or Operator

Address Carlsbad, New Mexico.

[Signature]
Notary Public

My Commission expires August 5, 1941

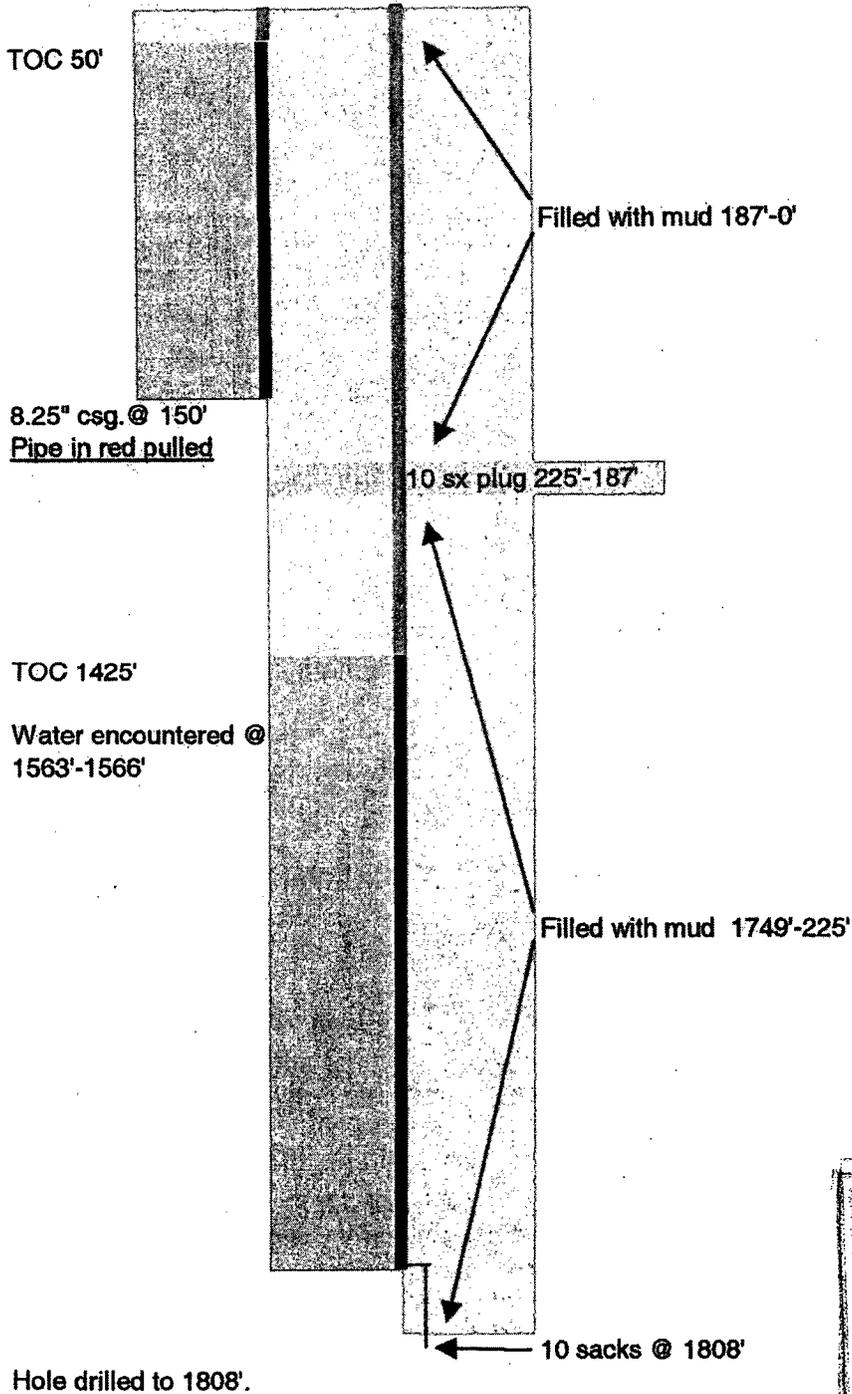
Remarks:

R. O. Yerbrangh R. M.
Name

OIL & GAS INSPECTOR

Title

OPERATOR: E. Paul Mason	API# 30-015-00375
WELL: Ramuz # 1	LOCATION: C-18-23-26
SURFACE CSG- HOLE SIZE 10" CSG. SIZE 8.25" SET @ 150'	SX. CMT. 25 TOC. 50'
INT. CSG- HOLE SIZE " CSG. SIZE " SET @ '	SX. CMT. TOC.
LONG STRING- HOLE SIZE 8" CSG. SIZE 7" SET @ 1880'	SX. CMT. 14 TOC. 1425'
OTHER-	



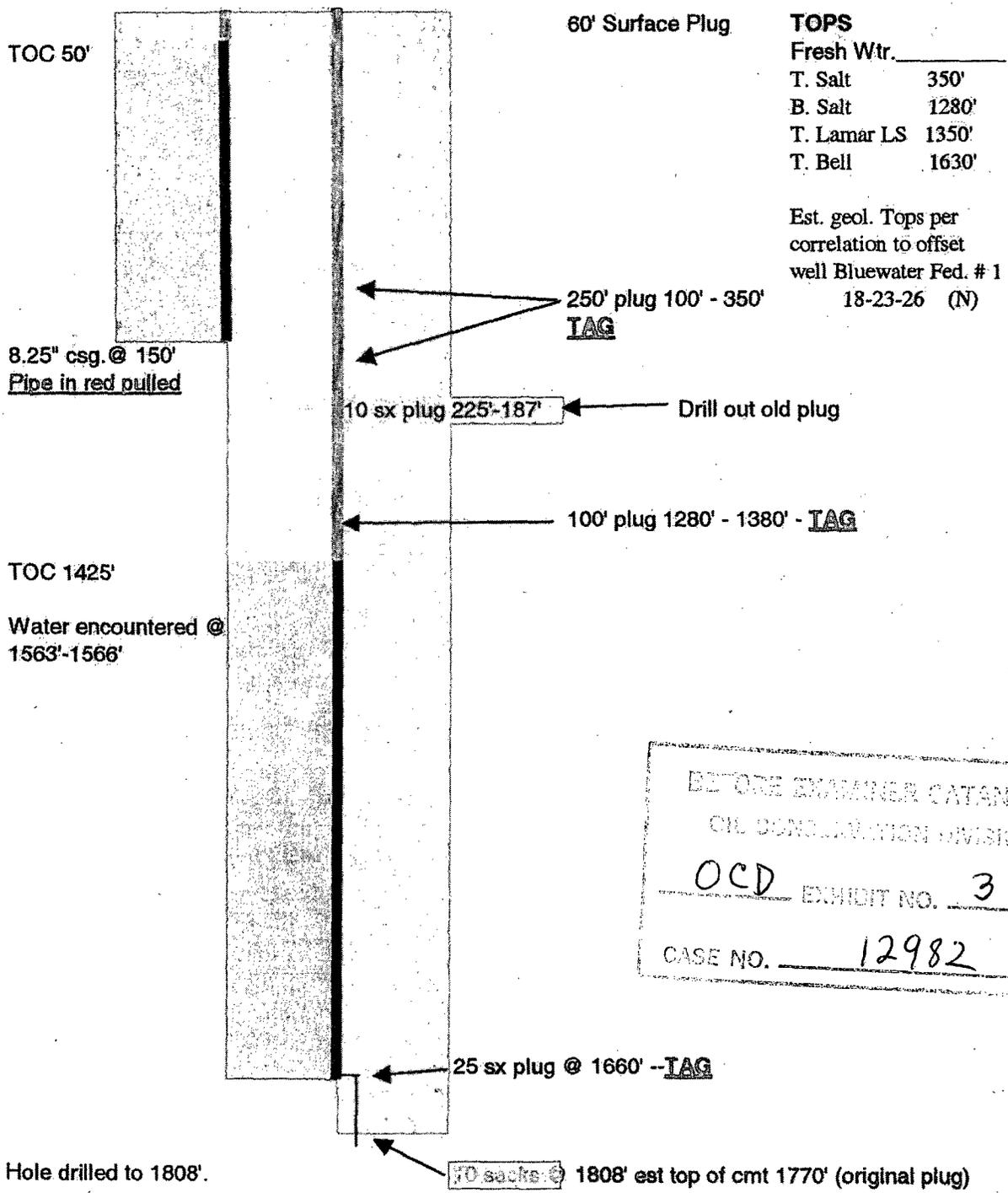
TOPS

Fresh Wtr.	
T. Salt	350'
B. Salt	1280'
T. Lamar LS	1350'
T. Bell	1630'

Est. geol. Tops per correlation to offset well Bluewater Fed. # 1 18-23-26 (N)

BEFORE EXAMINER CATANACH
 OIL CONSERVATION DIVISION
 OCD PERMIT NO. 2
 CASE NO. 12982
 CASE

OPERATOR: E. Paul Mason		API#	30-015-00375
WELL: Ramuz # 1		LOCATION:	C-18-23-26
SURFACE CSG- HOLE SIZE 10"	CSG. SIZE 8.25"	SET @ 150'	SX. CMT. 25 TOC. 50'
INT. CSG- HOLE SIZE "	CSG. SIZE "	SET @ '	SX. CMT. TOC.
LONG STRING- HOLE SIZE 8"	CSG. SIZE 7"	SET @ 1660'	SX. CMT. 14 TOC. 1425'
<u>Purposed P&A Procedure</u>			



BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
OCD EXHIBIT NO. 3
CASE NO. 12982

BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

OCO

EXHIBIT NO.

4

CASE NO.

12982

SCOUT REPORT
NEW MEXICO
OIL CONSERVATION COMMISSION

MIDD-CAT

9-A

Company Turner and De Vito

Farm Name De Vito Well No. 1

Land Classification Government

Sec. 12 Twp. 23 Range 25 County Eddy

Feet from Line 370 1650

Elevation _____ Method M

Contractor _____ Scout _____

Spudded 10-18-10 Completed 11-10-10 Initial Production _____

Bond Status _____

Amount
Casing and Cementing Record

Size	Feet	Inches	Box Cement
10"	451		5
7"	1533		Mixed

ACID RECORD

GAIS.	TA
	TS
	BS
	TBS 533
	TBL
	TWL

Tubing Record

No. of Quarts	Shot at	Feet

SHOOTING RECORD

No. of Quarts	Shot at	Feet
S/O 1100-00 G	S/O	S/O
S/O	S/O	S/O

DATE		DATE	
10-9-10	RUN		
10-15	φ 175 G		
10-29	φ 890 G		
	1 Bl. Sul W PH - 755-60 G		
	W W - 840-05 W		
	H.F. Sul W @ 880 - A		
11-6	φ 1169 S		
11-13	φ 1330 L		
11-20	T.D. 1530 L		
	Ring @ 1430		
	H.F.W 1956-58 Sil		
11-26	T.D. 1590 S		
	SP Refers		
12-4	T.D. 1650 L		
	SP Refers		
	400 Sul W 19 Sil		
	1642-249 Sil		
12-11	T.D. 1758 S		

LOG

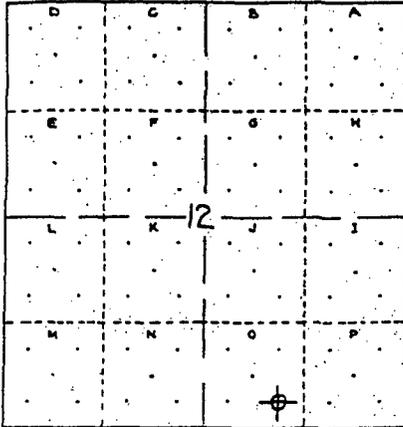
h	Formation	Depth	Formation	Depth	Formation
10	Gr A				
15	Gr A				
20	Gr A				
25	Gr A				
30	Gr A				
35	Gr A				
40	Gr A				
45	Gr A				
50	Gr A				
55	Gr A				
60	Gr A				
65	Gr A				
70	Gr A				
75	Gr A				
80	Gr A				
85	Gr A				
90	Gr A				
95	Gr A				
100	Gr A				
105	Gr A				
110	Gr A				
115	Gr A				
120	Gr A				
125	Gr A				
130	Gr A				
135	Gr A				
140	Gr A				
145	Gr A				
150	Gr A				
155	Gr A				
160	Gr A				
165	Gr A				
170	Gr A				
175	Gr A				
180	Gr A				
185	Gr A				
190	Gr A				
195	Gr A				
200	Gr A				

DATE

COUNTY, N.

T. 23 S., R. 25 E., Sec. 12
330 fr SL ; 1650 fr EL Unit 0

AMPLE LOG TO 1755 PLOTTED



CASING RECORD

SIZE	DEPTH	CEMENT

OPERATOR TURNER, FRED

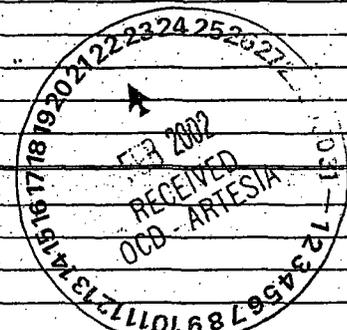
LEASE DeVito (Medford) WELL NO. 1
 Spud Comp. T. D.
 Tools Cable
 I.P. ABANDONED After

Producing Zone:

DRILL STEM TESTS

DATE	FROM — TO	OPEN	RESULTS

Shows: HF Sol Wtr (Castile) 846
 WTR 1450-59 (Lamar)
 " 1640-47 (Del sd)



ELEVATION BY L-S 3446

GEOLOGICAL RECORD

FORMATION	DEPTH	DATUM	INFO.	FORMATION	DEPTH	DATUM	INFO.
Top Rustler				Top Pennsylvanian (Cisco)			
Base Rustler Lime				Top Canyon			
Top Salt	None		SL	Top Strawn			
Base Salt	"		SL	Top Bond (Atoka)			
Top Tansil				Top Mississippian (Chester)			
Top Yates				Top Miss. Lime			
Base 2nd Yates Sand				Top Devonian (Woodford)			
Top Seven Rivers (Capitan)				Top Devonian Lime			
Base Anhydrite				Top Silurian (Fusselman)			
Top Queen				Top Ordovician (Montoya)			
Top Penrose				Top Simpson			
Top Grayburg				Top Ellenburger			
Top San Andreas				Top Cambrian (Bliss)			
Top Glorietta				Top Pre-Cambrian			
Top Yeso							
Top Drinkard Zone				INTVL. T.A. — B.R.L.			
Top Fullerton Zone				B.R.L. — B.S.			
Top Abo				T.A. — B.S. (Salado)			
Top Wolfcamp (Hueco)				B.S. — T.T. (Fletcher)			
Top Bursum				T.T. — T.Y. (Tansil)			
DELAWARE BASIN				T.Y. — T.S.R.L. (Yates)			
Top Lamar	1078	+2368	SL	B.S. — B.A. (Gradational)			
Top Del. Sand	1528	+1918	SL	B.S. — T.D.L. (Castile)			
Top Bone Springs				T.D.L. — T.D.S. (Lamar)		450	SL
				T.D.S. — T.B.S.L. (Delaware)			
				T.D.L. - Fluids (wtr)		562	SL-op

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONSERVATION BRANCH

INDIVIDUAL WELL RECORD

OWNER'S NAME _____ **Well No.** _____

Land Office _____ **Box District** _____ **Date** _____ **Box Section** _____

Serial No. 657035 **County** Eddy

Permit or Lease 26712a **Field** Park-Summit

Operator Turner and Duffin **District** 22nd 12th

Well No. 1 **Subdivision** RR **Sec.** 21 **T.** 12 **R.** 22

Location 132 feet from N. S. line and 1650 feet from E. N. line of _____

Drilling approved Oct. 11, 1940 **Well elevation** 346 (100)

Drilling commenced Oct. 15, 1940 **Total depth** 175

Drilling ceased Dec. 9, 1940 **Initial production** 2000

Flagged and abandoned ~~Completed~~ March 5, 1941 **Gravity** A. P. I.

Abandonment approved _____ 19____ **Initial R. P.** _____

Geologic Formations _____ **Productive Horizons** _____

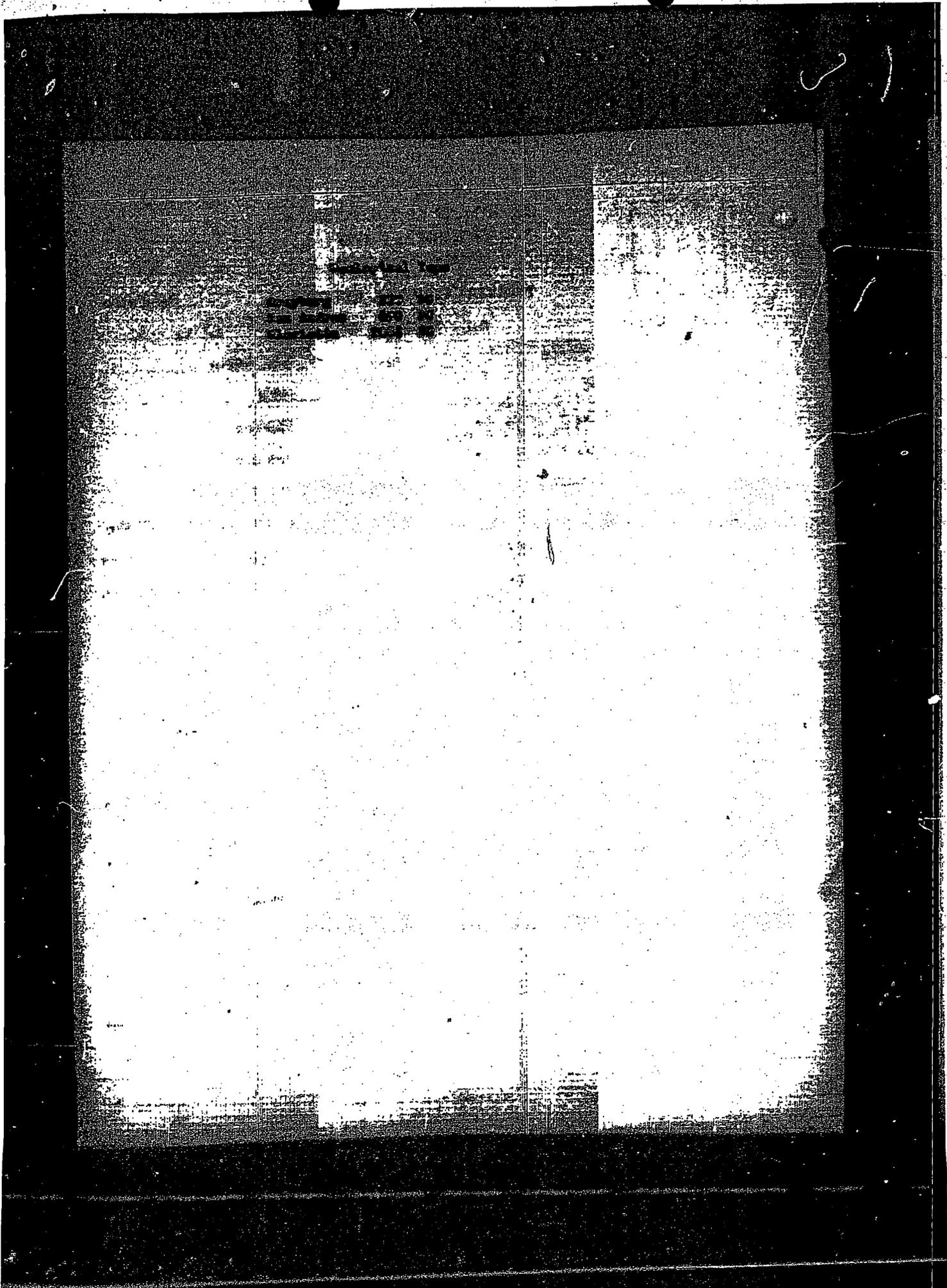
Surface	Lowest tested	Name	Depth	Contents
Tertiary	Permian			

WELL STATUS

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	OCT.	NOV	DEC.
1940										Dry	Dry	Dry
1941	Dry	Dry	PA									

REMARKS Meter found at 837-40', 1156-71' and 1655-47'.

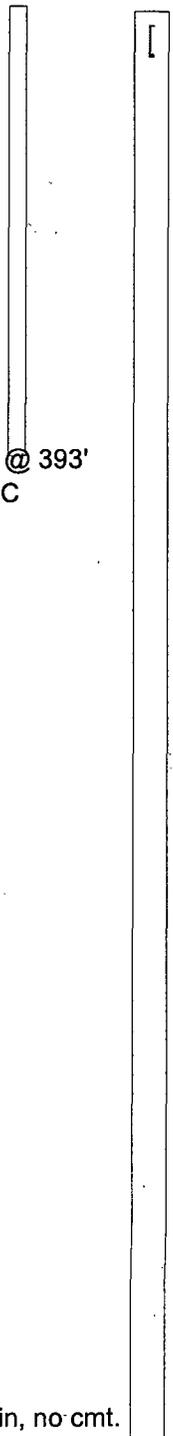
This sheet is printed on specially selected paper.



Brooks, David K

From: Barton, Van
Sent: Wednesday, January 08, 2003 4:01 PM
To: Olson, William; Brooks, David K
Subject: Plug Sheet.xls

OPERATOR: Turner and De Vito	API#
WELL: De Vito Federal # 1	LOCATION: O-12-23-25
SURFACE CSG- HOLE SIZE ?" CSG. SIZE 8.0" SET @ 451' SX. CMT. 5 TOC. Est. 393'	
INT.CSG- HOLE SIZE " CSG. SIZE " SET @ ' SX. CMT. TOC.	
LONG STRING- HOLE SIZE ?? CSG. SIZE 7" SET @ 1533' SX. CMT. 0 TOC. N/A	
OTHER-	



TOPS

SE/SE-12-23-25
T. Salt _____
B. Salt _____
Lowest water zone 350'
Base of anhydrite 1065'
T. Lamar LS 1400'
T. Bell 1510'

10" @ 451' TOC est @ 393'
used 11' hole for TOC

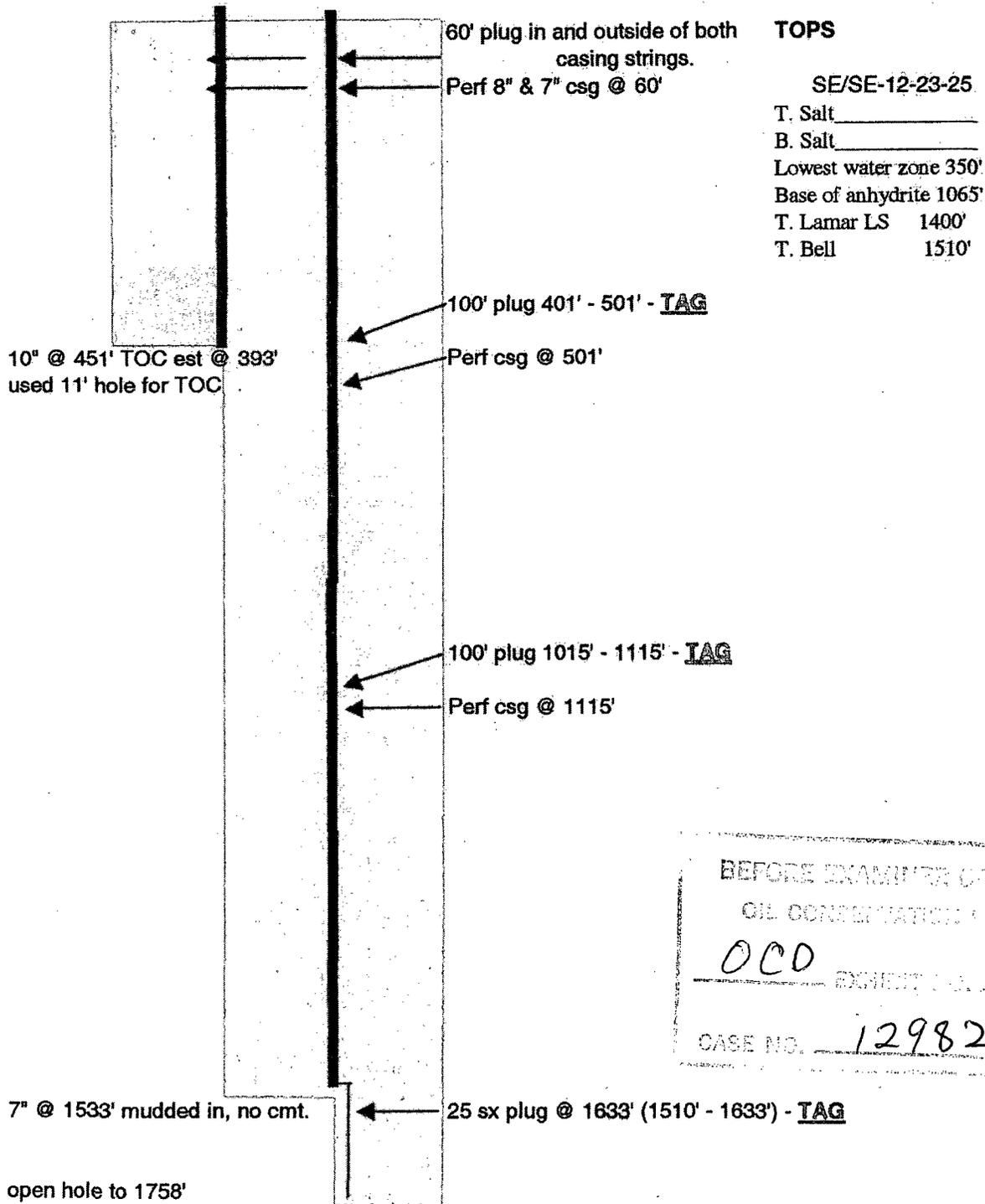
BEFORE EXAMINED BY ANADARKO
OIL CONSERVATION DIVISION
OCC ELEMENT NO. 5
CASE NO. 12982

7" @ 1533' mudded in, no cmt.

1/8/2003

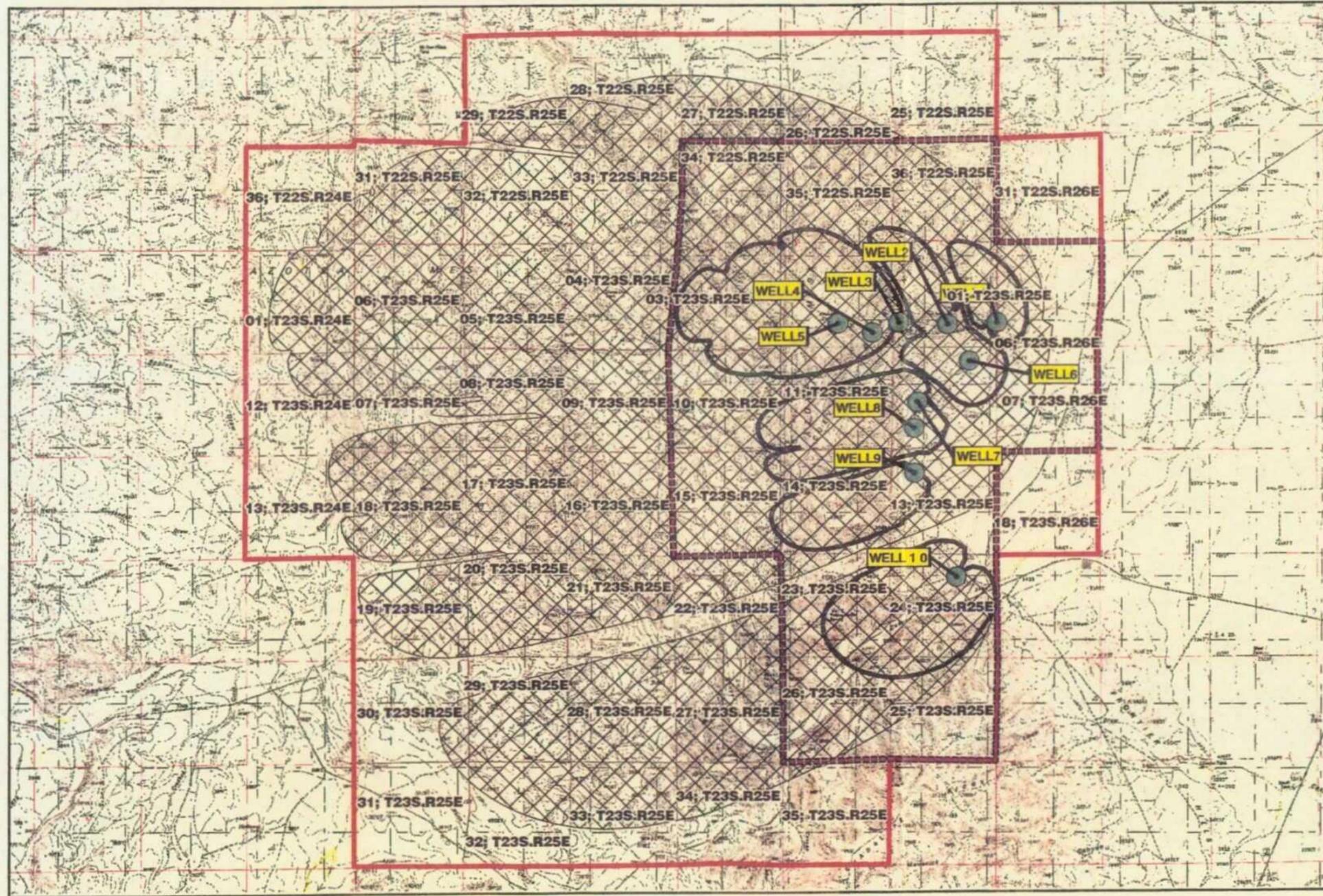
open hole to 1758'

OPERATOR: Turner and De Vito		API#	
WELL: De Vito Federal # 1		LOCATION: O-12-23-25	
SURFACE CSG- HOLE SIZE 7"	CSG. SIZE 8.0"	SET @ 451'	SX. CMT. 5 TOC. Est. 393'
INT. CSG- HOLE SIZE "	CSG. SIZE "	SET @ "	SX. CMT. TOC.
LONG STRING- HOLE SIZE ??	CSG. SIZE 7"	SET @ 1533'	SX. CMT. 0 TOC. N/A
Purposed P&A Procedure			



BEFORE EXAMINER DETACH
OIL CONSERVATION DIVISION
000 EXHIBIT NO. 6
CASE NO. 12982

CITY OF CARLSBAD SHEEP DRAW WELLFIELD WELLHEAD PROTECTION AREAS



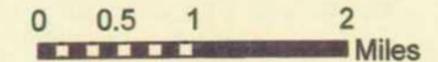
Legend

- 2 YEAR WELLHEAD PROTECTION AREA BOUNDARY
- 2 YEAR WELL CAPTURE ZONE
- 10 YEAR WELLHEAD PROTECTION AREA BOUNDARY
- 10 YEAR WELL CAPTURE ZONE

FIGURE 8

**SHEEP DRAW WELLFIELD
WELLHEAD PROTECTION AREA**

	TOWNSHIP	RANGE	SECTION	
2 YEAR PROTECTION AREA	T22S	R25E	36	
	T22S	R25E	35	
	T22S	R25E	34	
	Critical Impact Area	T23S	R25E	2
		T23S	R25E	1
		T23S	R25E	6
		T23S	R25E	3
		T23S	R25E	7
		T23S	R25E	11
	T23S	R25E	12	
T23S	R25E	10		
T23S	R25E	14		
T23S	R25E	13		
T23S	R25E	15		
T23S	R25E	23		
T23S	R25E	24		
T23S	R25E	26		
T23S	R25E	25		
10 YEAR PROTECTION AREA	T22S	R24E	36	
	T22S	R25E	25	
	T22S	R25E	26	
	Significant Impact Area	T22S	R25E	27
		T22S	R25E	28
		T22S	R25E	29
		T22S	R25E	31
		T22S	R25E	32
		T22S	R25E	33
		T22S	R25E	34
T22S		R25E	35	
T22S		R25E	36	
T22S		R26E	31	
T23S	R24E	1		
T23S	R24E	12		
T23S	R24E	13		
T23S	R25E	1		
T23S	R25E	2		
T23S	R25E	3		
T23S	R25E	4		
T23S	R25E	5		
T23S	R25E	6		
T23S	R25E	7		
T23S	R25E	8		
T23S	R25E	9		
T23S	R25E	10		
T23S	R25E	11		
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T23S	R25E	13		
T23S	R25E	14		
T23S	R25E	15		
T23S	R25E	16		
T23S	R25E	17		
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T23S	R25E	28		
T23S	R25E	29		
T23S	R25E	30		
T23S	R25E	31		
T23S	R25E	32		
T23S	R25E	33		
T23S	R25E	34		
T23S	R25E	35		
T23S	R26E	6		



N

 PROJECTION: NEW MEXICO
 STATEPLANE EAST ZONE, NAD27

DATA SOURCE: USGS 1:24,000 DRGS, "WHPA VERSION 2.2",
 1993, HYDROLOGIC, INC., DEVELOPED FOR
 THE USEPA OFFICE OF GROUNDWATER PROTECTION.

BALLEAU GROUNDWATER, INC.
 OCD Exhibit # 7
 Case # 12982

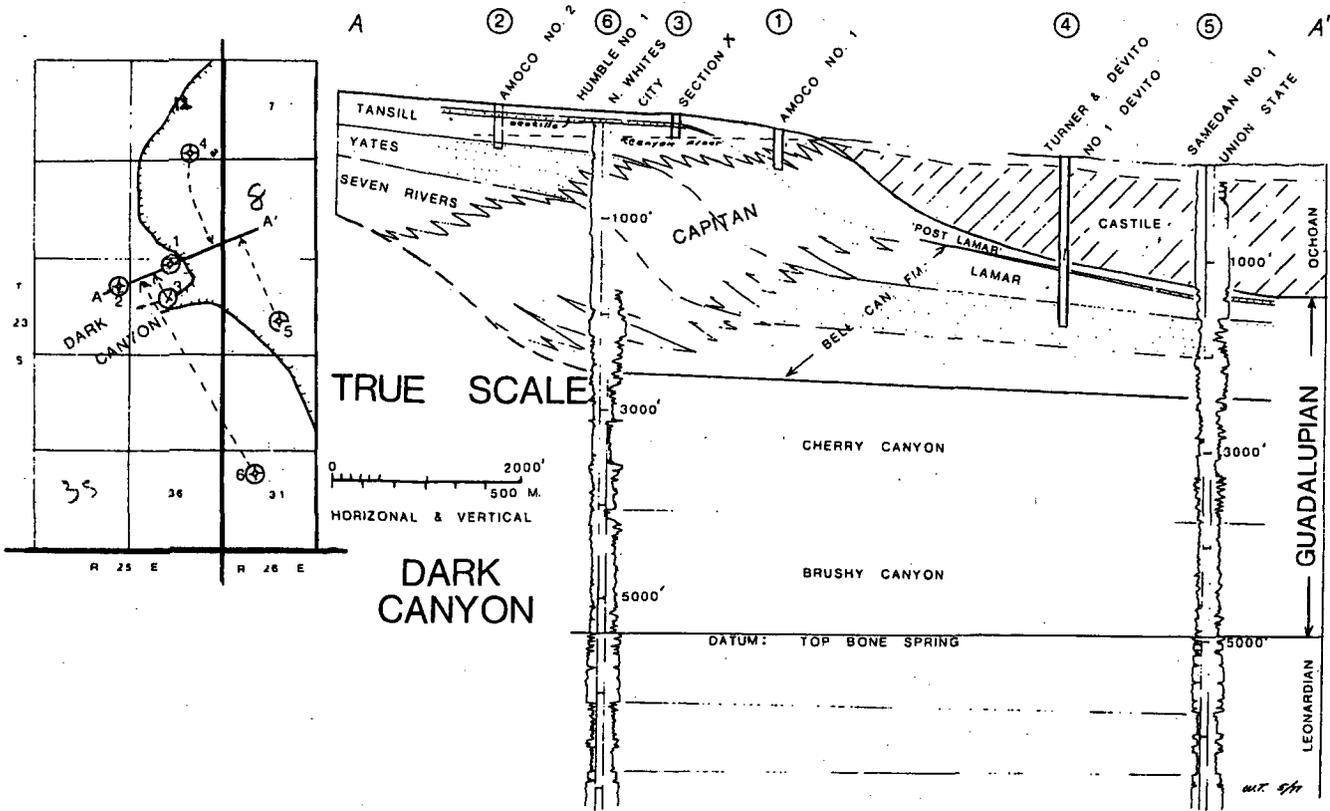


FIGURE 1—TRUE-SCALE STRATIGRAPHIC SECTION SHOWING RELATIONSHIPS OF AMOCO CORE HOLES TO NEARBY WELL CONTROL IN DARK CANYON, GUADALUPE MOUNTAINS, EDDY COUNTY, NEW MEXICO.

OCD Exhibit # 8 Case # 12982



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera
Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

November 26, 2002

United States Bureau of Land Management
P.O.Box 1778
Carlsbad, NM 88221

United States Bureau of Land Management
1474 Rodeo Rd
Santa Fe, NM 87505

VIA CERTIFIED MAIL

Re: Well Name Devito #1
Location 330' from the South Line and 1650' from the East line (Unit O) of Section 12, Township 23 South, Range 25 East

Dear Mrs. Johnson:

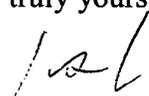
The above described abandoned oil and gas well which was drilled in 1940 is apparently located on land in which you own an interest.

The New Mexico Oil Conservation Division is seeking authority to re-plug said well to protect ground water and the environment. There will be a public hearing on the Division's application to re-plug this well on Thursday, December 19, 2002, at 8:15 a.m. at 1220 South Saint Francis Drive in Santa Fe.

If you have any objection to the Division re-plugging this well, you should arrange to attend this hearing, or otherwise notify the Division of your objections prior to the scheduled date of the hearing.

Should you have any questions, please call me at (505)-476-3450.

Very truly yours,


David K. Brooks
Assistant General Counsel

cc: Tim Gum, OCD Artesia
William C Olsen, OCD Santa Fe



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery

Director
Oil Conservation Division

November 26, 2002

Mrs. Arvil Johnson
c/o Barbara M. Killion
132 Simmit Drive
Pismo Beach CA 93449

VIA CERTIFIED MAIL

Re: Well Name: Ramuz #1
Location: 660' from the North Line and 1980' from the West line
(Unit C) of Section 18, Township 23 South, Range 26 East.

Dear Mrs. Johnson:

The above described abandoned oil and gas well which was drilled in 1940 is apparently located on land in which you own an interest.

The New Mexico Oil Conservation Division is seeking authority to re-plug said well to protect ground water and the environment. There will be a public hearing on the Division's application to re-plug this well on Thursday, December 19, 2002, at 8:15 a.m. at 1220 South Saint Francis Drive in Santa Fe.

If you have any objection to the Division re-plugging this well, you should arrange to attend this hearing, or otherwise notify the Division of your objections prior to the scheduled date of the hearing.

Should you have any questions, please call me at (505)-476-3450.

Very truly yours,

David K. Brooks
Assistant General Counsel

cc: Tim Gum, OCD Artesia
William C Olsen, OCD Santa Fe

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION,
THROUGH THE SUPERVISOR OF DISTRICT II, FOR AN ORDER
AUTHORIZING THE DIVISION TO PLUG TWO (2) WELLS, EDDY COUNTY,
NEW MEXICO.**

CASE NO. _____

APPLICATION FOR PLUGGING

1. According to information in the files of the New Mexico Oil Conservation Division, the following wells ("the subject wells") were drilled and plugged in Eddy County, New Mexico, in 1940:

Operator	-	E. Paul Moran
Well Name	-	Ramuz #1
Location	-	660' from the North Line and 1980' from the West line (Unit C) of Section 18, Township 23 South, Range 26 East.
Surface Owner	-	Mrs. Arvil Johnson
Operator	-	Turner and Devito (also listed as Fred Turner on other paperwork)
Well Name	-	Devito #1
Location	-	330' from the South Line and 1650' from the East line (Unit O) of Section 12, Township 23 South, Range 25 East.
Surface Owner	-	United States Bureau of Land Management

The Division has no further information concerning the identity or whereabouts of the operators, and no production from said wells has been reported to the Division.

2. Recent investigation has determined that the subject wells are located within the City of Carlsbad's Wellhead Protection Area; the wells are not properly

plugged; and there exists a necessity to re-plug these wells for the protection of the public health and safety, groundwater and the environment.

3. The subject wells have not produced any hydrocarbon or carbon dioxide substance for more than one year and are no longer usable for beneficial purposes. No permit for temporary abandonment has been requested for either of said wells or approved by the Division.

4. By virtue of Operators' failure to use the subject wells for production or other beneficial purposes or to secure a current temporary abandonment permit, the subject wells are presumed abandoned, and are required to be properly plugged.

5. Division Rule 201.B, issued pursuant to the authority of NMSA 1978, Secs. 70-2-12 and 70-2-14, requires that wells that are inactive for more than one year or are no longer usable for beneficial purposes be properly plugged.

6. Division Rule 101.M, issued pursuant to the same authority, authorizes the Division, after notice and hearing, to order the operator to plug and abandon any well or wells not in compliance with Rule 201, and to direct the Division to cause such well or wells to be plugged in accordance with a Division approved plugging program if, after the time provided in such order, the operator and its surety, if any, have failed to do so.

7. In this case, the Division is unable to identify any operator of the subject wells, and due to the passage of time it is reasonable to presume that the named operators are deceased. No bonds purporting to cover the subject wells or the named operators are on file with the Division. Because the subject wells are not properly plugged and are endangering groundwater and the environment they constitute public nuisances, and the Division seeks authority to plug and abandon the same.

WHEREFORE, the Supervisor of District II of the Division hereby applies to the Director to enter an order:

- A. Determining whether the subject wells should be re-plugged and abandoned in accordance with a Division-approved plugging program.
- B. Authorizing the Division (i) to re-plug the subject wells in accordance with a division-approved plugging program; (ii) to take necessary and appropriate measures to recover from the operators (should the identity and whereabouts of the operator ever be discovered) all costs of re-plugging the subject wells.
- C. For such other and further relief as the Division deems just and proper under the circumstances.

RESPECTFULLY SUBMITTED,

David K. Brooks
Assistant General Counsel
Energy, Minerals and Natural
Resources Department of the State of
New Mexico
1220 S. St. Francis Drive
Santa Fe, NM 87505
(505)-476-3450

Attorney for The New Mexico Oil
Conservation Division

Case No. _____ . **Application of the New Mexico Oil Conservation Division for an Order Authorizing the Division to Plug Two (2) Wells; Eddy County, New Mexico.** The Applicant seeks an order authorizing the Division to plug two abandoned wells in Eddy County, New Mexico, as to which the whereabouts of the operators are unknown, and providing for such other relief as the Director deems appropriate. The subject wells are the following:

Operator - E. Paul Moran
Well Name - Ramuz #1
Location - 660' from the North Line and 1980' from the West line
(Unit C) of Section 18, Township 23 South, Range 26 East.

Operator - Turner and Devito (also listed as Fred Turner on other
paperwork)
Well Name - Devito #1
Location - 330' from the South Line and 1650' from the East line (Unit
O) of Section 12, Township 23 South, Range 25 East.

FAX COVER SHEET

OIL CONSERVATION DIVISON
1301 W. GRAND AVE
ARTESIA, NM 88210

PHONE (505-748-1283
FAX (505-748-9720

Date 11/25/2002

TO: William C. OLSON 700-476-3462

FROM: Mike Stubblefield

NUMBER OF PAGES 8 (INCLUDING COVER SHEET)

MESSAGE

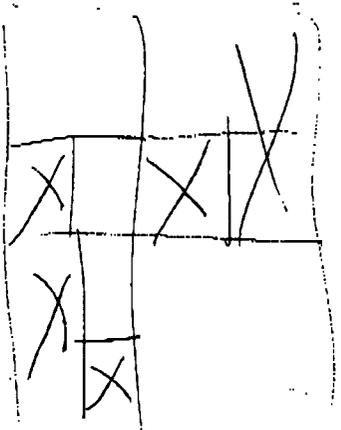
1 TW 23 NS S RG 25 EW E S 00 NE|NW|SW|SE|=X XXXX M=misc BK PG 00000
 01 SECTIONS 1, 3-15, 17-27, 34, 35 /qtr\ PROPERTY# 4 000 020 093 067
 02 ALL SECTIONS 7, 8, 11, 14, 15, 17, 18, OWNER # 0020093 DIST CO
 03 19, 25, 34
 04 N/2, N/2S/2, SESW, SWSE SEC 1 BUREAU OF LAND MANAGEMENT
 05 SW SEC 3 PO BOX 1778
 06 SW SEC 4 620 E GREENE STREET
 07 S/2 SEC 5 CARLSBAD NM 882211778
 08 S/2N/2, S/2 SEC 6 Land 1400142 C.A. 0
 09 W/2, W/2SE SEC 9 Imp 0
 10 NW, E/2SW SEC 10 P.P. 0 Fam ex 0
 11 N/2NW, SENW, S/2NE, SESW, SE SEC 12 M.H. 0 Vet ex 0
 12 NENW, S/2NW, N/2NE, SWNE, NESW, S/2SW 13 Lstk 0 Oth ex 1400142
 00 Key line# to insert after, use CMD-10 Total 1400142 NET 0

Date created 900221 by JACKIE changed 020723 by BETTE Current Year

Description	Code	Quantity	Rate(2)	Value- F U L L	date	user
GRAZ B FED	2	138 000013490	0000225	000000303	020725	BETTE

CMDS |1=u/prop|5=u/owner|6=u/alt loc|8=u/prior|9=no|

FROM SECTION-18 TOWNSHIP-238 RANGE-24E OWNER & DIST OWNER NAME AND ADDRESS	TO SECTION-18 TOWNSHIP-238 RANGE-24E SEC/TWN/RG	PROPERTY DESCRIPTION	LAND FULL VALUE	11/25/02 PAGE QUANTITY BOOK PAGE
20093 CD BUREAU OF LAND MANAGEMENT 4-000-020 PO BOX 1778 -093-099 620 E GREENE STREET CARLISBAD NM	18 23 24	88221-1778		
2104 CD JOHNSON, ARVIL MRS ET AL 4-000-002 XKILLION, BARBARA H -104-001 132 SUMMIT DR FISHB BEACH CA	18 23 24	265UNW, N/2NW MAP#287-9 LOC 7330 HIDALGO RD SW OF CCR733	12,000	120
20105 CD STATE OF NEW MEXICO 4-000-020 310 OLD SANTA FE TRAIL -108-130 SANTA FE NM	18 23 24	87304-0000		



OWNER & DIST	OWNER NAME AND ADDRESS	SEC/TWN/RG	PROPERTY DESCRIPTION	FULL VALUE	BOOK	PAGE
251371 CD 4-000-000 -121-001	JOHNSON, S P III & BARBARA J TRUBT KJOHNSON, S P III & BARBARA J PO BOX 1641 ROSWELL, NH 08202-1641	12 23 25N/28W	MAP#286-9 LAND LEASED TO ALBERT BACH	7,998	80	48 809
20078 CD 4-000-020 -078-001	CITY OF CARLSBAD	12 23 25S/W8	MAP#286-10 EXEMPT	90	40	
20078 CD 4-000-020 -077-001	CITY OF CARLSBAD	12 23 25S/W8	MAP#286-8 EXEMPT	90	40	
260996 CD 4-000-260 -996-001	CITY OF CARLSBAD	12 23 25N/E8	MAP# 286-CITY LOC W OF HIDALGO RD; MILE MARKER 7	90	40	444 753
20093 CD 4-000-020 -093-067	BUREAU OF LAND MANAGEMENT PO BOX 1778 420 E GREENE STREET CARLSBAD, NH 08221-1778	12 23 25				

OWNER • DIST OWNER NAME AND ADDRESS

SEC/TWN/RG PROPERTY DESCRIPTION

192
17A

FULL VALUE
2,665
90

80.00
120.00

BOOK PAGE

1 TW 23 NS S RG 26 E E S 00 NE|NW|SW|SE|=X
 01 SECTIONS 6,, 7,, 18,,24,,25,,33,,34,,35
 02 ALL SEC 6
 03 N/2NW,, E/2NE,, SE SEC 7
 04 NE,, SENW,, N/2SW,, SWSW,, NWSE SEC 18
 05 S2 SEC 24
 06 NE SEC 33
 07 NW,, N2NE,, W2SE SEC 34
 08 E2,, E2W2 SEC 35
 09 MAP#287-6
 10 LOC E & W OF 7000 HIDALGO ROAD
 11 EXEMPT
 12

M=misc BK PG 00000
 /qtr\ PROPERTY# 4 000 020 105 130
 OWNER # 0020105 DIST CO
 STATE OF NEW MEXICO
 310 OLD SANTA FE TRAIL
 SANTA FE NM 875040000
 Land 439195 C.A. 0
 Imp 7671
 P.P. 0 Fam ex 0
 M.H. 0 Vet ex 0
 Lstk 0 Oth ex 446866
 Total 446866 NET 0

00 Key line# to insert after, use CMD-10
 Date created 900504 by JACKIE changed 010912 by BETTE Current Year
 |Description |*| Code|Quantity |Rate(2)|Value- F U L L |date | user |

GRAZ B NM 2 150 000260000 0000225 000005850 010912 BETTE

CMDS |1=u/prop|5=u/owner|6=u/alt loc|8=u/prior|9=no|

1 TW 23 NS S RG 26 EW E S 00 NE|NW|SW|SE|=X M=misc BK PG 00000
 01 SECTIONS 4,5,8,17,18,20,29,30,31,33 /qtr\ PROPERTY# 4 000 020 093 099
 02 ALL SEC 4 OWNER # 0020093 DIST CO
 03 ALL SEC 5 BUREAU OF LAND MANAGEMENT
 04 ALL SEC 8 PO BOX 1778
 05 N2, SE, NESW SEC 17 620 E GREENE STREET
 06 S2SE, NESE, SESW SEC 18 CARLSBAD NM 882211778
 07 N/2, W/2SW, E/2SE SEC 20 Land 1400142 C.A. 0
 08 E/2E/2, NWNW SEC 29 Imp 0
 09 ALL (LESS SENE) SEC 30 P.P. 0 Fam ex 0
 10 ALL SEC 31 M.H. 0 Vet ex 0
 11 W2, SE SEC 33 Lstk 0 Oth ex 1400142
 12 MAP#287-2,3,11 Total 1400142 NET 0

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 Date created 900504 by JACKIE changed 960611 by KAR Current Year
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GRAZ B FED 2 138 000500000 0000225 000011250 960611 KAR

CMDS |1=u/prop|5=u/owner|6=u/alt loc|8=u/prior|9=no|

Olson, William

From: Olson, William
Sent: Tuesday, November 19, 2002 9:14 AM
To: Brooks, David K
Cc: Anderson, Roger; Gum, Tim; Wrotenbery, Lori

David,

Below is the information that you needed to set these two wells, in the Carlsbad Wellhead Protection Area, to hearing on December 19, 2002 for replugging under the reclamation fund.

1. Operator - E. Paul Moran
Well Name - Ramuz #1
Location - 660' from the North Line and 1980' from the West line (Unit C) of Section 18, Township
23 South, Range 26 East.

2. Operator - Turner and Devito (also listed as Fred Turner on other paperwork)
Well Name - Devito #1
Location - 330' from the South Line and 1650' from the East line (Unit O) of Section 12, Township
23 South, Range 25 East.

These wells were drilled and plugged in 1940. The division is not aware of any current operators for these wells.

If you any additional information, please let me know.

Sincerely,



William C. Olson
Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
(505) 476-3491



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 13, 2002

Mr. Jon R. Tully
City Administrator
City of Carlsbad
P.O. Box 1569
Carlsbad, New Mexico 88221-1569

**RE: MONITOR WELL #3 INVESTIGATIONS
SHEEP DRAW WELLFIELD
CARLSBAD, NEW MEXICO**

Dear Mr. Tully:

Attached is a copy of the New Mexico Oil Conservation Division's (OCD) preliminary investigation report of the brine water that the City of Carlsbad discovered in monitor well MW#3 which was installed in the Sheep Draw Wellfield.

The OCD would like to meet with you after the city has an opportunity to review the report and discuss the results of the report and potential future actions at the site. Please contact me at your convenience so that we can set a meeting date.

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

cc w/attachment: Tim Gum, OCD Artesia District Supervisor

Olson, William

From: Stubblefield, Mike
Sent: Thursday, September 19, 2002 1:48 PM
To: Olson, William
Subject: WELLS WITHIN ONE MILE OF CITY OF CARLSBAD WELLHEAD PROTECTION AREA WITH WELL STATUS



WELLS IN 1 MILE
OF WELL PROTEC.

WELLS LOCATED WITH-IN 1 MILE CITY OF CARLSBAD
WELLHEAD PROTECTION AREA.

30-015-29800 B-25-22s-25e PENWELL ENERGY INC. FILAREE 25 FED. COM. #1 EXPIRED DRLG INT.
30-015-30833 B-25-22s-25e DEVON ENERGY CORP. FILAREE 25 FED. COM. #1 EXPIRED DRLG INT.
30-015-00135 G-25-22s-25e WESTERN OIL PROD. MCKITTRICK FED. #1 P&A 11/13/1972
30-015-23269 H-27-22s-25e POLLUX LTD NE ROCK TANK FED C #1 EXPIRED DRLG INT.
30-015-10560 N-28-22s-25e MONSANTO CO. CUEVA #1 P&A 12/23/1965
30-015-24404 C-30-22s-26e SABA ENERGY OF TEXAS INC. MCKITTRICK 30 FED. #1 ACTIVE GAS WELL
30-015-25650 K-30-22s-26e ENRON OIL & GAS GOBBLERS KNOB 30 FED. #1 P&A 10/14/1986
30-015-22177 L-30-22s-26e HANAGAN PETRO. CORP. MCKITTRICK #1 T&A 7/5/1977 TD-591'
30-015-29522 H-31-22s-26e DEVON ENERGY PROD. CO. HACKBERRY 31 ST. #1 P&A 11/25/1998
30-015-27751 A-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #3 ACTIVE OIL WELL
30-015-28849 B-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #4 ACTIVE OIL WELL
30-015-29185 G-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #6 P&A 7/2/2001
30-015-27559 H-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. COM. #2 ACTIVE OIL WELL
30-015-25387 H-32-22s-26e EXXON CORP. NEW MEXICO FA ST. COM. #1 EXPIRED DRLG INT.
30-015-27558 I-32-22s-26e LOUIS DREYFUS NAT. GAS CO. BARBADOS ST. #1 ACTIVE SWD
30-015-25352 K-32-22s-26e LOUIS DREYFUS NAT. GAS CO. NEW MEX. EV ST. #1 ACTIVE SWD
30-015-28507 P-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #5 EXPIRED DRLG INT.
30-015-26131 L-16-23s-25e SIETE OIL & GAS CORP. WITCHITA ST. #1 P&A 7/11/1990
30-015-22230 B-22-23s-25e EXXON CORP. N. HORSE SHOE BEND #1 P&A 8/9/1989
30-015-21656 K-34-23s-25e HANAGAN PETRO. CORP. HORSESHOE BEND #1 P&A 1980
30-015-00137 D-35-23s-25e MCINTYRE SPEAROW R ETAL #1 P&A 10/10/34 P&A 10/10/1934
30-015-25227 I-36-23s-25e EXXON CORP. NEW MEXICO ER ST. #1 P&A 7/17/1985
30-015-25309 G-36-23s-25e EXXON CORP. NEW MEXICO ET LEASE #1 EXPIRED DRLG INT.
30-015-24572 P-5-23s-26e HILLIN PROD. CO. CITIES 5 FED. #1 P&A 1/17/1985

30-015-23538 I-5-23s-26e CITIES SERVICE OIL CO. FED. N COM. #1 P&A 1/14/1984

30-015-00374 N-8-23s-26e ROUNDEY GEORGE ROUNDY FED. #1 P&A 8/9/1939

30-015-31529 D-17-23s-26e SARAGOSSA 17 FED. COM. #1 ACTIVE GAS WELL

30-015-26146 I-17-23s-26e BETTTIS BOYLE AND STOVAL EXXON 17 FED. COM. #1 ACTIVE GAS WELL

30-015-31935 L-17-23s-26e LOUIS DREYFUS NAT. GAS CO. SARAGOSSA 17 ST. COM. #3 ACTIVE GAS WELL

30-015-31522 L-17-22s-26e OXY USA INC. OXY PEA SHOOTER STATE #1 EXPIRED DRLG INT.

30-015-21161 P-17-23s-26e COQUINA OIL CORP. EXXON A FED. #1 P&A 5/9/1974

30-015-31466 G-18-23s-26e OXY USA WTP LIMITED PARTNERS OXY HONEST JOHN STATE #1 ACTIVE GAS WELL

30-015-24641 N-18-23s-26e MAYNE & MERTZ BLUE WATER FED. #1 P&A 12/11/1985

30-015-00375 C-18-23s-26e MORAN E PAUL RAMUZ #1 P&A 8/21/1940

30-015-24592 1-19-23s-26e NADEL & GUSSMAN PERMIAN, L NEW MEXICO DI STATE #2 ACTIVE OIL WELL

30-015-24425 2-19-23s-26e NADEL & GUSSMAN PERMIAN, L NEW MEXICO DI ST. #1 ACTIVE OIL WELL

30-015-24591 3-19-23s-26e NADEL & GUSSMAN PERMIAN,L NEW MEXICO DI ST. #3 T&A OIL WELL

30-015-32144 C-19-23s-26e LOUIS DREYFUS NAT. GAS CO. SARAGOSSA 19 ST. COM. #1 ACTIVE OIL WELL

30-015-24593 M-19-23s-26e EXXON CORP. NEW MEXICO DI ST. #4 EXPIRED DRLG INT.

30-015-31936 N-19-23s-26e DEVON ENERGY PROD. CO. FH 19 STATE COM. #1 EXPIRED DRLG INT.

30-015-24425 E-19-23s-26e EXXON DORP. NEW MEXICO DI ST. #1 ACTIVE OIL WELL

30-015-24592 D-19-23s-26e EXXON CORP. NEW MEXICO DI ST. #2 ACTIVE OIL WELL

30-015-20311 J-19-23s-26e SAMEDAN OIL CORP. GRAND RANCH UNION STATE #1 P&A 12/14/1971

30-015-00376 A-19-23-26 DEVITO DC STATE #1 P&A 7/2/1946

30-015-20144 C-31-23s-26e YATES PETRO. CORP. N. WHITE CITY ABP FED. #1 P&A 1/25/1986

30-015-23462 F-31-23s-26e AMOCO PROD. CO. STATE IZ COM. #1 P&A 12/7/1999



BOB FORREST
MAYOR

Post Office Box 1569
Carlsbad, NM 88221-1569
(505) 887-1191
1-800-658-2713

JON R. TULLY
CITY ADMINISTRATOR

September 6, 2002

RECEIVED

SEP 11 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Mr. William C. Olson
Hydrologist
Environmental Bureau
State of New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87501

RE: Sheep Draw Wellfield Contamination

Dear Mr. Olson:

From discussions at our last meeting on June 26, 2002, it was our understanding that your office would prepare by August 1, 2002, a written action plan to identify, abate and remediate the produced water contamination encountered at City Monitoring Well #3. As of the date of this letter I have heard nothing further from you regarding this plan.

We consider this contamination with its BTX and high saline content to pose a serious threat to the City's sole source municipal aquifer. The first year anniversary of the discovery of this contamination is fast approaching with no definitive course of action to mitigate the threat.

Please advise me as to OCD's intentions and time table for developing and implementing a plan to address this matter. Thank you.

Sincerely,

Jon R. Tully
City Administrator

JRT:rc

xc: Mayor Forrest
Carlsbad City Council

COUNCILORS

Ward 1
JIMMIE S. CISNEROS
PAUL C. AGUILAR

Ward 2
MANUEL C. ANAYA, JR.
JEFF DIAMOND

Ward 3
H. CALVIN BOWDITCH
JUDI WATERS

Ward 4
LARRY HENDERSON
ROBERT C. MURRAY II

Olson, William

From: Stubblefield, Mike
Sent: Wednesday, September 04, 2002 9:10 AM
To: Olson, William
Subject: REQUESTED INFORMATION 9/4/2002

WILLY,

HERE ARE THE FILES YOU REQUESTED.

THE SECOND FILE IS NOT NAMED CORRECTLY IT SHOULD HAVE BEEN LABELED WELLS WITH-IN CITY WATER FIELD.

HAVE A GREAT DAY.

MIKE S.



REPORT ON
HEAD PROTECTI



WELLS NEAR
Y WATER FIELD C



WELLS IN 1 MILE
OF WELL PROTEC.

A REVIEW OF ALL THE WELLS LOCATED IN THE CITY OF CARLSBAD WELLHEAD PROTECTION AREA AND OF ALL THE WELLS LOCATED WITHIN ONE MILE OF THE CITY OF CARLSBAD WELLHEAD PROTECTION AREA WAS CONDUCTED BY ENVIRONMENTAL ENGINEER SPECIALIST MIKE STUBBLEFIELD.

THIS REVIEW INTELLED A STUDY OF ALL CASING SETTING DEPTHS FOR SURFACE, INTERMEDIATE, AND PRODUCTION STRINGS OF CASING RAN AND CEMENTED IN THE AREA OF REVIEW.

ALL CEMENTS USED TO CEMENT CASING IN THE REVIEW AREA WERE CHECKED FOR VOLUMES USED, QUALITY OF CEMENT USED, AND CEMENT TOPS AS PER LOGS AND SUBSEQUENT REPORTS.

THE WELL FILES FOR WELLS LOCATED IN THE REVIEW AREA WERE CHECKED FOR HISTORY AS TO REPORTED LOSS CIRCULATION ZONES, WATER FLOWS, OR OTHER PROBLEMS THAT MIGHT HAVE OCCURRED DURING DRILLING, PRODUCTION, AND PLUGGING OPERATIONS.

ALL PLUGGED WELLS IN THE AREA OF REVIEW WERE CHECKED FOR PROCEDURES USED IN THE PLUGGING OF THE WELLS, VOLUMES OF CEMENT PLUGS USED DURING PLUGGING OPERATIONS, SETTING DEPTHS OF ISOLATION PLUGS, AND CEMENT PLUGS VERIFIED BY TAGGING OF THE CEMENT PLUGS SET DURING THE PLUGGING OPERATIONS.

DRILLING BEGAN IN THE AREA OF REVIEW AS EARLY AS 1940 WITH OLDER WELLS BEING DRILLED BY CABLETOOL METHOD AND THE MODERN WELLS BEING DRILLED BY ROTARY METHOD.

THE REVIEW FOUND CEMENT TO BE CIRCULATED TO SURFACE ON THE SURFACE AND INTERMEDIATE CASING STRINGS IN THE WELLHEAD PROTECTION AREA.

LOST CIRCULATION DURING DRILLING OPERATIONS WAS COMMON IN THE AREA OF REVIEW WITH LOST CIRCULATION ZONES LOCATED FROM 85' TO 2485' BEING REPORTED.

A LARGE PERCENT OF THE SURFACE AND INTERMEDIATE CASINGS STRINGS WERE 1" TO SURFACE USING STAGE CEMENT METHODS.

MOST OF THE CEMENTING OPERATIONS WERE WITNESSED BY O.C.D. AND BLM FIELD PERSONEL AS REPORTED ON SUBSEQUENT CASING REPORTS AND WITNESS SHEETS IN WELL FILES.

THE PRODUCTION STRINGS OF CASING WERE WITH-IN REGULATIONS AS PER CEMENT TOPS REQUIRED BY RULE 107.E.

ONE REPORT OF CEMENT OPERATIONS TO SHUTOFF A WATERFLOW AND BOULDERS BETWEEN 230' AND 402' WAS REPORTED ON THE CORINNE GRACE CUEVA UNIT #1 WHICH IS LOCATED IN UT K-6-23s-26e.

THE WATER FLOW REPORT DID NOT GIVE THE QUALITY OF THE WATER IN THE WATERFLOW BEFORE THE WATER FLOW WAS SHUT OFF BY CEMENTING OPERATIONS.

MODERN PLUGGED WELLS IN THE AREA OF REVIEW WERE PLUGGED USING CURRENT RULES AND GUIDE LINES FOR PLUG AND ABANDONMENT WITH SOME HAVING WITNESS REPORTS IN WELL FILE . SOME OF THE OLDER WELLS IN THE AREA OF REVIEW WHICH WERE DRILLED BY CABLE TOOL METHOD DID NOT HAVE A REPORT ON ACTIONS TAKEN TO PLUG THE WELLS.

THE DEVITO WELL #1 LOCATED 330' FSL 1650' FEL-12-23s-25e WHICH IS THE CLOSES WELL DUE NORTH AND WEST OF THE MONITOR WELL #3 WAS DRILLED BY CALBETOOL METHOD IN 1940.

THE WELL HISTORY FOUND ON THE DEVETO #1 WAS FOUND ON A SCOUTING REPORT.

THE OLDER WELLS IN DISTRICT 2 HAVE WELL HISTORY ON SCOUTING REPORTS WHICH WAS THE METHOD USED TO REPORT WELL DATA BEFORE THE IMPLMENT OF TODAYS SYSTEM OF REQUIRED REPORT FORMS.

THE SCOUTING REPORT DID SHOW 10" CASING SET AT 451' WITH 5 SX CEMENT USED AND 7" CASING SET AT 1533' MUDDED IN HOLE WITH NO REPORT OF THE CASING HAVING BEEN PULLED OR LEFT IN THE WELLBORE.

THE SCOUTING REPORT FOR THE DEVETO #1 REPORTED THE WELL TO HAVE SULPHUR WATER IN THE HOLE AT A DEPTH OF 755'-60'.

THERE WAS NO INFORMATION FOUND ON PLUGGING ACTIONS TAKEN ON THE DEVITO #1 IN THE SCOUTING REPORT .

THE SCOUTING REPORT FOR THE DEVITO #1 REPORTED THE WELL TO BE DRY AND ABANDON AT A TD OF 1758'.

THE ONLY OTHER WELL FOUND IN SECTION 12-23-25 WAS THE LOUIS DREYFUS NATURAL GAS CORP. SQUAW FEDERAL #1 LOCATED 1980' FNL 1980' FSL SECTION 12-23s-25e.

THE SQUAW FEDERAL #1 WAS PERMITTED ON 10/17/1973.

THE WELL WAS SPUDDED AND DRILLED TO A TD OF 105' BY CABLETOOL METHOD AND WAS THEN REPLACE WITH A ROTARY DRILLING RIG.

THE ROTARY RIG DRILLED TO A TD OF 425' WITH NO LOSS CIRCULATION REPORTED ON USGS FORM 9-331.16" CASING AS CEMENTED AT 100' IN THE WELL WITH 75 SX CEMENT BEING REPORTED CIRCULATED TO THE PIT.

THE SQUAW FEDERAL #1 SET 9.625" CASING AT 2660' AND CEMENTED CASING WITH 1000 SX HALCO LITE CEMENT, AND 200 SX CL. C CEMENT. SUBSEQUENT REPORT ON CEMENT OPERATIONS REPORTED THE WELL DID NOT CIRCULATE ON THE INITIAL CEMENT OPERATION AND WAS 1" TO SURFACE FROM A DEPTH OF 744' USING 535 SX CEMENT IN 5 STAGES FROM 744' TO SURFACE.

THE SQUAW FEDERAL #1 TD'ED AT A DEPTH OF 11,460' AND 5.5" CASING WAS RAN AND CEMENTED IN THE WELL AT 11,460' USING 700SX CL. H. CEMENT .

A TEMPERATURE SURVEY SHOWED TOP OF THE CEMENT TO BE AT 8200' ON THE 5.5" CASING. THE WELL WAS COMPLETED AND PRODUCED AS A MORROW WELL FROM PERFORATIONS LOCATED AT 11,203-09'.

A CIBP WAS RAN AND SET AT 11,195' WITH 35' OF CEMENT ON TOP OF CIBP ON 5/22/1984.

NEW PERFORATIONS WERE ADDED AT A DEPTH OF 11,098' TO 11,121' AND THE WELL PRODUCED AS A MORROW COMPLETION.

A CIBP WAS RAN AND SET AT 11,080' WITH 35' OF CEMENT ON TOP OF CIBP ON 6/14/1984. THE WELL WAS PERFORATED AT 10,434' AND TESTED.

A CIBP WAS RAN AND SET AT 10,385' WITH 35' OF CEMENT ON TOP OF THE CIBP AND NEW PERFORATION ADDED AT A DEPTH OF 10,138'-10,160'. THE WELL WAS THEN PRODUCED FROM THE SHEEP DRAW STRAWN. A REPORT FILED 09/04/1992 FILED THE WELL IN SHUT-IN STATUS DUE TO HIGH H2S CONTENT.

06/25/2001 A CIBP WAS RAN AND SET AT 9630' WITH 4 SX CEMENT ON TOP OF THE CIBP. MUD GEL WAS CIRCULATED TO SURFACE. THE 5.5" CASING WAS CUT AND PULLED AT 8047'. A 35 SX CEMENT PLUG WAS SET AT 8100' TO 7950' AND TAGGED AT 7942'. A 35 SX CEMENT PLUGS WAS SET AT 6550'-6440'. A 40 SX CEMENT PLUG WAS SET AT 4810'-4670'. A 40 SX CEMENT PLUG WAS SET AT 2710'-2601'. THE CEMENT PLUG WAS TAGGED AT 2573'. A 40 SX CEMENT PLUG WAS SET AT 230'-121'. A 20 SX CEMENT PLUG WAS SET FROM 50' TO SURFACE.

WELL INFORMATION ON SECTIONS BORDERING SECTION 12-23s-25e.

SECTION 11-23s-25e

1924' FNL 651' FEL MINERAL TECHNOLOGIES INC. MARY FEDERAL #1

THE MARY FEDERAL #1 WAS PERMITTED ON 12/27/1972.

THE WELL WAS SPUDDED WITH ROTARY DRILLING RIG 1/20/1973'.

16" CASING WAS RAN AND CEMENTED AT 100' W/150 SX CL. C. CEMENT CIRCULATED TO SURFACE VOLUME NOT REPORTED.

9.625" CASING WAS RAN AND CEMENT AT 2430' W/850 SX HALCO LITE & 150 SX CL C. CEMENT. CEMENT DID NOT CIRCULATE. A TEMPERATURE SURVEY FOUND THE TOP OF CEMENT TO BE AT 600'. CEMENT WAS BROUGHT TO SURFACE FROM 625' TO 270' IN 8 STAGES USING A TOTAL OF 290 SX CEMENT. THE WELL WAS READYMIXED TO SURFACE FORM 270' USING 14 YDS READYMIX. THE WELL WAS TD'ED AT 11,570'. CEMENT PLUGS SPOTTED WERE A 35 SX CEMENT 11,050'-10,950'. A 50 SX CEMENT PLUG 9900'-9800', A 50 SX CEMENT PLUG 8600'-8500'. A 50 SX CEMENT PLUG 6500'-6400'. A 50 SX CEMENT PLUG 5000'-4900'. A 50 SX CEMENT PLUG 2480'-2380'. A 10 SX CEMENT SURFACE PLUG.

NO REPORT ON ANY CEMENT PLUGS BEING TAGGED DURING PLUGGING OPERATIONS.

8/24/1973 THE WELL WAS REENTERED AND DRILLED TO A TD OF 11,570'. 5.5" CASING WAS RAN AND CEMENTED AT 11,570' W/350 SX CL. H CEMENT. TEMPERATURE SURVEY FOUND TOP OF CEMENT TO BE AT 10,100'. THE 5.5" CASING WAS PERFORATED AT 9830'-33'. THE WELL WAS SQUEEZED W/ 725 SX CL. H CEMENT. THE 5.5" CASING WAS PERFORATED AT 11,363'-83'. THE WELL WAS PRODUCED FROM THE WILDCAT MORROW FORMATION. A CIBP WAS RAN AND SET AT 11,003' WITH 35' OF CEMENT ON TOP OF CIBP. THE 5.5" CASING WAS PERFORATED AT 10,500'. A CIBP WAS RAN AND SET AT 10,500'. THE 5.5" CASING WAS PERFORATED AT 10,268'-292' WITH THE WELL PRODUCING FROM THE SHEEP DRAW STRAWN FORMATION. NEW PERFORATIONS WERE ADDED 12/5/1994 9850'-10,050'.

1925' FNL 810' FEL MINERAL TECHNOLOGIES INC. MARY FEDERAL #3

THE MARY FEDERAL #3 WAS PERMITTED ON 7/17/1984. THE WELL WAS SPUDDED AND DRILLED TO 1183'. THE WELL WAS PLUGGED DUE TO A FISH CONSISTING OF 468' OF DRILL PIPE WAS LEFT IN THE HOLE FROM 468'-1183'. THE WELL WAS PLUGGED WITH 40 SX CEMENT 1183'-1233'. A 40 SX CEMENT WAS SET FROM 50' TO SURFACE. THE RIG WAS SKIDDED 15' NW OF THE WELL TO MARY FED. #3Y.

1906' FNL 807' FEL MINERAL TECHNOLOGIES INC. MARY FEDERAL #3Y

THE MARY FEDERAL #3Y WAS PERMITTED 9/21/1984. THE WELL WAS SPUDDED 8/29/1984 WITH ROTARY DRILLING RIG. 8.625" CASING WAS RAN AND CEMENTED AT 1329' W/800 SX PACESETTER LITE CEMENT. A TEMPERATURE SURVEY FOUND THE TOP OF CEMENT TO BE AT 615'. THE CEMENT WAS BROUGHT TO SURFACE FROM 615' IN 1 STAGE WITH TOTAL 303 SX CEMENT. 5.5" CASING WAS RAN AND SET AT 5167' W/ DV TOOL SET AT 2814'. THE 1st STAGE CEMENT W/1850 SX CL. C. & THE 2nd STAGE CEMENT W/450 SX. CEMENT DID NOT CIRCULATE. TEMPERATURE SURVEY FOUND THE TOP OF CEMENT AT 872'. THE 5.5" CASING WAS PERFORATED AT 4783'-92'. THE WELL PRODUCED FROM THE CHERRY CANYON FORMATION. THE WELL WAS PLUGGED ON 1/7/1985. A CIBP WAS RAN AND SET AT 4750' WITH 35' OF CEMENT ON TOP OF CIBP. A 15 SX CEMENT CEMENT PLUG WAS SET AT 2864'-2764'. A 15 SX CEMENT PLUG WAS SET AT 1379'-1279'. A 10 SX CEMENT PLUG WAS SET FROM 30' TO SURFACE. FROM SURFACE TO 90' BETWEEN 8.625" CASING & 5.5' CASING WAS TOPPED OFF W/10 SX CL. C.CEMENT.

709' FSL 1929' FWL MINERAL TECHNOLOGIES, INC. MARY FEDERAL #5

THE MARY FEDERAL #5 WAS PERMITTED 8/20/1985. THE WELL WAS SPUDDED ON 9/21/1985 WITH A ROTARY DRILLING RIG.

20" CONDUCTOR CASING WAS RAN AND CEMENTED AT 95' W/125 SX CEMENT. THE WELL LOST CIRCULATION AT 290'. THE OPERATOR NOTIFIED CLAUDE LABOR CITY MANAGER OF CARLSBAD & JIM WRIGHT STATE ENGINEER. THEY APPROVED GEAR GUM AS HOLE SWEEP. SET LOST CIRCULATION CEMENT PLUGS AT 250'-305' & 131'-250' W/200 SX CL. C. CEMENT. RESUME DRILLING. 13.375" CASING WAS RAN AND SET AT 1613' W/1600 SX HAL. LITE & 400 SX CL. C. CEMENT. CEMENT CIRCULATED TO SURFACE INITIAL CEMENT OPERATION.

9.625" CASING WAS RAN AND CEMENTED AT 2600' W/ 475 SX HOWCO LITE & 300 SX CL. C. CEMENT. THE CEMENT CIRCULATED TO SURFACE ON INITIAL CEMENT OPERATON..

7" CASING WAS RAN AND CEMENTED AT 10,395' WITH A DV TOOL SET AT 4792'. 1st STAGE WAS 745 SX CL. H. CEMENT & 2nd STAGE 975 SX TLW CEMENT. THE TOP OF CEMENT WAS FOUND BY TEMPERATURE SURVEY TO BE AT 2990'.

THE 7" CASING WAS PERFORATED AT 9742'-52' AND THE WELL PRODUCED FROM THE SHEEP DRAW - UNDESIG. SHEEP DRAW STRAW FORMATION. NEW PERFORATIONS WERE ADDED AT 10,120'-146'.

NEW PERFORATIONS WERE ADDED 9742'-52'. A COMMINGLE PERMIT GRANTED AND WELL PRODUCED FROM SHEEP DRAW -STRAWN GAS POOL AND UPPER PENN FORMATIONS.

SECTION 14-23s-25e NO WELLS

SECTION 13-23s-25e

2310' FNL 2240' FEL EXXON CORP. SQUAW FEDERAL #2

THE SQUAW FEDERAL #2 WAS PERMITTED ON 9/28/1983.

THE WELL WAS SPUDDED ON 12/22/1983.

8.625" CASING WAS RAN AND CEMENTED AT 1325' W/700 SX CL. B5, & 550 SX CL. C. CEMENT. THE CEMENT CIRCULATED TO SURFACE ON INITIAL STAGE OF CEMENT OPERATIONS.

5.5" CASING WAS RAN AND CEMENTED AT 5172' WITH A D.V. TOOL SET AT 3020'. THE 1st STAGE WAS CEMENTED W/550 SX CL. C. & 2nd STAGE W/ 900 SX CL. C. CEMENT. CEMENT DID NOT CIRCULATE ON INITIAL CEMENT OPERATON. A TEMPERATURE SURVEY FOUND THE TOP OF THE CEMENT TO BE AT 1050' ON THE 5.5" CASING .

THE 5.5" CASING WAS PERFORATED AT 4732'-74' AND THE WELL PRODUCED FROM THE WEST DARK CANYON DELAWARE FORMATION.

THE WELL WAS T&A'eD ON 1/2/1985 WITH A CIBP SET AT 4650'.

THE WELL WAS PLUGGED ON 12/3/1991.

A CIBP WAS RAN AND SET AT 4620'. A 25 SX CEMENT PLUG WAS SET AT 4362'. A 25 SX CEMENT PLUG WAS SET AT 3080'-2827'. A 25 SX CEMENT PLUG WAS SET AT 1375'-1122'. A 10 SX CEMENT PLUG WAS SET AT 100' TO SURFACE. NO REPORT ON CEMENT PLUGS BEING TAGGED.

UT P-13-23s-25e EXXON CORPORATION NEW MEXICO DS STATE #1

EXPIRED DRILLING INTENT.

SECTION 18-23s-26e

660' FNL 1980' FWL E.P. MORAN RAMAZ #1

THE RAMAZ #1 WAS ON PERMITTED 5/31/1940.

7" CASING WAS RAN AND CEMENTED AT 1660'. AND ESTIMATED 14 SX OF CEMENT WAS USED AS PER RECORDS ON WELL.

THE WELL WAS TD AT 1808'.

THE WELL RECORDS REPORTED ON 8/4/1940 STRUCK WATER {SALT} AT 1808' WHICH CAME UP APPROXIMATELY 1500' IN THE HOLE.

THE WELL WAS PLUGGED ON 10/5,6/1940 SUBSEQUENT REPORT AS FOLLOWS.

CEMENTED BOTTOM WATER AT 1808' WITH 10 SACKS. LEFT 235' OF 7 INCH WHICH WAS CEMENTED TO SHUT OFF WATER ENCOUNTERED AT 1563'-66' WITH 10 SACKS OF CEMENT IN ORDER TO PROTECT ANY SURFACE WATERS. LEFT 100' OF 8.25" SURFACE PIPE. FILLED HOLE UP WITH MUD AND PLACED A CEMENT CAP WITH REGULATION 4" PIPE AS MARKER.

1980' FNL 1700' FEL OXY USA WIP LIMITED PARTNERSHIP
OXY HONEST JOHN STATE #1

THE OXY HONEST JOHN WAS PERMITTED ON 10/19/2001.

THE WELL WAS SPUDDED ON 3/13/2001.

THE WELL LOST CIRCULATION AT 156' AND WAS DRY DRILLED TO TD @ 719'.

13.375" CASING WAS RAN AND CEMENTED AT 718' W/200 SX CL. H., 366 SX 65/35 POZ. & 200 SX CL. C. CEMENT.

CEMENT DID NOT CIRCULATE ON INITIAL CEMENT OPERATION. A TEMPERATURE SURVEY FOUND THE TOP OF CEMENT TO BE AT 116'. THE CEMENT WAS BROUGHT TO SURFACE FROM 155' IN 3 STAGES WITH 250 SX CEMENT USED.

9.625" CASING WAS RAN AND CEMENTED AT 2807' W/780 SX 65/35 POZ. & 200 SX CL. C. CEMENT. THE CEMENT CIRCULATED TO SURFACE ON INITIAL CEMENT OPERATION. 7" CASING RAN AND CEMENTED AT 9470' W/525 SX 65/35 POZ. & 200 SX CL. H. CEMENT. A TEMPERATURE SURVEY FOUND THE TOP OF CEMENT TO BE AT 3200'.

A 4.5" LINER WAS RAN AND CEMENTED AT 8933'-11,780' W/400 SX CL. C. CEMENT.

A CBL RAN FOUND THE TOP OF CEMENT TO BE AT 3260'. PERFORATED 4.5" LINER AT 11,612'-18'. THE WELL IS PRODUCING FROM THE CARLSBAD MORROW SOUTH.

660' FSL 1673' FWL MAYER & MERTZ BLUEWATER FEDERAL #1

THE BLUEWATER FEDERAL #1 WAS PERMITTED ON 10/1/1983.
13.375" CASING WAS RAN AND CEMENTED AT 281' W/ 100 SX HALL. LITE, &
400 SX CL. C. CEMENT. CEMENT CIRCULATED ON INITIAL CEMENT
OPERATION.

8.625" CASING WAS RAN AND CEMENTED AT 1596' W/ 580 SX CL. C.
CEMENT.

CEMENT CIRCULATED ON THE INITIAL CEMENT OPERATION.

4.5" CASING WAS RAN AND CEMENTED AT 5056' W/ 850 SX 50/50 POZ.
CEMENT. THE TEMPERTURE SURVEY FOUND THE TOP OF CEMENT TO BE
AT 2690'.

THE 4.5" CASING WAS PERFORATED AT 4926'-44'.

A CIBP WAS RAN AND SET AT 4920' WITH 10' OF CEMENT ON TOP OF CIBP.

THE 4.5" CASING WAS PERFORATED AT 4795'-4851'.

A CIBP WAS RAN AND SET AT 4785'

THE 4.5" CASING WAS PERFORATED AT 4684'-4756'.

THE WELL IS PRODUCING FROM THE WILDCAT DELAWARE POOL.

SECTION 7-23s-26e

2310' FEL 660' FSL EXXON CORP. NEWMAN #1

THE NEWMAN #1 WAS PERMITTED ON 2/10/1975.

THE WELL WAS SPUDDED ON 2/13/1975 WITH A CABLETOOL.

5/12/1975 A ROTARY RIG WAS MOVED ONTO THE WELL.

16" CASING WAS RAN AND CEMENTED AT 96' W/ 180 SX CL. C. CEMENT.

CEMENT CIRCULATED TO THE SURFACE ON INITIAL CEMENT OPERATION.

9.625" CASING WAS RAN AND CEMENTED AT 2480' W/ 900 SX HOWCO LITE &
150 SX CL. C. CEMENT. THE CEMENT CIRCULATED TO SURFACE ON INITIAL
CEMENT OPERATION.

THE WELL WAS TD'ED AT 11,625'. THE WELL WAS PLUGGED BACK TO 4920'.

A 35 SX CEMENT PLUG WAS SET AT 11,100'. A 35 SX CEMENT PLUG WAS SET
AT 10,100',

A 35 SX CEMENT PLUG WAS SET AT 8600'-8500'. A 35 SX CEMENT PLUG
WAS SET AT 6200'-6100',

A 55 SX CEMENT PLUG WAS SET AT 5040'-4910'.

THE CEMENT PLUG WAS DRESSED OFF TO 4920'.

THE 4.5" CASING WAS RAN AND CEMENTED AT 4920' W/ 675 SX 50/50 POZ.

THE 4.5" CASING WAS PERFORATED AT 4781'-90'.

THE WELL IS PRODUCING FROM THE BRYNES MIDDLE TANK DELEWARE
GAS POOL.

6/27/1984' NEW PERFORATIONS WERE ADDED AT 4746'-80'.

THE WELL WAS PLUGGED 2/25/1985.

A CIBP WAS RAN AND SET AT 4200'. A CIBP WAS RAN AND SET AT 4168'

WITH 10 SX CEMENT ON TOP OF CIBP. THE CASING WOULD NOT PRESSURE

TEST. OPERATOR FOUND A HOLE IN 4.5" CASING AT 3495'. HOLE IN CASING WERE SQUEEZED UNDER PACKER USING 50 SX CL. C. CEMENT. PRESSURE TESTED CASING OK TO 1000# PSI. PERFORATED 4.5" CASING AT 2535'. AND TRIED TO SQUEEZE. PRESSURE HELD. SPOTTED 20 SX CL. C. CEMENT AT 2535'. TAGGED CEMENT AT 2304'. PERFORATED THE 4.5" CASING AT 1320' AND CIRCULATED WITH MUD TO SURFACE. SQUEEZED A 30 SX CL.C. CEMENT PLUG AT 1320'. PERFORATED 4.5" CASING AT 50' AND CIRCULATED CEMENT TO SURFACE .

SECTION 6-23s-26e

1980' FSL 1980' FWL CORINNE GRACE CUEVA UNIT #1

THE CUEVA UNIT #1 WAS PERMITTED ON 9/12/1974.

THE WELL WAS SPUDDED ON 9/14/1974.

CONDUCTOR PIPE WAS SET AT 30'.

16" CASING WAS RAN AND CEMENTED AT 255' W/ 490 SX CL. C. CEMENT. CEMENT CIRCULATED TO SURFACE ON INITIAL CEMENT OPERATION.

11.75" CASING WAS RAN AND CEMENTED AT 1257' W/ 515 SX CL. C. CEMENT. A TEMPERATURE SURVEY FOUND TOP OF CEMENT TO BE AT 1000'.

THE CEMENT WAS TAGGED AT 788' AND BROUGHT TO SURFACE IN 7 STAGES FROM 788' WITH 420 SX CEMENT USED. DURING DRILLING OPERATIONS A 5 SX CEMENT PLUG WAS SPOTTED AT 402' TO SHUTOFF A WATER FLOW AND BOULDERS FROM 402'-230'.

8.625" CASING WAS RAN AND CEMENTED AT 4915' W/540 SX HALL. LITE & 150 SX CL. C CEMENT. NO REPORT ON CEMENT CIRCULATED . THE TOC WAS AT 1180' BY TEMPERATURE SURVEY.

THE WELL WAS TD'ED AT 11,535'.

5.5" CASING WAS RAN AND CEMENTED AT 11,618' W/ 1350 SX CL. H. CEMENT. A TEMPERATURE SURVEY FOUND THE TOP OF CEMENT TO BE AT 6,900'.

THE 5.5" CASING WAS PERFORATED AT 10,164'-266'.

THE WELL IS PRODUCING FROM THE SHEEP DRAW STRAWN POOL.

NEW PERFORATIONS WERE ADDED 11/18/1983 AT 11,178'-88'.

NEW PERFORATIONS WERE ADDED AT 11,116'-24' ON 11/27/1983.

SECTION 1-23s-25e

2130' FSL 2160' FWL LOUIS DREYFUS NATURAL GAS CORP. SQUAW FED. #3

THE SQUAW FEDERAL #3 WAS PERMITTED ON 8/20/1985.

THE WELL WAS SPUDDED ON 9/14/1985 WITH A ROTARY DRILLING RIG.

20" CONDUCTOR PIPE WAS SET AT 85' WITH 250 SX CL. C. CEMENT & ALSO READY MIXED TO SURFACE.

THE WELL LOST CIRCULATION AT 203' WHILE DRILLING.

13.375 CASING WAS RAN AND CEMENTED AT 1510' W/ 1600 SX CL. C.& 300 SX CL. C. CEMENT. THE CEMENT DID NOT CIRCULATE. A TEMPERATURE

SURVEY FOUND THE TOP OF CEMENT AT 950'. THE CEMENT WAS BROUGHT TO SURFACE FROM 627' IN 7 STAGES WITH 735 SX CEMENT USED. 9.625" CASING WAS RAN AND CEMENTED AT 2604' W/ 475 SX HOWCO LITE & 300 SX CL. C. CEMENT. THE CEMENT CIRCULATED TO SURFACE ON THE INITIAL CEMENT OPERATION. 5" CASING WAS RAN AND CEMENTED AT 11,665' WITH A D.V. TOOL SET AT 4778'. CEMENTED W/ 1st STAGE 1800 SX CL. H. CEMENT & 2nd STAGE W/1000 SX TLW. CEMENT. THE CEMENT DID NOT CIRCULATE TO SURFACE ON INITIAL CEMENT OPERATION. A TEMPERATURE SURVEY FOUND TOP OF CEMENT TO BE AT 3300'.

THE 5" CASING WAS PERFORATED AT 11,218'-621'. THE WELL IS PRODUCING FROM THE SHEEP DRAW MORROW GAS POOL. 7/9/1987 A VALVE ON A SERVICE COMPANY'S BLENDER WAS LEFT OPEN ALLOWING APPROXIMATELY 5-10 BBL OF DIESEL TO LEAK ONTO THE LOCATION. THE LEAK WAS STOPPED BY CLOSING THE VALVE. THE AFFECTED AREA COVERED MOST OF THE SW/4 OF THE LOCATION AND A AREA 8' WIDE TAPERING TO 6' WIDE 200' IN LENGTH, WEST OF THE LOCATION. THE LEAK DID NOT AFFECT ANY SURFACE WATER. THE AREA WAS CLEANED UP BY COVERING IT WITH FRESH DIRT.

A CIBP WAS RAN AND SET AT 11,150'.

NEW PERFORATIONS WERE ADDED AT 10,469'-857'.

WELL IS PRODUCING FROM THE SHEEP DRAW ATOKA POOL.

COMMINGLE PERMIT APPROVED 3/15/1988'.

NEW PERFORATIONS ADDED AT 9754'-9770'.

3/26/1997 RAN AND SET CIBP AT 10,050' WTH 50' OF CEMENT ON TOP OF CIBP.

NEW PERFORATIONS WERE ADDED 9989'-9992'.

WELL IS PRODUCING FROM THE SHEEP DRAW ATOKA {GAS} POOL.

NO WELLS FOUND IN SECTIONS 2-22s-25e OR 3-22s-25

7/17/2002 MIKE STUBBLEFIELD ENVIR. ENG. SPEC.

WELLS IN CITY OF CARLSBAD WELLHEAD PROTECTION AREA

30-015-25379 K-1-23s-25e LOUIS DREYFUS NAT. GAS CORP. SQUAW FED. #3
ACTIVE

30-015-23106 A-10-23s-25e ENRON OIL & GAS ROCK TANK 10 ST. #1
P&A

30-015-20785 H-11-23s-25e MINERAL TECH. INC. MARY FED. #1
ACTIVE

30-015-24942 H-11-23s-25e EXXON CORP. MARY FED. #3
P&A

30-015-25378 N-11-23s-25e PINON PETRO. INC. MARY FED. #5
SHUT-IN

30-015-25046 H-11-23s-25e EXXON CORP. MARY FED. #3y
P&A

30-015-20999 F-12-23s-25e LOUIS DREYFUS NAT. GAS CORP. SQUAW FED. #1
P&A

30-015-00136 0-12-23s-25e TURNER DEVITO DEVITO #1
P&A

30-015-24701 G-13-23s-25e EXXON CORP. SQUAW FED. #2
P&A

30-015-24595 P-13-23s-25e EXXON CORP. NEW MEXICO DS ST. #1
EXP. DRLG INT

30-015-22430 J-15-23s-25e GULF OIL CORP. SHEARN D FED. COM. #1
P&A

30-015-24698 A-24-23s-25e EXXON CORP. MARY FED. #2
EXP. DRLG INT.

30-015-25135 H-24-23s-25e EXXON CORP. MARY FED. #4
P&A

30-015-30524 O-25-23s-25e DEVON ENERGY PROD. CO. RUGER 25 FED. #1
EXP. DRLG INT.

30-015-26975 J-26-23s-25e COLLINS & WARE INC. MULEY FED. #1
P&A

30-015-21362 K-6-23s-26e CORINNE GRACE CUEVA UNIT #1
ACTIVE

30-015-21477 O-7-23s-26e EXXON CORP. NEWMAN #1
P&A

WELLS LOCATED WITH-IN 1 MILE CITY OF CARLSBAD
WELLHEAD PROTECTION AREA.

30-015-29800 B-25-22s-25e PENWELL ENERGY INC. FILAREE 25 FED. COM. #1
30-015-30833 B-25-22s-25e DEVON ENERGY CORP. FILAREE 25 FED. COM. #1
30-015-00135 G-25-22s-25e WESTERN OIL PROD. MCKITTRICK FED. #1
30-015-23269 H-27-22s-25e POLLUX LTD NE ROCK TANK FED C #1
30-015-10560 N-28-22s-25e MONSANTO CO. CUEVA #1
30-015-24404 C-30-22s-26e SABA ENERGY OF TEXAS INC. MCKITTRICK 30 FED. #1
30-015-25650 K-30-22s-26e ENRON OIL & GAS GOBBLERS KNOB 30 FED. #1
30-015-22177 L-30-22s-26e HANAGAN PETRO. CORP. MCKITTRICK #1
30-015-29522 H-31-22s-26e DEVON ENERGY PROD. CO. HACKBERRY 31 ST. #1
30-015-27751 A-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #3
30-015-28849 B-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #4
30-015-29185 G-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #6
30-015-27559 H-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. COM. #2
30-015-25387 H-32-22s-26e EXXON CORP. NEW MEXICO FA ST. COM. #1
30-015-27558 I-32-22s-26e LOUIS DREYFUS NAT. GAS CO. BARBADOS ST. #1
30-015-25352 K-32-22s-26e LOUIS DREYFUS NAT. GAS CO. NEW MEX. EV ST. #1
30-015-28507 P-32-22s-26e LOUIS DREYFUS NAT. GAS CO. EV ST. #5
30-015-26131 L-16-23s-25e SIETE OIL & GAS CORP. WITCHITA ST. #1
30-015-22230 B-22-23s-25e EXXON CORP. N. HORSE SHOE BEND #1
30-015-21656 K-34-23s-25e HANAGAN PETRO. CORP. HORSESHOE BEND #1
30-015-00137 D-35-23s-25e MCINTYRE SPEAROW R ETAL #1
30-015-25227 I-36-23s-25e EXXON CORP. NEW MEXICO ER ST. #1
30-015-25309 G-36-23s-25e EXXON CORP. NEW MEXICO ET LEASE #1
30-015-24572 P-5-23s-26e HILLIN PROD. CO. CITIES 5 FED. #1

30-015-23538 I-5-23s-26e CITIES SERVICE OIL CO. FED. N COM. #1
30-015-00374 N-8-23s-26e ROUNDEY GEORGE ROUNDY FED. #1
30-015-31529 D-17-23s-26e SARAGOSSA 17 FED. COM. #1
30-015-26146 I-17-23s-26e BETTTIS BOYLE AND STOVAL EXXON 17 FED. COM. #1
30-015-31935 L-17-23s-26e LOUIS DREYFUS NAT. GAS CO. SARAGOSSA 17 ST. COM. #3
30-015-31522 L-17-22s-26e OXY USA INC. OXY PEA SHOOTER STATE #1
30-015-21161 P-17-23s-26e COQUINA OIL CORP. EXXON A FED. #1
30-015-31466 G-18-23s-26e OXY USA WTP LIMITED PARTNERS OXY HONEST JOHN STATE #1
30-015-24641 N-18-23s-26e MAYNE & MERTZ BLUE WATER FED. #1
30-015-00375 C-18-23s-26e MORAN E PAUL RAMUZ #1
30-015-24592 1-19-23s-26e NADEL & GUSSMAN PERMIAN, L NEW MEXICO DI STATE #2
30-015-24425 2-19-23s-26e NADEL & GUSSMAN PERMIAN, L NEW MEXICO DI ST. #1
30-015-24591 3-19-23s-26e NADEL & GUSSMAN PERMIAN,L NEW MEXICO DI ST. #3
30-015-32144 C-19-23s-26e LOUIS DREYFUS NAT. GAS CO. SARAGOSSA 19 ST. COM. #1
30-015-24591 L-19-23s-26e EXXON CORP. NEW MEXICO DI ST. #3
30-015-24593 M-19-23s-26e EXXON CORP. NEW MEXICO DI ST. #4
30-015-31936 N-19-23s-26e DEVON ENERGY PROD. CO. FH 19 STATE COM. #1
30-015-24425 E-19-23s-26e EXXON DORP. NEW MEXICO DI ST. #1
30-015-24592 D-19-23s-26e EXXON CORP. NEW MEXICO DI ST. #2
30-015-20311 J-19-23s-26e SAMEDAN OIL CORP. UNION ST. #1
30-015-00376 A-19-23-26 DEVITO DC STATE #1
30-015-20144 C-31-23s-26e YATES PETRO. CORP. N. WHITE CITY ABP FED. #1
30-015-23462 F-31-23s-26e AMOCO PROD. CO. STATE IZ COM. #1

TRACEANALYSIS, INC.

8701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922
E-Mail: lab@tracanalysis.com

800-378-1296
888-588-3443

806-794-1298
915-585-3443

FAX 806-794-1298
FAX 915-585-4944

To: _____
Date: 8/21/02 Time: 0835 AM PM

WHILE YOU WERE OUT
In Gary Adams (I called)
of Trace (512)

- Phone Numbers _____
- Telephoned
 - Please call
 - Returned your call
 - Called to see you
 - Wants to see you
 - Will call again
 - URGENT
- Office _____
Voicemail _____
FAX _____
Pager _____
Mobile _____
e-mail _____
- Message _____

OCD still has not received corrected lab sheet for TPS as requested in April will wait to receive before issuing payment

Operator _____ Reorder #23-000

Willie 8/23/02
I checked my files, I don't have a record of this being paid
Mary

FAX COVER SHEET

TO: Bill Okon MARY

COMPANY: OCD

DATE: 6/19/02 8/22/02

FAX NO: 1-505-476-3462

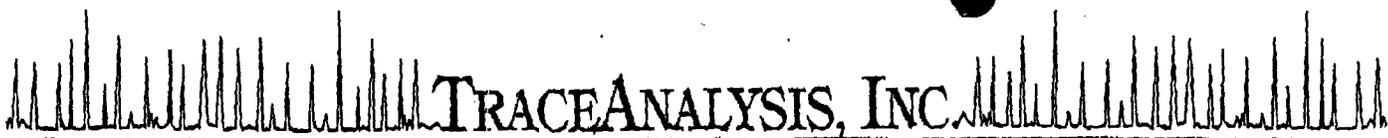
NO OF PAGES FOLLOWING: 1

FROM: GARY ADAMS

MESSAGE: Mr. Okon, we still show this invoice as unpaid. - over 90 days. Please let me know if you need any other info or assistance on it.

Important: This message is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the recipient or the employee, or an agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address via regular postal service. Thank you.

PLEASE CALL IMMEDIATELY IF THERE ARE ANY PROBLEMS IN RECEIVING THIS TRANSMISSION.



TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1296
 155 McCutcheon, Suite H El Paso, Texas 79932 888-588-3443 915-585-3443 FAX 915-585-4944
 E-Mail: lab@traceanalysis.com

Bill To: **OCD**
 1220 S. Saint Francis Dr.
 Santa Fe, NM 87505

Invoice # **51865**

Invoice Date: **Mar 13, 2002**

Attn: **Bill Olson**

Order ID: **A02030711**

Project #:	2517000008
Project Name:	Carlsbad Well Development & Sampling
Project Location:	Carlsbad-City Well

Test	Quantity	Matrix	Description	Price	SubTotal
Fe, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Al, Total	1	Water	192304 - 192304	\$10.00	\$10.00
As, Total	1	Water	192304 - 192304	\$10.00	\$10.00
B, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Ba, Total	1	Water	192304 - 192304	\$10.00	\$10.00
BTEX/TPH GRO	1	Water	192304 - 192304	\$60.00	\$60.00
General Cations / Anions / Chemistry	1	Water	192304 - 192304	\$120.00	\$120.00
Cd, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Co, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Ag, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Cu, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Zn, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Hg, Total	1	Water	192304 - 192304	\$12.00	\$12.00
Mn, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Mo, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Ni, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Pb, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Se, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Si, Total	1	Water	192304 - 192304	\$10.00	\$10.00
TPH DRO	1	Water	192304 - 192304	\$40.00	\$40.00
Cr, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Payment Terms: Net 30 Days				Total	\$402.00

Director, Dr. Blair Leftwich



TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
 155 McCutcheon, Suite H El Paso, Texas 79932 888-588-3443 915-585-3443 FAX 915-585-4944
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Cr, Total	1	Water	192304 - 192304	\$10.00	\$10.00
Payment Terms: Net 30 Days				Total	\$402.00


 Director, Dr. Blair Leftwich



Fax

To *Bill Olson*
Company *OLD*
Fax
Charge no *505 476 - 3462*
File no
Fax operator

From *Bob Wilcox*
Direct Tel *915/686-1978*
Fax *915/618-0137 or 915/683-8911*
Pages *X 2* (inc. this page)
Date *6/12/02*
cc

Subject *Invoice backup*

AMEC Earth & Environmental, Inc.
301 N. Colorado Street, Suite 350
Midland, Texas 79701
Tel + 915/686-1978
Fax + 915/618-0137
www.amec.com

This fax message is confidential. If you are not the intended recipient please notify us by telephone as soon as possible and either return the message by post or destroy it. If you are not the intended recipient, any use by you of its contents is prohibited.



Field Equipment Project Utilization Statement

**AMEC Earth and Environmental
125 Montoya
El Paso, Texas 79932**

**AMEC Job # 2-517-00008
Carlsbad Well Sampling
Oil Conservation Division**

Inhouse AMEC Field Equipment

2/7/02, 1 Day

Item	Days	Rate	Total
Generator	1	\$40/Day	\$40.00
Total Field Equipment:			\$40.00

Olson, William

From: Olson, William
Sent: Tuesday, June 11, 2002 8:32 AM
To: 'bob.wilcox@amec.com'
Subject: RE: Eldridge invoice backup

Bob,

I also got the invoice for the Carlsbad monitor well sampling yesterday. The billing looks ok except for one item. The invoice had all the receipts and invoice tickets for non-listed items under the pricing agreement except for the 1 day generator rental. Could you also send an invoice or receipt for the generator rental.

Sincerely,

William C. Olson
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
(505) 476-3491

=====

-----Original Message-----

From: bob wilcox [mailto:bob.wilcox@amec.com]
Sent: Tuesday, June 11, 2002 8:50 AM
To: wolson@state.nm.us
Subject: Eldridge invoice backup

Hello Bill,

I figured that when you received the updated invoice while I was on vacation, you may not have received all the backup invoices. I will fax them over to you later today. When you receive them, send me a confirmation e-mail that that is what you were looking for,

Thank you,

Bob



20
6/12/02

INVOICE 518509

AMEC Earth & Environmental, Inc.
P.O. Box 24445
Seattle, Washington 98124-0445

JUN-06-2002
Page Number 1

RECEIVED

JUN 10 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Energy Conservation & Mnmt Division
NM Oil Conservation Div.
1220 St. Francis, NM
Santa Fe, NM 87505

ATTENTION: Mr. Bill Olson

Professional Services Through MAY-17-2002

Project 2-517-000008 Monitor Well Development-Sampling

Carlsbad, NM
Client Project Manager: Mr. Bill Olson
PA NO 00-805-09-17658

LABOR		937.50
OTHER EXPENSES		4,145.59
		<hr/>
CURRENT BILLING		5,083.09
NMGRT @ 5.8125 %		295.45
AMOUNT DUE THIS INVOICE		5,378.54

TOTAL CONTRACT	5,162.25
PRIOR BILLINGS	.00
CURRENT INVOICE	5,083.09

TOTAL REMAINING	79.16
-----------------	-------

Project Manager: Wilcox, Robert E.

Terms: Net thirty (30) days. After thirty (30) days from invoice date a late charge of one and one-half percent (1½%) per month, or the maximum rate allowed by law may be charged.

Direct all billing inquiries to your AMEC Earth & Environmental, Inc. Project Manager. Please visit our website at <http://www.amecee.com>

Federal Tax # 91-1641772



AMEC Earth & Environmental, Inc.
 P.O. Box 24445
 Seattle, Washington 98124-0445

INVOICE 518509

JUN-06-2002
 Page Number 2

LABOR

		HOURS	RATE	AMOUNT
Project Management				
Wilcox, Robert E.	04/05/02	.50		
	***	.50	75.00	37.50
Ehrlich, Mark A	04/05/02	4.00		
Ehrlich, Mark A	04/26/02	8.00		
	***	12.00	75.00	900.00
		-----		-----
		12.50		937.50

EXPENSES

		QTY	RATE	AMOUNT
Unit Charges				
Unit Pricing				
pH/Temp Conductivity Meter		2.00	Day(s)	
RA531C	05/17/02			
	***	2.00	5.0000	10.00
Credit Memo				
Credit Memo				
Prior Period		1,338.45	Dollar(s)	
Billing Adjustment				
AB517A	05/17/02			
CM 517831 Put back into				
WIP				
Prior Period		1,918.94	Dollar(s)	
Billing Adjustment				
AB517C	05/17/02			
DM 518459 Put back into WIP				
	***	3,257.39	1.0000	3,257.39

Subcontractor				
Geomechanics Sw Inc				
607307	04/02/02			
	***			751.00

Supplies & Equipment

Terms: Net thirty (30) days. After thirty (30) days from invoice date a late charge of one and one-half percent (1½%) per month, or the maximum rate allowed by law may be charged.

Direct all billing inquiries to your AMEC Earth & Environmental, Inc. Project Manager. Please visit our website at <http://www.amecee.com>

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 P.O. Box 24445
 Seattle, Washington 98124-0445

INVOICE 518509

JUN-06-2002
 Page Number

3

	QTY	RATE	AMOUNT
Supplies & Equipment Controlled Recovery Inc.			
011200 03/07/02			127.20

			----- 4,145.59
** Total Project 2-517-000008			5,083.09 =====

Terms: Net thirty (30) days. After thirty (30) days from invoice date a late charge of one and one-half percent (1½%) per month, or the maximum rate allowed by law may be charged.

Direct all billing inquiries to your AMEC Earth & Environmental, Inc. Project Manager.
 Please visit our website at
<http://www.amecee.com>

Federal Tax # 91-1641772

February 1, 2002

Through
March 1, 2002

LABOR:

STAFF SCIENTIST	DATE	HOURS	RATE	AMOUNT
Smith, William R	2-24-02 / 3-1-02	17.00		
Smith, William R	2-10-02 / 2-15-02	<u>2.00</u>		
		19.00	\$57.00	\$1,083.00
STFF SCIENTIST/ANALYSIS				
Strzelczyk, Bogdan M	2-24-02 / 3-1-02	<u>1.00</u>	\$57.00	\$57.00
WORD PROCESSOR				
Trujillo, Robert J	2-24-02 / 3-1-02	<u>1.00</u>	\$29.00	<u>\$29.00</u>
TOTAL LABOR				\$1,169.00

EXPENSES:

	DATE	QTY	RATE	AMOUNT
Per Diem				
Smith, William R	2-24-02 / 3-1-02	1.0 day(s)	\$60.00	\$60.00
Generator	2-24-02 / 3-1-02	1.0 day(s)	\$40.00	\$40.00
Vehicle	2-24-02 / 3-1-02	1.0 day(s)	\$50.00	\$50.00
Water Level Indicator	2-24-02 / 3-1-02	2.0 day(s)	\$5.00	\$10.00
Supplies/Equipment: (supplies for pump)				
Cable Ties			\$2.97	
Poly Rope			\$2.96	
Poly Rope			\$2.96	
			\$8.89	
Tax on supplies @ 6.313%			\$0.56	
Total Supplies/Equipment				\$9.45

Total Charges: \$1,338.45

March 2, 2002

Through

March 30, 2002

LABOR/PROJECT MANAGEMENT:

SENIOR PROJECT SCIENTIST:	DATE	HOURS	RATE	AMOUNT
Wilcox, Robert E.	03-02-02 / 03-08-02	1.00		
		<u>0.00</u>		
		1.00	\$75.00	\$75.00

LABOR/DEVELOPMENT & SAMPLING TRAVEL:

STAFF SCIENTIST

Strzelczyk, Bogdan M	03-02-02 / 03-08-02	14.00	\$ 57.00	\$ 798.00
----------------------	---------------------	-------	----------	-----------

PROJECT ADMINISTRATION:

Trujillo, Robert J	03-02-02 / 03-08-02	<u>1.00</u>	\$29.00	<u>\$29.00</u>
--------------------	---------------------	-------------	---------	----------------

TOTAL LABOR \$902.00

EXPENSES:

	DATE	QTY	RATE	AMOUNT
Mileage:				
Strzelczyk, Bogdan M	03/04/02	91.0 Miles		
Strzelczyk, Bogdan M	03/05/02	161.0 Miles		
Strzelczyk, Bogdan M	03/06/02	<u>343.0 Miles</u>		
		595.0	0.25	\$ 148.75
Per Diem				
Strzelczyk, Bogdan M	03-04-02 / 03-05-02	2.0 day(s)	\$60.00	\$120.00

Supplies/Equipment: (Supplies for Water Disposal)

Vacuum Truck Standby	\$507.64
United Parcel Service (Pump Shipping)	\$240.55
	<u>\$748.19</u>

Total Supplies/Equipment \$748.19

Total Charges: \$1,918.94

April 1, 2002
Through
May 17, 2002

LABOR:

STAFF SCIENTIST	DATE	HOURS	RATE	AMOUNT
Wilcox, Robert E.	04/05/2002	0.5		
Ehrlich, Mark A.	04/05/2002	4.0		
Ehrlich, Mark A.	04/26/2002	8.0		
		<u>12.5</u>	\$ 75.00	\$ 937.50

EXPENSES:

Supplies/Equipment:

pH/Temp Conductivity Meter	05/17/2002	2.0 Day(s)	\$ 5.00	\$ 10.00
Geomechanics SW Inc.	04/02/2002		\$ 751.00	\$ 751.00
Controlled Recovery Inc.	03/07/2002		\$ 127.20	<u>\$ 127.20</u>

Total Charges: \$ 1,825.70

Geomexchanics Southwest, Inc.
PMB 410
2818 N Campbell Ave
Tucson, AZ 85719

RECEIVED APR 17 2002

INVOICE #: 607307
Invoice Date: 02-Apr-02
DUE DATE: 02-May-02
GSI Job #: 043-02A

AMEC
8519 Jefferson NE
Albuquerque, NM 87113
ATTN: Accounts Payable

INVOICE FOR DRILLING SERVICES

Project Name: Well Development
Project Location: Carlsbad, New Mexico
Job / P.O. #: 2-517-000008
Date Work Performed: 3/4/02 - 3/5/02
Attn: Bob Wilcox

Quantity	Description	Unit Rate	Total
68.00	Drill Rig Mobilization Mileage	\$0.75	\$51.00
7 00	Hours Well Development	\$100.00	\$700.00

AMOUNT DUE

\$751.00

APPROVED BY [Signature] DATE: 4/24/02

PROJECT NO: 2517-000008 TASK: _____

DEPT. NO: 6517 ACCT. NO: 5720-00

AMOUNT: \$ 751⁰⁰

A 1.5% monthly service charge will be added to any past due amount over 30 days.

Remove bottom portion and return with remittance.

Invoice Date	02-Apr-02	AMOUNT DUE	\$751 00
DUE DATE:	02-May-02		
Invoice #:	607307		

Invoice

Invoice Number:

011200

Invoice Date:

Mar 7, 2002

Page:

1

RECEIVED MAR 11 2002

Controlled Recovery, Inc.
P.O. Box 388
Hobbs, NM 88241-0388

Phone: (505) 393-1079
Fax: (505) 393-3615

Sold To:
AMEC
ATTN: BOB WILCOX
8519 JEFFERSON NE
ALBUQUERQUE, NM 87113

Ship to:
AMEC
MW3 CITY OF CARLSBAD WELL
FIELD

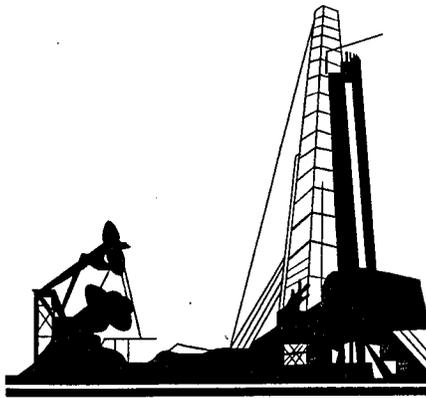
Customer ID	Customer PO	Payment Terms	
AMEC		Net 30 Days	
Sales Rep ID	Shipping Method	Ship Date	Due Date
	GSI V-53	3/5/02	4/6/02

Quantity	Item	Description	Unit Price	Extension
200.00		PURGED GROUND WATER PER GALLON TKT #39213	0.30	60.00
200.00		PURGED GROUND WATER PER GALLON TKT #39185	0.30	60.00

[Signature]
 APPROVED BY: *[Signature]* DATE: 4/5/02
 PROJECT NO: 2577-000008 TASK:
 DEPT. NO: 6577 ACCT. NO: 572500
 AMOUNT: \$ 12720

Subtotal	120.00
Sales Tax	7.20
Total Invoice Amount	127.20
Payment Received	
TOTAL	127.20

Check No:



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Bob Wilcox - Amec

FROM: Bill Olson

DATE: 4/26/02

PAGES: 11 w/cover

SUBJECT: Carlsbad Well Sampling

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.

Olson, William

From: Olson, William
Sent: Friday, April 26, 2002 1:56 PM
To: Bob Wilcox - AMEC (E-mail)
Cc: Anderson, Roger; Anaya, Mary; Ross, Stephen
Subject: Carlsbad Monitor Well Sampling Invoices

Bob,

The New Mexico Oil Conservation Division (OCD) is in receipt of 2 AMEC invoices for the Carlsbad monitor well sampling project dated March 19, 2002 and April 19, 2002. According to the New Mexico General Services Department Pricing Agreement (#00-805-09-17658) governing this project "Payment for services performed will be initiated upon final acceptance and inspection of work." The invoices submitted to date mix billings for multiple activities, some of which have not been accepted and inspected such as submission of the final report documenting the site activities and results of the laboratory analyses.

There also appears to be some errors on the invoices. The invoices all list a total contract amount which is less than the total amount approved in the February 6, 2002 purchase document. In addition, the invoices list a dollar "amount due this invoice" that differs from the "current invoice" dollar amount listed at the bottom of the invoice.

Therefore, the OCD cannot authorize payment of these invoices at this time. The OCD will either authorize payment of a total project invoice based on inspection and acceptance of the final report, or authorize partial payment based upon inspection and acceptance of detailed completion reports of specific work elements categorized in AMEC's February 1, 2002 scope of work. The above-discussed discrepancies in the billing amounts also need to be corrected.

If you have any questions, please contact me.

Sincerely,



William C. Olson
Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
(505) 476-3491



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO:

Jon Tully - City of Carlsbad

FROM:

Bill Olson

DATE:

4/8/02

PAGES:

18 w/cover

SUBJECT:

Carlsbad MW-3

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.

TRANSACTION REPORT

P. 01

AUG-23-2002 FRI 10:16 AM

FOR:

RECEIVE

DATE	START	SENDER	RX TIME	PAGES	TYPE	NOTE	M#	DP
AUG-23	10:15 AM	8067941298	54"	2	RECEIVE	OK		



INVOICE

517831

AMEC Earth & Environmental, Inc.
P.O. Box 24445
Seattle, Washington 98124-0445

MAR-19-2002
Page Number

1

Energy Conservation & Mnmt Division
NM Oil Conservation Div.
1220 St. Francis, NM
Santa Fe, NM 87505

ATTENTION: Mr. Bill Olson

Professional Services Through MAR-02-2002

Project 2-517-000008 Monitoring Well Development-Samplin

Carlsbad, NM
Client Project Manager: Mr. Bill Olson
PA NO 00-805-09-17658

LABOR 1,169.00

OTHER EXPENSES 169.45

CURRENT BILLING 1,338.45
NMGRT @ 5.8125 % 77.80
AMOUNT DUE THIS INVOICE 1,416.25

TOTAL CONTRACT 5,162.25
PRIOR BILLINGS .00
CURRENT INVOICE 1,338.45

TOTAL REMAINING 3,823.80

Project Manager: Wilcox, Robert E.



INVOICE

AMEC Earth & Environmental, Inc.
 P.O. Box 24445
 Seattle, Washington 98124-0445

LABOR:

STAFF SCIENTIST	DATE	HOURS	RATE	AMOUNT
Smith, William R	2-24-02 / 3-1-02	17.00		
Smith, William R	2-10-02 / 2-15-02	<u>2.00</u>		
		19.00	\$57.00	\$1,083.00
STFF SCIENTIST/ANALYSIS				
Strzelczyk, Bogdan M	2-24-02 / 3-1-02	<u>1.00</u>	\$57.00	\$57.00
WORD PROCESSOR				
Trujillo, Robert J	2-24-02 / 3-1-02	<u>1.00</u>	\$29.00	<u>\$29.00</u>
TOTAL LABOR				\$1,169.00

EXPENSES:

	DATE	QTY	RATE	AMOUNT
Per Diem Smith, William R	2-24-02 / 3-1-02	1.0 day(s)	\$60.00	\$60.00
Generator	2-24-02 / 3-1-02	1.0 day(s)	\$40.00	\$40.00
Vehicle	2-24-02 / 3-1-02	1.0 day(s)	\$50.00	\$50.00
Water Level Indicator	2-24-02 / 3-1-02	2.0 day(s)	\$5.00	\$10.00
Supplies/Equipment: (supplies for pump)				
Cable Ties			\$2.97	
Poly Rope			\$2.96	
Poly Rope			\$2.96	
			\$8.89	
Tax on supplies @ 6.313%			\$0.56	
Total Supplies/Equipment				\$9.45

Total Charges:

\$1,338.45

Terms: Net thirty (30) days. After thirty (30) days from invoice date a late charge of one and one-half percent (1½%) per month, or the maximum rate allowed by law may be charged.

Direct all billing inquiries to your AMEC Earth & Environmental, Inc. Project Manager.
 Please visit our website at <http://www.amecee.com>

Federal Tax # 91-1641772



INVOICE

AMEC Earth & Environmental, Inc.
P.O. Box 24445
Seattle, Washington 98124-0445



Always

29.45
2-517-00008

SUPER CENTER
WE SELL FOR LESS
MANAGER GARY ROHDE
(505) 885-0727
CARLSBAD, NH

ST# 0868 DP# 00001243 TE# 73 TR# 05571	
CABLE TIES 007847709004	2.97 J
POLY ROPE 007151400037	2.96 J
POLY ROPE 007151400037	2.96 J
IRRIGATION 001275390113	0.97 J
IRRIGATION 001275390113	0.97 J
FEMALE END 001275390109	1.47 J
FEMALE END 001275390109	1.47 J
HOSE REEL 004436500778K	19.88 J
SUBTOTAL	33.65
TAX 1 6.313 %	2.12
TOTAL	35.77
DISCV TEND	35.77

ACCOUNT #2156
APPROVAL #007766
TRANS ID -
VALIDATION -
PAYMENT SERVICE - N
CHANGE DUE 0.00

overhead

ITEMS SOLD 8

TC# 0633 2839 2986 1878 3296



AMERICAN LEGENDS ON VIDEO AND DVD 2/12
02/07/02 09:18:42

CUSTOMER COPY

FAX COVER SHEET

OIL CONSERVATION DIVISON
1301 W. GRAND AVE
ARTESIA, NM 88210

PHONE (505-748-1283
FAX (505-748-9720

Date 3-4-02

TO: Roger Anderson & Bill Olsen

FROM: Bryan Arrant

NUMBER OF PAGES 3 (INCLUDING COVER SHEET)

MESSAGE The City of Carlsbad Monitor Well is due east
of the #4 Day Note Marker. (Neil DeVito)

LATE GUADALUPIAN CORRELATIONS, PERMIAN REEF COMPLEX, WEST TEXAS AND NEW MEXICO

by Willis W. Tyrrell, Jr., *Amoco International Oil Company, Chicago, Illinois*,
Donald H. Lokke, *Southern Methodist University, Dallas, Texas*,
George A. Sanderson, *Amoco Production Company, Tulsa, Oklahoma* and
George J. Verville, *Amoco Production Company, Denver, Colorado*

Abstract

The Tansill Formation (shelf deposit), upper Capitan Formation (shelf margin deposit), and Lamar Limestone (basinal deposit) are the uppermost carbonate units of the Permian Reef Complex. The Lamar Limestone Member of the Bell Canyon Formation is separated from the overlying Castile Formation by the "post-Lamar beds" consisting of Capitan debris at the margin of the Delaware Basin and a thin sandstone unit further basinward. The generally accepted correlation of the middle and lower Tansill with the Lamar (Tyrrell, 1969) has been questioned by Achauer (1969) and Kelly (1971), who correlate the Lamar with the Seven Rivers Formation. Their correlations contradict the exceptionally fine fusulinid zonation first established by Skinner and Wilde (1954, 1955) for the Lamar.

Fig. 1 shows the location and stratigraphic relationship of two Amoco Research core holes and a section measured along the north wall of Dark Canyon. The Amoco No. 2 Dark Canyon cored 399 ft of the Tansill Formation and the upper 70 ft of the underlying Yates Formation. The Ocotillo Silt Member is present from 86-118 ft. Fusulinid occurrences in this core include (from top to bottom):

Fusulinid	Depth (in ft)
Poorly preserved <i>Paraboultonia</i> (?)	15-80
<i>Reichelina</i>	106-232
<i>Paradoxiella</i>	242-324
<i>Codonofusiella</i>	332-469 (total depth)
<i>Yabeina texana</i>	391 (one bed)

In the Amoco No. 1 Dark Canyon core hole, the upper 220 ft consists mostly of Tansill lithology with a few units of Capitan lithology; the section from 220-290 ft is transitional with alternating Tansill and Capitan lithologies; and the section from 290 ft to total depth (400 ft) is massive Capitan.

Paraboultonia is common from 40-394 ft, and no *Reichelina* were found.

The small Tethyan fusulinid genera in the two core holes and in measured sections and well cuttings of Tansill and Lamar between Dark Canyon and McKittrick Canyon reconfirm: 1) *Paraboultonia* is restricted to the Ocotillo Silt Member and the overlying upper Tansill beds, as well as to the uppermost Capitan, uppermost Lamar and post-Lamar beds; 2) *Reichelina* slightly overlaps the lower part of the *Paraboultonia* zone, but otherwise is restricted to the middle Tansill and to all except the lower Lamar; 3) *Paradoxiella* is present in the middle Tansill and middle and lower Lamar; 4) *Yabeina texana* is restricted to the lowermost Tansill and lowermost Lamar; 5) *Codonofusiella* ranges as high as the lower Tansill and lower Lamar; 6) *Polydiexodina*, the large fusulinid characteristic of the upper Guadalupian in west Texas, does not range as high as the Tansill or Lamar.

References

- Achauer, C. W., 1969, Origin of the Capitan Formation, Guadalupe Mountains, New Mexico and Texas: American Association of Petroleum Geologists, Bull., v. 53, p. 2314-2323
- Kelley, V. C., 1971, Geology of the Pecos Country, southeastern New Mexico: New Mexico Bureau of Mines and Mineral Resources, Mem. 24, 75 p.
- Skinner, J. W., and Wilde, G. L., 1954, The fusulinid subfamily Boultoniinae: Journal of Paleontology, v. 28, p. 434-444
- , 1955, New fusulinids from the Permian of west Texas: Journal of Paleontology, v. 29, p. 927-940
- Tyrrell, W. W., Jr., 1969, Criteria useful in interpreting environments of unlike but time-equivalent carbonate units (Tansill-Capitan-Lamar), Capitan Reef Complex, west Texas and New Mexico: Society of Economic Paleontologists and Mineralogists, Spec. Pub. No. 14, p. 8-97

(five abstracts follow)

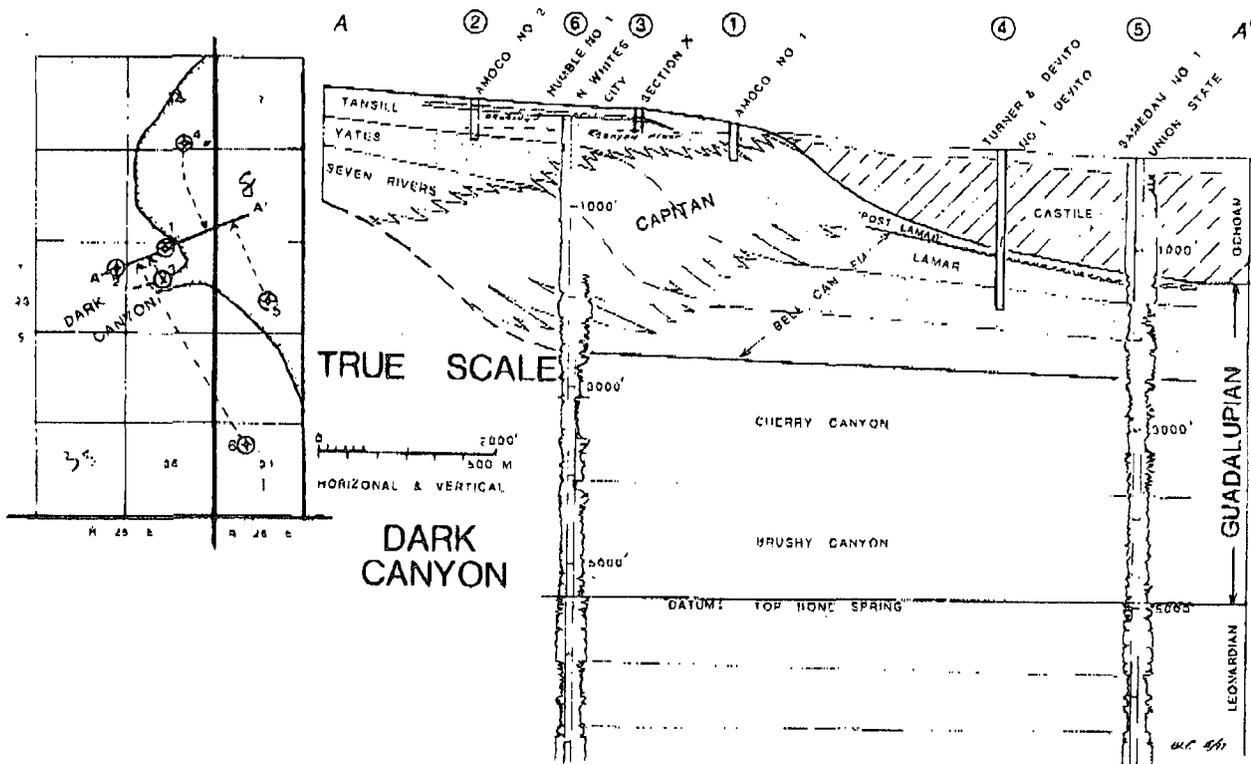


FIGURE 1—TRUE-SCALE STRATIGRAPHIC SECTION SHOWING RELATIONSHIPS OF AMOCO CORE HOLES TO NEARBY WELL CONTROL IN DARK CANYON, GUADALUPE MOUNTAINS, EDDY COUNTY, NEW MEXICO.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 6, 2002

Mr. Bob Wilcox
AMEC Earth and Environmental, Inc.
8519 Jefferson, NE
Albuquerque, New Mexico 87113

**RE: MONITOR WELL MW-3 DEVELOPMENT AND SAMPLING
CARLSBAD CITY WELL FIELD**

Dear Mr. Wilcox:

The New Mexico Oil Conservation Division (OCD) has reviewed AMEC Earth and Environmental, Inc.'s (AMEC) February 1, 2002 correspondence titled "SCOPE OF WORK, MONITORING WELL DEVELOPMENT AND SAMPLING, CITY OF CARLSBAD WELL FIELD, CARLSBAD, NEW MEXICO. This document contains AMEC's scope of work and cost estimate for development and sampling of monitor well MW-3 in the City of Carlsbad well field southwest of Carlsbad, New Mexico pursuant to the State of New Mexico, General Services Department Contract #00-805-09-17658.

The development and sampling services as outlined in the above-referenced document are approved. Enclosed you will find a copy of a purchase document showing that \$5,462.31 has been encumbered for the monitor well development and sampling required. As discussed with you in our phone conversations, all sample analyses will be covered separately under the OCD State contract with Trace Analysis, Inc.

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

A handwritten signature in black ink, appearing to read "W.C. Olson".

William C. Olson
Hydrologist
Environmental Bureau

xc w/o enclosure: Tim Gum, OCD Artesia District Office
Roger Anderson, Environmental Bureau Chief
Jon R. Tully, Carlsbad City Administrator



02-199-005082

521

02/06/02

02

911641772

AMEC EARTH & ENVIRONMENTAL INC
8519 JEFFERSON NE

ALBUQUERQUE, NM 87113

OIL CONSERVATION DIVISION
1220 SO. ST. FRANCIS DRIVE
SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SO. ST. FRANCIS DRIVE
SANTA FE, NM 87505

PHONE NUMBER

BMONTOYA

AGENCY CONTACT

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300	0700	3522	5,462.31
TOTAL							5,462.31
Maximum of six accounting lines per purchase document							5,462.31
FOR AGENCY USE:							
LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	5,462.31
TOTAL							5,462.31

PURCHASE REQUISITION
(BIDS MUST BE REQUESTED FOR ITEMS OVER \$1,000.00)

BUYER:

RECOMMENDED SOURCE & SPECIAL REMARKS:

DFA APPROVED

ESTABLISH RENEWAL NO.:

CONTRACT, PRICE AGREEMENT, PURCHASE ORDER
OTHER THAN PROFESSIONAL SERVICE CONTRACTS:
(APPROVED VENDORS MUST BE USED FOR ITEMS UNDER CONTRACT)

FOR AGENCY USE:

CIPA /PO# 008050917658

EXPIRES: 8-31-2002

DIRECT PURCHASE ORDER
(ONLY VALID FOR PURCHASES \$1,500.00 AND UNDER)

EXEMPT FROM THE NM PROCUREMENT CODE
PURSUANT TO SECTION

EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING
PURSUANT TO SECTION

FOR ENCUMBERING PURPOSES ONLY
REASON:

AGENCY APPROVAL - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation, rules and regulations. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

AGENCY AUTHORIZED SIGNATURE:

DATE:

DATE

APPROVAL 2

DATE

APPROVAL 1

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 1.8 01/13/02

1 VENDOR/SP/BEONLY

2 DFA COPY

3 AGENCY COPY

4 AGENCY COPY

© 2001 State of New Mexico

CONTINUATION SHEET 1

DATE	BUDGET FY
02/06/02	02

DELIVERY DATE 02/06/02

FOB D

BUDGET VERIFIED BY:

AGENCY NAME ENERGY, MINERALS & NAT RES

QMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		INSTALL GROUNDWATER MONITORING WELL AND SAMPLE FOR CONTAMINA	5462.3100	5462.31

Printed by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 1.8 01/13/02 © 2001 State of New Mexico

TOTAL

5,462.31

Olson, William

From: Bob Wilcox [BWilcox@agraus.com]
Sent: Friday, February 01, 2002 12:57 PM
To: WOLSON@state.nm.us
Subject: Carlsbad Proposal



6 December
2001.doc

Attached is our proposal for the Carlsbad work. Call me on my cell phone to discuss. I will be in Alb. Monday AM and back down here Monday PM. We will be shipping the Grunfos pump today to the OCD office in Artesia. I will also inform Mike Stubblefield.

BW

1 February 2002

AMEC Proposal No. PF02-0201

Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
1220 St. Francis Drive
Santa Fe, New Mexico 87505

Attention: Mr. Bill Olson

**Re: SCOPE OF WORK
Monitoring Well Development and Sampling
City of Carlsbad Well Field
Carlsbad, New Mexico**

AMEC Earth & Environmental, Inc. (AMEC) is pleased to present you with this cost estimate to provide well development and ground water sampling services for a monitor well located in the City of Carlsbad, New Mexico well field. Scope of services were detailed in Request for Proposal (RFP) provided to AMEC by the State of New Mexico Energy, Minerals and Natural Resources Department Oil - Conservation Division (NMOCD) dated 23 January, 2002.

This scope of work will follow the terms and conditions of AMEC's Site Maintenance and Monitoring Contract (PA No. 00-805-09-17658) awarded by the State of New Mexico, General Services Department. Where a specific item is warranted in the NMOCD scope of work and is not detailed in the GSA Contract, AMEC will use its most current Unit Fee Schedule. We assume that the NMOCD will obtain access from the City of Carlsbad owners for the project. AMEC will contact the NMOCD Project Manager within one week prior to beginning the project to inform interested parties of our project schedule.

2. MONITOR WELL DEVELOPMENT AND GROUND WATER SAMPLING

We understand the well to be developed and sampled has 6-inch diameter casing. The total depth of the well is approximately 124 feet below ground surface (bgs). The most recent field data available indicates the depth to ground water is 72.49 feet below top of casing.

The well will be developed using a Grunfos submersible pump to purge the well until the amount of suspended solids have been reduced and pH, temperature, and conductivity have stabilized. All development water will be placed in a vacuum truck and disposed at an approved NMOCD injection facility.

The well will be allowed to recharge for 24 hours, then ground water samples will be collected with the Grunfos pump after pH, temperature, and conductivity have stabilized. These samples will be sent for the NMOCD contract laboratory for analysis for BTEX, TPH, total dissolved solids (TDS), major cations/anions, and New Mexico Water Quality Control Commission (NMWQCC) metals. Any samples obtained during the project will be placed in containers supplied by the laboratory, chilled properly in a cooler, and sent overnight delivery to the laboratory using standard chain-of custody protocols. AMEC assumes NMOCD will contract directly with the laboratory for analytical costs.

2. WASTE DISPOSAL

The development water and purge water will be pumped to a vacuum truck and will be transferred to an approved NMOCD-licensed disposal facility near Carlsbad. We request that NMOCD personnel sign applicable waste manifests.

3. REPORTING

AMEC will submit a letter report to the NMOCD summarizing the field activities and laboratory analyses. The report will include the following:

- A description of the investigation activities and procedures used during the project;
- Summary of all groundwater quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data;
- Disposition of all waste generated.

The report will be submitted to the NMOCD within 10 days of receiving the results from the analytical laboratory.

It is anticipated that the field project will consist of 2 working days. We expect to be able to begin the project within a few working days of being given the notice to proceed. If unforeseen site conditions are encountered, costs for the project may increase. The NMOCD will be notified in the event this occurs. The cost estimate for the project is \$5,462.31 including 5.8125% New Mexico Gross Receipts Tax. An estimated cost breakdown for the project is shown on the attachment and reflect the unit rates specified in our price agreement for environmental services with the State of New Mexico. Should you have any questions concerning this proposal, please contact our office.

Respectfully submitted,

AMEC Earth & Environmental, Inc.

Reviewed by:

Bob Wilcox, P.G.
Senior Project Manager

Copies: Addressee (2)

BW:rrg

Fred T. Schelby, P.E.
Engineering Manager

AMEC Earth & Environmental, Inc.

8519 Jefferson, N.E.

Albuquerque, New Mexico 87113

Telephone: 505/821-1801

Fax: 505/821-7371

www.amec.com

Budget Estimate - PF02-0201

New Mexico Oil Conservation Division

Ground Water Sampling

City of Carlsbad Well Field, Carlsbad, New Mexico

AMEC Mobilization/Demobilization/ Project Preparation

4 hours Project Manager @ \$75/hour ✓	\$ 300.00
16 hours Staff Scientist @ \$57/hour ✓	\$912.00
Pickup Truck 2 days @ \$50/day ✓	\$ 100.00
900 miles @ \$.25/mile ✓	\$ 225.00
1 man days per diem @ \$60/day ✓	<u>\$ 60.00</u>
Subtotal	\$ 1,597.00

Well Development/Ground Water Sampling

16 hours Staff Scientist @ \$57/hour ✓	\$ 912.00
Interface Probe 2 days @ \$5.00/day ✓	\$ 10.00
Grunfos pump w/ 200 ft reel 2 days @ \$200/day	\$400.00
Shipping for Grunfos pump	\$380.00
Generator for Grubfos pump 2 days @ \$100/day	\$200.00
pH/Temp/Conductivity Meter 2 days @ \$5.00/day ✓	\$ 10.00
1 man day per diem @ \$60/day ✓	<u>\$ 60.00</u>
Subtotal	\$ 1,972.00

Waste Disposal

Vaccum Truck 10 hours @ \$70/ hour	\$700.00
Disposal Fee 15 barrels @ \$0.35/ barrel	\$ <u>5.25</u>
Subtotal	\$ 705.25

Project Management/Reporting

8 hours Senior Scientist @ \$75/hour ✓	\$ 600.00
2 hours Staff Scientist @ \$57/hour ✓	\$ 114.00
6 hours Clerical @ \$29/hour ✓	<u>\$ 174.00</u>
Subtotal	\$ 888.00

Estimated Project Total \$5,162.25

Estimated Project Total (including 5.8125% NMGRT) \$5,462.31

Olson, William

From: Olson, William
Sent: Monday, January 28, 2002 9:20 AM
To: Bob Wilcox - AMEC (E-mail)
Cc: Anderson, Roger
Subject: Scope of Work - Carlsbad Well Field

Bob,

Attached is a scope of work for sampling a monitor well in the City of Carlsbad well field. The work will be carried out under the Highway Department contract. Please provide me a quote for this work. If you have any questions, please e-mail me or call me.

Sincerely,

William C. Olson
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, New Mexico 87505
E-mail: wolson@state.nm.us
(505)476-3491



SCOPE1.DOC



William Olson
(E-mail).vcf

SCOPE OF WORK

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

NEW MEXICO OIL CONSERVATION DIVISION

GROUND WATER INVESTIGATION

OF

CARLSBAD CITY WELL FIELD

JANUARY 23, 2002

I. INTRODUCTION

A. PURPOSE

The State of New Mexico's Oil Conservation Division of the Energy, Minerals and Natural Resources Department (NMOCD) is investigating brine contaminated ground water discovered in a monitor well installed in the City of Carlsbad municipal well field southwest of the City of Carlsbad.

B. SUMMARY SCOPE OF WORK

The contractor shall perform the work necessary to sample ground water in monitor well MW-3 installed in the City of Carlsbad well field. The scope of work includes, but is not limited to:

1. development of the monitor well;
2. purging and sampling ground water from the monitor well;
3. removal and disposal of development and purge water in a manner approved by the NMOCD;
4. preparation of a sampling report.

C. PROCUREMENT MANAGER

NMOCD has designated a Procurement Manager who is responsible for the conduct of this procurement whose name, address and telephone number are listed below.

William C. Olson
New Mexico Oil Conservation Division
1220 Saint Francis Drive
Santa Fe, New Mexico 87505
Phone: 505-476-3491
Fax: 505-476-3462
E-mail: wolson@state.nm.us

All deliveries via express carrier should be addressed as above. Any inquiries or requests regarding this procurement should be submitted to the Procurement Manager in writing.

D. BACKGROUND INFORMATION

In December of 2001, the NMOCD was notified that the City of Carlsbad discovered brine contaminated ground water in a monitor well installed within the city municipal well field and located in the SE/4 SE/4 of Section 12, Township 23 South, Range 25 East, Eddy County, New Mexico. Monitor MW-3 was installed as part of a network of monitor wells with the purpose of monitoring the quality and quantity of ground water within the aquifer used by the city as a public water supply. Ground water was discovered at approximately 116 feet during drilling. A sample was obtained for analysis and drilling of the monitor well continued. During further drilling the results of the sample analyses were received and showed that the ground water was contaminated with 123,000 ppm of chlorides and there were no detectable concentrations of gasoline or diesel range organics. At this time, drilling was ceased at 320 feet and the borehole was grouted back to approximately 140 feet and a bentonite plug was placed atop the grout up to 124 feet. The purpose of the grout and bentonite plug was to prevent migration of the upper brine contaminated water to deeper zones. A subsequent sample was obtained from the undeveloped well which showed the water contained benzene and toluene at concentrations of 5 ppb. No ethylbenzene or xylene were detected. The monitor well currently has approximately 80 feet of 6 inch surface casing. The remainder of the hole is uncased within a fractured limestone. On December 20, 2001, the measured depth to ground water was 72.49 feet below the top of the casing.

II. TECHNICAL SPECIFICATIONS

The contractor shall:

1. Develop the monitor well using appropriate EPA approved procedures.
2. Sample ground water from the monitor well no less than 24 hours after the well is developed. The ground water must be purged and sampled for concentrations of benzene, toluene, ethylbenzene, xylene, total petroleum hydrocarbons (TPH), total dissolved solids (TDS), major cations/anions and New Mexico Water Quality Control Commission (WQCC) metals using EPA approved methods and quality assurance/quality control (QA/QC) procedures. The laboratory sample analyses will be paid for separately under the OCD's laboratory pricing agreement.
3. Remove and recycle or dispose of investigation derived wastes at an NMOCD-approved facility.
4. Prepare and deliver to NMOCD a sampling report that contains:
 - a. A description of the development and sampling activities which occurred.

- b. Summary tables of all ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data.
- c. The disposition of all wastes generated.

III. SCHEDULE

A. INITIATION OF WORK

Due to the potential public impacts at the site, the project shall be scheduled to commence as soon as possible.

B. REPORT SUBMISSION

A report on the investigations shall be submitted to the NMOCD within 2 weeks of initiation of sampling.

IMPORTANT MESSAGE

FOR _____
DATE 1/21 TIME _____ A.M.
P.M.

M Billy Whately
OF Hydrogeological Services

PHONE 856-6498
AREA CODE NUMBER EXTENSION

FAX
 MOBILE 269-4041
AREA CODE NUMBER TIME TO CALL

TELEPHONED		PLEASE CALL	
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RUSH	
RETURNED YOUR CALL		SPECIAL ATTENTION	

MESSAGE Contract
prop vis
develop well ?

SIGNED _____

1/14/02 Carlsbad City Well Meetings

John Tully - City Carlsbad
Bill Ohm - OCP
Tom Amos - BLM

Tom Gunn - OCP
Randy P - "
Ross Wolford - Bellman Consultants
Mike Stubblefield -
Roger Anderson -
Jack Ford -
John Hague
Luis Camero

- New maps of area, 1998 aerial photo
- Well head protection

MW-3 expected depth

Monitor of each ^{production} well monthly
20% salt by weight

Produce north of MW-3 with oil skinning

OCP will contract to surface well

Olson, William

From: Stubblefield, Mike
Sent: Monday, January 07, 2002 11:44 AM
To: Olson, William
Subject: MINERALS TECH INC. MARY FED. #1 30-015-20785 H-11-23s-25e SI WELL GAS WELL.

WILLY,

HERE IS INFO. ON THE WELL YOU ASKED ABOUT.
THE MARY FED. #1 HAS 16" CASING SET AT SET AT 100' CIRC.

THE 9.625" CASING IS SET AT 2430' AND CEMENTED W/1000 SXS INITIAL .
DID NOT CIRC. TOC AT 600' BY TEMP. SURVEY. 1" TO SURFACE FROM
625' IN 9 STAGES.

THE OPERATOR WAS UNABLE TO CIRC. CEMENT ON THE 9.625" CASING
TO SURFACE IN THE WELL USING CONVENTION CEMENTING METHODS FROM 270' TO SURFACE.
14 YARDS READY MIX USED FROM 270' TO SURFACE .

5.5" CASING IS SET AT 11,570' CEMENTED W/350 SXS CL. H CEMENT.
TOC. AT 10.100' BY TEMP. SURVEY. ON 5.5" CASING STRING.

THERE IS A PLUGGING PROCEDURE IN WELL FILE WRITTEN BY O.C.D.
STAFF AND THE MARY FED. #1 MY BE HEADED TO SHOW CAUSE.

MIKE S.

12/19/01 WCO + PCA 11:35
Called Pete Bellean

- Gas lift reservoirs capable of lifting PW

City took 1st sample

- sp. cond 95,000 μ mhos
- Cd - 123,00 mg/l
- 8015 - 610,000 - ND

2nd sample 12/14 sp cond
Bellean sample 350,000 μ mhos

well was deepened

3rd sample taken by city

MW-3 S₁₂, S₁₄, S₁₆ ser 12 on section line
oil wells

- Exxon 91
- 1940's well due west $\frac{1}{4}$ - $\frac{1}{3}$ mile

City wells

- NEAR ser 12
- 1 $\frac{1}{2}$ mile south

hit water at 120'
water rose to 80'

kept drilling to 320'
then cancelled to 140'

surface casing to 80'
open hole below 80'

intended to be

midday to afternoon

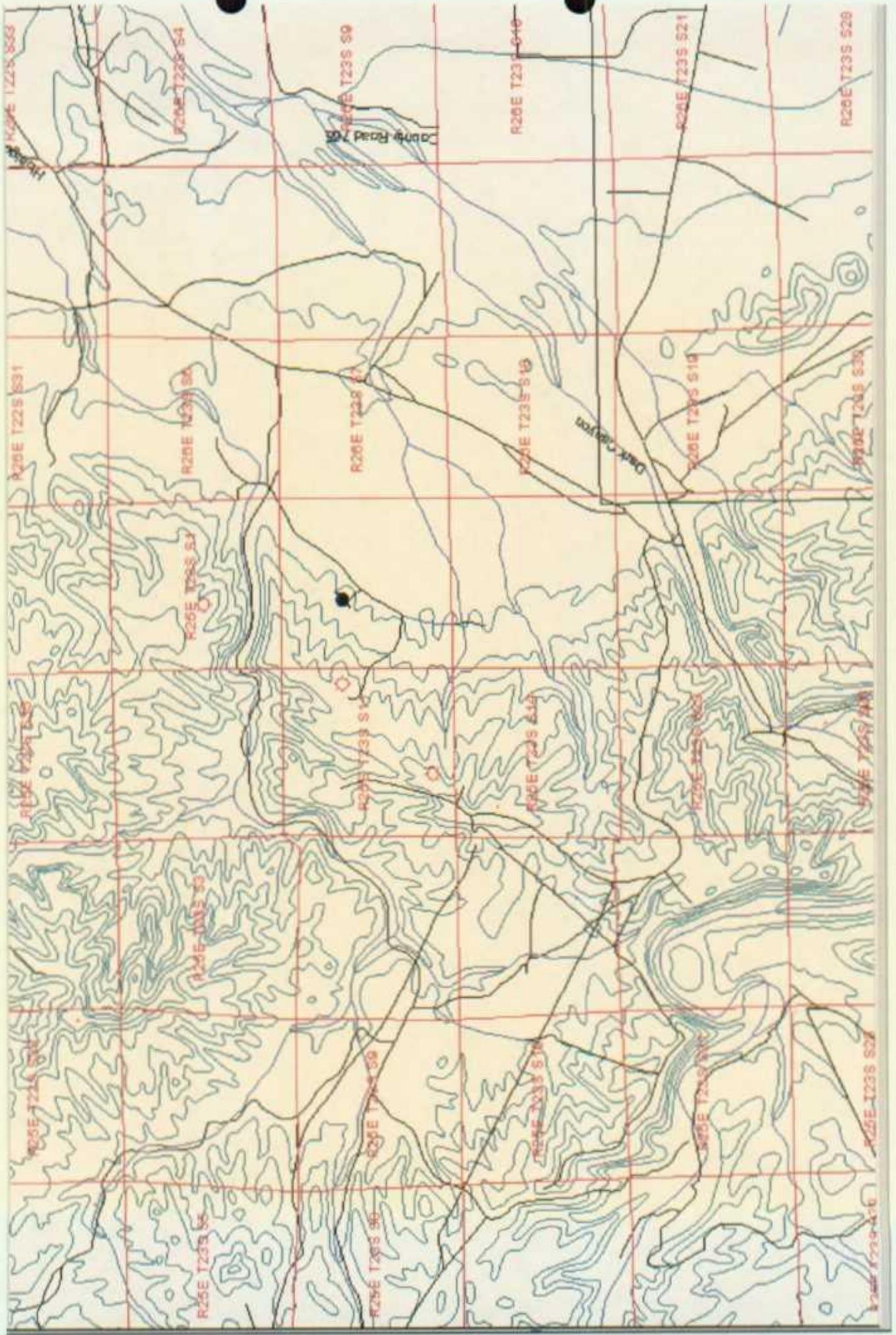
Olson, William

From: Stone, Ben
Sent: Wednesday, December 19, 2001 11:11 AM
To: Olson, William
Subject: 12-23S-25E



S12T23S25E.doc

Section 12-Township 23 South-Range 25 East



Olson, William

From: Arrant, Bryan
Sent: Friday, December 14, 2001 2:09 PM
To: Olson, William
Cc: Gum, Tim; Wrotenbery, Lori
Subject: FW: Contaminant found near city well and its getting blurry

Bill,

I'm in and out of the office so I'll fill you in on what I know so far.

I spoke to Jim Owen, who is in field operations with the BLM in Carlsbad, and he informed me that the City of Carlsbad was in the process of drilling their 3rd monitor well @ the cities' water wells that they are testing and encountered H2S gas and salty water at a depth of 119'. They ran a field test of the water sample which measured 550 ppm H2S and 10K CL. The workers drilling the monitor well became sick. Jim told me that he visually saw 2 old wells close by. One is on Federal land and the other is on Fee. The well on Fee land is @ 100 yards away and was drilled back in 1940s. The Federal well is further away and was drilled by Exxon and reported circulation on both strings of casing.

The City of Carlsbad is having Cardinal laboratories from Hobbs, NM., perform tests on the sample and will determine what if any hydrocarbons are present. I informed Jim Owen to be sure to let us know if the sample has the presence of hydrocarbons and is indeed oil field related.

We will keep you in touch.

Bryan

-----Original Message-----

From: Arrant, Bryan
Sent: Friday, December 14, 2001 7:16 AM
To: Wrotenbery, Lori
Subject: Contaminant found near city well and its getting blurry

I'll keep you informed as we hear more news.
My vision is regressing back to old times.



Contaminant found
near city we...

12/17/01

called : John Tully - Carlsbad City Administrator
called : RCT, WCO

Believe Produced Water, ongoing release
want to meet

ocw - need to get list of wells in area

Pete Beltran - 247-2000
Hydrologist

Wells plugged
1 hole still open

Benzene, Toluene in sample
Salt at scale

12/14/01
1115 hrs.

Bill Olson } OCD
Boyer Johnson }

Jon Tully - City Administrator (887-1191)

Sec 12, T23S R25E
8 miles SW of town, Sheeps Draw
near wells P & 9 N. of Park Canyon

prelim test

600 ppm H₂S in headspace
Salt with scale

1000' from
wells 8 & 9

couple wells nearby (P & A)

drilling MW's, 119 ft., bit void, water flowed
moved over hit it at 100'

City well pumps from 600' wells in Capitan
static W.L. 400'

Below GW Associates - Pete Below
Boss. Wolford - Hydrologist

Olson, William

From: Wrotenbery, Lori
Sent: Friday, December 14, 2001 9:38 AM
To: Anderson, Roger; Olson, William
Subject: FW: Contaminant found near city well and its getting blurry

Please check into this situation and come brief me.

-----Original Message-----

From: Arrant, Bryan
Sent: Friday, December 14, 2001 7:16 AM
To: Wrotenbery, Lori
Subject: Contaminant found near city well and its getting blurry

I'll keep you informed as we hear more news.
My vision is regressing back to old times.



Contaminant found
near city we...



Print this Article



E-Mail to a Friend

Carlsbad Current-Argus

Contaminant found near city well field

December 11, 2001

Stella Davis Current-Argus Staff Writer

CARLSBAD -- The city of Carlsbad and the federal Bureau of Land Management have launched an investigation to determine how hydrogen sulphide, or H₂S, gas and a high concentration of salt has seeped into the area of city's water well field.

City officials said that to their knowledge, the city's water supply has not been contaminated, but there is cause for concern. Samples of the water have been sent to a laboratory in Albuquerque used by the city to monitor its water supply. The BLM has conducted its own preliminary tests on the water.

At Tuesday night's City Council meeting, Mayor Gary Perkowski said he had "frightening" news and asked City Administrator Jon Tully to explain the problem to the public.

Tully said the city contractor drilling six monitoring wells near the city's water wells about 12 miles southwest of the city was drilling the third of the six late last week when at 119 feet the contractor discovered the contamination.

The city is installing the monitoring wells so that the quality and quantity of water in the aquifer that supplies the city with water can be monitored.

Tully had two tightly capped, clear plastic bottles of the contaminated water on display. The water appeared gray in color and black sediment had settled to the bottom. He and the council advised against smelling it, saying the odor was extremely bad and sickening.

"It's definitely not pleasant and something you would definitely not want to smell," said Councilman Chuck Wiggins.

The city's water wells are on a ranch the city is proposing to purchase in an effort to protect the wells and infrastructure. In addition to private land, the ranch also has state and federal leases. The monitoring well where the contamination was discovered is on federal land and 1,000 feet from two of the city water wells.

Tully said that when the contamination was discovered, drilling was stopped immediately and the contractor brought in samples of the water. The city then contacted the BLM.

He said city officials have met with the BLM to discuss the situation. "They are definitely concerned and want to find a way to solve the problem," Tully said.

"We don't know where the contamination is coming from," Tully said, in reply to a question asked by someone in the audience. "There are some active oil and gas wells in the area, and we know that there have been others that have been capped. We don't know how the contamination managed to flow into

the monitoring well nor do we know if it has seeped into the aquifer."

Tully said a hydrologist hired by the city is expected to be in the area later this week to determine the scope of the contamination and where it is coming from and who is responsible.





STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

1000342

2R50

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

M E M O R A N D U M

TO: MIKE WILLIAMS, Acting District Supervisor, Artesia
FROM: DAVID G. BOYER, Hydrogeologist, Environmental Bureau *DB*
SUBJECT: VISIT TO CARLSBAD MUNICIPAL WELL FIELD 12/1/87
DATE: DECEMBER 15, 1987

On December 1, 1987, Jami Bailey and myself met with you and several other persons from the Oil Conservation Division, City of Carlsbad, Environmental Improvement Division, and the Bureau of Land Management (BLM) to discuss the potential for contamination of Carlsbad's municipal water wells from oil and gas activities in the area. The visit included a trip to the well field and discussions at city hall. A list of those attending is attached.

The water wells are located southwest of the city in Sheep Draw and along the east face of the foothills between Sheep Draw and Dark Canyon. Logs of the water wells show they are completed in the Carlsbad Limestone at depths between 600 and 1000 feet with the major water-bearing fractures between 400 and 800 feet and standing water levels for all wells about 400 feet. The recharge area for the limestone begins immediately west of the well field and continues for an undetermined distance west and south towards the Guadalupe Mountains. Recharge west of the well field is directly from precipitation on the fractured rock outcrops and by surface drainage down Sheep Draw. Because the Carlsbad limestone descends toward the northeast, additional recharge may be provided by outcrops southwest of the Sheep Canyon drainage or by subcrops under Dark Canyon in the same area. However, no information was readily available that could verify this.

Five of the city's wells are located within Sheep Canyon and are susceptible to contamination from surface sources. The city has reported instances of coliform bacteria contamination in the wells after heavy storm runoff. Although the wells are sealed to prevent surface contamination, only 20 to 50 feet of casing was used with open hole completion for the remaining distance of 400 feet to water. Although this method of completion allows any intercepted fractures to drain to the well, it also increases the likelihood of contamination from the surface. The thin soil cover

and fractured rock provide little filtering capacity to prevent direct entry to the wells of bacteria of any other contaminant that may reach the Sheep Canyon drainage.

Field Observations

During the visit, inspections were made at three Exxon Corporation gas wells near several of the water wells. At one well, evidence of a serious spill or leak could still be seen. The gas well sites visited are located on BLM land.

1. Exxon Squaw Federal #3 Gas Well, NE $\frac{1}{4}$ of SW $\frac{1}{4}$ Sec. 1, T23S, R25E. The site is on a bluff on the northside of Sheep Draw.

- A. Salt from the closed reserve pit could be seen on the surface at the site of the pit, but not at other locations on the lease. During rainfall this salt may be washed into the draw, but will likely be diluted by precipitation.

Recommendation: The site of the pit should be covered with clean soil or dirt to prevent salt runoff and leaching.

- B. Dark staining, providing evidence of a past oil/produced water spill, was seen on the pad and over the south side of the bluff. Stained soil down the bluff had a hydrocarbon odor when broken apart. No locks were on the tanks making them susceptible to vandalism.

Recommendation: Locks should be installed on the tank drains, and a berm should be constructed sufficient to contain entire tank contents on the pad.

2. Exxon Mary Federal #1 Gas Well, SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 11, T23S, R25E. The site is on a bluff immediately above water well #7.

- A. This site showed little evidence of fluid production. The tank was nearly empty and the heater treater was off. Gas was flowing to the Transwestern Pipeline.

Recommendation: A lock should be placed on the tank to prevent vandalism, and the tank should be diked.

- B. An unfenced, unlined but dry burn pit was present at the site.

Recommendation: The burn pit should be fenced, and lined to prevent infiltration and runoff.

3. Exxon Squaw Federal #1 Gas Well, SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 12, T23S, R25E. The site is on a small hill between wells 6 and 7. This site also produces very little fluid. In addition to the condensate tank, an open produced water tank was also at the site.

Recommendations: The same recommendations as for the Mary Federal #1 are applicable at this site also.

Recommendations

In addition to the above recommendations at individual sites, the following general recommendations for the area are suggested. I believe that all recommendations pertinent to oil and gas activities can be implemented by the OCD Artesia District office with the cooperation of the BLM.

1. Because of the special ground water vulnerability inherent to that area, I suggest that OCD establish special requirements for oil and gas drilling and production within the boundary of Sheep Draw watershed and within one-half mile of the existing wells. This area would include:

<u>Township-Range</u>	<u>Section(s)</u>	<u>Unit Letters</u>
T22S, R24E	36	P
T22S, R25E	28	M
	31	I-K, M-P
	32	A-C, E-P
	33	C-G, I-P
	34	A-C, E-P
	35	D, E, J-P
T23S, R24E	1	A, H, I
R23S, R25E	1	C-P
	2-6	Entire section
	7	A-C, F-J, P
	8-16	Entire section
	17	A, B, H, I
	21	A-C, H
	22	A-D, G-J
	23	A-E, G, H
	24	A-G
T23S, R26E	6	E, K-N
	7	C-F, L

A figure showing the relationship of the 40-acre units within a section is attached.

2. Existing facilities within the above area should have no discharges of any type to unlined pits, and all tanks for water or condensate, and all fluid loading areas should be bermed to contain fluids from spills or leaks. All tanks should have locks to prevent vandalism.
3. New oil and gas wells proposed for drilling within this area should have drilling fluids and cuttings stored in steel mud pits. Disposal on site of dried mud and cuttings is acceptable provided such materials are not in a watercourse or drainageway, and they are covered with clean material to prevent runoff or leaching.
4. Blasting in the immediate vicinity of the wells should be restricted. There is the possibility that vibrations from the blasting can dislodge sediment and debris in the open holes and fracture zones. This may cause turbidity and move undesirable material into and down the open boreholes beneath the casing.
5. Additional city water wells should be completed such that the open-hole area above the water table is isolated from the pumping zone. While this is more expensive, it will greatly reduce the chances of contamination resulting from surface fractures recharging directly into the wells. At a minimum, additional cemented surface casing is needed beyond the 20 feet present in most of the currently used wells.

Reference

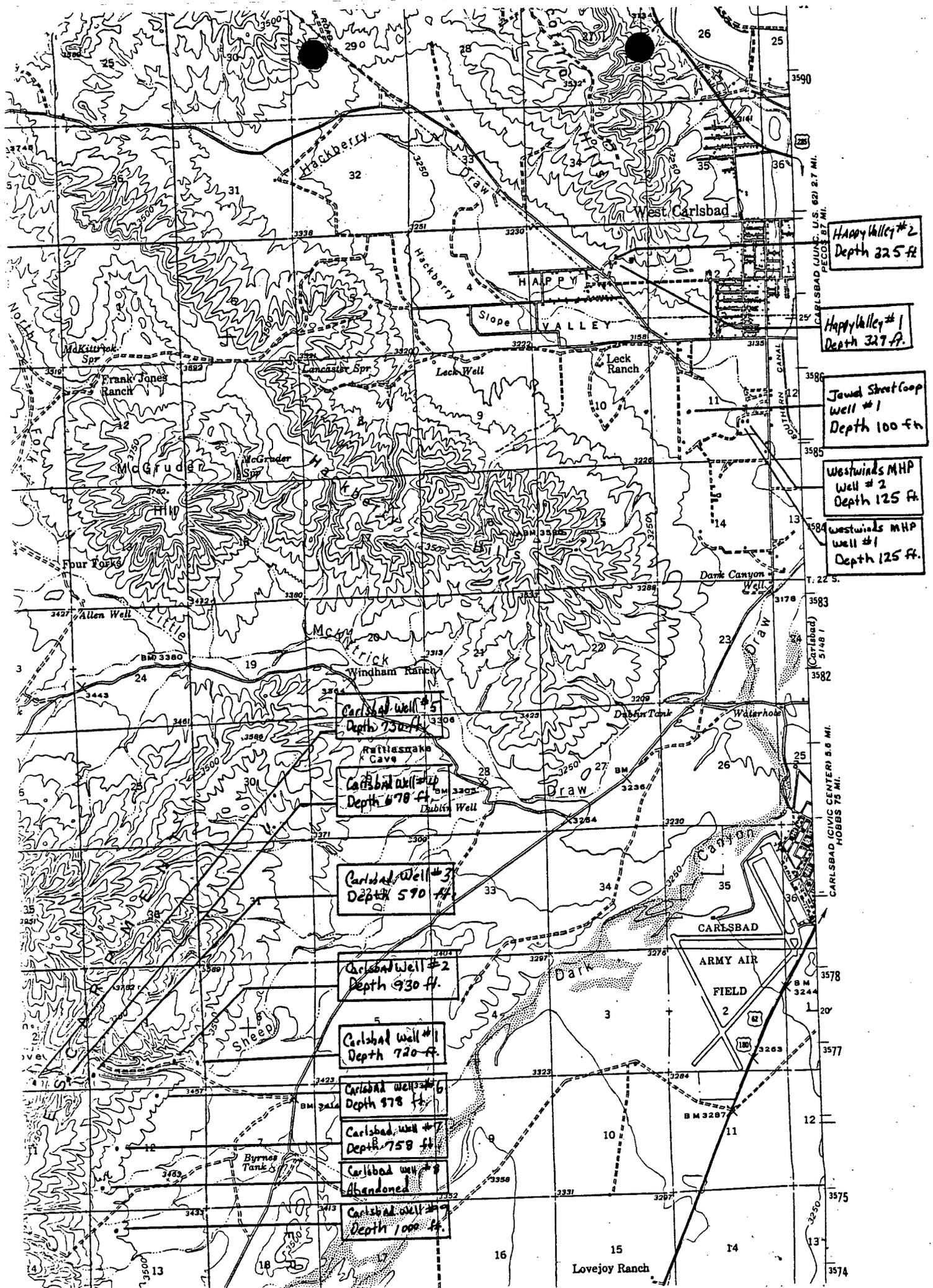
"Geology and Ground-Water Resources of Eddy County, New Mexico" by G.E. Hendrickson and R.S. Jones, Ground-Water Report 3, NM Bureau of Mines and Mineral Resources, Socorro, 1952.

Attachments

cc: Attendees at 12/1/87 Meeting
W. J. LeMay, OCD Director
Dennis McQuillan, EID Ground Water
Stuart Castle, EID Water Supply

City of Carlsbad Meeting 12/1/87

<u>Name</u>	<u>Agency</u>	<u>Phone #</u>
Dwight Royer	OCD	827-5812
Johnny Robinson	OCD	748-1283
Mike Wilman	OCD Artesia	748-1283
Roy Dandy	E.F.D.	885-9023
Don Patterson	City of Carlsbad	887-1191
JAMI BAILEY	OCS - SANTA FE	827-5884
BILL WEBER	EID - ROSWELL	624-6046
Mat H. Cordova	City of Carlsbad	887-1191
Shannon J. Shaw	BLM/Carlsbad	887-6544



Happy Valley #2
Depth 225 ft.

Happy Valley #1
Depth 327 ft.

Jawed Street Coop
Well #1
Depth 100 ft.

Westwinds MHP
Well #2
Depth 125 ft.

Westwinds MHP
Well #1
Depth 125 ft.

Carlsbad Well #5
Depth 752 ft.

Carlsbad Well #4
Depth 678 ft.

Carlsbad Well #3
Depth 570 ft.

Carlsbad Well #2
Depth 930 ft.

Carlsbad Well #1
Depth 720 ft.

Carlsbad Well #6
Depth 978 ft.

Carlsbad Well #7
Depth 758 ft.

Carlsbad Well #8
Abandoned

Carlsbad Well #9
Depth 1000 ft.

CARLSBAD CIVIC CENTER 2.7 MI.
PECOS 8.7 MI.

CARLSBAD CIVIC CENTER 5.6 MI.
HOBBS 7.5 MI.

Standard Section

N

