

TESORO PETROLEUM CORPORATION

Suite 2000 First of Denver Plaza Building

633 Seventeenth Street

DENVER, COLORADO 80202

Rocky Mountain District

(303) - 825-2000

January 2, 1980

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

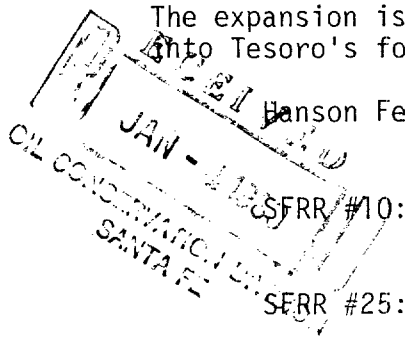
ATTENTION: Mr. Joe Ramey

RE: Case 4971 - Order No. R-4558
Expansion of Project Area
Tesoro South Hospah -
Lower Sand Oil Pool

Gentlemen:

Tesoro Petroleum Corporation requests administrative approval to expand the Lower Hospah Pressure Maintenance Project, in accordance with Rule 10 of Order No. R-4558.

The expansion is to include the injection of produced Lower Hospah water into Tesoro's following wells in McKinley County, New Mexico:



Hanson Fed. #28: 2310' FSL & 2310' FEL, Section 6-17N-8W
Presently SI Lower Hospah well.

SFRR #10: 330' FNL & 2310' FEL, Section 7-17N-8W
Presently producing 1/5 BOPD from Upper Hospah.

SFRR #25: 1220' FNL & 2600' FWL, Section 7-17N-8W
Presently SI Upper Hospah well.

Hanson #34: 990' FSL & 2310' FEL, Section 6-17N-8W
Well is to be drilled.

The following data is submitted in support of this application as specified by Rule 10:

1. A plat showing the location of proposed injection wells, all wells within the project area, the location of the only offset operator, Tenneco Oil Company, and all offset wells.

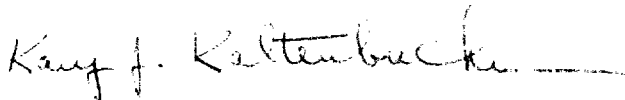
Jan. 2, 1980

2. Schematic drawings of the four proposed injection wells which describe the casing, tubing, perforated interval and depth showing that the injection of water will be confined to the Lower-Hospah formation.

Tenneco Oil Company will be notified by receiving a copy of this application, along with supporting data.

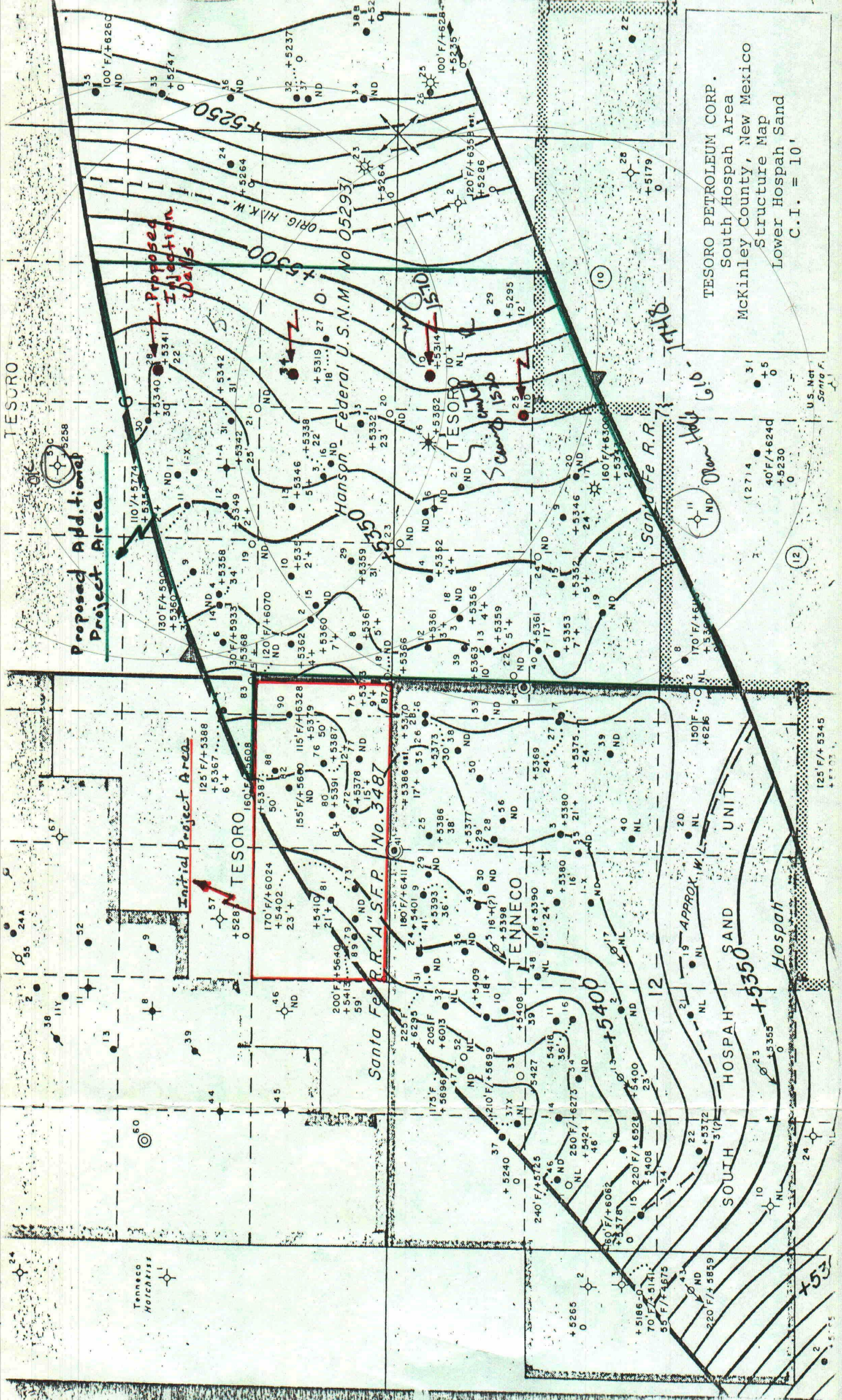
Tesoro Petroleum Corporation requests your early consideration and approval of this application.

Very truly yours,

A handwritten signature in cursive script, reading "Kary J. Kaltenbacher", followed by a horizontal line.

Kary J. Kaltenbacher

KJK:c1
Encl.



TESORO PETROLEUM CORP.
South Hospah Area
McKinley County, New Mexico
Structure Map
Lower Hospah Sand
C.I. = 10'

TESORO

Proposed Additional Project Area

Proposed Injection Wells

Initial Project Area

Hanson - Federal U.S.N.M. No. 052931

Santa Fe R.R. No. 3487

TENNECO

SOUTH HOSPAH SAND

Hospah

U.S. Nat. Survey

Elevation: 6908' KB - 6904' GL

8-5/8", 24#, K-55 csg. set @ 23'
w/ 15 sx cement

Well now producing
1/2 BOPD and 6 BWPD
from the Upper Hospah

Cement Top @ 1140'

2-7/8", 6.5#, J-55, EUE tbg.

U. Hospah perfs. 1541' - 69' KB
Squeeze w/ 10 sx cement

Baker Model AD-1 Packer @ 1570' KB

Howco E Z Drill Cement
Retainer - to be
drilled out

5-1/2", 14#, K-55 csg. set @ 1595' KB
w/ 100 sx cement

TD-1604' KB

4-3/4" open hole (9')

Tesoro Petroleum Corp.
SFRR #10
Proposed Injection Well
NW/NE Section 10-17N-8W

Elevation: 6965' KB - 6953' GL

7" csg. set @ 72' w/ 60 sx cement

PRESENTLY SHUT-IN UPPER
HOSPAN WELL

Cement Top @ 1150'

2 7/8", 6.5#, J-55, EVE tbg.

Perfs.

1585'-88'

1595'-98'

1602'-05'

1609'-12'

Squeeze w/20 sx cement

Set Baker Model AD-1 Packer @ 1615' KB

Lower Hospah Top @ 1637' KB

4 1/2", 9.5#, K-55 csg. set @ 1621' KB
w/65 sx cement

Drill 29' of 3 1/2" hole

TD-1650' KB

TESORO PETROLEUM CORP.
SFRR #25
Proposed Injection Well
NE/NW Section 7 -17N- 8W

Elevation: 6916' KB - 6903' GL

8-5/8", 20#, H-40 Csg. Set @
103' w/ 100 sx cement

Well Shut-In 5/79 due
to high water cut

Cement Top @ 1140'

2-7/8", 6.5#, J-55, EUE tbg.

Baker Model AD-1 Packer @ 1550' KB

L. Hospah perfs. 1576 - 82' KB

Baker Model "K" Cement Retainer @
1589'

L. Hospah perfs. 1594'-
1600' squeezed w/ 100
sx Class A

5-1/2", 14#, K-55, STC Csg. Set @
1687' KB w/ 100 sx cement

TD - 1699' KB

Tesoro Petroleum Corp.
Hanson Federal #28
Proposed Injection Well
NW/SE Section 6-17N-8W

Elevation: approx. 6930' KB - 6920' GL

Set 8 5/8", 24#, K-55, STC csg. @ 60' and cement to surface

WELL IS TO BE DRILLED

All depths approximate

← Cement Top @ 1000'

← 2 7/8", 6.5#, J-55, EVE tbg.

Lower Hospah Top @ 1605' KB

Set Baker Model AD-1 Packer @ 1580' KB

Perf. L. Hospah 1605'-1615' KB w/2JSPF

PBTD - 1625' KB

Set 5 1/2", 14#, K-55, STC csg. @ 1650' KB w/100 sx cement

TESORO PETROLEUM CORP.
Hanson Federal #34
Proposed Injection Well
SW/SE Section 6-17N-8W

TESORO PETROLEUM CORPORATION

Suite 2000 First of Denver Plaza Building

633 Seventeenth Street

DENVER, COLORADO 80202

Rocky Mountain District

(303)-825-2000

January 2, 1980

Tenneco Oil Co.
720 So. Colorado Blvd.
Denver, Colorado 80222

ATTN: Mr. John Cook

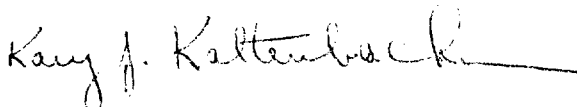
RE: South Hospah Field -
Expansion of Lower Hospah
Pressure Maintenance Project

Gentlemen:

Attached is an application with supporting data to the New Mexico Oil Conservation Commission (NMOCC) to add four additional Lower Hospah water injection wells on the east side of our Hanson Fed. and SFRR leases. As Tenneco is an offset operator to this proposed project area, Tesoro is required by the NMOCC to supply you with this information. Objections to this application must be submitted by letter within twenty days to Mr. Joe Ramey of the NMOCC.

If you have any questions concerning this, please contact me.

Very truly yours,



Kary J. Kaltenbacher
District Engineer

KJK:cl
Encl.

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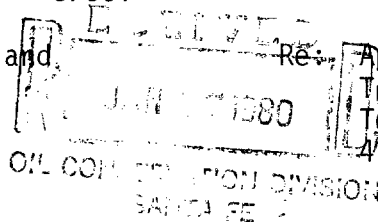
(303) - 825-2000

January 15, 1980

New Mexico Oil Conservation Division
Energy and Minerals Department
P.O. Box 2088
Santa Fe, New Mexico 87501

ATTENTION: Mr. Holland

Re: Application for PMX
Tesoro Petroleum Corp.
Tesoro South Hospah
wells



Dear Sir:

Pursuant to your letter dated January 8, 1980, the following additional information you requested is enclosed:

1. Tabular summary of all wells within one-half mile of the proposed injection wells.
2. Schematics of all plugged and abandoned wells within one-half mile of the proposed injection wells that have penetrated the injection zone.

If any additional information is needed for this application, please let me know.

Very truly yours,

Kary J. Kaltenbacher
District Engineer

KJK:c1
Encl.

Wells Within 1/2 Mile of Proposed Injection Wells

<u>Operator</u>	<u>Well Name</u>	<u>Location</u>	<u>Casing Strings</u>	<u>Setting Depth</u>	<u>Cement Volume</u>	<u>Cement Top</u>	<u>Total Depth</u>	<u>Producing Interval</u>	<u>Producing Formation</u>
Tesoro	Hanson #5	SE-NW Sec 6-17N-8W	8 5/8"	24'	15 sx	surface	1696'	P & A	--
Tesoro	Hanson #30	NE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	103' 1643'	100 sx 100 sx	surface 1000'	1643'	1576'-84'	L. Hospah
Tesoro	Hanson #17	NE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	74' 1513'	50 sx 100 sx	surface 880'	1538'	1513'-38'	U. Hospah
Tesoro	Hanson #1-X	NE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	21' 1599'	12 sx 150 sx	surface 650'	1599'	1546'-54'	L. Hospah
Tesoro	Hanson #11	NE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	71' 1541'	40 sx 60 sx	surface 1160'	1546'	1541'-46'	L. Hospah
Tesoro	Hanson #12	NE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	70' 1544'	40 sx 60 sx	surface 1160'	1552'	1544'-52'	L. Hospah
Tesoro	Hanson #1	NE-SW Sec 6-17N-8W	9 5/8" 5 1/2"	66' 1598'	30 sx 100 sx	surface 960'	2510'	P & A	--
Tesoro	Hanson #31	NE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	85' 1617'	100 sx 100 sx	surface 1000'	1620'	1550'-58'	L. Hospah
Tesoro	Hanson #21	NE-SW Sec 6-17N-8W	7" 4 1/2"	75' 1541'	40 sx 65 sx	surface 950'	1542'	1508'-28' (Injection Well)	U. Hospah
Tesoro	Hanson #19	NW-SW Sec 6-17N-8W	7" 4 1/2"	75' 1557'	40 sx 65 sx	surface 940'	1558'	1524'-42' (Injection Well)	U. Hospah
Tesoro	Hanson #9	NW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	71' 1533'	40 sx 60 sx	surface 1150'	1571'	1533'-71'	L. Hospah
Tesoro	Hanson #4	NW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	21' 1587'	15 sx 100 sx	surface 960'	1587'	1536'-45'	L. Hospah

Wells Within 1/2 Mile of Proposed Injection Wells

<u>Operator</u>	<u>Well Name</u>	<u>Location</u>	<u>Casing Strings</u>	<u>Setting Depth</u>	<u>Cement Volume</u>	<u>Cement Top</u>	<u>Total Depth</u>	<u>Producing Interval</u>	<u>Producing Formation</u>
Tesoro	Hanson #14	NW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	72' 1494'	50 sx 100 sx	surface 870'	1518'	1494'-1518'	U. Hospah
Tesoro	Hanson #6	NW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	70' 1533'	40 sx 60 sx	surface 1160'	1560'	1533'-60'	L. Hospah
Tesoro	Hanson #7	SW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	72' 1559'	40 sx 60 sx	surface 1170'	1601'	1559'-1601'	L. Hospah
Tesoro	Hanson #10	SW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	71' 1554'	40 sx 60 sx	surface 1160'	1586'	1554'-86'	L. Hospah
Tesoro	Hanson #2	SW-SW Sec 6-17N-8W	8 5/8" 4 1/2"	40' 1540'	25 sx 100 sx	surface 800'	1569'	1540'-69'	L. Hospah
Tesoro	Hanson #15	SW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	73' 1517'	50 sx 100 sx	surface 880'	1539'	1517'-39'	U. Hospah
Tesoro	Hanson #8	SW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	73' 1573'	40 sx 60 sx	surface 1160'	1610'	1573'-1610'	L. Hospah
Tesoro	Hanson #18	SW-SW Sec 6-17N-8W	8 5/8" 4 1/2"	74' 1565'	50 sx 120 sx	surface 1000'	1566'	1519'-49' (Injection well)	U. Hospah
Tesoro	Hanson #29	SW-SW Sec 6-17N-8W	8 5/8" 5 1/2"	103' 1640'	100 sx 100 sx	surface	1640'	1580'-90'	L. Hospah
Tesoro	Hanson #13	SE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	71' 1549'	40 sx 60 sx	surface 1160'	1557'	1549'-57'	L. Hospah
Tesoro	Hanson #3	SE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	23' 1589'	15 sx 100 sx	surface 960'	1591'	1552'-58'	L. Hospah
Tesoro	Hanson #16	SE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	74' 1515'	50 sx 100 sx	surface 880'	1537'	1501'-05'	U. Hospah

Wells Within 1/2 Mile of Proposed Injection Wells

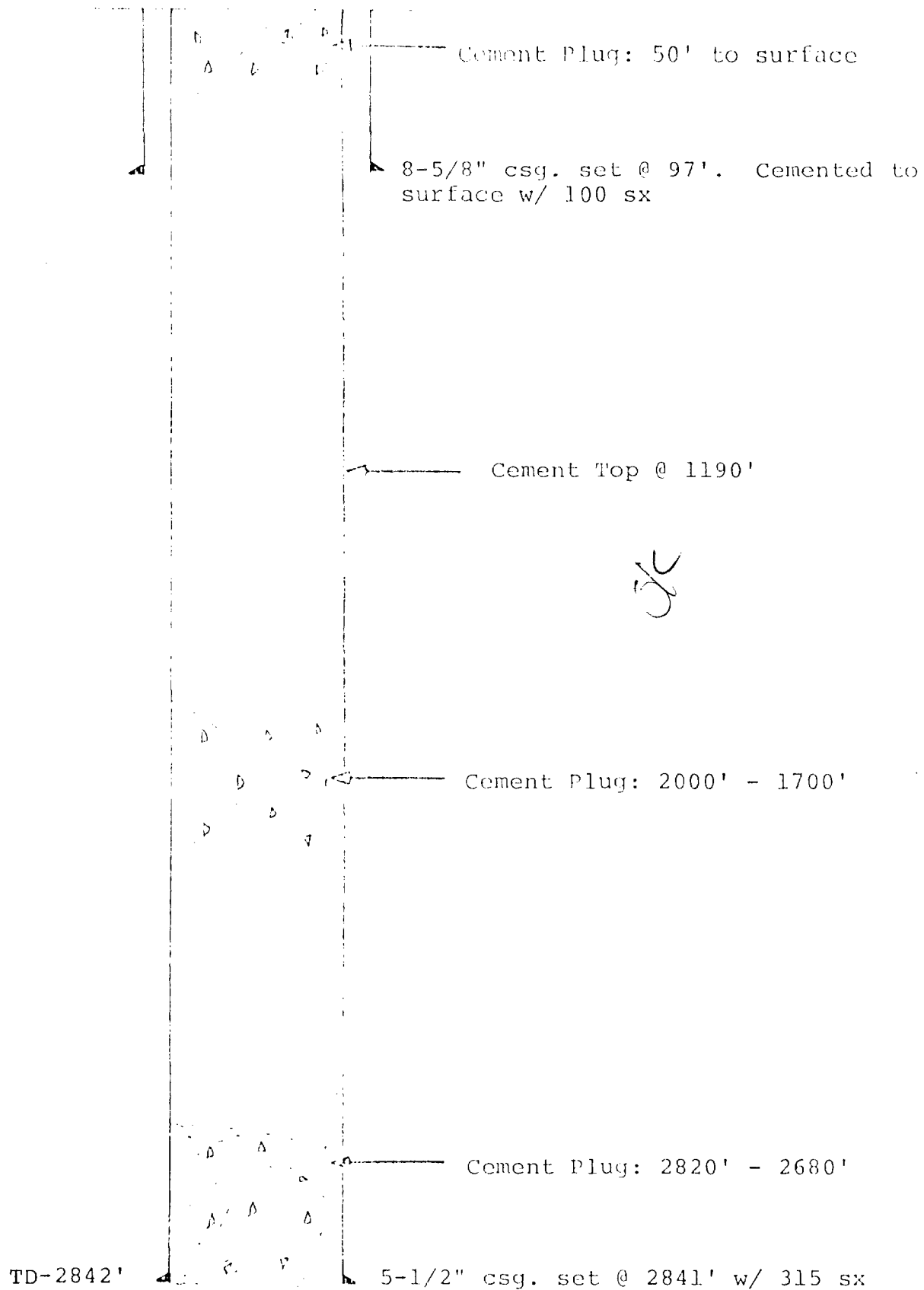
<u>Operator</u>	<u>Well Name</u>	<u>Location</u>	<u>Casing Strings</u>	<u>Setting Depth</u>	<u>Cement Volume</u>	<u>Cement Top</u>	<u>Total Depth</u>	<u>Producing Interval</u>	<u>Producing Formation</u>
Tesoro	Hanson #33	SE-SW Sec 6-17N-8W	8 5/8" 5 1/2"	100' 1640'	100 sx 100 sx	surface 1020'	1645'	1568'-74'	L. Hospah
Tesoro	Hanson #20	SE-SW Sec 6-17N-8W	7" 4 1/2"	70' 1584'	40 sx 65 sx	surface 960'	1585'	1539'-68'	U. Hospah
Tesoro	Hanson #27	SW-SE Sec 6-17N-8W	8 5/8" 5 1/2"	103' 1644'	100 sx 100 sx	surface 1020'	1645'	1519'-50'	U. Hospah
Tesoro	Hanson #24	NE-SE Sec 6-17N-8W	8 5/8" 5 1/2"	100' 2657'	100 sx 310 sx	surface 720'	2657'	Temp. Abandoned Well	
Tesoro	Hanson #23	SE-SE Sec 6-17N-8W	8 5/8" 5 1/2"	144' 2724'	100 sx 325 sx	surface 700'	2725'	2638'-50'	Dakota
Tesoro	SFRR #12	NW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	72' 1561'	40 sx 60 sx	surface 1190'	1593'	1561'-93'	L. Hospah
Tesoro	SFRR #14	NW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	69' 1562'	40 sx 60 sx	surface 1190'	1584'	1562'-84'	L. Hospah
Tesoro	SFRR #18	NW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	75' 1529'	50 sx 100 sx	surface 900'	1551'	1529'-51'	U. Hospah
Tesoro	SFRR #3	NW-NW Sec 7-17N-8W	8 5/8" 4 1/2"	37' 1547'	7 sx 75 sx	surface 1180'	1584'	1547'-84'	L. Hospah
Tesoro	SFRR #39	NW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	101' 1648'	100 sx 100 sx	surface 1020'	1650'	1574'-79'	L. Hospah
Tesoro	SFRR #13	NW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	69' 1576'	40 sx 60 sx	surface 1200'	1614'	1576'-1614'	L. Hospah
Tesoro	SFRR #22	NW-NW Sec 7-17N-8W	7" 4 1/2"	75' 1575'	40 sx 65 sx	surface 950'	1576'	1533'-63' (Injection Well)	U. Hospah

Wells Within 1/2 Mile of Proposed Injection Wells

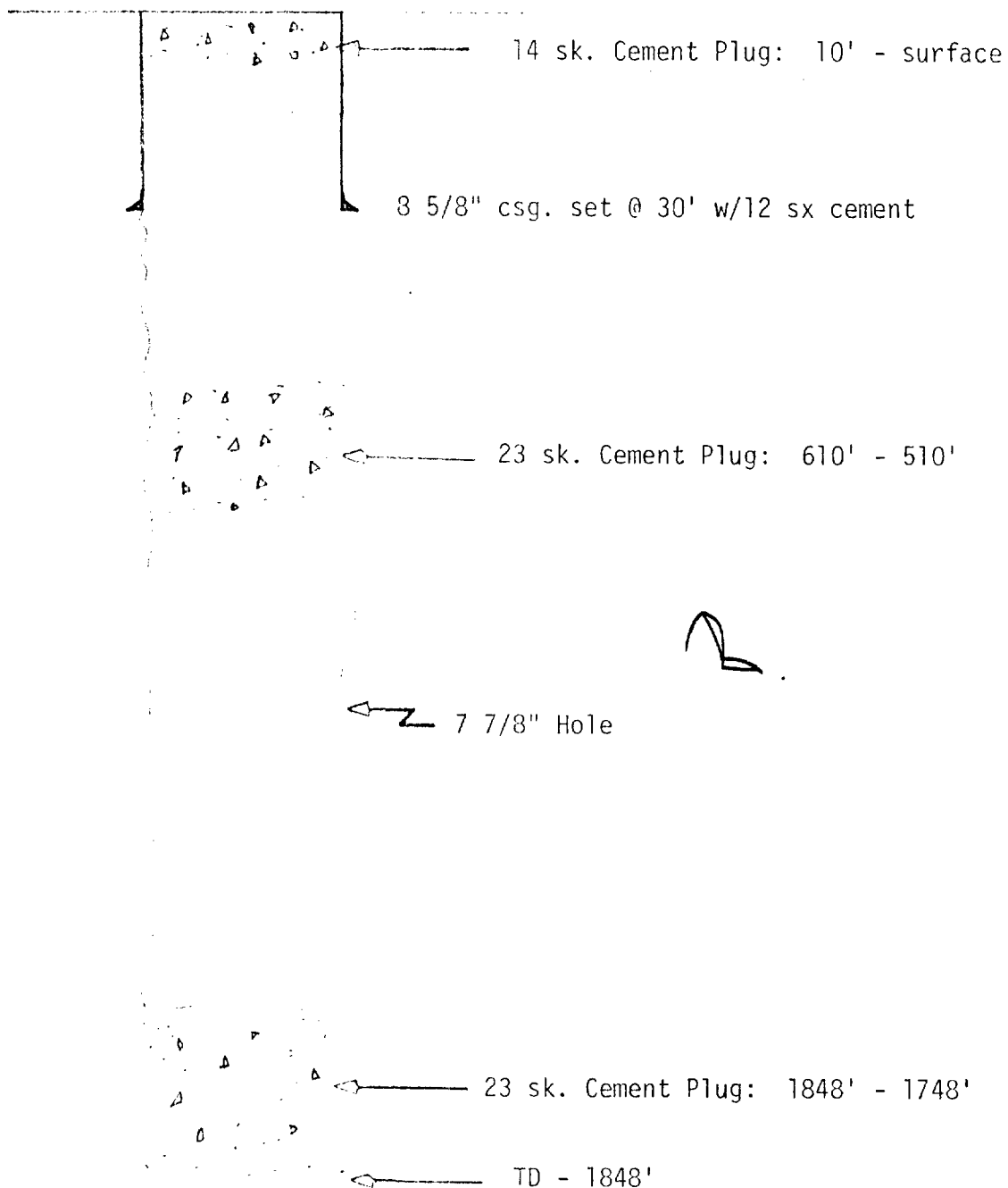
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Tesoro	SFRR #40	SW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	101' 1647'	100 sx 100 sx	surface 1020'	1655'	1599'-1605'	L. Hospah
Tesoro	SFRR #7	SW-NW Sec 7-17N-8W	8 5/8" 4 1/2"	24' 1582'	10 sx 100 sx	surface 950'	1613'	1582'-1613'	L. Hospah
Tesoro	SFRR #24	SW-NW Sec 7-17N-8W	7" 4 1/2"	69' 1605'	40 sx 65 sx	surface 980'	1606'	1564'-92' (Injection Well)	U. Hospah
Tesoro	SFRR #15	SW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	70' 1623'	40 sx 60 sx	surface 1250'	1635'	1623'-35'	L. Hospah
Tesoro	SFRR #19	SW-NW Sec 7-17N-8W	8 5/8" 5 1/2"	74' 1591'	50 sx 100 sx	surface 960'	1622'	1591'-1622'	U. Hospah
Tesoro	SFRR #9	SE-NW Sec 7-17N-8W	8 5/8" 5 1/2"	24' 1670'	15 sx 100 sx	surface 1050'	1670'	1571'-79'	U. Hospah
Tesoro	SFRR #20	SE-NW Sec 7-17N-8W	8 5/8" 5 1/2"	75' 1605'	50 sx 100 sx	surface 990'	1626'	1605'-26'	U. Hospah
Tesoro	SFRR #17	SE-NW Sec 7-17N-8W	8 5/8" 5 1/2"	136' 2787'	100 sx 150 sx	surface 1500'	2794'	2645-76'	Dakota
Tesoro	SFRR #21	NE-NW Sec 7-17N-8W	8 5/8" 5 1/2"	73' 1558'	50 sx 100 sx	surface 930'	1578'	1558'-78'	U. Hospah
Tesoro	SFRR #16	NE-NW Sec 7-17N-8W	8 5/8" 5 1/2"	137' 2569'	100 sx 150 sx	surface 1520'	2708'	1521'-38'	Dakota
Tesoro	SFRR #4	NE-NW Sec 7-17N-8W	8 5/8" 5 1/2"	43' 1543'	35 sx 100 sx	surface 920'	1569'	1543'-69'	L. Hospah
Tesoro	SFRR #23	NE-NW Sec 7-17N-8W	7" 4 1/2"	75' 1549'	40 sx 65 sx	surface 920'	1550'	1519'-37' (Injection well)	U. Hospah

Wells Within 1/2 Mile of Proposed Injection Wells

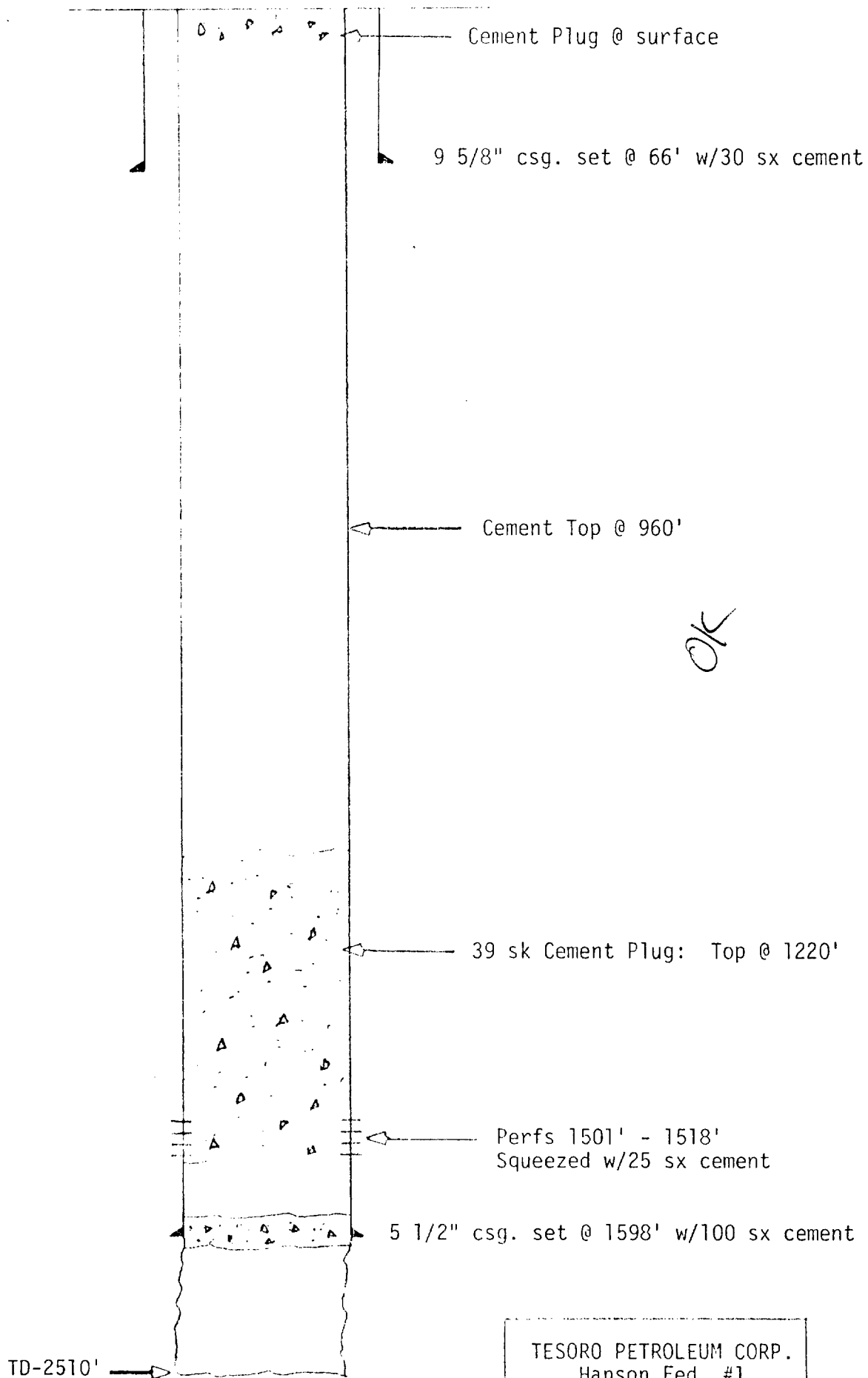
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Tesoro	SFRR #29	NW-NE Sec 7-17N-8W	8 5/8" 5 1/2"	137' 2704'	100 sx 300 sx	surface 950'	2705'	2579' -93'	Dakota
Tesoro	SFRR #2	NE-NE Sec 7-17N-8W	8 5/8" 4 1/2"	97' 2841'	100 sx 315 sx	surface 1190'	2842'	P & A	--
Tesoro	SFRR #11	NE-SW Sec 7-17N-8W	8 5/8"	30'	125 sx	surface	1848'	P & A	--
Tenneco	Lone Pine Dakota D Unit #4	NW-SE Sec 7-17N-8W	8 5/8" 5 1/2"	131' 2826'	100 sx 200 sx	surface 1420'	2835'	2762' -64'	Dakota
Tenneco	Lone Pine Dakota D Unit #3	NE-SW Sec 7-17N-8W	8 5/8" 5 1/2"	65' 2830'	40 sx 300 sx	surface 950'	2830'	2760' -62-	Dakota



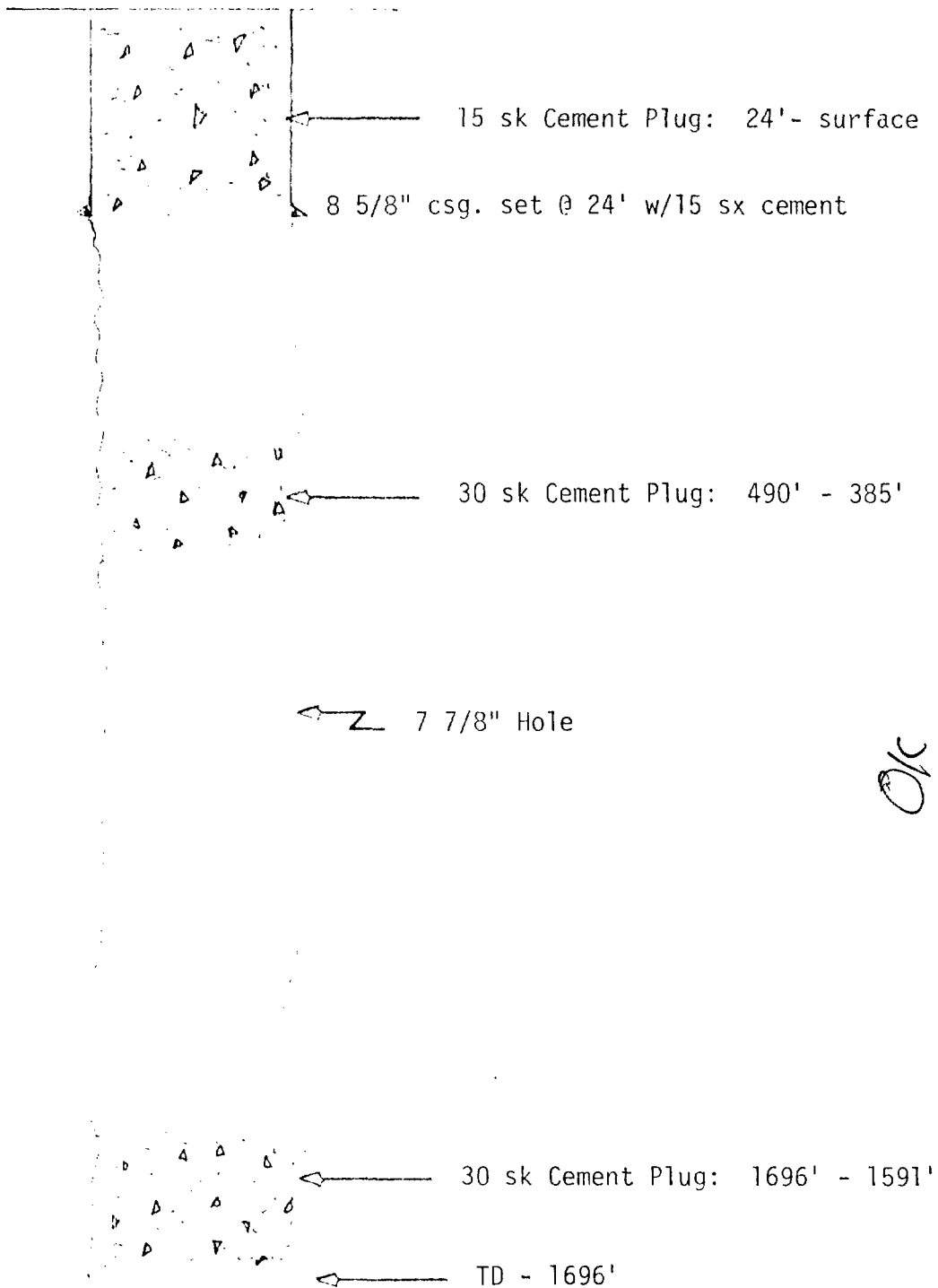
Burr and Cooley
Coleman #2
Abandoned Well
Section 8-17N-8W



TESORO PETROLEUM CORP.
SFRR #11
Abandoned Well
NE/SW Sec 7-17N-8W



TESORO PETROLEUM CORP.
Hanson Fed. #1
Abandoned Well
NE/SW Sec 6-17N-8W



TESORO PETROLEUM CORP.
Hanson Fed. #5
Abandoned Well
SE/NW Sec 6-17N-8W