

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☒ no
- II. Operator: Phillips Petroleum Company
Address: 4001 Penbrook Street, Odessa, Texas 79762
Contact party: Don R. Wier Phone: 915-368-1203
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugging well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Don R. Wier Title: Manager, Reservoir Engineering
Signature: Don R. Wier Date: July 23, 1993
- If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

VACUUM GLORIETA EAST UNIT

ATTACHMENT III TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

PROPOSED WELL NUMBERING SCHEME

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Lease Name</u>	<u>Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec-Tn-Rg</u>	<u>Footage</u>	<u>Former Operator</u>	<u>Well Status</u>
VGEU 01-01	New Mexico K State	31	3002520721	L	28 17S 35E	2310 FS, 330 FW	Exxon	GLOR PROD
VGEU 01-02	New Mexico K State	29	3002520719	K	28 17S 35E	2310 FS, 1981 FW	Exxon	GLOR PROD
VGEU 01-03	New Mexico K State	25	3002520715	J	28 17S 35E	2310 FS, 1981 FE	Exxon	GLOR PROD
VGEU 01-04	New Mexico K State	23	3002520714	I	28 17S 35E	2310 FS, 330 FE	Exxon	GLOR PROD
VGEU 01-05	New Mexico K State	34	3002530436	L	28 17S 35E	1286 FS, 1333 FW	Exxon	GLOR PROD
VGEU 01-06	New Mexico K State	35	3002530437	O	28 17S 35E	1195 FS, 2518 FE	Exxon	GLOR PROD
VGEU 01-07	New Mexico K State	36	3002530805	M	28 17S 35E	430 FS, 330 FW	Exxon	GLOR PROD
VGEU 01-08	New Mexico K State	32	3002520722	M	28 17S 35E	330 FS, 330 FW	Exxon	P&A GLOR PROD
VGEU 01-09	New Mexico K State	27	3002520717	N	28 17S 35E	330 FS, 1980 FW	Exxon	GLOR PROD
VGEU 01-10	New Mexico K State	21	3002520712	O	28 17S 35E	330 FS, 1980 FE	Exxon	GLOR PROD
VGEU 01-11	New Mexico K State	19	3002520710	P	28 17S 35E	330 FS, 330 FE	Exxon	TA GLOR PROD
VGEU 01-13				P	28 17S 35E	1320 FS, 1320 FE		NEW DRILL PROD
VGEU 01W12				L	28 17S 35E	1320 FS, 100 FW		NEW DRILL INJ
VGEU 01W14				M	28 17S 35E	100 FS, 1320 FW		NEW DRILL INJ
VGEU 01W15				P	28 17S 35E	100 FS, 1320 FE		NEW DRILL INJ
VGEU 02-01	New Mexico K State	30	3002520720	B	32 17S 35E	330 FN, 2306 FE	Exxon	GLOR PROD
VGEU 02-02	New Mexico K State	28	3002520718	A	32 17S 35E	330 FN, 330 FE	Exxon	GLOR PROD
VGEU 02-03	New Mexico K State	26	3002520716	G	32 17S 35E	1980 FN, 2306 FE	Exxon	GLOR PROD
VGEU 02-04	New Mexico K State	24	3002521008	H	32 17S 35E	1865 FN, 330 FE	Exxon	GLOR PROD
VGEU 02-05	New Mexico K State	22	3002520713	J	32 17S 35E	1980 FS, 2307 FE	Exxon	P&A GLOR PROD
VGEU 02-06	New Mexico K State	18	3002520709	I	32 17S 35E	1830 FS, 510 FE	Exxon	GLOR PROD
VGEU 02-07	New Mexico K State	20	3002520711	O	32 17S 35E	330 FS, 2308 FE	Exxon	GLOR PROD
VGEU 02-08	New Mexico K State	17	3002502971	P	32 17S 35E	330 FS, 330 FE	Exxon	TA GLOR PROD
VGEU 02-11				A	32 17S 35E	1200 FN, 1320 FE		NEW DRILL PROD
VGEU 02W09				B	32 17S 35E	1320 FN, 2650 FW		NEW DRILL INJ
VGEU 02W12				H	32 17S 35E	2640 FN, 1320 FE		NEW DRILL INJ
VGEU 03-01	Skelly J State	2	3002520854	C	31 17S 35E	760 FN, 1790 FW	Texaco	
VGEU 03W02				C	31 17S 35E	100 FN, 1320 FW		NEW LL INJ
VGEU 04-01	Skelly P State	4	3002520856	D	33 17S 35E	810 FN, 660 FW	Texaco	GLOR PROD
VGEU 04-02	Skelly P State	3	3002520855	C	33 17S 35E	779 FN, 2285 FW	Texaco	GLOR PROD
VGEU 04W03				D	33 17S 35E	1200 FN, 100 FW		NEW DRILL INJ
VGEU 04W04				C	33 17S 35E	1310 FN, 1320 FW		NEW DRILL INJ
VGEU 05-01	State M	1	3002520828	J	29 17S 35E	1980 FS, 1980 FE	Shell	GLOR PROD
VGEU 05-02	State M	3	3002520830	I	29 17S 35E	1980 FS, 660 FE	Shell	GLOR PROD
VGEU 05-03	State M	2	3002520829	O	29 17S 35E	460 FS, 1980 FE	Shell	GLOR PROD
VGEU 05-04	State M	4	3002520831	P	29 17S 35E	330 FS, 450 FE	Shell	GLOR PROD
VGEU 05-06				O	29 17S 35E	1330 FS, 1330 FE		NEW DRILL PROD
VGEU 05W05				J	29 17S 35E	1320 FS, 2650 FW		NEW DRILL INJ
VGEU 05W07				O	29 17S 35E	100 FS, 2650 FW		NEW DRILL INJ
VGEU 05W08				P	29 17S 35E	100 FS, 1320 FE		NEW DRILL INJ
VGEU 06-01	State T	10	3002520232	J	33 17S 35E	2310 FS, 1980 FE	Shell	GLOR PROD
VGEU 06-02	State T	9	3002520330	I	33 17S 35E	2310 FS, 660 FE	Shell	TA GLOR PROD
VGEU 07-01	State V	5	3002520286	I	27 17S 35E	2310 FS, 990 FE	Shell	TA GLOR PROD

VACUUM GLORIETA EAST UNIT

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PROPOSED WELL NUMBERING SCHEME

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Lease Name</u>	<u>Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec-Tn-Rg</u>	<u>Footage</u>	<u>Former Operator</u>	<u>Well Status</u>
VGEU 08-01	State E	2	3002520823	N	31 17S 35E	660 FS, 1700 FW	Shell	GLOR PROD
VGEU 08W02				N	31 17S 35E	300 FS, 1320 FW		NEW LL INJ
VGEU 09-01	State B	3	3002520821	I	30 17S 35E	1980 FS, 860 FE	Shell	GLOR PROD
VGEU 09-02	State B	4	3002520822	P	30 17S 35E	660 FS, 990 FE	Shell	GLOR PROD
VGEU 09W03				P	30 17S 35E	1320 FS, 1310 FE		NEW DRILL INJ
VGEU 09W04				P	30 17S 35E	100 FS, 1310 FE		NEW DRILL INJ
VGEU 10-01	State N	6	3002520834	B	28 17S 35E	990 FN, 1880 FE	Shell	TA GLOR PROD
VGEU 10-02	State N	4	3002520832	G	28 17S 35E	2180 FN, 1980 FE	Shell	SI GLOR PROD
VGEU 10-03	State N	5	3002520833	H	28 17S 35E	2310 FN, 330FE	Shell	GLOR PROD
VGEU 10W04				H	28 17S 35E	1500 FN, 1320 FE		NEW DRILL INJ
VGEU 10W05				G	28 17S 35E	2630 FN, 2650 FW		NEW DRILL INJ
VGEU 10W06				H	28 17S 35E	2630 FN, 1320 FE		NEW DRILL INJ
VGEU 11-01	State K	8	3002520624	B	27 17S 35E	990 FN, 2310 FE	Oxy	GLOR PROD
VGEU 11-02	State K	7	3002520301	A	27 17S 35E	990 FN, 330 FE	Oxy	SI GLOR PROD
VGEU 11-03	State K	6	3002520253	G	27 17S 35E	2310 FN, 1750 FE	Oxy	SI GLOR PROD
VGEU 11-04	State K	5	3002520201	H	27 17S 35E	2310 FN, 330 FE	Oxy	P&A GLOR PROD
VGEU 12-01	Santa Fe	117	3002523700	N	27 17S 35E	990 FS, 1650 FW	Phillips	GLOR PROD
VGEU 12-02	Santa Fe	90	3002520582	M	27 17S 35E	330 FS, 660 FW	Phillips	GLOR PROD
VGEU 13-01	Santa Fe	94	3002520788	D	26 17S 35E	990 FN, 335 FW	Phillips	GLOR PROD
VGEU 13-03	Santa Fe	89	3002520526	E	26 17S 35E	2310 FN, 330 FW	Phillips	SI GLOR PROD
VGEU 14-01	Santa Fe	109	3002520802	G	29 17S 35E	2323 FN, 2213 FE	Phillips	SI GLOR PROD
VGEU 15-01	Santa Fe	101	3002520795	J	30 17S 35E	1880 FS, 1880 FE	Phillips	GLOR PROD
VGEU 15-02	Santa Fe	100	3002520794	O	30 17S 35E	810 FS, 1955 FE	Phillips	GLOR PROD
VGEU 15W03				J	30 17S 35E	2650 FN, 2650 FW		NEW DRILL INJ
VGEU 15W04				O	30 17S 35E	1320 FS, 2650 FW		NEW DRILL INJ
VGEU 15W05				O	30 17S 35E	100 FS, 2650 FW		NEW DRILL INJ
VGEU 16-01	Santa Fe	99	3002520793	D	5 18S 35E	330 FN, 660 FW	Phillips	SI GLOR PROD
VGEU 16W04				E	5 18S 35E	1320 FN, 100 FW		NEW LL INJ
VGEU 17-01	State K	9	3002521096	J	31 17S 35E	2110 FS, 1980 FE	Phillips	SI GLOR PROD
VGEU 17-02	State K	7	3002520864	I	31 17S 35E	2080 FS, 660 FE	Phillips	GLOR PROD
VGEU 17-03	State K	8	3002520865	P	31 17S 35E	760 FS, 660 FE	Phillips	GLOR PROD
VGEU 18-01	State BC	3	3002520985	M	33 17S 35E	900 FS, 330 FW	Texaco	P&A GLOR PROD
VGEU 19-01	State B1576	7	3002520846	L	32 17S 35E	2310 FS, 660 FW	ARCO	GLOR PROD
VGEU 19-02	State B1576	6	3002520845	K	32 17S 35E	2310 FS, 2310 FW	ARCO	GLOR PROD
VGEU 19-03	State B1576	8	3002520847	M	32 17S 35E	660 FS, 500 FW	ARCO	GLOR PROD
VGEU 19-04	State B1576	5	3002520844	N	32 17S 35E	760 FS, 2310 FW	ARCO	GLOR PROD
VGEU 20-01	State B1578	3	3002521352	F	30 17S 35E	1980 FN, 1800 FW	ARCO	GLOR PROD
VGEU 20W02				F	30 17S 35E	2640 FN, 1320 FW		NEW LL INJ
VGEU 22-01	Santa Fe	132	3002530506	B	33 17S 35E	330 FN, 2310 FE	Phillips	GLOR PROD
VGEU 22-02	Santa Fe	95	3002520789	B	33 17S 35E	990 FN, 1980 FE	Phillips	GLOR PROD
VGEU 22-03	Santa Fe	91	3002520785	A	33 17S 35E	860 FN, 660 FE	Phillips	GLOR PROD

VACUUM GLORIETA EAST UNIT

ATTACHMENT III TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

PROPOSED WELL NUMBERING SCHEME

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Lease Name</u>	<u>Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec-Tn-Rg</u>	<u>Footage</u>	<u>Former Operator</u>	<u>Well Status</u>
VGEU 23-01	Warn State AC 1	5	3002520750	F	31 17S 35E	2122 FN, 2227 FW	Marathon	SI GLOR PROD
VGEU 23-02	Warn State AC 1	4	3002520749	K	31 17S 35E	2311 FS, 2226 FW	Marathon	SI GLOR PROD
VGEU 23W03				K	31 17S 35E	2640 FN, 1320 FW		NEW LL INJ
VGEU 24-01	Warn State AC 3	8	3002524806	H	33 17S 35E	1650 FN, 990 FE	Marathon	SI GLOR PROD
VGEU 24-02	Warn State AC 3	6	3002520751	G	33 17S 35E	1980 FN, 1650 FE	Marathon	GLOR PROD
VGEU 24-03	Warn State AC 3	7	3002520752	F	33 17S 35E	2310 FN, 2310 FW	Marathon	GLOR PROD
VGEU 24-04	Warn State AC 3	9	3002528039	H	33 17S 35E	2310 FN, 580 FW	Marathon	SI GLOR PROD
VGEU 24-06				K	33 17S 35E	1330 FN, 2640 FW		NEW DRILL PROD
VGEU 25-01	State 3 32	8	3002521012	D	32 17S 35E	760 FN, 660 FW	Chevron	GLOR PROD
VGEU 25-02	State 3 32	7	3002520886	C	32 17S 35E	760 FN, 1980 FW	Chevron	GLOR PROD
VGEU 25-03	State 3 32	6	3002520885	E	32 17S 35E	1880 FN, 660 FW	Chevron	GLOR PROD
VGEU 25-04	State 3 32	5	3002520884	F	32 17S 35E	2080 FN, 1980 FW	Chevron	GLOR PROD
VGEU 25W06				C	32 17S 35E	1320 FN, 1320 FW		NEW DRILL INJ
VGEU 26-01	State 5 27	8	3002520883	D	27 17S 35E	990 FN, 330 FW	Chevron	SI GLOR PROD
VGEU 26-02	State 5 27	7	3002521011	C	27 17S 35E	990 FN, 2173 FW	Chevron	GLOR PROD
VGEU 26-03	State 5 27	6	3002520882	E	27 17S 35E	2310 FN, 330 FW	Chevron	GLOR PROD
VGEU 26-04	State 5 27	5	3002520881	F	27 17S 35E	1980 FN, 2110 FW	Chevron	SI GLOR PROD
VGEU 26-06				F	27 17S 35E	1500 FN, 1320 FW		NEW DRILL PROD
VGEU 26W07				F	27 17S 35E	2630 FN, 1320 FW		NEW DRILL INJ
VGEU 27-01	State 4 27	10	3002520880	L	27 17S 35E	1650 FS, 330 FW	Chevron	GLOR PROD
VGEU 27-02	State 4 27	7	3002502901	K	27 17S 35E	1980 FS, 2180 FW	Chevron	GLOR PROD
VGEU 27-03	State 4 27	6	3002502900	J	27 17S 35E	1980 FS, 2180 FE	Chevron	SI GLOR PROD
VGEU 27-05	State 4 27	5	3002502899	O	27 17S 35E	660 FS, 2100 FE	Chevron	GLOR PROD
VGEU 28-01	State 6 34	11	3002521383	L	34 17S 35E	2310 FS, 330 FW	Chevron	SI GLOR PROD
VGEU 29-01	Santa Fe	103	3002520797	K	29 17S 35E	1655 FS, 1980 FW	Phillips	GLOR PROD
VGEU 29-02				K	29 17S 35E	1320 FS, 1330 FW		NEW DRILL PROD
VGEU 30-01	Santa Fe	102	3002520796	O	31 17S 35E	690 FS, 2110 FE	Phillips	GLOR PROD
VGEU 30W02				O	31 17S 35E	100 FS, 1320 FE		NEW LL INJ
VGEU 32-01	Santa Fe	106	3002520799	H	29 17S 35E	2323 FN, 660 FE	Phillips	GLOR PROD
VGEU 33-01	Santa Fe	108	3002520801	A	28 17S 35E	990 FN, 431 FE	Phillips	GLOR PROD
VGEU 34-01	Staplin State AC 1	4	3002520746	K	30 17S 35E	1650 FS, 1650 FW	Marathon	GLOR PROD
VGEU 34-02	Staplin State AC 1	3	3002521009	N	30 17S 35E	330 FS, 1576 FW	Marathon	GLOR PROD
VGEU 35-01	State M	13	3002520866	D	34 17S 35E	330 FN, 330 FW	Phillips	GLOR PROD
VGEU 35-02	State M	14	3002520867	C	34 17S 35E	330 FN, 1650 FW	Phillips	SI GLOR PROD
VGEU 35-03	State M	15	3002520868	E	34 17S 35E	1980 FN, 380 FW	Phillips	SI GLOR PROD
VGEU 36-01	State H	2	3002520826	L	29 17S 35E	1800 FS, 660 FW	Shell	GLOR PROD
VGEU 36W02				L	29 17S 35E	1330 FS, 100 FW		NEW DRILL INJ
VGEU 37-01	State A	7	3002520819	B	31 17S 35E	660 FN, 2180 FE	Shell	GLOR PROD
VGEU 37-02	State A	5	3002520370	A	31 17S 35E	990 FN, 660 FE	Shell	TA GLOR PROD
VGEU 37-03	State A	6	3002520290	G	31 17S 35E	2310 FN, 1980 FE	Shell	GLOR PROD
VGEU 37-04	State A	8	3002520820	H	31 17S 35E	2180 FN, 660 FE	Shell	GLOR PROD

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PROPOSED WELL NUMBERING SCHEME

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Lease Name</u>	<u>Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec-Tn-Rg</u>	<u>Footage</u>	<u>Former Operator</u>	<u>Well Status</u>
VGEU 38-01	State F	3	3002520824	M	29 17S 35E	800 FS, 800 FW	Shell	GLOR PROD
VGEU 38-02	State F	4	3002520825	N	29 17S 35E	330 FS, 1980 FW	Shell	GLOR PROD
VGEU 38W03				M	29 17S 35E	100 FS, 100 FW		NEW DRILL INJ
VGEU 38W04				N	29 17S 35E	100 FS, 1320 FW		NEW DRILL INJ
VGEU 39-01	State I	2	3002502938	E	29 17S 35E	2310 FN, 330 FW	Shell	GLOR PROD
VGEU 40-01	Santa Fe	104	3002520798	F	28 17S 35E	2130 FN, 1980 FW	Phillips	GLOR PROD
VGEU 41-01	Santa Fe	107	3002520800	C	28 17S 35E	990 FN, 2310 FW	Phillips	P&A GLOR PROD
VGEU 41-02	Santa Fe	105	3002521080	E	28 17S 35E	2322 FN, 660 FW	Phillips	GLOR PROD
VGEU 42-01	Santa Fe	131	3002530505	E	33 17S 35E	1655 FN, 990 FW	Phillips	GLOR PROD
VGEU 42-02	Santa Fe	96	3002520790	E	33 17S 35E	2180 FN, 660 FW	Phillips	GLOR PROD
VGEU 42W03				E	33 17S 35E	2640 FN, 100 FW		NEW DRILL INJ
VGEU 43-01	Santa Fe	92	3002520786	K	33 17S 35E	2105 FS, 1980 FW	Phillips	GLOR PROD
VGEU 44-01	State O	2	3002520869	L	33 17S 35E	1700FS, 990 FW	Phillips	SI GLOR PROD
VGEU 45-01	State L DE	2	3002521353	G	30 17S 35E	2310 FN, 2310 FE	ARCO	GLOR PROD
VGEU 45W02				G	30 17S 35E	1330 FN, 2650 FW		NEW DRILL INJ
VGEU 46-01	State CG NCT 2	1	3002520957	F	29 17S 35E	2310 FN, 1750 FW	Texaco	REPLACE WELL
VGEU 47-01	State CG NCT 1	2	3002520958	H	30 17S 35E	2310 FN, 400 FE	Texaco	REPLACE WELL

VACUUM GLORIETA EAST UNIT

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PROPOSED PRODUCING WELLS CONVERTED TO INJECTION WELLS

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

New Well Designation	Lease Name	Well No.	Operator	API Number	TOC *	Construction	Injection Information	Unit	Sec-Tn-Rq	Footage	Current Well Status
VGEU 01-05	New Mexico K State	34	Exxon	3002530436	4975' C	See Diagram	See Injection	L	28 17S	35E	GLOR PROD
VGEU 01-06	New Mexico K State	35	Exxon	3002530437	4967' C	"	Well Data	O	28 17S	35E	GLOR PROD
VGEU 06-01	State T	10	Shell	3002520232	Surface	"	Sheet	J	33 17S	35E	GLOR PROD
VGEU 14-01	Santa Fe	109	Phillips	3002520802	2500' M	"	"	G	29 17S	35E	SI GLOR PROD
VGEU 24-01	Warm State AC 3	8	Marathon	3002524806	5528' M	"	"	H	33 17S	35E	SI GLOR PROD
VGEU 27-01	State 4 27	10	Chevron	3002520880	2600' M	"	"	L	27 17S	35E	GLOR PROD
VGEU 32-01	Santa Fe	106	Phillips	3002520799	2600' M	"	"	H	29 17S	35E	GLOR PROD
VGEU 41-02	Santa Fe	105	Phillips	3002521080	2600' M	"	"	E	28 17S	35E	GLOR PROD
VGEU 43-01	Santa Fe	92	Phillips	3002520786	2600' M	"	"	K	33 17S	35E	GLOR PROD
											1286 FS, 1333 FW
											1195 FS, 2518 FE
											2310 FS, 1980 FE
											2323 FN, 2213 FE
											1650 FN, 990 FE
											1650 FS, 330 FW
											2323 FN, 660 FE
											2322 FN, 660 FW
											2105 FS, 1980 FW

* Top Of Cement
M - Measured by Temperature Survey or Cement Bond Log
E - Estimated
C - Calculated using a cement yield of 1.32 cu. Ft. / Sack
and assuming 50 % excess

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

VGEU 01-05
WELL NO.

1286 FS, 1333 FW
FOOTAGE LOCATION

28
SECTION

17S
TOWNSHIP

35E
RANGE

FORMERLY EXXON NEW MEXICO STATE K #34 API# 3002530436

Tabular Data

Surface Casing @ 471'

Size 13.375" Cemented with 500 sx
TOC surface feet determined by Circulation
Hole size 17.5"

Long String @ 6300'

Size 5.5" Cemented with 350 sx
TOC 4975 feet determined by Calculation
Hole size 7.875"
Total depth 6309'

Intermediate Casing @ 4739'

Size 8.625" Cemented with 1200 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Injection Interval

6043' to 6194'
Perforated X
or
Open-Hole

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5950'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

EXXON
NEW MEXICO K STATE NO. 34
API# 3002530436

0 - 471' CEMENT 500 sx
0 - 471' 13.375" OD SURF CSG

(VGEU 01-05)

0 - 471' 17.5 " OD HOLE

0 - 4739' CEMENT 1200 sx

0 - 5950' 2.375" OD TBG

1286 FSL & 1333 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3968 KB
SPUD DATE: 10-23-88
COMPLETION DATE: 12-30-88
COMPLETION INTERVAL: 6043 - 6181 (GLRT)

0 - 4739' 8.625" OD INT CSG

471 - 4739' 12.25 " OD HOLE

4975 - 6300' CEMENT 350 sx

5950 - 5950' PACKER BAKER A-3 LOKSET

0 - 6300' 5.5" OD PROD CSG
6189 - 6192' CIBP

6181 - 6194' PERFS

6043 - 6181' PERFS

4739 - 6309' 7.875 " OD HOLE

KB ELEV: 3967'

TD: 6309'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY

VACUUM GLORIETA EAST UNIT

OPERATOR

LEASE

VGEU 01-06

1195 FS, 2518 FE

28

17S

35E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

FORMERLY EXXON NEW MEXICO STATE K #35

API# 3002530437

Tabular Data

Surface Casing @ 469'

Size 13.375" Cemented with 500 sx
 TOC surface feet determined by Circulation
 Hole size 17.5"

Long String @ 6300'

Size 5.5" Cemented with 350 sx
 TOC 4967 feet determined by Calculation
 Hole size 7.875"
 Total depth 6300'

Intermediate Casing @ 4764'

Size 8.625" Cemented with 1950 sx
 TOC surface feet determined by Circulation
 Hole size 12.25"

Injection Interval

6014' to 6152'
 Perforated X
 or
 Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5925'
 (brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

EXXON
NEW MEXICO K STATE NO. 35
API# 3002530437

(VGEU 01-06)

0 - 469' CEMENT 500 sx
0 - 469' 13.375" OD SURF CSG

0 - 469' 17.5 " OD HOLE



0 - 4764' CEMENT 1950 sx

0 - 5925' 2.375" OD TBG

1195 FSL & 2518 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3954 KB
SPUD DATE: 11-19-88
COMPLETION DATE: 12-29-88
COMPLETION INTERVAL: 6014 - 6152 (PDCK)

0 - 4764' 8.625" OD INT CSG

469 - 4764' 12.25 " OD HOLE

4967 - 6300' CEMENT 350 sx

5925 - 5925' PACKER BAKER A-3 LOKSET

6014 - 6152' PERFS

0 - 6300' 5.5" OD PROD CSG

4764 - 6300' 7.875 " OD HOLE

KB ELEV: 3939'

PBTD: 6280'

TD: 6300'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY

VACUUM GLORIETA EAST UNIT

OPERATOR

LEASE

VGEU 06-01

2310 FS, 1980 FE

33

17S

35E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

FORMERLY SHELL STATE T #10

API# 3002520232

Tabular Data

Surface Casing @ 1614'

Size 8.625" Cemented with 410 sx
TOC surface feet determined by Circulation
Hole size 12"

Long String @ 6238'

Size 5.5" Cemented with 950 sx
TOC surface feet determined by Circulation
Hole size 7.875"
Total depth 6240'

Intermediate Casing

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Injection Interval

5983' to 6202'
Perforated X
or
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5900'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

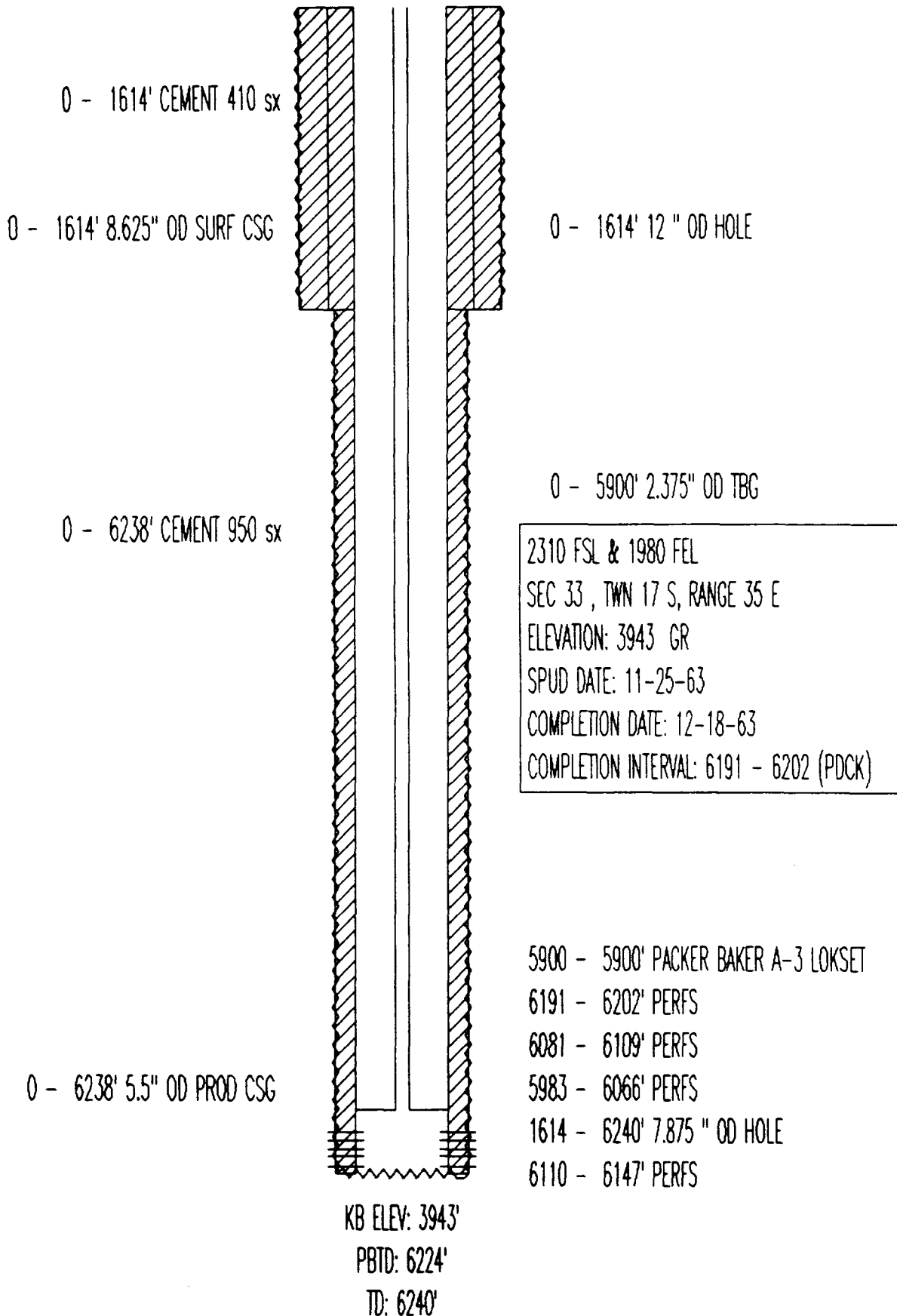
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

SHELL
STATE T NO. 10
API# 3002520232
(VGEU 06-01)



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

VGEU 14-01
WELL NO.

2323 FN, 2213 FE
FOOTAGE LOCATION

29
SECTION

17S
TOWNSHIP

36E
RANGE

FORMERLY PHILLIPS SANTA FE #109 API# 3002520802

Tabular Data

Surface Casing @ 1664'

Size 8.625" Cemented with 590 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Long String @ 6250'

Size 4.5" Cemented with 800 sx
TOC 2500' feet determined by CBL
Hole size 7.875"
Total depth 6250'

Intermediate Casing

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Injection Interval

6152' to 6174'
Perforated X
or
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 6050'
(brand & model)

Other Data

- Name of the injection formation Paddock
- Name of the Field or Pool VACUUM
- Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

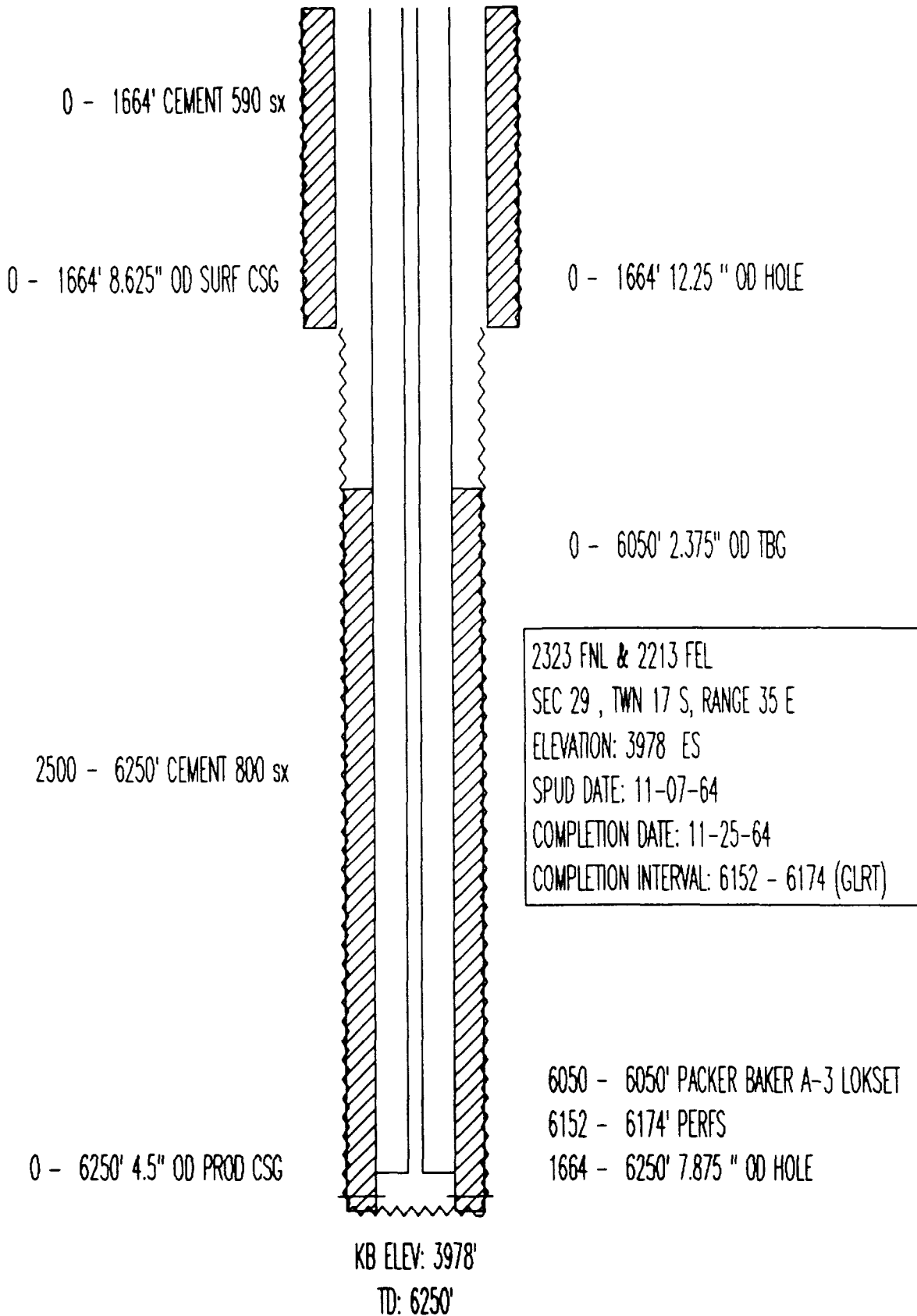
NO

- Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

PHILLIPS PET
SANTA FE NO. 109
API# 3002520802
(VGEU 14-01)



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

VGEU 24-01
WELL NO.

1650 FN, 990 FE
FOOTAGE LOCATION

33
SECTION

17S
TOWNSHIP

35E
RANGE

FORMERLY MARATHON WARM ST. AC3 #8 API# 3002524806

Tabular Data

Surface Casing @ 1481'

Size 8.625" Cemented with 750 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Liner 4738' - 6286'

Size 5.5" Cemented with 200 sx
TOC 4738' feet determined by Circulation
Hole size 6.25
Total depth 6292'

Intermediate Casing @ 4821'

Size 7" Cemented with 480 sx
TOC surface feet determined by Circulation
Hole size 7.875

Injection Interval

6099' to 6122'
Perforated X
or
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 6000'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

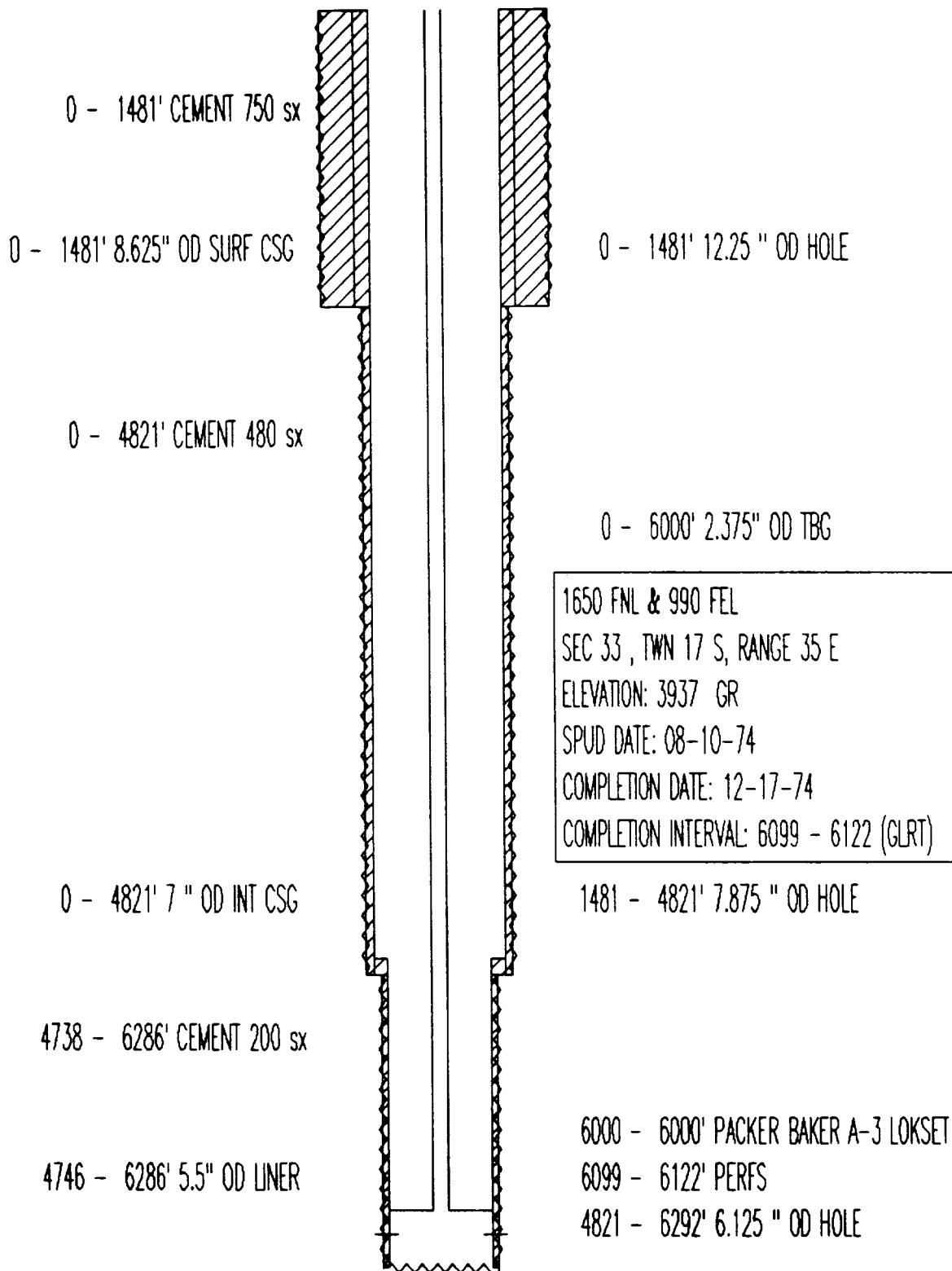
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

MARATHON OIL
 WARN STATE AC3 NO. 8
 API# 3002524806
 (VGEU 24-01)



KB ELEV: 3937'
 PBTD: 6252'
 TD: 6292'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY

VACUUM GLORIETA EAST UNIT

OPERATOR

LEASE

VGEU 27-01

1650 FS, 330 FW

27

17S

35E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

FORMERLY CHEVRON STATE 4-27 #10 API# 3002520880

Tabular Data

Surface Casing @ 1602'

Size 8.625" Cemented with 950 sx
 TOC surface feet determined by Circulation
 Hole size 11"

Long String @ 6262'

Size 4.5" Cemented with 870 sx
 TOC 2600' feet determined by Temp. Survey
 Hole size 7.875"
 Total depth 6268'

Intermediate Casing

Size _____ Cemented with _____
 TOC _____ feet determined by _____
 Hole size _____

Injection Interval

6102' to 6138'
 Perforated X
 or _____
 Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 6005'
 (brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO
 If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

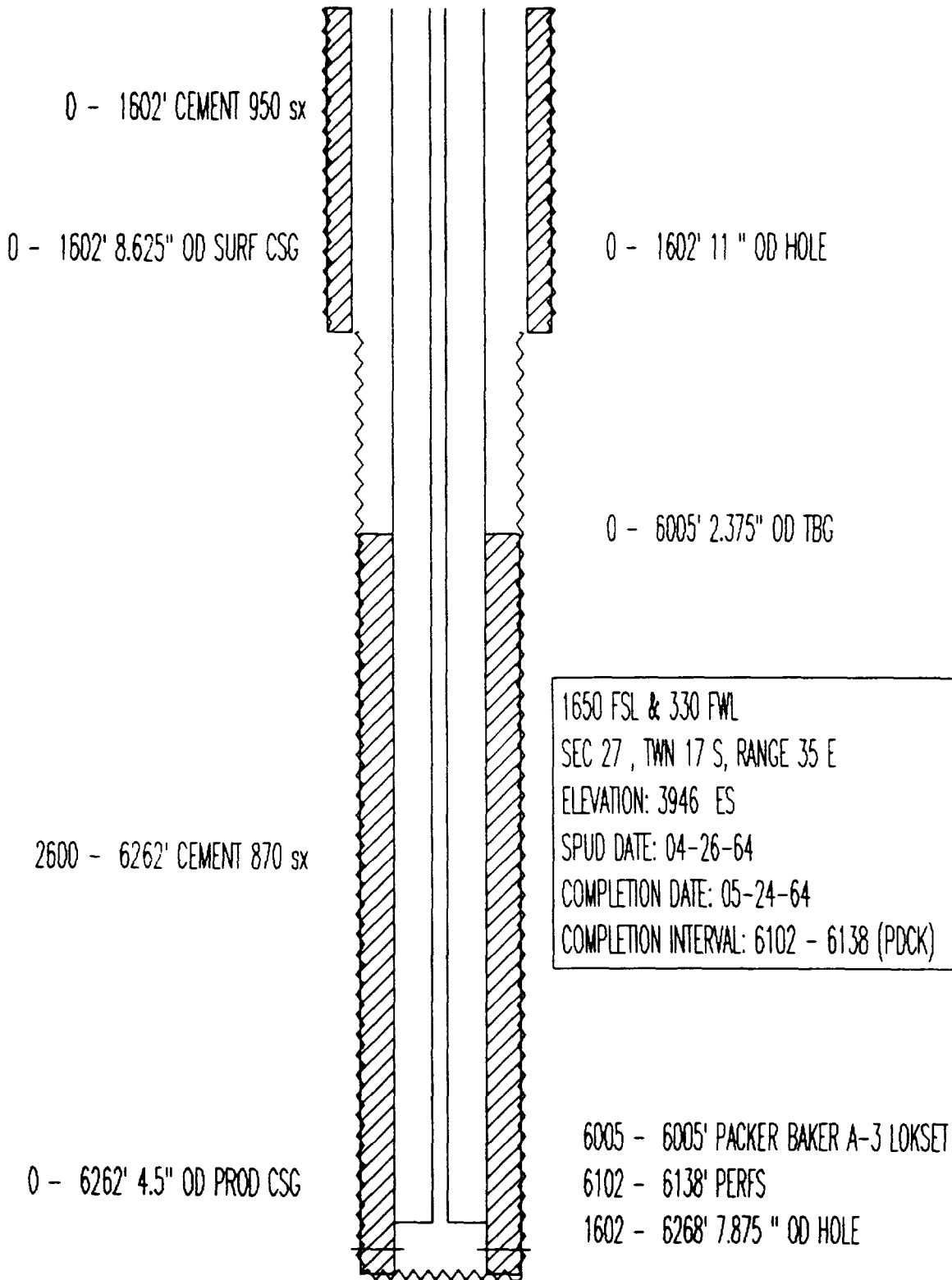
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

CHEVRON
STATE 4-27 NO. 10
API# 3002520880
(VGEU 27-01)



1650 FSL & 330 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3946 ES
SPUD DATE: 04-26-64
COMPLETION DATE: 05-24-64
COMPLETION INTERVAL: 6102 - 6138 (PDCK)

KB ELEV: 3946'
PBD: 6224'
TD: 6268'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY

VACUUM GLORIETA EAST UNIT

OPERATOR

LEASE

VGEU 32-01

2323 FN, 660 FE

29

17S

35E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

FORMERLY PHILLIPS SANTA FE #106

API# 3002520799

Tabular Data

Surface Casing @ 1688'

Size 8.625" Cemented with 640 sx
 TOC surface feet determined by Circulation
 Hole size 12.25"

Intermediate Casing

Size _____ Cemented with _____
 TOC _____ feet determined by _____
 Hole size _____

Long String @ 6155'

Size 4.5" Cemented with 800 sx
 TOC 2600' feet determined by CBL
 Hole size 7.875'
 Total depth 6225'

Injection Interval

6148' to 6168'
 Perforated X
 or _____
 Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 6050'
 (brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

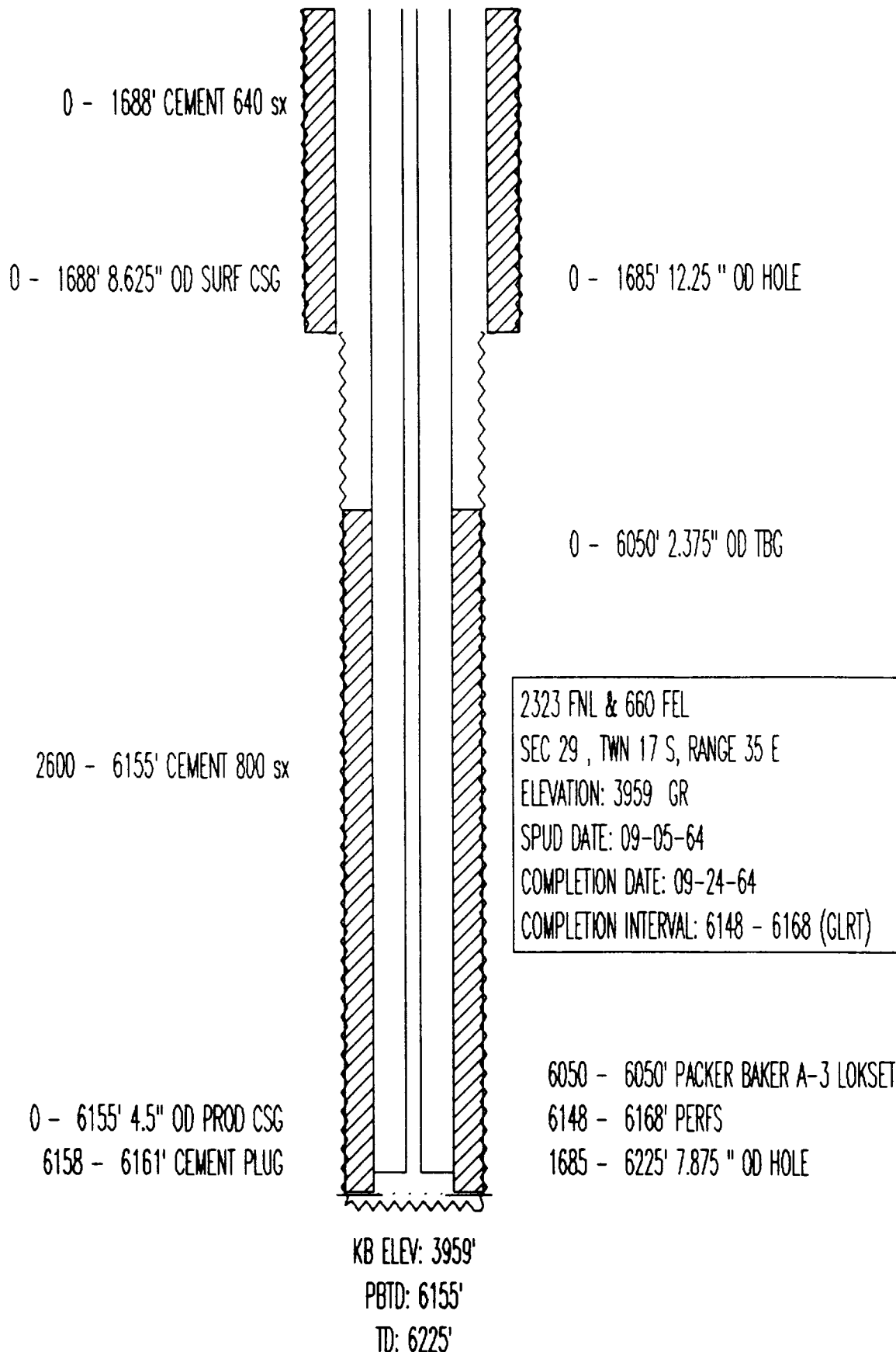
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

PHILLIPS PET
SANTA FE NO. 106
API# 3002520799
(VGEU 32-01)



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

VGEU 41-02

2322 FN, 660 FW

28

17S

36E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

FORMERLY PHILLIPS SANTA FE #105 API# 3002521080

Tabular Data

Surface Casing @ 1700'

Size 8.625" Cemented with 640 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Intermediate Casing

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Long String @ 6250'

Size 4.5" Cemented with 800 sx
TOC 2600' feet determined by CBL
Hole size 7.875"
Total depth 6250'

Injection Interval

6140' to 6159'
Perforated X
or _____
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 6050'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

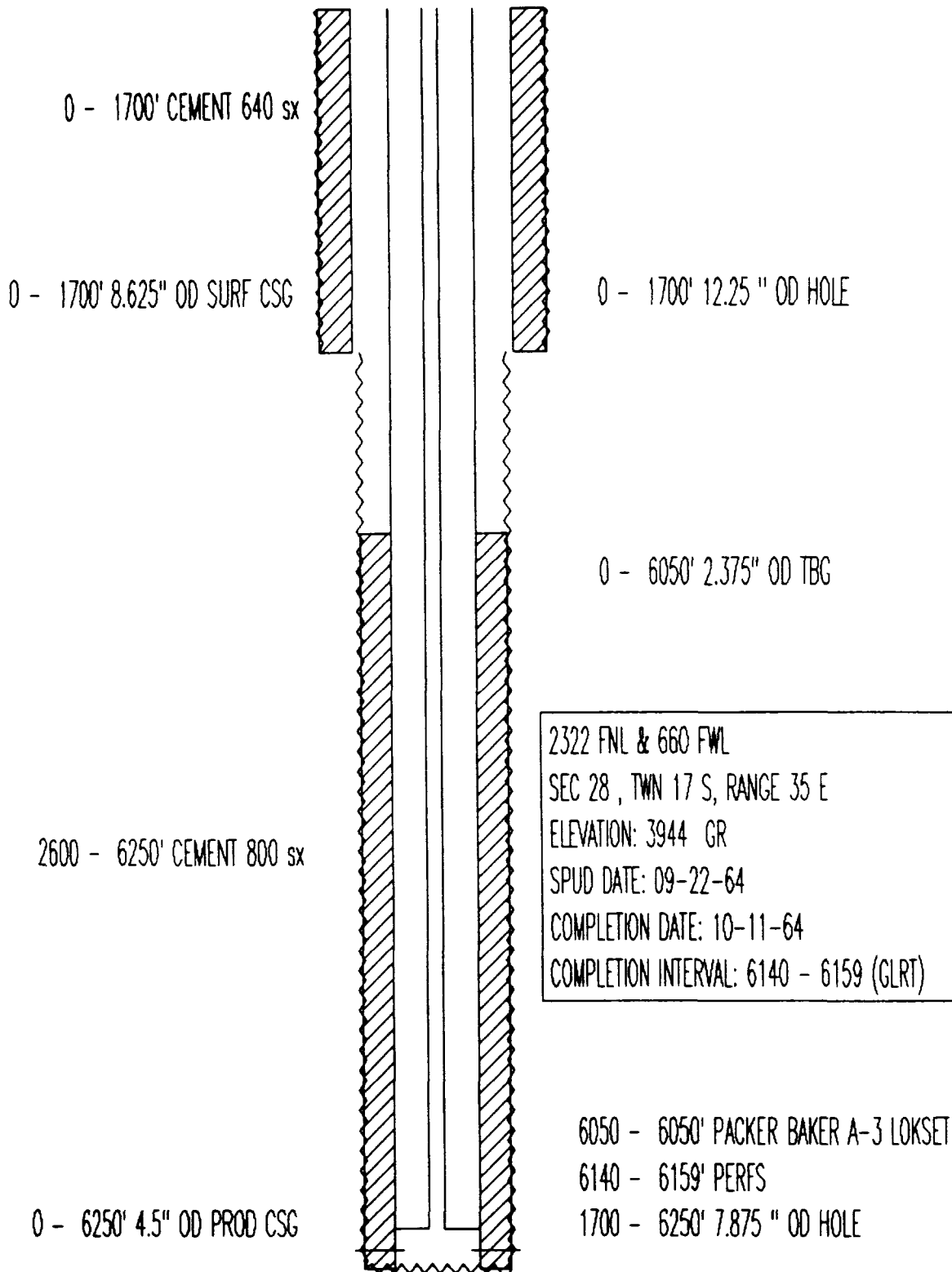
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

PHILLIPS PET
SANTA FE NO. 105
API# 3002521080
(VGEU 41-02)



KB ELEV: 3944'
PBSD: 6199'
TD: 6250'

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

VGEU 43-01
WELL NO.

2105 FS, 1980 FW
FOOTAGE LOCATION

33
SECTION

17S
TOWNSHIP

35E
RANGE

FORMERLY PHILLIPS SANTA FE #92 API# 3002520786

Tabular Data

Surface Casing @ 1623'

Size 8.625" Cemented with 870 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Intermediate Casing

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Long String @ 6226'

Size 4.5" Cemented with 950 sx
TOC surface feet determined by Circulation
Hole size 7.875"
Total depth 6226'
* perf @ 1630' circ cmt to surf

Injection Interval

6124' to 6144'
Perforated X
or _____
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 6025'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

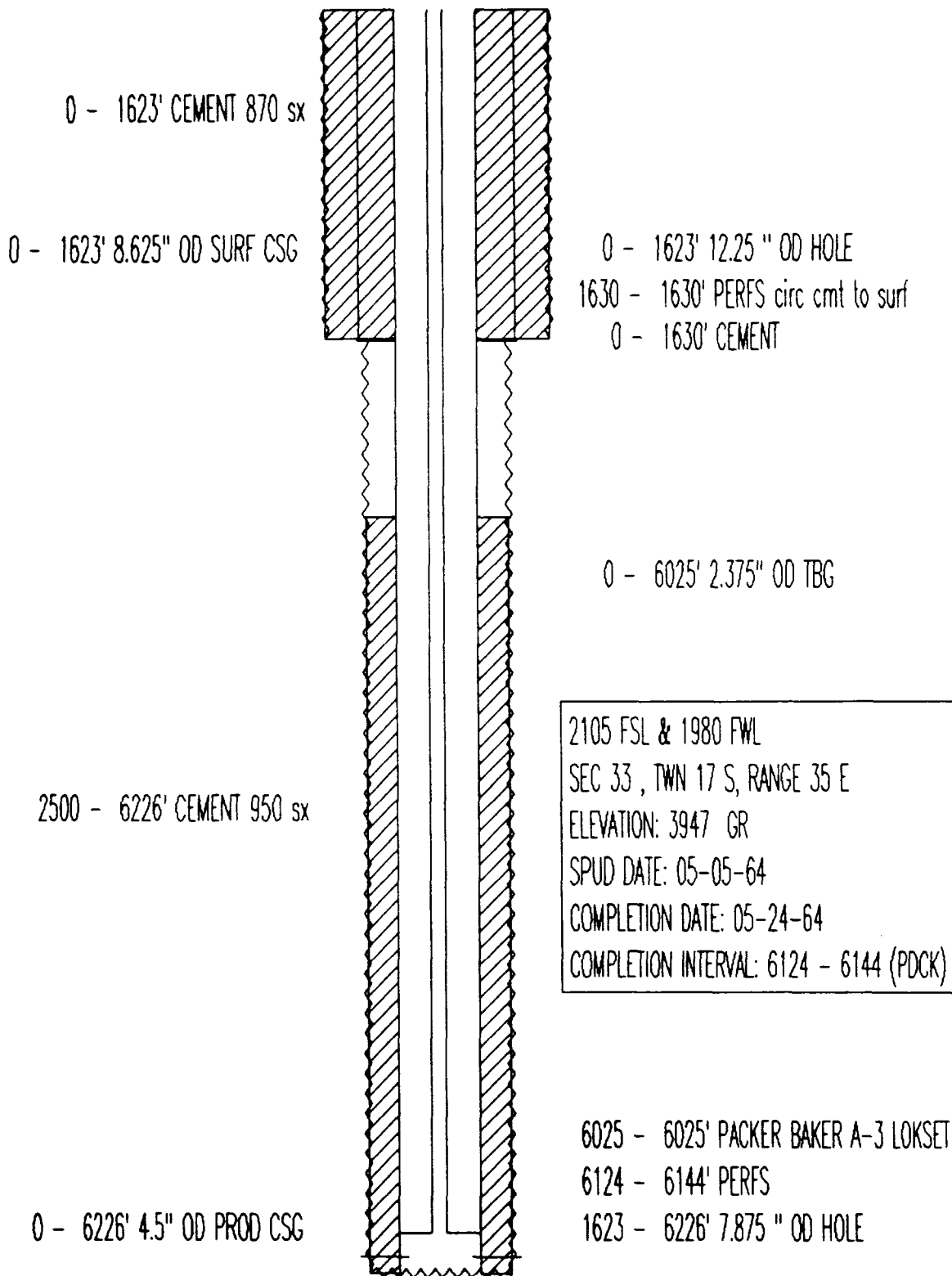
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

PHILLIPS PET
SANTA FE NO. 92
API# 3002520786
(VGEU 43-01)



2105 FSL & 1980 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3947 GR
SPUD DATE: 05-05-64
COMPLETION DATE: 05-24-64
COMPLETION INTERVAL: 6124 - 6144 (PDCK)

6025 - 6025' PACKER BAKER A-3 LOKSET
6124 - 6144' PERFS
1623 - 6226' 7.875" OD HOLE

KB ELEV: 3947'
TD: 6226'

VACUUM GLORIETA EAST UNIT

ATTACHMENT III TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

PROPOSED INFILL PRODUCING WELLS CONVERTED TO INJECTION WELLS

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Former Lease Name</u>	<u>Operator</u>	<u>API Number</u>	<u>TOC *</u>	<u>Construction</u>	<u>Injection Information</u>	<u>Unit</u>	<u>Sec--Tn--Rg</u>	<u>Approximate Footage</u>	<u>Proposed Well Status</u>
VGEU 01-13	New Mexico K State	Phillips		Surface	See Typical	See Typical	P	28 17S 35E	1320 FS, 1320 FE	Infill Producer
VGEU 02-11	New Mexico K State	Phillips		Surface	Well Diagram	Injection Well	A	32 17S 35E	1200 FN, 1320 FE	Infill Producer
VGEU 05-06	State M	Phillips		Surface	.	Data Sheet	O	29 17S 35E	1330 FS, 1330 FE	Infill Producer
VGEU 24-06	Warn State AC 3	Phillips		Surface	.	.	K	33 17S 35E	1330 FN, 2640 FW	Infill Producer
VGEU 26-06	State 5 27	Phillips		Surface	.	.	F	27 17S 35E	1500 FN, 1320 FW	Infill Producer
VGEU 29-02	Santa Fe	Phillips		Surface	.	.	K	29 17S 35E	1320 FS, 1330 FW	Infill Producer

* Top Of Cement

M - Measured by Temperature Survey or Cement Bond Log

E - Estimated

C - Calculated using a cement yield of 1.32 cu. Ft. / Sack
and assuming 50 % excess

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

TYPICAL CONVERSION WELL DRILLED IN THE NON-WATERFLOW AREA

Tabular Data

Surface Casing @ 1600'

Size 8.625 Cemented with 600 sx
TOC surface feet determined by Circulation
Hole size 12.25

Intermediate Casing @ 2700'

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Long String @ 6300'

Size 5.5" Cemented with 1000 sx
TOC surface feet determined by Circulation
Hole size 7.875'
Total depth 6300'

Injection Interval

6000' to 6200'
Perforated X
or _____
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5900'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO

If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

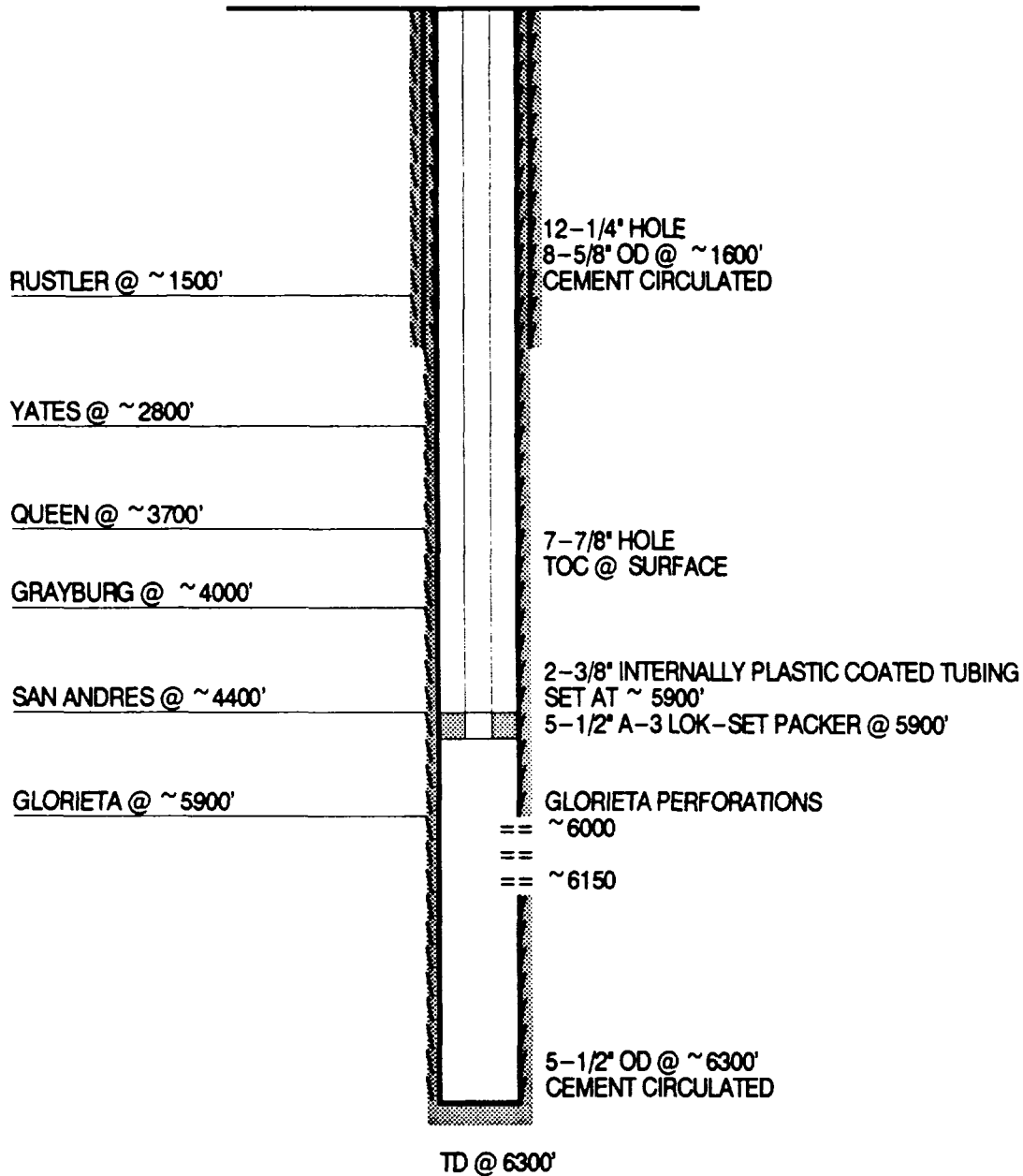
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

VACUUM GLORIETA EAST UNIT
WELL COMPLETION DIAGRAM IN NON - WATERFLOW AREA
5-1/2" INJECTION WELL



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

TYPICAL CONVERSION WELL DRILLED IN THE WATERFLOW AREA

Tabular Data

Surface Casing @ 330'

Size 13.375" Cemented with 150 sx
TOC surface feet determined by Circulation
Hole size 17.5"

Intermediate Casing @ 2700'

Size 8.625" Cemented with 1000 sx
TOC surface feet determined by Circulation
Hole size 12.25"

Long String @ 6300'

Size 5.5" Cemented with 1000 sx
TOC surface feet determined by Circulation
Hole size 7.875"
Total depth 6300'

Injection Interval

6000' to 6200'
Perforated X
or
Open-Hole

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5900'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? NO
If no, for what purpose was the well originally drilled? PADDOCK OIL & GAS PRODUCER

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

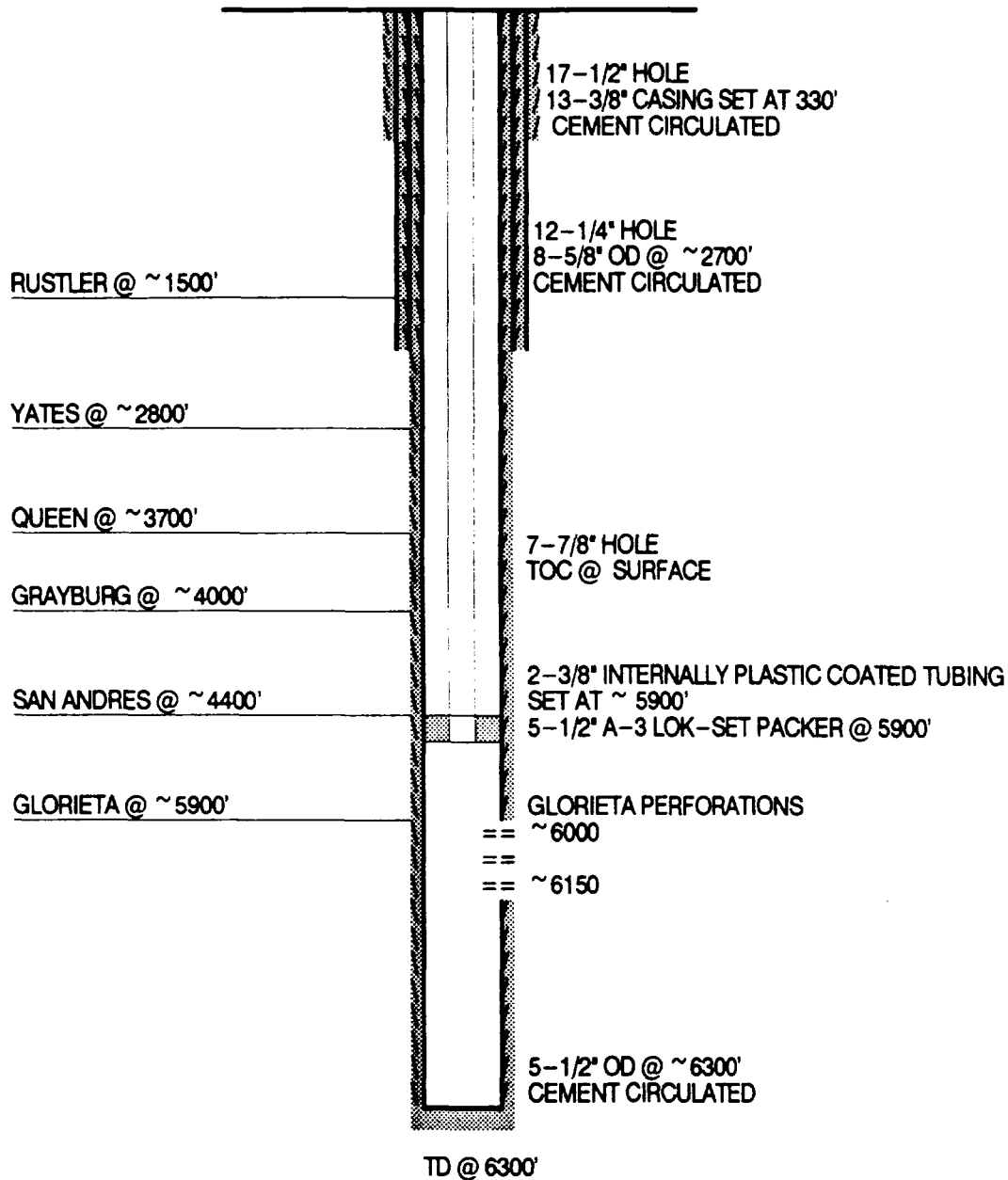
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

VACUUM GLORIETA EAST UNIT
WELL COMPLETION DIAGRAM IN WATERFLOW AREA
5-1/2" INJECTION WELL



**PROPOSED INFILL
INJECTION WELLS**

1

VACUUM GLORIETA EAST UNIT
ATTACHMENT III TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT
PROPOSED DRILLED INJECTION WELLS
(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Former Lease Name</u>	<u>Operator</u>	<u>API Number</u>	<u>TOC *</u>	<u>Construction</u>	<u>Injection Information</u>	<u>Unit</u>	<u>Sec - Tn - Rg</u>	<u>Approximate Footage</u>	<u>Proposed Well Status</u>
VGEU 01W12	New Mexico State K	Phillips		Surface	See Typical	See Typical	L	28 17S 35E	1320 FS, 100 FW	Infill Injector
VGEU 01W14	New Mexico State K	Phillips		Surface	Well Diagram	Injection Well	M	28 17S 35E	100 FS, 1320 FW	Infill Injector
VGEU 01W15	New Mexico State K	Phillips		Surface	"	Data Sheet	P	28 17S 35E	100 FS, 1320 FE	Infill Injector
VGEU 02W09	New Mexico State K	Phillips		Surface	"	"	B	32 17S 35E	1320 FN, 2650 FW	Infill Injector
VGEU 02W12	New Mexico State K	Phillips		Surface	"	"	H	32 17S 35E	2640 FN, 1320 FE	Infill Injector
VGEU 03W02	Skelly J State	Phillips		Surface	"	"	C	31 17S 35E	50 FN, 1370 FW	Infill Injector
VGEU 04W03	Skelly P State	Phillips		Surface	"	"	D	33 17S 35E	1200 FN, 100 FW	Infill Injector
VGEU 04W04	Skelly P State	Phillips		Surface	"	"	C	33 17S 35E	1310 FN, 1320 FW	Infill Injector
VGEU 05W05	State M	Phillips		Surface	"	"	J	29 17S 35E	1320 FS, 2650 FW	Infill Injector
VGEU 05W07	State M	Phillips		Surface	"	"	O	29 17S 35E	100 FS, 2650 FW	Infill Injector
VGEU 05W08	State M	Phillips		Surface	"	"	P	29 17S 35E	100 FS, 1320 FE	Infill Injector
VGEU 08W02	State F	Phillips		Surface	"	"	N	31 17S 35E	50 FS, 1370 FW	Infill Injector
VGEU 09W03	State B	Phillips		Surface	"	"	P	30 17S 35E	1320 FS, 1310 FE	Infill Injector
VGEU 09W04	State B	Phillips		Surface	"	"	P	30 17S 35E	100 FS, 1310 FE	Infill Injector
VGEU 10W04	State N	Phillips		Surface	"	"	H	28 17S 35E	1500 FN, 1320 FE	Infill Injector
VGEU 10W05	State N	Phillips		Surface	"	"	G	28 17S 35E	2630 FN, 2650 FW	Infill Injector
VGEU 10W06	State N	Phillips		Surface	"	"	H	28 17S 35E	2630 FN, 1320 FE	Infill Injector

VACUUM GLORIETA EAST UNIT
ATTACHMENT III TO FORM C-108
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PROPOSED DRILLED INJECTION WELLS
(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

<u>New Well Designation</u>	<u>Former Lease Name</u>	<u>Operator</u>	<u>API Number</u>	<u>TOC *</u>	<u>Construction</u>	<u>Injection Information</u>	<u>Unit</u>	<u>Sec - Tn - Rg</u>	<u>Approximate Footage</u>	<u>Proposed Well Status</u>
VGEU 15W03	Santa Fe	Phillips		Surface	See Typical Well Diagram	See Typical Injection Well	J	30 17S 35E	2650 FN, 2650 FW	Infill Injector
VGEU 15W04	Santa Fe	Phillips		Surface	"	Data Sheet	O	30 17S 35E	1320 FS, 2650 FW	Infill Injector
VGEU 15W05	Santa Fe	Phillips		Surface	"	"	O	30 17S 35E	100 FS, 2650 FW	Infill Injector
VGEU 16W04	Santa Fe	Phillips		Surface	"	"	E	5 18S 35E	660 FN, 50 FW	Infill Injector
VGEU 20W02	State B 1578	Phillips		Surface	"	"	F	30 17S 35E	2510 FS, 1370 FW	Infill Injector
VGEU 23W03	Warn State AC1	Phillips		Surface	"	"	K	31 17S 35E	2640 FN, 1370 FW	Infill Injector
VGEU 25W06	State 3 - 32	Phillips		Surface	"	"	C	32 17S 35E	1320 FN, 1320 FW	Infill Injector
VGEU 26W07	State 5 - 27	Phillips		Surface	"	"	F	27 17S 35E	2630 FN, 1320 FW	Infill Injector
VGEU 30W02	Santa Fe	Phillips		Surface	"	"	O	31 17S 35E	50 FS, 1370 FE	Infill Injector
VGEU 36W02	State H	Phillips		Surface	"	"	L	29 17S 35E	1330 FS, 100 FW	Infill Injector
VGEU 38W03	State F	Phillips		Surface	"	"	M	29 17S 35E	100 FS, 100 FW	Infill Injector
VGEU 38W04	State F	Phillips		Surface	"	"	N	29 17S 35E	100 FS, 1320 FW	Infill Injector
VGEU 42W03	Santa Fe	Phillips		Surface	"	"	E	33 17S 35E	2640 FN, 100 FW	Infill Injector
VGEU 45W02	State L DE	Phillips		Surface	"	"	G	30 17S 35E	1330 FN, 2650 FW	Infill Injector
VGEU 46W01	State CG NCT-2	Phillips		Surface	"	"	F	29 17S 35E	1980 FN, 1980 FW	Repl. Injector
VGEU 47W01	State CG NCT-1	Phillips		Surface	"	"	H	30 17S 35E	1980 FN, 660 FE	Repl. Injector

INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

TYPICAL INJECTION WELL DRILLED IN THE NON-WATERFLOW AREA

Tabular Data

Surface Casing @ 1600'

Size 8.625 Cemented with 600 sx
TOC surface feet determined by Circulation
Hole size 12.25

Long String @ 6300'

Size 5.5" Cemented with 1000 sx
TOC surface feet determined by Circulation
Hole size 7.875'
Total depth 6300'

Intermediate Casing

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole size _____

Injection Interval

6000' to 6200'
Perforated X
or _____
Open-Hole _____

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5900'
(brand & model)

Other Data

1. Name of the injection formation PADDOCK
2. Name of the Field or Pool VACUUM
3. Is this a new well drilled for injection? YES

If no, for what purpose was the well originally drilled? _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

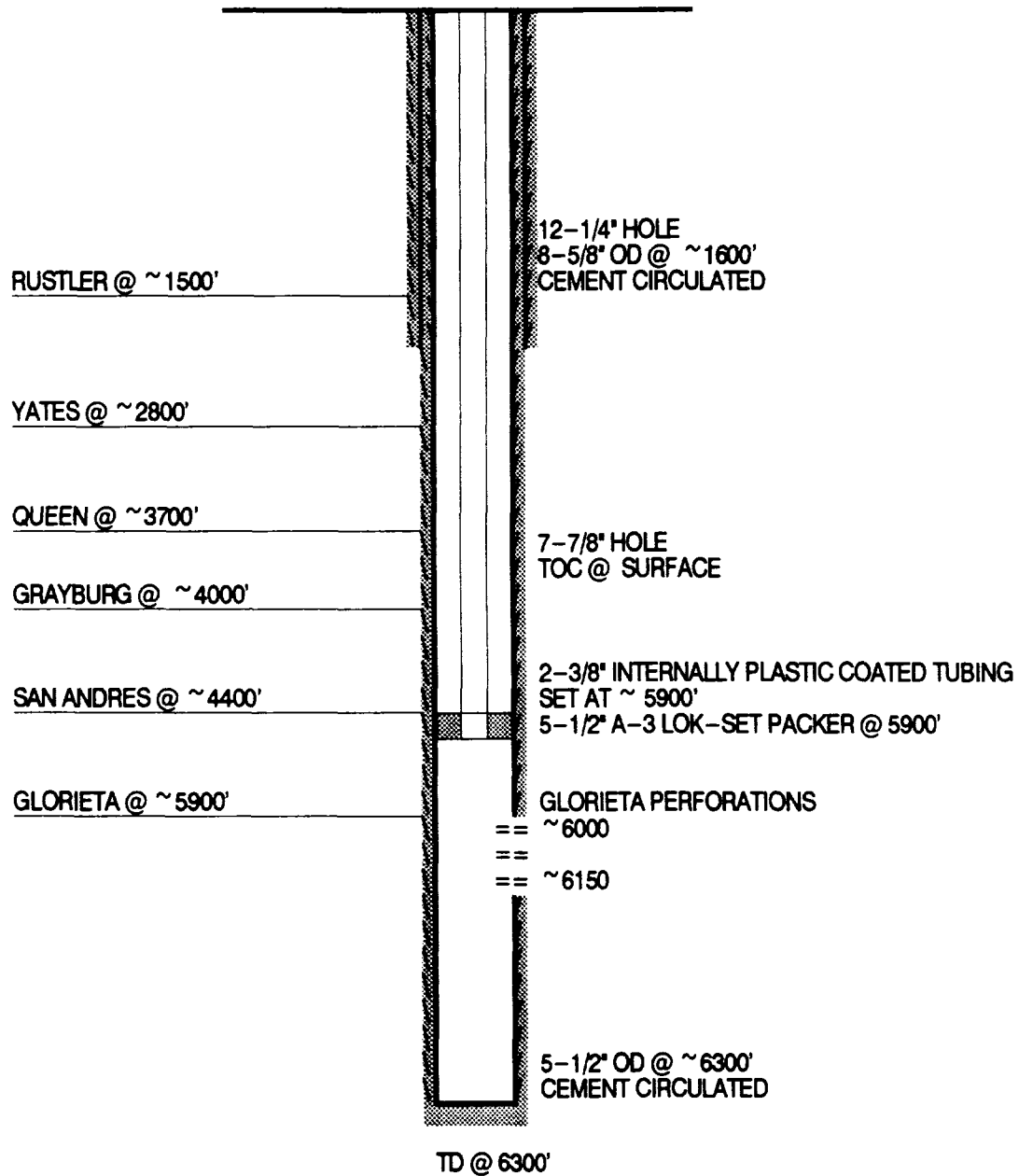
NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'

DRINKARD @ 7600', ABO @ 8000'

VACUUM GLORIETA EAST UNIT
WELL COMPLETION DIAGRAM IN NON-WATERFLOW AREA
5-1/2" INJECTION WELL



INJECTION WELL DATA SHEET

PHILLIPS PETROLEUM COMPANY
OPERATOR

VACUUM GLORIETA EAST UNIT
LEASE

TYPICAL INJECTION WELL DRILLED IN THE WATERFLOW AREA

Tabular Data

Surface Casing @ 330'

Size	13.375"	Cemented with	150 sx
TOC	surface	feet determined by	Circulation
Hole size	17.5		

Intermediate Casing @ 2700'

Size	8.625	Cemented with	1000 sx
TOC	surface	feet determined by	Circulation
Hole size	12.25		

Long String @ 6300'

Size	5.5"	Cemented with	1000 sx
TOC	surface	feet determined by	Circulation
Hole size	7.875'		
Total depth	6300'		

Injection Interval

6000' to 6200'

Perforated or Open-Hole X

Tubing 2.375" 4.7#/ft lined with plastic coating set in a BAKER A-3 LOKSET packer at 5900'
(brand & model)

Other Data

- | | |
|--|---------|
| 1. Name of the injection formation | PADDOCK |
| 2. Name of the Field or Pool | VACUUM |
| 3. Is this a new well drilled for injection? | YES |

If no, for what purpose was the well originally drilled?

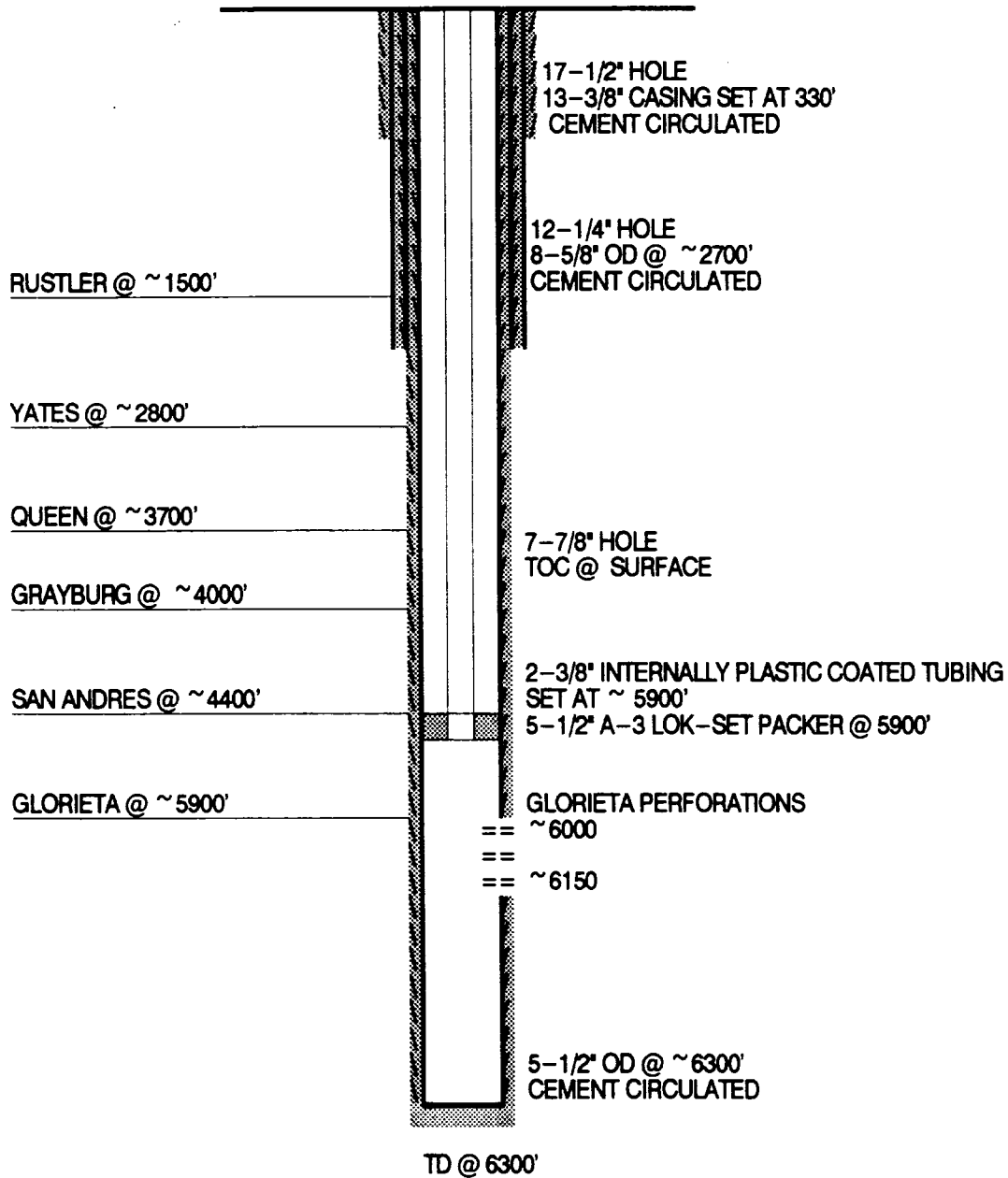
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).

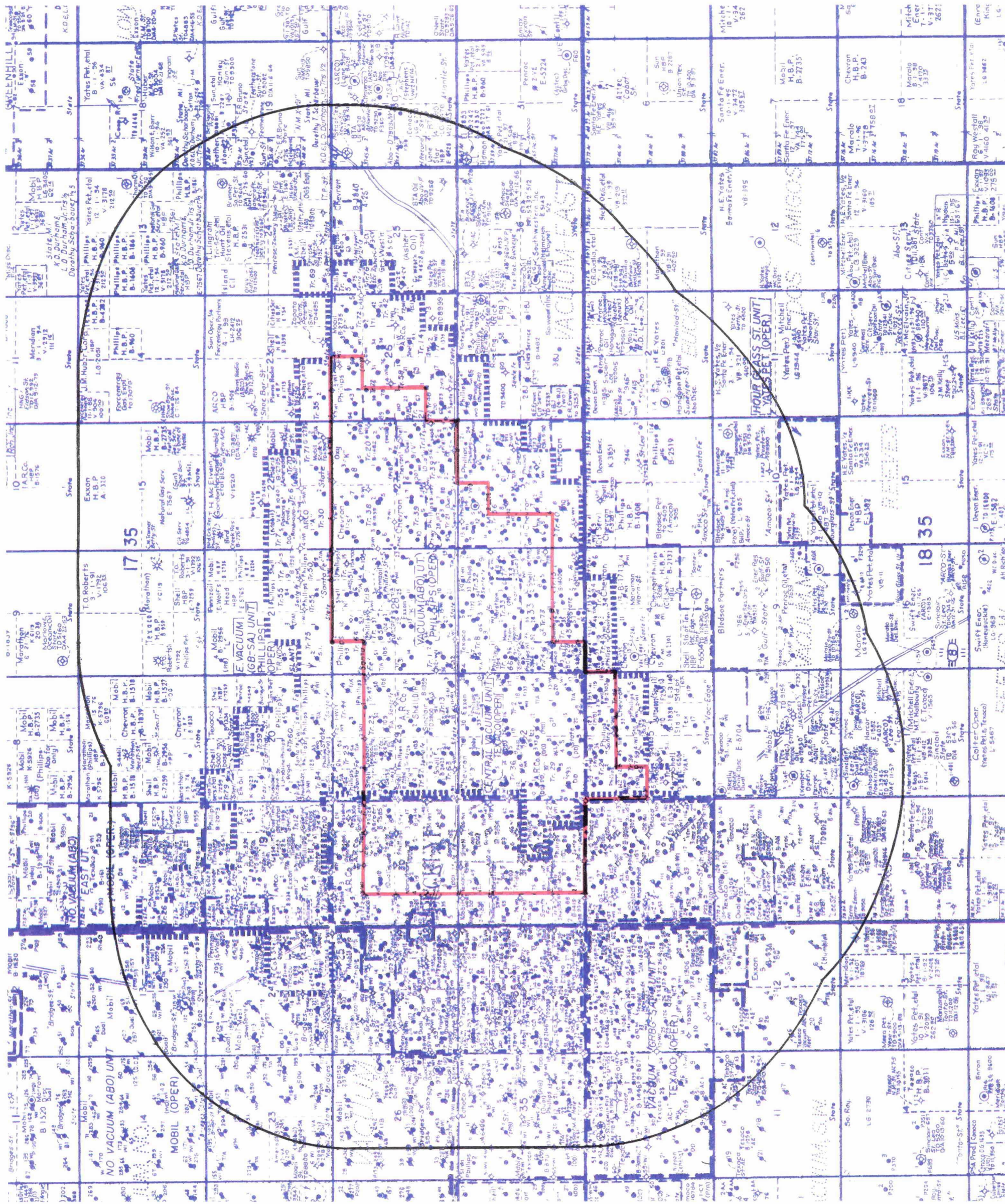
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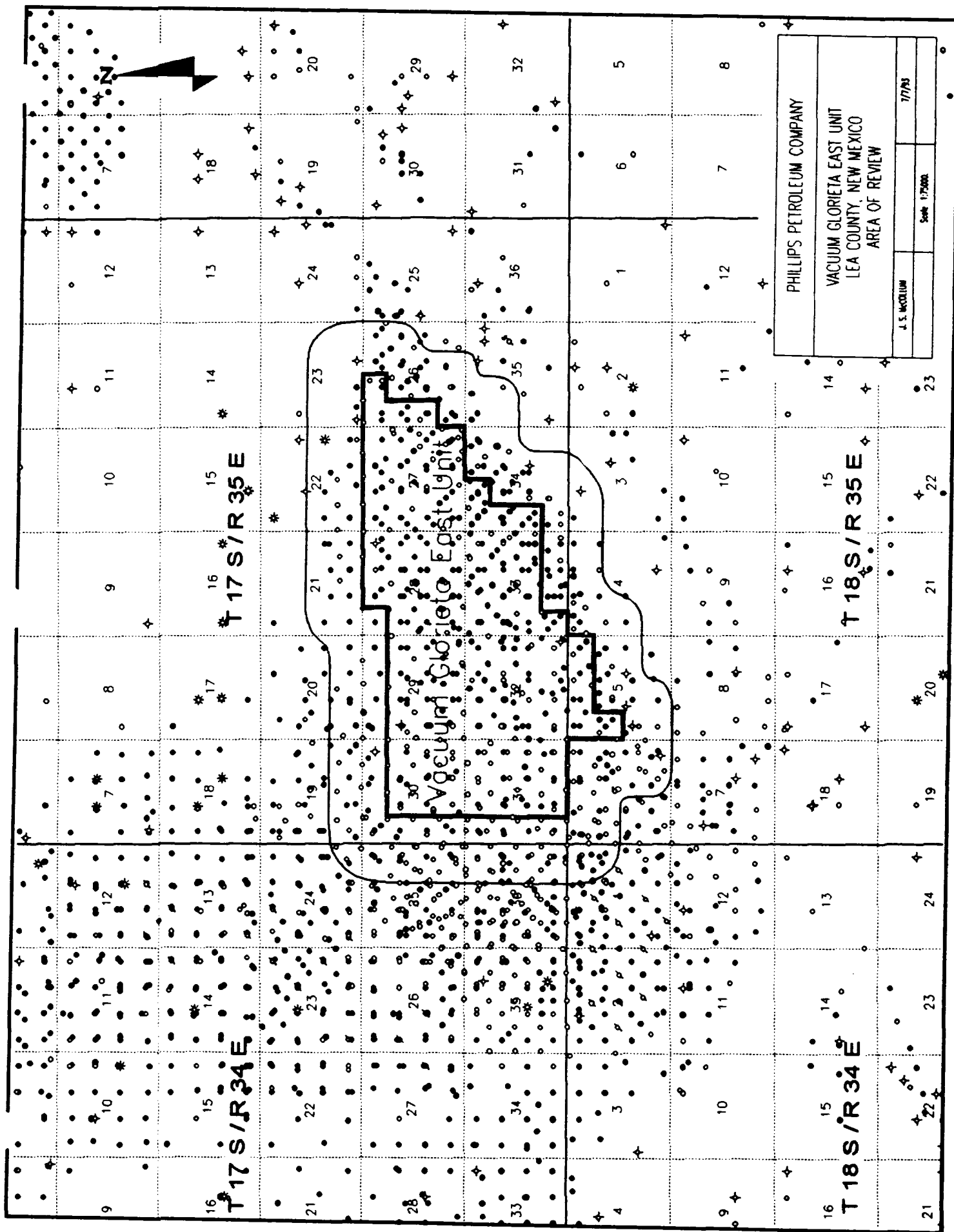
5. Give the depth to and name of any overlying and/or underlying oil or gas zones

(pools) in this area. SAN ANDRES @ 4500'
DRINKARD @ 7600'. ABO @ 8000'

VACUUM GLORIETA EAST UNIT
WELL COMPLETION DIAGRAM IN WATERFLOW AREA
5-1/2" INJECTION WELL







VACUUM GLORIETA EAST UNIT
ATTACHMENT IV TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT
WELLS WITHIN 1/2 MILE RADIUS OF REVIEW
WELLS INSIDE VACUUM GLORIETA EAST UNIT
WELL DATA TABLE

(NGEU DENOTES VACUUM GLORIETA EAST UNIT)

New Well Designation	Lease Name / Well No.	Operator	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Unit	Location
VGEU 01-01	New Mexico K State	Exxon	3002520721	PROD	2700' M	See Diagram	06-29-64	See Diagram	6270'	L	28 17S 35E 2310FS, 330FW
VGEU 01-02	New Mexico K State	Exxon	3002520719	PROD	2800' M	.	06-13-64	.	6210'	K	28 17S 35E 2310FS, 1981FW
VGEU 01-03	New Mexico K State	Exxon	3002520715	PROD	2600' M	.	05-28-64	.	6210'	J	28 17S 35E 2310FS, 1981FE
VGEU 01-04	New Mexico K State	Exxon	3002520714	PROD	3000' M	.	05-01-64	.	6230'	I	28 17S 35E 2310FS, 330FE
VGEU 01-05	New Mexico K State	Exxon	3002530436	PROD	4975' C	.	10-23-88	.	6309'	L	28 17S 35E 1286FS, 1333FW
VGEU 01-06	New Mexico K State	Exxon	3002530437	PROD	4967' C	.	11-19-88	.	6300'	O	28 17S 35E 1195FS, 2518FE
VGEU 01-07	New Mexico K State	Exxon	3002530805	PROD	4300' C	.	03-23-90	.	6310'	M	28 17S 35E 430FS, 330FW
VGEU 01-08	New Mexico K State	Exxon	3002520717	PROD	3010' M	.	05-11-64	.	6200'	N	28 17S 35E 330FS, 1980FW
VGEU 01-10	New Mexico K State	Exxon	3002520712	PROD	2636' M	.	04-15-64	.	6230'	O	28 17S 35E 330FS, 1980FE
VGEU 01-11	New Mexico K State	Exxon	3002520710	T&A	2650' M	.	03-25-64	.	6230'	P	28 17S 35E 330FS, 330FE
VGEU 02-01	New Mexico K State	Exxon	3002520720	PROD	2701' M	.	06-09-64	.	6225'	B	32 17S 35E 330FN, 2306FE
VGEU 02-02	New Mexico K State	Exxon	3002520718	PROD	2600' M	.	05-15-64	.	6200'	A	32 17S 35E 330FN, 330FE
VGEU 02-03	New Mexico K State	Exxon	3002520716	PROD	2613' M	.	05-28-64	.	6210'	G	32 17S 35E 1980FN, 2306FE
VGEU 02-04	New Mexico K State	Exxon	3002521008	PROD	2800' M	.	04-30-64	.	6210'	H	32 17S 35E 1865FN, 330FE
VGEU 02-06	New Mexico K State	Exxon	3002520709	PROD	2600' M	.	03-05-64	.	6463'	I	32 17S 35E 1830FS, 510FE
VGEU 02-07	New Mexico K State	Exxon	3002520711	PROD	2713' M	.	04-01-64	.	6205'	O	32 17S 35E 330FS, 2306FE
VGEU 02-08	New Mexico K State	Exxon	3002502971	T&A	3120' M	.	05-02-61	.	9000'	P	32 17S 35E 330FS, 330FE
VGEU 03-01	Skelly J State	Texaco	3002520854	PROD	2480' M	.	07-15-64	.	6800'	C	31 17S 35E 760FN, 1790FW
VGEU 04-01	Skelly P State	Texaco	3002520856	PROD	2695' M	.	07-21-64	.	6300'	D	33 17S 35E 810FN, 660FW
VGEU 04-02	Skelly P State	Texaco	3002520855	PROD	850' M	.	07-08-64	.	6300'	C	33 17S 35E 779FN, 2285FW
VGEU 05-01	State M	Shell	3002520828	PROD	3678' C	.	04-18-64	.	10300'	J	29 17S 35E 1980FS, 1980FE
VGEU 05-02	State M	Shell	3002520830	PROD	4750' C	.	07-26-64	.	6300'	I	29 17S 35E 1980FS, 660FE
VGEU 05-03	State M	Shell	3002520829	PROD	4012' C	.	06-07-64	.	6301'	O	29 17S 35E 460FS, 1980FE
VGEU 05-04	State M	Shell	3002520831	PROD	2750' M	.	07-20-64	.	6250'	P	29 17S 35E 330FS, 450FE
VGEU 06-01	State T	Shell	3002520232	PROD	Surface	.	11-25-63	.	6240'	J	33 17S 35E 2310FS, 1980FE
VGEU 06-02	State T	Shell	3002520330	T&A	2850' M	.	11-06-63	.	6245'	I	33 17S 35E 2310FS, 660FE
VGEU 07-01	State V	Shell	3002520286	T&A	2850' M	.	10-17-63	.	6250'	I	27 17S 35E 2310FS, 990FE
VGEU 08-01	State E	Shell	3002520823	PROD	3000' E	.	03-04-64	.	10406'	N	31 17S 35E 660FS, 1700FW
VGEU 08-01	State B	Shell	3002520821	PROD	2232' M	.	03-09-64	.	7100'	I	30 17S 35E 1980FS, 860FE
VGEU 08-02	State B	Shell	3002520822	PROD	4172' C	.	08-22-69	.	6200'	P	30 17S 35E 660FS, 990FE

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS INSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

New Well Designation	Lease Name / Well No.	Operator	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Unit	Location
VGEU 10-01	State N	6 Shell	3002520834	T&A	4273 C	See Diagram	08-21-64	See Diagram	6302'	B	28 17S 36E 990 FN, 1880 FE
VGEU 10-02	State N	4 Shell	3002520832	T&A	4550' C	.	08-06-64	.	6251'	G	28 17S 36E 2180 FN, 1980 FE
VGEU 10-03	State N	5 Shell	3002520833	PROD	Surface	.	07-20-64	.	6250'	H	28 17S 36E 2310 FN, 330 FE
VGEU 11-01	State K	8 Oxy	3002520624	PROD	1650' M	.	03-22-64	.	6300'	B	27 17S 36E 990 FN, 2310 FE
VGEU 11-02	State K	7 Oxy	3002520301	SI PROD	2905' M	.	12-19-63	.	6290'	A	27 17S 36E 990 FN, 330 FE
VGEU 11-03	State K	6 Oxy	3002520253	SI PROD	2640' M	.	12-09-63	.	6270'	G	27 17S 36E 2310 FN, 1750 FE
VGEU 12-01	Santa Fe	117 Phillips	3002523700	PROD	2600' M	.	02-20-71	.	6200'	N	27 17S 36E 990 FS, 1650 FW
VGEU 12-02	Santa Fe	90 Phillips	3002520582	PROD	2600' M	.	02-15-64	.	6250'	M	27 17S 36E 330 FS, 660 FW
VGEU 13-01	Santa Fe	94 Phillips	3002520788	PROD	2700' M	.	03-05-64	.	6250'	D	26 17S 36E 990 FN, 336 FW
VGEU 13-03	Santa Fe	89 Phillips	3002520526	SI PROD	2500' M	.	01-30-64	.	6275'	E	26 17S 36E 2310 FN, 330 FW
VGEU 14-01	Santa Fe	109 Phillips	3002520802	SI PROD	2500' M	.	11-07-64	.	6250'	G	29 17S 36E 2323 FN, 2213 FE
VGEU 15-01	Santa Fe	101 Phillips	3002520795	PROD	2550' M	.	08-21-64	.	6200'	J	30 17S 36E 1880 FS, 1880 FE
VGEU 15-02	Santa Fe	100 Phillips	3002520794	PROD	2500' M	.	08-06-64	.	6200'	O	30 17S 36E 810 FS, 1955 FE
VGEU 16-01	Santa Fe	99 Phillips	3002520793	SI PROD	2900' M	.	06-02-64	.	6250'	D	5 18S 36E 330 FN, 660 FW
VGEU 17-01	State K	9 Phillips	3002521096	SI PROD	Surface	.	02-19-65	.	6200'	J	31 17S 36E 2110 FS, 1980 FE
VGEU 17-02	State K	7 Phillips	3002520864	PROD	1680' M	.	11-05-64	.	6300'	I	31 17S 36E 2080 FS, 660 FE
VGEU 17-03	State K	8 Phillips	3002520865	PROD	Surface	.	11-24-64	.	6290'	P	31 17S 36E 760 FS, 660 FE
VGEU 19-01	State B1576	7 ARCO	3002520846	PROD	850' M	.	08-14-64	.	6200'	L	32 17S 36E 2310 FS, 660 FW
VGEU 19-02	State B1576	6 ARCO	3002520845	PROD	1605' M	.	06-29-64	.	6200'	K	32 17S 36E 2310 FS, 2310 FW
VGEU 19-03	State B1576	8 ARCO	3002520847	PROD	900' M	.	08-29-64	.	6200'	M	32 17S 36E 660 FS, 500 FW
VGEU 19-04	State B1576	5 ARCO	3002520844	PROD	1805' M	.	07-10-64	.	6250'	N	32 17S 36E 760 FS, 2310 FW
VGEU 20-01	State B1578	3 ARCO	3002521352	PROD	4656' M	.	02-27-65	.	10200'	F	30 17S 36E 1980 FN, 1800 FW
VGEU 22-01	Santa Fe	132 Phillips	3002530506	PROD	2500' M	.	01-21-89	.	6350'	B	33 17S 36E 330 FN, 2310 FE
VGEU 22-02	Santa Fe	95 Phillips	3002520789	PROD	2600' M	.	04-05-64	.	6225'	B	33 17S 36E 990 FN, 1980 FE
VGEU 22-03	Santa Fe	91 Phillips	3002520785	PROD	2500' M	.	03-22-64	.	6225'	A	33 17S 36E 860 FN, 660 FE
VGEU 23-01	Warn State AC 1	5 Marathon	3002520750	SI PROD	190' M	.	08-27-64	.	6250'	F	31 17S 36E 2122 FN, 2227 FW
VGEU 23-02	Warn State AC 1	4 Marathon	3002520749	SI PROD	1685' M	.	04-17-64	.	6250'	K	31 17S 36E 2311 FS, 2226 FW
VGEU 24-01	Warn State AC 3	8 Marathon	3002524806	SI PROD	5528' M	.	08-10-74	.	6292'	H	33 17S 36E 1650 FN, 990 FE
VGEU 24-02	Warn State AC 3	6 Marathon	3002520751	PROD	1655' M	.	02-14-64	.	6250'	G	33 17S 36E 1980 FN, 1650 FE
VGEU 24-03	Warn State AC 3	7 Marathon	3002520752	PROD	1920' M	.	04-15-64	.	6250'	F	33 17S 36E 2310 FN, 2310 FW
VGEU 24-04	Warn State AC 3	9 Marathon	3002528039	SI PROD	Surface	.	12-21-82	.	6200'	H	33 17S 36E 2310 FN, 580 FW

VACUUM GLORIETA EAST UNIT

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APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS INSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

New Well Designation	Lease Name / Well No.	Operator	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Unit	Location
VGEU 25-01	State 3 32	8 Chevron	3002521012	PROD	1750' M	See Diagram	09-09-64	See Diagram	6277'	D	32 17S 35E 760 FN, 660 FW
VGEU 25-02	State 3 32	7 Chevron	3002520886	PROD	2550' M	.	08-24-64	.	6250'	C	32 17S 35E 760 FN, 1980 FW
VGEU 25-03	State 3 32	6 Chevron	3002520885	PROD	2500' M	.	08-07-64	.	6266'	E	32 17S 35E 1880 FN, 660 FW
VGEU 25-04	State 3 32	5 Chevron	3002520884	PROD	2695' M	.	07-18-64	.	6245'	F	32 17S 35E 2080 FN, 1980 FW
VGEU 26-01	State 5 27	8 Chevron	3002520883	SI PROD	Surface	.	06-24-64	.	6240'	D	27 17S 35E 990 FN, 330 FW
VGEU 26-02	State 5 27	7 Chevron	3002521011	PROD	2666' M	.	06-02-64	.	6260'	C	27 17S 35E 990 FN, 2173 FW
VGEU 26-03	State 5 27	6 Chevron	3002520882	PROD	3754' C	.	05-16-64	.	6280'	E	27 17S 35E 2310 FN, 330 FW
VGEU 26-04	State 5 27	5 Chevron	3002520881	SI PROD	Surface	.	04-06-64	.	6268'	F	27 17S 35E 1980 FN, 2110 FW
VGEU 27-01	State 4 27	10 Chevron	3002520880	PROD	2600' M	.	04-26-64	.	6268'	L	27 17S 35E 1650 FS, 330 FW
VGEU 27-02	State 4 27	7 Chevron	3002502901	PROD	2814' M	.	03-05-64	.	6270'	K	27 17S 35E 1980 FS, 2180 FW
VGEU 27-03	State 4 27	6 Chevron	3002502900	SI PROD	Surface	.	11-08-72	.	6270'	J	27 17S 35E 1980 FS, 2180 FE
VGEU 27-05	State 4 27	5 Chevron	3002502899	PROD	1850' M	.	03-24-64	.	6257'	O	27 17S 35E 660 FS, 2100 FE
VGEU 28-01	State 6 34	11 Chevron	3002521383	SI PROD	2697' M	.	05-03-65	.	6281'	L	34 17S 35E 2310 FS, 330 FW
VGEU 29-01	Santa Fe	103 Phillips	3002520797	PROD	2250' M	.	09-03-64	.	6225'	K	35E 1655 FS, 1980 FW
VGEU 30-01	Santa Fe	102 Phillips	3002520796	PROD	2300' M	.	07-26-64	.	6200'	O	31 17S 35E 690 FS, 2110 FE
VGEU 32-01	Santa Fe	106 Phillips	3002520799	PROD	2600' M	.	09-05-64	.	6225'	H	28 17S 35E 2323 FN, 660 FE
VGEU 33-01	Santa Fe	108 Phillips	3002520801	PROD	2550' M	.	10-22-64	.	6250'	A	35E 990 FN, 431 FE
VGEU 34-01	Staplin State AC 1	4 Marathon	3002520746	PROD	Surface	.	06-04-64	.	6150'	K	30 17S 35E 1650 FS, 1650 FW
VGEU 34-02	Staplin State AC 1	3 Marathon	3002521009	PROD	Surface	.	05-10-64	.	6150'	N	30 17S 35E 330 FS, 1576 FW
VGEU 35-01	State M	13 Phillips	3002520866	PROD	1675' M	.	04-29-64	.	6300'	D	34 17S 35E 330 FN, 330 FW
VGEU 35-02	State M	14 Phillips	3002520867	SI PROD	1485' M	.	05-17-64	.	6300'	C	34 17S 35E 330 FN, 1650 FW
VGEU 35-03	State M	15 Phillips	3002520868	SI PROD	245' M	.	06-25-64	.	6300'	E	34 17S 35E 1980 FN, 380 FW
VGEU 36-01	State H	2 Shell	3002520826	PROD	2800' M	.	07-13-64	.	6250'	L	29 17S 35E 1800 FS, 660 FW
VGEU 37-01	State A	7 Shell	3002520819	PROD	900' M	.	03-16-64	.	6311'	B	31 17S 35E 660 FN, 2180 FE
VGEU 37-02	State A	5 Shell	3002520370	T&A	3230' M	.	11-18-62	.	10300'	A	31 17S 35E 990 FN, 660 FE
VGEU 37-03	State A	6 Shell	3002520290	PROD	Surface	.	01-14-64	.	6900'	G	31 17S 35E 2310 FN, 1980 FE
VGEU 37-04	State A	8 Shell	3002520820	PROD	Surface	.	05-23-64	.	6300'	H	31 17S 35E 2180 FN, 660 FE
VGEU 38-01	State F	3 Shell	3002520824	PROD	Surface	.	05-09-64	.	6222'	M	29 17S 35E 800 FS, 800 FW
VGEU 38-02	State F	4 Shell	3002520825	PROD	2650' M	.	06-28-64	.	6250'	N	29 17S 35E 330 FS, 1980 FW
VGEU 39-01	State I	2 Shell	3002502938	PROD	4335' M	.	07-28-60	.	6387'	E	29 17S 35E 2310 FN, 330 FW

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS INSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

(NGEU DENOTES VACUUM GLORIETA EAST UNIT)

New Well Designation	Lease Name / Well No.	Operator	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Unit	Location
NGEU 40-01	Santa Fe	Phillips	3002520798	PROD	2700' M	See Diagram	09-19-64	See Diagram	6250'	F	28 17S 35E 2130 FN, 1980 FW
NGEU 41-01	Santa Fe	Phillips	3002520800	T&A	2800' M	.	10-07-64	.	6209'	C	28 17S 35E 990 FN, 2310 FW
NGEU 41-02	Santa Fe	Phillips	3002521080	PROD	2800' M	.	09-22-64	.	6250'	E	28 17S 35E 2322 FN, 660 FW
NGEU 42-01	Santa Fe	Phillips	3002530505	PROD	1100' M	.	01-11-89	.	6350'	E	33 17S 35E 1665 FN, 990 FW
NGEU 42-02	Santa Fe	Phillips	3002520790	PROD	2800' M	.	04-18-64	.	6225'	E	33 17S 35E 2180 FN, 660 FW
NGEU 43-01	Santa Fe	Phillips	3002520786	PROD	2800' M	.	05-05-64	.	6226'	K	33 17S 35E 2106 FS, 1980 FW
NGEU 44-01	State O	Phillips	3002520869	SI PROD	2968' M	.	05-18-64	.	9000'	L	33 17S 35E 1700 FS, 990 FW
NGEU 45-01	State LDE	ARCO	3002521353	PROD	2055' M	.	09-05-65	.	6250'	G	30 17S 35E 2310 FN, 2310 FE
NGEU 46-01	State CG NCT 2	Texaco	3002520957	SI PROD	3285' M	.	07-27-64	.	6252'	F	29 17S 35E 2310 FN, 1750 FW
NGEU 47-01	State CG NCT 1	Texaco	3002520958	SI PROD	2870' M	.	06-05-64	.	6250'	H	30 17S 35E 2310 FN, 400 FE

*Top of Cement

M - Measured by Temp. Survey or Cement Bond Log

E - Estimated

G - Calculated using a cement yield of 1.32 cu. ft./sack
and assuming 50 % excess

EXXON
NEW MEXICO K STATE NO. 31
API# 3002520721
(VGEU 01-01)

0 - 1614' CEMENT 750 sx

0 - 1614' 8.625" OD SURF CSG

0 - 1614' 12.25 " OD HOLE

2700 - 6270' CEMENT 900 sx

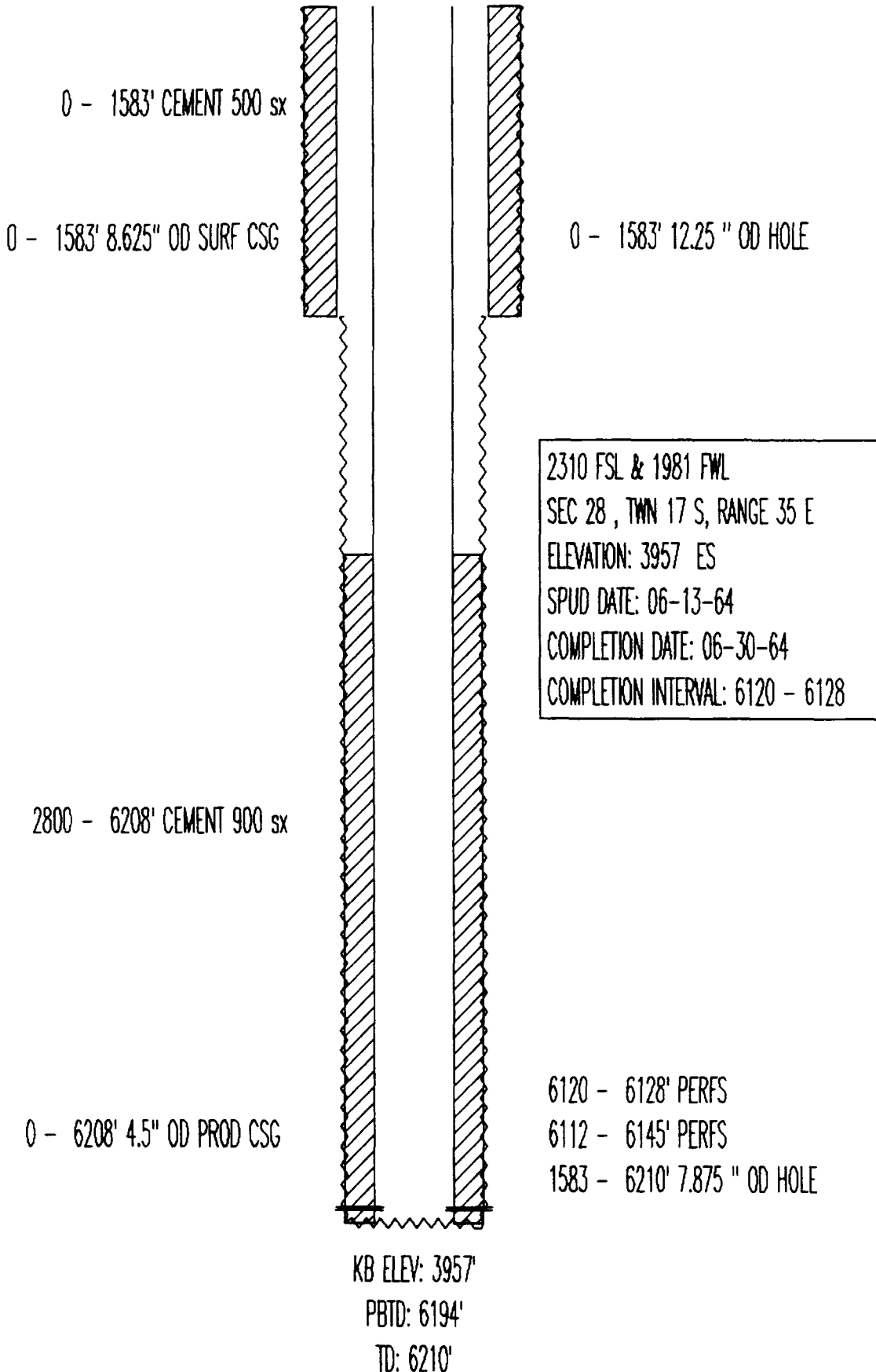
0 - 6270' 4.5" OD PROD CSG

2310 FSL & 330 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3962 ES
SPUD DARE: 06-29-64
COMPLETION DATE: 07-18-64
COMPLETION INTERVAL: 6162 - 6176 (GLRT)

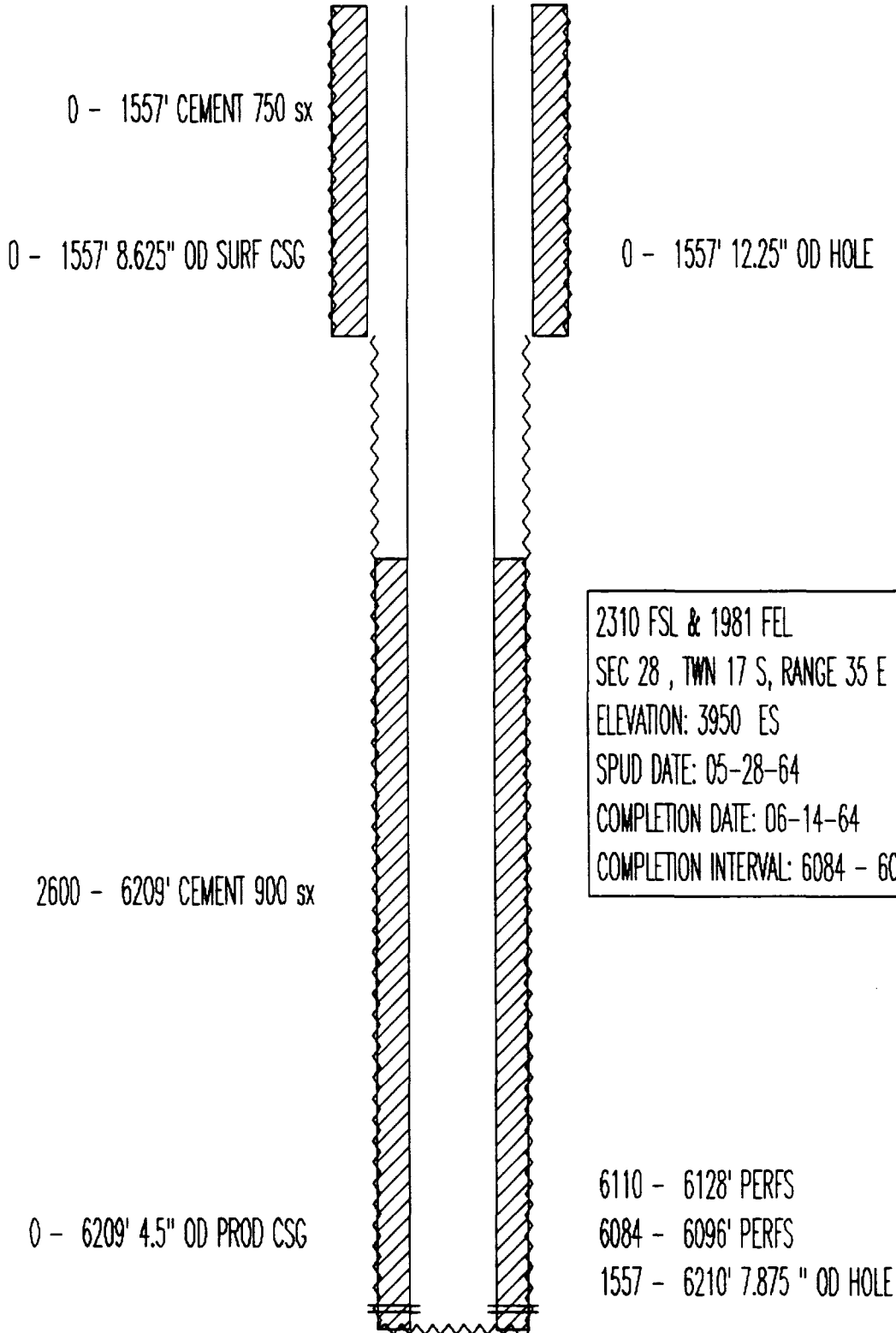
6162 - 6176' PERFS
1614 - 6270' 7.875 " OD HOLE

KB ELEV: 3962'
PBTD: 6235'
TD: 6270'

EXXON
NEW MEXICO K STATE NO. 29
API# 3002520719
(VGEU 01-02)



EXXON
NEW MEXICO K STATE NO. 25
API# 3002520715
(VGEU 01-03)



2310 FSL & 1981 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3950 ES
SPUD DATE: 05-28-64
COMPLETION DATE: 06-14-64
COMPLETION INTERVAL: 6084 - 6096 (PDCK)

KB ELEV: 3950'
PBTD: 6178'
TD: 6210'

EXXON
NEW MEXICO K STATE NO. 23
API# 3002520714
(VGEU 01-04)

0 - 1584' CEMENT 750 sx
0 - 1584' 8.625" OD SURF CSG
0 - 1584' 12.25 " OD HOLE

3000 - 6230' CEMENT 875 sx

2310 FSL & 330 FEL SEC 28 , TWN 17 S, RANGE 35 E ELEVATION: 3938 GR SPUD DATE: 05-01-64 COMPLETION DATE: 05-30-64 COMPLETION INTERVAL: 6090 - 6108 (PDCK)
--

0 - 6230' 4.5" OD PROD CSG
6090 - 6108' PERFS
6055 - 6142' PERFS
1584 - 6230' 7.875 " OD HOLE

KB ELEV: 3938'
PBTD: 6210'
TD: 6230'

EXXON
NEW MEXICO K STATE NO. 34
API# 3002530436
(VGEU 01-05)

0 - 471' CEMENT 500 sx
0 - 471' 13.375" OD SURF CSG

0 - 471' 17.5 " OD HOLE

0 - 4739' CEMENT 1200 sx

1286 FSL & 1333 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3968 KB
SPUD DATE: 10-23-88
COMPLETION DATE: 12-30-88
COMPLETION INTERVAL: 6043 - 6181 (GLRT)

0 - 4739' 8.625" OD INT CSG

471 - 4739' 12.25 " OD HOLE

4975 - 6300' CEMENT 350 sx

6189 - 6192' CIBP

6181 - 6194' PERFS

6043 - 6181' PERFS

0 - 6300' 5.5" OD PROD CSG

4739 - 6309' 7.875 " OD HOLE

KB ELEV: 3967'

TD: 6309'

EXXON
NEW MEXICO K STATE NO. 35
API# 3002530437
(VGEU 01-06)

0 - 469' CEMENT 500 sx
0 - 469' 13.375" OD SURF CSG

0 - 469' 17.5 " OD HOLE

0 - 4764' CEMENT 1950 sx

1195 FSL & 2518 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3954 KB
SPUD DATE: 11-19-88
COMPLETION DATE: 12-29-88
COMPLETION INTERVAL: 6014 - 6152 (PDCK)

0 - 4764' 8.625" OD INT CSG

469 - 4764' 12.25 " OD HOLE

4967 - 6300' CEMENT 350 sx

0 - 6300' 5.5" OD PROD CSG

6014 - 6152' PERFS

4764 - 6300' 7.875 " OD HOLE

KB ELEV: 3939'
PBSD: 6280'
TD: 6300'

EXXON
NEW MEXICO K STATE NO. 36
API# 3002530805

(VGEU 01-07)

0 - 460' CEMENT 400 sx
0 - 460' 13.375" OD SURF CSG

0 - 460' 17.5" OD HOLE

0 - 4808' CEMENT 1425 sx

430 FSL & 330 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3963 KB
SPUD DATE: 03-23-90
COMPLETION DATE: 06-11-90
COMPLETION INTERVAL: 5946 - 6006 (GLRT)

0 - 4808' 8.625" OD INT CSG

460 - 4808' 12.25" OD HOLE

4300 - 6308' CEMENT 160 sx

0 - 6308' 5.5" OD PROD CSG

5946 - 6006' PERFS

6022 - 6132' PERFS

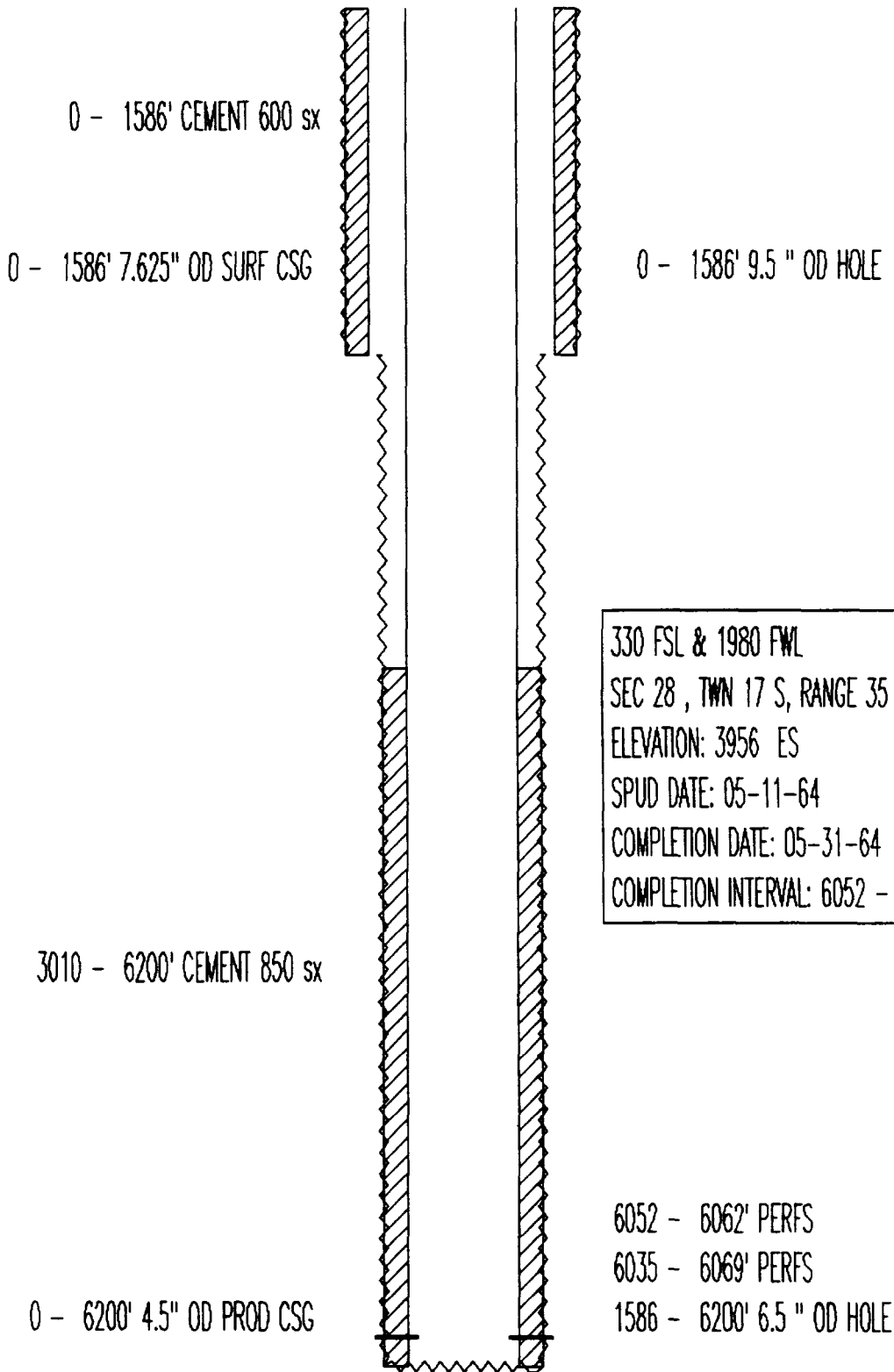
4808 - 6310' 7.875" OD HOLE

KB ELEV: 3962'

PBTD: 6259'

TD: 6310'

EXXON
NEW MEXICO K STATE NO. 27
API# 3002520717
(VGEU 01-09)



330 FSL & 1980 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3956 ES
SPUD DATE: 05-11-64
COMPLETION DATE: 05-31-64
COMPLETION INTERVAL: 6052 - 6062 (PDCK)

0 - 6200' 4.5" OD PROD CSG

6052 - 6062' PERFS
6035 - 6069' PERFS
1586 - 6200' 6.5" OD HOLE

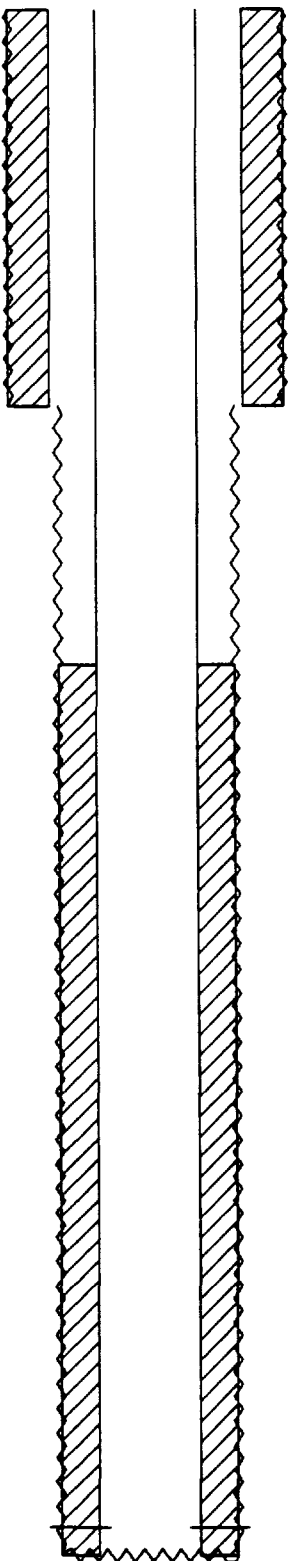
KB ELEV: 3956'
PBTD: 6181'
TD: 6200'

EXXON
NEW MEXICO K STATE NO. 21
API# 3002520712
(VGEU 01-10)

0 - 1609' CEMENT 850 sx

0 - 1609' 8.625" OD SURF CSG

0 - 1609' 12.25 " OD HOLE



2636 - 6230' CEMENT 800 sx

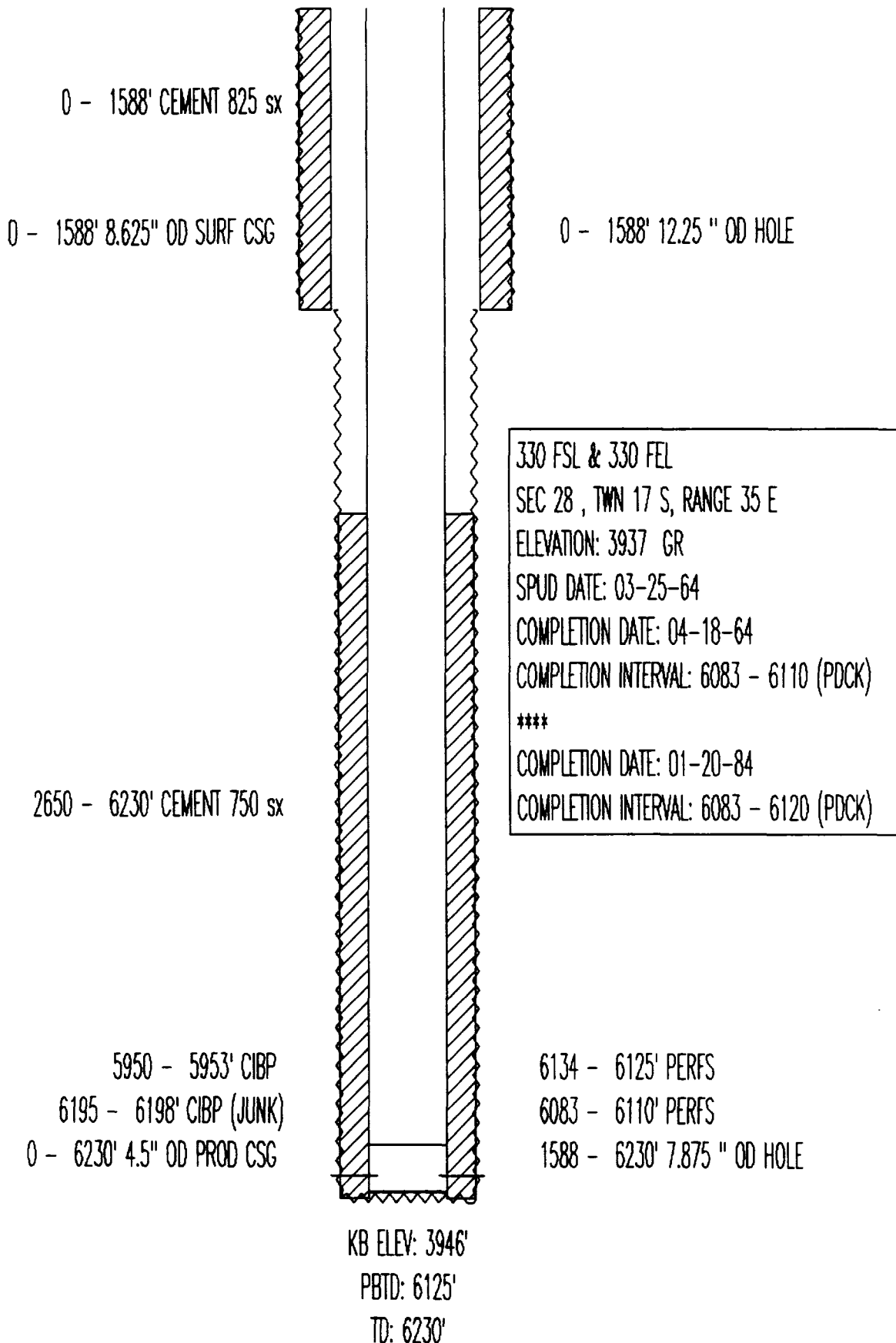
0 - 6230' 4.5" OD PROD CSG

330 FSL & 1980 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3949 ES
SPUD DATE: 04-15-64
COMPLETION DATE: 05-03-64
COMPLETION INTERVAL: 6101 - 6117 (PDCK)

6101 - 6117' PERFS
1609 - 6230' 7.875 " OD HOLE

KB ELEV: 3949'
PBD: 6211'
TD: 6230'

EXXON
NEW MEXICO K STATE NO. 19
API# 3002520710
(VGEU 01-11)



EXXON
STATE K NO. 30
API# 3002520720
(VGEU 02-01)

0 - 1579' CEMENT 750 sx

0 - 1579' 8.625" OD SURF CSG

0 - 1579' 12.25 " OD HOLE

2701 - 6223' CEMENT 900 sx

0 - 6223' 4.5" OD PROD CSG

330 FNL & 2306 FEL
SEC 32 , TWN 17 S, RANGE 35 E
SPUD DATE: 06-09-64
COMPLETION DATE: 07-01-64
COMPLETION INTERVAL: 6164 - 6172

6164 - 6172' PERFS

5954 - 6149' PERFS

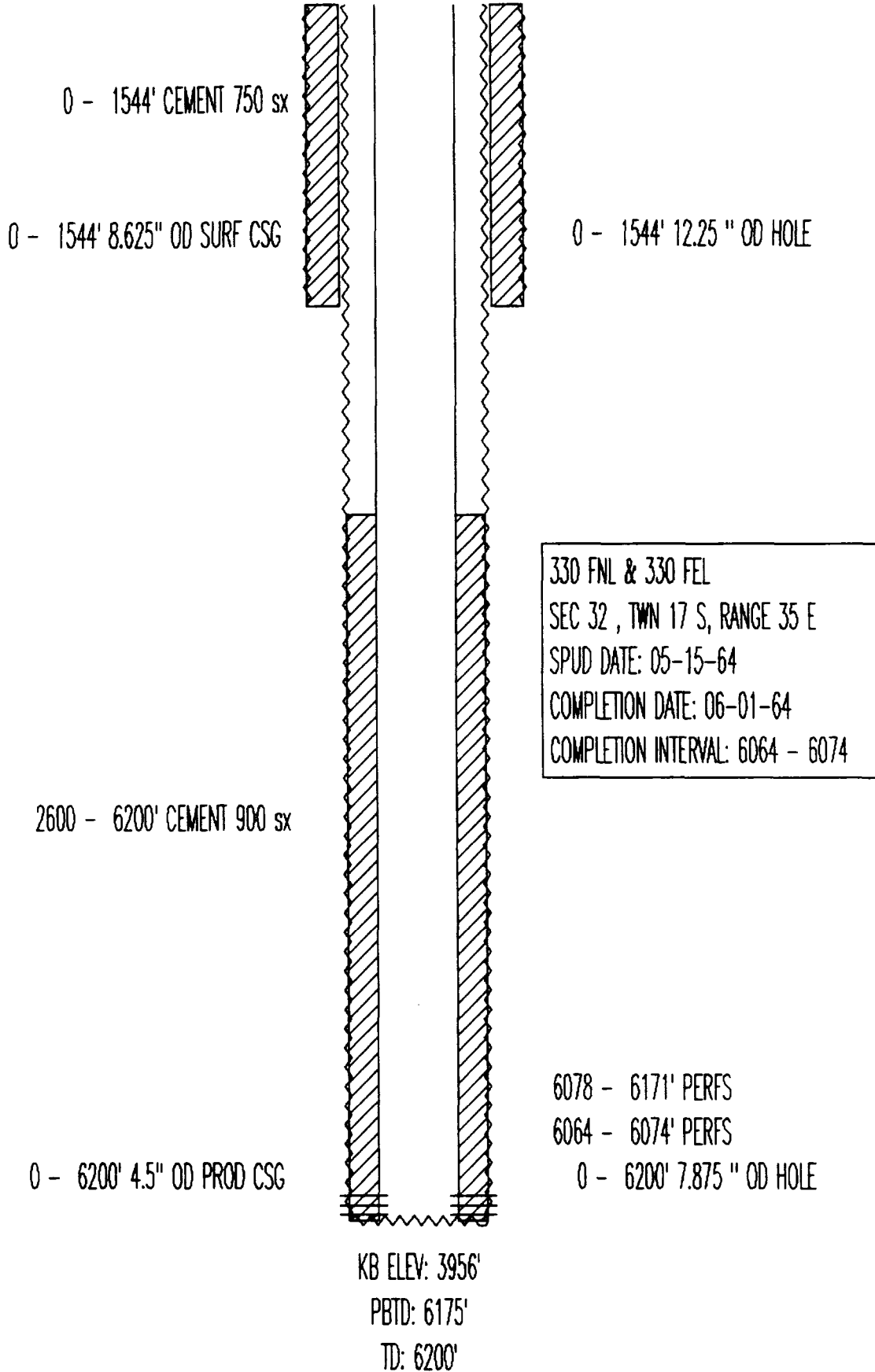
0 - 6223' 7.875 " OD HOLE

KB ELEV: 3977'

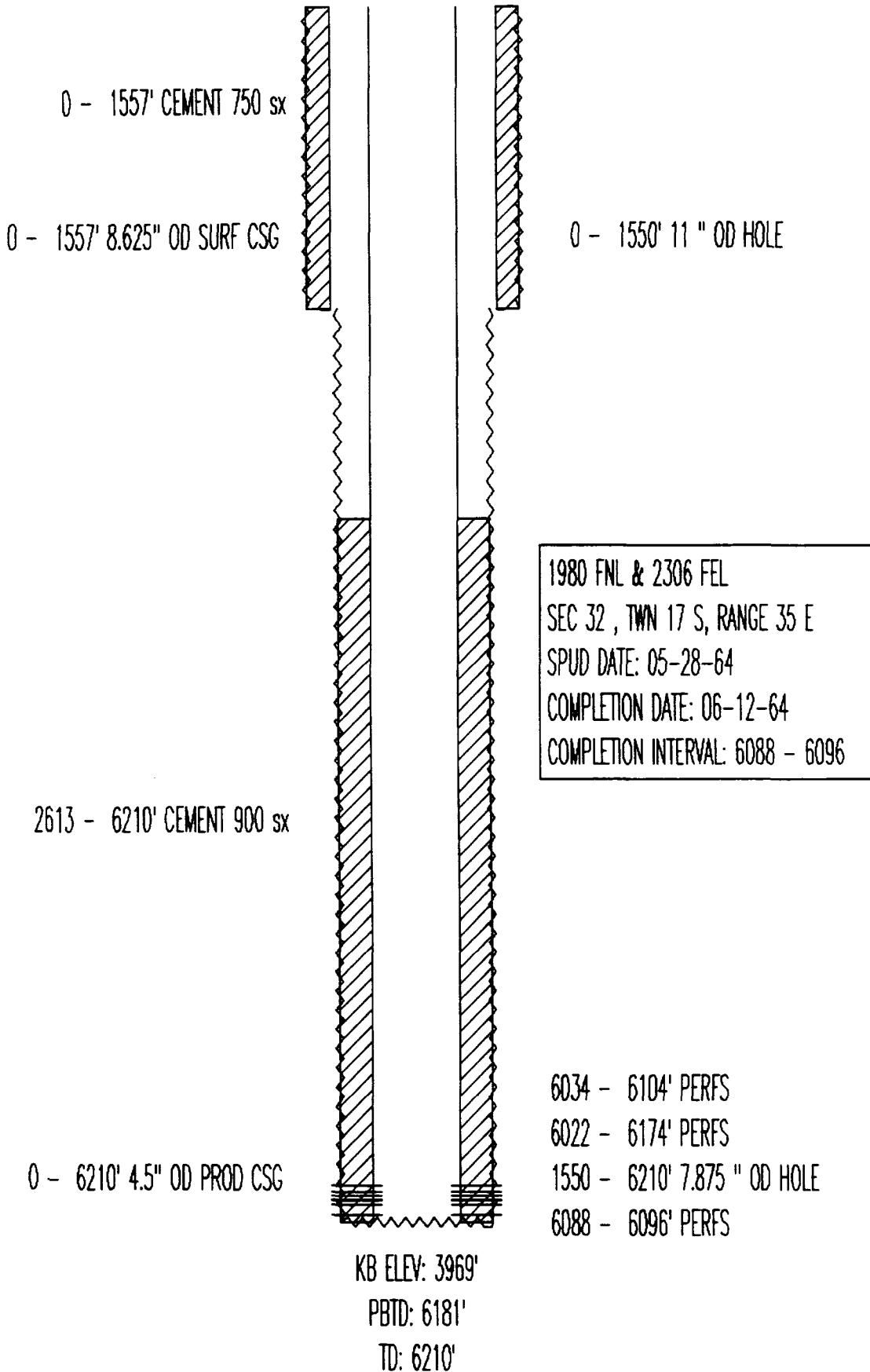
PBTD: 6213'

TD: 6225'

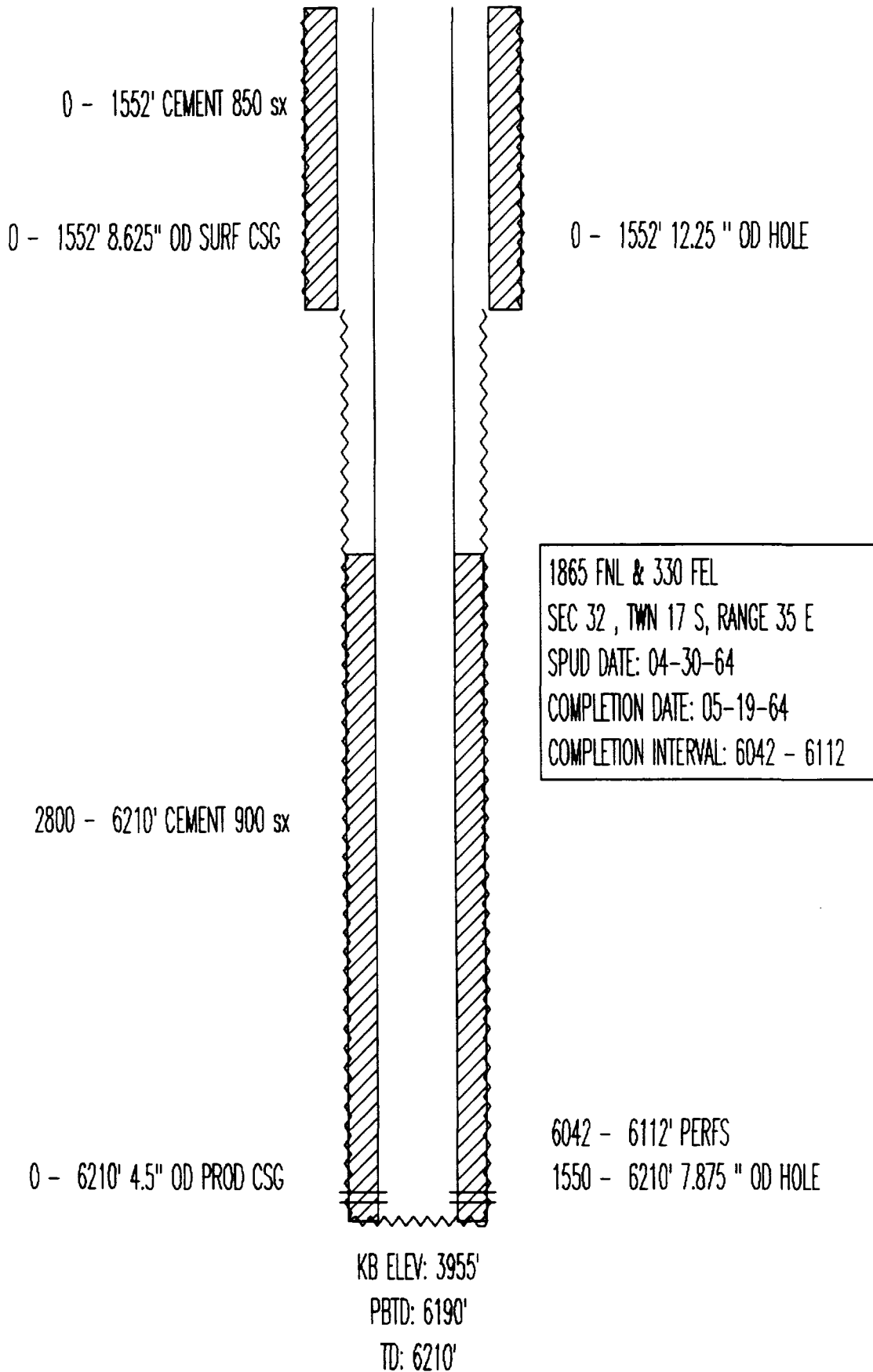
EXXON
STATE K NO. 28
API# 3002520718
(VGEU 02-02)



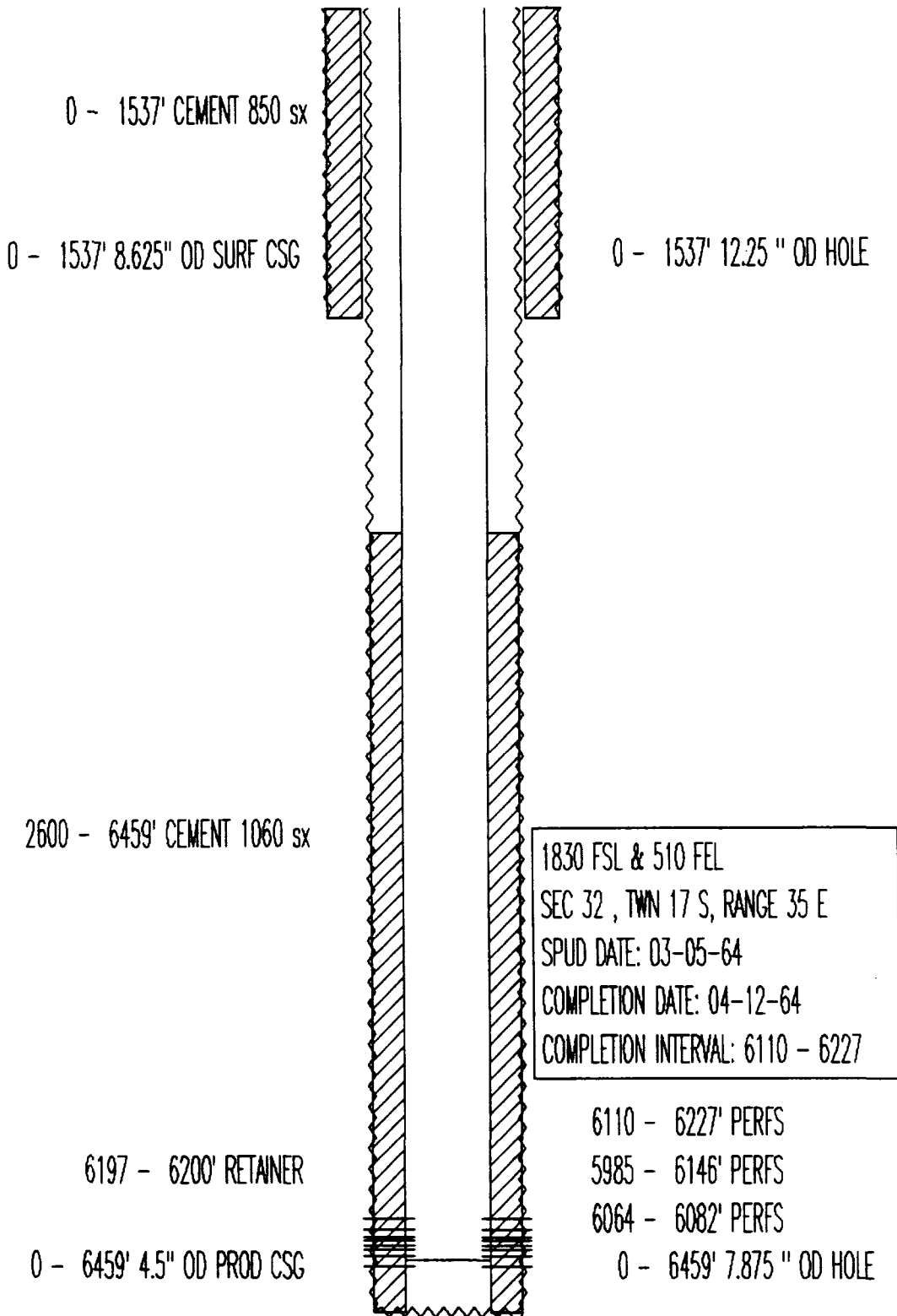
EXXON
STATE K NO. 26
API# 3002520716
(VGEU 02-03)



EXXON
STATE K NO. 24
API# 3002521008
(VGEU 02-04)

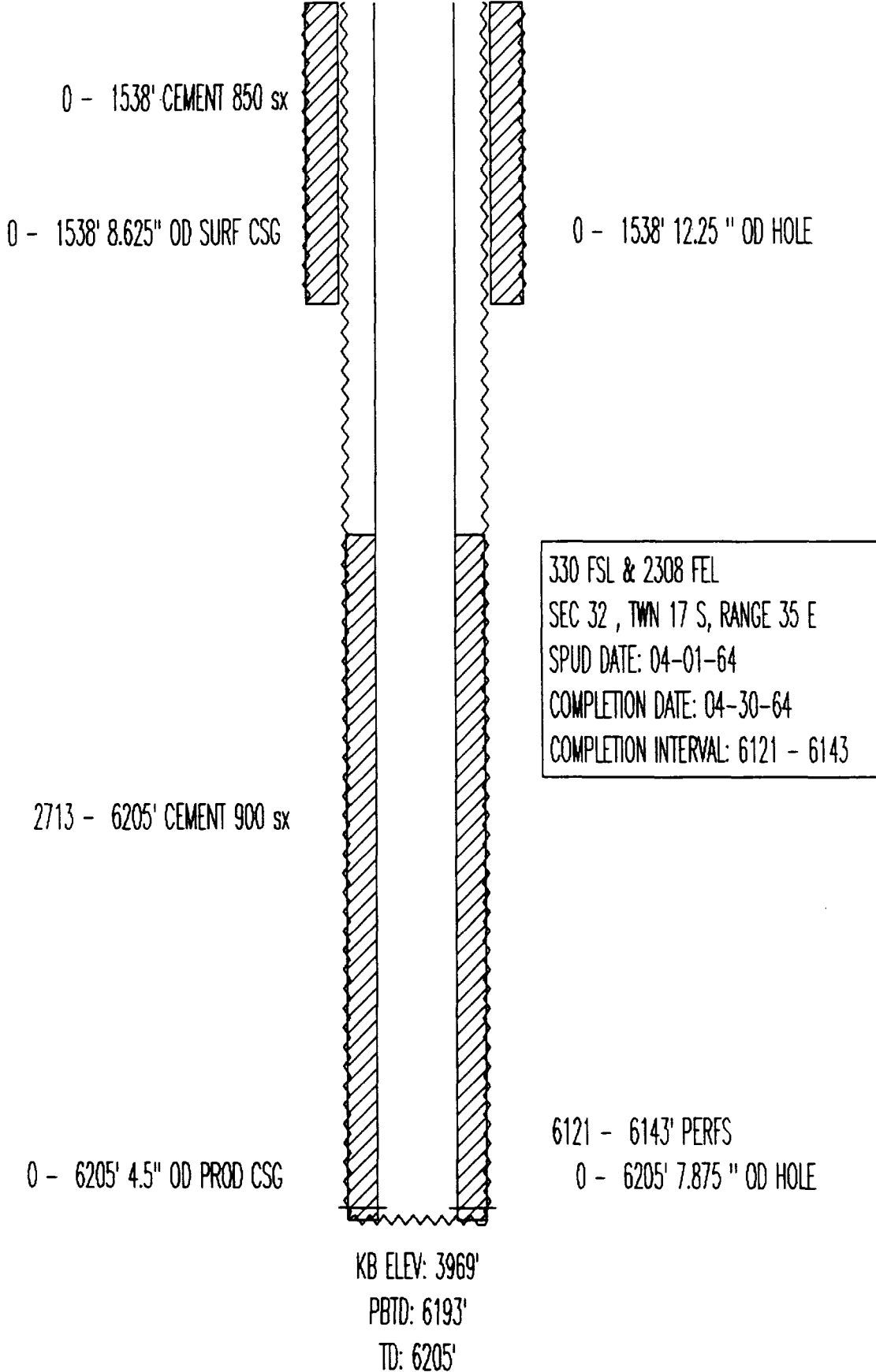


EXXON
STATE K NO. 18
API# 3002520709
(VGEU 02-06)



KB ELEV: 3963'
PBTD: 6197'
TD: 6463'

EXXON
STATE K NO. 20
API# 3002520711
(VGEU 02-07)



EXXON
NEW MEXICO K STATE NO. 17
API# 3002502971

0 - 324' 13.75" OD SURF CSG

(VGEU 02-08)

0 - 324' 17.5 " OD HOLE

0 - 324' CEMENT 300 sx

0 - 3253' CEMENT 400 sx

0 - 3253' 8.625" OD INT CSG

324 - 3253' 11 " OD HOLE

330 FSL & 330 FEL
SEC 32 , TWN 17 S, RANGE 35 E
ELEVATION: 3966 DF
SPUD DATE: 01-22-64
COMPLETION DATE: 02-04-64

5650 - 5990' CEMENT PLUG

5990 - 5993' CIBP

3120 - 9000' CEMENT 725 sx

6280 - 6283' CIBP

6330 - 6333' CIBP

6605 - 6608' CIBP

6340 - 6513' PERFS

8130 - 8530' CEMENT PLUG

8560 - 8563' CIBP

8762 - 8765' CIBP

0 - 9000' 5.5" OD PROD CSG

8771 - 8797' PERFS

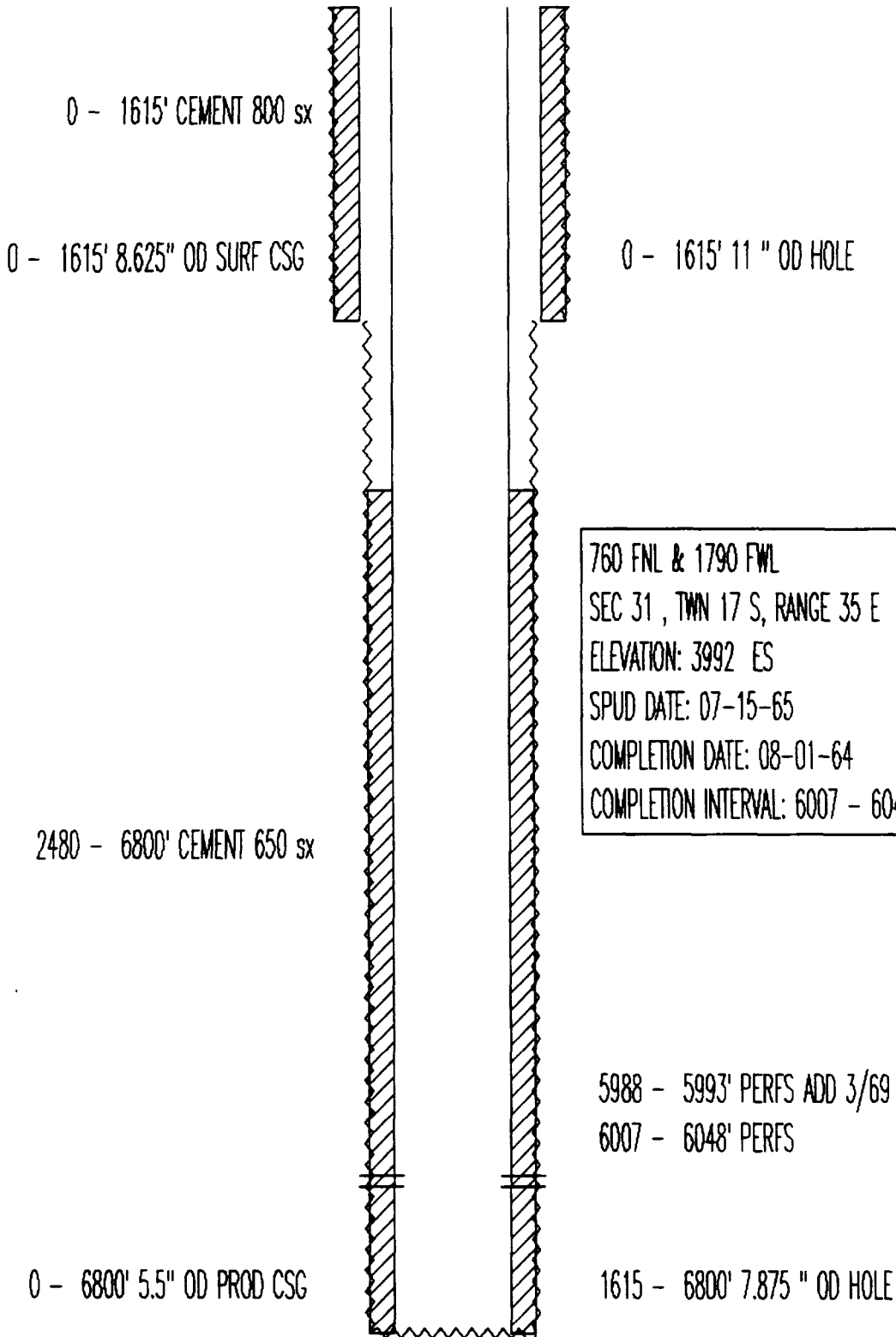
3253 - 9000' 7.875 " OD HOLE

KB ELEV: 3966'

PBTD: 5650'

TD: 9000'

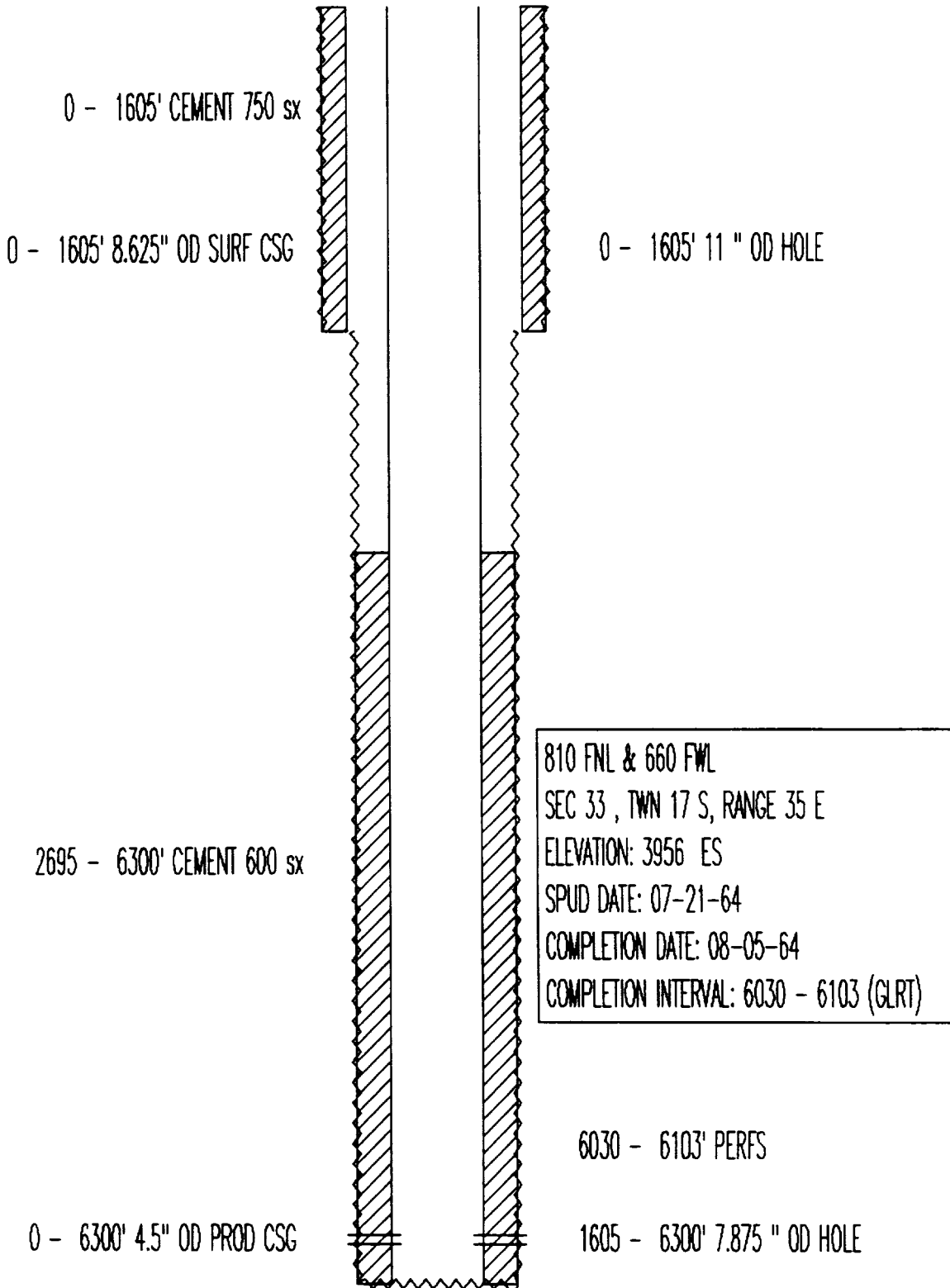
TEXACO EXPL & PROD
SKELLY J STATE NO. 2
API# 3002520854
(VGEU 03-01)



760 FNL & 1790 FWL
SEC 31 , TWN 17 S, RANGE 35 E
ELEVATION: 3992 ES
SPUD DATE: 07-15-65
COMPLETION DATE: 08-01-64
COMPLETION INTERVAL: 6007 - 6048 (GLRT)

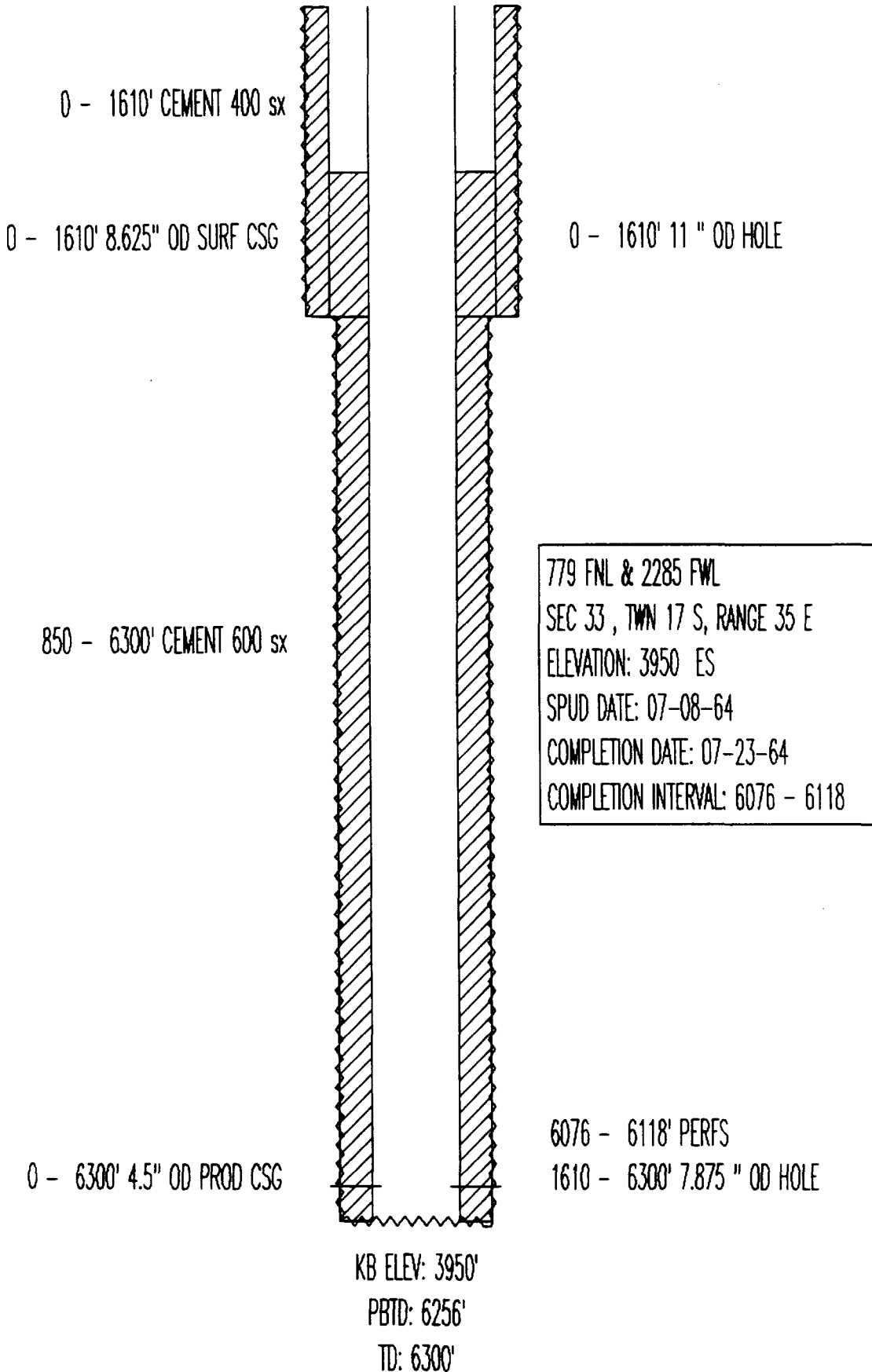
KB ELEV: 3992'
PBD: 6764'
TD: 6800'

TEXACO EXPL& PROD
SKELLY P STATE NO. 4
API# 3002520856
(VGEU 04-01)



KB ELEV: 3956'
PBTD: 6267'
TD: 6300'

TEXACO EXPL & PROD
SKELLY P STATE NO. 3
API# 3002520855
(VGEU 04-02)



SHELL
STATE M. NO. 1
API# 3002520828
(VGEU 05-01)

0 - 356' 13.375" OD SURF CSG

0 - 356' 17.5 " OD HOLE

0 - 356' CEMENT 350 sx

0 - 3014' CEMENT 400 sx

0 - 3014' 9.625" OD INT CSG

356 - 3014' 12.25 " OD HOLE

3978 - 6306' CEMENT 900 sx

0 - 6306' 4.5" OD PROD CSG

6130 - 6200' PERFS

6273 - 6500' CEMENT PLUG

8050 - 8150' CEMENT PLUG

9450 - 9750' CEMENT PLUG

10200 - 10300' CEMENT PLUG

1980 FSL & 1980 FEL
SEC 29 , T14N 17 S, RANGE 35 E
ELEVATION: 3975 ES
SPUD DATE: 04-18-64
COMPLETION DATE: 06-01-64
COMPLETION INTERVAL: 6130 - 6200 (PDCK)

3014 - 10300' 8.5 " OD HOLE

KB ELEV: 3975'

PBTD: 6273'

TD: 10300'

SHELL
STATE M NO. 3
API# 3002520830
(VGEU 05-02)

0 - 1647' CEMENT 800 sx

0 - 1647' 8.625" OD SURF CSG

0 - 1662' 12.25 " OD HOLE

4750 - 6300' CEMENT 700 sx

0 - 6300' 4.5" OD PROD CSG

1980 FSL & 660 FEL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3968 ES
SPUD DATE: 07-26-64
COMPLETION DATE: 08-11-64
COMPLETION INTERVAL: 6112 - 6148 (PDCK)

6112 - 6148' PERFS

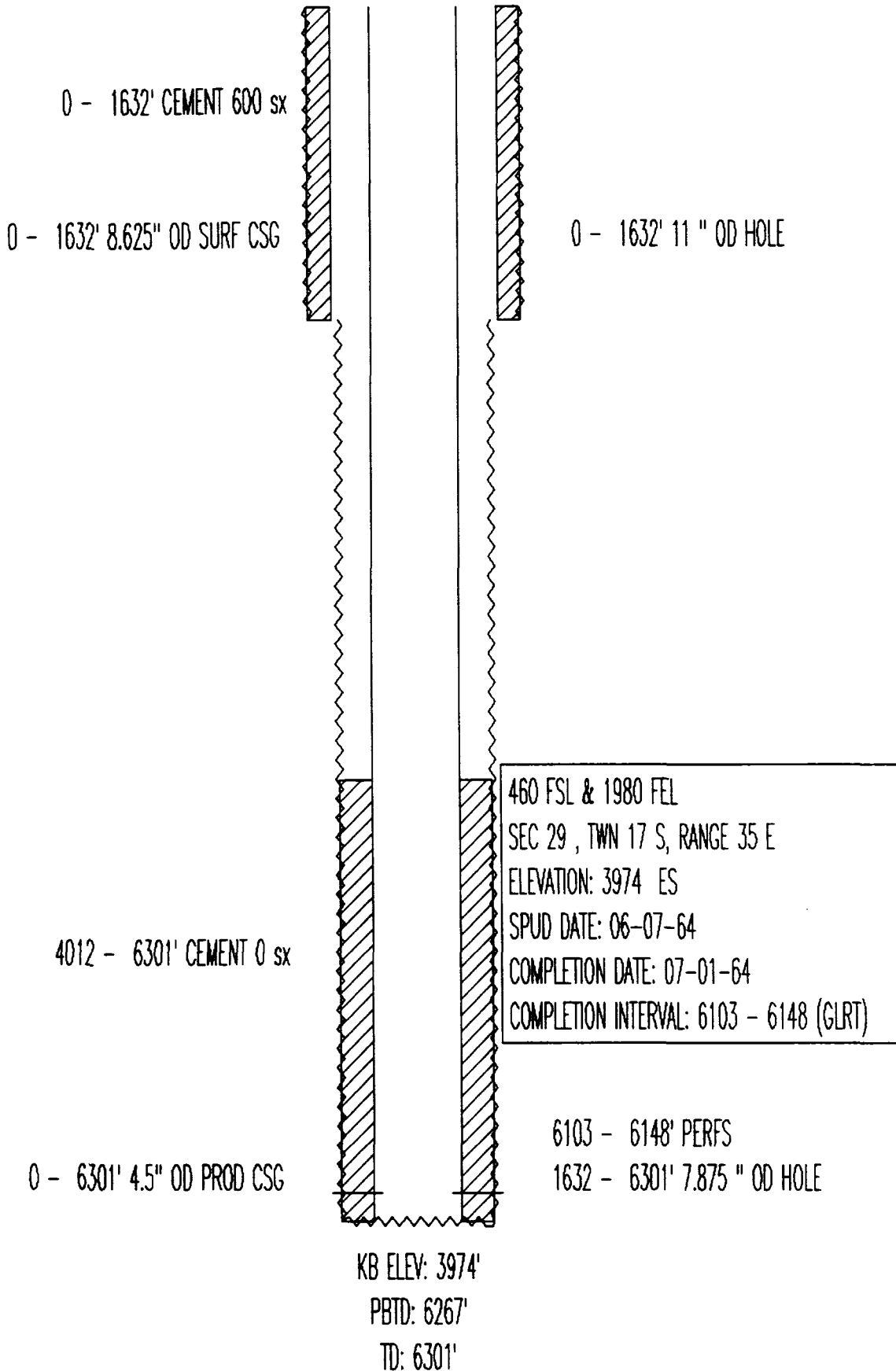
1662 - 6300' 7.875 " OD HOLE

KB ELEV: 3968'

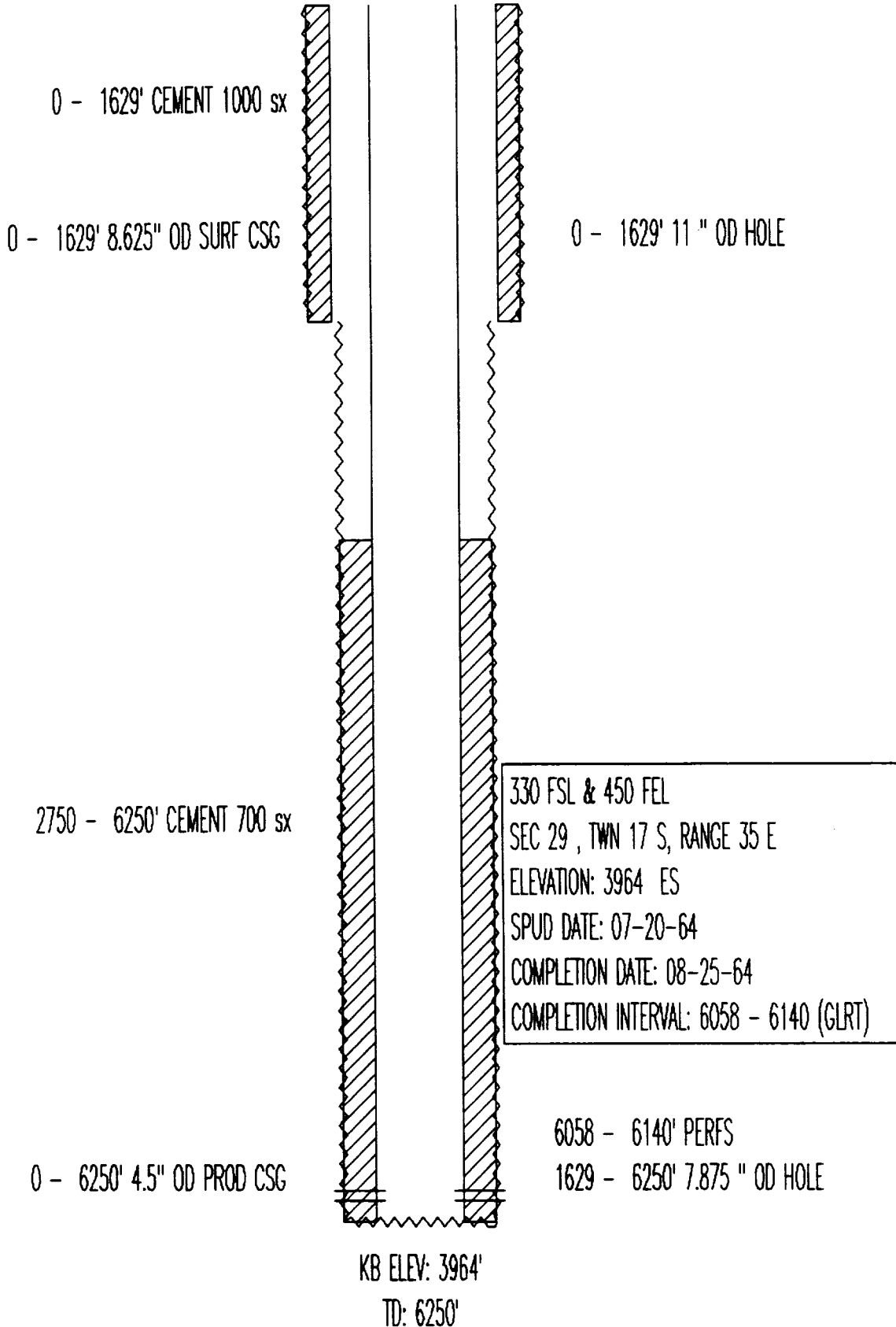
PBTD: 6263'

TD: 6300'

SHELL
STATE M NO. 2
API# 3002520829
(VGEU 05-03)



SHELL
STATE M NO. 4
API# 3002520831
(VGEU 05-04)



SHELL
STATE T NO. 10
API# 3002520232
(VGEU 06-01)

0 - 1614' CEMENT 410 sx

0 - 1614' 8.625" OD SURF CSG

0 - 1614' 12 " OD HOLE

0 - 6238' CEMENT 950 sx

2310 FSL & 1980 FEL

SEC 33 , T17N 17 S, RANGE 35 E

ELEVATION: 3943 GR

SPUD DATE: 11-25-63

COMPLETION DATE: 12-18-63

COMPLETION INTERVAL: 6191 - 6202 (PDCK)

6220 - 6223' CIBP

0 - 6238' 5.5" OD PROD CSG

6191 - 6202' PERFS

6081 - 6109' PERFS

5983 - 6066' PERFS

1614 - 6240' 7.875 " OD HOLE

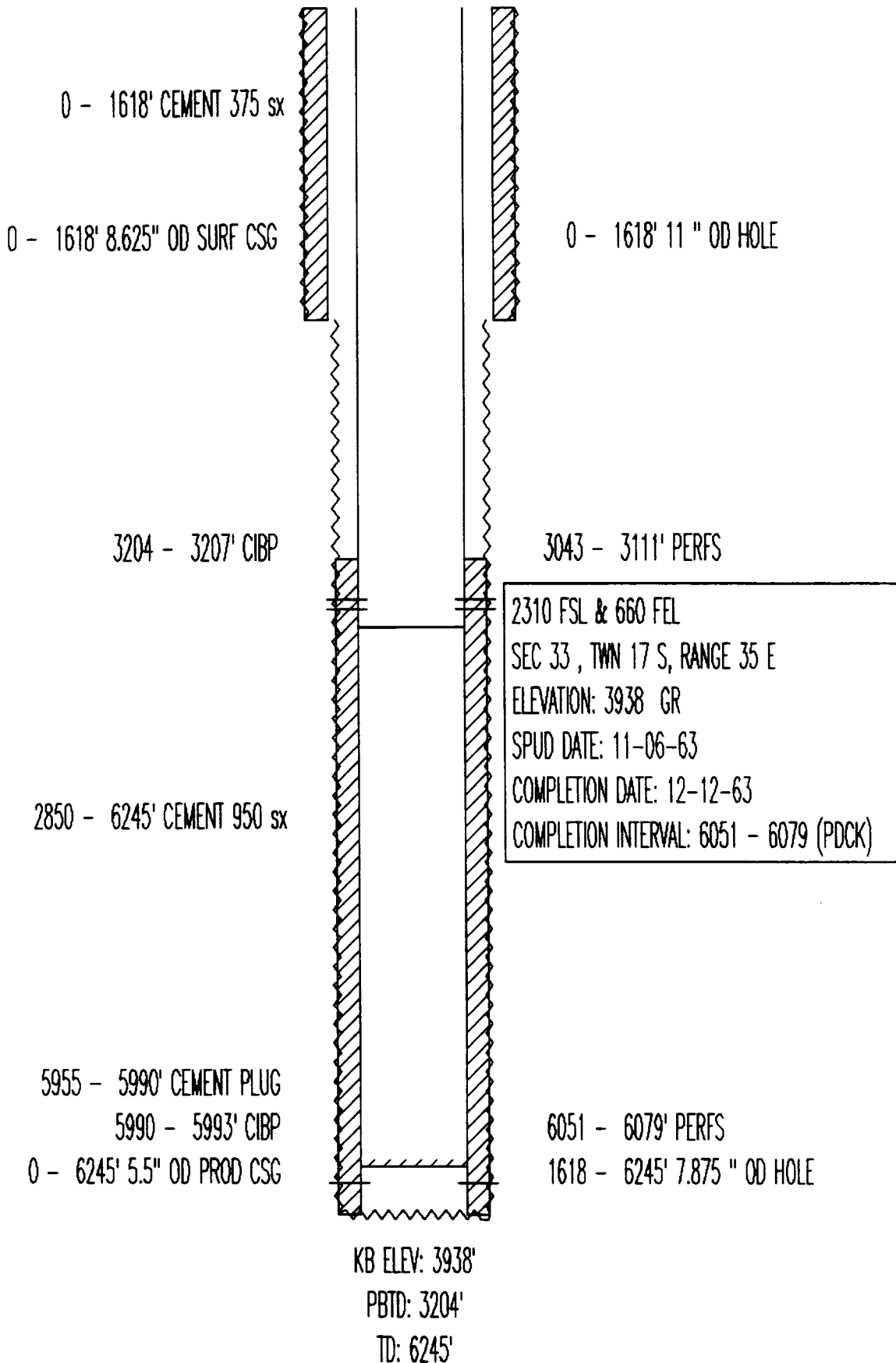
6110 - 6147' PERFS

KB ELEV: 3943'

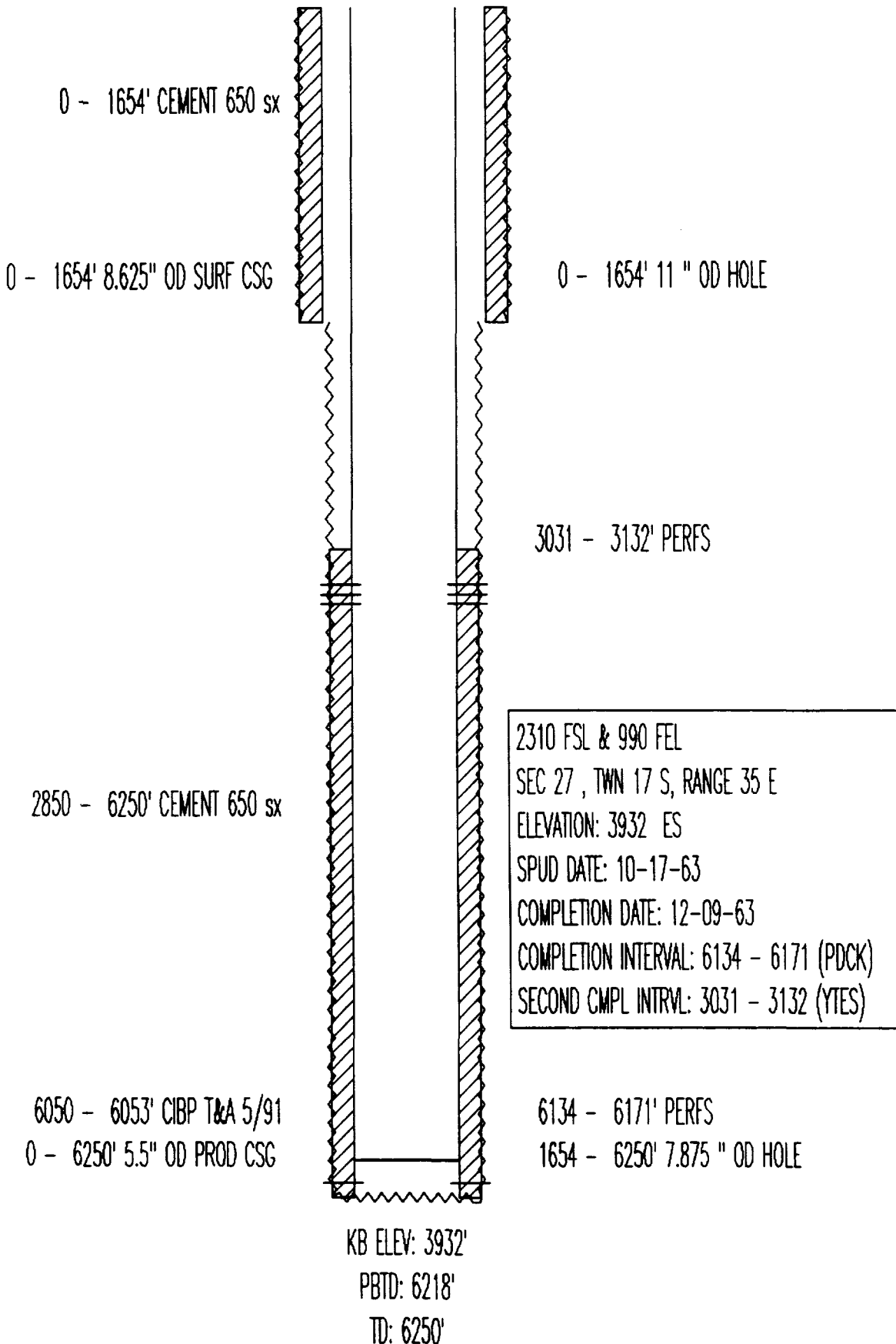
PBTD: 6220'

TD: 6240'

SHELL
STATE T NO. 9
API# 3002520330
(VGEU 06-02)



SHELL OIL
STATE V NO. 5
API# 3002520286
(VGEU 07-01)



SHELL
STATE E NO. 2
API# 3002520823
(VGEU 08-01)

0 - 332' 13.375" OD SURF CSG

0 - 332' 17.5 " OD HOLE

0 - 332' CEMENT 300 sx

0 - 3284' CEMENT 574 sx

0 - 3284' 9.625" OD INT CSG

332 - 3284' 12.25 " OD HOLE

5999 - 6101' PERFS

6063 - 6223' PERFS

3000 - 9505' CEMENT 500 sx

6296 - 6299' CIBP

660 FSL & 1700 FWL

SEC 31 , TWN 17 S, RANGE 35 E

ELEVATION: 3984 GR

SPUD DATE: 03-04-64

COMPLETION DATE: 05-11-64

COMPLETION INTERVAL: 5999 - 6101 (PDCK)

COMPLETION DATE: 12-22-70

COMPLETION INTERVAL: 5999 - 6134 (GLRT)

9096 - 9099' CIBP

0 - 9505' 7 " OD PROD CSG

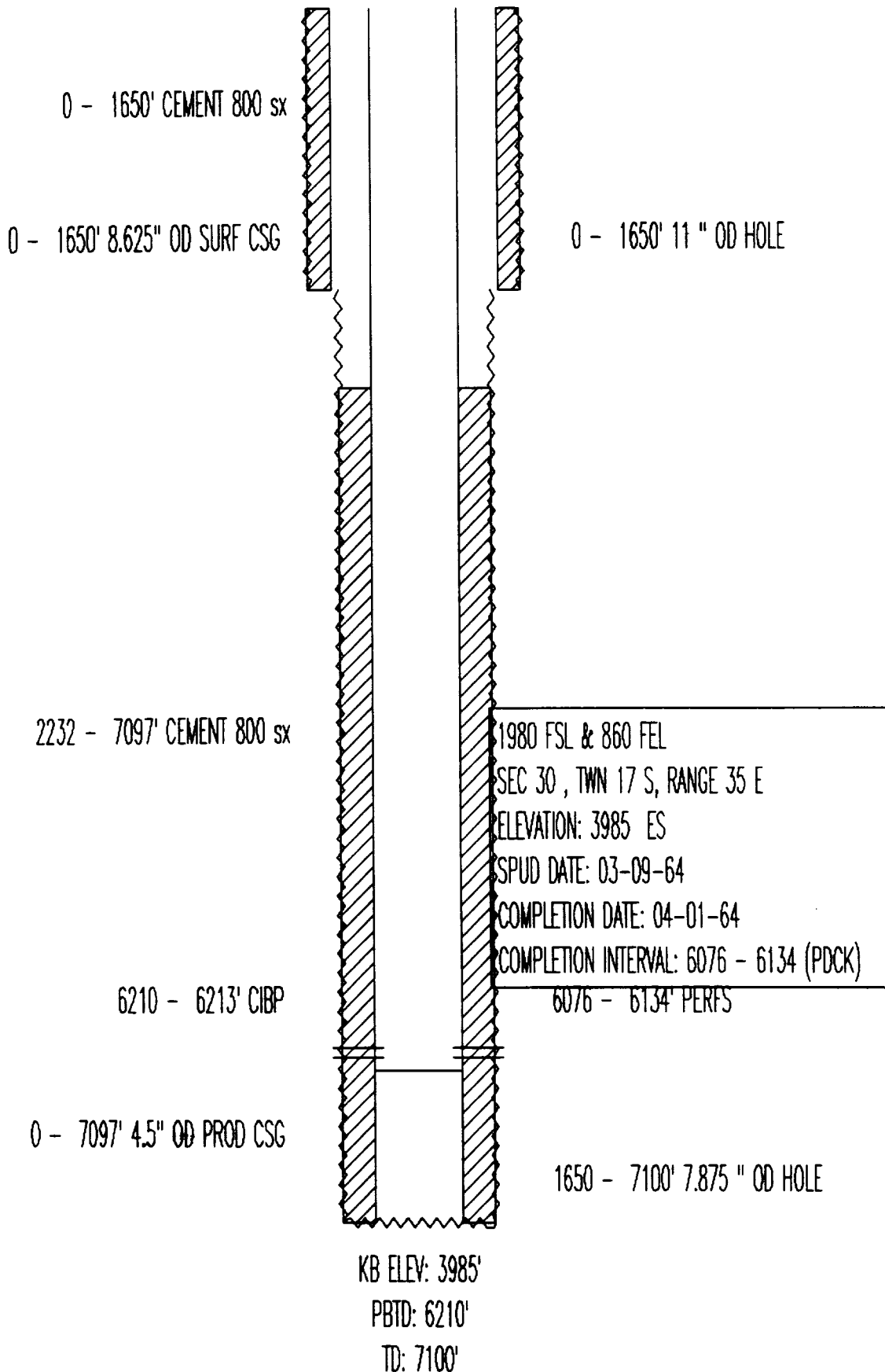
9229 - 9311' PERFS

9414 - 9418' PERFS

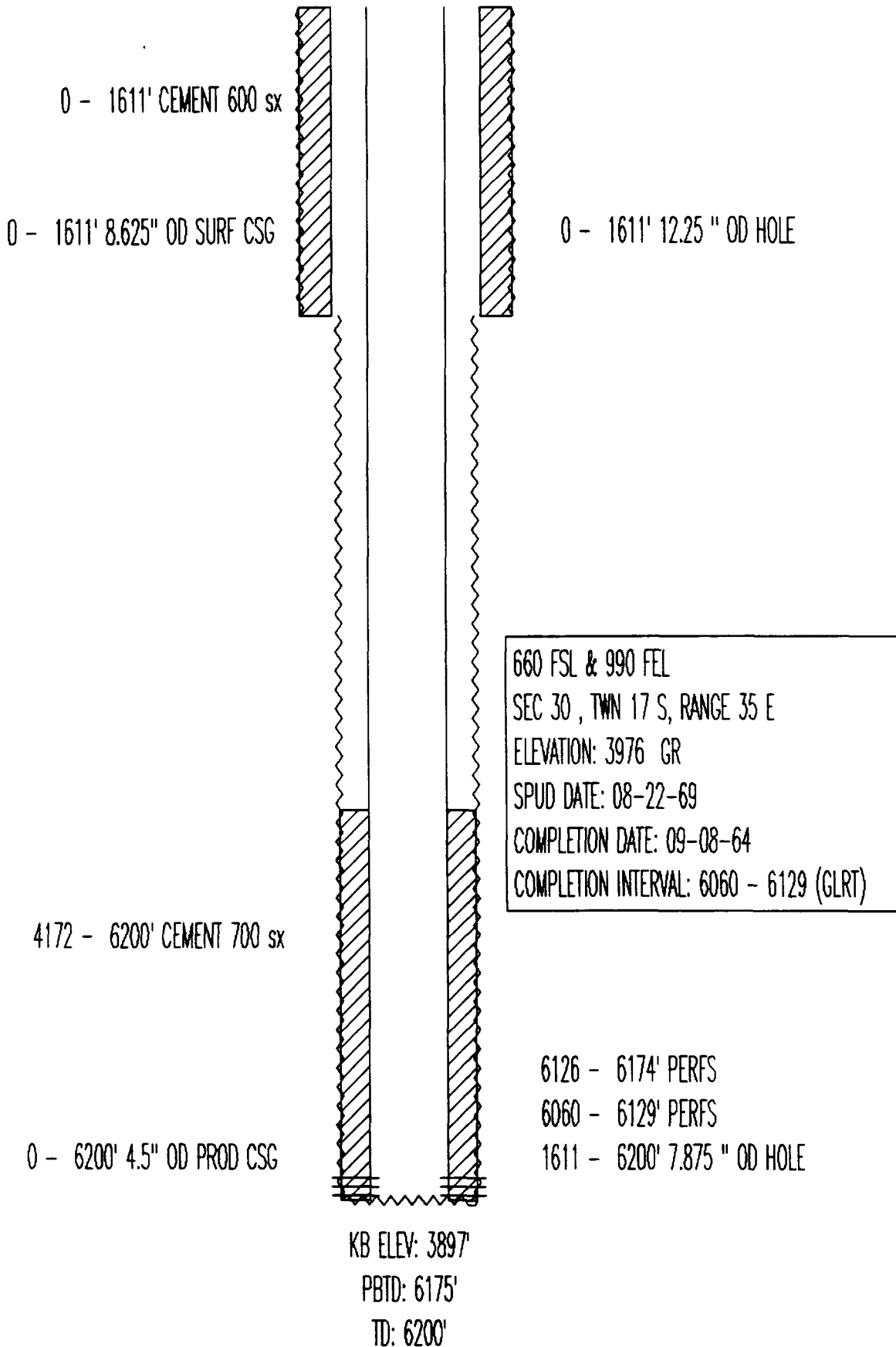
3284 - 10406' 8.5 " OD HOLE

PBTD: 6296'

SHELL
STATE B NO. 3
API# 3002520821
(VGEU 09-01)



SHELL
STATE B NO. 4
API# 3002520822
(VGEU 09-02)



SHELL
STATE N NO. 6
API# 3002520834
(VGEU 10-01)

0 - 1648' CEMENT 400 sx

0 - 1648' 8.625" OD SURF CSG

0 - 1648' 12.25 " OD HOLE

990 FNL & 1880 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3954 ES
SPUD DATE: 08-21-64
COMPLETION DATE: 09-10-64
COMPLETION INTERVAL: 6151 - 6168 (GLRT)

4273 - 6302' CEMENT 700 sx

6050 - 6053' CIBP

0 - 6302' 4.5" OD PROD CSG

6151 - 6168' PERFS

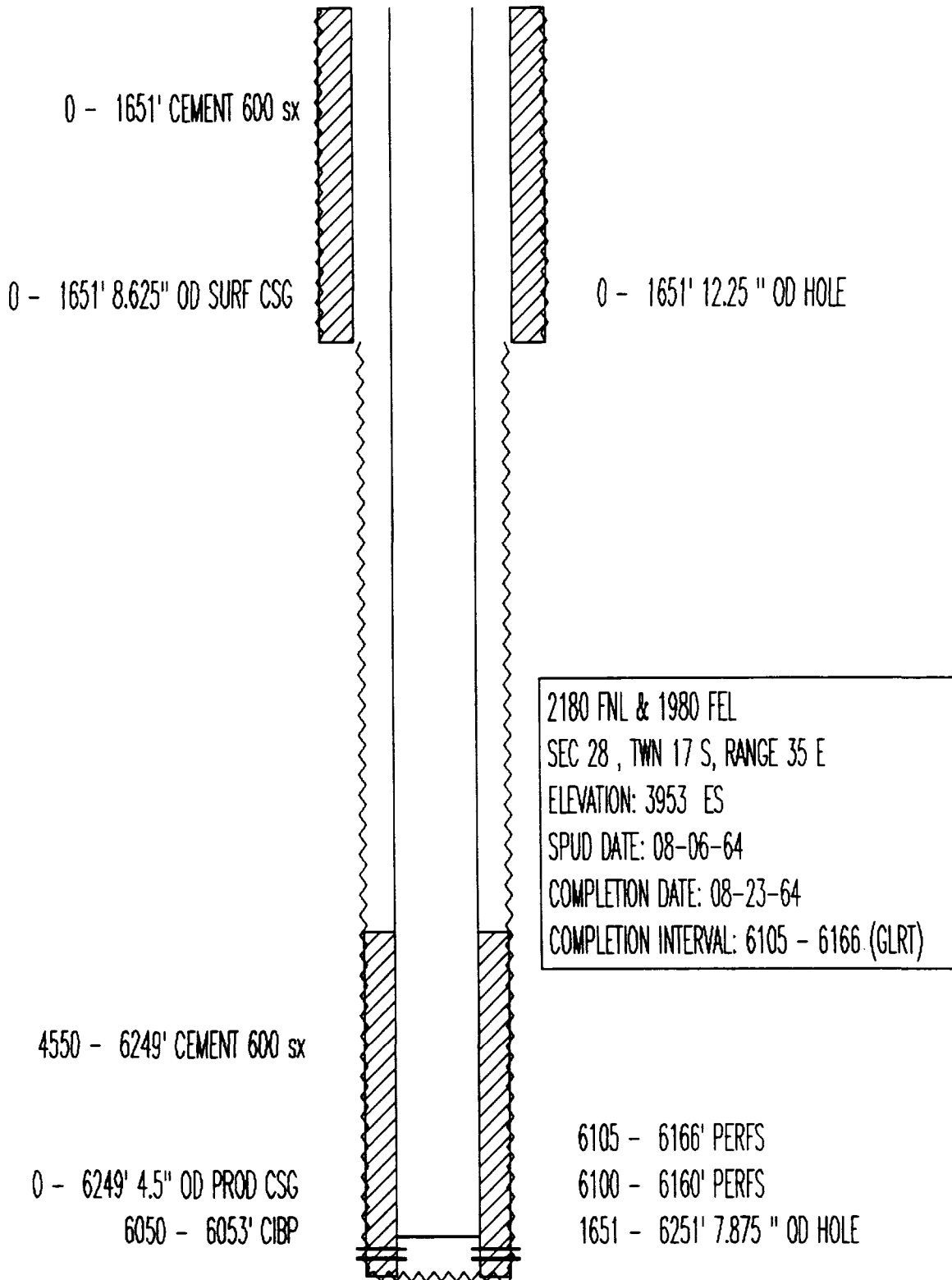
1648 - 6302' 7.875 " OD HOLE

KB ELEV: 3954'

PBTD: 6276'

TD: 6302'

SHELL
STATE N NO. 4
API# 3002520832
(VGEU 10-02)



KB ELEV: 3953'
PBTD: 6218'
TD: 6251'

SHELL
STATE N NO. 5
API# 3002520833
(VGEU 10-03)

0 - 1649' CEMENT 600 SX

0 - 1649' 8.625" OD SURF CSG

0 - 1649' 11 " OD HOLE

0 - 6248' CEMENT 400 SX

0 - 6248' 4.5" OD PROD CSG

2310 FNL & 330 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3948 ES
SPUD DATE: 07-20-64
COMPLETION DATE: 08-08-64
COMPLETION INTERVAL: 6092 - 6139 (GLRT)

6092 - 6139' PERFS

1649 - 6250' 7.875 " OD HOLE

KB ELEV: 3948'

PBTD: 6208'

TD: 6250'

OXY
STATE K NO. 8
API# 3002520624
(VGEU 11-01)

0 - 350' CEMENT 350 sx
0 - 350' 13.375" OD SURF CSG

0 - 350' 17.5 " OD HOLE

0 - 3029' CEMENT 1700 sx

0 - 3029' 8.625" OD INT CSG

350 - 3029' 12.25 " OD HOLE

1650 - 6299' CEMENT 1006 sx

0 - 6299' 5.5" OD PROD CSG

990 FNL & 2310 FEL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3935 GR
SPUD DATE: 03-22-64
COMPLETION DATE: 04-10-64
COMPLETION INTERVAL: 6138 - 6144 (PDCK)

6138 - 6176' PERFS
3029 - 6300' 7.875 " OD HOLE

KB ELEV: 3935'
TD: 6300'

OXY
STATE K NO. 7
API# 3002520301
(VGEU 11-02)

0 - 356' CEMENT 360 sx
0 - 356' 13.375" OD SURF CSG

0 - 356' 17.5" OD HOLE

0 - 2995' CEMENT 1480 sx

0 - 2995' 8.625" OD INT CSG

356 - 2995' 12.25" OD HOLE
3039 - 3121' PERFS

3390 - 3393' CIBP

2905 - 6290' CEMENT 1001 sx

990 FNL & 330 FEL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3934 KB
SPUD DATE: 12-19-63
COMPLETION DATE: 01-30-64
COMPLETION INTERVAL: 6114 - 6208 (PDCK)

6020 - 6023' CIBP

0 - 6290' 5.5" OD PROD CSG

6114 - 6208' PERFS
2995 - 6290' 7.875" OD HOLE

KB ELEV: 3934'
PBTD: 3370'
TD: 6290'

OXY
STATE K NO. 6
API# 3002520253
(VGEU 11-03)

0 - 350' CEMENT 360 sx
0 - 350' 13.375" OD SURF CSG

0 - 352' 17.5 " OD HOLE

0 - 2999' CEMENT 1500 sx

0 - 2999' 8.625" OD INT CSG

352 - 2999' 12.25 " OD HOLE

3022 - 3124' PERFS

3400 - 3403' CIBP

2640 - 6269' CEMENT 330 sx

2310 FNL & 1750 FEL

SEC 27 , TWN 17 S, RANGE 35 E

ELEVATION: 3941 ES

SPUD DATE: 12-09-63

COMPLETION DATE: 12-31-63

COMPLETION INTERVAL: 6178 - 6200 (PDCK)

6020 - 6023' CIBP

0 - 6269' 5.5" OD PROD CSG

6178 - 6200' PERFS

6100 - 6122' PERFS

2999 - 6270' 7.875 " OD HOLE

KB ELEV: 3930'

PBTD: 3380'

TD: 6270'

PHILLIPS PET
SANTA FE NO. 117
API# 3002523700
(VGEU 12-01)

0 - 1667' CEMENT 450 sx

0 - 1667' 8.625" OD SURF CSG

0 - 1667' 12.25 " OD HOLE

2600 - 6200' CEMENT 975 sx

990 FSL & 1650 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3945 DF
SPUD DATE: 02-20-71
COMPLETION DATE: 03-10-71
COMPLETION INTERVAL: 6041 - 6062 (GLRT)

0 - 6200' 4.5" OD PROD CSG

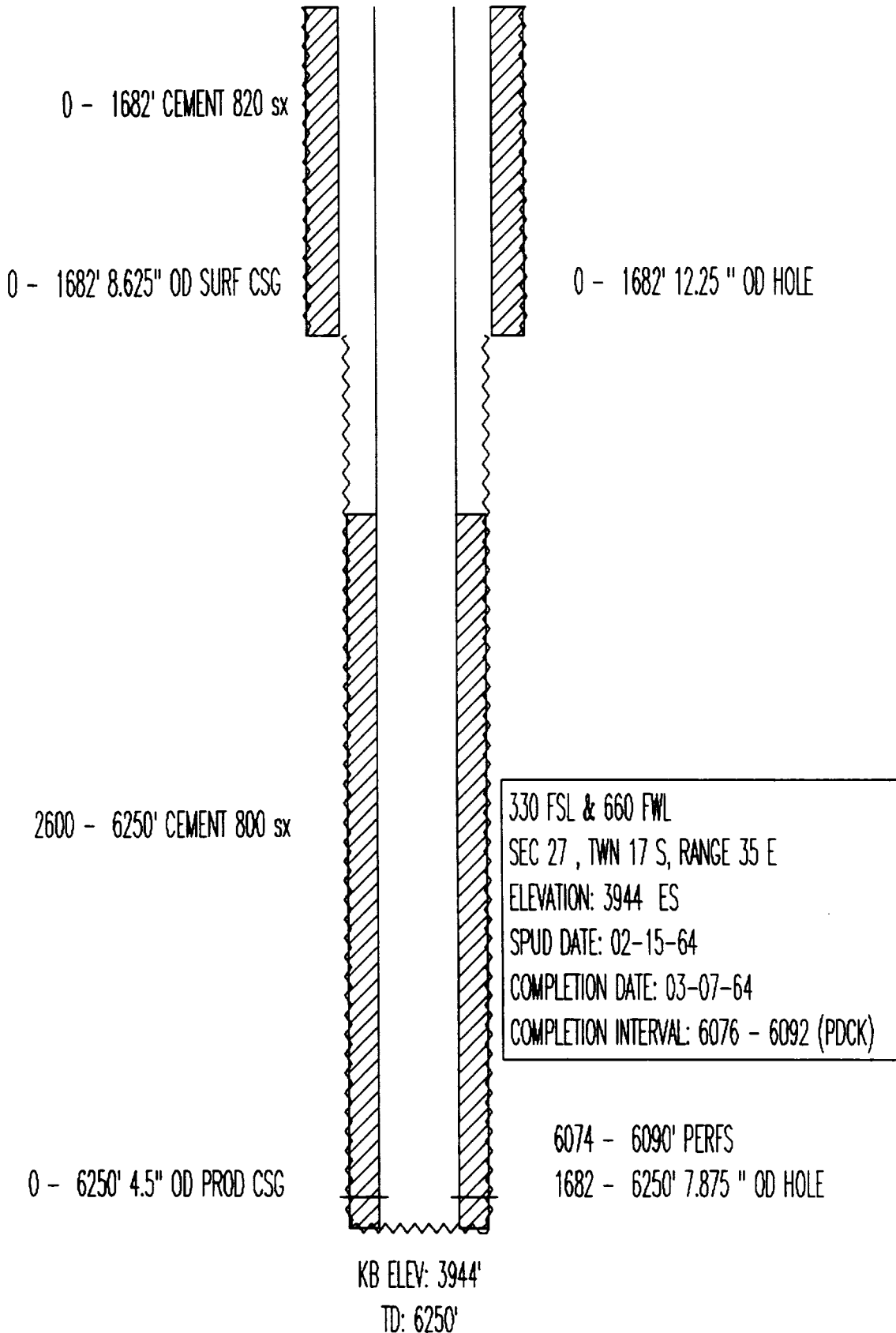
6041 - 6062' PERFS

1667 - 6200' 7.875 " OD HOLE

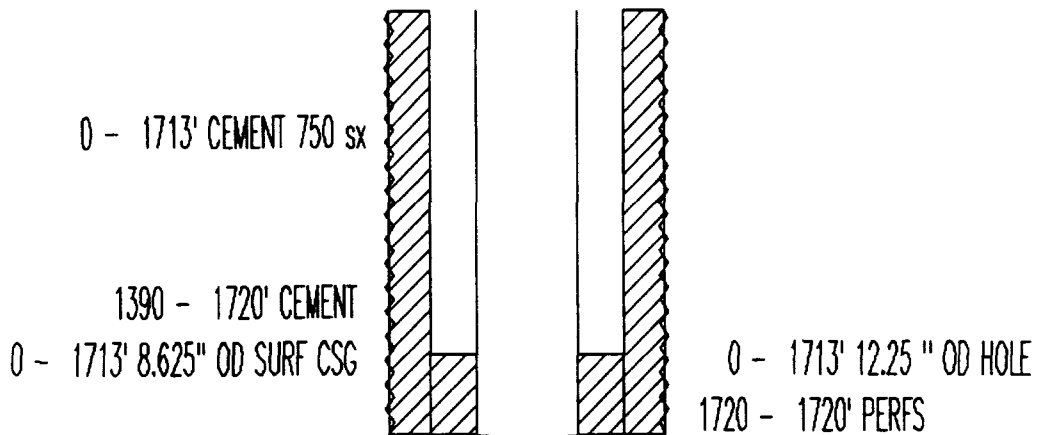
KB ELEV: 3945'

TD: 6200'

PHILLIPS PET
SANTA FE NO. 90
API# 3002520582
(VGEU 12-02)



PHILLIPS PET
SANTA FE NO. 94
API# 3002520788
(VGEU 13-01)



2700 - 6250' CEMENT 800 sx

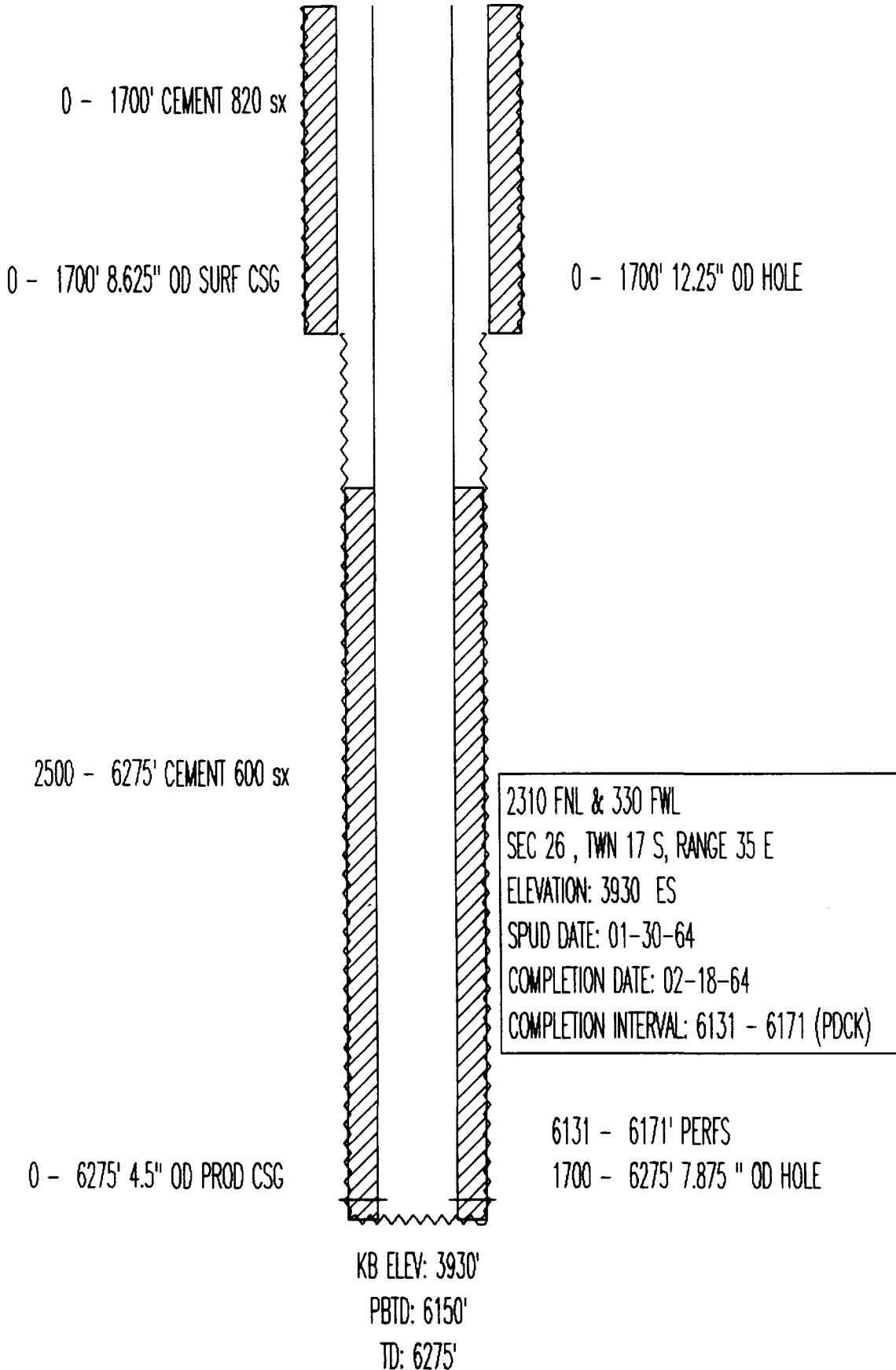
0 - 6250' 4.5" OD PROD CSG

990 FNL & 335 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3931 ES
SPUD DATE: 03-05-64
COMPLETION DATE: 03-25-64
COMPLETION INTERVAL: 6132 - 6148 (PDCK)

6132 - 6148' PERFS
1713 - 6250' 7.875 " OD HOLE

KB ELEV: 3931'
TD: 6250'

PHILLIPS PET
SANTA FE-STATE NO. 89
API# 3002520526
(VGEU 13-03)



PHILLIPS PET
SANTA FE NO. 109
API# 3002520802
(VGEU 14-01)

0 - 1664' CEMENT 590 sx

0 - 1664' 8.625" OD SURF CSG

0 - 1664' 12.25 " OD HOLE

2500 - 6250' CEMENT 800 sx

2323 FNL & 2213 FEL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3978 ES
SPUD DATE: 11-07-64
COMPLETION DATE: 11-25-64
COMPLETION INTERVAL: 6152 - 6174 (GLRT)

0 - 6250' 4.5" OD PROD CSG

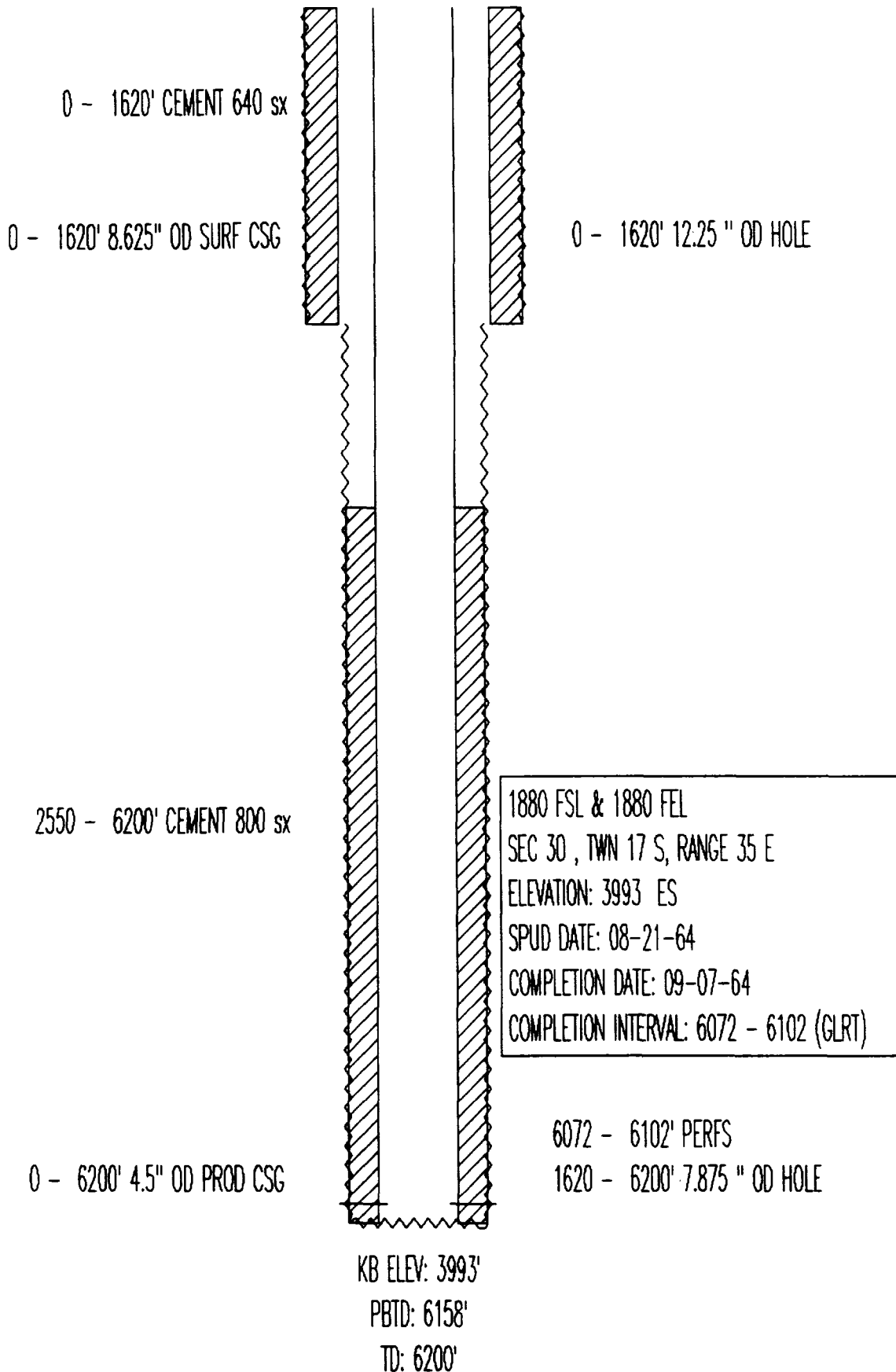
6152 - 6174' PERFS

1664 - 6250' 7.875 " OD HOLE

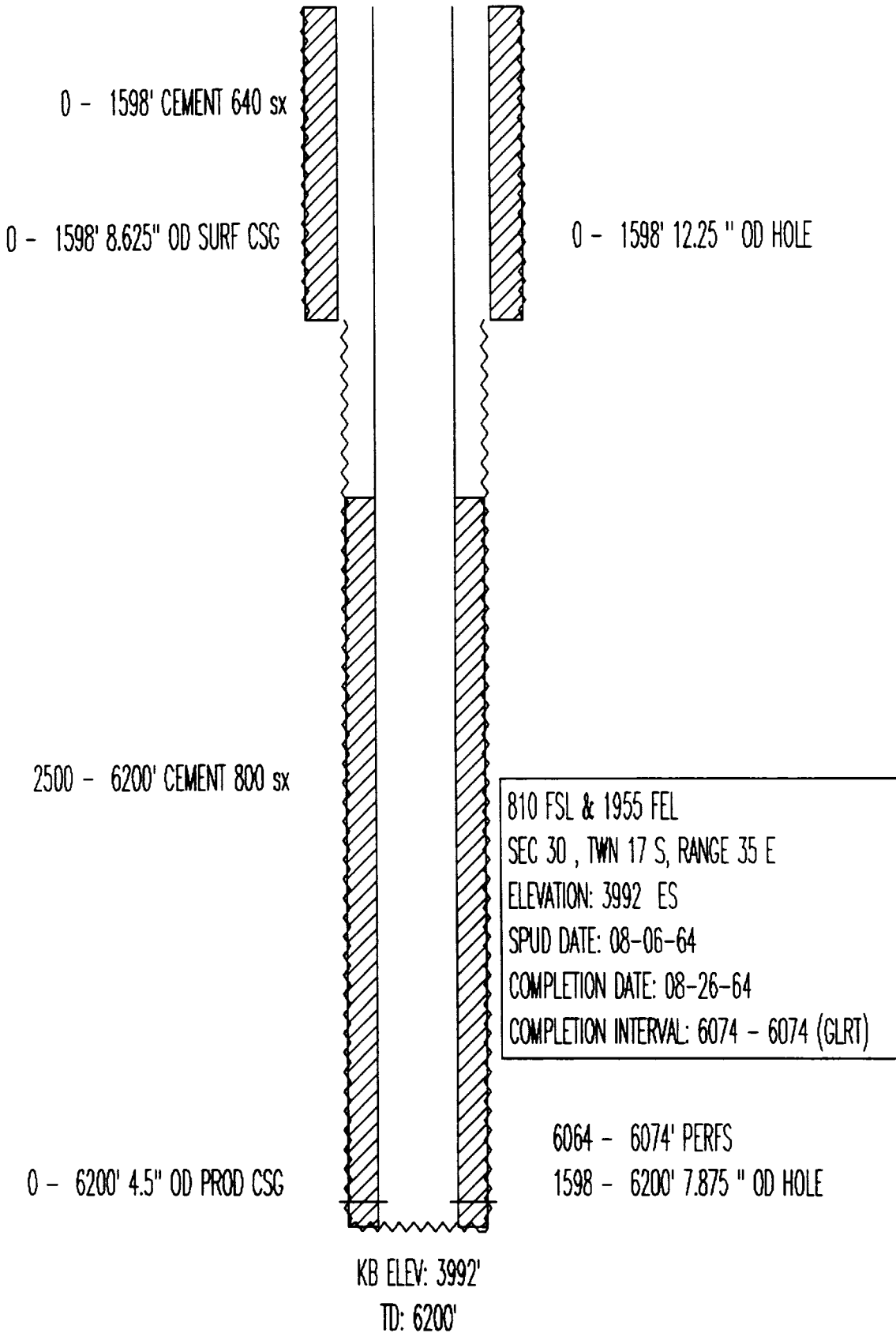
KB ELEV: 3978'

TD: 6250'

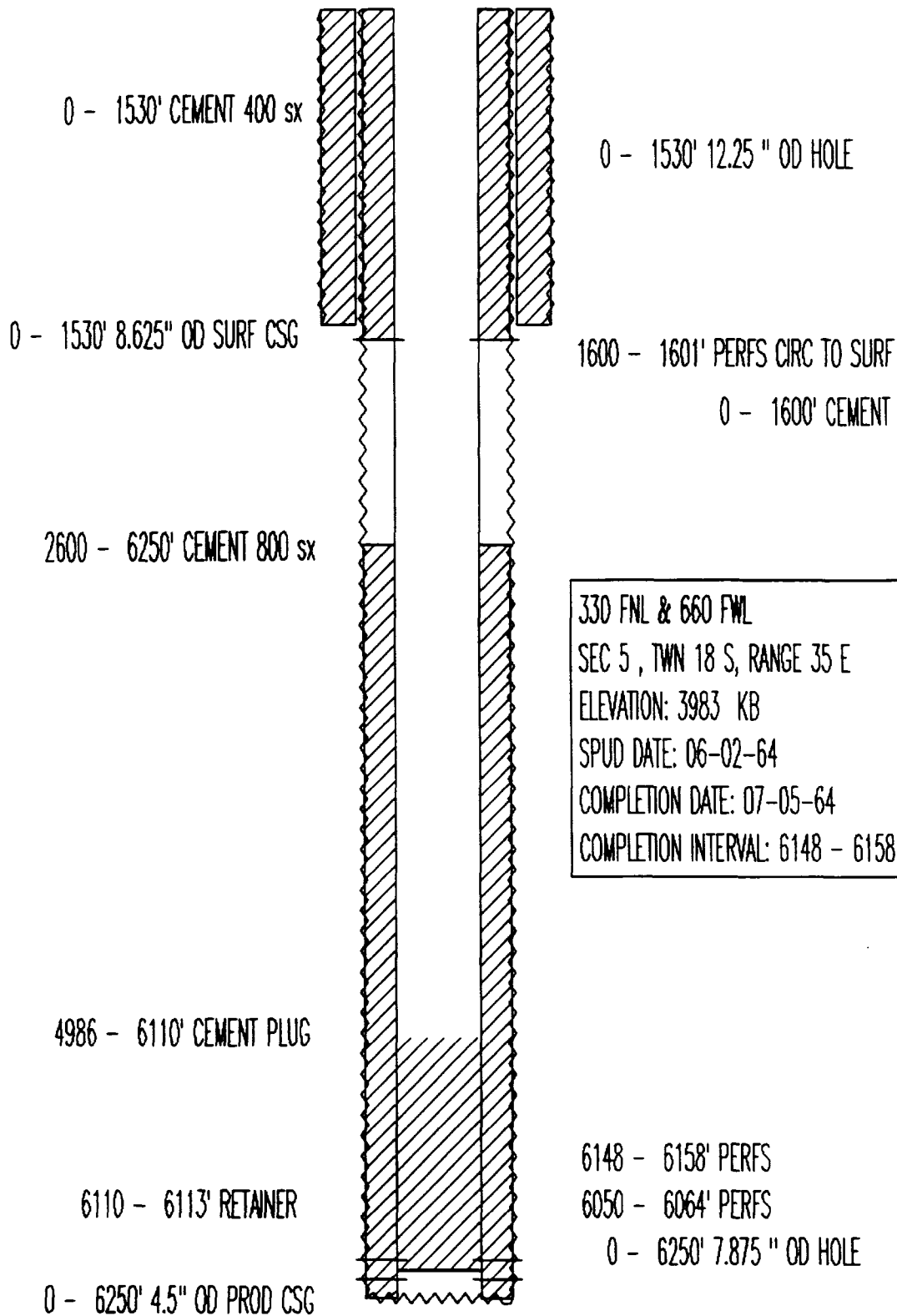
PHILLIPS PET
SANTA FE NO. 101
API# 3002520795
(VGEU 15-01)



PHILLIPS PET
SANTA FE NO. 100
API# 3002520794
(VGEU 15-02)



PHILLIPS PET
SANTA FE NO. 99
API# 3002520793
(VGEU 16-01)



330 FNL & 660 FWL
SEC 5 , TWN 18 S, RANGE 35 E
ELEVATION: 3983 KB
SPUD DATE: 06-02-64
COMPLETION DATE: 07-05-64
COMPLETION INTERVAL: 6148 - 6158

KB ELEV: 3974'
PBTD: 4986'
TD: 6250'

PHILLIPS PET
STATE K NO. 9
API# 3002521096
(VGEU 17-01)

0 - 1545' CEMENT 900 sx

0 - 1545' 8.625" OD SURF CSG

0 - 1545' 12.25 " OD HOLE

0 - 6200' CEMENT 2675 sx

2110 FSL & 1980 FEL
SEC 31 , TWN 17 S, RANGE 35 E
ELEVATION: 3973 GR
SPUD DATE: 02-19-65
COMPLETION DATE: 03-18-65
COMPLETION INTERVAL: 6007 - 6047 (GLRT)

5918 - 5921' CIBP T&A 11/74

0 - 6200' 4.5" OD PROD CSG

6007 - 6047' PERFS

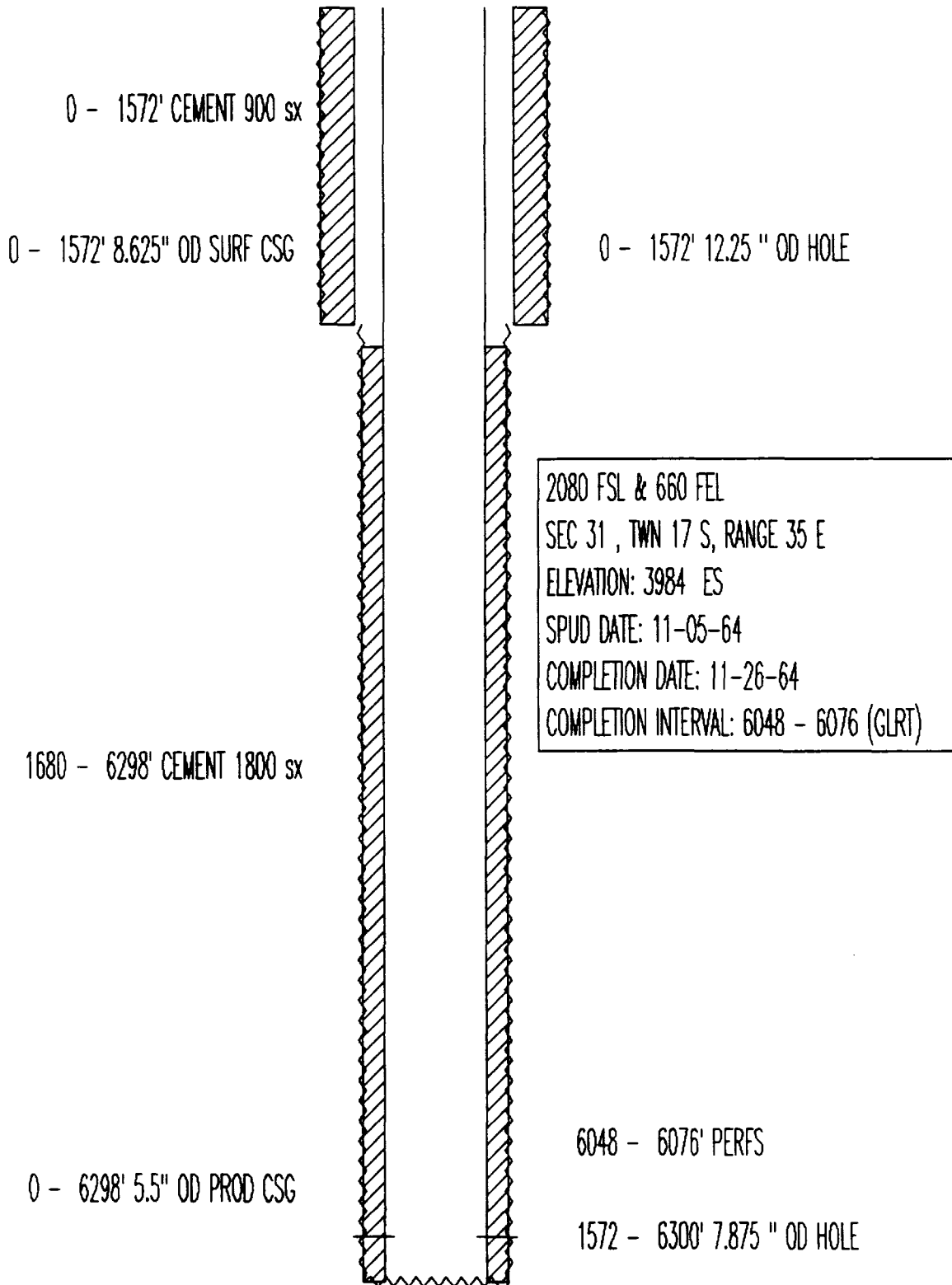
1545 - 6200' 7.875 " OD HOLE

KB ELEV: 3973'

PBTD: 6163'

TD: 6200'

PHILLIPS PET
STATE K NO. 7
API# 3002520864
(VGEU 17-02)



KB ELEV: 3984'
PBTID: 6251'
TD: 6300'

PHILLIPS PET
STATE K NO. 8
API# 3002520865
(VGEU 17-03)

0 - 1614' CEMENT 900 sx

0 - 1614' 8.625" OD SURF CSG

0 - 1514' 12.25 " OD HOLE

0 - 6290' CEMENT 2085 sx

760 FSL & 660 FEL
SEC 31 , TWN 17 S, RANGE 35 E
ELEVATION: 3980 ES
SPUD DATE: 11-24-64
COMPLETION DATE: 12-15-64
COMPLETION INTERVAL: 6076 - 6117 (GLRT)

0 - 6290' 4.5" OD PROD CSG

6076 - 6117' PERFS

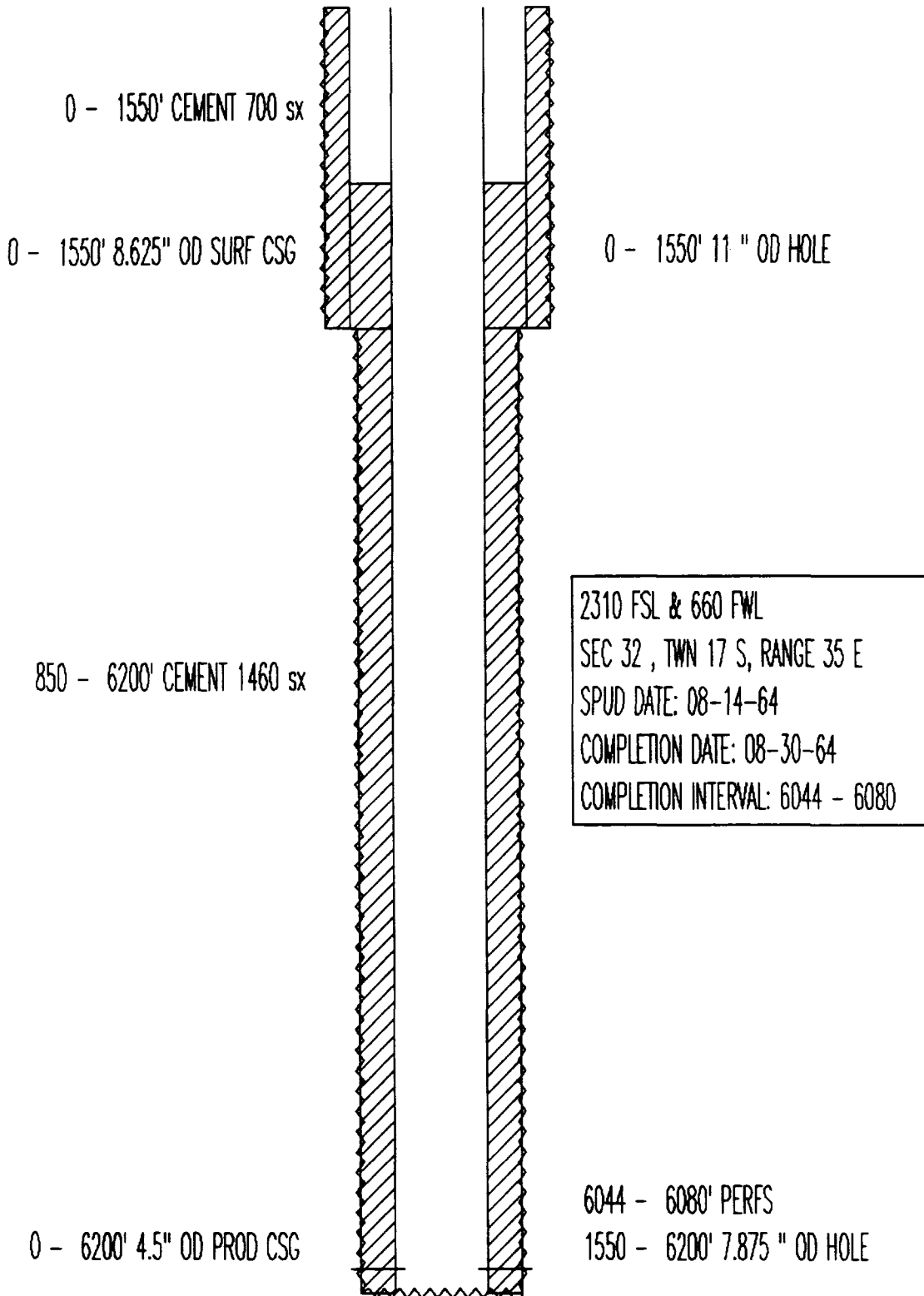
1514 - 6290' 7.875 " OD HOLE

KB ELEV: 3980'

PBTD: 6241'

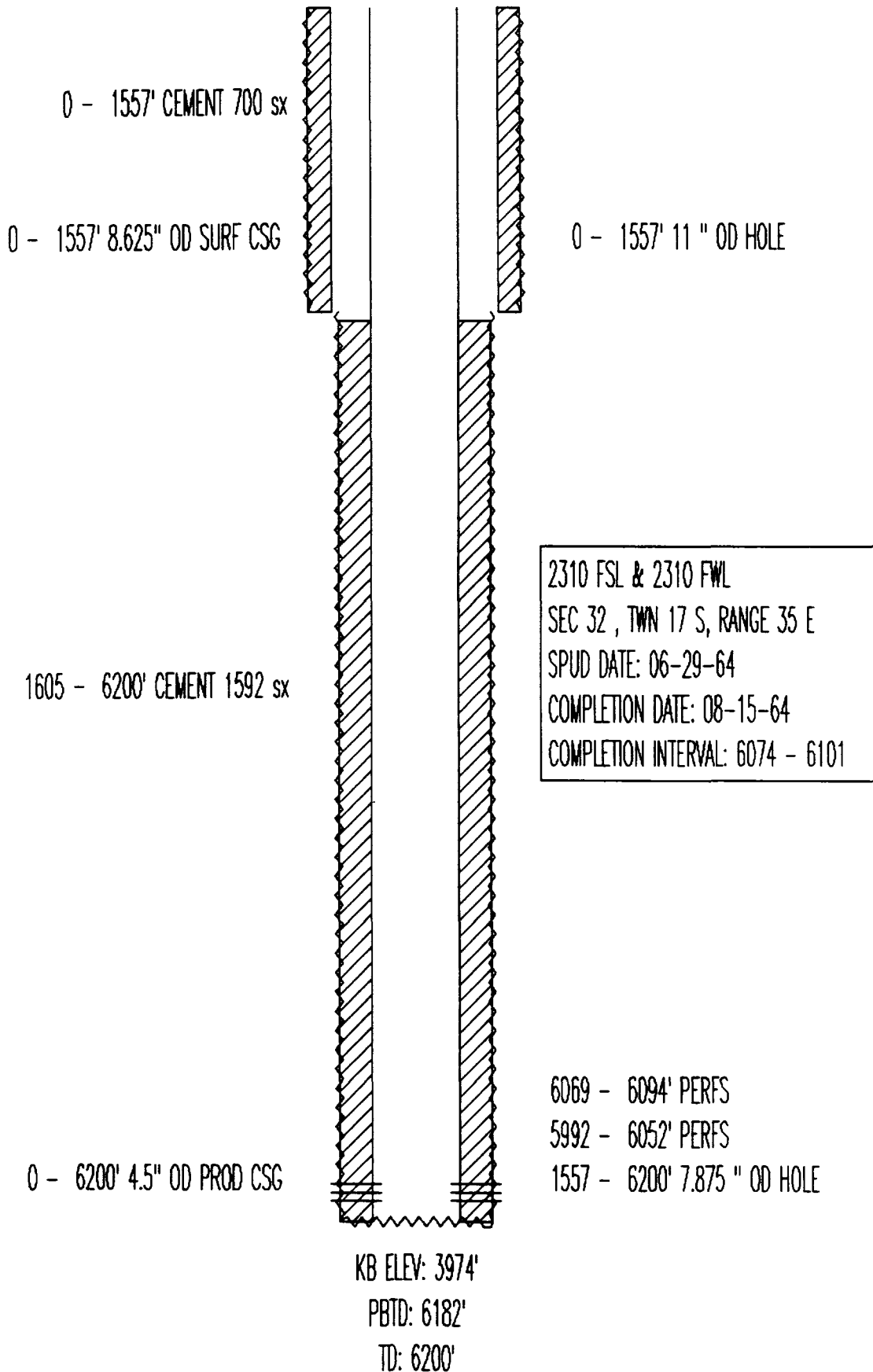
TD: 6290'

ARCO
STATE B1576 NO. 7
API# 3002520846
(VGEU 19-01)

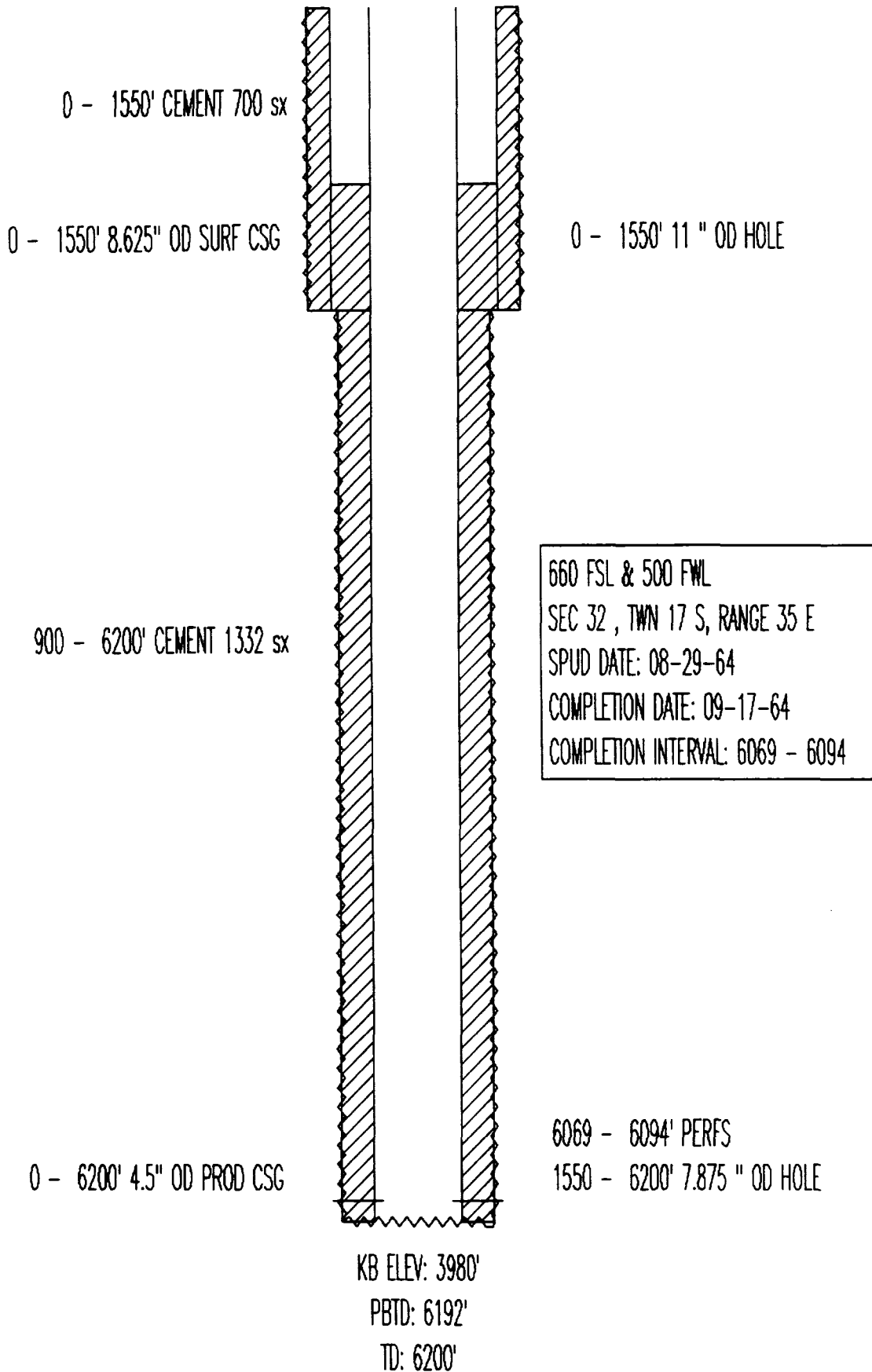


KB ELEV: 3980'
PBTD: 6187'
TD: 6200'

ARCO
STATE B1576 NO. 6
API# 3002520845
(VGEU 19-02)



ARCO
STATE B1576 NO. 8
API# 3002520847
(VGEU 19-03)



ARCO
STATE B1576 NO. 5
API# 3002520844
(VGEU 19-04)

0 - 1590' CEMENT 630 sx

0 - 1590' 8.625" OD SURF CSG

0 - 1590' 11 " OD HOLE

1805 - 6250' CEMENT 1320 sx

0 - 6250' 4.5" OD PROD CSG

760 FSL & 2310 FWL
SEC 32 , TWN 17 S, RANGE 35 E
SPUD DATE: 07-10-64
COMPLETION DATE: 07-30-64
COMPLETION INTERVAL: 6086 - 6106

6086 - 6106' PERFS
1590 - 6250' 7.875 " OD HOLE

KB ELEV: 3970'
PBTD: 6234'
TD: 6250'

ARCO
STATE B1578 NO. 3
API# 3002521352
(VGEU 20-01)

0 - 1571' CEMENT 1300 sx
0 - 1571' 13.375" OD SURF CSG
0 - 1571' 17.5 " OD HOLE
0 - 4800' CEMENT 2170 sx

0 - 4800' 9.625" OD INT CSG
1571 - 4800' 12.25 " OD HOLE

6082 - 6139' PERFS

4656 - 10200' CEMENT 1440 sx

8469 - 8654' PERFS

9650 - 9653' CIBP

9136 - 9244' PERFS

4647 - 10200' 7.5" OD LINER

1980 FNL & 1800 FWL
SEC 30 , TWN 17 S, RANGE 35 E
ELEVATION: 4001 DF
SPUD DATE: 02-27-65
COMPLETION DATE: 05-28-65
COMPLETION INTERVAL: 9769 - 9994 (WFMP)

SECOND CMPL INTRVL: 6082 - 6139 (PDCK)

9769 - 9994' PERFS

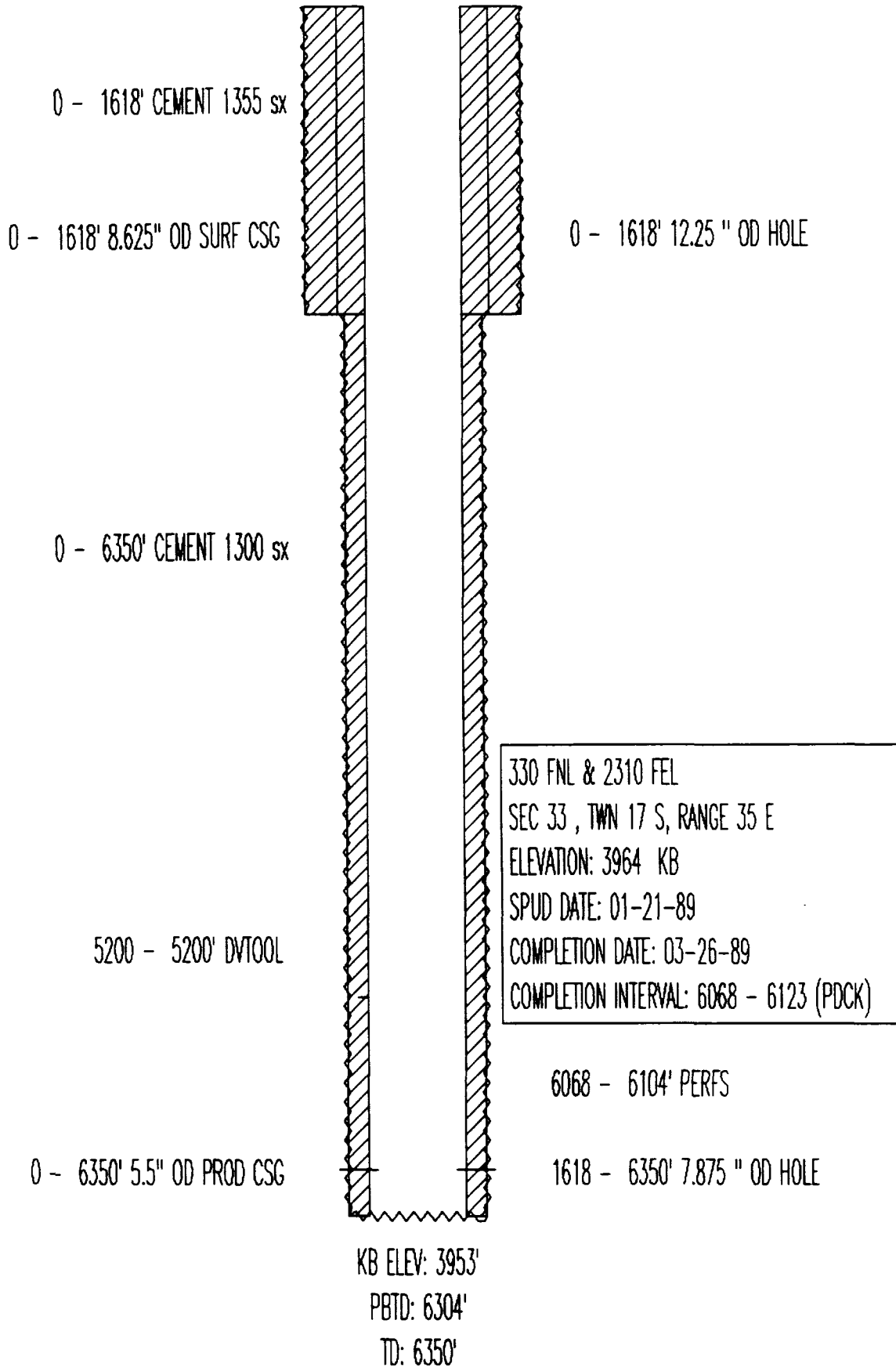
4800 - 10200' 8.5 " OD HOLE

KB ELEV: 4001'

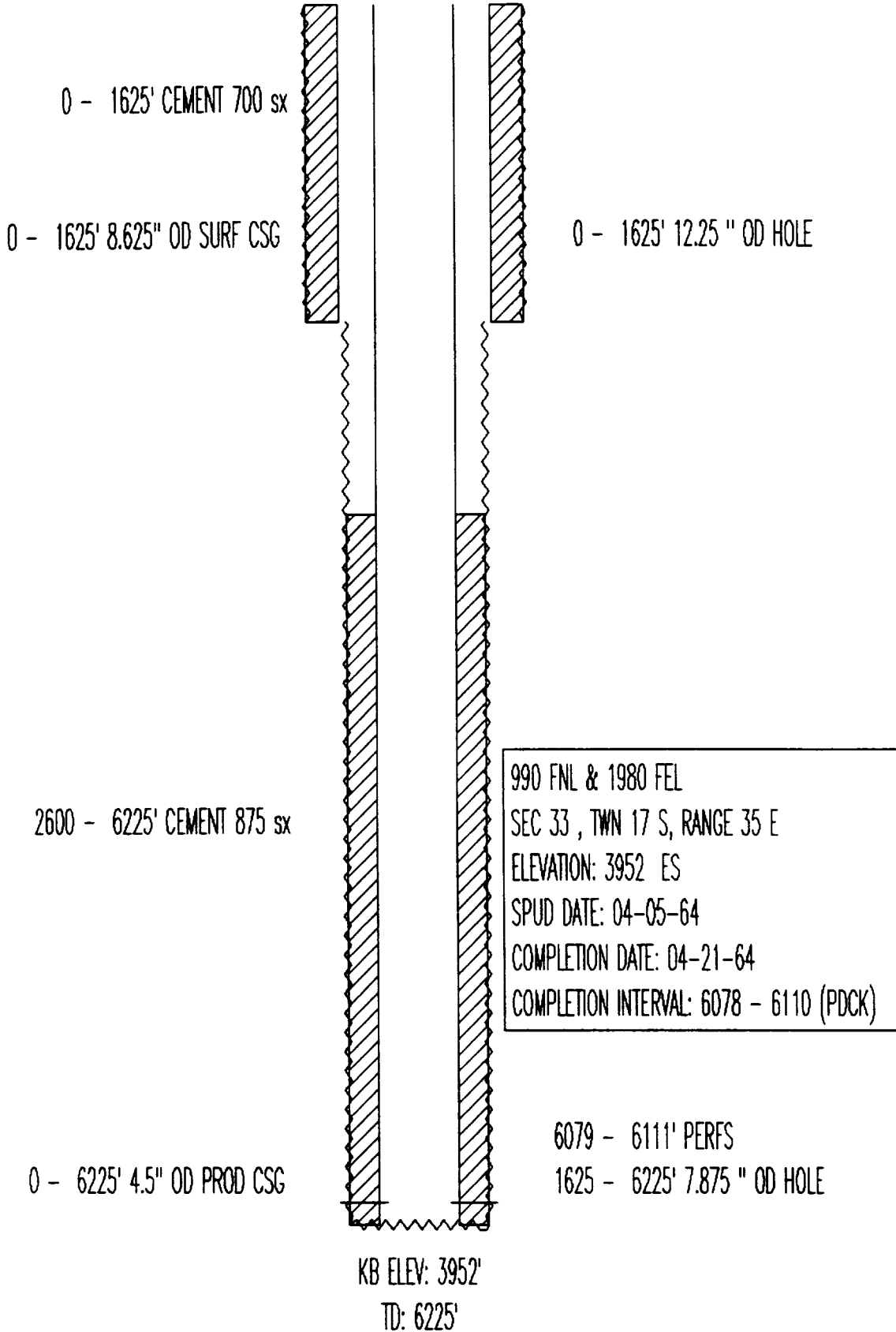
PBTD: 9602'

TD: 10200'

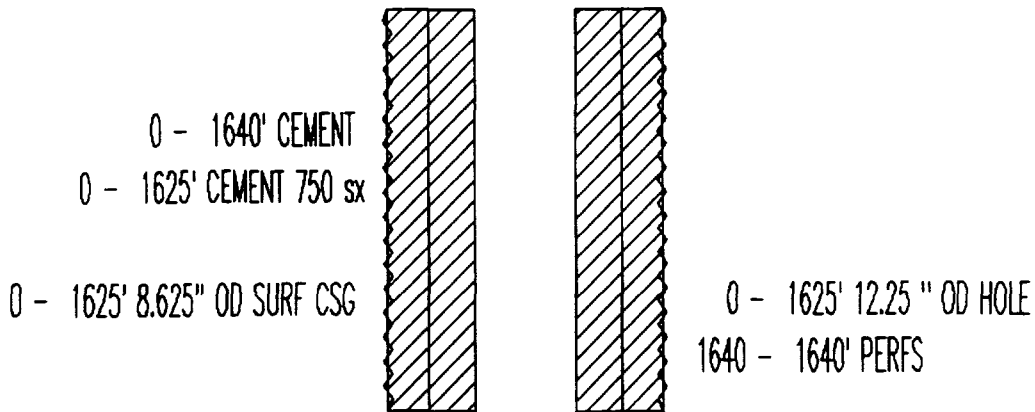
PHILLIPS PET
SANTA FE NO. 132
API# 3002530506
(VGEU 22-01)



PHILLIPS PET
SANTA FE NO. 95
API# 3002520789
(VGEU 22-02)



PHILLIPS PET
SANTA FE NO. 91
API# 3002520785
(VGEU 22-03)



860 FNL & 660 FEL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 4373 GR
SPUD DATE: 03-22-64
COMPLETION DATE: 04-07-64
COMPLETION INTERVAL: 6083 - 6098 (PDCK)

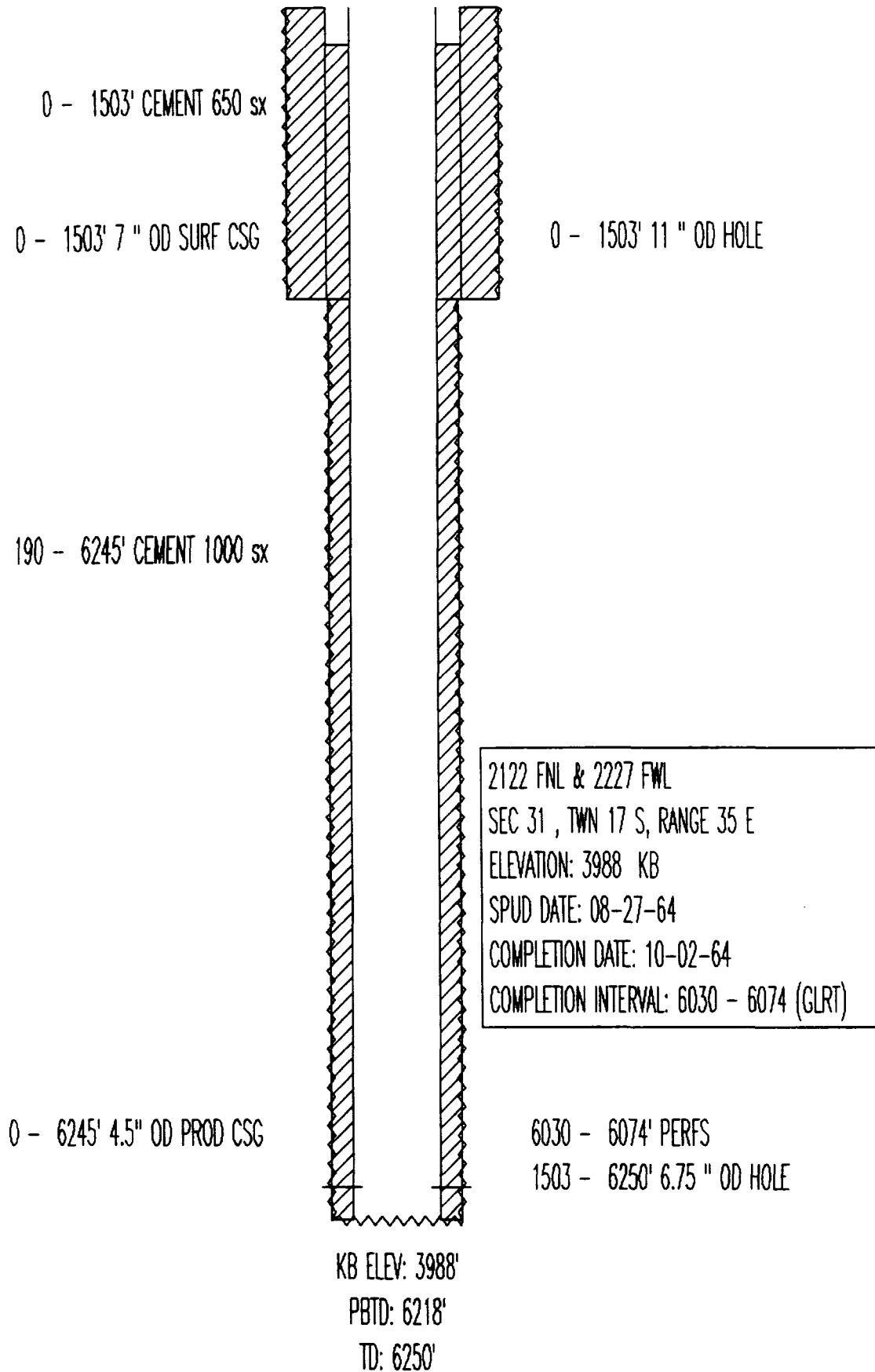
2500 - 6225' CEMENT 800 sx

0 - 6225' 4.5" OD PROD CSG

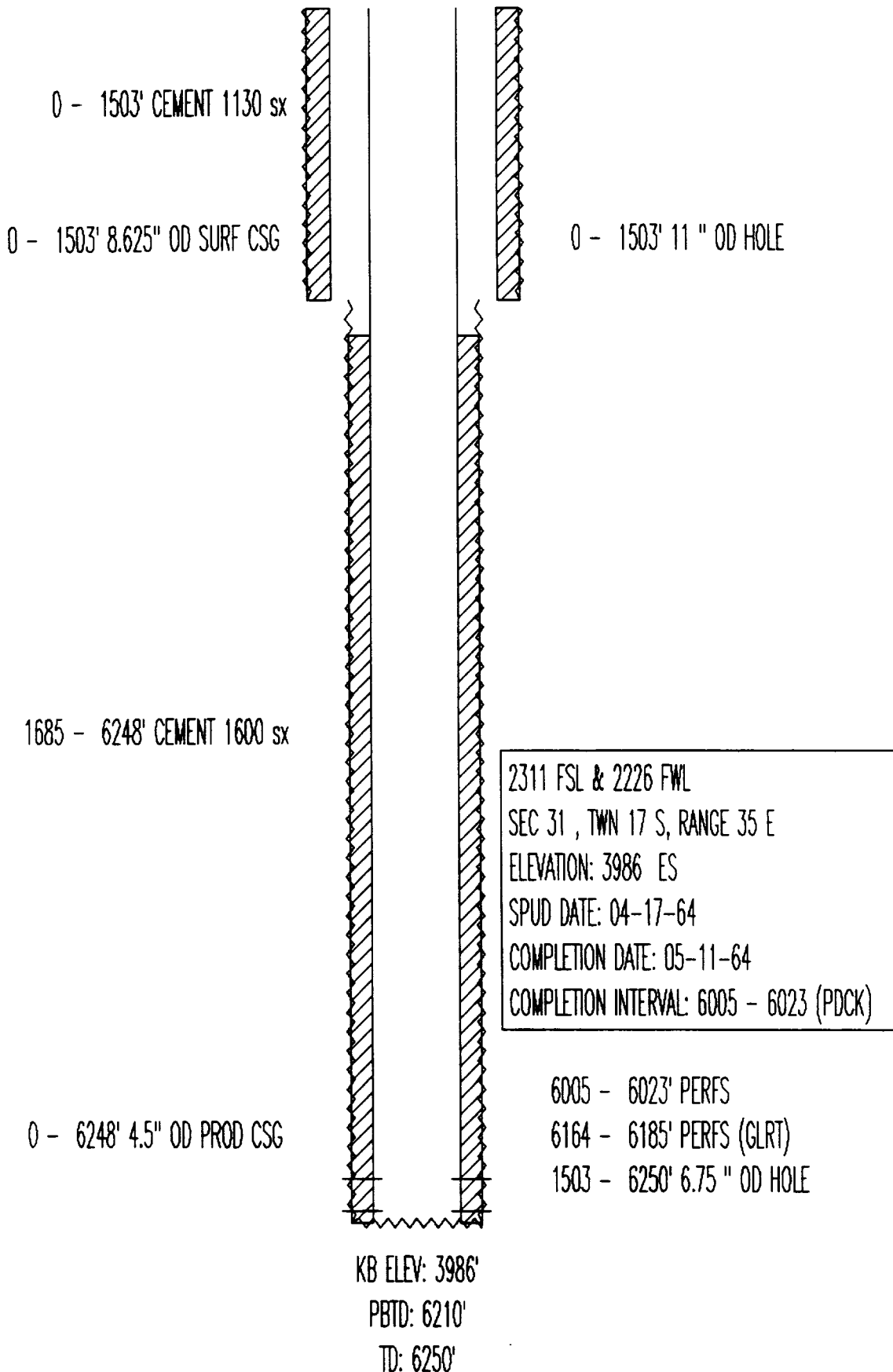
6083 - 6098' PERFS
1625 - 6225' 7.875 " OD HOLE

KB ELEV: 4373'
TD: 6225'

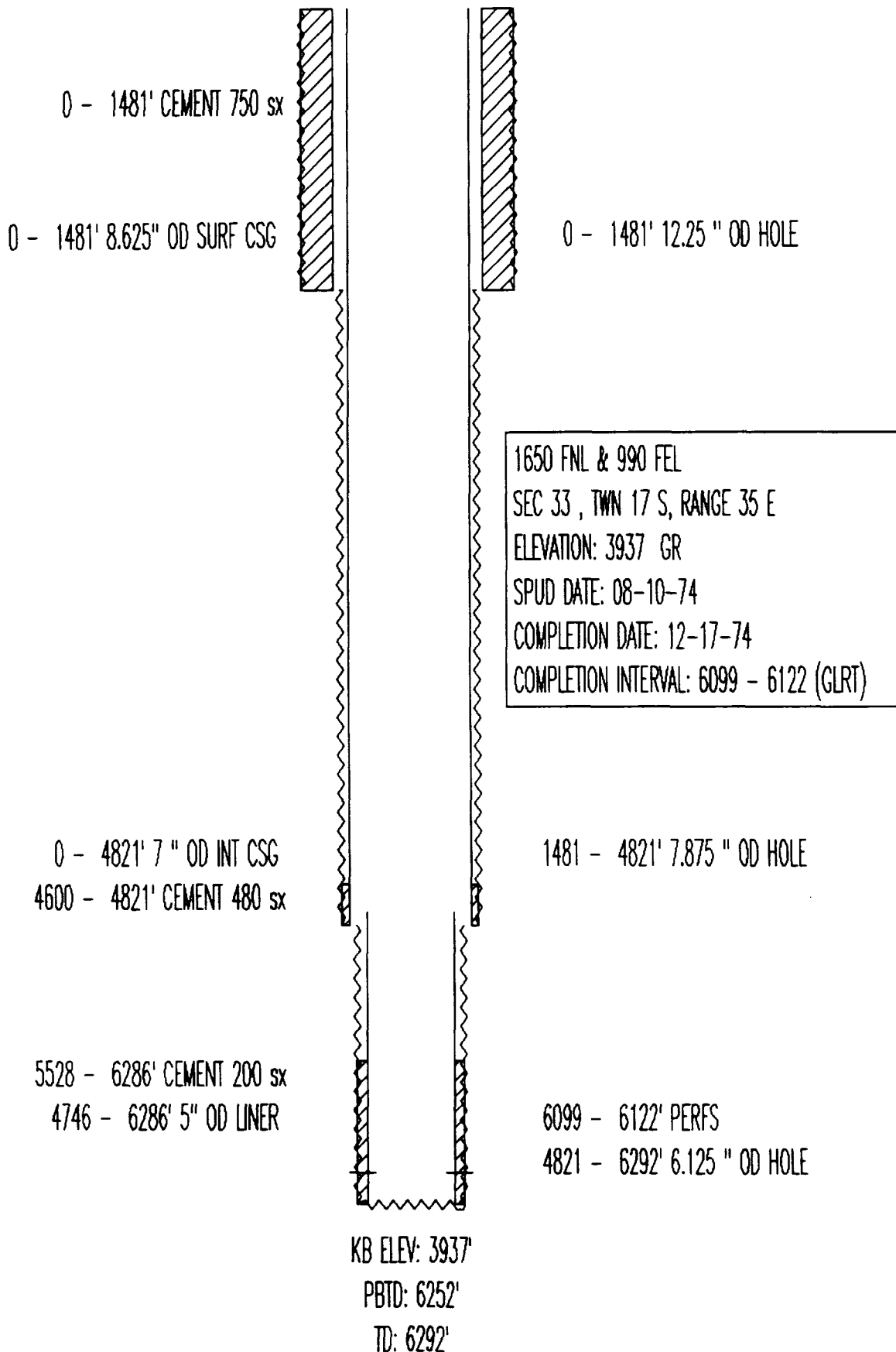
MARATHON OIL
WARN-STATE AC1 NO. 5
API# 3002520750
(VGEU 23-01)



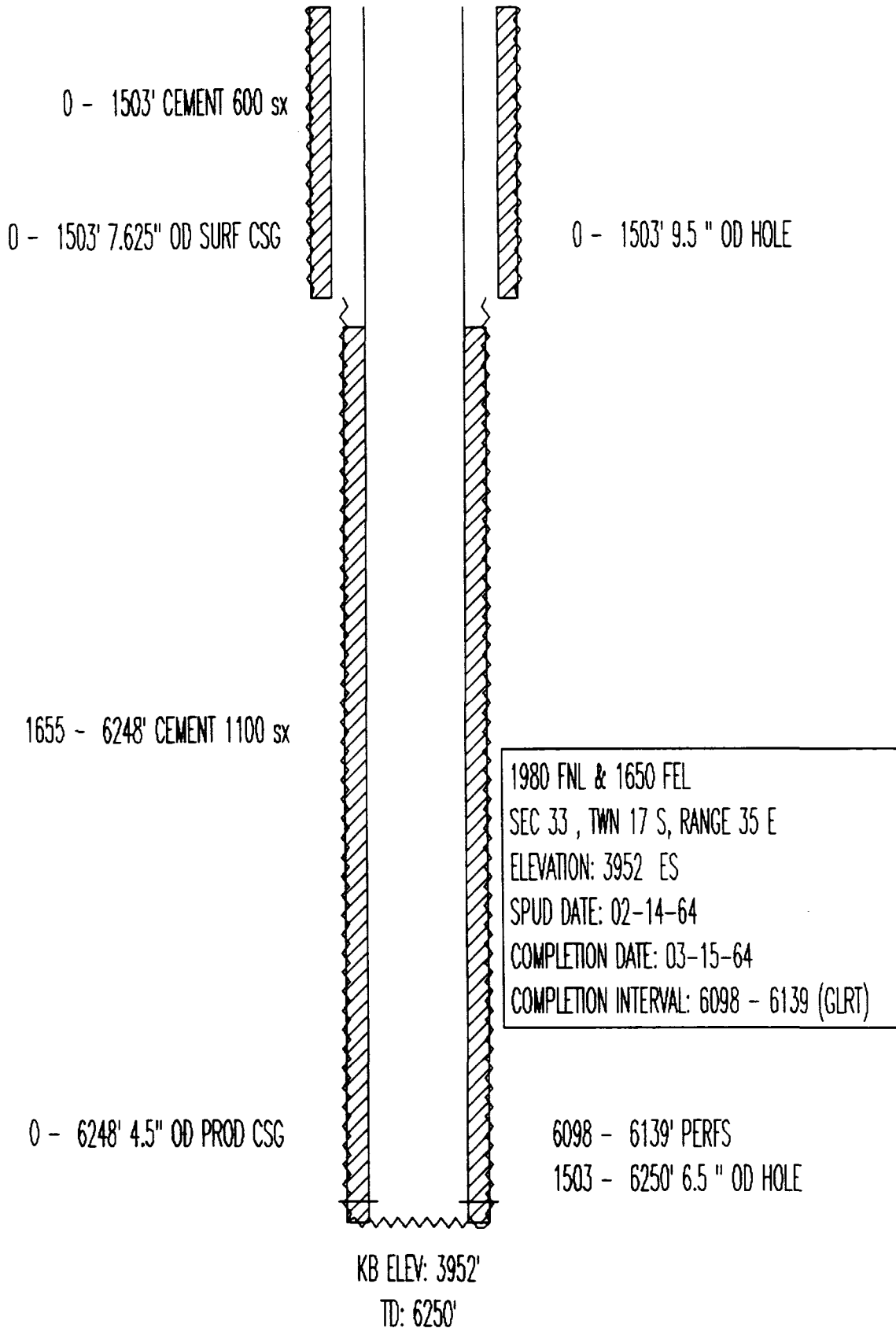
MARATHON
WARN-STATE AC1 NO. 4
API# 3002520749
(VGEU 23-02)



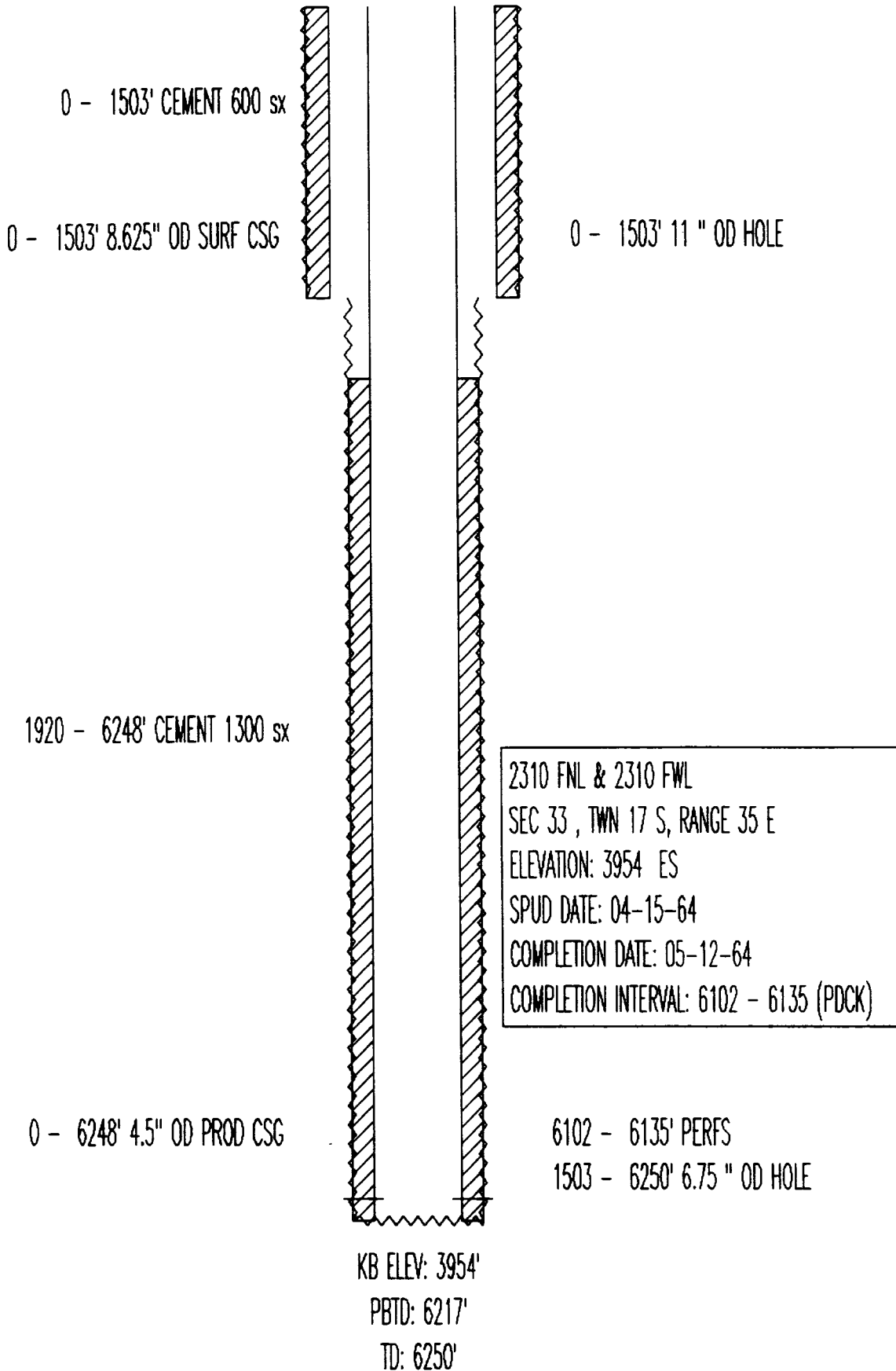
MARATHON OIL
WARN STATE AC3 NO. 8
API# 3002524806
(VGEU 24-01)



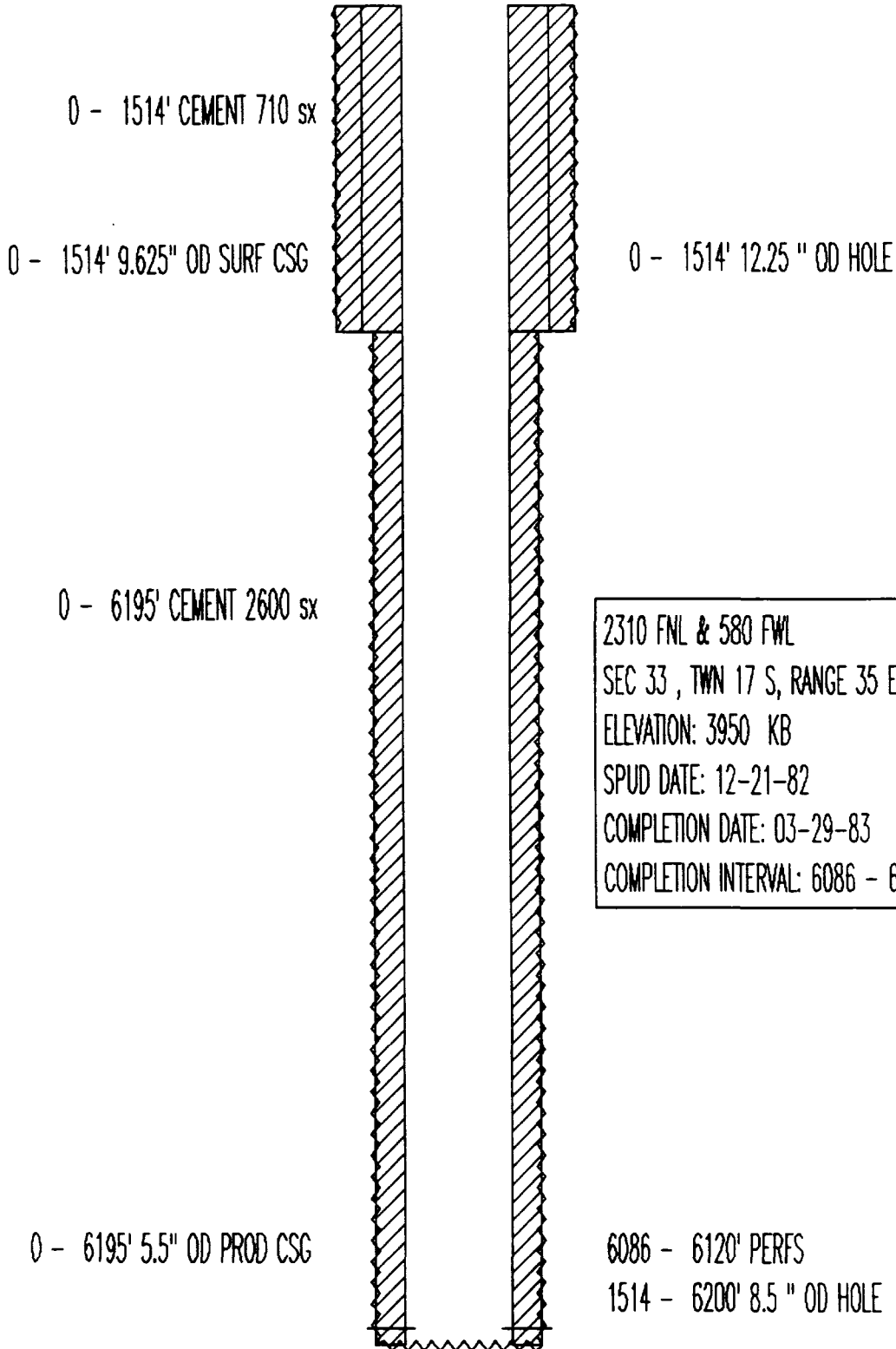
MARATHON OIL
WARN STATE AC3 NO. 6
API# 3002520751
(VGEU 24-02)



MARATHON OIL
WARN STATE AC3 NO. 7
API# 3002520752
(VGEU 24-03)



MARATHON OIL
WARN STATE AC3 NO. 9
API# 3002528039
(VGEU 24-04)



2310 FNL & 580 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3950 KB
SPUD DATE: 12-21-82
COMPLETION DATE: 03-29-83
COMPLETION INTERVAL: 6086 - 6120 (GLRT)

KB ELEV: 3950'
PBTD: 6149'
TD: 6200'

CHEVRON
STATE 3-32 NO. 8
API# 3002521012
(VGEU 25-01)

0 - 30' CEMENT 26 sx
0 - 30' 13.375" OD SURF CSG

0 - 30' 17 " OD HOLE

0 - 1604' CEMENT 150 sx

0 - 1604' 8.625" OD INT CSG

0 - 1604' 12.25 " OD HOLE

1750 - 6265' CEMENT 300 sx

0 - 6265' 4.5" OD PROD CSG

760 FNL & 660 FWL
SEC 32 , TWN 17 S, RANGE 35 E
SPUD DATE: 09-09-64
COMPLETION DATE: 10-05-64
COMPLETION INTERVAL: 6056 - 6101

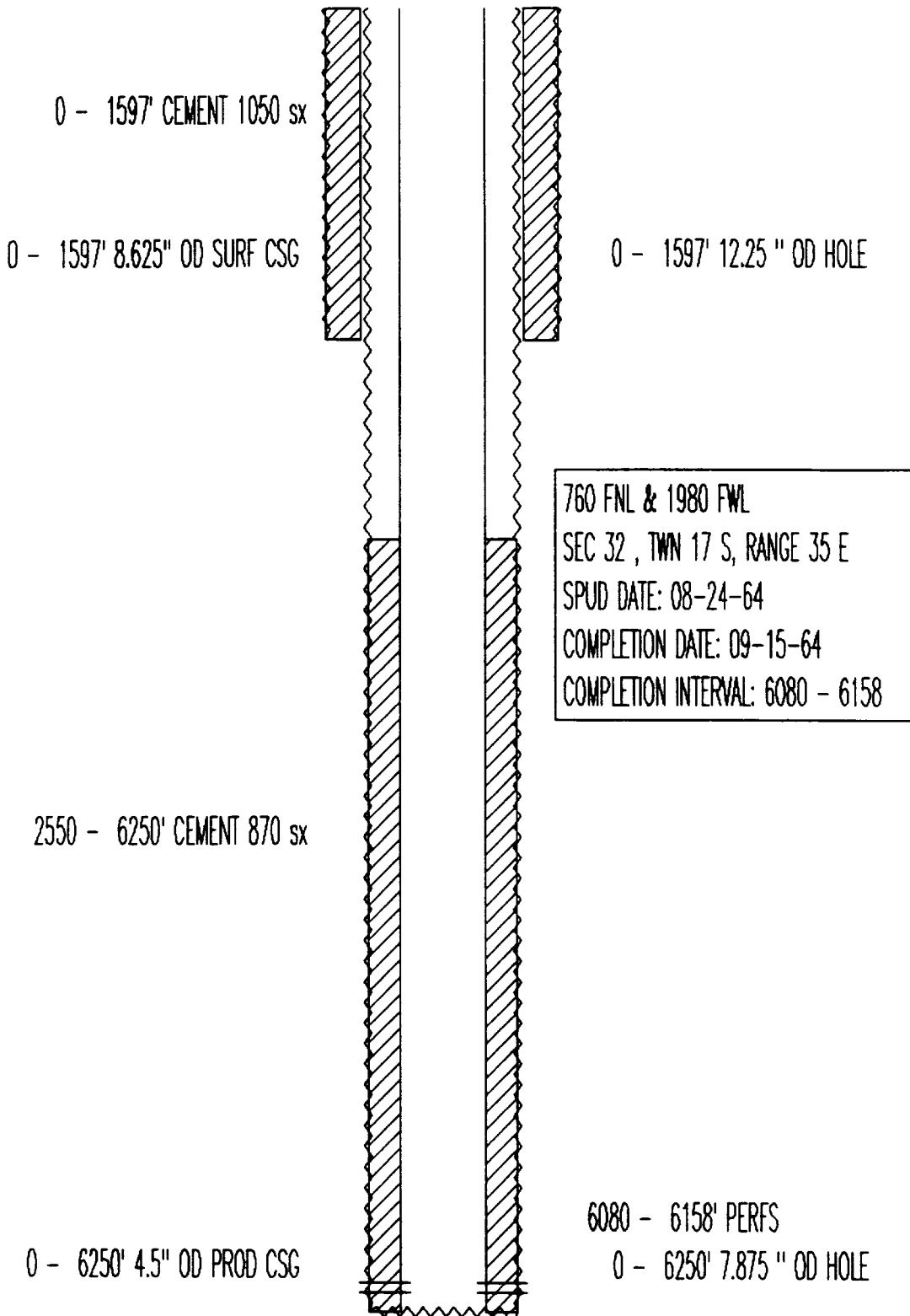
6120 - 6197' PERFS

6056 - 6101' PERFS

0 - 6276' 7.875 " OD HOLE

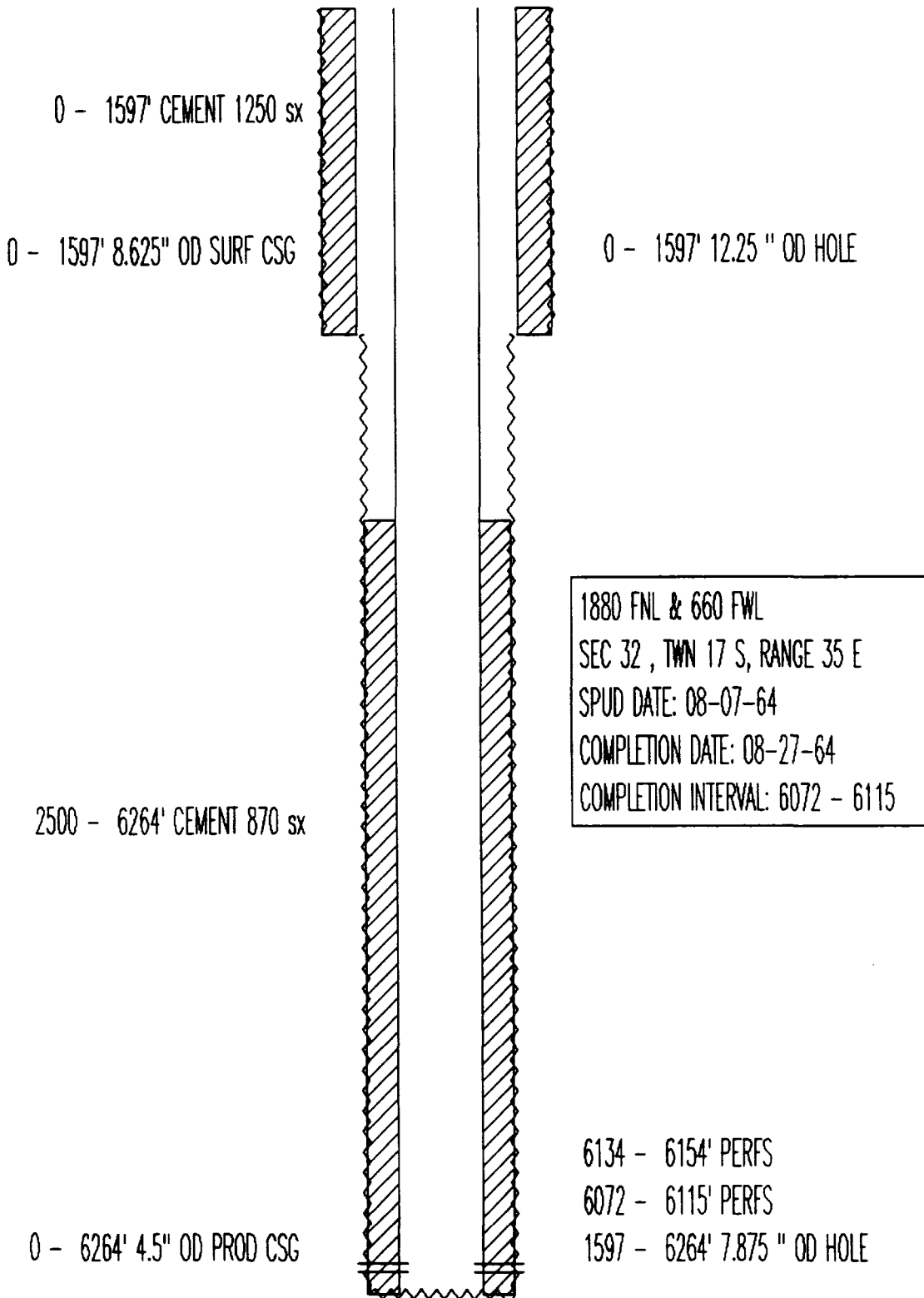
KB ELEV: 3979'
PBTD: 6224'
TD: 6277'

CHEVRON
STATE 3-32 NO. 7
API# 3002520886
(VGEU 25-02)



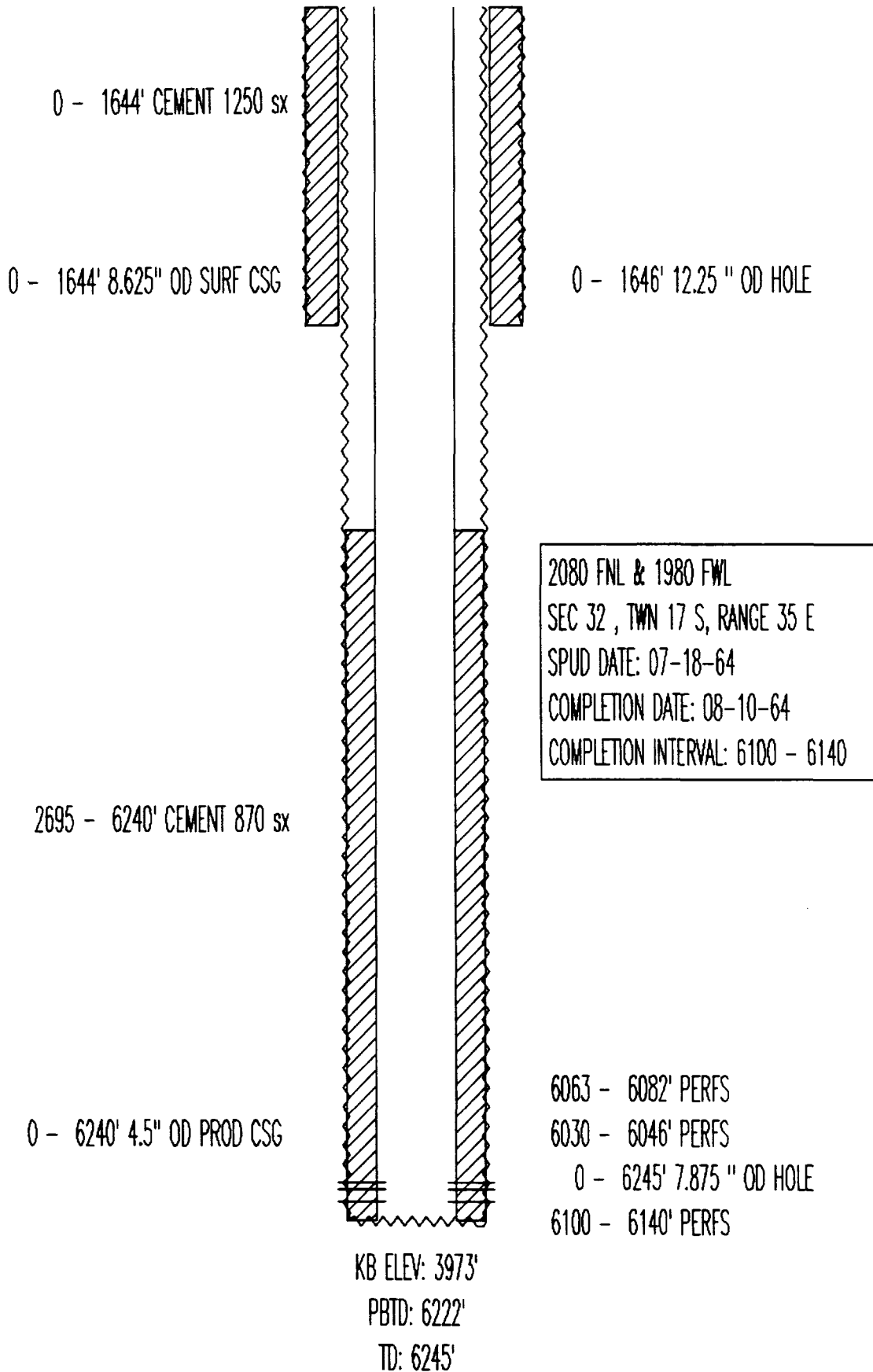
KB ELEV: 3976'
PBTD: 6209'
TD: 6250'

CHEVRON
STATE 3-32 NO. 6
API# 3002520885
(VGEU 25-03)

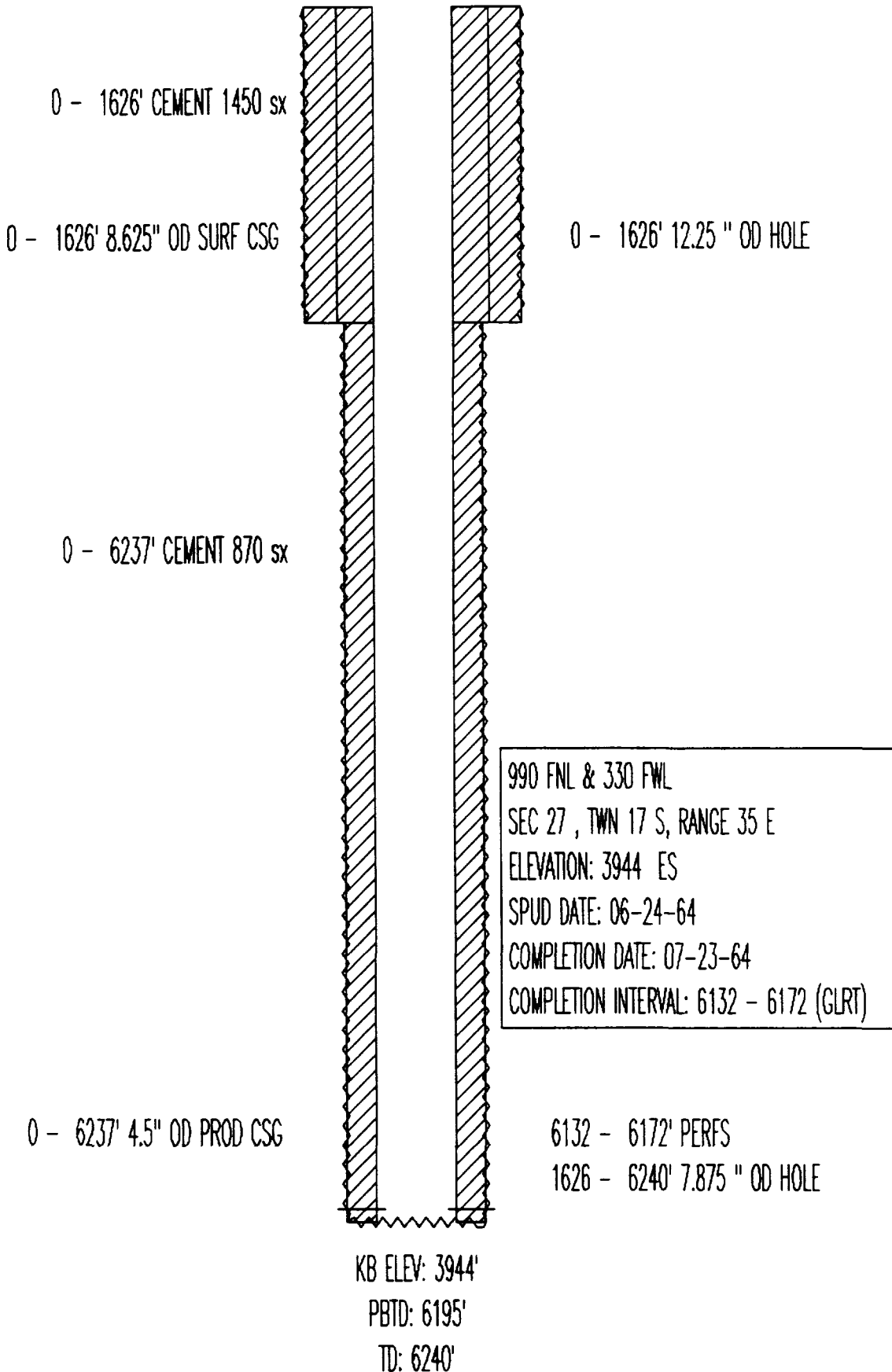


KB ELEV: 3976'
PBTD: 6227'
TD: 6266'

CHEVRON
STATE 3-32 NO. 5
API# 3002520884
(VGEU 25-04)



CHEVRON
STATE 5-27 NO. 8
API# 3002520883
(VGEU 26-01)



CHEVRON
STATE 5-27 NO. 7
API# 3002521011
(VGEU 26-02)

0 - 30' CEMENT 30 sx
0 - 30' 13.375" OD SURF CSG

0 - 30' 17" OD HOLE

0 - 1601' CEMENT 1250 sx

0 - 1601' 8.625" OD INT CSG

0 - 1601' 12.25" OD HOLE

990 FNL & 2173 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3936 ES
SPUD DATE: 06-02-64
COMPLETION DATE: 06-28-64
COMPLETION INTERVAL: 6131 - 6150 (PDCK)

2666 - 6255' CEMENT 870 sx

0 - 6255' 4.5" OD PROD CSG

6131 - 6150' PERFS

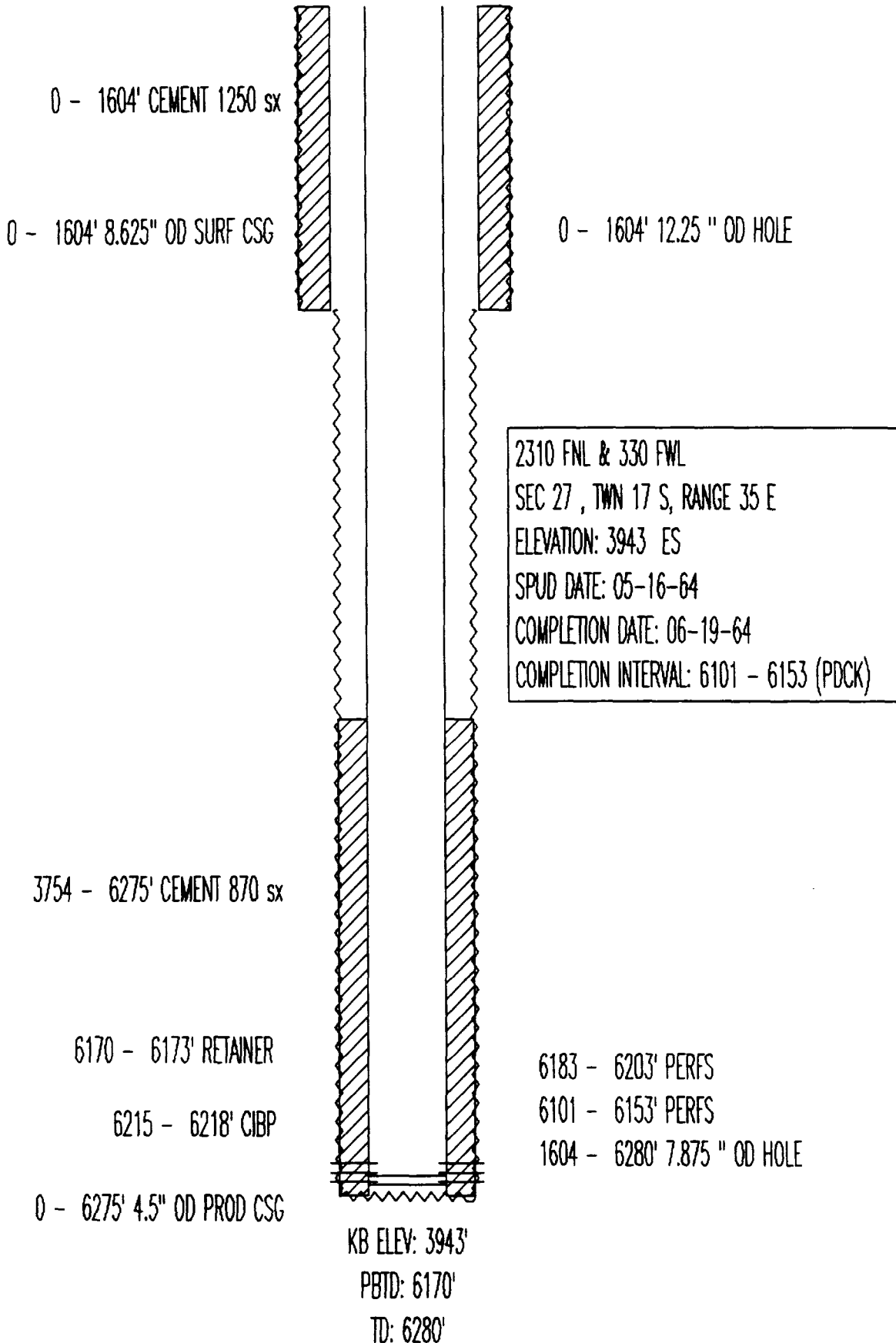
1601 - 6260' 7.875" OD HOLE

KB ELEV: 3936'

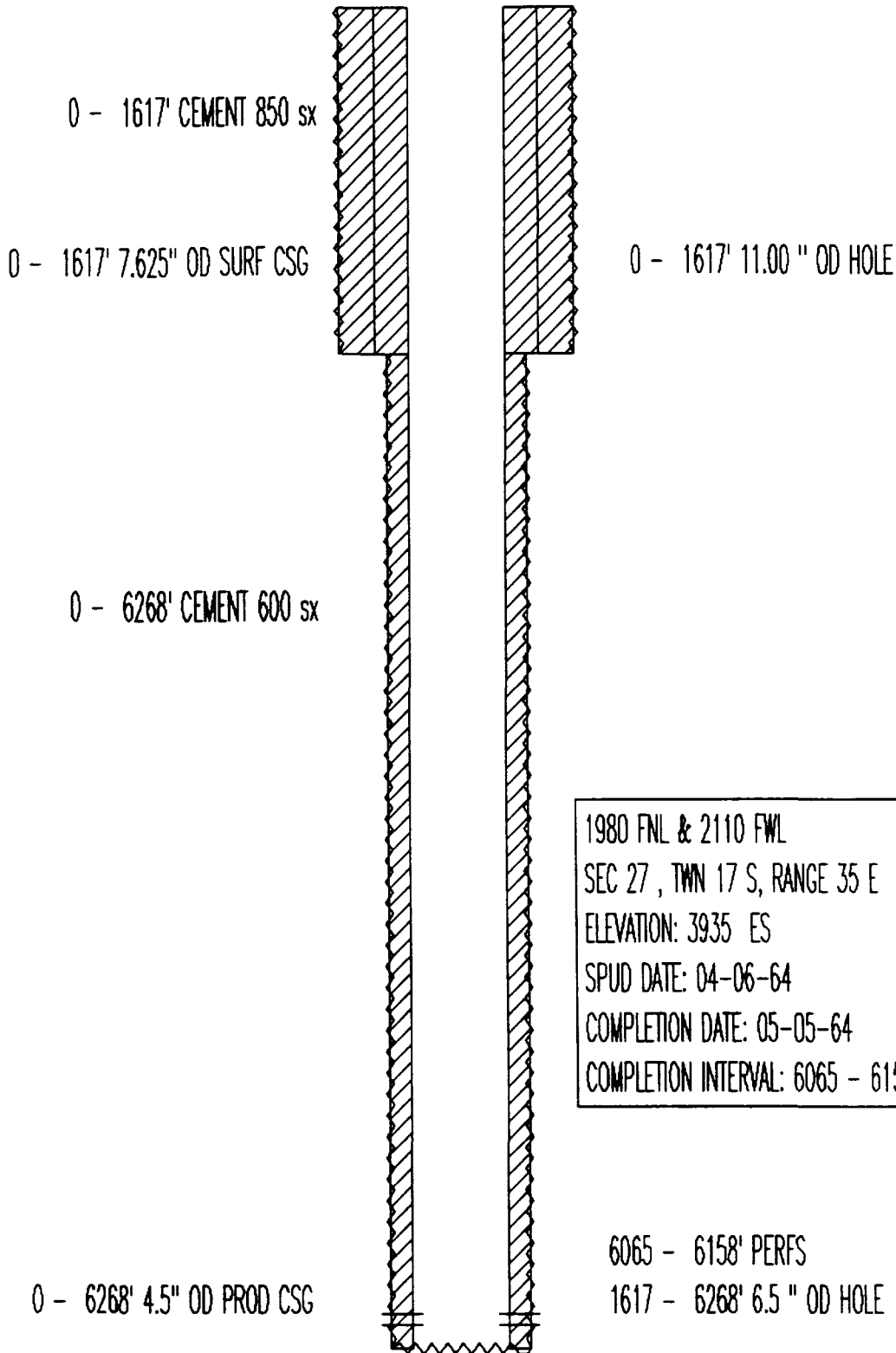
PBTD: 6205'

TD: 6260'

CHEVRON
STATE 5-27 NO. 6
API# 3002520882
(VGEU 26-03)



CHEVRON
STATE 5-27 NO. 5
API# 3002520881
(VGEU 26-04)

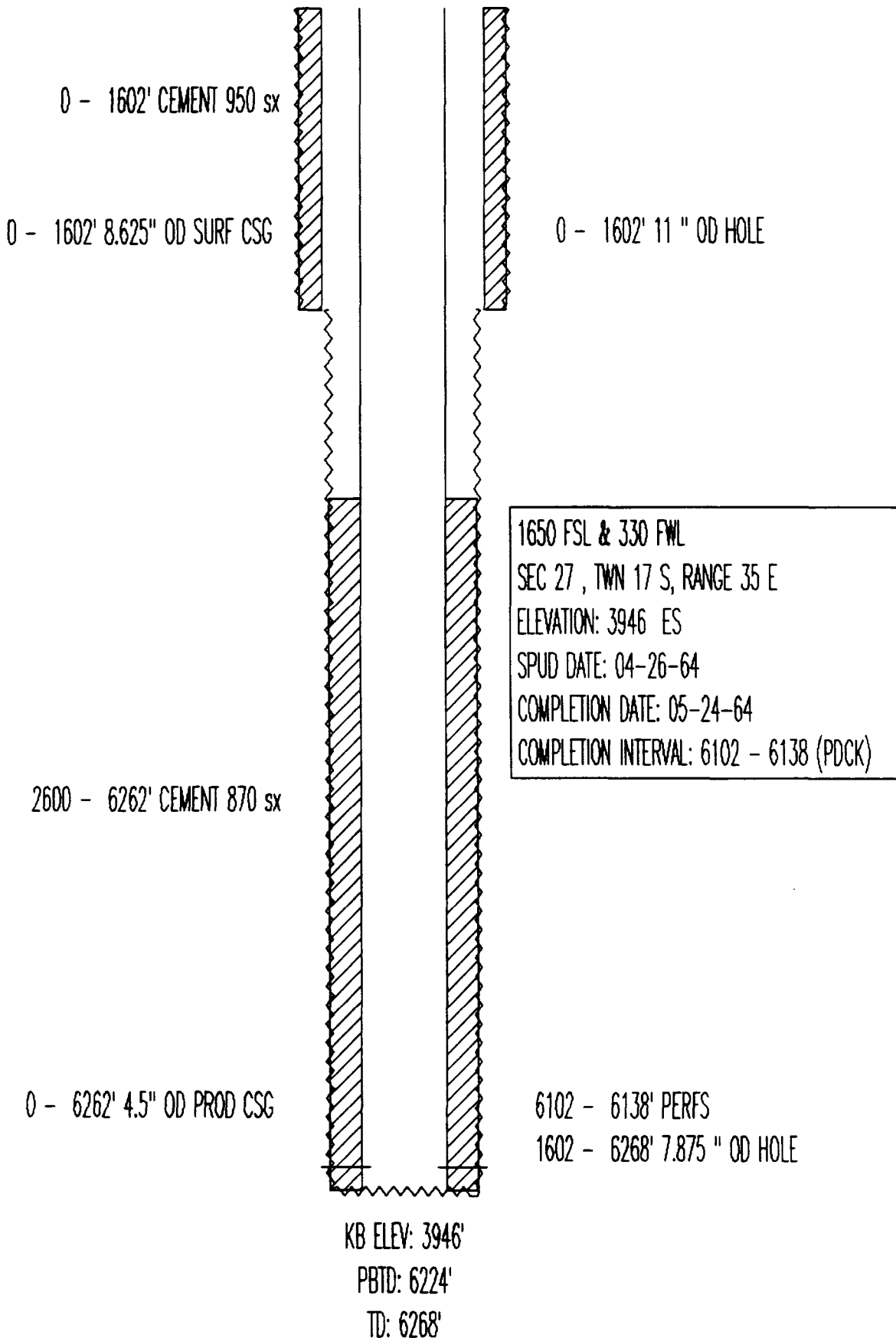


1980 FNL & 2110 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3935 ES
SPUD DATE: 04-06-64
COMPLETION DATE: 05-05-64
COMPLETION INTERVAL: 6065 - 6158 (CLFK)

6065 - 6158' PERFS
1617 - 6268' 6.5 " OD HOLE

KB ELEV: 3935'
PBD: 6225'
TD: 6268'

CHEVRON
STATE 4-27 NO. 10
API# 3002520880
(VGEU 27-01)



CHEVRON
STATE 4-27 NO. 7
API# 3002502901
(VGEU 27-02)

0 - 413' CEMENT 200 sx
0 - 413' 8.625" OD SURF CSG

0 - 413' 12.25 " OD HOLE

0 - 3244' CEMENT 475 sx

0 - 3244' 7 " OD INT CSG

413 - 3250' 8.5 " OD HOLE

2814 - 6268' CEMENT 350 sx

1980 FSL & 2180 FWL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3943 KB
SPUD DATE: 10-16-57
COMPLETION DATE: 12-04-57
NOT COMPLETED AS A PRODUCER

COMPLETION DATE: 03-25-64
COMPLETION INTERVAL: 6051 - 6163 (PDCK)

6070 - 6163' CEMENT PLUG

0 - 6268' 4.5" OD PROD CSG

0 - 6268' 6.25 " OD HOLE
6051 - 6153' PERFS

KB ELEV: 3943'
PBTD: 6070'
TD: 6270'

CHEVRON
STATE 4-27 NO. 6
API# 3002502900
(VGEU 27-03)

0 - 414' CEMENT 250 sx
0 - 414' 9.625" OD SURF CSG

0 - 414' 12.25 " OD HOLE

0 - 3244' CEMENT 600 sx

0 - 6224' CEMENT 575 sx
0 - 3244' 7" OD INT CSG

0 - 3244' 8.75 " OD HOLE

1980 FSL & 2180 FEL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3930 KB
SPUD DATE: 11-08-72
COMPLETION DATE: 01-19-73
COMPLETION INTERVAL: 6071 - 6095 (GLRT)

6062 - 6065' CIBP

0 - 6224' 4.5" OD PROD CSG

6071 - 6095' PERFS

6040 - 6055' PERFS

6127 - 6186' PERFS

0 - 6224' 6.25 " OD HOLE

KB ELEV: 3930'

PBTD: 6062'

TD: 6225'

CHEVRON
STATE 4-27 NO. 5
API# 3002502899
(VGEU 27-05)

0 - 391' CEMENT 250 sx
0 - 391' 9.625" OD SURF CSG

0 - 391' 12.25 " OD HOLE

575 - 3251' CEMENT 550 sx

0 - 3251' 7 " OD INT CSG

3037 - 3091' PERFS SQZ'D

1850 - 6257' CEMENT 400 sx

391 - 3924' 8.5 " OD HOLE

660 FSL & 2100 FEL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3936 DF
SPUD DATE: 03-24-64
COMPLETION DATE: 10-06-57
COMPLETION INTERVAL: 3037 - 3091 (YATES)

COMPLETION DATE: 04-09-64
COMPLETION INTERVAL: 6102 - 6184 (PDCK)

6162 - 6165' CIBP
0 - 6257' 4.5 " OD PROD CSG

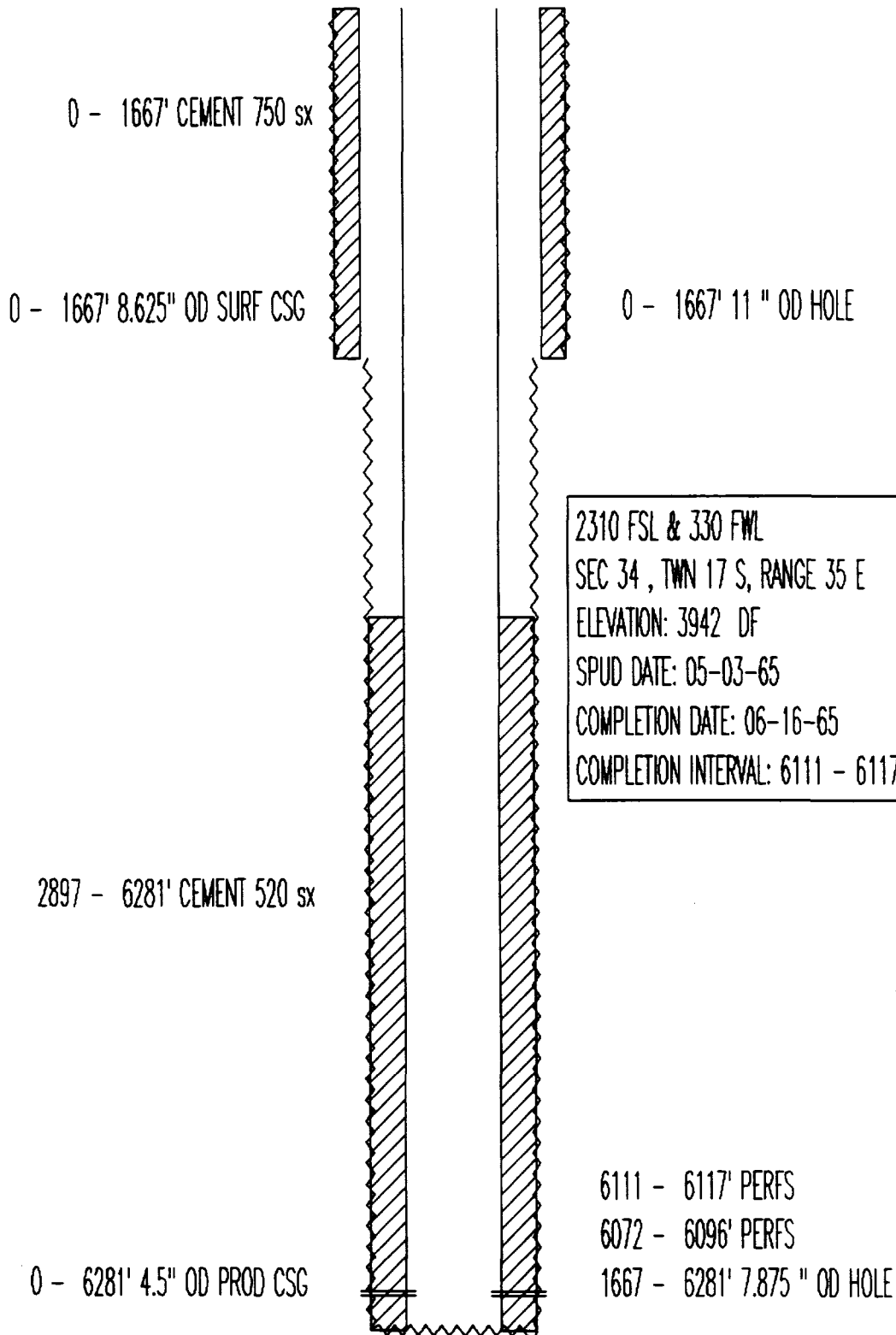
6170 - 6184' PERFS

6102 - 6150' PERFS

3924 - 6257' 6.25 " OD HOLE

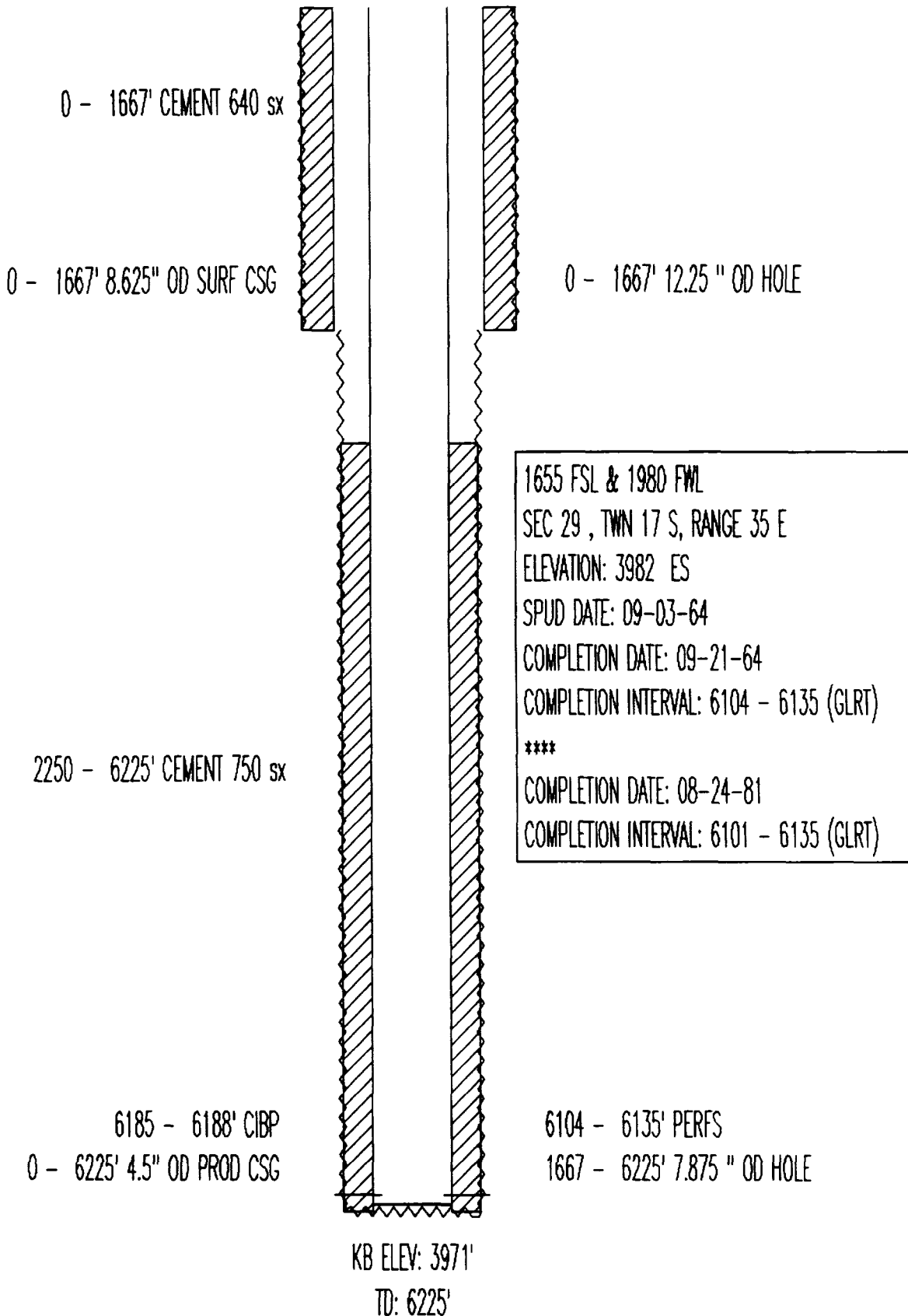
KB ELEV: 3936'
PBTD: 6212'
TD: 6257'

CHEVRON
STATE 6-34 NO. 11
API# 3002521383
(VGEU 28-01)



KB ELEV: 3942'
PBTD: 6211'
TD: 6281'

PHILLIPS PET
SANTA FE NO. 103
API# 3002520797
(VGEU 29-01)



PHILLIPS PET
SANTA FE NO. 102
API# 3002520796
(VGEU 30-01)

0 - 1581' CEMENT 700 SX

0 - 1581' 8.625" OD SURF CSG

0 - 1581' 12.25 " OD HOLE

690 FSL & 2110 FEL
SEC 31 , TWN 17 S, RANGE 35 E
ELEVATION: 3982 ES
SPUD DATE: 07-26-64
COMPLETION DATE: 09-03-64
COMPLETION INTERVAL: 6030 - 6050 (GLRT)

2300 - 6200' CEMENT 800 SX

0 - 6200' 4.5" OD PROD CSG

6104 - 6174' PERFS
6030 - 6050' PERFS
1581 - 6200' 7.875 " OD HOLE

KB ELEV: 3982'
TD: 6200'

PHILLIPS PET
SANTA FE NO. 106
API# 3002520799
(VGEU 32-01)

0 - 1700' CEMENT
0 - 1688' CEMENT 640 sx
0 - 1688' 8.625" OD SURF CSG
0 - 1685' 12.25 " OD HOLE
1700 - 1700' PERFS

2323 FNL & 660 FEL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3959 GR
SPUD DATE: 09-05-64
COMPLETION DATE: 09-24-64
COMPLETION INTERVAL: 6148 - 6168 (GLRT)

2600 - 6155' CEMENT 800 sx

0 - 6155' 4.5" OD PROD CSG
6158 - 6161' CEMENT PLUG

6148 - 6168' PERFS
1685 - 6225' 7.875 " OD HOLE

KB ELEV: 3959'
PBD: 6155'
TD: 6225'

PHILLIPS PET
SANTA FE NO. 108
API# 3002520801
(VGEU 33-01)

0 - 1707' CEMENT 640 sx

0 - 1707' 8.625" OD SURF CSG

0 - 1707' 12.25 " OD HOLE

2550 - 6250' CEMENT 800 sx

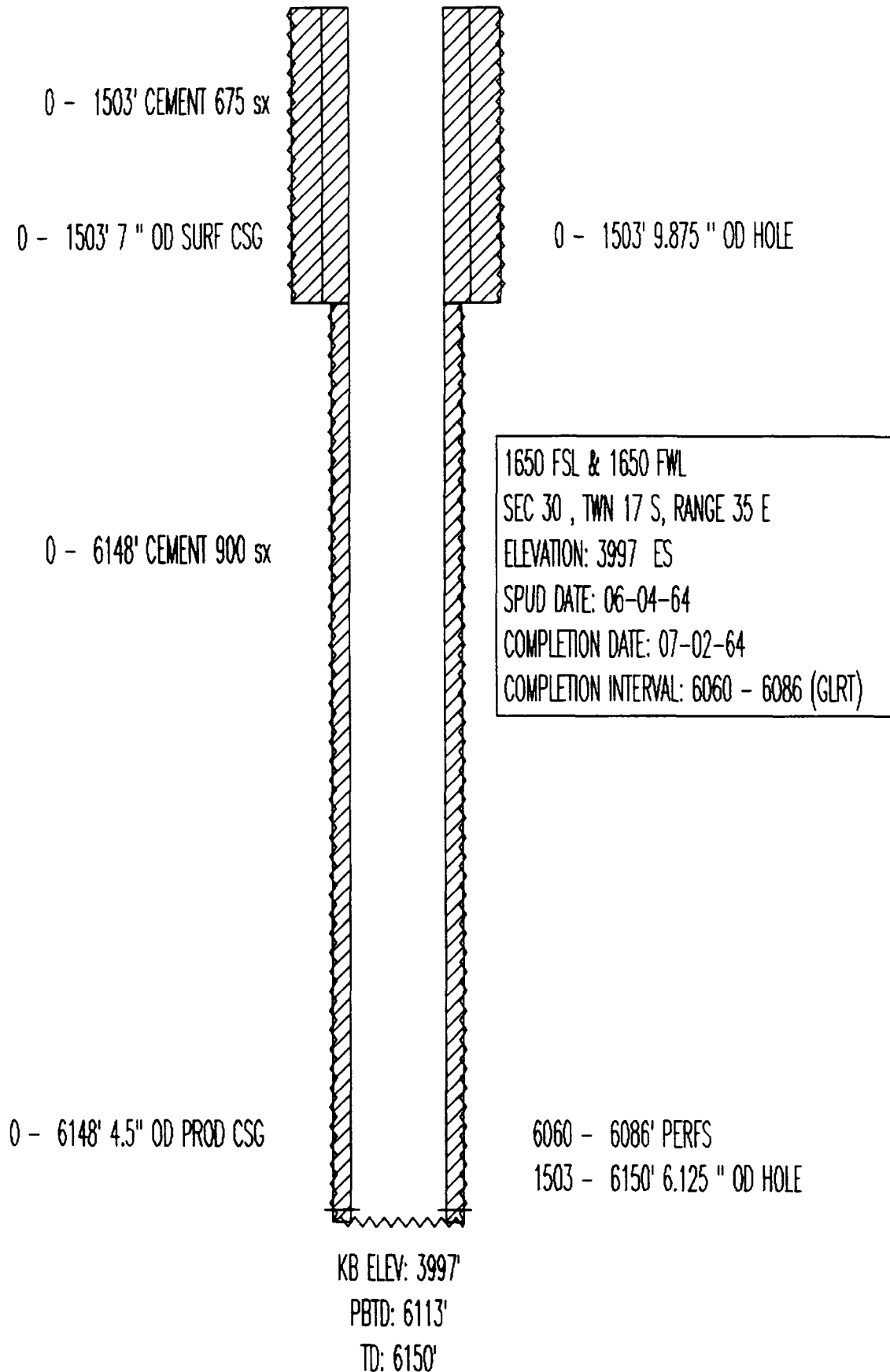
990 FNL & 431 FEL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3949 ES
SPUD DATE: 10-22-64
COMPLETION DATE: 11-09-64
COMPLETION INTERVAL: 6148 - 6164 (GLRT)

0 - 6250' 4.5" OD PROD CSG

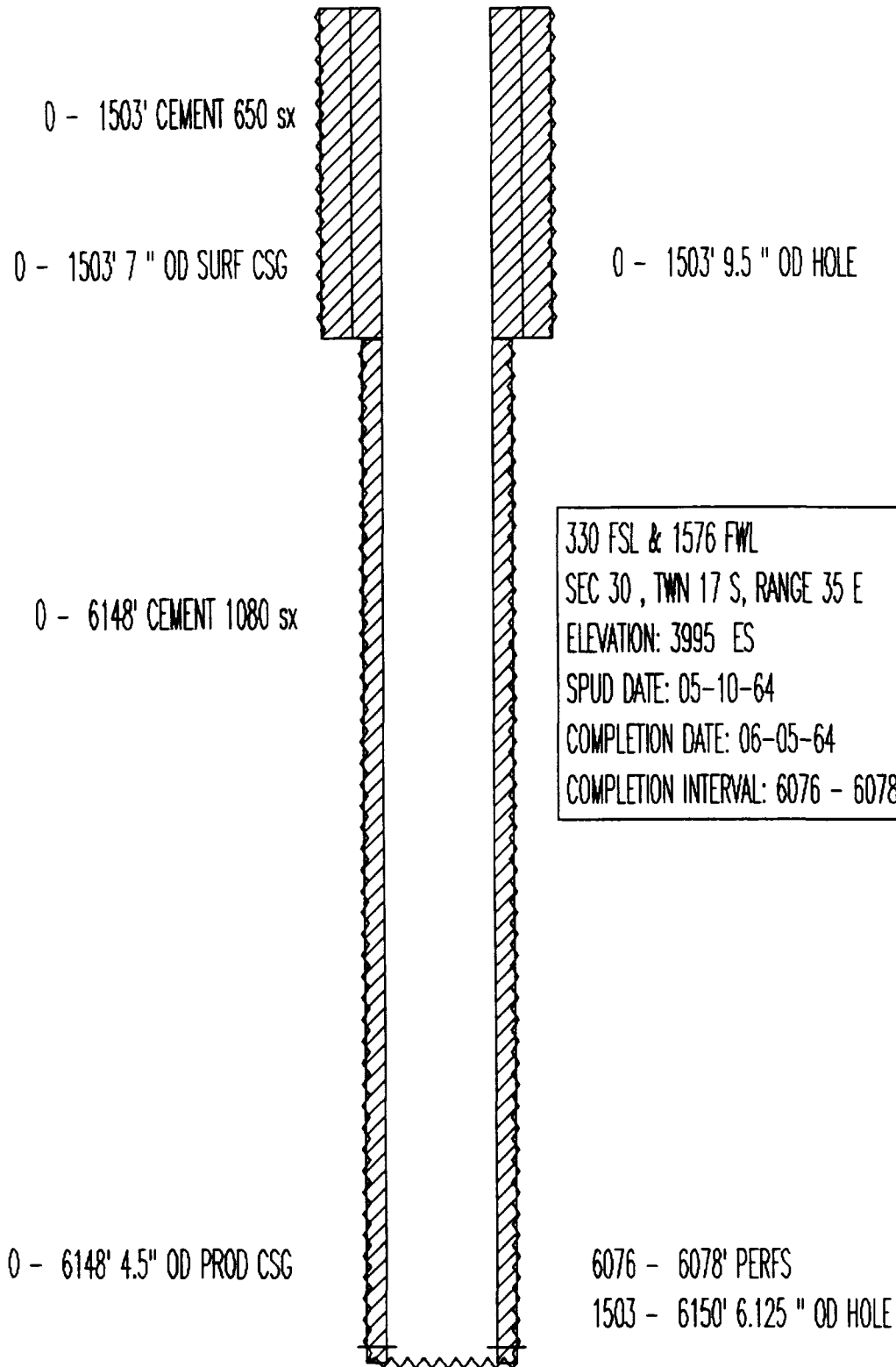
6148 - 6164' PERFS
1707 - 6250' 7.875 " OD HOLE

KB ELEV: 3949'
TD: 6250'

MARATHON
STAPLIN STATE AC1 NO. 4
API# 3002520746
(VGEU 34-01)

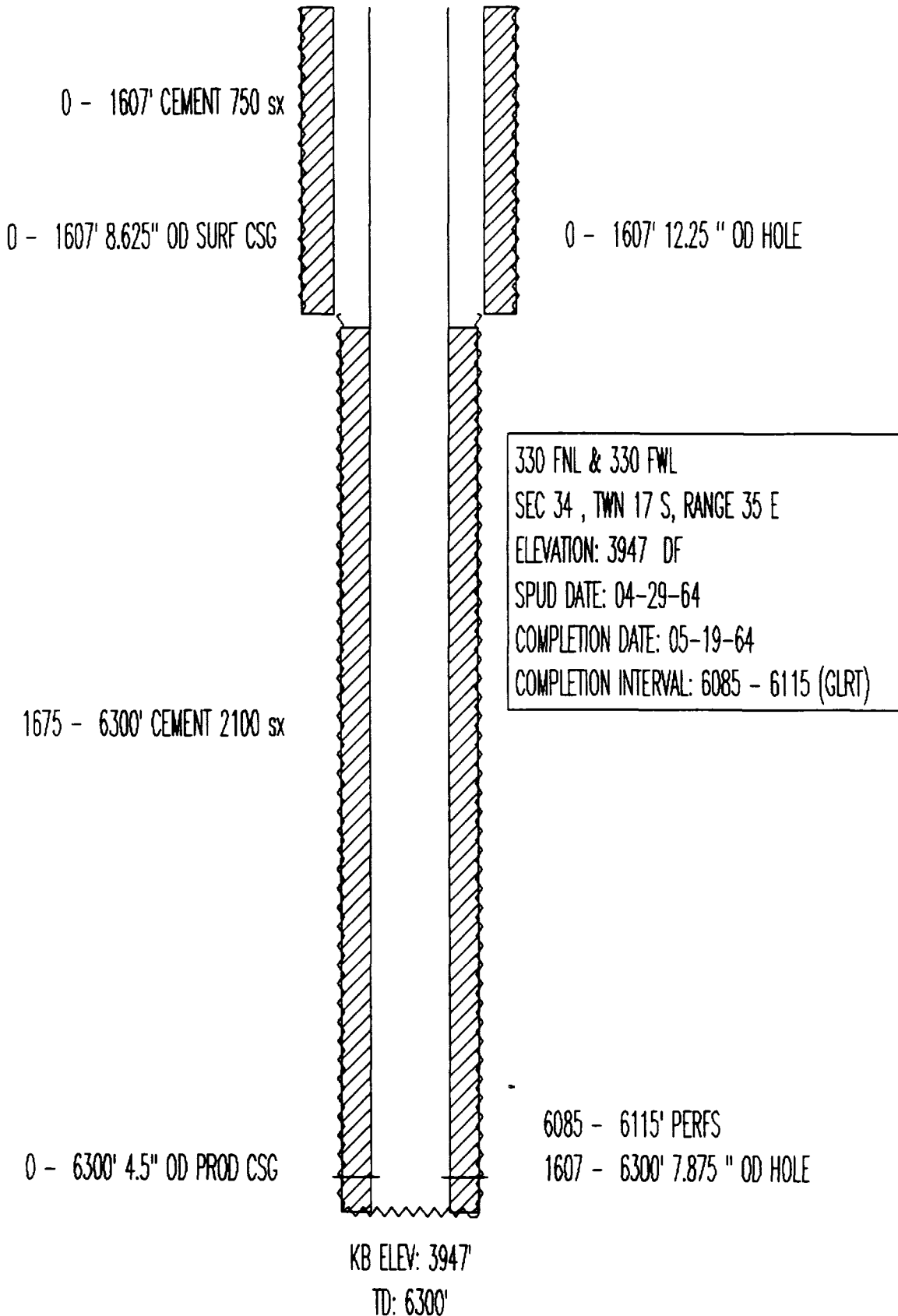


MARATHON OIL
STAPLIN STATE AC1 NO. 3
API# 3002521009
(VGEU 34-02)

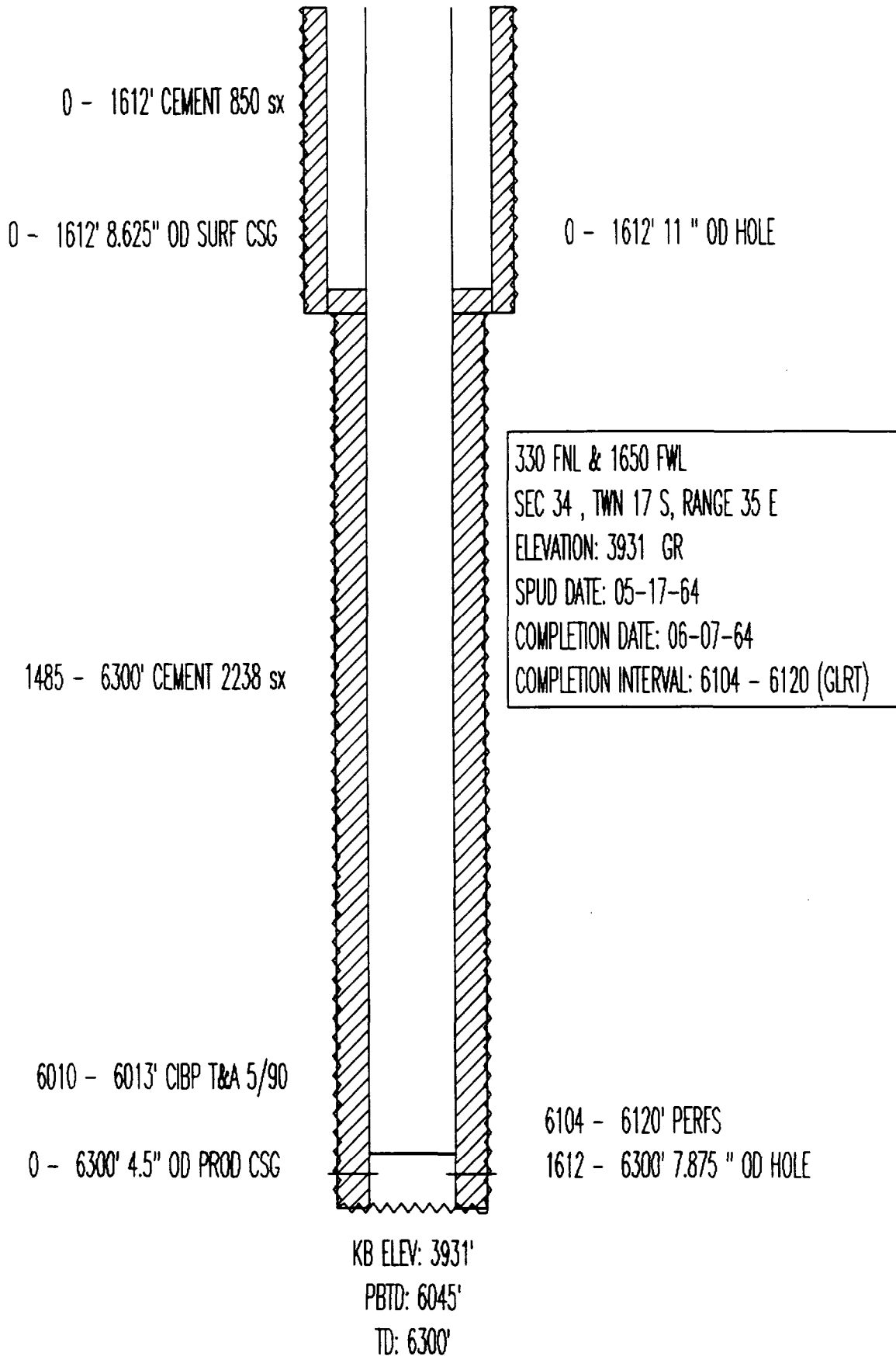


KB ELEV: 3995'
PBTD: 6112'
TD: 6150'

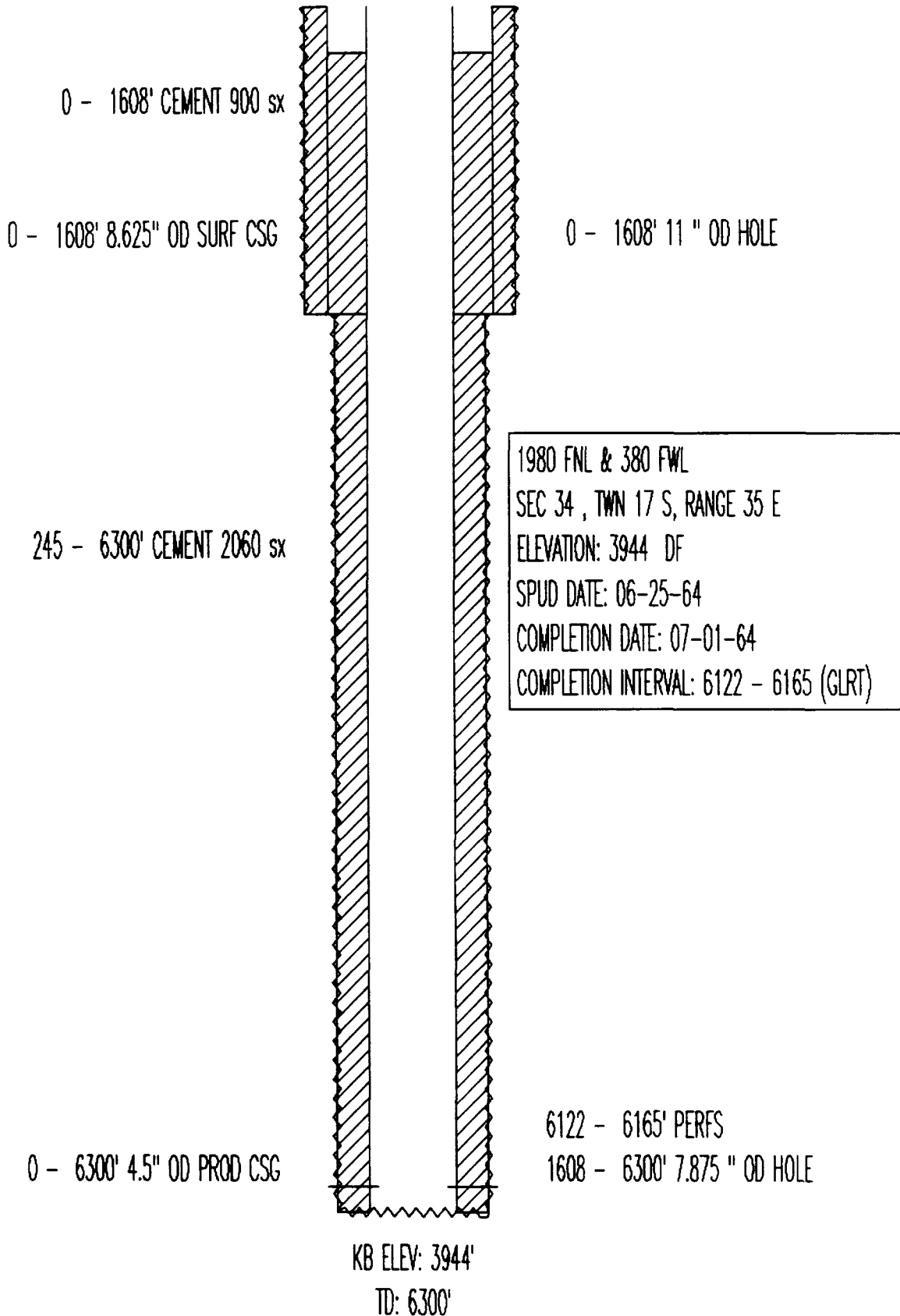
PHILLIPS PET
STATE M NO. 13
API# 3002520866
(VGEU 35-01)



PHILLIPS PET
STATE M NO. 14
API# 3002520867
(VGEU 35-02)



PHILLIPS PET
STATE M NO. 15
API# 3002520868
(VGEU 35-03)



SHELL
STATE H NO. 2
API# 3002520826
(VGEU 36-01)

0 - 1613' CEMENT 800 sx

0 - 1613' 8.625" OD SURF CSG

0 - 1613' 11 " OD HOLE

2800 - 6250' CEMENT 750 sx

6210 - 6210' RETAINER
0 - 6250' 4.5" OD PROD CSG

1800 FSL & 660 FWL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3980 ES
SPUD DATE: 07-13-64
COMPLETION DATE: 08-01-64
COMPLETION INTERVAL: 6102 - 6133 (PDCK)

6102 - 6133' PERFS
1613 - 6250' 7.875 " OD HOLE

KB ELEV: 3980'
PBTD: 6210'
TD: 6250'

SHELL
STATE A NO. 7
API# 3002520819
(VGEU 37-01)

0 - 1665' CEMENT 600 sx

0 - 1665' 8.625" OD SURF CSG

0 - 1665' 11 " OD HOLE

900 - 6310' CEMENT 400 sx

660 FNL & 2180 FEL
SEC 31 , TWN 17 S, RANGE 35 E
ELEVATION: 3990 GR
SPUD DATE: 03-16-64
COMPLETION DATE: 04-04-64
COMPLETION INTERVAL: 6035 - 6067 (PDCK)

COMPLETION DATE: 09-18-82
COMPLETION INTERVAL: 6035 - 6110 (GLRT)

6169 - 6275' CEMENT PLUG

6160 - 6163' CIBP

0 - 6310' 4.5" OD PROD CSG

6035 - 6177' PERFS

1665 - 6311' 7.875 " OD HOLE

KB ELEV: 3990'

PBTD: 6148'

TD: 6311'

SHELL
STATE A NO. 5
API# 3002520370
(VGEU 37-02)

0 - 293' 13.375" OD SURF CSG

0 - 293' 17.5 " OD HOLE

0 - 293' CEMENT 300 sx

0 - 2982' CEMENT 1050 sx

0 - 2982' 9.625" OD INT CSG

293 - 2982' 12.25 " OD HOLE

990 FNL & 660 FEL

SEC 31 , TWN 17 S, RANGE 35 E

ELEVATION: 3972 GR

SPUD DATE: 11-18-62

COMPLETION DATE: 01-25-63

COMPLETION INTERVAL: 10009 - 10116 (WFMP)

COMPLETION DATE: 10-19-63

COMPLETION INTERVAL: 6069 - 6080 (GLRT)

COMPLETION DATE: 09-24-75

COMPLETION INTERVAL: 6069 - 6174 (GLRT)

COMPLETION DATE: 04-06-82

COMPLETION INTERVAL: 6010 - 6174 (GLRT)

5938 - 5941' CIBP

6250 - 6253' CIBP

3230 - 10300' CEMENT 1300 sx

6010 - 6148' PERFS

6069 - 6174' PERFS

8425 - 8460' CEMENT PLUG

8460 - 8463' CIBP

9400 - 9403' CIBP

9925 - 9928' CIBP

0 - 10300' 5.5" OD PROD CSG

8510 - 9306' PERFS

9423 - 9484' PERFS

10009 - 10116' PERFS

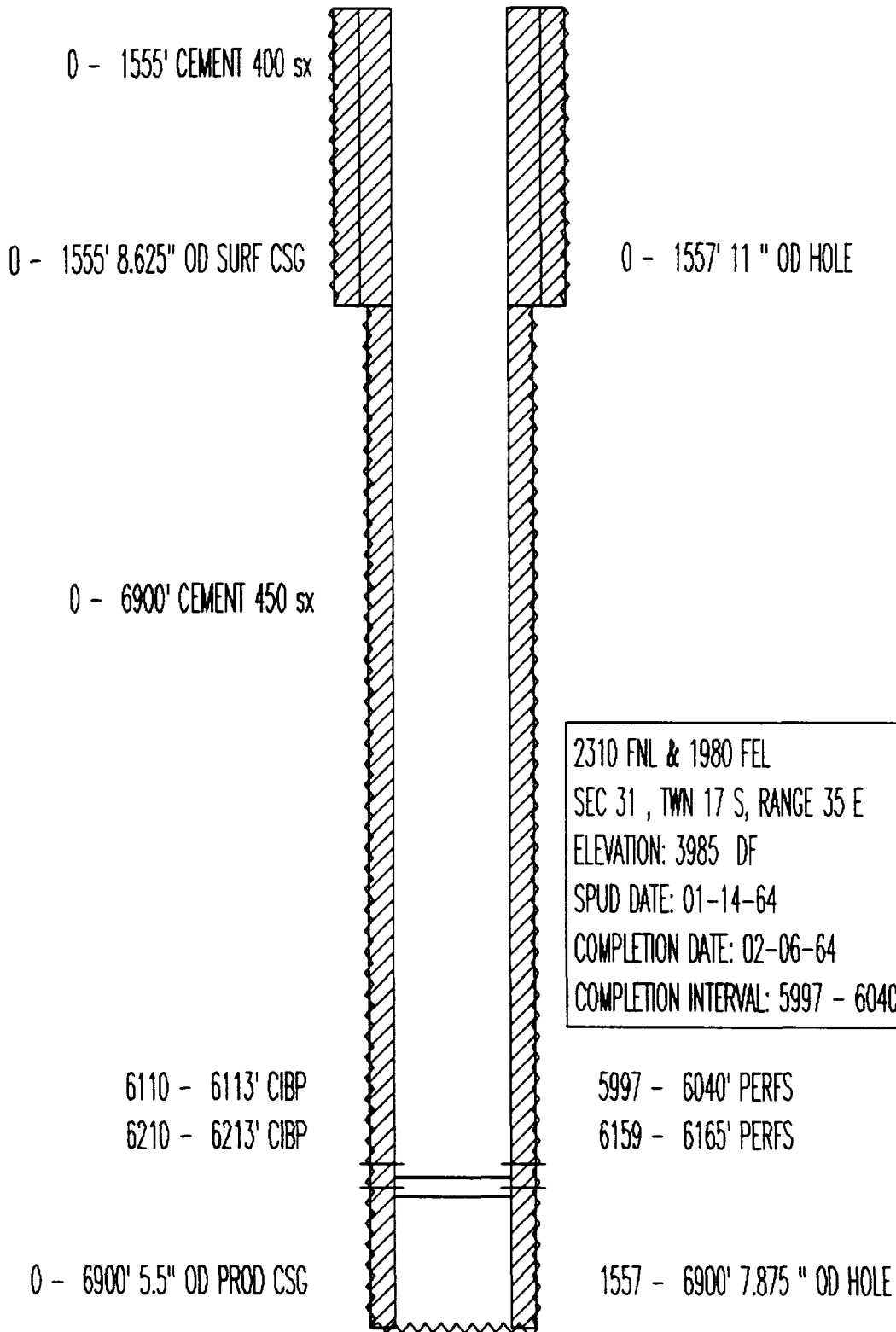
2982 - 10300' 8.5 " OD HOLE

KB ELEV: 3981'

PBTD: 6250'

TD: 10300'

SHELL
STATE A NO. 6
API# 3002520290
(VGEU 37-03)



KB ELEV: 3985'
PBD: 6198'
TD: 6900'

SHELL
STATE A NO. 8
API# 3002520820
(VGEU 37-04)

0 - 1574' CEMENT 600 sx

0 - 1574' 8.625" OD SURF CSG

0 - 1574' 11 " OD HOLE

0 - 6300' CEMENT 320 sx

2180 FNL & 660 FEL
SEC 31 , TWN 17 S, RANGE 35 E
ELEVATION: 3984 ES
SPUD DATE: 05-23-64
COMPLETION DATE: 06-09-64
COMPLETION INTERVAL: 6036 - 6076 (PDCK)

0 - 6300' 4.5" OD PROD CSG

6036 - 6177' PERFS

1574 - 6300' 7.875 " OD HOLE

KB ELEV: 3984'

PBTD: 6228'

TD: 6300'

SHELL
STATE F NO. 3
API# 3002520824
(VGEU 38-01)

0 - 1657' CEMENT 600 sx

0 - 1657' 8.625" OD SURF CSG

0 - 1657' 11 " OD HOLE

0 - 6219' CEMENT 866 sx

0 - 6219' 4.5" OD PROD CSG

800 FSL & 800 FWL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3979 ES
SPUD DATE: 05-09-64
COMPLETION DATE: 05-24-64
COMPLETION INTERVAL: 6072 - 6121 (PDCK)

6105 - 6154' PERFS

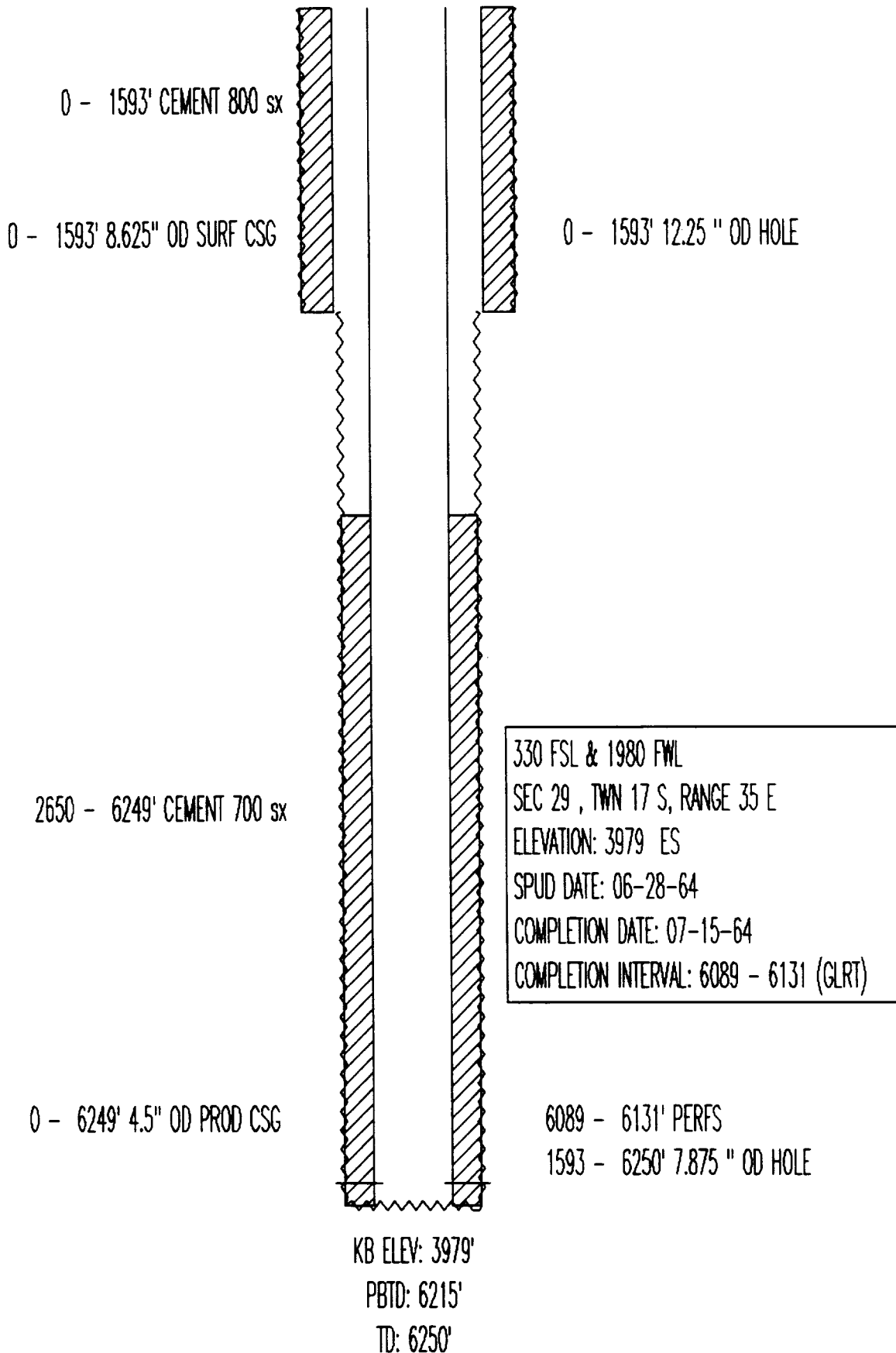
6072 - 6121' PERFS

1657 - 6222' 7.875 " OD HOLE

KB ELEV: 3979'

TD: 6222'

SHELL
STATE F NO. 4
API# 3002520825
(VGEU 38-02)



SHELL
STATE I NO. 2
API# 3002502938
(VGEU 39-01)

0 - 307' CEMENT 250 sx
0 - 307' 8.625" OD SURF CSG

0 - 307' 11 " OD HOLE

2266 - 4726' CEMENT 250 sx

2310 FNL & 330 FWL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3976 KB
SPUD DATE: 07-28-60
COMPLETION DATE: 02-07-64
COMPLETION INTERVAL: 6111 - 6146 (PDCK)

0 - 4726' 5.5" OD INT CSG

4408 - 4570' PERFS
307 - 4726' 7.875 " OD HOLE

4335 - 6387' CEMENT 170 sx

6111 - 6146' PERFS

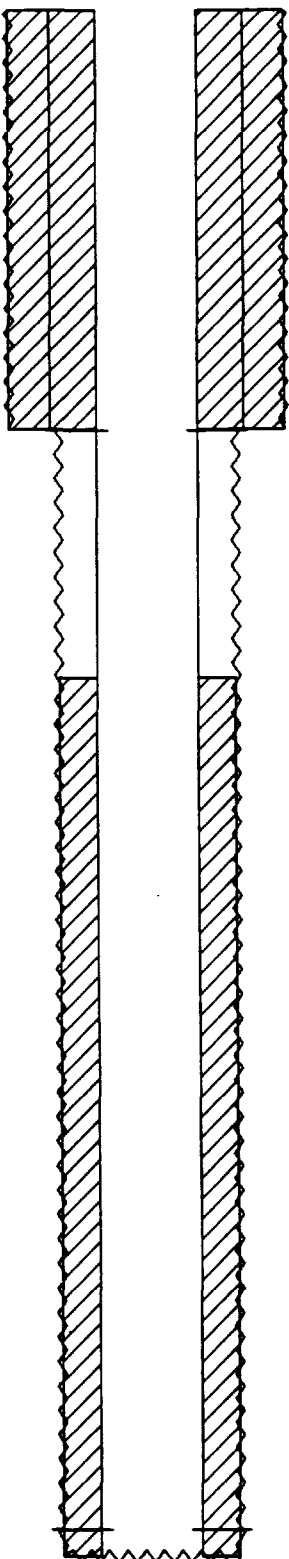
4335 - 6387' 3.5" OD LINER

4726 - 6387' 4.75 " OD HOLE

KB ELEV: 3976'
PBTD: 6385'
TD: 6387'

PHILLIPS PET
SANTA FE NO. 104
API# 3002520798
(VGEU 40-01)

0 - 1700' CEMENT
0 - 1697' CEMENT 640 sx
0 - 1697' 8.625" OD SURF CSG
0 - 1697' 12.25 " OD HOLE
1700 - 1700' PERFS



2130 FNL & 1980 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3949 GR
SPUD DATE: 09-19-64
COMPLETION DATE: 10-14-63
COMPLETION INTERVAL: 6120 - 6142 (GLRT)

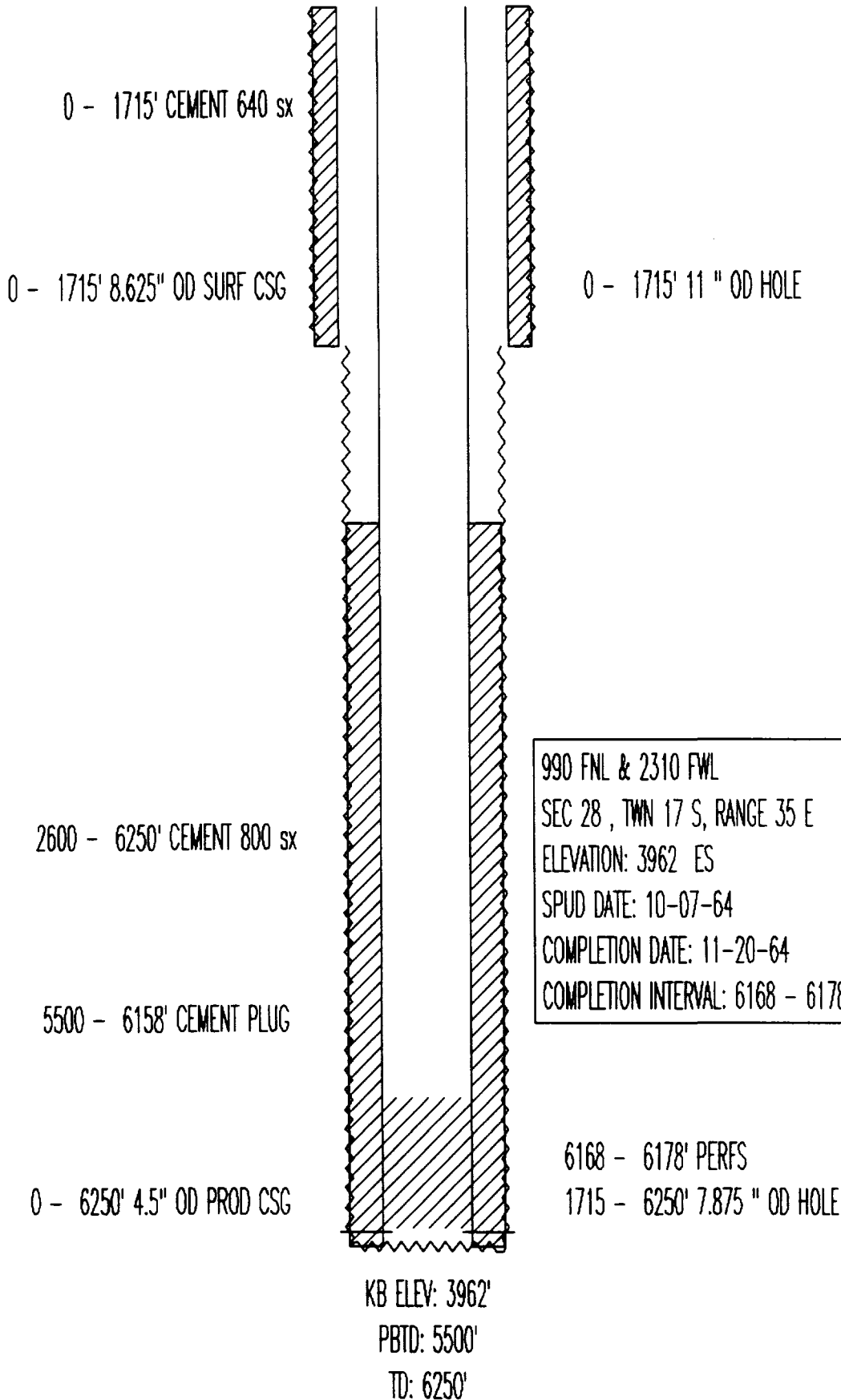
2700 - 6250' CEMENT 800 sx

0 - 6250' 4.5" OD PROD CSG

6120 - 6142' PERFS
1697 - 6250' 7.875 " OD HOLE

KB ELEV: 3949'
TD: 6250'

PHILLIPS PET
SANTA FE NO. 107
(VGEU 41-01)
API# 3002520800



PHILLIPS PET
SANTA FE NO. 105
API# 3002521080
(VGEU 41-02)

0 - 1700' CEMENT 640 sx

0 - 1700' 8.625" OD SURF CSG

0 - 1700' 12.25 " OD HOLE

2322 FNL & 660 FWL
SEC 28 , TWN 17 S, RANGE 35 E
ELEVATION: 3944 GR
SPUD DATE: 09-22-64
COMPLETION DATE: 10-11-64
COMPLETION INTERVAL: 6140 - 6159 (GLRT)

2600 - 6250' CEMENT 800 sx

0 - 6250' 4.5" OD PROD CSG

6140 - 6159' PERFS

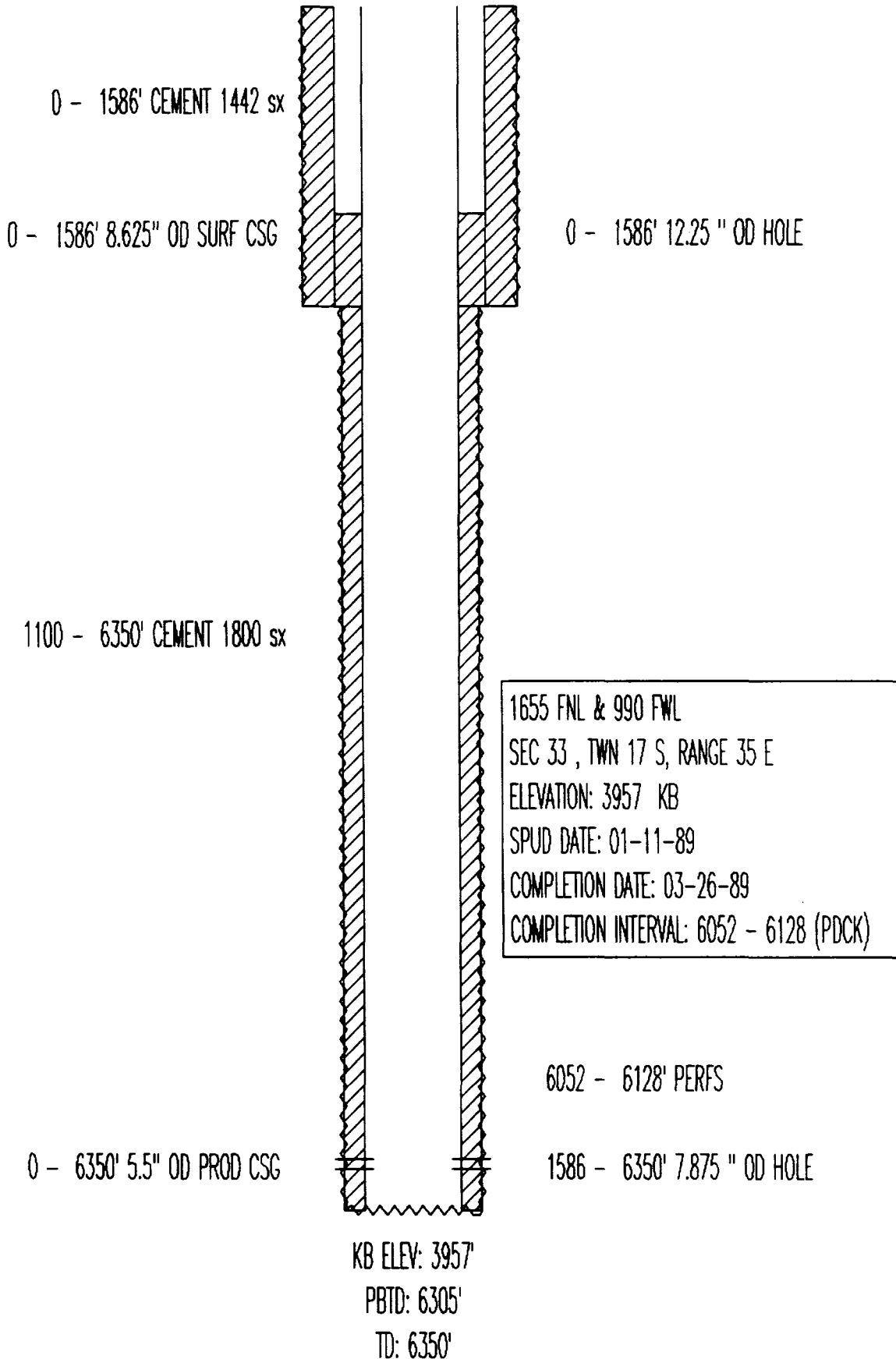
1700 - 6250' 7.875 " OD HOLE

KB ELEV: 3944'

PBTD: 6199'

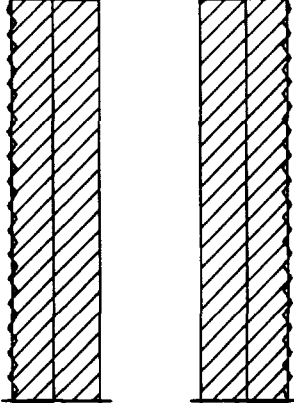
TD: 6250'

PHILLIPS PET
SANTA FE NO. 131
API# 3002530505
(VGEU 42-01)



PHILLIPS PET
SANTA FE NO. 96
API# 3002520790
(VGEU 42-02)

0 - 1620' CEMENT
0 - 1625' CEMENT 700 sx
0 - 1625' 8.625" OD SURF CSG
0 - 1625' 12.25 " OD HOLE
1620 - 1620' PERFS

A schematic diagram of a wellbore. The top section consists of two vertical columns filled with diagonal hatching, representing cement. The left column is labeled with '0 - 1620' CEMENT', '0 - 1625' CEMENT 700 sx', and '0 - 1625' 8.625" OD SURF CSG'. The right column is labeled with '0 - 1625' 12.25 " OD HOLE' and '1620 - 1620' PERFS'. The two columns are connected by a wavy line at the bottom, indicating a perforated section.

2180 FNL & 660 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3961 GR
SPUD DATE: 04-18-64
COMPLETION DATE: 05-05-64
COMPLETION INTERVAL: 6079 - 6107 (PDCK)

2600 - 6225' CEMENT 950 sx

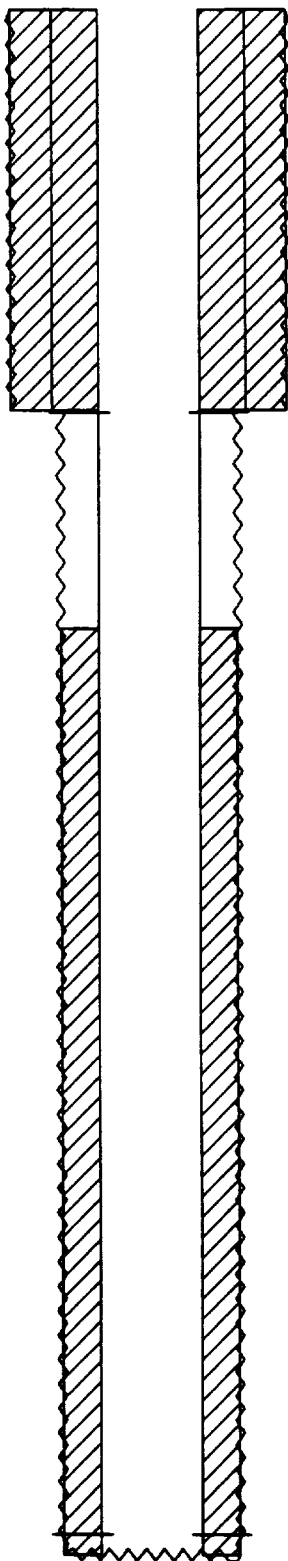
0 - 6225' 4.5" OD PROD CSG

6079 - 6107' PERFS
1625 - 6225' 7.875 " OD HOLE

KB ELEV: 3961'
PBD: 6180'
TD: 6225'

PHILLIPS PET
SANTA FE NO. 92
API# 3002520786
(VGEU 43-01)

0 - 1630' CEMENT
0 - 1623' CEMENT 870 sx
0 - 1623' 8.625" OD SURF CSG
0 - 1623' 12.25 " OD HOLE
1630 - 1630' PERFS



2105 FSL & 1980 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3947 GR
SPUD DATE: 05-05-64
COMPLETION DATE: 05-24-64
COMPLETION INTERVAL: 6124 - 6144 (PDCK)

2500 - 6226' CEMENT 950 sx

0 - 6226' 4.5" OD PROD CSG

6124 - 6144' PERFS
1623 - 6226' 7.875 " OD HOLE

KB ELEV: 3947'
TD: 6226'

PHILLIPS PET
STATE O NO. 2
API# 3002520869
(VGEU 44-01)

0 - 355' 13.375" OD SURF CSG

0 - 355' 17.5 " OD HOLE

0 - 355' CEMENT 300 sx

350 - 3200' CEMENT 1530 sx

0 - 3200' 9.625" OD INT CSG

355 - 3200' 12.25 " OD HOLE

2968 - 6369' CEMENT 750 sx

1700 FSL & 990 FWL

SEC 33 , TWN 17 S, RANGE 35 E

ELEVATION: 3952 GR

SPUD DATE: 05-18-64

COMPLETION DATE: 07-13-64

COMPLETION INTERVAL: 6119 - 6136 (GLRT)

6258 - 6369' CEMENT PLUG

6119 - 6136' PERFS

2968 - 6369' 7" OD LINER

6139 - 6155' PERFS

6400 - 6450' CEMENT PLUG

7120 - 7300' CEMENT PLUG

8090 - 8270' CEMENT PLUG

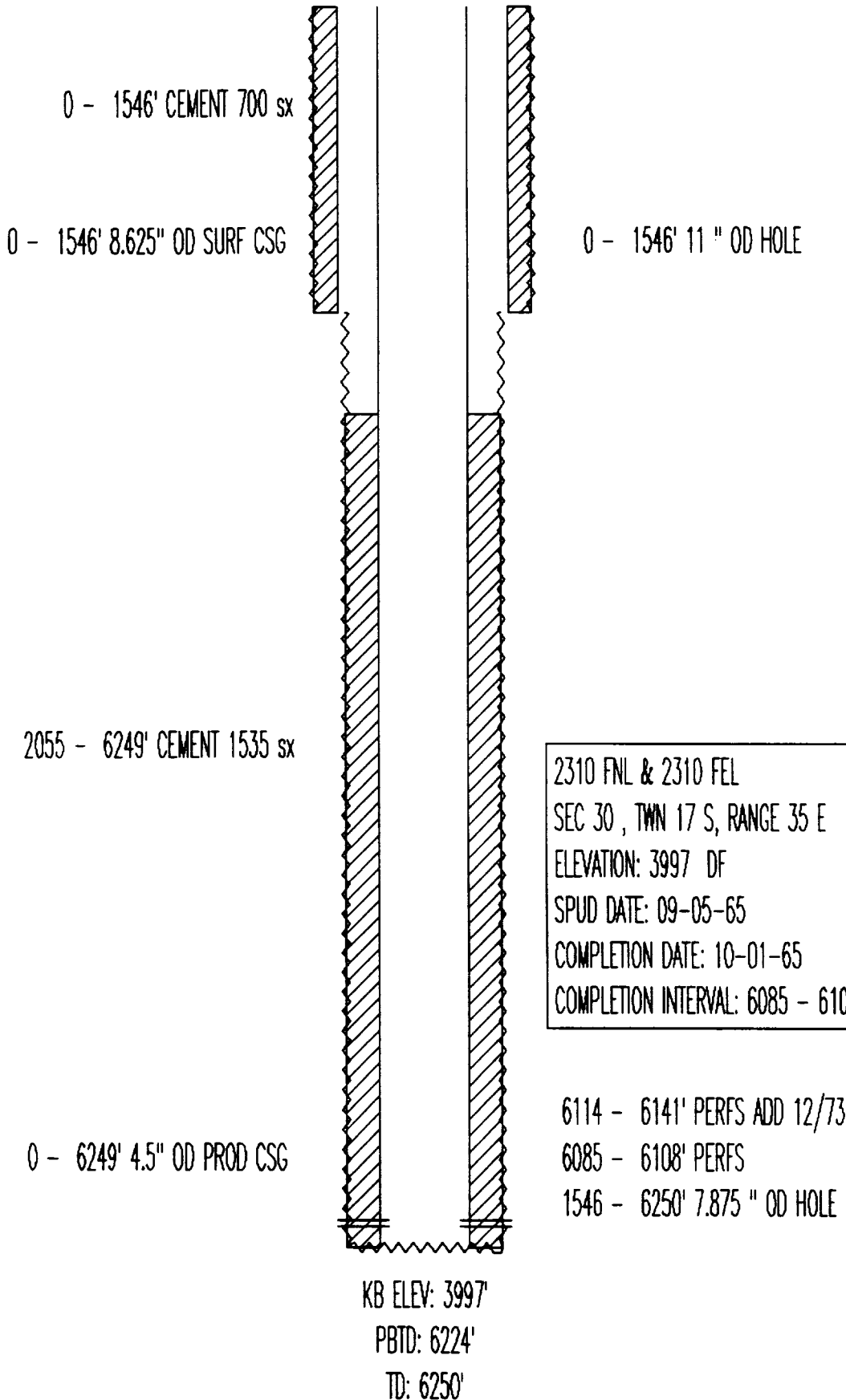
3200 - 9000' 8.75 " OD HOLE

KB ELEV: 3952'

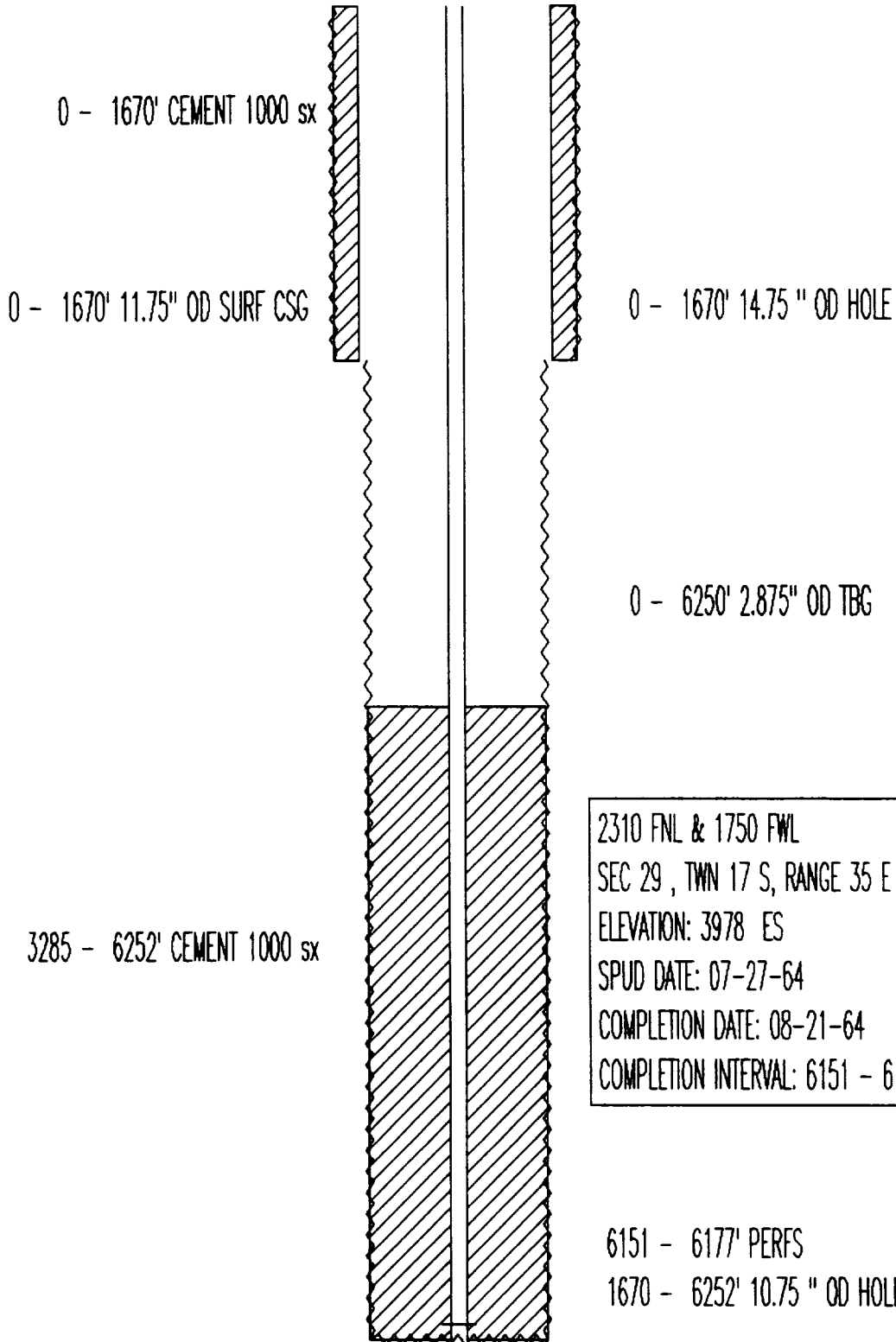
PBTD: 6258'

TD: 9000'

ARCO
STATE L DE NO. 2
API# 3002521353
(VGEU 45-01)



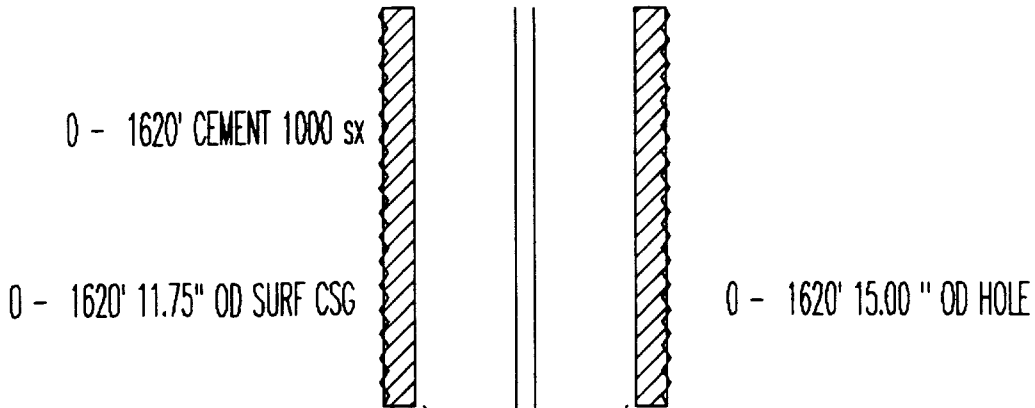
TEXACO EXPL & PROD
STATE CG NCT2 NO. 1
API# 3002520957
(VGEU 46-01)



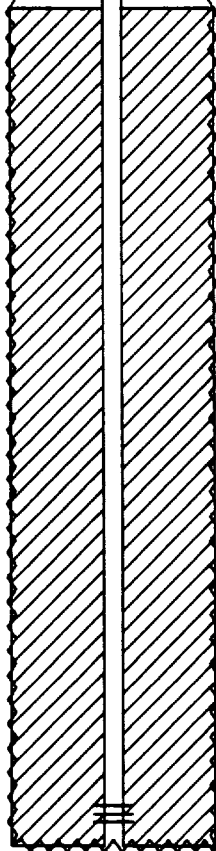
2310 FNL & 1750 FWL
SEC 29 , TWN 17 S, RANGE 35 E
ELEVATION: 3978 ES
SPUD DATE: 07-27-64
COMPLETION DATE: 08-21-64
COMPLETION INTERVAL: 6151 - 6177 (GLRT)

KB ELEV: 3978'
TD: 6252'

TEXACO EXPL & PROD
STATE CG NCT1 NO. 2
API# 3002520958
(VGEU 47-01)



2870 - 6250' CEMENT 1200 sx



KB ELEV: 3985'
PBTD: 6242'
TD: 6250'

2310 FNL & 400 FEL
SEC 30 , TWN 17 S, RANGE 35 E
ELEVATION: 3985 ES
SPUD DATE: 06-05-64
COMPLETION DATE: 06-24-64
COMPLETION INTERVAL: 6101 - 6119 (GLRT)

6101 - 6119' PERFS
6045 - 6086' PERFS
1620 - 6250' 10.75 \"

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C--108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

PLUGGED AND ABANDONED WELLS INSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

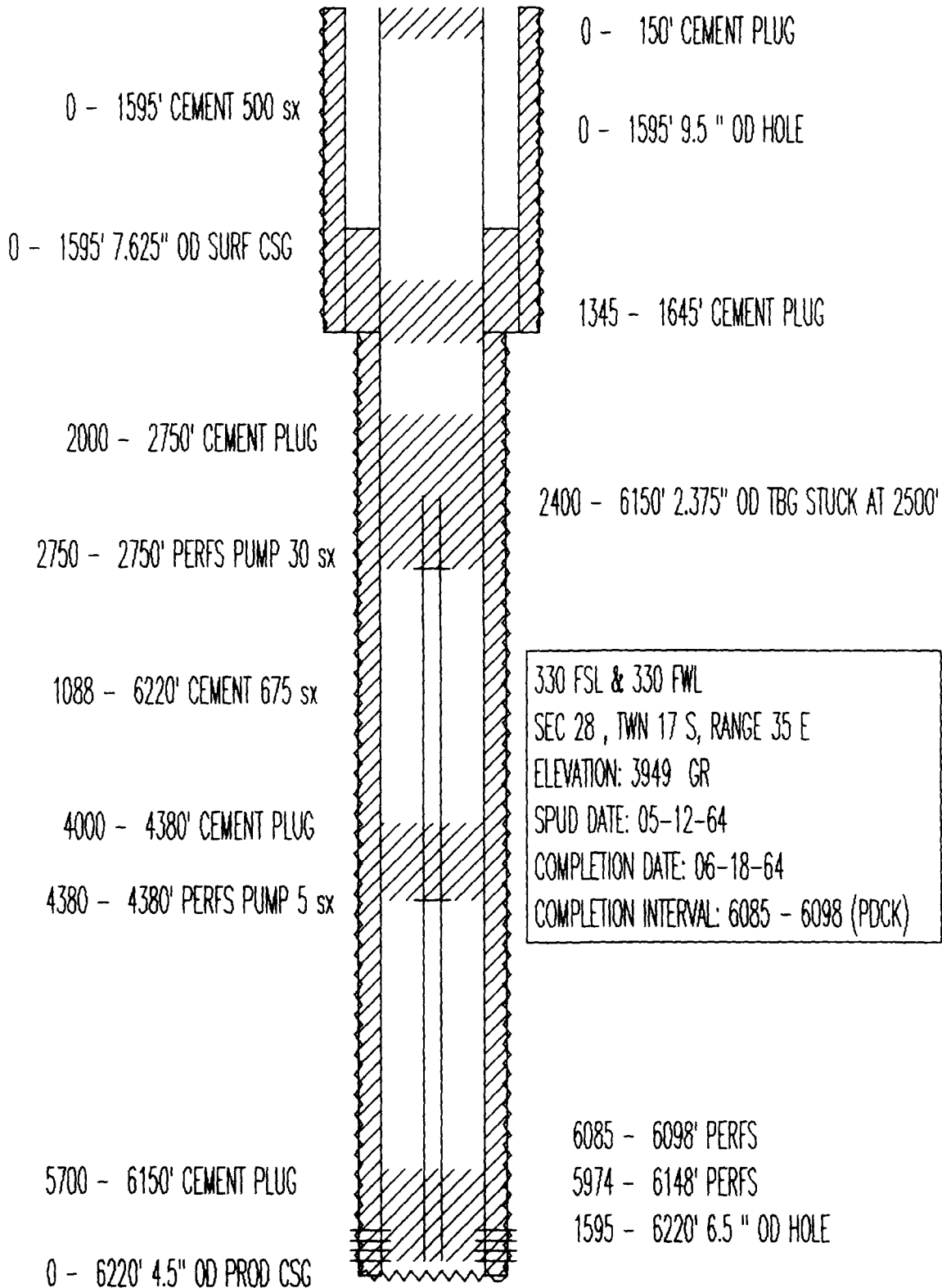
(VGEU DENOTES VACUUM GLORIETA EAST UNIT)

New Well Designation	Lease Name / Well Operator	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Plugging Detail	Unit	Location
VGEU 01-08	N M K State	32	Exxon	3002520722	P&A	1088' M	See Diagram	6220'	See Diagram	M	28 17S 35E 330 FS, 330 FW
VGEU 02-05	N M K State	22	Exxon	3002520713	P&A	2600' M	.	6210'	.	J	32 17S 35E 1980 FS, 2307 FE
VGEU 11-04	State K	5	Oxy	3002520201	P&A	3675' M	.	9000'	.	H	27 17S 35E 2310 FN, 330 FE
VGEU 18-01	State BC	3	Texaco	3002520985	P&A	1600' M	.	6320'	.	M	33 17S 35E 900 FS, 330 FW

*Top of Cement

- M - Measured by Temp. Survey or Cement Bond Log
- E - Estimated
- C - Calculated using a cement yield of 1.32 cu. ft./sack and assuming 50 % excess

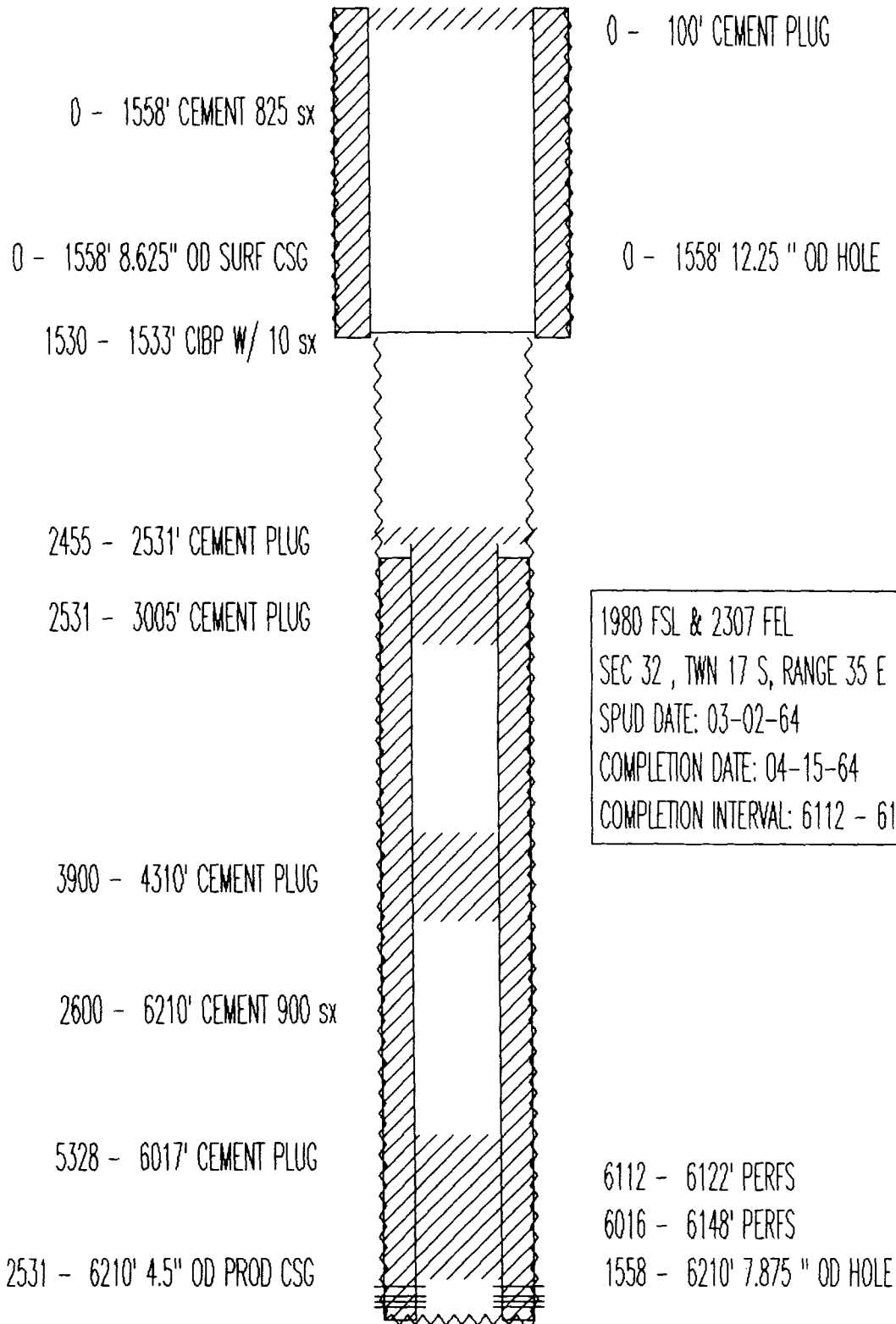
EXXON
NEW MEXICO K STATE NO. 32
API# 3002520722
(VGEU 01-08)



KB ELEV: 3957'

TD: 6220'

EXXON
STATE K NO. 22
API# 3002520713
(VGEU 02-05)

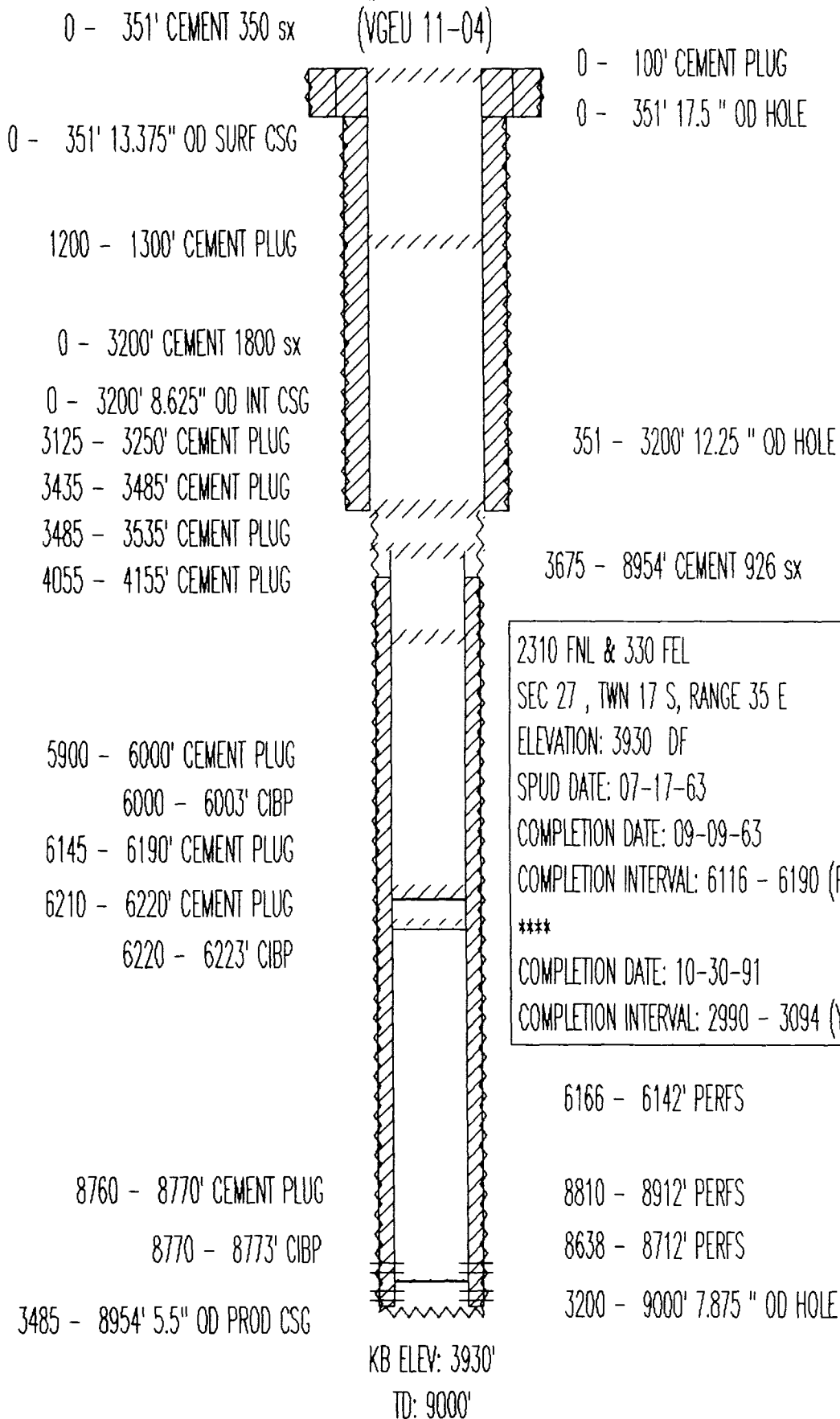


1980 FSL & 2307 FEL
SEC 32 , TWN 17 S, RANGE 35 E
SPUD DATE: 03-02-64
COMPLETION DATE: 04-15-64
COMPLETION INTERVAL: 6112 - 6122

6112 - 6122' PERFS
6016 - 6148' PERFS
1558 - 6210' 7.875 " OD HOLE

KB ELEV: 3959'
PBTD: 6175'
TD: 6210'

OXY
STATE K NO. 5
API# 3002520201



TEXACO EXPL & PROD
STATE BC NO. 3
API# 3002520985
(VGEU 18-01)

0 - 1450' CEMENT PLUG
0 - 1583' CEMENT 675 sx
0 - 1583' 7.625" OD SURF CSG
1609 - 1963' CEMENT PLUG
0 - 1583' 10" OD HOLE
1450 - 1450' PERFS
0 - 1450' CEMENT

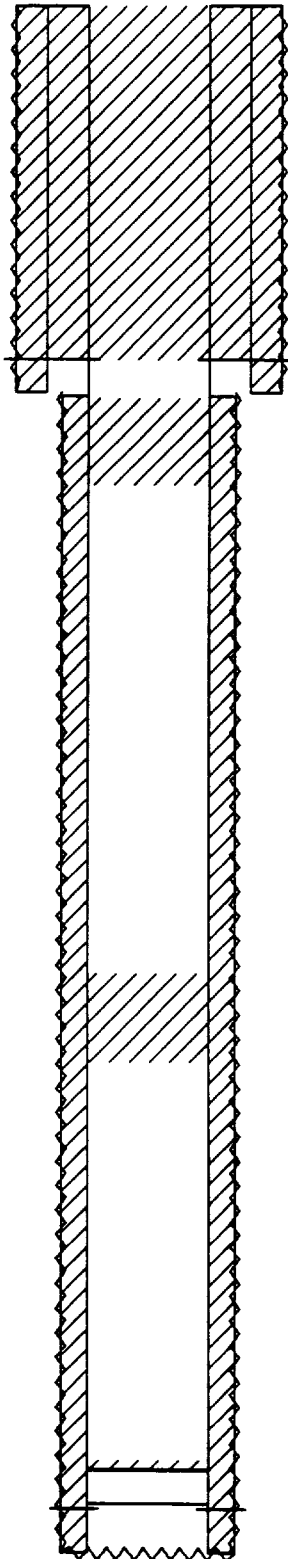
1600 - 6316' CEMENT 800 sx
3952 - 4312' CEMENT PLUG

990 FSL & 330 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3962 DF
SPUD DATE: 06-22-64
COMPLETION DATE: 07-19-64
COMPLETION INTERVAL: 6134 - 6138 (GLRT)

5942 - 5977' CEMENT PLUG
5977 - 5980' CIBP
6115 - 6118' CIBP
0 - 6316' 4.5" OD PROD CSG

6134 - 6138' PERFS
1583 - 6320' 6.5" OD HOLE

KB ELEV: 3962'
TD: 6320'



OTHER WELLS IN
AREA OF REVIEW

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS OUTSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

Operator	Lease Name	Well No.	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Plugging Detail	Unit	Location
Phillips	EVGSAU	0524-098	3002520792	PROD	Surface	See Diagram	06-03-64	See Diagram	6258'	See Diagram	C	5 18S 35E 330 FN, 1980 FW
Phillips	EVGSAU	0524-112	3002521651	SI PROD	2600' M	.	01-02-66	.	6250'	.	E	5 18S 35E 1655 FN, 330 FW
Phillips	EVGSAU	0546-119	3002520888	PROD	Surface	.	10-17-64	.	6262'	.	A	5 18S 35E 330 FN, 990 FE
Phillips	EVGSAU	0546-123	3002520887	PROD	2450' M	.	09-27-64	.	6300'	.	B	5 18S 35E 330 FN, 2310 FE
Phillips	EVGSAU	2622-086	3002520314	PROD	3100' M	.	10-14-63	.	9000'	.	C	26 17S 35E 990 FN, 2307 FW
Phillips	EVGSAU	2631-110	3002520803	PROD	2600' M	.	11-03-64	.	6250'	.	L	26 17S 35E 2314 FS, 333 FW
Phillips	EVGSAU	2717-006	3002520835	PROD	4272' C	.	04-01-64	.	6300'	.	P	27 17S 35E 990 FS, 890 FE
Texaco	Mobil State	01	3002520962	PROD	5709' C	.	06-18-64	.	10300'	.	H	25 17S 34E 2080 FN, 560 FE
Mobil	N Vac Abo Unit	232	3002527519	SI PROD	4802' M	.	09-30-81	.	8750'	.	A	25 17S 34E 519 FN, 560 FE
Texaco	NM AB State	02	3002503085	PROD	4705' M	.	07-25-61	.	9052'	.	P	6 18S 35E 660 FS, 560 FE
Texaco	NM AB State	04	3002503087	SI PROD	5108' M	.	11-04-61	.	9080'	.	I	6 18S 35E 1650 FS, 660 FE
Exxon	NM J State	05	3002503087	SI PROD	5503' C	.	01-23-72	.	8740'	.	N	19 17S 35E 790 FS, 1915 FW
Texaco	NM L State	07	3002520937	SI PROD	3598' C	.	03-03-64	.	6750'	.	A	1 18S 34E 760 FN, 560 FE
Texaco	NM N State	08	3002520944	PROD	4180' C	.	10-02-64	.	10300'	.	D	30 17S 35E 550 FN, 500 FW
Texaco	NM O State NCT1	16	3002520945	SI PROD	3608' C	.	02-27-64	.	6800'	.	H	36 17S 34E 1980 FN, 990 FE
Texaco	NM O State NCT1	18	3002520274	SI PROD	5718' M	.	05-09-63	.	11510'	.	H	36 17S 34E 1880 FN, 560 FE
Texaco	NM Q State	04	3002520294	PROD	5909' C	.	08-21-63	.	12285'	.	P	25 17S 34E 500 FS, 760 FE
Texaco	NM Q State	06	3002520947	SI PROD	4455' C	.	02-07-64	.	6850'	.	P	25 17S 34E 460 FS, 999 FE
Texaco	NM R State NCT1	06	3002520053	SI PROD	5923' C	.	04-04-63	.	8850'	.	H	6 18S 35E 2310 FN, 760 FE
Phillips	Santa Fe	97	3002520791	PROD	2400' M	.	05-21-64	.	6300'	.	P	33 17S 35E 990 FS, 1980 FW
Phillips	Santa Fe	113	3002521713	PROD	2800' M	.	09-16-65	.	6250'	.	B	34 17S 35E 330 FN, 2310 FE
Phillips	Santa Fe	124	3002524126	PROD	2200' M	.	05-16-72	.	8980'	.	D	29 17S 35E 520 FN, 520 FW
Phillips	Santa Fe	125	3002524207	PROD	4300' M	.	08-12-72	.	10450'	.	N	20 17S 35E 660 FS, 1820 FW
Permco	State AR	01	3002525674	PROD	4000' M	.	11-29-77	.	8800'	.	B	30 17S 35E 470 FN, 1990 FE
Mobil	State DD Com	01	3002520862	T&A	3879' C	.	10-04-64	.	10553'	.	D	31 17S 35E 510 FN, 535 FW
Cr. Timbers	State K	03	3002524051	PROD	4406' C	.	03-14-72	.	8900'	.	P	19 17S 35E 660 FS, 660 FE
Mobil	State L	05	3002528134	PROD	1955' C	.	02-19-83	.	9000'	.	L	21 17S 35E 1980 FS, 660 FW
Mobil	State "Sec 22"	01	3002530509	SI PROD	4495' M	.	02-01-89	.	12330'	.	I	22 17S 35E 1980 FS, 660 FE
Phillips	Vac Abo Un	01-08	3002502902	PROD	3693' M	.	06-24-62	.	9100'	.	O	27 17S 35E 330 FS, 1650 FE

VACUUM GLORIETA EAST UNIT

ATTACHMENT N TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS OUTSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

Operator	Lease Name	Well No.	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Plugging Detail	Unit	Location
Phillips	Vac Abo Un	01-09	3002520879	WI	2875' M	See Diagram	01-29-64	See Diagram	9060'	See Diagram	J	27 17S 38E 1650 FS, 1650 FE
Phillips	Vac Abo Un	04-05	3002502888	PROD	3434' M	.	08-14-62	.	9100'	.	A	26 17S 38E 990 FN, 330 FE
Phillips	Vac Abo Un	04-06	3002502872	WI	3441' M	.	09-24-63	.	9085'	.	B	26 17S 38E 990 FN, 1650 FE
Phillips	Vac Abo Un	05-01	3002508548	PROD	4516' M	.	04-20-62	.	9103'	.	J	26 17S 38E 1980 FS, 1980 FE
Phillips	Vac Abo Un	05-02	3002508549	WI	6645' C	.	05-12-62	.	9180'	.	O	26 17S 38E 990 FS, 2185 FE
Phillips	Vac Abo Un	06-57	3002502890	PROD	3300' M	.	01-19-61	.	9000'	.	N	33 17S 38E 330 FS, 1980 FW
Phillips	Vac Abo Un	06-59	3002503061	SI PROD	3600' M	.	07-29-61	.	8982'	.	F	5 18S 38E 2310 FN, 1980 FW
Phillips	Vac Abo Un	06-61	3002503003	PROD	1100' M	.	12-12-61	.	9100'	.	G	34 17S 38E 2080 FN, 2080 FE
Phillips	Vac Abo Un	06-63	3002503062	PROD	2300' M	.	11-01-61	.	9000'	.	E	5 18S 38E 2310 FN, 990 FW
Phillips	Vac Abo Un	06-64	3002503004	T&A	1600' M	.	02-26-62	.	9100'	.	A	34 17S 38E 760 FN, 760 FE
Phillips	Vac Abo Un	06-65	3002503005	PROD	3100' M	.	01-26-62	.	9100'	.	B	34 17S 38E 987 FN, 1980 FE
Phillips	Vac Abo Un	06-66	3002502885	PROD	1700' M	.	04-12-62	.	9133'	.	M	26 17S 38E 510 FS, 510 FW
Phillips	Vac Abo Un	06-67	3002508541	PROD	2700' M	.	05-04-62	.	9033'	.	L	26 17S 38E 1882 FS, 660 FW
Phillips	Vac Abo Un	06-68	3002520528	WI	3950' M	.	06-08-63	.	9000'	.	H	34 17S 38E 1736 FN, 990 FE
Phillips	Vac Abo Un	06-69	3002508542	PROD	2600' M	.	05-18-62	.	9100'	.	K	26 17S 38E 1980 FS, 1890 FW
Phillips	Vac Abo Un	06-70	3002508523	PROD	3150' M	.	06-16-62	.	9066'	.	G	26 17S 38E 2080 FN, 1980 FE
Phillips	Vac Abo Un	06-71	3002508543	PROD	Surface	.	07-16-62	.	9100'	.	H	26 17S 38E 1980 FN, 760 FE
Phillips	Vac Abo Un	06-74	3002502871	SI PROD	750' M	.	09-17-62	.	9100'	.	N	26 17S 38E 760 FS, 1980 FW
Phillips	Vac Abo Un	06-76	3002520200	PROD	1700' M	.	02-15-63	.	10680'	.	F	26 17S 38E 2310 FN, 2270 FW
Phillips	Vac Abo Un	06-78	3002520021	PROD	2500' M	.	04-02-63	.	9000'	.	D	35 17S 38E 350 FN, 350 FW
Phillips	Vac Abo Un	06-79	3002520527	PROD	2200' M	.	05-09-63	.	8975'	.	E	26 17S 38E 2311 FN, 992 FW
Phillips	Vac Abo Un	06-80	3002520119	PROD	500' M	.	07-13-63	.	9000'	.	N	27 17S 38E 330 FS, 2315 FW
Phillips	Vac Abo Un	06-85	3002520054	WI	2200' M	.	08-11-63	.	8950'	.	C	36 17S 38E 380 FN, 1650 FW
Phillips	Vac Abo Un	06-86	3002530760	PROD	2170' M	.	02-27-90	.	8900'	.	N	33 17S 38E 50 FS, 2480 FW
Phillips	Vac Abo Un	07-03	3002502907	PROD	3800' M	.	03-24-62	.	9100'	.	P	27 17S 38E 330 FS, 560 FE
Phillips	Vac Abo Un	07-04	3002508526	PROD	4026' C	.	06-25-62	.	9000'	.	I	27 17S 38E 1650 FS, 330 FE
Phillips	Vac Abo Un	07-05	3002530759	PROD	Surface	.	02-02-90	.	8900'	.	P	27 17S 38E 850 FS, 850 FE
Phillips	Vac Abo Un	08-09	3002503024	PROD	3416' M	.	12-14-61	.	9100'	.	F	34 17S 38E 2316 FN, 1980 FW

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C--108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS OUTSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

Operator	Lease Name	Well No.	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Plugging Detail	Unit	Location
Phillips	Vac Abo Un	08-10	3002503025	PROD	3540' M	See Diagram	02-05-62	See Diagram	9100'	See Diagram	E	34 17S 36E 2310 FN, 990 FW
Phillips	Vac Abo Un	08-11	3002503006	PROD	3416' M	.	03-18-62	.	9100'	.	C	34 17S 36E 990 FN, 2310 FW
Phillips	Vac Abo Un	08-12	3002503058	PROD	3453' M	.	12-15-62	.	9100'	.	D	34 17S 36E 990 FN, 990 FW
Phillips	Vac Abo Un	09-05	3002502077	WI	5900' M	.	05-28-63	.	9040'	.	H	33 17S 36E 2310 FN, 330 FE
Phillips	Vac Abo Un	10-05	3002503011	SI PROD	3195' M	.	05-30-61	.	9100'	.	M	34 17S 36E 330 FS, 330 FW
Phillips	Vac Abo Un	10-06	3002503012	PROD	3280' M	.	07-01-61	.	9100'	.	L	34 17S 36E 1650 FS, 330 FW
Phillips	Vac Abo Un	10-08	3002503014	WI	3185' M	.	08-31-61	.	9100'	.	N	34 17S 36E 990 FS, 1650 FW
Phillips	Vac Abo Un	10-09	3002503015	WI	570' M	.	10-02-61	.	9100'	.	J	34 17S 36E 1980 FS, 2310 FE
Phillips	Vac Abo Un	11-05	3002502991	PROD	7098' C	.	01-14-61	.	9003'	.	O	33 17S 36E 330 FS, 1980 FE
Phillips	Vac Abo Un	11-06	3002502992	TA	3575' M	.	02-22-61	.	9100'	.	P	33 17S 36E 330 FS, 660 FE
Phillips	Vac Abo Un	11-07	3002502993	PROD	3290' M	.	04-20-61	.	10498'	.	I	33 17S 36E 1650 FS, 660 FE
Phillips	Vac Abo Un	11-08	3002502994	PROD	Surface	.	04-16-62	.	9056'	.	J	33 17S 36E 1650 FS, 1650 FE
Phillips	Vac Abo Un	12-02	3002502998	WI	Surface	.	06-04-61	.	8902'	.	M	33 17S 36E 330 FS, 990 FW
Phillips	Vac Abo Un	13-02	3002503044	PROD	5000' M	.	08-10-60	.	8984'	.	E	4 18S 36E 1980 FN, 660 FW
Phillips	Vac Abo Un	13-03	3002503045	PROD	4263' C	.	11-16-60	.	8940'	.	C	4 18S 36E 660 FN, 2080 FW
Phillips	Vac Abo Un	13-04	3002503046	PROD	4217' C	.	01-25-61	.	8890'	.	B	4 18S 36E 330 FN, 1980 FE
Phillips	Vac Abo Un	13-05	3002503067	PROD	3265' M	.	02-05-61	.	9100'	.	H	5 18S 36E 1980 FN, 660 FE
Phillips	Vac Abo Un	13-06	3002503047	PROD	3290' M	.	03-04-61	.	9150'	.	A	4 18S 36E 330 FN, 660 FE
Phillips	Vac Abo Un	13-07	3002503069	WI	3212' M	.	03-14-61	.	8948'	.	G	5 18S 36E 2080 FN, 1980 FE
Phillips	Vac Abo Un	13-08	3002503048	TA	3242' M	.	04-18-61	.	8912'	.	D	4 18S 36E 330 FN, 990 FW
Phillips	Vac Abo Un	13-09	3002503040	WI	3300' M	.	04-13-61	.	9140'	.	D	3 18S 36E 330 FN, 660 FW
Phillips	Vac Abo Un	13-10	3002503070	TA	3250' M	.	04-19-61	.	8956'	.	J	5 18S 36E 1980 FS, 2310 FE
Phillips	Vac Abo Un	13-11	3002503049	PROD	3240' M	.	05-27-61	.	9100'	.	F	4 18S 36E 1650 FN, 1980 FW
Phillips	Vac Abo Un	13-12	3002503050	WI	3080' M	.	05-26-61	.	9100'	.	G	4 18S 36E 1650 FN, 1980 FE
Phillips	Vac Abo Un	13-13	3002503071	PROD	3200' M	.	05-21-61	.	9100'	.	I	5 18S 36E 2310 FS, 660 FE
Phillips	Vac Abo Un	13-15	3002503052	WI	3000' M	.	06-21-61	.	9100'	.	L	4 18S 36E 2310 FS, 660 FW
Phillips	Vac Abo Un	13-16	3002503072	PROD	2790' M	.	07-01-61	.	9100'	.	A	5 18S 36E 990 FN, 330 FE
Phillips	Vac Abo Un	13-17	3002503073	PROD	2590' M	.	08-05-61	.	9100'	.	O	5 18S 36E 890 FS, 2210 FE

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

WELLS OUTSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

Operator	Lease Name	Well No.	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Plugging Detail	Unit	Location
Phillips	Vac Abo Un	13-18	3002503053	WI	3250' M	See Diagram	08-09-61	See Diagram	9100'	See Diagram	K	4 18S 35E 2310 FS, 1980 FW
Phillips	Vac Abo Un	14-01	3002503063	PROD	7007' C	.	06-18-61	.	9006'	.	K	5 18S 35E 1980 FS, 1980 FW
Phillips	Vac Abo Un	14-02	3002503064	PROD	1000' M	.	07-18-61	.	9060'	.	M	5 18S 35E 660 FS, 660 FW
Phillips	Vac Abo Un	14-03	3002503065	SI PROD	1700' M	.	08-16-61	.	9107'	.	N	5 18S 35E 660 FS, 1980 FW
Phillips	Vac Abo Un	14-04	3002503066	SI PROD	4200' M	.	09-13-61	.	8950'	.	L	5 18S 35E 1650 FS, 660 FW
Phillips	Vac Abo Un	14-05	3002531903	PROD	5420' M	.	04-04-93	.	9100'	.	L	5 18S 35E 1475 FS, 430 FW
Texaco	VGWU	WI-20	3002531807	WI	Surface	.	01-05-93	.	6352'	.	H	25 17S 34E 1541 FN, 181 FE
Texaco	VGWU	WI-31	3002531814	WI	Surface	.	12-21-92	.	6353'	.	I	25 17S 34E 2520 FS, 153 FE
Texaco	VGWU	WI-42	3002531815	WI	Surface	.	01-07-93	.	6345'	.	M	30 17S 35E 1114 FS, 41 FW
Texaco	VGWU	WI-55	3002531817	WI	Surface	.	01-06-93	.	6334'	.	P	25 17S 34E 146 FS, 128 FE
Texaco	VGWU	25	3002520951	PROD	4999' C	.	10-02-64	.	6800'	.	H	25 17S 34E 2000 FN, 865 FE
Texaco	VGWU	26	3002520943	PROD	3453' C	.	05-13-64	.	6850'	.	E	30 17S 35E 1800 FN, 330 FW
Texaco	VGWU	36	3002520212	SI PROD	3853' C	.	12-21-63	.	6900'	.	I	25 17S 34E 1650 FS, 790 FE
Texaco	VGWU	37	3002520942	SI PROD	5660' M	.	05-15-64	.	10300'	.	L	30 17S 35E 1980 FS, 460 FW
Texaco	VGWU	48	3002530970	PROD	Surface	.	11-14-90	.	6310'	.	P	25 17S 34E 815 FS, 800 FE
Texaco	VGWU	49	3002530967	SI PROD	1750' C	.	12-30-90	.	6320'	.	M	30 17S 35E 990 FS, 895 FW
Texaco	VGWU	61	3002521432	SI PROD	850' C	.	04-28-65	.	6830'	.	A	36 17S 34E 660 FN, 760 FE
Texaco	VGWU	62	3002520663	T&A	1907' C	.	06-30-64	.	6850'	.	D	31 17S 35E 760 FN, 560 FW
Texaco	VGWU	75	3002530969	PROD	1615' C	.	12-14-90	.	6300'	.	H	36 17S 34E 2310 FN, 990 FE
Texaco	VGWU	76	3002520784	PROD	3068' C	.	05-20-64	.	6906'	.	E	31 17S 35E 2030 FN, 510 FW
Texaco	VGWU	89	3002520505	SI PROD	4521' C	.	11-27-63	.	6915'	.	I	36 17S 34E 1800 FS, 560 FE
Texaco	VGWU	90	3002520270	PROD	5670' C	.	12-07-63	.	10500'	.	L	31 17S 34E 2130 FS, 660 FW
Texaco	VGWU	102	3002530126	PROD	2672' C	.	11-06-87	.	6290'	.	P	36 17S 34E 990 FS, 990 FE
Texaco	VGWU	103	3002520339	PROD	5186' C	.	02-01-64	.	6900'	.	M	31 17S 35E 760 FS, 560 FW
Texaco	VGWU	107	3002531884	WI	1247' C	.	05-14-93	.	6390'	.	P	36 17S 34E 183 FS, 931 FE
Texaco	VGWU	115	3002531131	PROD	Surface	.	03-28-91	.	6300'	.	A	1 18S 34E 604 FN, 856 FE
Texaco	VGWU	116	3002520753	PROD	Surface	.	06-29-64	.	6250'	.	D	6 18S 35E 330 FN, 560 FW
Texaco	VGWU	117	3002520754	PROD	Surface	.	07-22-64	.	6287'	.	C	6 18S 35E 330 FN, 1571 FW

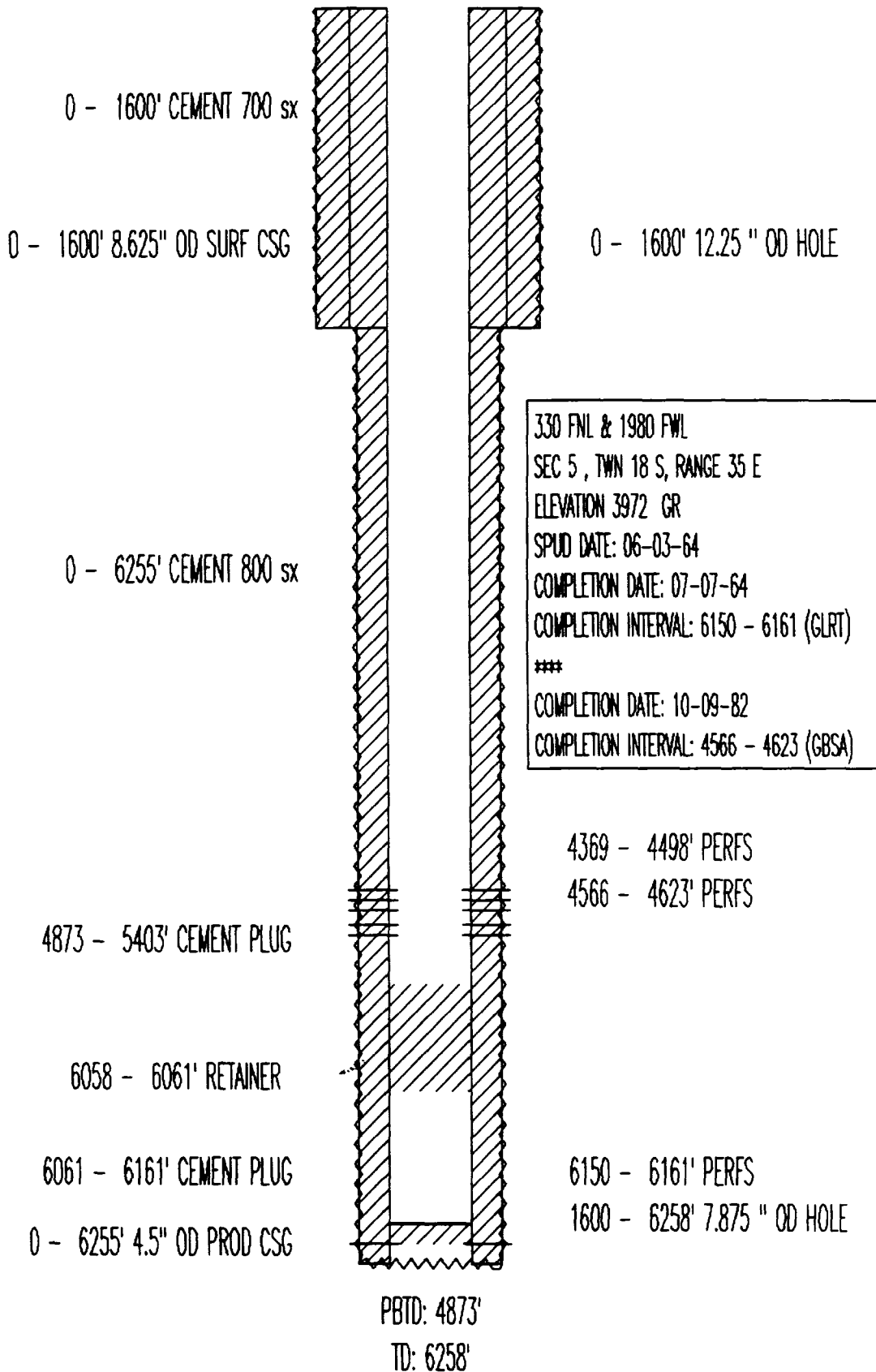
VACUUM GLORIETA EAST UNIT
ATTACHMENT N TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT
WELLS WITHIN 1/2 MILE RADIUS OF REVIEW
WELLS OUTSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

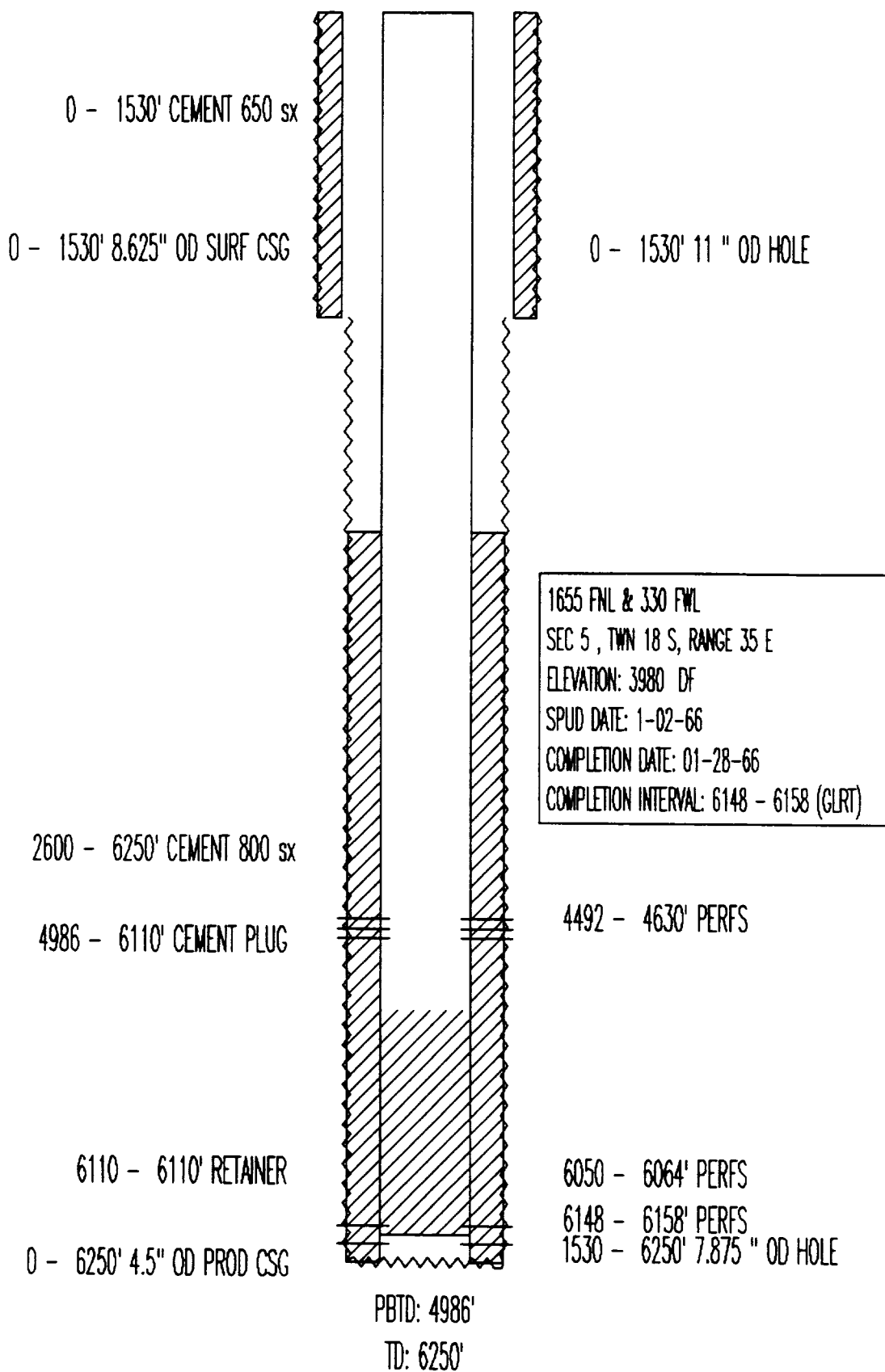
<u>Operator</u>	<u>Lease Name</u>	<u>Well No.</u>	<u>API Number</u>	<u>Type</u>	<u>TOC *</u>	<u>Construction</u>	<u>Date Drilled</u>	<u>Record of Completion</u>	<u>Depth</u>	<u>Plugging Detail</u>	<u>Unit</u>	<u>Location</u>
Texaco	VGWU	118	3002531129	PROD	1139' C	See Diagram	02-17-91	See Diagram	6205'	See Diagram	B	6 18S 35E 660 FN, 2135 FE
Texaco	VGWU	119	3002521108	SI PROD	4355' C	.	09-11-64	.	6850'	.	A	6 18S 35E 330 FN, 660 FE
Texaco	VGWU	126	3002521031	SI PROD	1375' C	.	12-20-64	.	6250'	.	E	6 18S 35E 1660 FN, 380 FW
Texaco	VGWU	127	3002521292	SI PROD	Surface	.	04-12-65	.	6285'	.	F	6 18S 35E 1650 FN, 1650 FW
Texaco	VGWU	128	3002521054	SI PROD	5213' C	.	01-08-65	.	6322'	.	G	6 18S 35E 1650 FN, 1980 FE
Texaco	VGWU	129	3002521425	SI PROD	2527' C	.	04-23-65	.	6250'	.	H	6 18S 35E 1650 FN, 990 FE
Marathon	Warm AC1	03	3002520748	PROD	2965' M	.	05-02-64	.	10301'	.	F	31 17S 35E 2080 FN, 1908 FW
Marathon	Warm AC2	19	3002531927	PROD	1000' M	.	04-06-93	.	8180'	.	F	6 18S 35E 2010 FN, 2230 FW
Marathon	Warm AC2	20	3002531934	PROD	Surface	.	05-14-93	.	8166'	.	E	6 18S 35E 2160 FN, 910 FW
Marathon	Warm AC2	21	3002531969	PROD	1050' M	.	06-06-93	.	8160'	.	C	6 18S 35E 1109 FN, 1993 FW

* Top of Cement
M - Measured by Temp. Survey or Cement Bond Log
E - Estimated
C - Calculated using a cement yield of 1.32 cu. ft./sack
and assuming 50 % excess

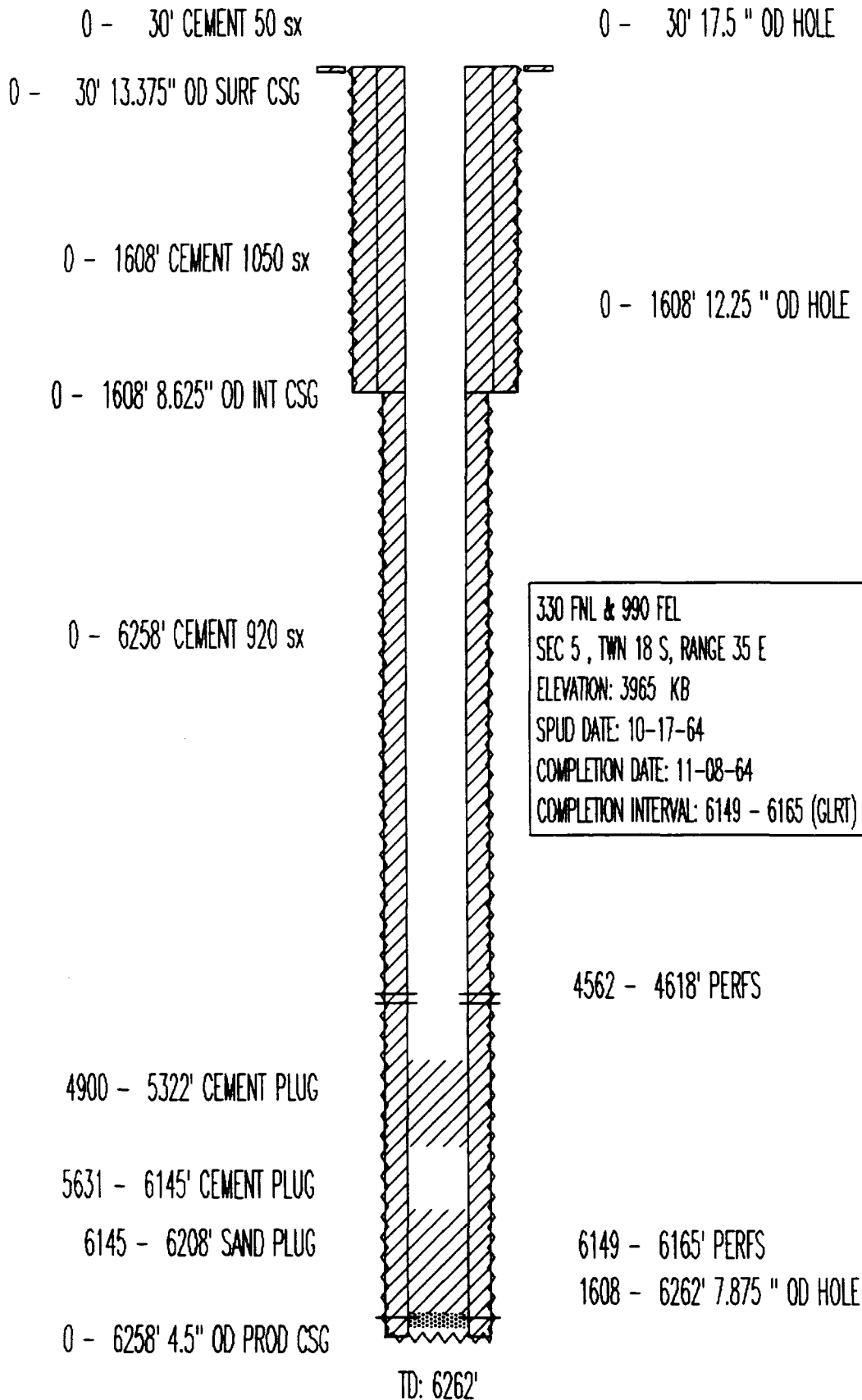
PHILLIPS PET
EVGSAU NO. 0524-098
API# 3002520792



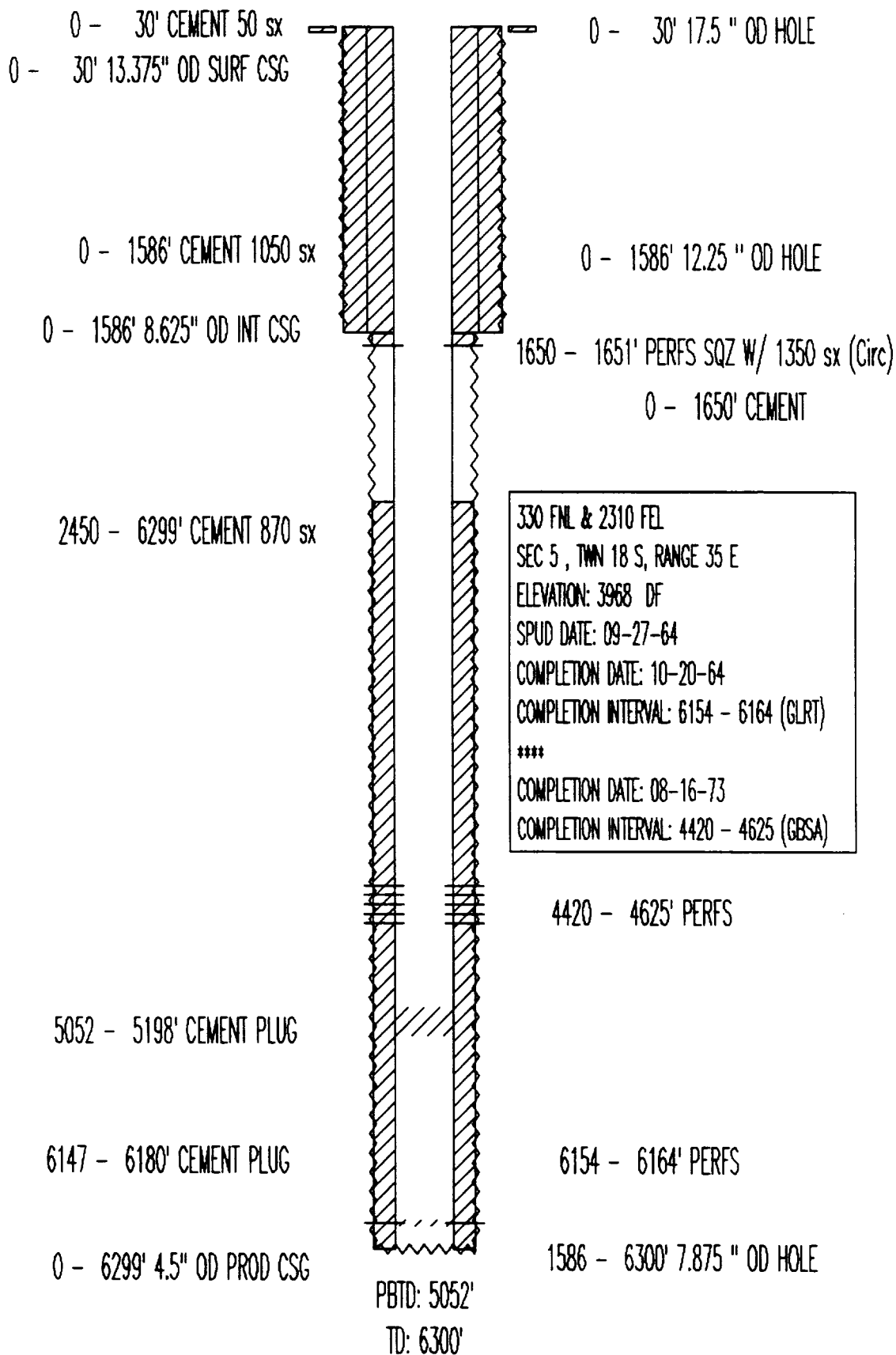
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API# 3002521651



PHILLIPS PET
EVGSAU NO. 0546-119
API# 3002520888



PHILLIPS PET
EVGSAU NO. 0546-123
API# 3002520887



PHILLIPS PET
EVGSAU NO. 2622-086
API# 3002520314

0 - 312' 13.375" OD SURF CSG

0 - 312' CEMENT 350 sx

2600 - 3250' CEMENT 400 sx

0 - 3250' 8.625" OD INT CSG

4482 - 4542' CEMENT PLUG

4482 - 4482' RETAINER

3100 - 9000' CEMENT 760 sx

4648 - 6125' CEMENT PLUG

6125 - 6392' SAND PLUG

6392 - 6700' CEMENT PLUG

8039 - 8913' CEMENT PLUG

0 - 9000' 5.5" OD PROD CSG

0 - 312' 17.5" OD HOLE

312 - 3250' 12.25" OD HOLE

4444 - 4466' PERFS

4506 - 4542' PERFS

990 FNL & 2307 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3920 DF
SPUD DATE: 10-14-63
COMPLETION DATE: 11-26-63
COMPLETION INTERVAL: 6152 - 6166 (GLRT)

COMPLETION DATE: 08-04-74
COMPLETION INTERVAL: 4444 - 4466 (SADR)

6152 - 6168' PERFS

8572 - 8894' PERFS

3250 - 9000' 7.875" OD HOLE

PBTD: 4482'

TD: 9000'

PHILLIPS PET
EVGSAU NO. 2631-110
API# 3002520803

0 - 1725' CEMENT
0 - 1697' CEMENT 640 sx
0 - 1697' 8.625" OD SURF CSG
0 - 1696' 12.25 " OD HOLE
1725 - 1725' PERFS

2600 - 6249' CEMENT 800 sx
4452 - 4514' CEMENT PLUG
4514 - 4517' CIBP
4525 - 6162' CEMENT PLUG

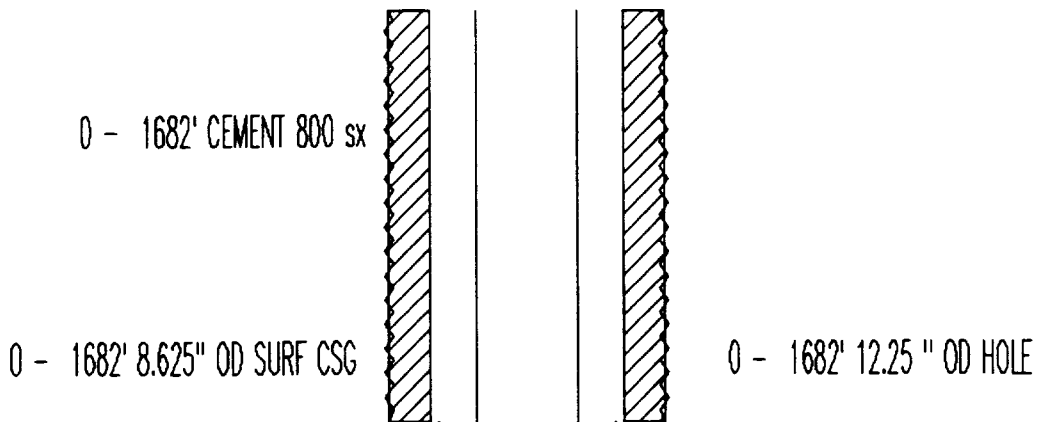
0 - 6249' 4.5" OD PROD CSG

2314 FSL & 333 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3929 ES
SPUD DATE: 11-03-64
COMPLETION DATE: 12-13-64
COMPLETION INTERVAL: 6138 - 6162 (GLRT)

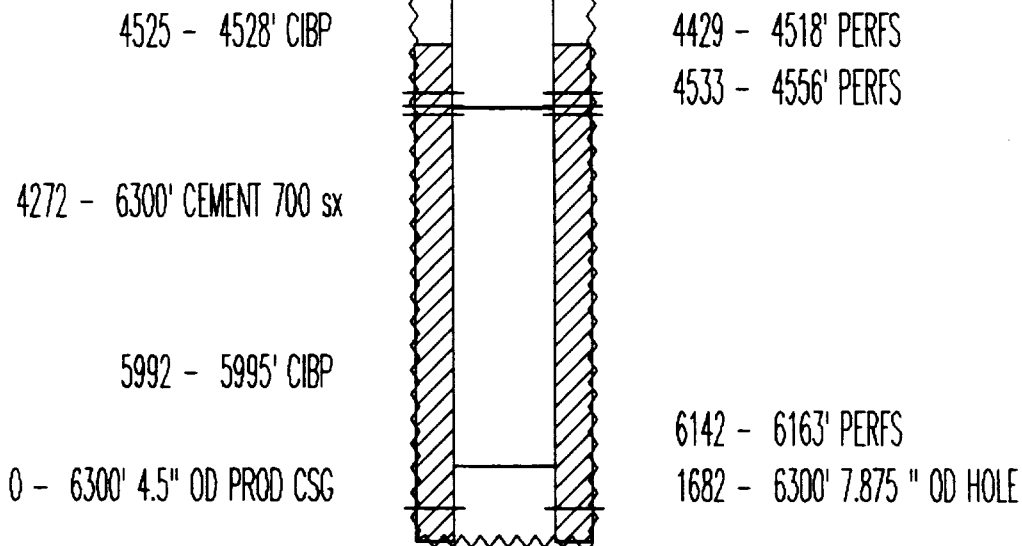
6138 - 6162' PERFS
6126 - 6136' PERFS
1696 - 6250' 7.875 " OD HOLE

KB ELEV: 3929'
PBD: 4452'
TD: 6250'

PHILLIPS PET
EVGSAU NO. 2717-006
API# 3002520835



990 FSL & 890 FEL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3935 DF
SPUD DATE: 04-01-64
COMPLETION DATE: 04-21-64
COMPLETION INTERVAL: 6142 - 6163 (GLRT)



PBTD: 4525'
TD: 6300'

TEXACO EXPL & PROD
MOBIL STATE NO. 1
API# 3002520962

0 - 350' 13.375" OD SURF CSG

0 - 350' CEMENT 400 sx

0 - 4800' CEMENT 1700 sx

0 - 4800' 9.625" OD INT CSG

5709 - 10300' CEMENT 1800 sx

0 - 350' 17.5 " OD HOLE

350 - 4800' 12.25 " OD HOLE

0 - 10295' 2.875" OD TBG

0 - 10293' 2.875" OD TBG

0 - 10298' 2.875" OD TBG

2080 FNL & 560 FEL
SEC 25 , TWN 17 S, RANGE 34 E
ELEVATION: 3998 DF
SPUD DATE: 06-18-64
COMPLETION DATE: 08-18-64
COMPLETION INTERVAL: 10024 - 10085 (PSLV)

SECOND CMPL INTRVL: 9626 - 9937 (WFMP)

THIRD CMPL INTRVL: 9093 - 9239 (ABO)

9000 - 9003' CIBP

9300 - 9303' CIBP

8439 - 8514' PERFS

8439 - 8514' PERFS

9093 - 9239' PERFS (WOLF)

9626 - 9937' PERFS (N. ABO)

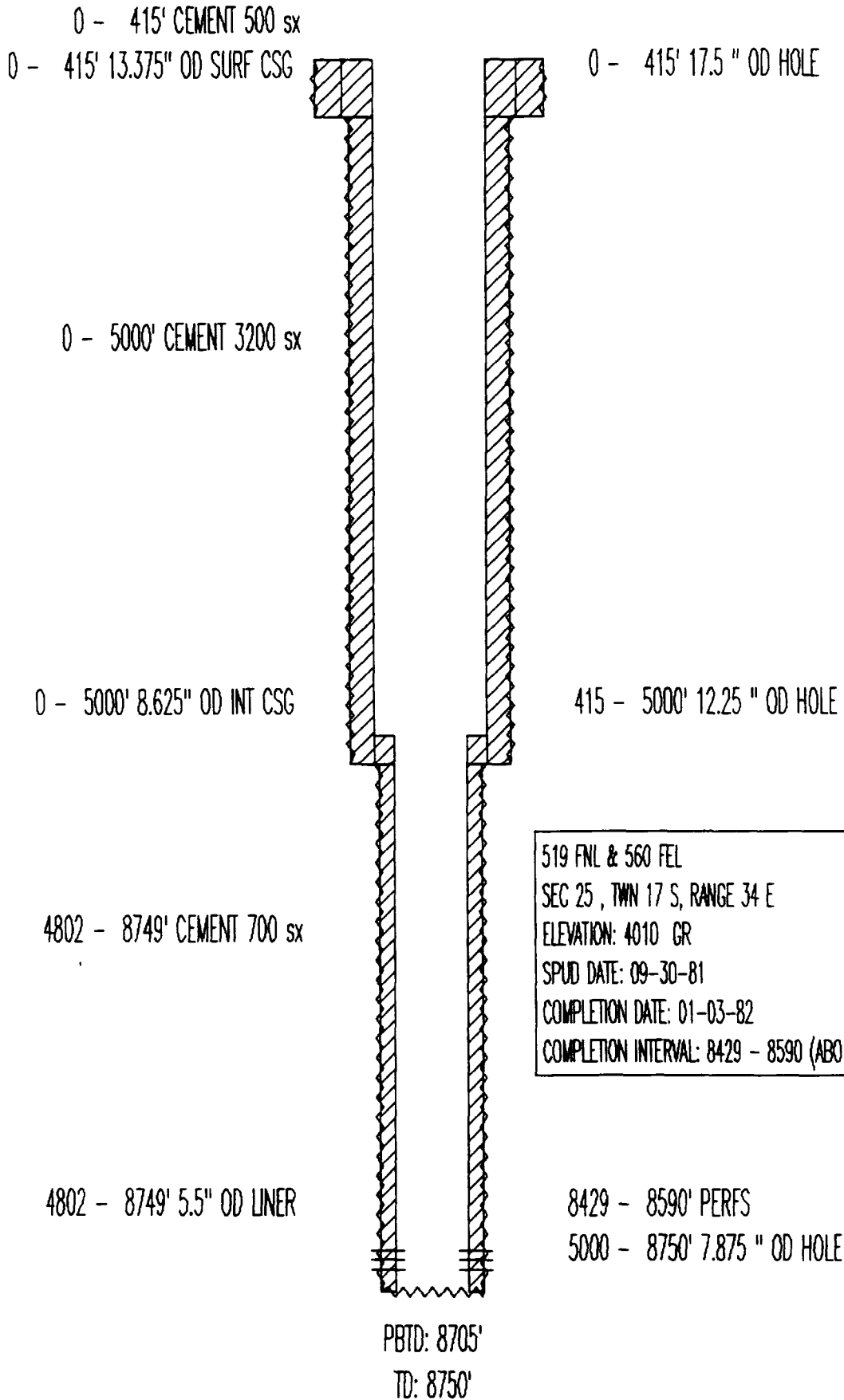
10024 - 10085' PERFS (UPP PENN)

4800 - 10300' 8.5 " OD HOLE

PBTD: 10289'

TD: 10300'

MOBIL PROD TX & NM
N VAC ABO UNIT NO. 232
API# 3002527519



TEXACO EXPL & PROD
NEW MEXICO AB STATE NO. 2
API# 3002503085

0 - 340' 13.375" OD SURF CSG

0 - 340' CEMENT 350 sx

0 - 340' 20 " OD HOLE

0 - 4830' CEMENT 900 sx

0 - 4830' 9.625" OD INT CSG

340 - 4830' 12.25 " OD HOLE

4705 - 9050' CEMENT 1025 sx

660 FSL & 560 FEL
SEC 6 , TWN 18 S, RANGE 35 E
ELEVATION: 3976 DF
SPUD DATE: 07-25-61
COMPLETION DATE: 10-27-61
COMPLETION INTERVAL: 8710 - 8834 (ABRF)

4705 - 9050' 4.5" OD LINER

8710 - 8834' PERFS

4830 - 9052' 6.25" OD HOLE

TD: 9052'

TEXACO EXPL & PROD
NEW MEXICO AB STATE NO. 4
API# 3002503087

0 - 327' 10.75" OD SURF CSG

0 - 327' CEMENT 350 sx

0 - 327' 13.375" OD HOLE

0 - 5228' CEMENT 900 sx

327 - 5228' 11.00 " OD HOLE

0 - 5228' 7.625" OD INT CSG

5108 - 9097' CEMENT 550 sx

1650 FSL & 660 FEL
SEC 6 , T14N 18 S, RANGE 35 E
ELEVATION: 3984 DF
COMPLETION DATE: 12-22-61
COMPLETION INTERVAL: 8674 - 8826 (ABRF)

COMPLETION INTERVAL: 8483 - 8826 (ABO) 01-11-68

5108 - 9097' 4.5" OD LINER

8208 - 8470' PERFS

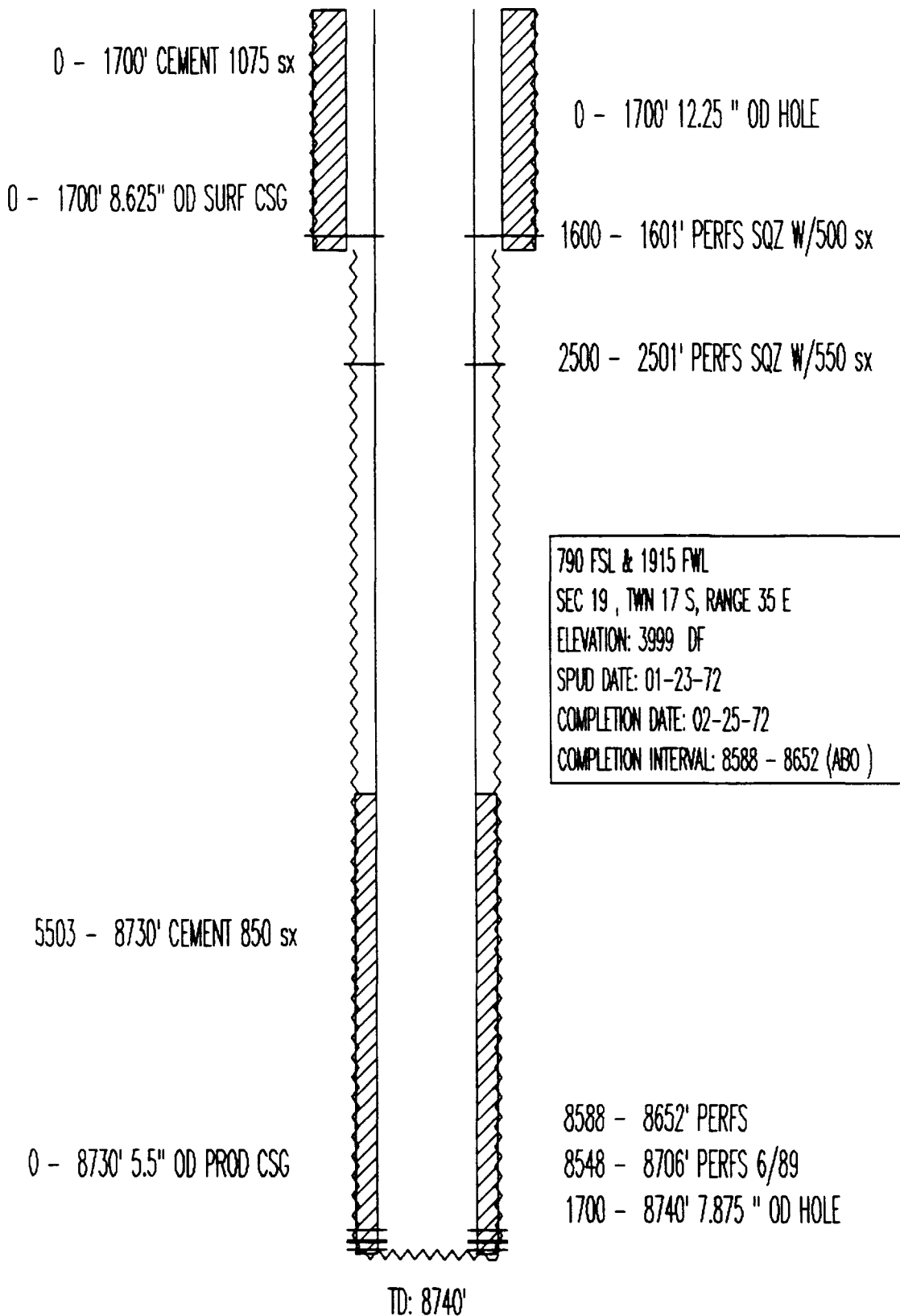
8483 - 8826' PERFS

5228 - 9080' 7.625 " OD HOLE

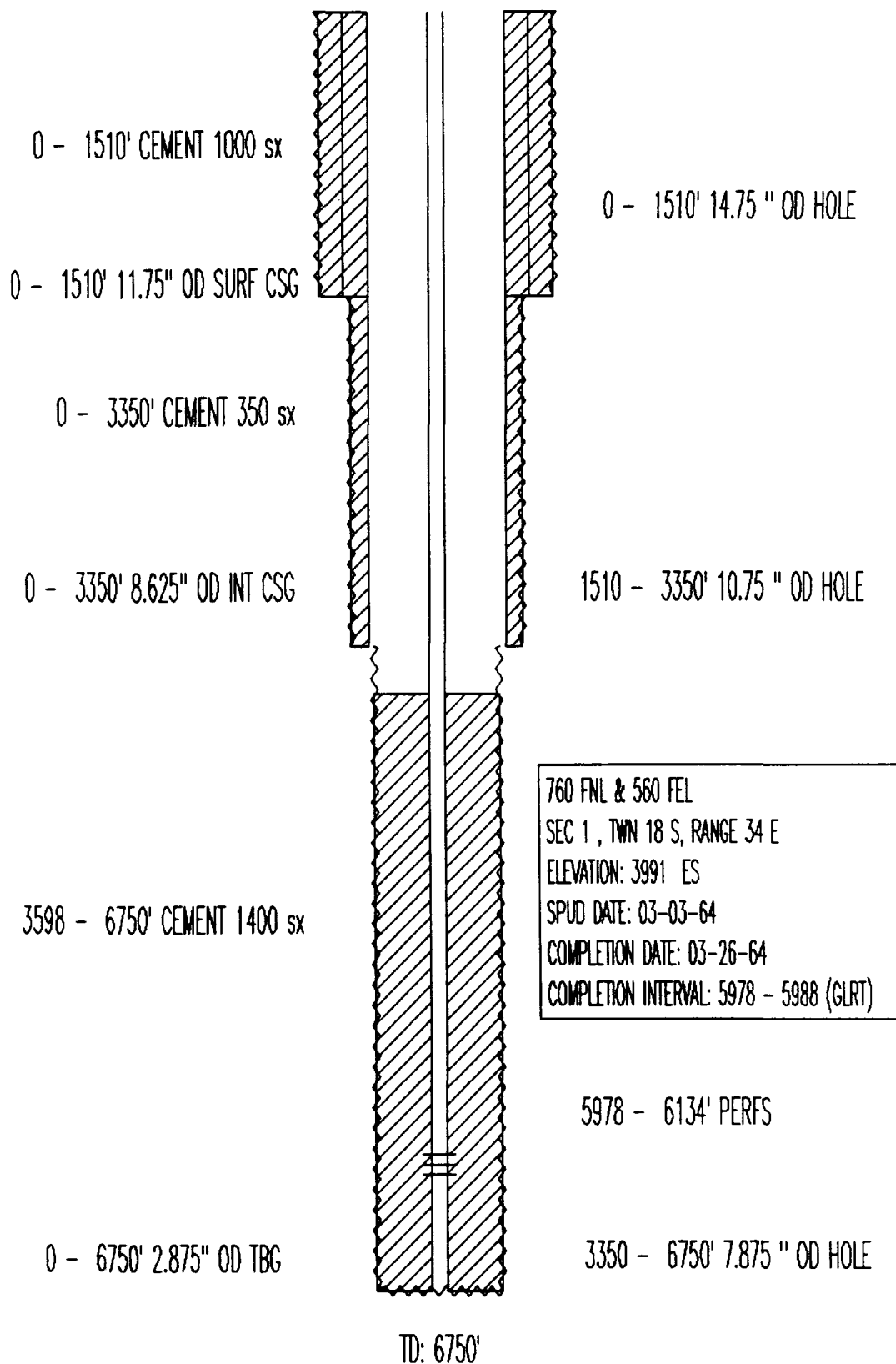
PBTD: 9060'

TD: 9080'

EXXON
NEW MEXICO J STATE NO. 5
API# 3002524013



TEXACO EXPL & PROD
NEW MEXICO L STATE NO. 7
API# 3002520937



TEXACO EXPL & PROD
NEW MEXICO N STATE NO. 8
API# 3002520944

0 - 374' CEMENT 450 sx

0 - 374' 13.375" OD SURF CSG

0 - 4800' CEMENT 500 sx

0 - 4800' 9.625" OD INT CSG

4180 - 10300' CEMENT 2400 sx

0 - 374' 17.5 " OD HOLE

374 - 4800' 12.25 " OD HOLE

5951 - 5954' RETAINER

6100 - 6115' PERFS

6113 - 6130' PERFS

6200 - 6203' CIBP

8494 - 8549' PERFS

9000 - 9003' PLUG

9156 - 9299' PERFS

9515 - 9852' PERFS

10072 - 10097' PERFS

10110 - 10113' CIBP

10171 - 10181' PERFS

4800 - 10300' 8.5 " OD HOLE

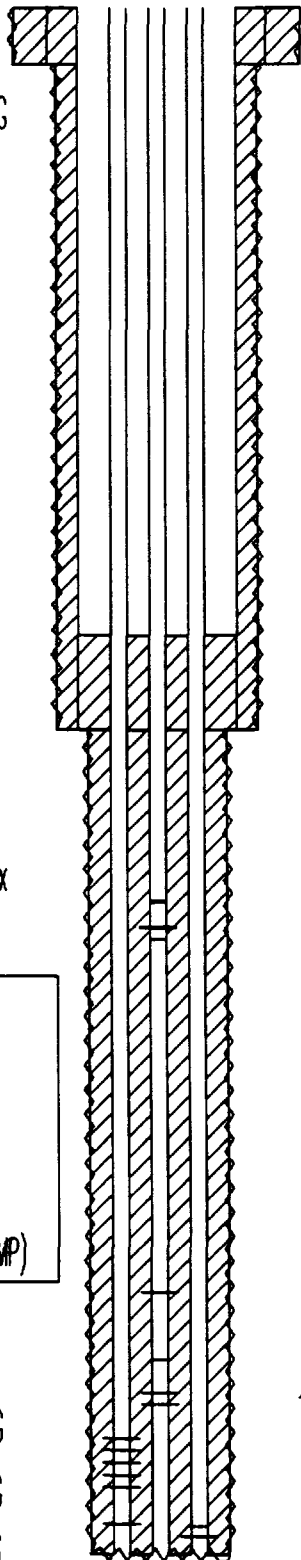
550 FNL & 500 FWL
SEC 30 , TWN 17 S, RANGE 35 E
ELEVATION: 4001 DF
SPUD DATE: 10-02-64
COMPLETION DATE: 11-21-64
COMPLETION INTERVAL: 10072 - 10097 (WFMP)

0 - 10300' 2.875" OD TBG

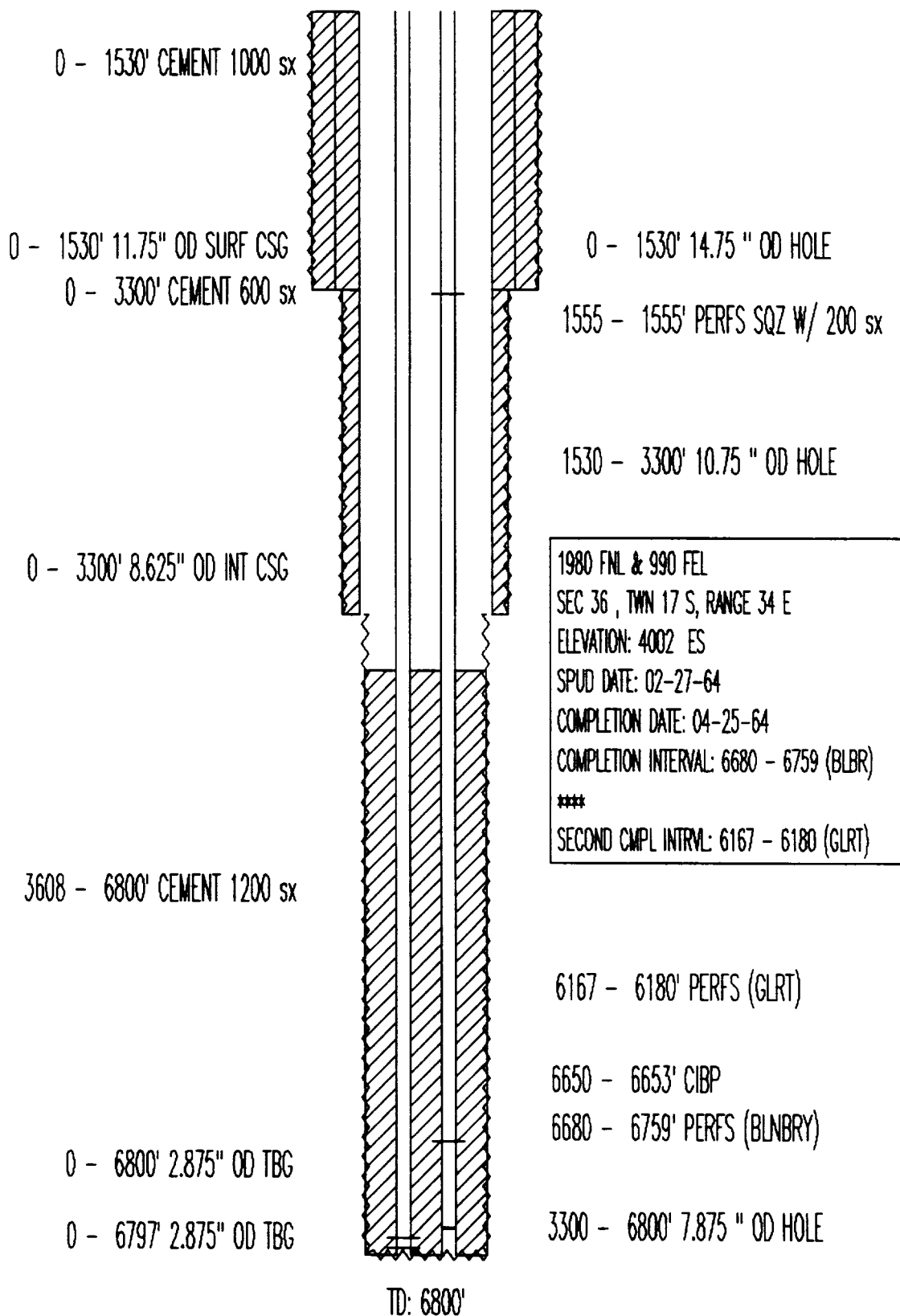
0 - 10300' 2.875" OD TBG

0 - 10300' 2.875" OD TBG

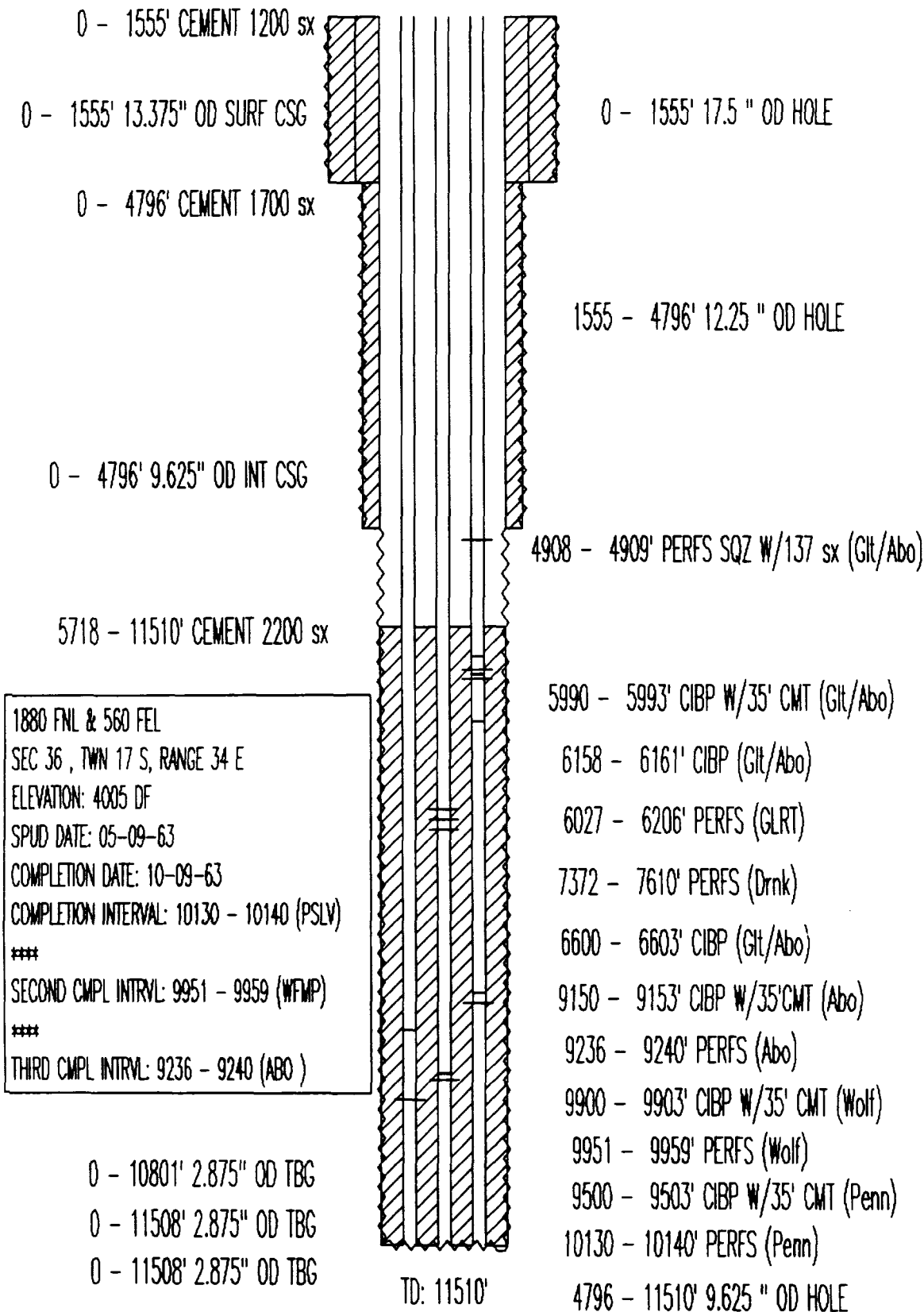
TD: 10300'



TEXACO EXPL & PROD
NEW MEXICO O ST NCT1 NO. 16
API# 3002520945



TEXACO EXP & PRO
NEW MEXICO O ST. NCT-1 NO.18
API# 3002520274



TEXACO EXPL & PROD
NEW MEXICO Q STATE NO. 4
API# 3002520294

0 - 385' 13.375" OD SURF CSG

0 - 385' CEMENT 400 sx

0 - 385' 20 " OD HOLE

0 - 4799' CEMENT 200 sx

0 - 4799' 9.625" OD INT CSG

385 - 4799' 12.25 " OD HOLE

5909 - 12285' CEMENT 2500 sx

500 FSL & 760 FEL

SEC 25 , TWN 17 S, RANGE 34 E

ELEVATION: 4003 DF

SPUD DATE: 08-21-63

COMPLETION DATE: 12-04-63

COMPLETION INTERVAL: 10069 - 10107 (PSLV)

SECOND CMPL INTRVL: 9951 - 10005 (WFMP)

THIRD CMPL INTRVL: 9148 - 9251 (ABO)

8500 - 8503' CIBP

8420 - 8460' PERFS (ABO)

9148 - 9251' PERFS (ABO)

9627 - 9734' PERFS (WOLF)

9951 - 10005' PERFS (WOLF)

10069 - 10107' PERFS (PENN)

0 - 10150' 2.875" OD TBG

0 - 10176' 2.875" OD TBG

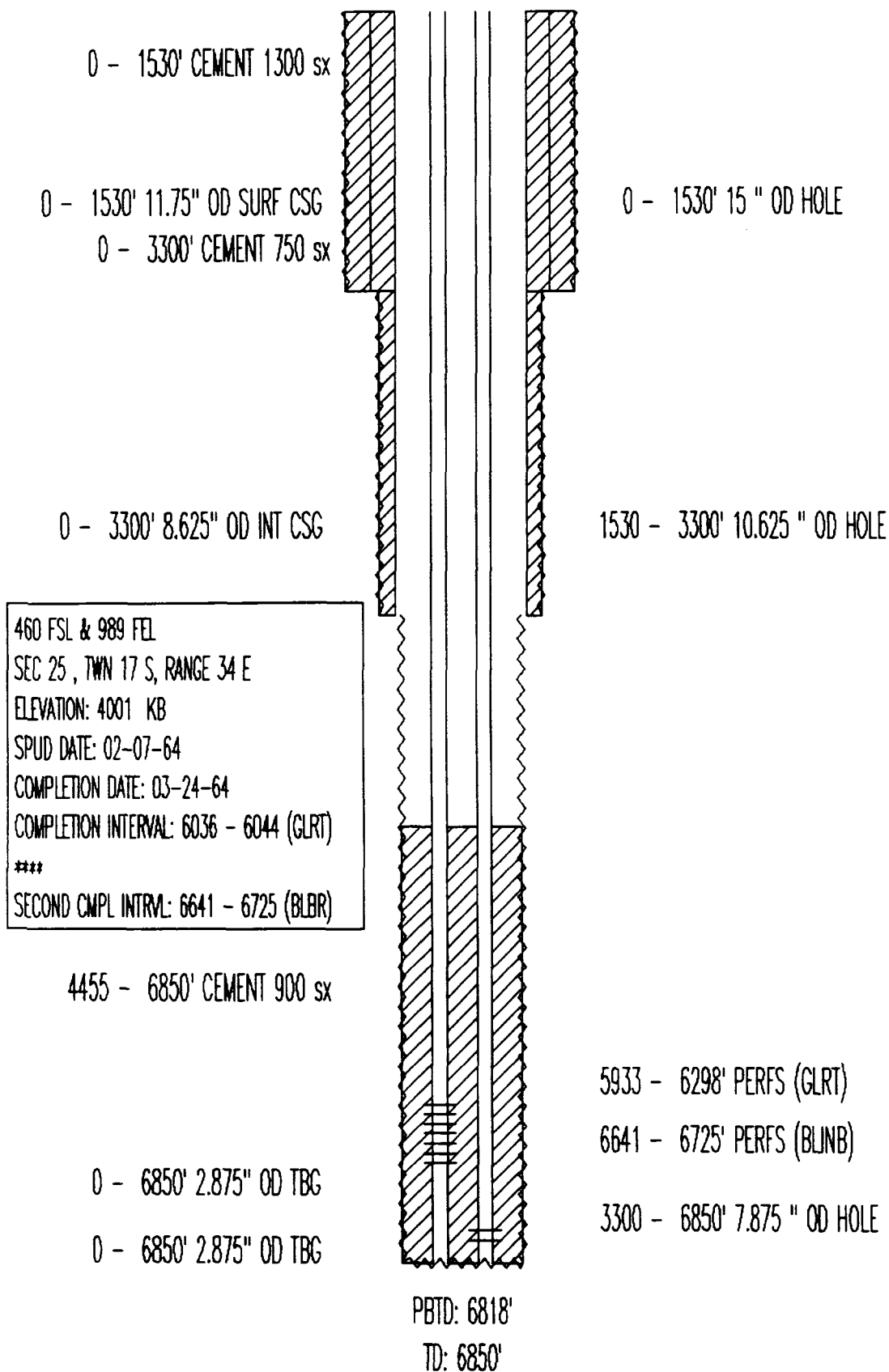
0 - 11468' 2.875" OD TBG

4799 - 12285' 8.5 " OD HOLE

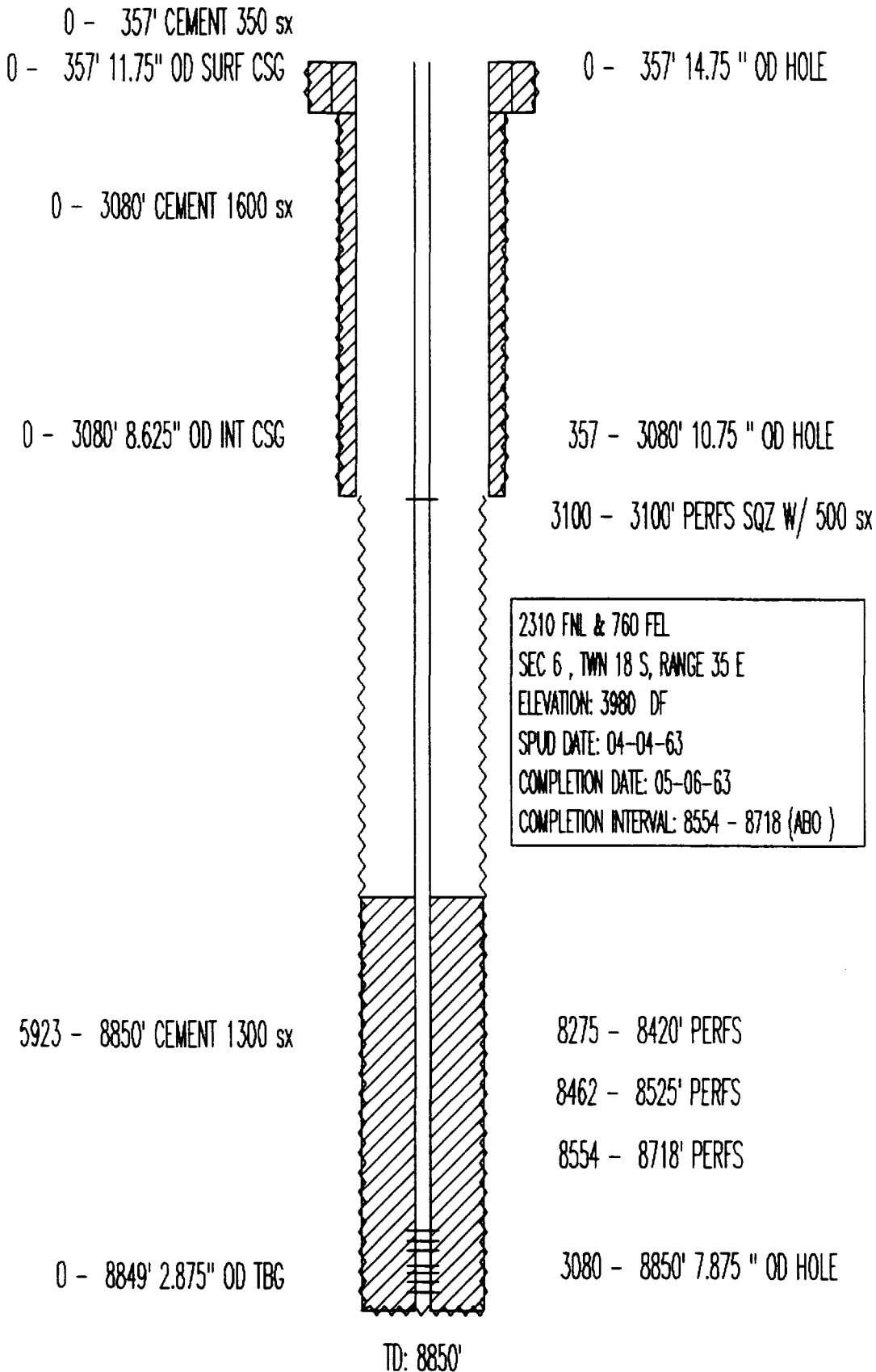
PBTD: 11468'

TD: 12285'

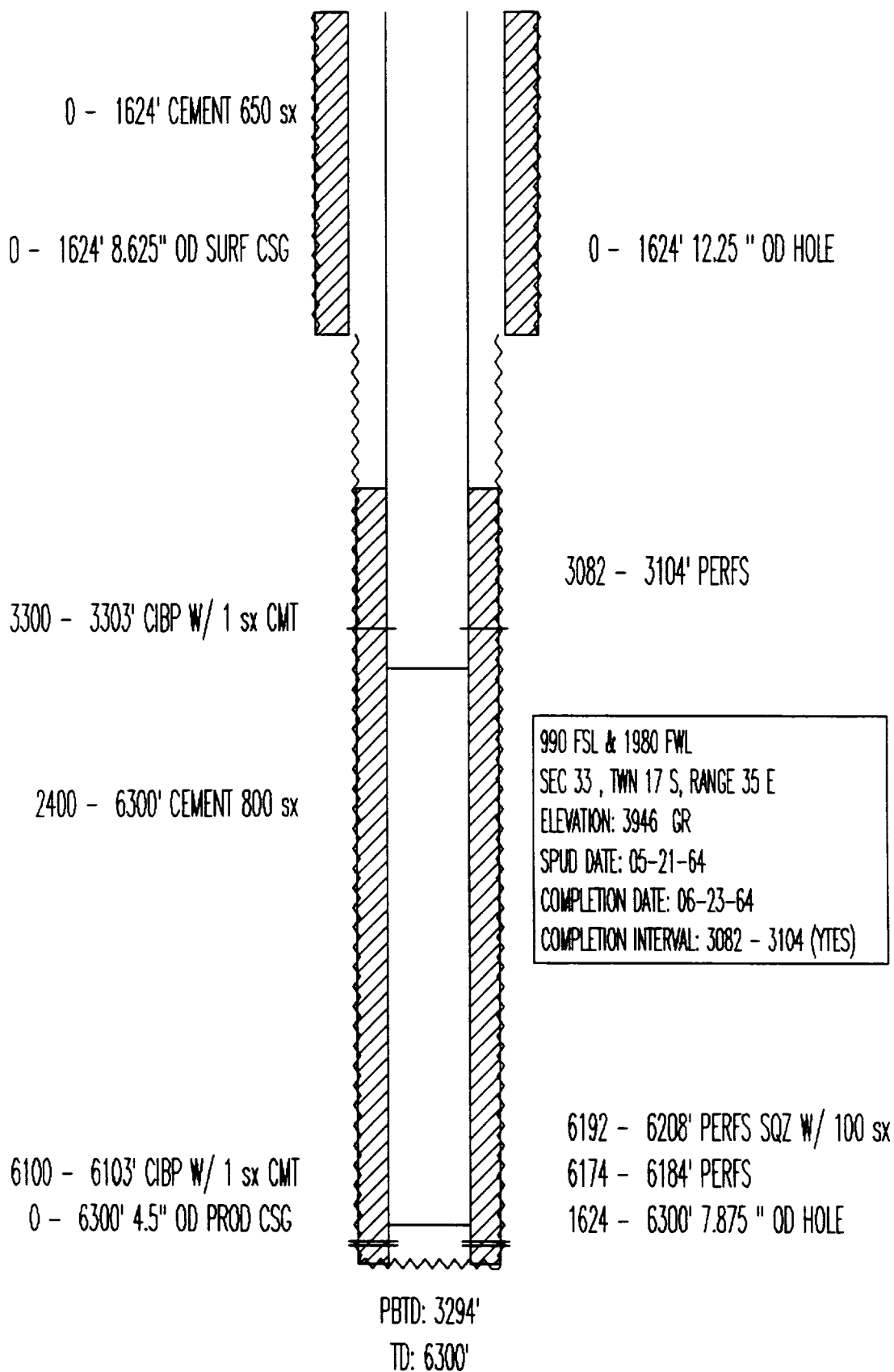
TEXACO EXPL & PROD
NEW MEXICO Q STATE NO. 6
API# 3002520947



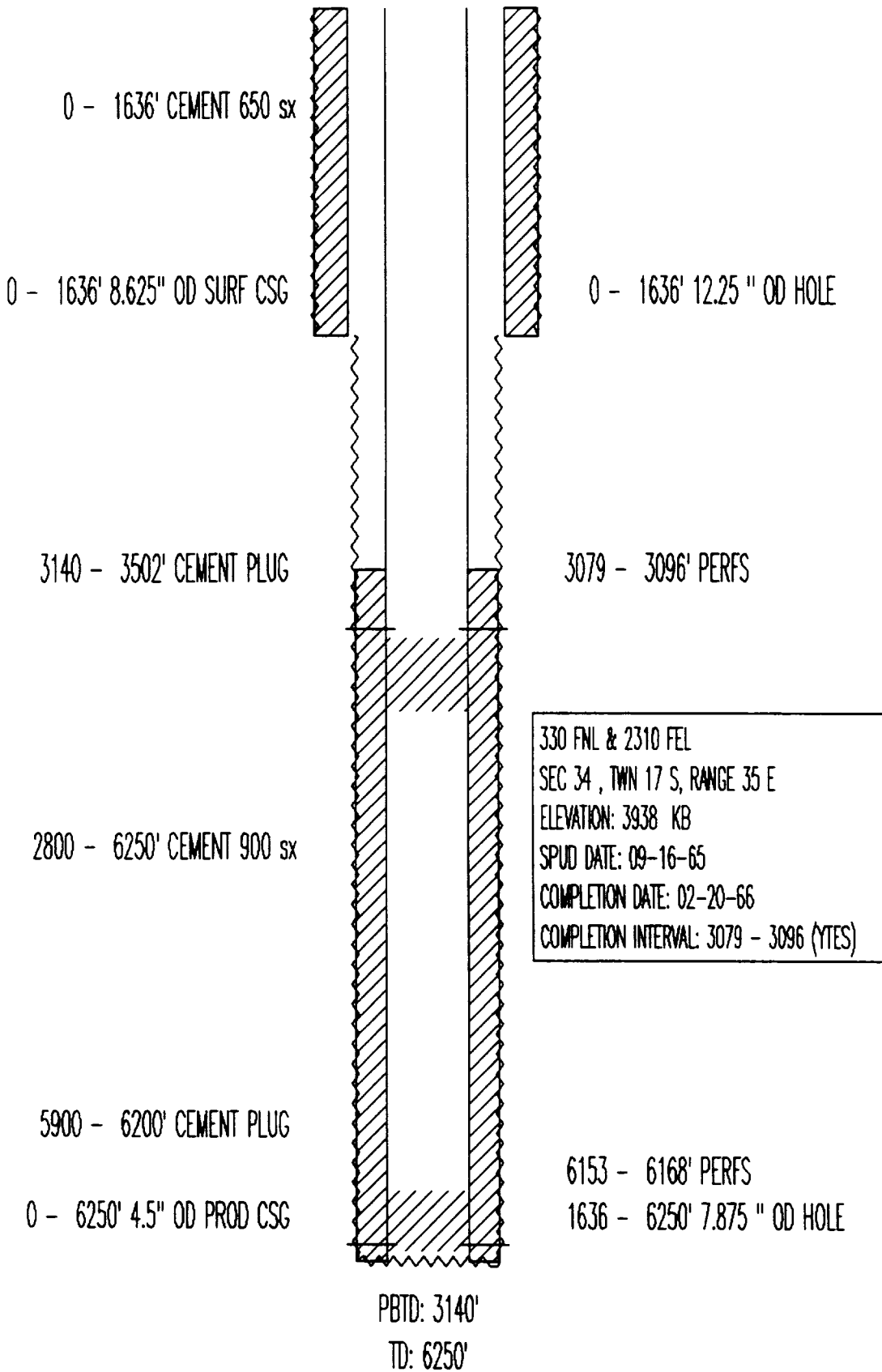
TEXACO EXPL & PROD
NEW MEXICO R ST NCT1 NO. 6
API# 3002520053



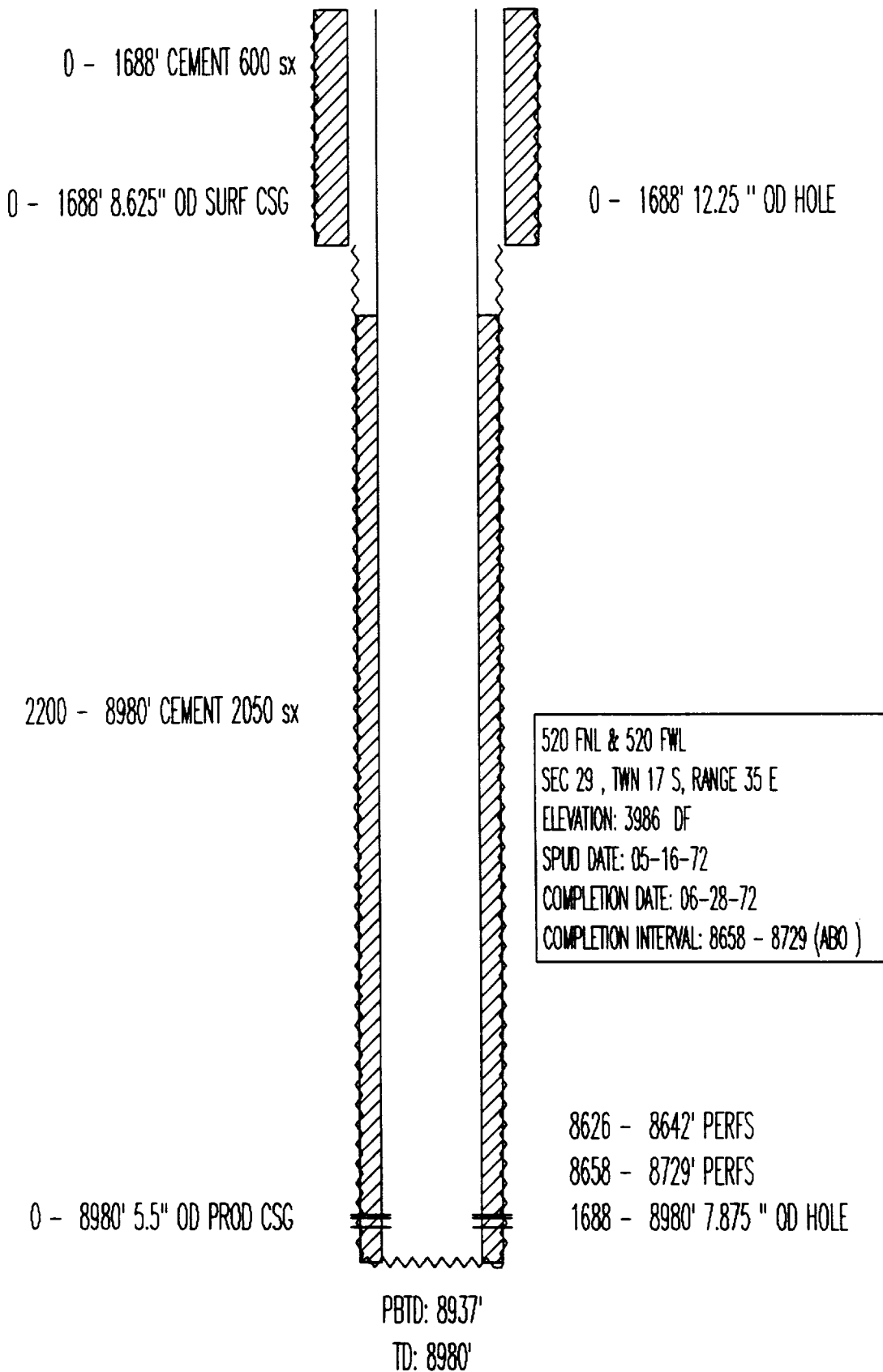
PHILLIPS PET
SANTA FE NO. 97
API# 3002520791



PHILLIPS PET
SANTA FE NO. 113
API# 3002521713



PHILLIPS PET
SANTA FE NO. 124
API# 3002524126



PHILLIPS PET
SANTA FE NO. 125
API# 3002524207

0 - 365' 13.375" OD SURF CSG

0 - 365' CEMENT 425 sx

0 - 4355' CEMENT 550 sx

0 - 4355' 8.625" OD INT CSG

4300 - 10450' CEMENT 950 sx

0 - 10450' 5.5" OD PROD CSG

0 - 365' 17.5 " OD HOLE

365 - 4355' 12.25 " OD HOLE

660 FSL & 1820 FWL
SEC 20 , TWN 17 S, RANGE 35 E
ELEVATION: 3984 DF
SPUD DATE: 08-12-72
COMPLETION DATE: 10-12-72
COMPLETION INTERVAL: 8681 - 8744 (ABO)

8681 - 8744' PERFS

9692 - 10135' PERFS

10188 - 10320' PERFS

4355 - 10450' 7.875 " OD HOLE

PBTD: 10350'

TD: 10450'

PENROC OIL
STATE AR NO. 1
API# 3002525674

0 - 300' 13.375" OD SURF CSG

0 - 300' CEMENT 325 sx

0 - 300' 17.0 " OD HOLE

0 - 2892' CEMENT 1600 sx

0 - 2892' 9.625" OD INT CSG

300 - 2892' 12.25 " OD HOLE

4000 - 8800' CEMENT 900 sx

0 - 8800' 4.5" OD PROD CSG

470 FNL & 1990 FEL
SEC 30 , TWN 17 S, RANGE 35 E
ELEVATION: 3996 KB
SPUD DATE: 11-29-77
COMPLETION DATE: 01-10-78
COMPLETION INTERVAL: 8580 - 8642 (ABO)

8580 - 8642' PERFS

2892 - 8800' 7.875" OD HOLE

PBTD: 8751'

TD: 8800'

MOBIL OIL
STATE DD UNIT NO. 1
API# 3002520862

0 - 370' 13.375" OD SURF CSG

0 - 370' 17.5 " OD HOLE

0 - 370' CEMENT 350 sx

0 - 5000' CEMENT 3475 sx

0 - 5000' 9.625" OD INT CSG

370 - 5000' 12.25 " OD HOLE

3879 - 10553' CEMENT 1520 sx

510 FNL & 535 FWL
SEC 31 , T14N 17 S, RANGE 35 E
ELEVATION: 3999 KB
SPUD DATE: 10-04-64
COMPLETION DATE: 12-18-64
COMPLETION INTERVAL: 9287 - 9320 (ABO)

9224 - 9227' CIBP T&A 10/91

9287 - 9320' PERFS

9400 - 9403' CIBP W/ 10' CMT

10108 - 10163' PERFS

10043 - 10046' CIBP W/ 10' CMT

9875 - 10019' PERFS

0 - 10553' 7 " OD PROD CSG

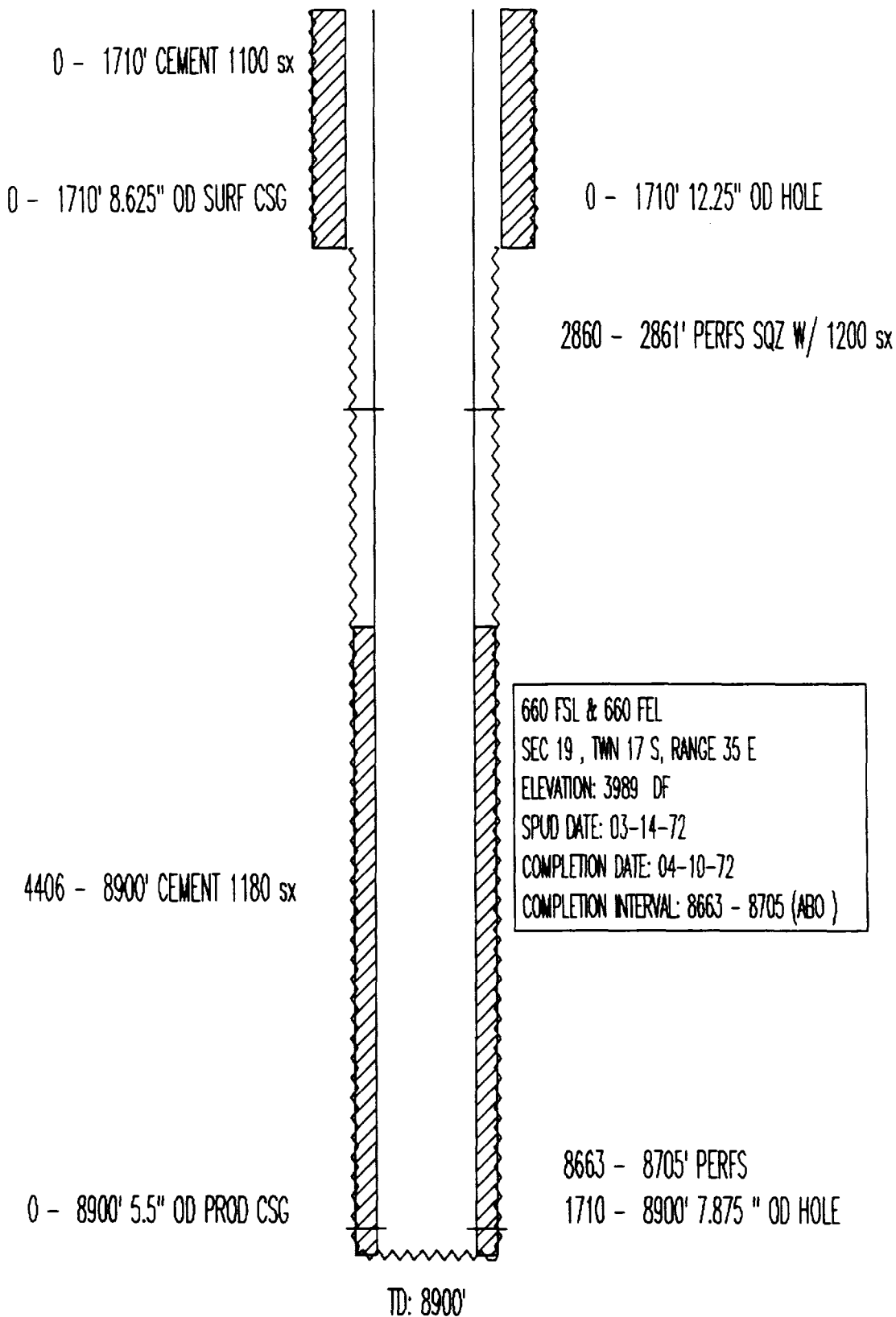
10088 - 10175' PERFS

5000 - 10553' 8.75 " OD HOLE

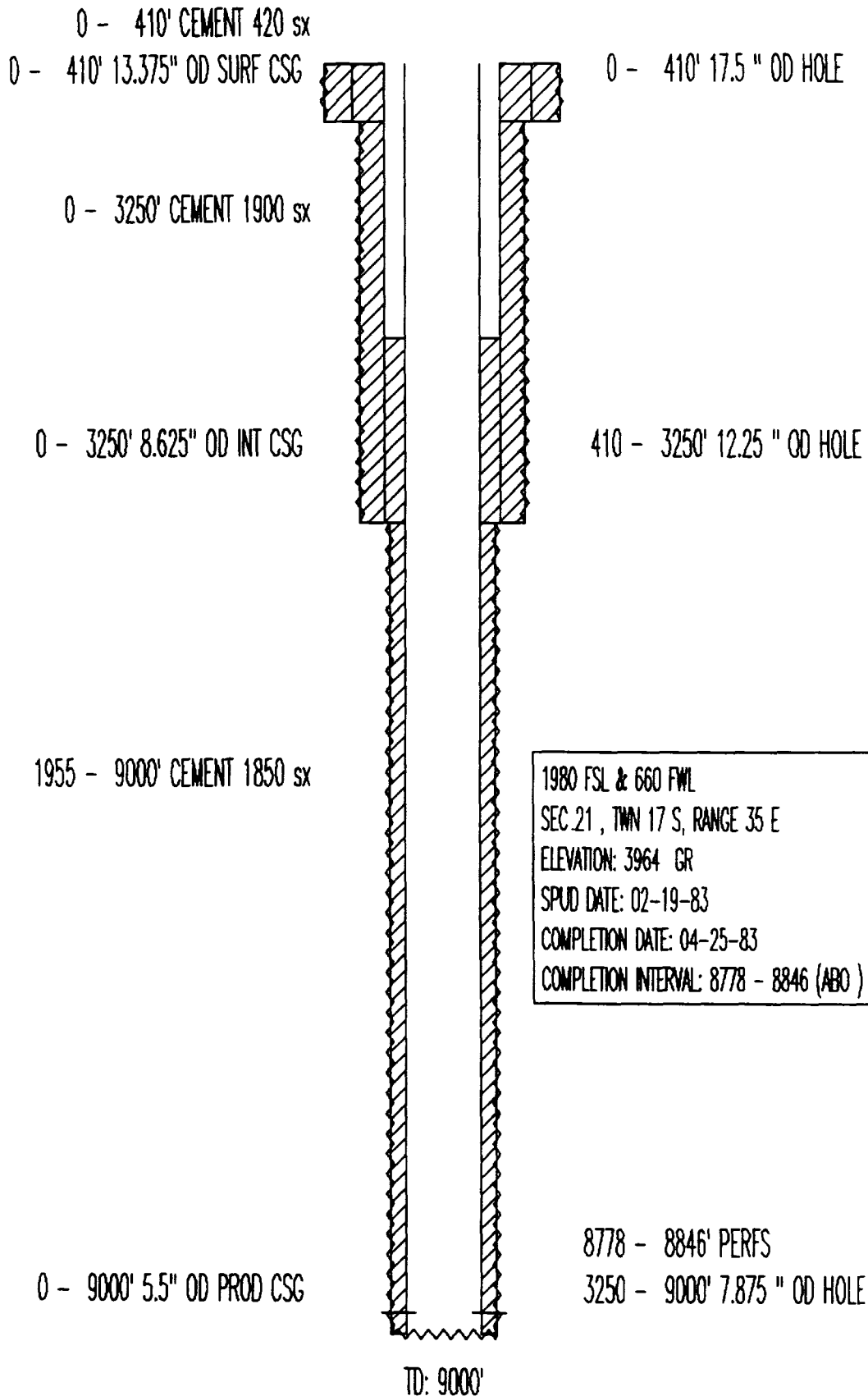
PBTD: 9390'

TD: 10553'

CROSS TIMBERS
STATE K NO. 3
API# 3002524051



MOBIL
STATE L NO. 5
API# 3002528134



MOBIL
STATE SEC 22 NO. 1
API# 3002530509

0 - 432' 13.375" OD SURF CSG

0 - 432' 17.5 " OD HOLE

0 - 432' CEMENT 425 sx

0 - 5000' CEMENT 1850 sx

0 - 5000' 8.625" OD INT CSG

432 - 5000' 11.00 " OD HOLE

4495 - 12328' CEMENT 1525 sx

4495 - 12328' 5.5" OD LINER

1980 FSL & 660 FEL
SEC 22 , T11N 17 S, RANGE 35 E
ELEVATION: 3948 KB
SPUD DATE: 02-01-89
COMPLETION DATE: 03-27-89
COMPLETION INTERVAL: 11970 - 11985 (ATOK)

11970 - 11985' PERFS

5000 - 12330' 7.875 " OD HOLE

TD: 6350'

PHILLIPS PET
VAC ABO UNIT TR1 NO. 8
API# 3002502902

0 - 332' 13.375" OD SURF CSG

0 - 332' CEMENT 350 sx

0 - 3283' CEMENT 950 sx

0 - 3283' 8.625" OD INT CSG

3693 - 9100' CEMENT 700 sx

8598 - 8735' CEMENT PLUG

8735 - 8736' BRIDGE PLUG

0 - 9100' 5.5" OD PROD CSG

0 - 332' 17.5 " OD HOLE

332 - 3283' 12.25 " OD HOLE

330 FSL & 1650 FEL

SEC 27 , TWN 17 S, RANGE 35 E

ELEVATION: 3938 DF

SPUD DATE: 06-24-62

COMPLETION DATE: 07-27-62

COMPLETION INTERVAL: 8781 - 8945 (ABO)

8445 - 8626' PERFS

8680 - 8734' PERFS

8746 - 8758' PERFS

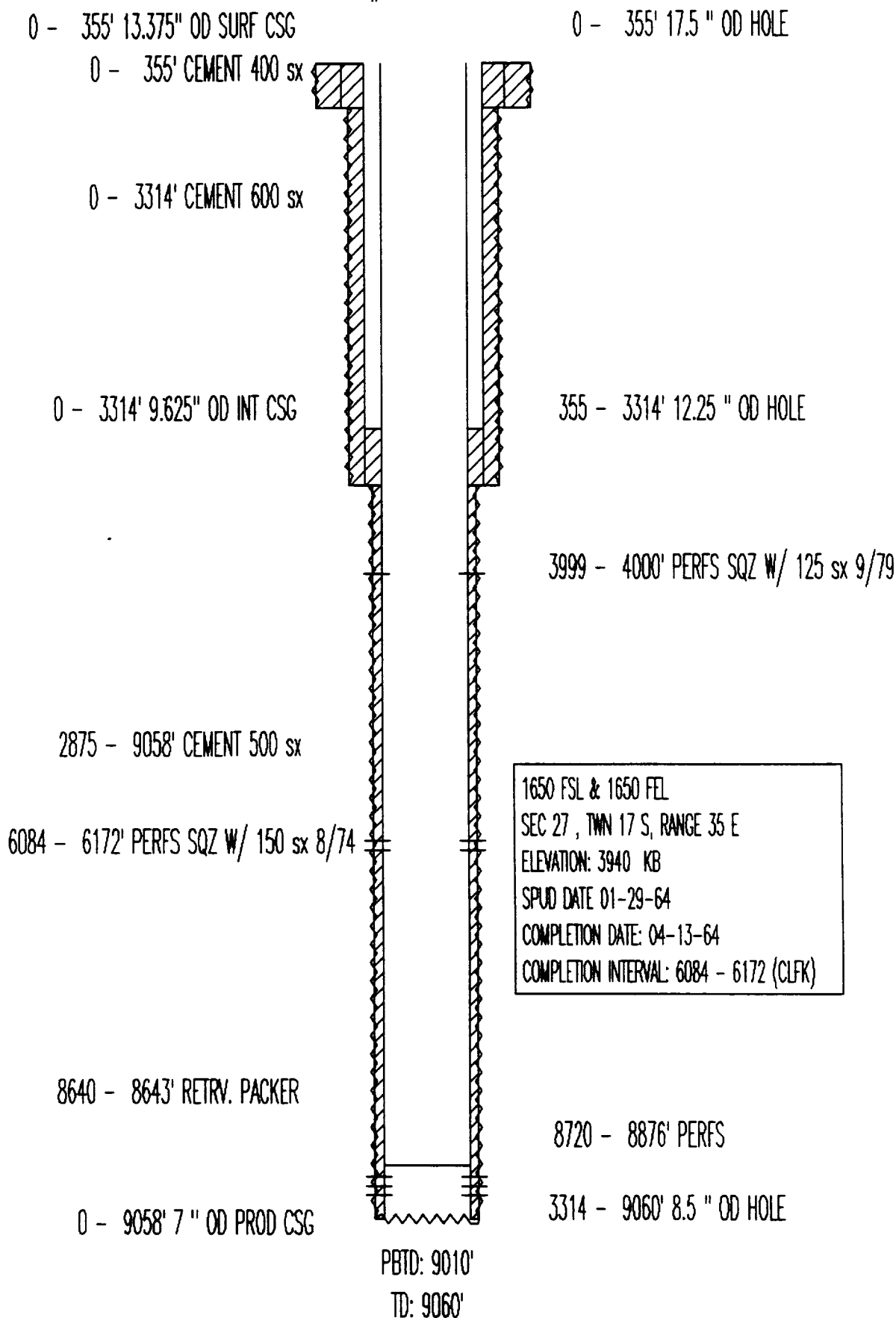
8781 - 8945' PERFS

3283 - 9100' 7.875 " OD HOLE

PBTD: 8598'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR1 NO. 9
API# 3002520879



PHILLIPS PET
VAC ABO UNIT TR4 NO. 5
API# 3002502888

0 - 330' 10.75" OD SURF CSG

0 - 330' CEMENT 450 sx

0 - 3596' CEMENT 2290 sx

0 - 3596' 7.625" OD INT CSG

3434 - 9100' CEMENT 660 sx

3434 - 9100' 5.5" OD LINER

0 - 330' 15 " OD HOLE

330 - 3596' 9.875 " OD HOLE

990 FNL & 330 FEL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3922 DF
SPUD DATE: 08-14-62
COMPLETION DATE: 09-14-62
COMPLETION INTERVAL: 8674 - 8854 (ABO)

8674 - 8854' PERFS

3596 - 9100' 6.75 " OD HOLE

PBTD: 8939'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR4 NO. 6
API# 3002502872

0 - 353' 10.75" OD SURF CSG

0 - 353' CEMENT 450 sx

0 - 353' 15" OD HOLE

0 - 3600' CEMENT 2460 sx

0 - 3600' 7.625" OD INT CSG

353 - 3600' 9.875 " OD HOLE

3441 - 9085' CEMENT 750 sx

990 FNL & 1650 FEL
SEC 26 , T11N 17 S, RANGE 35 E
ELEVATION: 3917 DF
SPUD DATE: 09-24-63
COMPLETION DATE: 10-22-63
COMPLETION INTERVAL: 8586 - 8850 (ABO)

8586 - 8850' PERFS

3441 - 9085' 5.5" OD LINER

3600 - 9085' 6.75 " OD HOLE

TD: 9085'

PHILLIPS PET
VAC ABO UNIT TR5 NO. 1
API# 3002508548

0 - 339' 13.375" OD SURF CSG

0 - 339' CEMENT 300 sx

0 - 3133' CEMENT 300 sx

0 - 3133' 8.625" OD INT CSG

4516 - 9103' CEMENT 1025 sx

8520 - 8556' CEMENT PLUG

8564 - 8645' CEMENT PLUG

0 - 9103' 4.5" OD PROD CSG

8802 - 8803' PACKER SQZ W/ 60 sx

8803 - 8865' CEMENT PLUG

PBTD: 8564'

TD: 9103'

0 - 339' 17.5 " OD HOLE

339 - 3133' 11 " OD HOLE

1980 FSL & 1980 FEL

SEC 26 , TWN 17 S, RANGE 35 E

ELEVATION: 3925 DF

SPUD DATE: 04-20-62

COMPLETION DATE: 05-16-62

COMPLETION INTERVAL: 8736 - 8865 ()

8568 - 8682' PERFS

8736 - 8865' PERFS

3133 - 9103' 7.875 " OD HOLE

PHILLIPS PET
VAC ABO UNIT TR5 NO. 2
API# 3002508549

0 - 322' 13.375" OD SURF CSG

0 - 322' CEMENT 325 sx

0 - 3150' CEMENT 300 sx

0 - 3150' 8.625" OD INT CSG

0 - 322' 17.5 " OD HOLE

322 - 3150' 12.25 " OD HOLE

990 FSL & 2195 FEL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3925 DF
SPUD DATE: 05-12-62
COMPLETION DATE: 06-19-62
COMPLETION INTERVAL: 8695 - 8851 (ABRF)

6645 - 9180' CEMENT 550 sx

8681 - 8851' CEMENT PLUG

0 - 9180' 4.5" OD PROD CSG

8660 - 8676' PERFS

8695 - 8851' PERFS

3150 - 9180' 7.875 " OD HOLE

PBTD: 8681'

TD: 9180'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 57
API# 3002502990

0 - 320' 13.375" OD SURF CSG

0 - 320' 17.5 " OD HOLE

0 - 320' CEMENT 350 sx

0 - 3300' CEMENT 400 sx

0 - 3300' 8.625" OD INT CSG

320 - 3300' 12.25 " OD HOLE

3300 - 8993' CEMENT 340 sx

0 - 8993' 5.5" OD PROD CSG

330 FSL & 1980 FWL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3956 DF
SPUD DATE: 01-19-61
COMPLETION DATE: 03-05-61
COMPLETION INTERVAL: 8830 - 8854 (ABRF)

8612 - 8686' PERFS

8712 - 8811' PERFS

8830 - 8854' PERFS

3300 - 9000' 7.875 " OD HOLE

PBTD: 8958'

TD: 9000'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 59
API# 3002503061

0 - 331' 13.375" OD SURF CSG

0 - 331' 17.5 " OD HOLE

0 - 331' CEMENT 350 sx

0 - 3250' CEMENT 400 sx

0 - 3250' 8.625" OD INT CSG

331 - 3250' 11 " OD HOLE

3600 - 8982' CEMENT 545 sx

2310 FNL & 1980 FWL
SEC 5 , T1N 18 S, RANGE 35 E
ELEVATION: 3971 KB
SPUD DATE: 07-29-61
COMPLETION DATE: 09-16-61
COMPLETION INTERVAL: 8544 - 8742 (ABRF)

0 - 8982' 5.5" OD PROD CSG

8508 - 8538' PERFS

8544 - 8742' PERFS

3250 - 8982' 7.875 " OD HOLE

PBTD: 8950'

TD: 8982'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 61
API# 3002503003

0 - 334' 13.375" OD SURF CSG

0 - 334' CEMENT 350 sx

0 - 3250' CEMENT 675 sx

0 - 3250' 8.625" OD INT CSG

1100 - 9099' CEMENT 656 sx

8580 - 8583' CIBP

8640 - 8654' CEMENT PLUG

0 - 9099' 5.5" OD PROD CSG

0 - 334' 17.5 " OD HOLE

334 - 3250' 11 " OD HOLE

2080 FNL & 2080 FEL

SEC 34 , TWN 17 S, RANGE 35 E

ELEVATION: 3935 DF

SPUD DATE: 12-12-61

COMPLETION DATE: 01-17-62

COMPLETION INTERVAL: 8698 - 8912 (ABRF)

8630 - 8650' PERFS

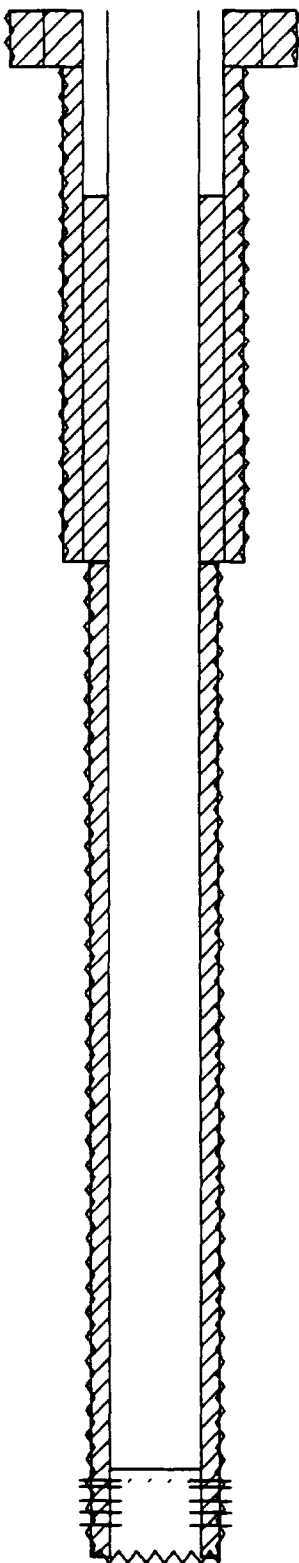
8668 - 8688' PERFS

8698 - 8912' PERFS

3250 - 9100' 7.875 " OD HOLE

PBTD: 8580'

TD: 9100'



PHILLIPS PET
VAC ABO UNIT TR6 NO. 63
API# 3002503062

0 - 318' 13.375" OD SURF CSG

0 - 318' 17.5 " OD HOLE

0 - 318' CEMENT 350 sx

0 - 3240' CEMENT 400 sx

0 - 3240' 8.625" OD INT CSG

318 - 3240' 12.25 " OD HOLE

2300 - 8999' CEMENT 350 sx

2310 FNL & 990 FWL
SEC 5 , TWN 18 S, RANGE 35 E
ELEVATION: 3979 KB
SPUD DATE: 11-01-61
COMPLETION DATE: 12-15-61
COMPLETION INTERVAL: 8495 - 8813 (ABRF)

0 - 8999' 5.5" OD PROD CSG

8233 - 8488' PERFS

8495 - 8813' PERFS

3240 - 9000' 7.875 " OD HOLE

PBTD: 8961'

TD: 9000'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 64
API# 3002503004

0 - 316' 13.375" OD SURF CSG

0 - 316' 17.5 " OD HOLE

0 - 316' CEMENT 350 sx

0 - 3244' CEMENT 400 sx

0 - 3244' 8.625" OD INT CSG

316 - 3244' 12.25 " OD HOLE

1600 - 9100' CEMENT 520 sx

760 FNL & 760 FEL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3935 KB
SPUD DATE: 02-26-62
COMPLETION DATE: 04-16-62
COMPLETION INTERVAL: 8536 - 8874 (ABRF)

8464 - 8467' CIBP

8536 - 8874' PERFS

0 - 9100' 5.5" OD PROD CSG

3244 - 9100' 7.875 " OD HOLE

PBTD: 8464'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 65
API# 3002503005

0 - 310' 13.375" OD SURF CSG

0 - 310' CEMENT 350 sx

0 - 3270' CEMENT 400 sx

0 - 3270' 8.625" OD INT CSG

3100 - 9100' CEMENT 450 sx

8565 - 8568' CIBP

0 - 9100' 5.5" OD PROD CSG

0 - 310' 17.5 " OD HOLE

310 - 3270' 11 " OD HOLE

987 FNL & 1980 FEL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3929 GR
SPUD DATE: 01-26-62
COMPLETION DATE: 03-01-62
COMPLETION INTERVAL: 8451 - 8898 (ABRF)

8451 - 8898' PERFS

3270 - 9100' 7.875 " OD HOLE

PBTD: 8565'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 66
API# 3002502885

0 - 321' 13.375" OD SURF CSG

0 - 321' 17.5 " OD HOLE

0 - 321' CEMENT 350 sx

0 - 3246' CEMENT 400 sx

0 - 3246' 8.625" OD INT CSG

321 - 3246' 12.25 " OD HOLE

1700 - 9132' CEMENT 615 sx

510 FSL & 510 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3923 DF
SPUD DATE: 04-12-62
COMPLETION DATE: 05-22-62
COMPLETION INTERVAL: 8446 - 8868 (ABRF)

0 - 9132' 5.5" OD PROD CSG

8408 - 8514' PERFS

8446 - 8868' PERFS

3246 - 9133' 7.875 " OD HOLE

PBTD: 9065'

TD: 9133'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 67
API# 3002508541

0 - 335' 13.375" OD SURF CSG

0 - 335' CEMENT 400 sx

0 - 3275' CEMENT 400 sx

0 - 3275' 8.625" OD INT CSG

2700 - 9033' CEMENT 520 sx

8391 - 8856' CEMENT PLUG

0 - 9033' 5.5" OD PROD CSG

0 - 335' 17.5 " OD HOLE

335 - 3275' 11 " OD HOLE

1882 FSL & 660 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3930 DF
SOUD DATE: 05-04-62
COMPLETION DATE: 06-08-62
COMPLETION INTERVAL: 8512 - 8856 (ABRF)

8366 - 8390' PERFS

8512 - 8856' PERFS

3275 - 9033' 7.875 " OD HOLE

PBTD: 8391'

TD: 9033'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 68
API# 3002520528

0 - 344' 13.375" OD SURF CSG

0 - 344' CEMENT 350 sx

0 - 3400' CEMENT 400 sx

0 - 3400' 8.625" OD INT CSG

3950 - 9000' CEMENT 495 sx

8534 - 8537' RETRV. PACKER

0 - 9000' 5.5" OD PROD CSG

0 - 344' 17.5 " OD HOLE

344 - 3400' 11 " OD HOLE

1735 FNL & 990 FEL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3922 GR
SPUD DATE: 06-08-63
COMPLETION DATE: 07-16-63
COMPLETION INTERVAL: 8700 - 8885 (ABO)

8700 - 8885' PERFS

8698 - 8909' PERFS

3400 - 9000' 7.875 " OD HOLE

PBTD: 8717'

TD: 9000'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 69
API# 3002508542

0 - 309' 13.375" OD SURF CSG

0 - 309' CEMENT 350 sx

0 - 3358' CEMENT 400 sx

0 - 3358' 8.625" OD INT CSG

2600 - 9100' CEMENT 600 sx

8485 - 8488' CIBP W/ 2 sx

0 - 9100' 5.5" OD PROD CSG

0 - 309' 17.5 " OD HOLE

309 - 3358' 12.25 " OD HOLE

1980 FSL & 1890 FWL
SEC 26 , TWIN 17 S, RANGE 35 E
ELEVATION: 3924 DF
SPUD DATE: 05-18-62
COMPLETION DATE: 06-20-62
COMPLETION INTERVAL: 8496 - 8810 (ABRF)

8416 - 8469' PERFS

8496 - 8810' PERFS

3358 - 9100' 7.875 " OD HOLE

PBTD: 8485'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 70
API# 3002508523

0 - 333' 13.375" OD SURF CSG

0 - 333' CEMENT 350 sx

0 - 3343' CEMENT 400 sx

0 - 3343' 8.625" OD INT CSG

3150 - 9066' CEMENT 425 sx

8653 - 8887' CEMENT PLUG

0 - 9066' 5.5" OD PROD CSG

0 - 333' 17.5 " OD HOLE

333 - 3343' 12.25 " OD HOLE

2080 FNL & 1980 FEL

SEC 26 , TWN 17 S, RANGE 35 E

ELEVATION: 3923 DF

SPUD DATE: 06-16-62

COMPLETION DATE: 07-19-62

COMPLETION INTERVAL: 8640 - 8887

8590 - 8700' PERFS

8640 - 8887' PERFS

3343 - 9066' 7.875 " OD HOLE

PBTD: 8653'

TD: 9066'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 71
API# 3002508543

0 - 356' 13.375" OD SURF CSG

0 - 356' 17.5 " OD HOLE

0 - 356' CEMENT 350 sx

0 - 3365' CEMENT 400 sx

0 - 3365' 8.625" OD INT CSG

356 - 3365' 11 " OD HOLE

0 - 9100' CEMENT 715 sx

0 - 9100' 5.5" OD PROD CSG

1980 FNL & 760 FEL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3920 DF
SPUD DATE: 07-16-62
COMPLETION DATE: 08-19-62
COMPLETION INTERVAL: 8600 - 8896 (ABO)

8494 - 8574' PERFS

8600 - 8896' PERFS

3365 - 9100' 7.875 " OD HOLE

PBTD: 9033'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 74
API# 3002502871

0 - 334' 13.375" OD SURF CSG

0 - 334' 17.5 " OD HOLE

0 - 334' CEMENT 350 sx

0 - 3250' CEMENT 400 sx

0 - 3250' 8.625" OD INT CSG

0 - 3250' 12.25 " OD HOLE

750 - 9099' CEMENT 656 sx

760 FSL & 1980 FWL

SEC 26, TWN 17 S, RANGE 35 E

SPUD DATE: 09-17-62

COMPLETION DATE: 11-20-62

COMPLETION INTERVAL: 8656 - 8892

8640 - 8835' CEMENT PLUG

8841 - 8844' CIBP

8628 - 8686' PERFS

8656 - 8892' PERFS

0 - 9099' 5.5" OD PROD CSG

0 - 9100' 7.875 " OD HOLE

PBTD: 8640'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 76
API# 3002520200

0 - 323' 13.375" OD SURF CSG

0 - 323' CEMENT 350 SX

0 - 3285' CEMENT 750 SX

0 - 3285' 9.625" OD INT CSG

1700 - 9058' CEMENT 680 SX

0 - 9058' 5.5" OD PROD CSG

9058 - 10680' CEMENT PLUG

0 - 323' 17.5 " OD HOLE

323 - 3285' 12.25 " OD HOLE

2310 FNL & 2270 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3923 ES
SPUD DATE: 02-15-63
COMPLETION DATE: 04-04-63
COMPLETION INTERVAL: 8612 - 8901 (ABO)

8556 - 8593' PERFS

8612 - 8901' PERFS

3285 - 10680' 7.875 " OD HOLE

PBTD: 9018'

TD: 10680'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 78
API# 3002520021

0 - 336' 13.375" OD SURF CSG

0 - 336' 17.5 " OD HOLE

0 - 336' CEMENT 350 sx

0 - 3368' CEMENT 400 sx

0 - 3368' 8.625" OD INT CSG

336 - 3368' 12.25 " OD HOLE

2500 - 9000' CEMENT 511 sx

350 FNL & 350 FNL

SEC 35 , TWN 17 S, RANGE 35 E

ELEVATION: 3921 GR

COMPLETION DATE: 05-08-63

SPUD DATE: 04-02-63

COMPLETION INTERVAL: 8612 - 8892 (ABO)

8640 - 8835' CEMENT PLUG

8841 - 8844' CIBP

0 - 9000' 5.5" OD PROD CSG

8612 - 8892' PERFS

3368 - 9000' 7.875 " OD HOLE

PBTD: 8643'

TD: 9000'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 79
API# 3002520527

0 - 339' 13.375" OD SURF CSG

0 - 339' CEMENT 350 sx

0 - 3275' CEMENT 400 sx

0 - 3275' 8.625" OD INT CSG

2200 - 8975' CEMENT 588 sx

0 - 8975' 5.5" OD PROD CSG

0 - 339' 17.5 " OD HOLE

339 - 3275' 12.25 " OD HOLE

2311 FNL & 992 FWL
SEC 26 , TWN 17 S, RANGE 35 E
ELEVATION: 3926 ES
SPUD DATE: 05-09-63
COMPLETION DATE: 06-11-63
COMPLETION INTERVAL: 8546 - 8820 (ABO)

8546 - 8820' PERFS

3275 - 8975' 7.875 " OD HOLE

PBTD: 8832'

TD: 8975'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 80
API# 3002520119

0 - 320' 13.375" OD SURF CSG

0 - 320' 17.5 " OD HOLE

0 - 320' CEMENT 350 sx

2350 - 3250' CEMENT 400 sx

320 - 3250' 12.25 " OD HOLE

0 - 3250' 8.625" OD INT CSG

500 - 9000' CEMENT 751 sx

6076 - 6108' PERFS SQZ W/ 100 sx 11-71

330 FSL & 2315 FHL

SEC 27 , T11N 17 S, RANGE 35 E

ELEVATION: 3939 ES

SPUD DATE: 07-13-63

COMPLETION DATE: 08-14-63

COMPLETION INTERVAL: 8522 - 8871 (ABO)

COMPLETION DATE: 01-11-64

COMPLETION INTERVAL: 6076 - 6108 (GLRT)

0 - 9000' 5.5" OD PROD CSG

8522 - 8871' PERFS

3250 - 9000' 7.875 " OD HOLE

PBTD: 8946'

TD: 9000'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 85
API# 3002520054

0 - 314' 13.375" OD SURF CSG

0 - 314' 17.5 " OD HOLE

0 - 314' CEMENT 350 sx

0 - 3424' CEMENT 400 sx

0 - 3424' 8.625" OD INT CSG

314 - 3424' 12.25 " OD HOLE

2200 - 8950' CEMENT 590 sx

380 FNL & 1650 FWL
SEC 35 , TWN 17 S, RANGE 35 E
ELEVATION: 3908 GR
SPUD DATE: 08-11-63
COMPLETION DATE: 09-26-63
COMPLETION INTERVAL: 8848 - 8901 (ABO)

8823 - 8826' RETRV. PACKER

0 - 8950' 5.5" OD PROD CSG

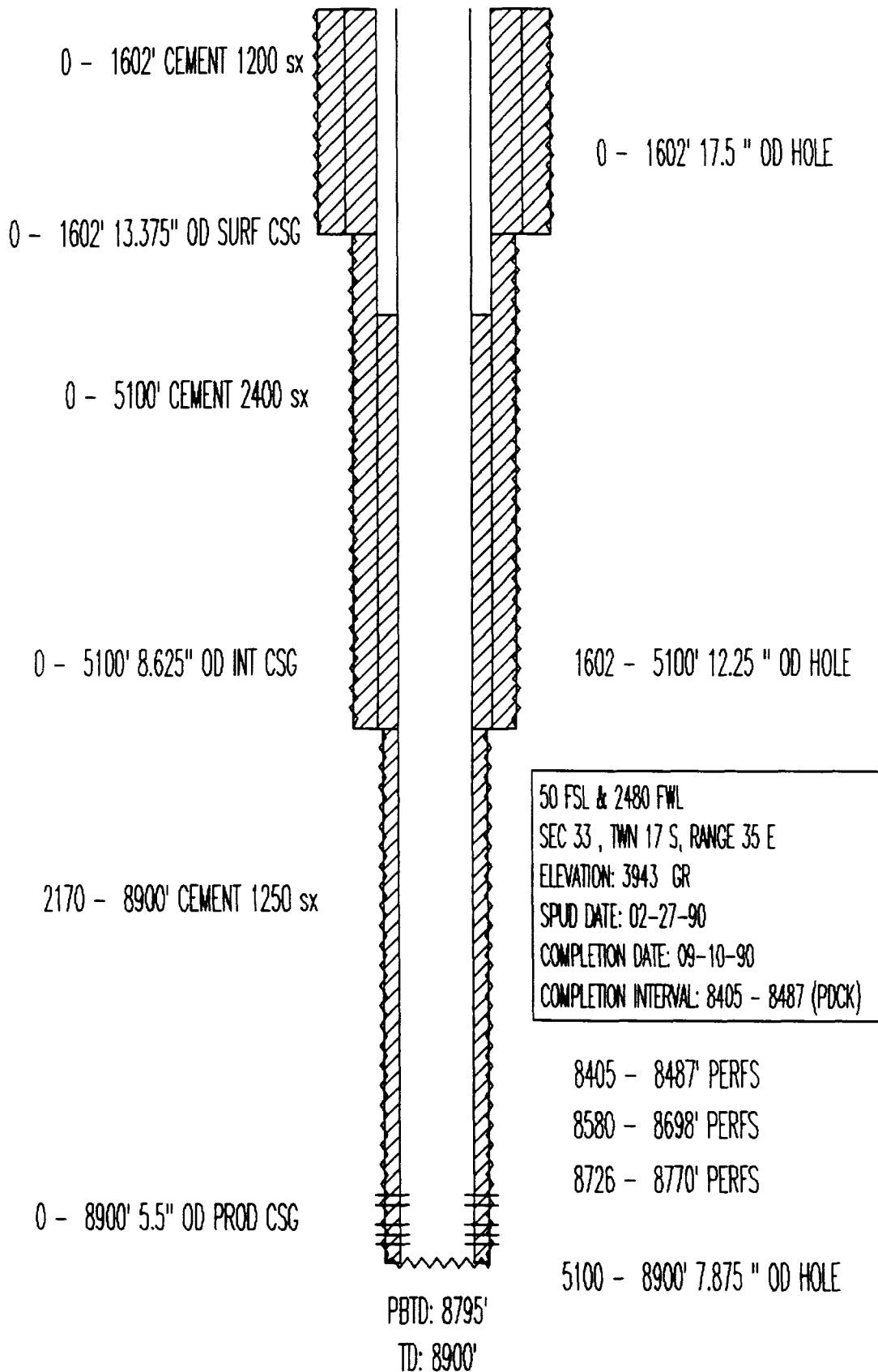
8848 - 8921' PERFS

3424 - 8950' 7.875 " OD HOLE

PBTD: 8930'

TD: 8950'

PHILLIPS PET
VAC ABO UNIT TR6 NO. 86
API# 3002530760



PHILLIPS PET
VAC ABO UNIT TR7 NO. 3
API# 3002502907

0 - 322' CEMENT 300 sx

0 - 322' 17.5 " OD HOLE

0 - 322' 13.375" OD SURF CSG

0 - 3154' CEMENT 200 sx

0 - 3154' 8.625" OD INT CSG

322 - 3154' 11 " OD HOLE

4654 - 4654' DVTOOL 350 sx

330 FSL & 560 FEL
SEC 27 , TWN 17 S, RANGE 35 E
ELEVATION: 3935 DF
SPUD DATE: 03-24-62
COMPLETION DATE: 04-25-62
COMPLETION INTERVAL: 8765 - 8840 (ABRF)

3800 - 9095' CEMENT 700 sx

8500 - 8557' CEMENT PLUG

8608 - 8675' CEMENT PLUG

8700 - 8900' CEMENT PLUG

8765 - 8840' PERFS

3154 - 9100' 7.875 " OD HOLE

0 - 9095' 5.5" OD PROD CSG

PBTD: 8500'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR7 NO. 4
API# 3002508526

0 - 337' 13.375" OD SURF CSG

0 - 337' CEMENT 325 sx

0 - 337' 17.5 " OD HOLE

0 - 3139' CEMENT 300 sx

0 - 3139' 8.625" OD INT CSG

337 - 3139' 12.25 " OD HOLE

3100 - 3101' PERFS SQZ W/ 700 sx

0 - 3100' CEMENT

1650 FSL & 330 FEL

SEC 27 , T14N 17 S, RANGE 35 E

ELEVATION: 3928 DF

COMPLETION DATE: 07-08-62

COMPLETION INTERVAL: 8505 - 8848 (ABRF)

4026 - 9000' CEMENT 700 sx

8873 - 8876' CIBP

0 - 9000' 4.5" OD PROD CSG

8884 - 8956' PERFS

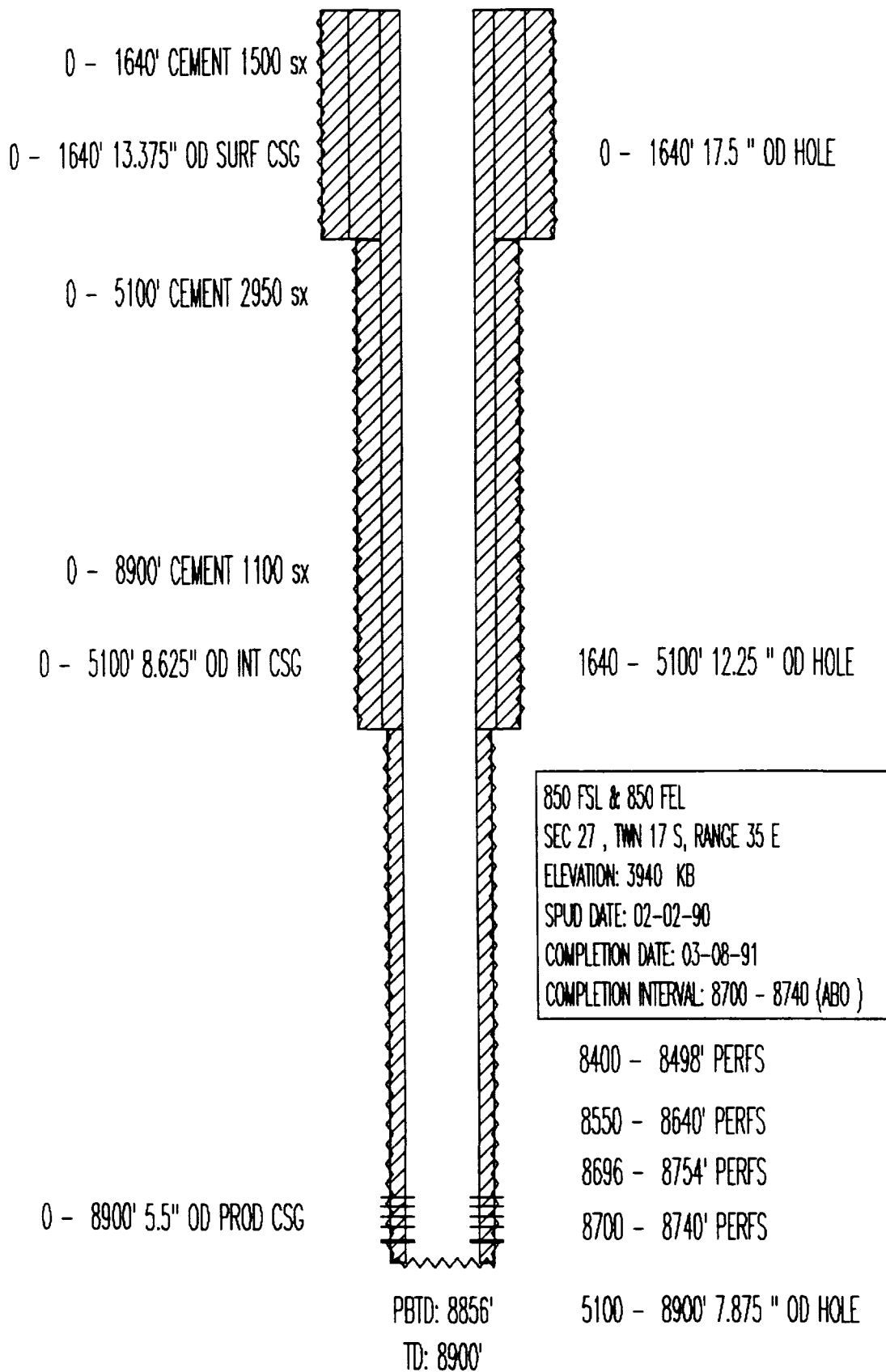
8505 - 8848' PERFS

3139 - 9000' 7.875 " OD HOLE

PBTD: 8873'

TD: 9000'

PHILLIPS PET
VAC ABO UNIT TR7 NO. 5
API# 3002530759



PHILLIPS PET
VAC ABO UNIT TR8 NO. 9
API# 3002503024

0 - 328' CEMENT 550 sx

0 - 328' 13.5 " OD HOLE

0 - 328' 10.75" OD SURF CSG

0 - 3600' CEMENT 1000 sx

0 - 3600' 7.625" OD INT CSG

328 - 3600' 9.5 " OD HOLE

3416 - 9100' CEMENT 950 sx

8245 - 8245' PACKER

3416 - 9100' 5.5" OD LINER

2316 FNL & 1980 FNL
SEC 34 , T1N 17 S, RANGE 35 E
ELEVATION: 3929 GR
SOLID DATE: 12-14-61
COMPLETION DATE: 01-29-62
COMPLETION INTERVAL: 8408 - 8658 ()

8408 - 8658' PERFS

8674 - 8788' PERFS

3600 - 9100' 6.5 " OD HOLE

PBTD: 9049'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR8 NO. 10
API# 3002503025

0 - 324' 10.75" OD SURF CSG

0 - 324' CEMENT 450 sx

0 - 324' 15 " OD HOLE

0 - 3600' CEMENT 1300 sx

0 - 3600' 7.625" OD INT CSG

324 - 3600' 9.875" OD HOLE

3540 - 9100' CEMENT 550 sx

2310 FNL & 990 FWL
SEC 34 , T14N 17 S, RANGE 35 E
ELEVATION: 3944 DF
SPUD DATE: 02-05-62
COMPLETION DATE: 03-15-62
COMPLETION INTERVAL: 8462 - 8898 (ABRF)

3397 - 9100' 5.5" OD LINER

8462 - 8898' PERFS

3600 - 9100' 6.625 " OD HOLE

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR8 NO. 11
API# 3002503006

0 - 335' 10.75" OD SURF CSG

0 - 335' CEMENT 467 sx

0 - 335' 13.5 " OD HOLE

0 - 3600' CEMENT 1220 sx

0 - 3600' 7.625" OD INT CSG

335 - 3600' 9.875 " OD HOLE

3416 - 9100' CEMENT 750 sx

3416 - 9100' 5.5" OD LINER

990 FNL & 2310 FWL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3940 DF
SPUD DATE: 03-18-62
COMPLETION DATE: 04-22-62
COMPLETION INTERVAL: 8384 - 8907 (ABRF)

8384 - 8907' PERFS

3600 - 9100' 6.625 " OD HOLE

PBTD: 9064'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR8 NO. 12
API# 3002520058

0 - 343' 10.75" OD SURF CSG

0 - 343' CEMENT 350 sx

0 - 343' 15 " OD HOLE

0 - 3600' CEMENT 1650 sx

0 - 3600' 7.625" OD INT CSG

343 - 3600' 9.875 " OD HOLE

3453 - 9100' CEMENT 720 sx

8770 - 8950' CEMENT PLUG

3453 - 9100' 5.5" OD LINER

990 FNL & 990 FWL

SEC 34 , TWN 17 S, RANGE 35 E

ELEVATION: 3942 DF

SPUD DATE: 12-15-62

COMPLETION DATE: 01-17-63

COMPLETION INTERVAL: 8491 - 8914 (ABO)

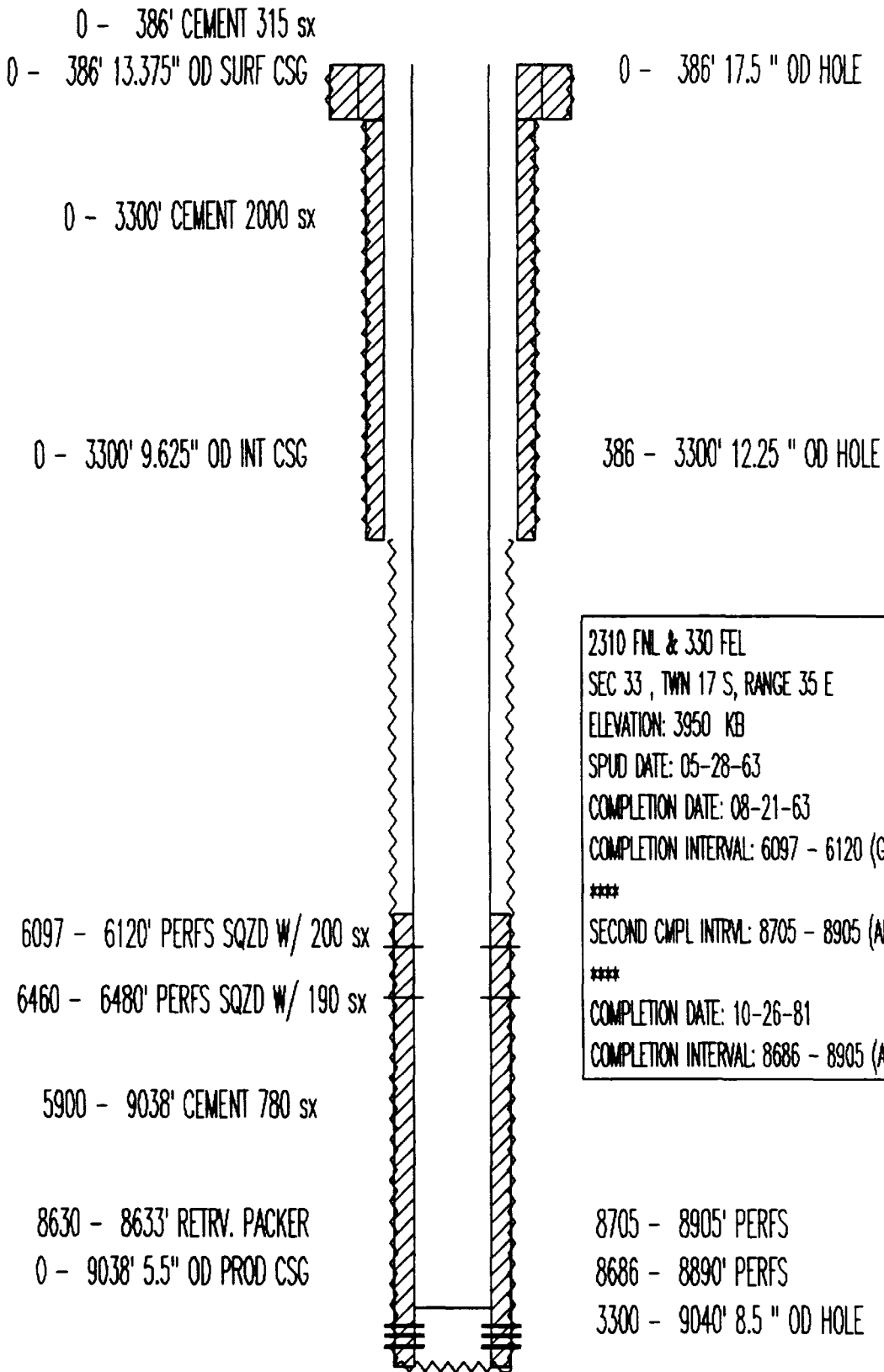
8332 - 8914' PERFS

3600 - 9100' 6.75 " OD HOLE

PBTD: 8770'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR9 NO. 5
API# 3002520277



PBTD: 8980'

TD: 9040'

PHILLIPS PET
VAC ABO UNIT TR10 NO. 6
API# 3002503012

0 - 309' 13.375" OD SURF CSG

0 - 309' CEMENT 375 sx

0 - 3135' CEMENT 1225 sx

0 - 3135' 8.625" OD INT CSG

3280 - 9100' CEMENT 679 sx

8860 - 8860' CIBP CMT TO 8852

0 - 9100' 5.5" OD PROD CSG

0 - 309' 17.5 " OD HOLE

309 - 3135' 12.25 " OD HOLE

1650 FSL & 330 FWL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3933 GR
SPUD DATE: 07-01-61
COMPLETION DATE: 08-06-61
COMPLETION INTERVAL: 8751 - 8888 (ABRF)

8394 - 8664' PERFS

8430 - 8460' PERFS

8702 - 8730' PERFS

8751 - 8888' PERFS

3135 - 9100' 7.875 " OD HOLE

PBTD: 8852'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR10 NO. 8
API# 3002503014

0 - 302' 13.375" OD SURF CSG

0 - 302' 17 " OD HOLE

0 - 302' CEMENT 375 sx

400 - 3193' CEMENT 1350 sx

0 - 3193' 8.625" OD INT CSG

302 - 3193' 11 " OD HOLE

3185 - 9099' CEMENT 679 sx

0 - 9099' 5.5" OD PROD CSG

990 FSL & 1650 FWL
SEC 34 , T1N 17 S, RANGE 35 E
ELEVATION: 3941 DF
SPUD DATE: 08-31-61
COMPLETION DATE: 10-21-61
COMPLETION INTERVAL: 8920 - 8960 (ABRF)

8920 - 8960' PERFS

8747 - 9049' PERFS

3193 - 9100' 7.875 " OD HOLE

PBTD: 9061'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR10 NO. 9
API# 3002503015

0 - 306' 13.375" OD SURF CSG

0 - 306' CEMENT 350 sx

0 - 306' 17 " OD HOLE

1083 - 3210' CEMENT 1200 sx

0 - 3210' 8.625" OD INT CSG

306 - 3220' 11 " OD HOLE

570 - 9100' CEMENT 679 sx

1980 FSL & 2310 FEL
SEC 34 , TWN 17 S, RANGE 35 E
ELEVATION: 3937 DF
SPUD DATE: 10-02-61
COMPLETION DATE: 11-01-61
COMPLETION INTERVAL: 8882 - 8940 (ABRF)

8710 - 8713' RETRV. PACKER

0 - 9100' 5.5" OD PROD CSG

8754 - 8844' PERFS

8755 - 9052' PERFS

8882 - 8940' PERFS

3220 - 9100' 7.875 " OD HOLE

PBTD: 9055'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR11 NO. 5
API# 3002502991

0 - 318' 13.375" OD SURF CSG

0 - 318' 17" OD HOLE

0 - 318' CEMENT 300 sx

318 - 3166' CEMENT 750 sx

0 - 3166' 8.625" OD INT CSG

318 - 3166' 11" OD HOLE

3200 - 3200' PERFS SQZ W/ 595 sx

330 FSL & 1980 FEL
SEC 33, T11N 17 S, RANGE 35 E
ELEVATION: 3948 DF
SPUD DATE: 01-14-61
COMPLETION DATE: 02-28-61
COMPLETION INTERVAL: 8740 - 8780 (ABRF)

7098 - 9003' CEMENT 500 sx

8735 - 8785' CEMENT PLUG

8785 - 8788' CIBP

0 - 9003' 5.5" OD PROD CSG

8682 - 8730' PERFS

8740 - 8780' PERFS

3166 - 9003' 7.875" OD HOLE

PBTD: 8735'

TD: 9003'

PHILLIPS PET
VAC ABO UNIT TR11 NO. 6
API# 3002502992

0 - 297' 13.375" OD SURF CSG

0 - 297' CEMENT 250 sx

0 - 3133' CEMENT 1050 sx

0 - 3133' 8.625" OD INT CSG

3575 - 9099' CEMENT 525 sx

8250 - 8253' CIBP

8550 - 8553' CIBP

8743 - 8746' CIBP

0 - 9099' 5.5" OD PROD CSG

0 - 297' 17.5 " OD HOLE

297 - 3133' 11 " OD HOLE

330 FSL & 660 FEL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3945 KB
SPUD DATE: 02-22-61
COMPLETION DATE: 03-28-61
COMPLETION INTERVAL: 8946 - 8986 (ABRF)

8320 - 8484' PERFS

8616 - 8730' PERFS

8746 - 8786' PERFS

3133 - 9100' 7.875 " OD HOLE

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR11 NO. 7
API# 3002502993

0 - 314' 13.375" OD SURF CSG

0 - 314' CEMENT 290 sx

0 - 3099' CEMENT 1125 sx

0 - 3099' 9.625" OD INT CSG

3290 - 9203' CEMENT 800 sx

0 - 9203' 5.5" OD PROD CSG

9172 - 9640' CEMENT PLUG 100 sx

10120 - 10220' CEMENT PLUG 25 sx

10398 - 10498' CEMENT PLUG 25 sx

PBTD: 9172'

TD: 10498'

0 - 314' 17.5 " OD HOLE

314 - 3099' 12.25 " OD HOLE

1650 FSL & 660 FEL
SEC 33 , T11N 17 S, RANGE 35 E
ELEVATION: 3947 DF
SPUD DATE: 04-20-61
COMPLETION DATE: 06-12-61
COMPLETION INTERVAL: 8790 - 8900 (ABRF)

8634 - 8759' PERFS

8790 - 8900' PERFS

3099 - 10498' 8.5 " OD HOLE

PHILLIPS PET
VAC ABO UNIT TR11 NO. 8
API# 3002502994

0 - 300' 13.375" OD SURF CSG

0 - 300' CEMENT 300 sx

0 - 3092' CEMENT 100 sx

0 - 3092' 8.625" OD INT CSG

0 - 9056' CEMENT 1260 sx

0 - 9056' 4.5" OD PROD CSG

0 - 300' 17.5 " OD HOLE

300 - 3092' 11 " OD HOLE

1650 FSL & 1650 FEL
SEC 33 , TWN 17 S, RANGE 35 E
ELEVATION: 3950 KB
SPUD DATE: 04-16-92
COMPLETION DATE: 06-27-62
COMPLETION INTERVAL: 8751 - 8764 (ABRF)

8685 - 8975' PERFS

8751 - 8764' PERFS

8830 - 8905' PERFS

8920 - 8976' PERFS

3092 - 9056' 7.875 " OD HOLE

PBTD: 9031'

TD: 9056'

PHILLIPS PET
VAC ABO UNIT TR12 NO. 2
API# 3002502998

0 - 317' 13.375" OD SURF CSG

0 - 317' CEMENT 350 sx

0 - 3300' CEMENT 700 sx

0 - 3300' 8.625" OD INT CSG

0 - 8902' CEMENT 1000 sx

8655 - 8658' RETRV. PACKER

0 - 8902' 5.5" OD PROD CSG

0 - 317' 17.5 " OD HOLE

317 - 3300' 11 " OD HOLE

330 FSL & 990 FWL

SEC 33 , TWN 17 S, RANGE 35 E

ELEVATION: 3963 KB

SPUD DATE: 06-04-61

COMPLETION DATE: 08-09-61

COMPLETION INTERVAL: 8690 - 8742 (ABRF)

8690 - 8742' PERFS

3300 - 8902' 7.875 " OD HOLE

PBTD: 8902'

TD: 8902'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 2
API# 3002503044

0 - 301' 13.375" OD SURF CSG

0 - 301' 17.5 " OD HOLE

0 - 301' CEMENT 325 sx

0 - 4986' CEMENT 300 sx

301 - 4986' 11 " OD HOLE

0 - 4986' 8.625" OD INT CSG

1980 FNL & 660 FWL
SEC 4 , TWN 18 S, RANGE 35 E
ELEVATION: 3950 DF
SPUD DATE: 08-10-60
COMPLETION DATE: 10-17-60
COMPLETION INTERVAL: 8650 - 8720 (ABO)

5000 - 8979' CEMENT 725 sx

8322 - 8388' PERFS

8410 - 8478' PERFS

8650 - 8720' PERFS

0 - 8979' 5.5" OD PROD CSG

4986 - 8984' 7.875 " OD HOLE

PBTD: 8882'

TD: 8984'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 3
API# 3002503045

0 - 312' 13.375" OD SURF CSG

0 - 312' CEMENT 350 sx

0 - 3237' CEMENT 1200 sx

0 - 3237' 8.625" OD INT CSG

4263 - 8940' CEMENT 1045 sx

0 - 8940' 5.5" OD PROD CSG

0 - 312' 17.5 " OD HOLE

312 - 3237' 12.5 " OD HOLE

660 FNL & 2080 FWL
SEC 4 , TWN 18 S, RANGE 35 E
ELEVATION: 3958 KB
SPUD DATE: 11-16-60
COMPLETION DATE: 01-06-61
COMPLETION INTERVAL: 8746 - 8827 (ABRF)

8484 - 8646' PERFS

8746 - 8827' PERFS

3237 - 8940' 7.875 " OD HOLE

PBTD: 8905'

TD: 8940'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 4
API# 3002503046

0 - 317' 13.375" OD SURF CSG

0 - 317' 17.5 " OD HOLE

0 - 317' CEMENT 300 sx

0 - 3216' CEMENT 1200 sx

0 - 3216' 8.625" OD INT CSG

317 - 3216' 12.25 " OD HOLE

330 FNL & 1980 FEL
SEC 4 , T11N 18 S, RANGE 35 E
ELEVATION: 3956 KB
SPUD DATE: 01-25-61
COMPLETION DATE: 03-10-61
COMPLETION INTERVAL: 8364 - 8400 (ABRF)

4217 - 8890' CEMENT 1045 sx

0 - 8890' 5.625" OD PROD CSG

8364 - 8400' PERFS

8725 - 8762' PERFS

3216 - 8890' 7.875 " OD HOLE

PBTD: 8791'

TD: 8890'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 5
API# 3002503067

0 - 304' 13.375" OD SURF CSG

0 - 304' CEMENT 350 sx

0 - 3276' CEMENT 1050 sx

0 - 3276' 8.625" OD INT CSG

3265 - 9100' CEMENT 575 sx

0 - 9100' 5.5" OD PROD CSG

0 - 304' 17.5 " OD HOLE

304 - 3276' 11 " OD HOLE

1980 FNL & 660 FEL
SEC 5 , TWN 18 S, RANGE 35 E
ELEVATION: 3965 KB
SPUD DATE: 02-05-61
COMPLETION DATE: 03-20-61
COMPLETION INTERVAL: 8712 - 8839 (ABRF)

8398 - 8640' PERFS

8650 - 8670' PERFS

8712 - 8839' PERFS

3276 - 9100' 7.875 " OD HOLE

PBTD: 9045'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 6
API# 3002503047

0 - 322' 13.375" OD SURF CSG

0 - 322' CEMENT 350 sx

0 - 3263' CEMENT 1200 sx

0 - 3263' 8.625" OD INT CSG

3290 - 9144' CEMENT 488 sx

8575 - 8760' CEMENT PLUG

8938 - 9150' CEMENT PLUG

0 - 9144' 5.5" OD PROD CSG

0 - 321' 16 " OD HOLE

321 - 3263' 11 " OD HOLE

330 FNL & 660 FEL
SEC 4 , TWN 18 S, RANGE 35 E
ELEVATION: 3950 KB
SPUD DATE: 03-04-61
COMPLETION DATE: 04-15-61
COMPLETION INTERVAL: 8938 - 9045 (ABRF)

8493 - 8544' PERFS

8494 - 8562' PERFS SQZ W/ 100 sx

8684 - 8698' PERFS

8608 - 8658' PERFS SQZ W/ 100 sx

8721 - 8834' PERFS

8938 - 9045' PERFS SQZ W/ 100 sx

3263 - 9150' 7.875 " OD HOLE

PBTD: 8938'

TD: 9150'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 7
API# 3002503069

0 - 297' 13.375" OD SURF CSG

0 - 297' CEMENT 350 sx

0 - 3233' CEMENT 1200 sx

0 - 3233' 8.625" OD INT CSG

3212 - 8971' CEMENT 529 sx

8520 - 8523' RETRV. PACKER

0 - 8971' 5.5" OD PROD CSG

0 - 297' 16" OD HOLE

297 - 3233' 11" OD HOLE

2080 FNL & 1980 FEL
SEC 5, TWN 18 S, RANGE 35 E
ELEVATION: 3968 KB
SPUD DATE: 03-14-61
COMPLETION DATE: 04-26-61
COMPLETION INTERVAL: 8638 - 8774 (ABRF)

8576 - 8629' PERFS

8638 - 8774' PERFS

3233 - 8975' 7.875" OD HOLE

PBTD: 8948'

TD: 8975'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 8
API# 3002503048

0 - 308' 13.375" OD SURF CSG

0 - 308' CEMENT 375 sx

0 - 3257' CEMENT 1250 sx

0 - 3257' 8.375" OD INT CSG

3242 - 8911' CEMENT 640 sx

8500 - 8503' CIBP

0 - 8911' 5.5" OD PROD CSG

0 - 308' 17.5 " OD HOLE

308 - 3257' 12.25 " OD HOLE

330 FNL & 990 FWL

SEC 4 , TWN 18 S, RANGE 35 E

ELEVATION: 3947 GR

SPUD DATE: 04-18-61

COMPLETION DATE: 05-29-61

COMPLETION INTERVAL: 8721 - 8816 (ABRF)

8721 - 8816' PERFS

8579 - 8687' PERFS

3257 - 8912' 7.875 " OD HOLE

PBTD: 8500'

TD: 8912'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 9
API# 3002503040

0 - 316' 13.375" OD SURF CSG

0 - 316' CEMENT 375 sx

0 - 3301' CEMENT 1400 sx

0 - 3301' 8.625" OD INT CSG

3300 - 9139' CEMENT 640 sx

0 - 9139' 5.5" OD PROD CSG

0 - 316' 16 " OD HOLE

316 - 3301' 11 " OD HOLE

330 FNL & 660 FWL
SEC 3 , TWN 18 S, RANGE 35 E
ELEVATION: 3945 KB
SPUD DATE: 04-13-61
COMPLETION DATE: 05-31-61
COMPLETION INTERVAL: 9010 - 9085 (ABO)

8922 - 8992' PERFS SQZ W/ 90 sx

8800 - 9084' PERFS

9010 - 9085' PERFS SQZ W/ 100 sx

3301 - 9140' 7.875 " OD HOLE

PBTD: 9100'

TD: 9140'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 10
API# 3002503070

0 - 297' 13.375" OD SURF CSG

0 - 297' 17" OD HOLE

0 - 297' CEMENT 350 sx

0 - 3250' CEMENT 1300 sx

0 - 3250' 8.625" OD INT CSG

297 - 3250' 11 " OD HOLE

3250 - 8956' CEMENT 640 sx

1980 FSL & 2310 FEL
SEC 5, T14N 18 S, RANGE 35 E
ELEVATION: 3969 DF
SPUD DATE: 04-19-61
COMPLETION DATE: 05-25-61
COMPLETION INTERVAL: 8750 - 8850 (ABRF)

8200 - 8203' CIBP

8450 - 8453' CIBP

8740 - 8900' CEMENT PLUG

8232 - 8850' PERFS

0 - 8956' 5.5" OD PROD CSG

3250 - 8956' 7.875 " OD HOLE

PBTD: 8200'

TD: 8956'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 11
API# 3002503049

0 - 305' 13.375" OD SURF CSG

0 - 305' CEMENT 375 sx

0 - 3244' CEMENT 1250 sx

0 - 3244' 8.625" OD INT CSG

3240 - 9100' CEMENT 679 sx

8696 - 8740' CEMENT PLUG

8740 - 8743' CIBP

8779 - 8868' CEMENT PLUG

8868 - 8871' CIBP

0 - 9100' 5.5" OD PROD CSG

0 - 305' 16 " OD HOLE

305 - 3244' 11 " OD HOLE

1650 FNL & 1980 FWL

SEC 4 , TWN 18 S, RANGE 35 E

ELEVATION: 3994 GR

SPUD DATE: 05-27-61

COMPLETION DATE: 06-24-61

COMPLETION INTERVAL: 8799 - 8996 (ABO)

8332 - 8480' PERFS

8581 - 8606' PERFS

8642 - 8700' PERFS

8706 - 8770' PERFS

8799 - 8996' PERFS SQZ W/ 150 sx

3244 - 9100' 7.875 " OD HOLE

PBTD: 8696'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 12
API# 3002503050

0 - 0' PACKER
0 - 304' 13.375" OD SURF CSG

0 - 304' 16 " OD HOLE

0 - 304' CEMENT 375 sx

0 - 3220' CEMENT 1250 sx

0 - 3220' 8.625" OD INT CSG

304 - 3220' 11 " OD HOLE

3115 - 3120' PERFS SQZ W/ 50 sx

3080 - 9100' CEMENT 679 sx

1650 FNL & 1980 FEL
SEC 4 , TWN 18 S, RANGE 35 E
ELEVATION: 3955 KB
SPUD DATE: 05-26-61
COMPLETION DATE: 07-06-61
COMPLETION INTERVAL: 8929 - 9020 (ABRF)

8972 - 8975' CIBP

8919 - 8972' CEMENT PLUG

0 - 9100' 5.5" OD PROD CSG

8716 - 9020' PERFS

3220 - 9100' 7.875 " OD HOLE

PBTD: 8910'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 13
API# 3002503071

0 - 326' 13.375" OD SURF CSG

0 - 326' CEMENT 375 sx

0 - 3227' CEMENT 1200 sx

0 - 3227' 8.625" OD INT CSG

3200 - 9099' CEMENT 679 sx

0 - 9099' 5.5" OD PROD CSG

0 - 326' 16 " OD HOLE

326 - 3227' 11 " OD HOLE

2310 FSL & 660 FEL
SEC 5 , T11N 18 S, RANGE 35 E
ELEVATION: 3958 DF
SPUD DATE: 05-21-61
COMPLETION DATE: 06-23-61
COMPLETION INTERVAL: 8652 - 8952 (ABO)

8274 - 8480' PERFS

8547 - 8569' PERFS

8652 - 8952' PERFS

3227 - 9100' 7.875 " OD HOLE

PBTD: 9069'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 15
API# 3002503052

0 - 313' 13.375" OD SURF CSG

0 - 313' CEMENT 375 sx

0 - 3036' CEMENT 1250 sx

0 - 3036' 8.625" OD INT CSG

3000 - 9100' CEMENT 740 sx

8510 - 8510' RETRV. PACKER

8920 - 8993' CEMENT PLUG

0 - 9100' 5.5" OD PROD CSG

0 - 313' 17.5 " OD HOLE

313 - 3036' 11 " OD HOLE

2310 FSL & 660 FWL

SEC 4 , TWIN 18 S, RANGE 35 E

ELEVATION: 3958 KB

SPUD DATE: 06-21-61

COMPLETION DATE: 08-15-61

COMPLETION INTERVAL: 8857 - 8993 (ABRF)

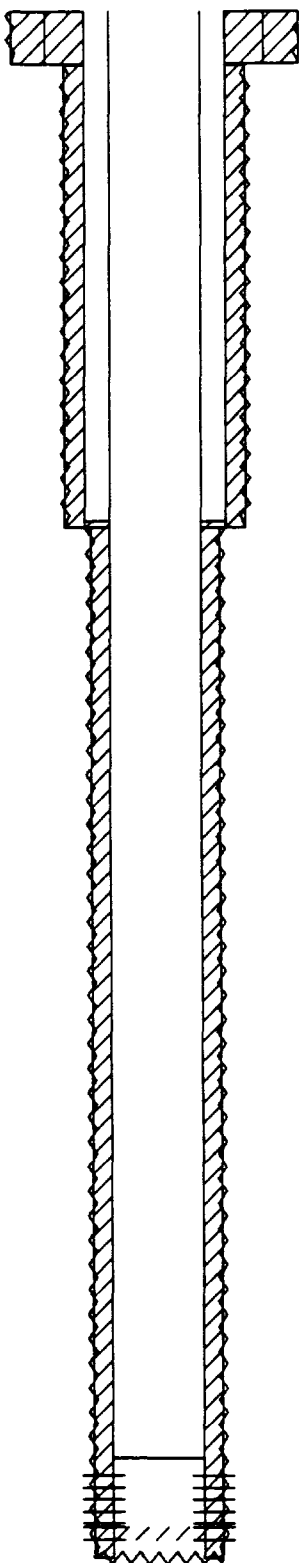
8558 - 8900' PERFS

8857 - 8993' PERFS

3036 - 9100' 7.875 " OD HOLE

PBTD: 8920'

TD: 9100'



PHILLIPS PET
VAC ABO UNIT TR13 NO. 16
API# 3002503072

0 - 317' 13.375" OD SURF CSG

0 - 317' CEMENT 375 sx

0 - 3036' CEMENT 1225 sx

0 - 3036' 8.625" OD INT CSG

2790 - 9100' CEMENT 679 sx

0 - 9100' 5.5" OD PROD CSG

0 - 317' 17.5 " OD HOLE

317 - 3036' 11 " OD HOLE

990 FNL & 330 FEL
SEC 5 , TWN 18 S, RANGE 35 E
ELEVATION: 3965 DF
SPUD DATE: 07-01-61
COMPLETION DATE: 08-11-61
COMPLETION INTERVAL: 8706 - 8802 (ABRF)

8576 - 8659' PERFS

8706 - 8802' PERFS

3036 - 9100' 7.875 " OD HOLE

PBTD: 9067'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 17
API# 3002503073

0 - 342' 13.375" OD SURF CSG

0 - 342' 17 " OD HOLE

0 - 342' CEMENT 475 sx

350 - 3251' CEMENT 1350 sx

0 - 3251' 8.625" OD INT CSG

342 - 3251' 11 " OD HOLE

2590 - 9099' CEMENT 1350 sx

890 FSL & 2210 FEL
SEC 5 , T1N 18 S, RANGE 35 E
ELEVATION: 3963 DF
SPUD DATE: 08-05-61
COMPLETION DATE: 09-19-61
COMPLETION INTERVAL: 8905 - 9024 (ABRF)

8593 - 8670' PERFS

8726 - 8864' PERFS

8905 - 9024' PERFS SQZ W/ 70 sx

3251 - 9101' 7.875 " OD HOLE

8815 - 9024' PLUG

0 - 9099' 5.5" OD PROD CSG

PBTD: 8815'

TD: 9101'

PHILLIPS PET
VAC ABO UNIT TR13 NO. 18
API# 3002503053

0 - 302' 13.375" OD SURF CSG

0 - 302' CEMENT 375 sx

0 - 302' 17 " OD HOLE

160 - 3299' CEMENT 1350 sx

0 - 3299' 8.625" OD INT CSG

302 - 3299' 11 " OD HOLE

3250 - 9099' CEMENT 679 sx

8271 - 8274' RETRV. PACKER

0 - 9099' 5.5" OD PROD CSG

2310 FSL & 1980 FWL
SEC 4 , TWN 18 S, RANGE 35 E
ELEVATION: 3956 DF
SPUD DATE: 08-09-61
COMPLETION DATE: 09-12-61
COMPLETION INTERVAL: 8875 - 9000 (ABRF)

8793 - 8859' PERFS

8772 - 9000' PERFS SQZ W/ 205 sx

3299 - 9100' 7.875 " OD HOLE

PBTD: 9030'

TD: 9100'

PHILLIPS PET
VAC ABO UNIT TR14 NO. 1
API# 3002503063

0 - 315' 13.375" OD SURF CSG

0 - 316' 17 " OD HOLE

0 - 315' CEMENT 290 sx

0 - 3200' CEMENT 200 sx

0 - 3200' 8.625" OD INT CSG

316 - 3200' 11 " OD HOLE

1980 FSL & 1980 FWL
SEC 5 , TWN 18 S, RANGE 35 E
ELEVATION: 3959 KB
SPUD DATE: 06-18-61
COMPLETION DATE: 07-20-61
COMPLETION INTERVAL: 8728 - 8840 (ABRF)

7007 - 9006' CEMENT 690 sx

8190 - 8193' CIBP

0 - 9006' 4.5" OD PROD CSG

8250 - 8596' PERFS

8630 - 8712' PERFS

8728 - 8840' PERFS

3200 - 9006' 7.875 " OD HOLE

PBTD: 8190'

TD: 9006'

PHILLIPS PET
VAC ABO UNIT TR14 NO. 2
API# 3002503064

0 - 300' 13.375" OD SURF CSG

0 - 300' 17 " OD HOLE

0 - 300' CEMENT 300 sx

0 - 3451' CEMENT 200 sx

0 - 3451' 8.625" OD INT CSG

300 - 3451' 11 " OD HOLE

1000 - 9062' CEMENT 778 sx

660 FSL & 660 FWL
SEC 5 , TWIN 18 S, RANGE 35 E
ELEVATION: 3977 DF
SPUD DATE: 07-18-61
COMPLETION DATE: 08-22-61
COMPLETION INTERVAL: 8761 - 8958 (ABO)

8810 - 8935' CEMENT PLUG

8508 - 8810' PERFS

8761 - 8958' PERFS

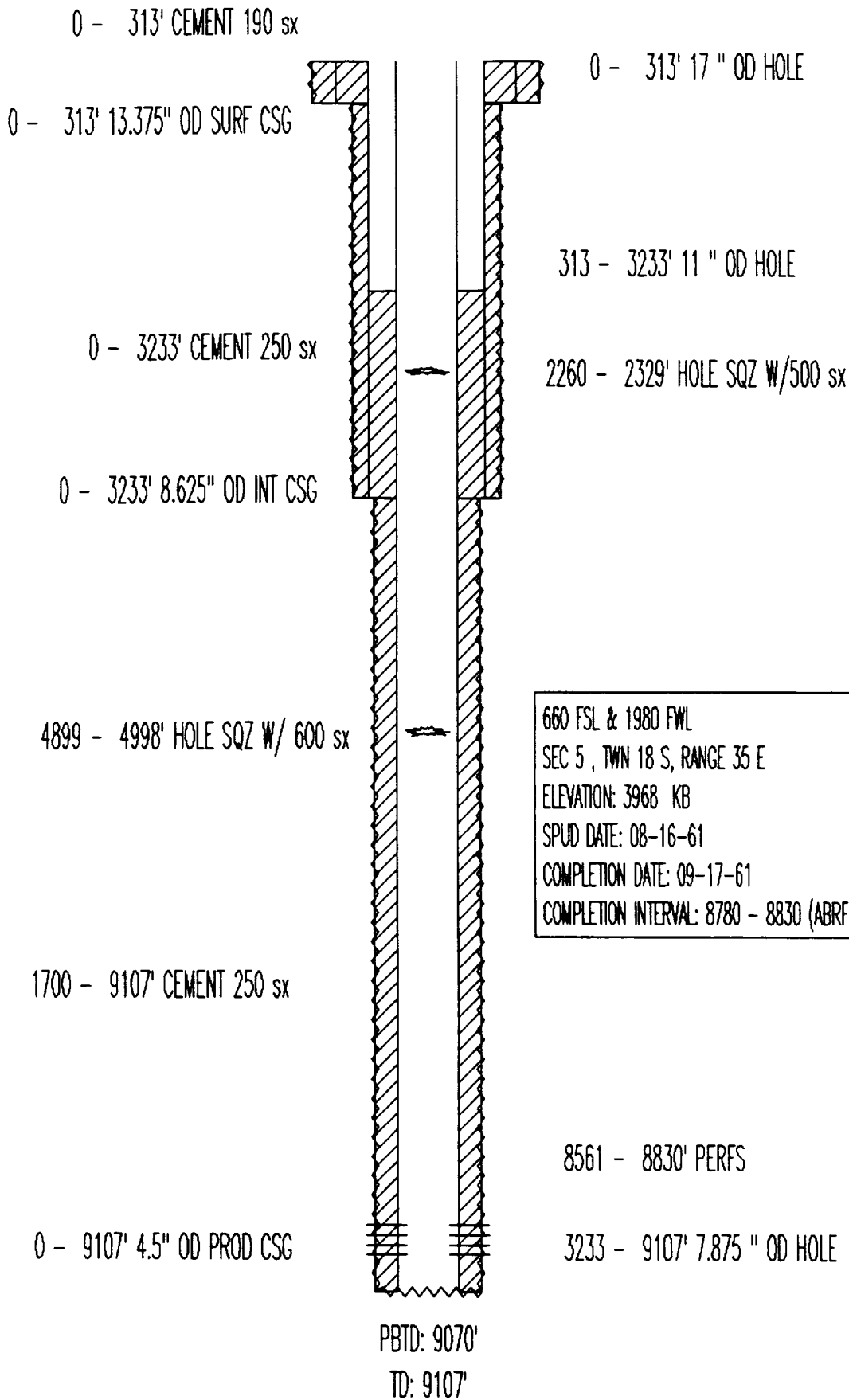
0 - 9062' 4.5" OD PROD CSG

3451 - 9060' 7.875 " OD HOLE

PBTD: 8810'

TD: 9060'

PHILLIPS PET
VAC ABO UNIT TR14 NO. 3
API# 3002503065



PHILLIPS PET
VAC ABO UNIT TR14 NO. 4
API# 3002503066

0 - 305' 13.375" OD SURF CSG

0 - 305' 17.5 " OD HOLE

0 - 305' CEMENT 190 sx

0 - 3199' CEMENT 200 sx

0 - 3199' 8.625" OD INT CSG

305 - 3199' 11 " OD HOLE

4150 - 4151' PERFS SQZ W/ 200 sx

1850 - 4150' CEMENT

1650 FSL & 660 FWL
SEC 5 , TWN 18 S, RANGE 35 E
ELEVATION: 3964 GR
SPUD DATE: 09-13-61
COMPLETION DATE: 10-15-61
COMPLETION INTERVAL: 8690 - 8816 (ABRF)

4200 - 8950' CEMENT 1000 sx

8297 - 8682' PERFS

8492 - 8580' PERFS

8630 - 8704' PERFS

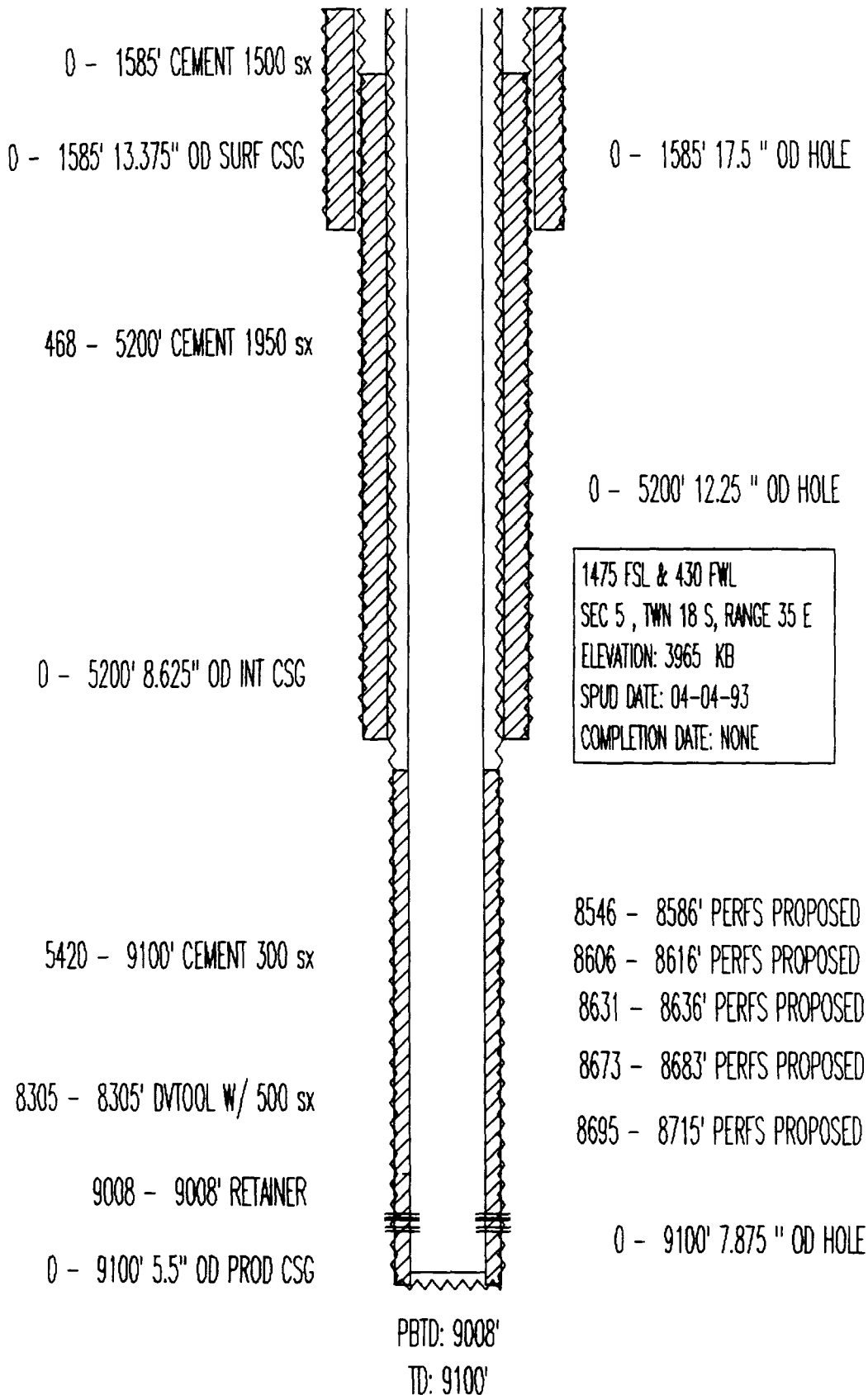
8690 - 8816' PERFS SQZ W/ 800 sx

0 - 8950' 4.5" OD PROD CSG

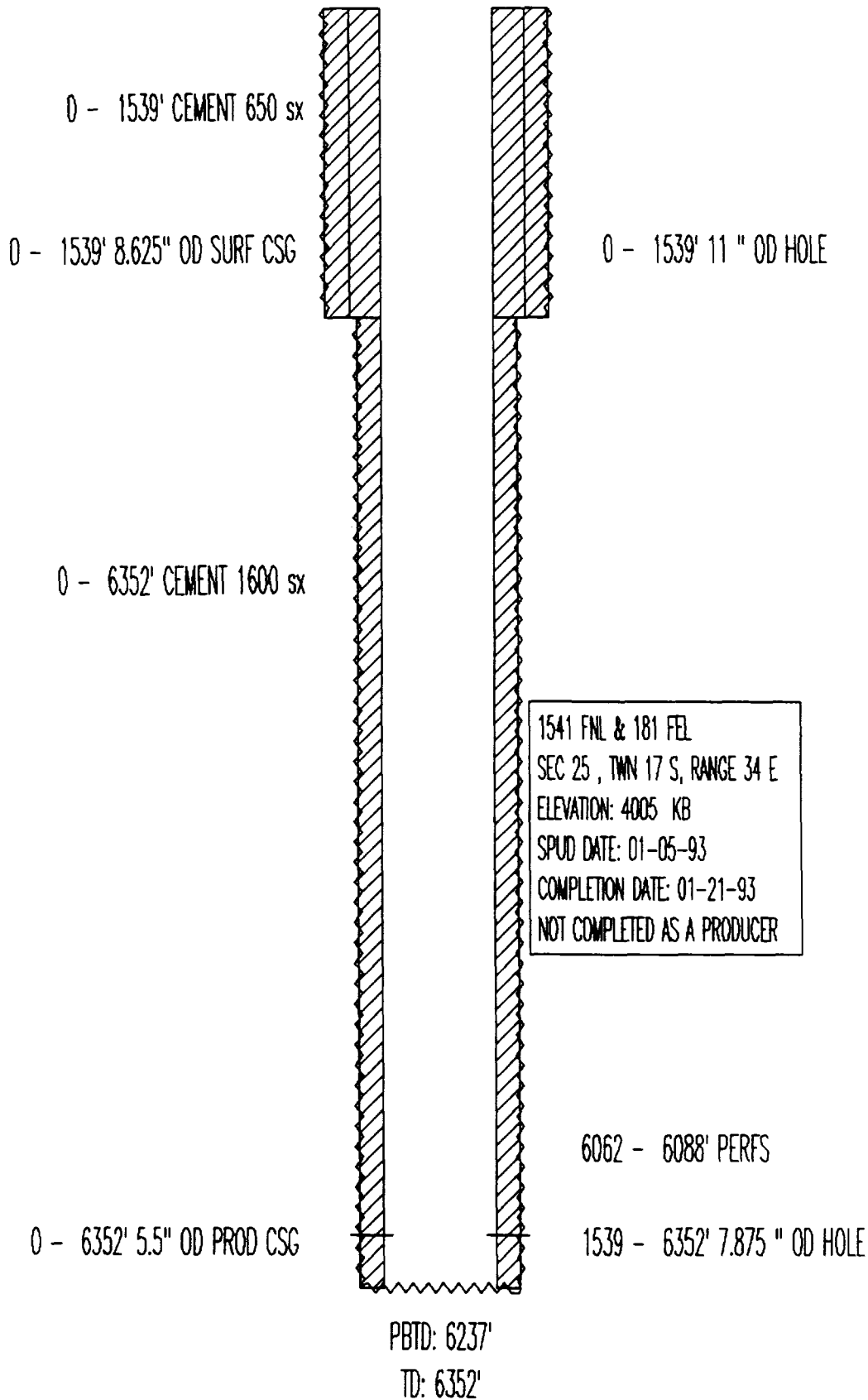
3199 - 8950' 7.875 " OD HOLE

TD: 8950'

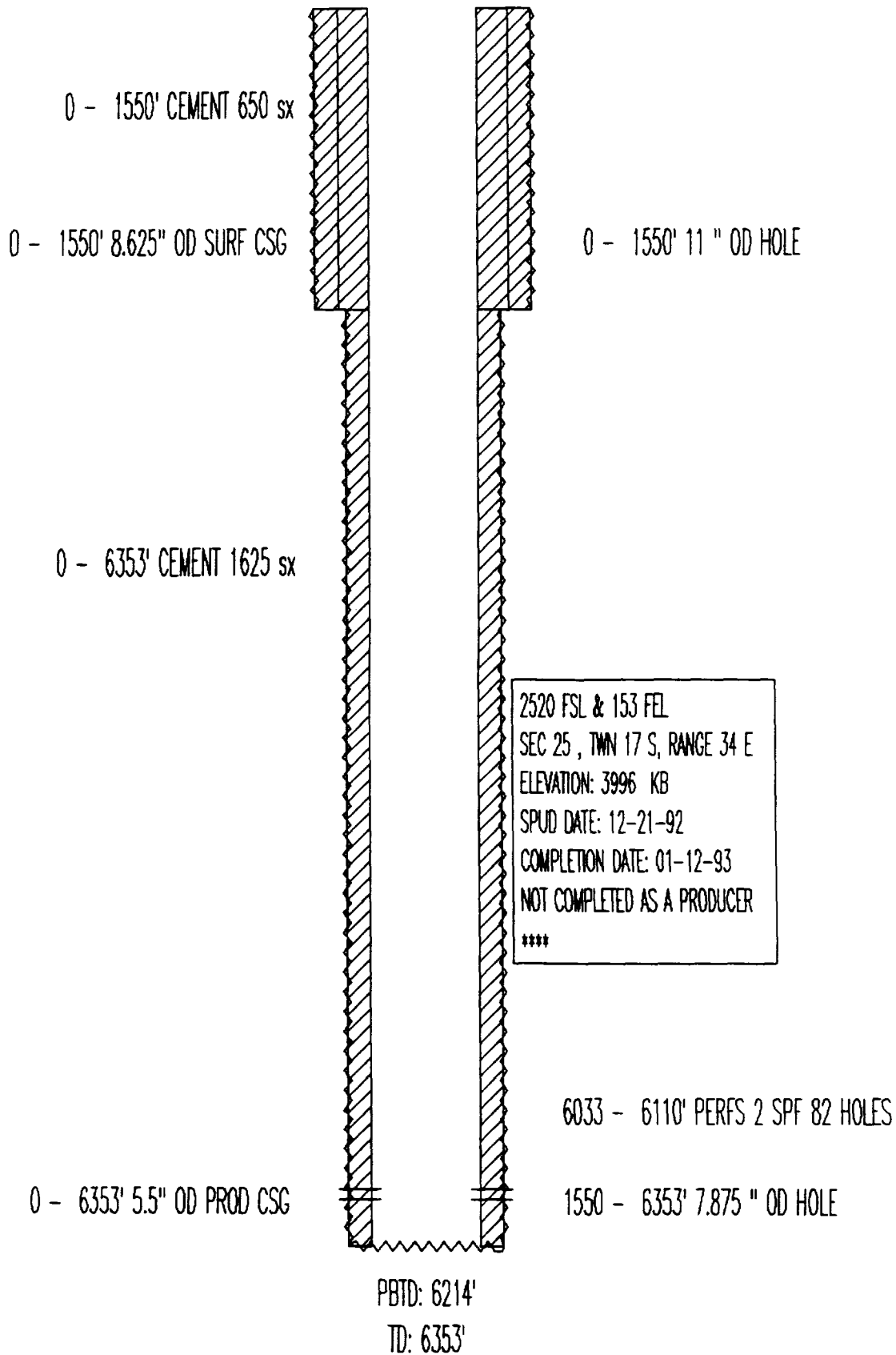
PHILLIPS PET
VAC ABO UNIT TR14 NO. 5
API# 3002531903



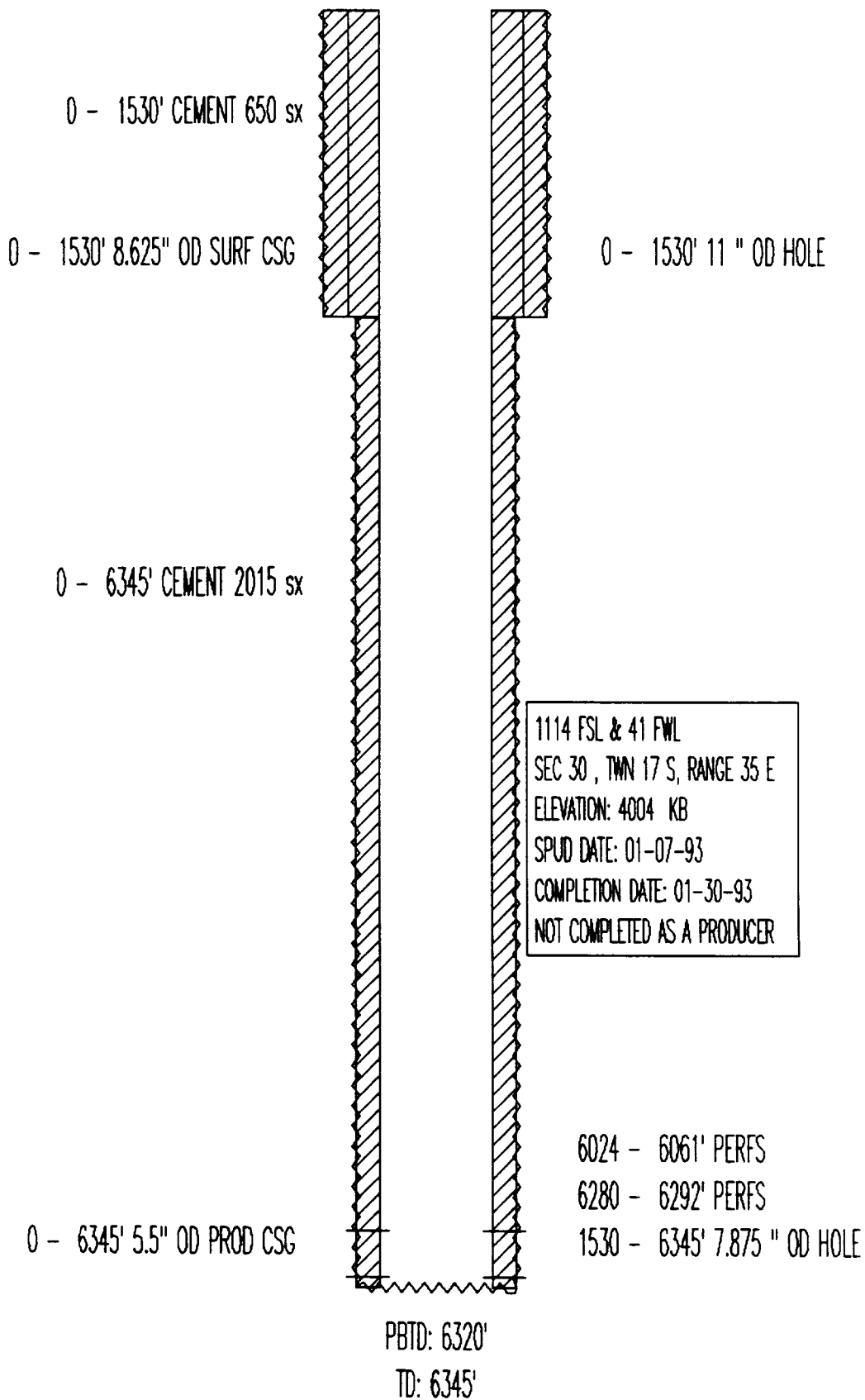
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. WI-20
API# 3002531807



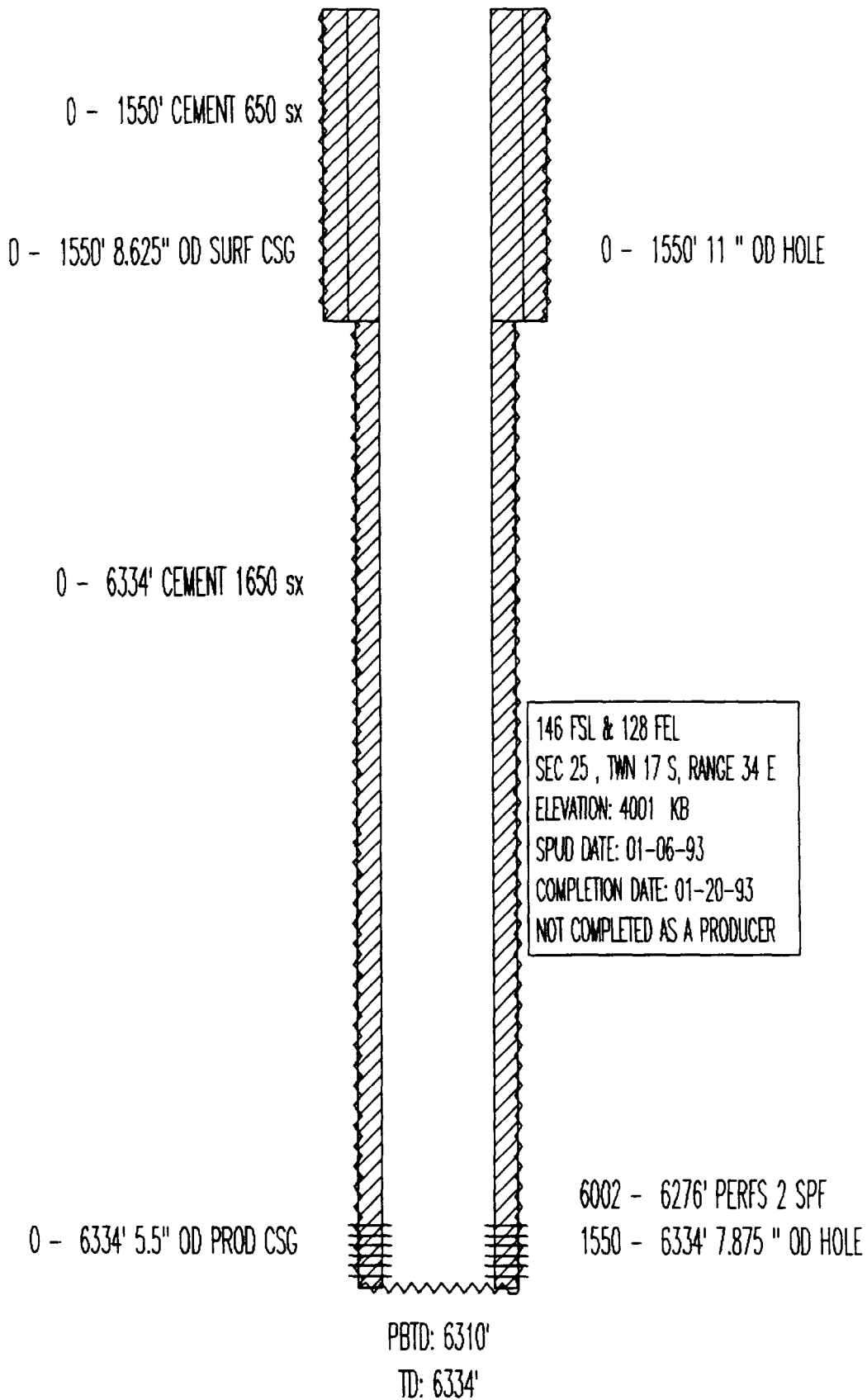
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. WI-31
API# 3002531814



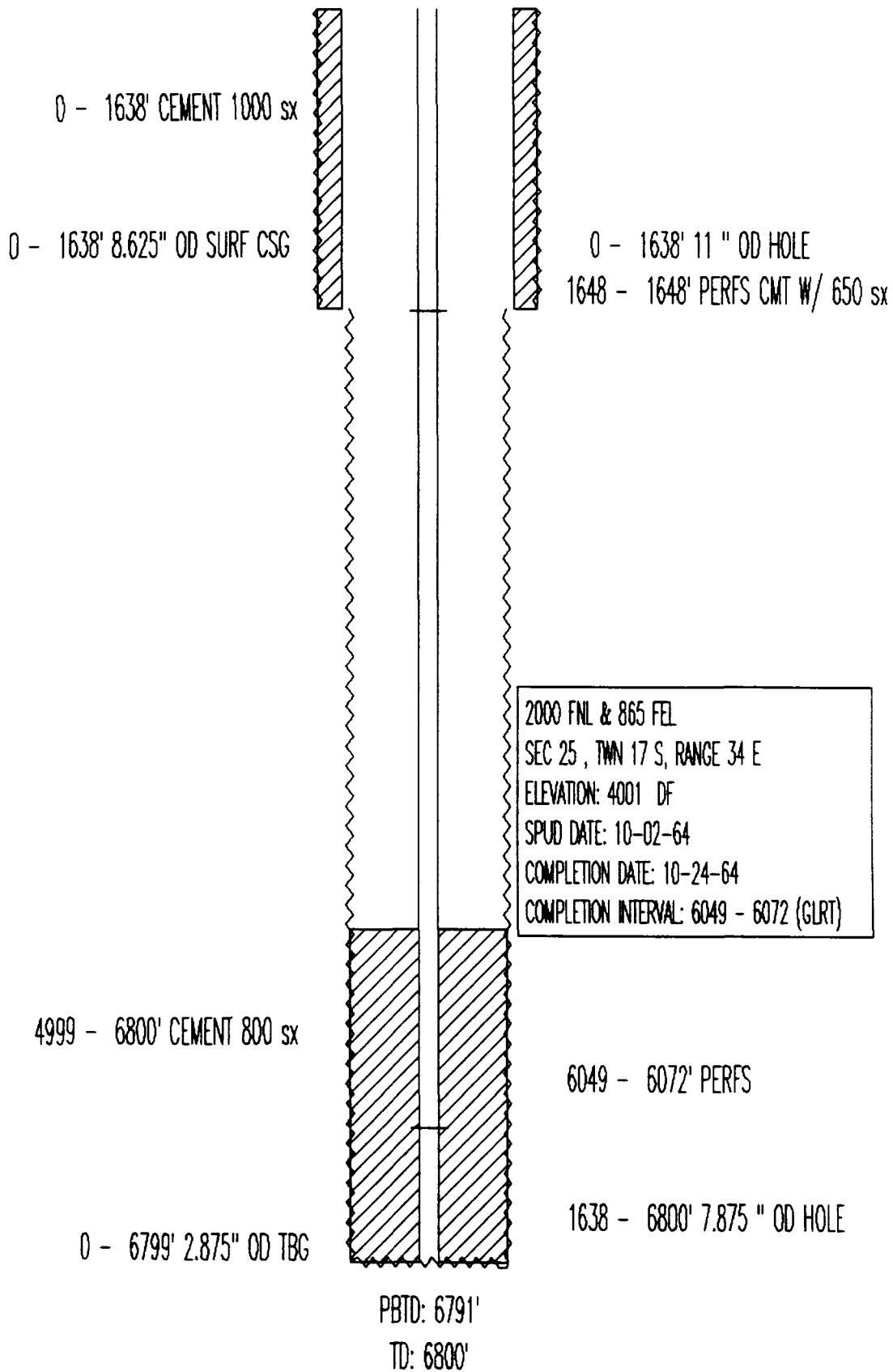
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VAC GLOR WEST UNIT NO. W1-42
API# 3002531815



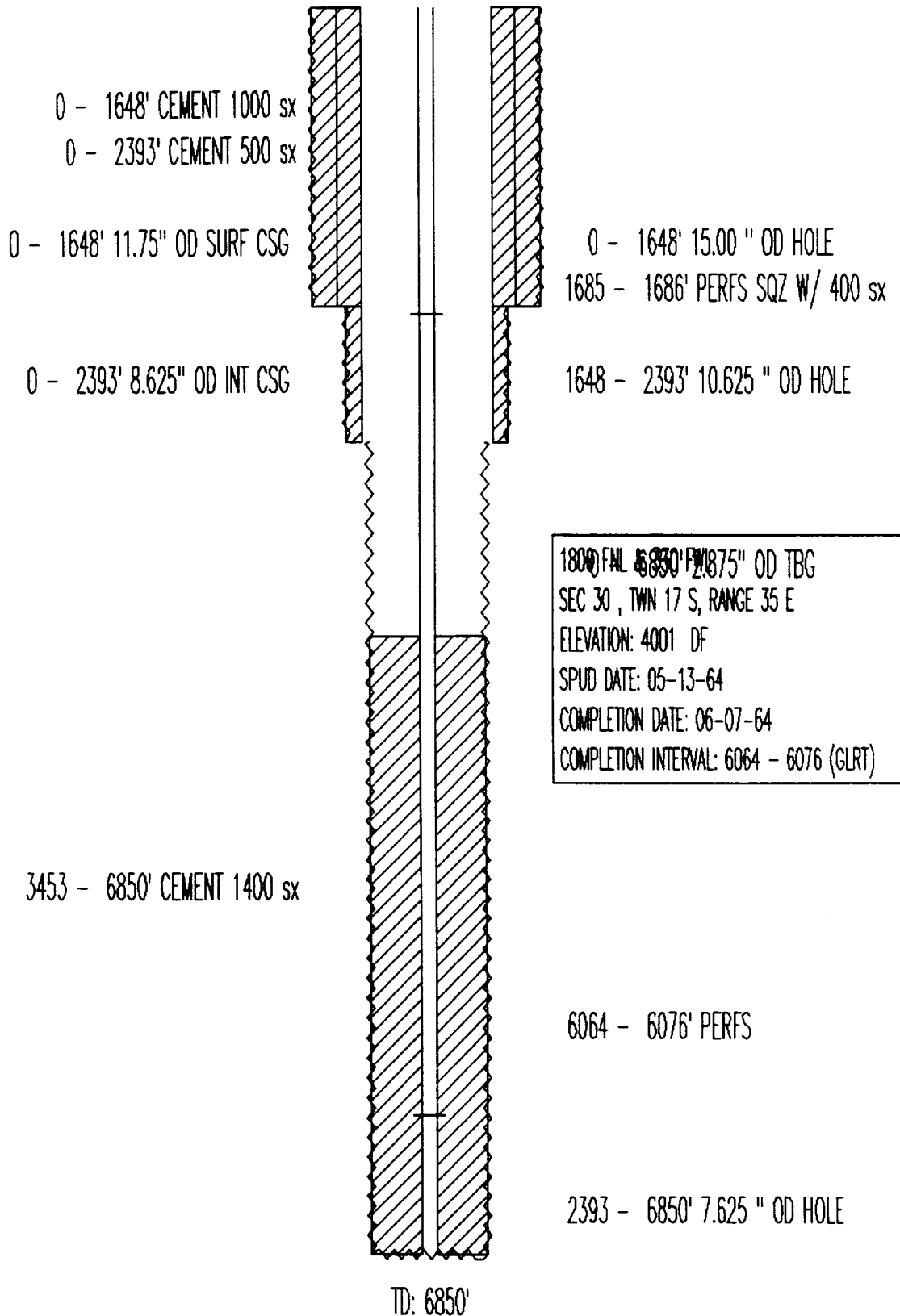
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. W1-55
API# 3002531817



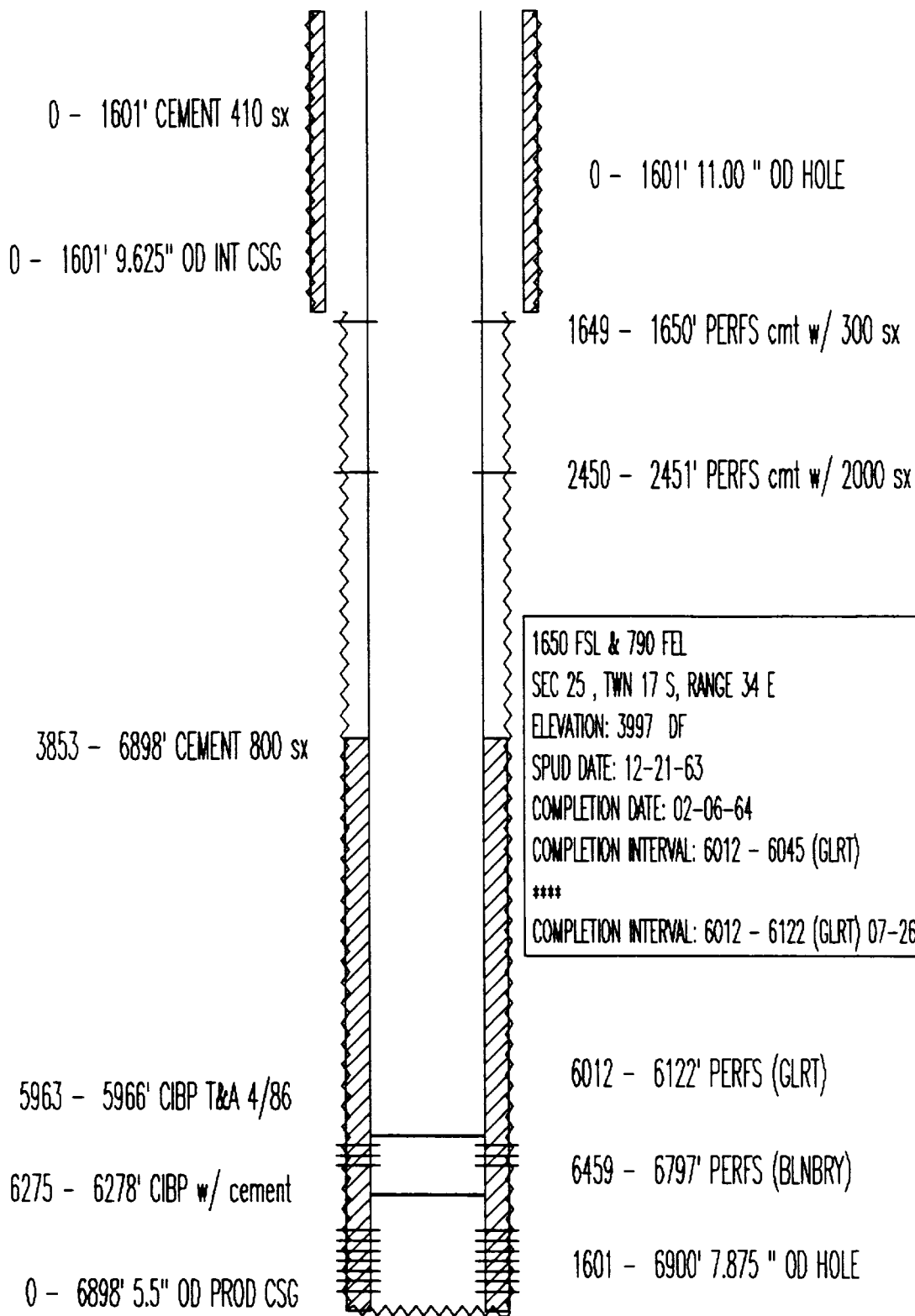
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 25
API# 3002520951



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 26
API# 3002520943

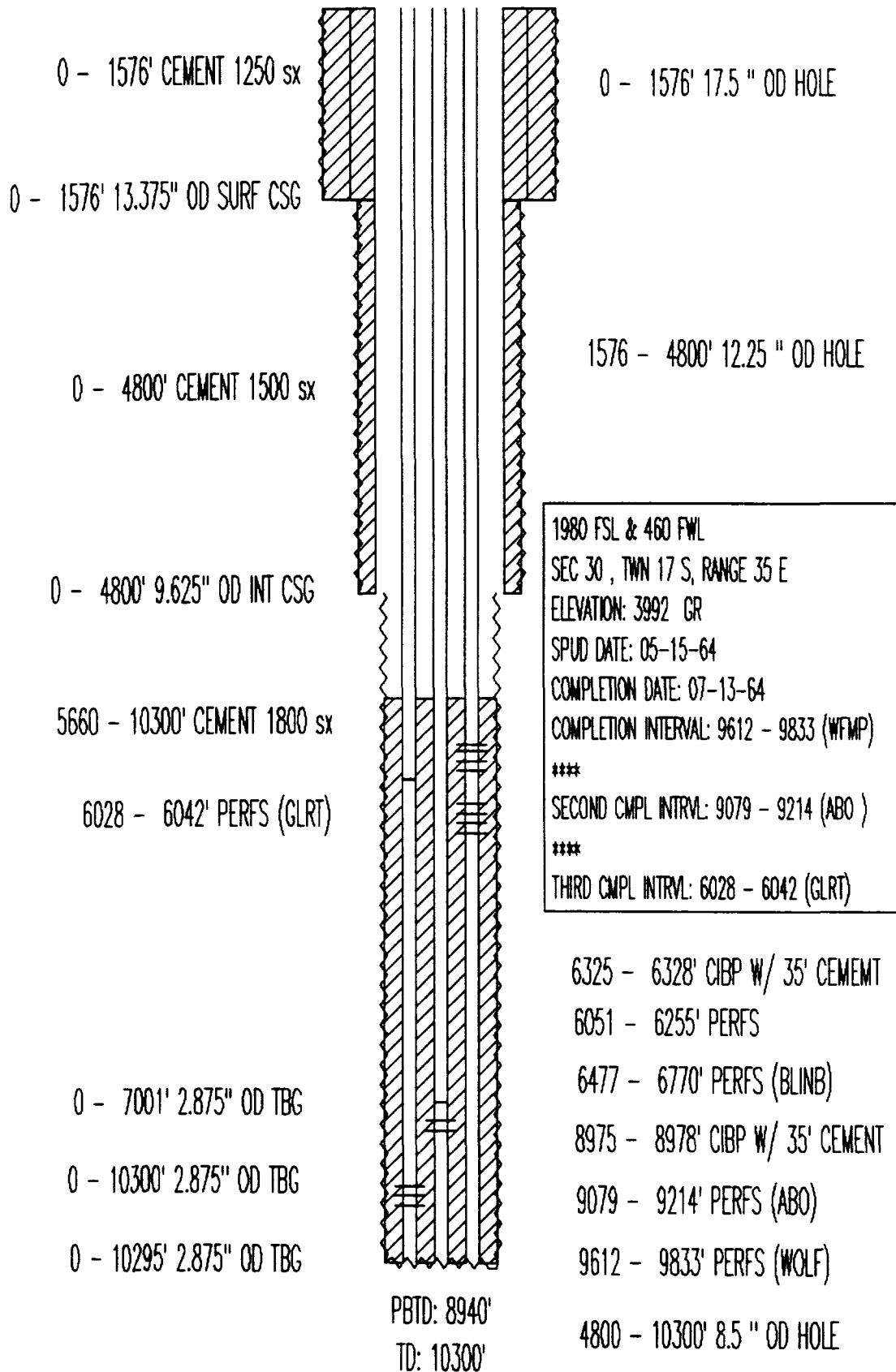


TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 36
API# 3002520212

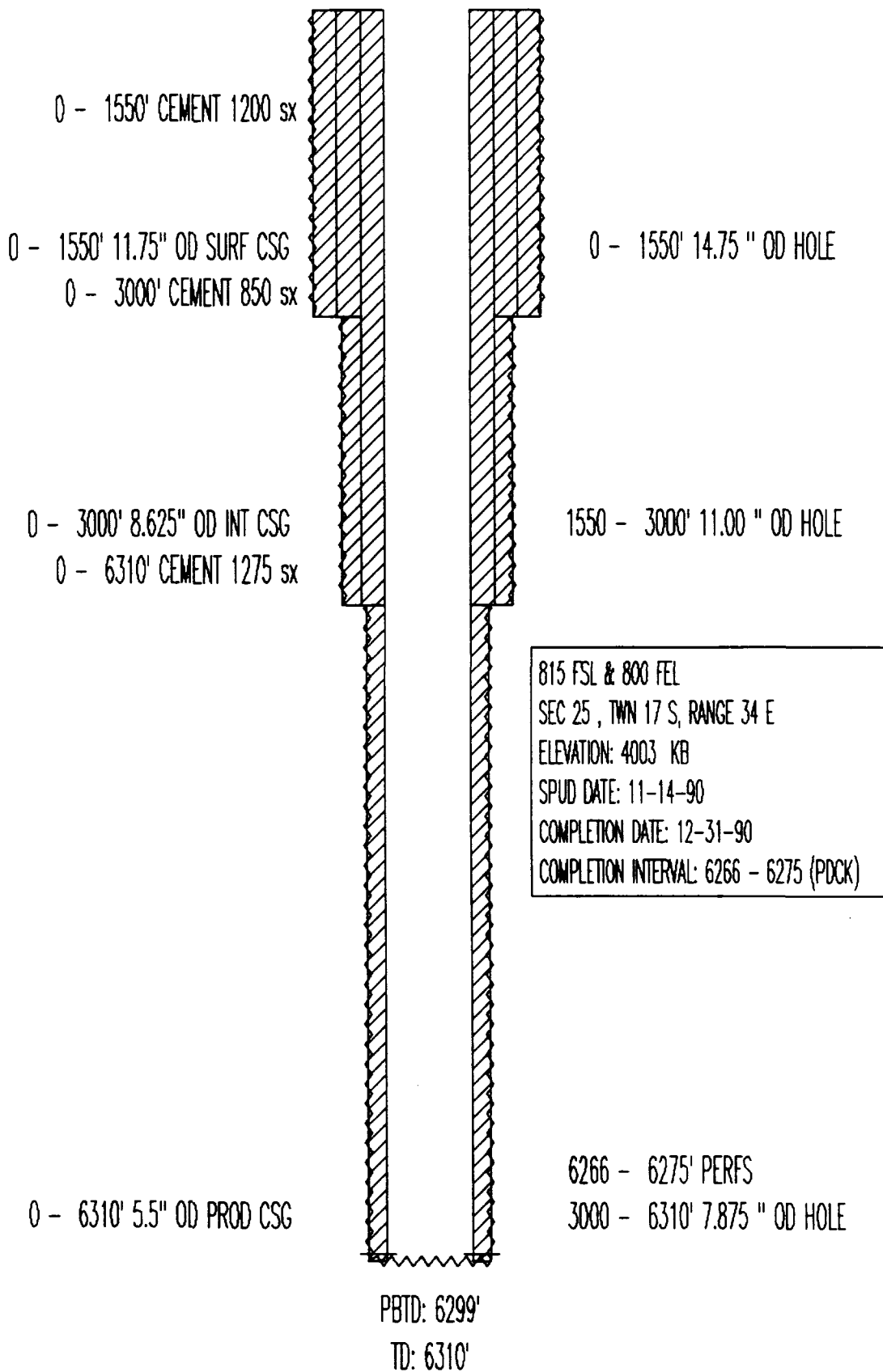


TD: 6900'

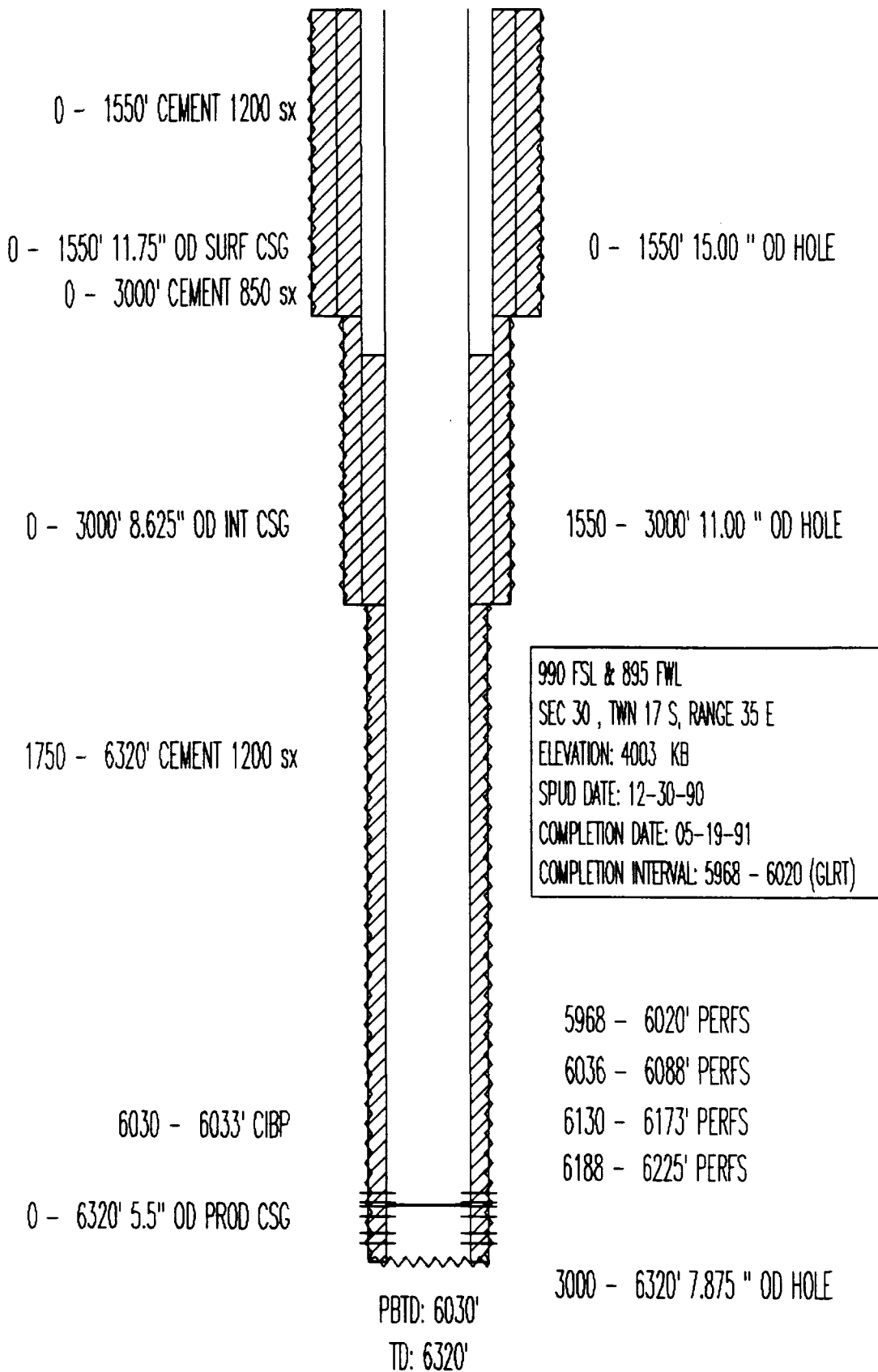
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 37
API# 3002520942



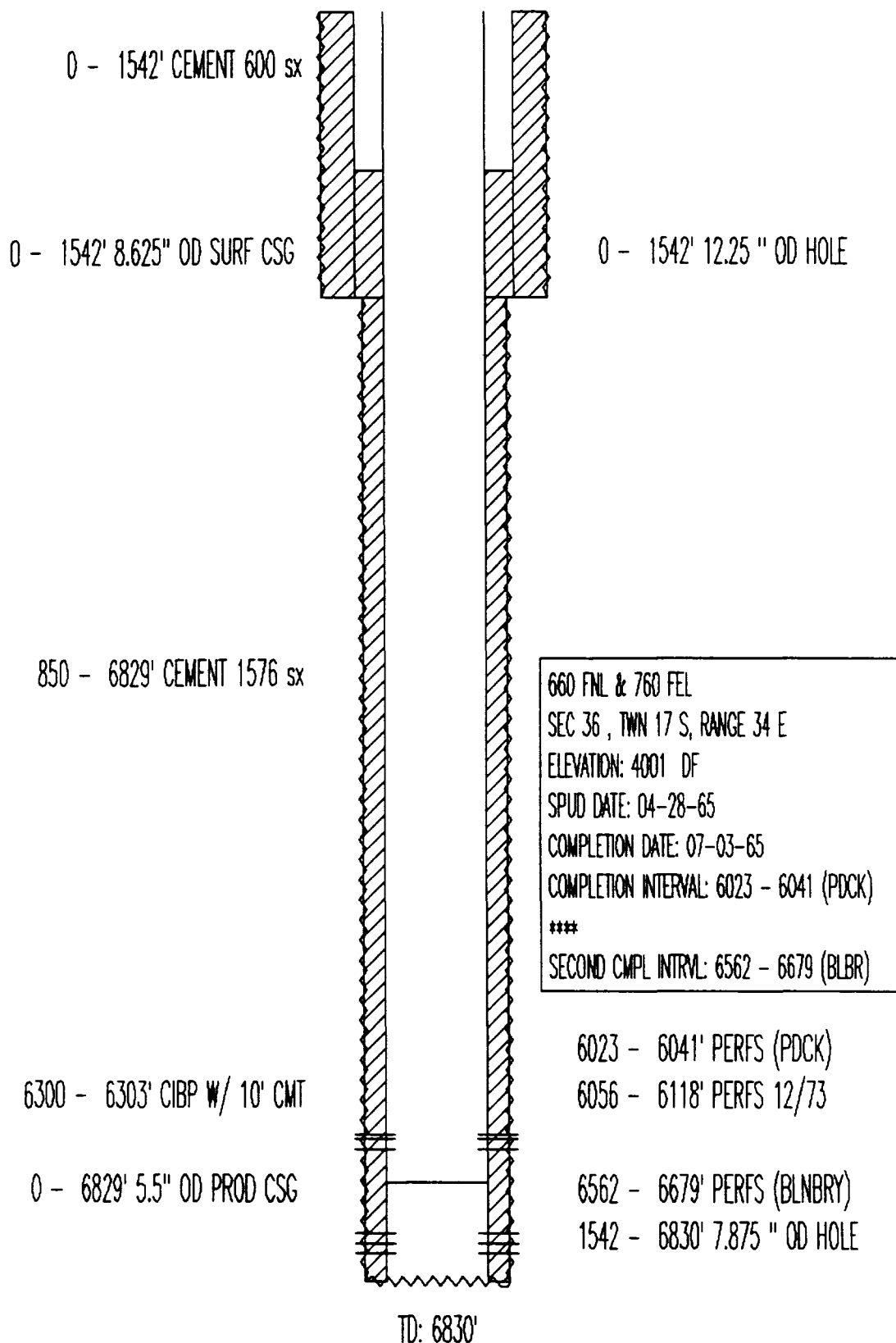
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 48
API# 3002530970



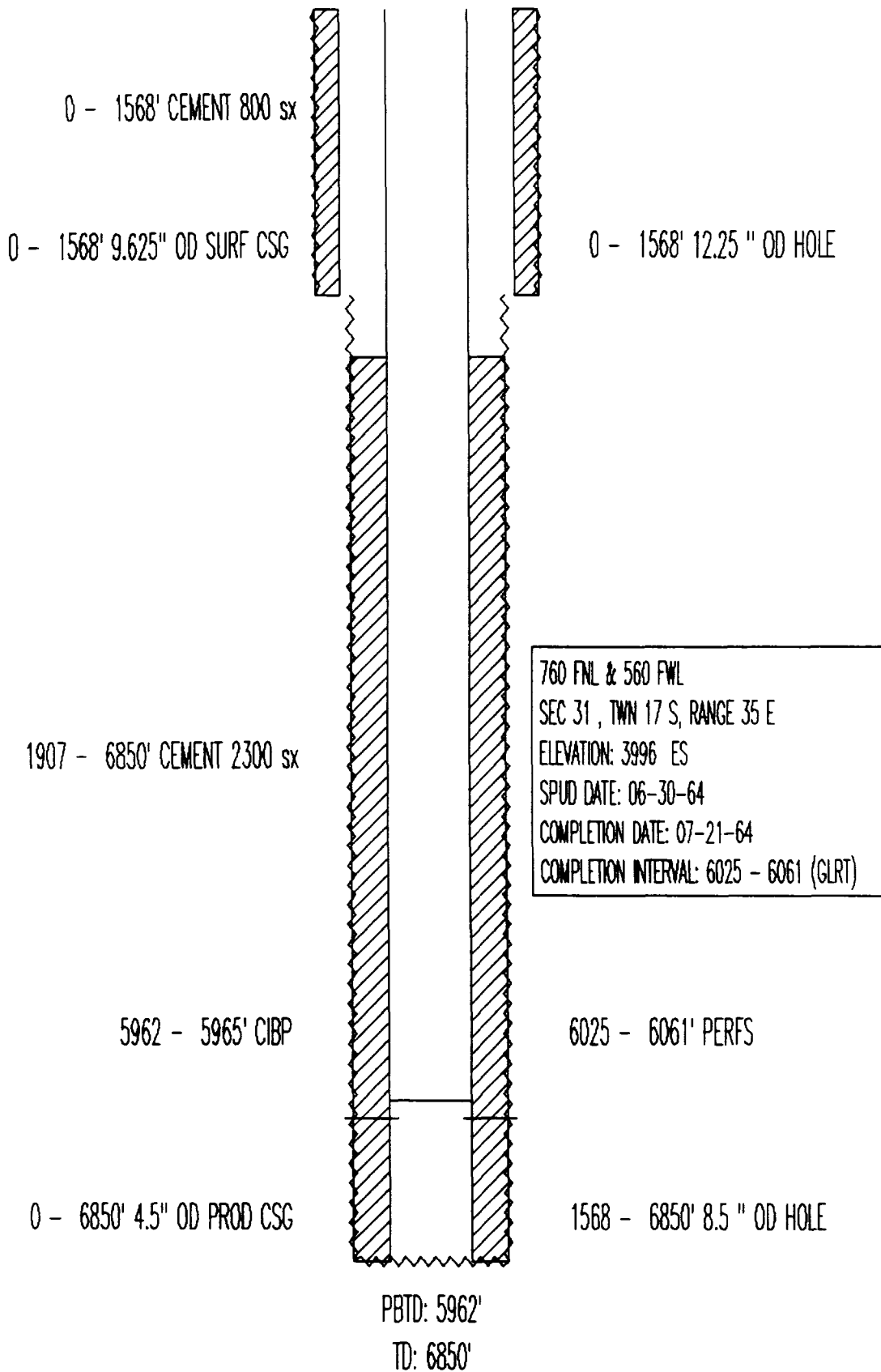
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 49
API# 3002530967



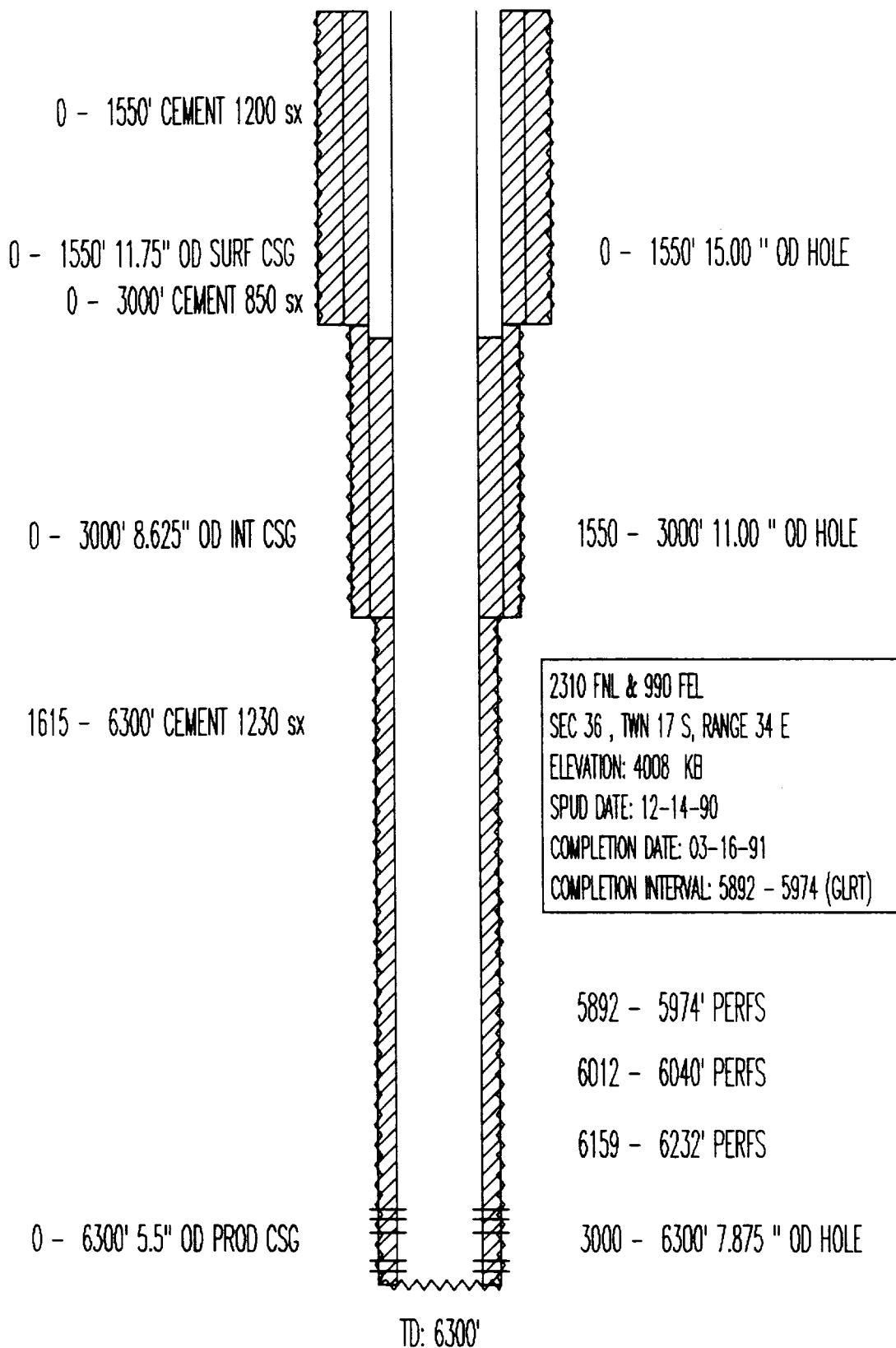
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 61
API# 3002521432



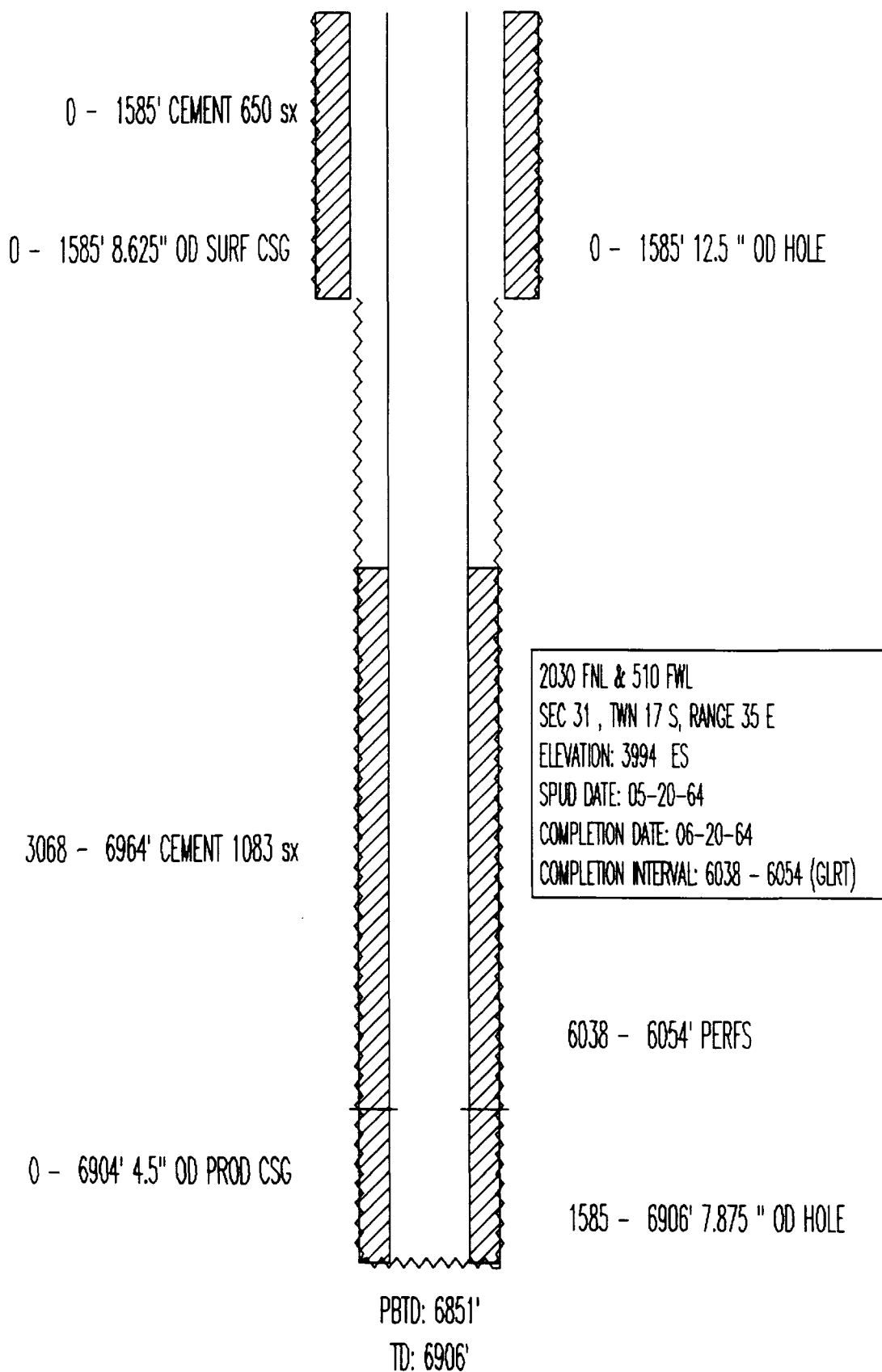
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VAC GLOR WEST UNIT NO. 62
API# 3002520863



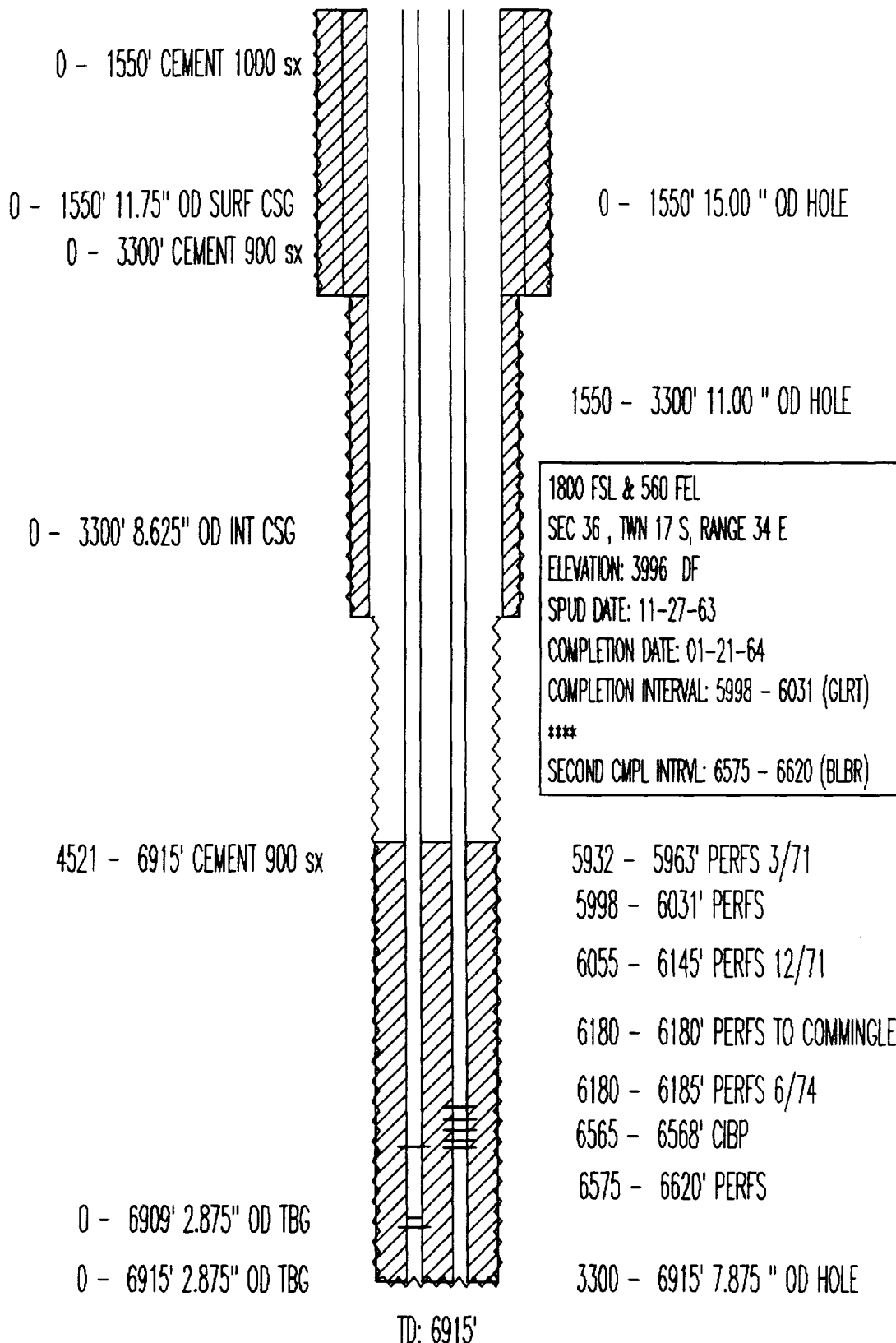
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 75
API# 3002530969



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 76
API# 3002520784



TEXACO EXP & PRO
VAC GLOR WEST UNIT NO. 89
API# 3002520505



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 90
API# 3002520270

0 - 337' 13.375" OD SURF CSG

0 - 337' CEMENT 350 sx

0 - 4774' CEMENT 762 sx

0 - 4774' 9.625" OD INT CSG

5670 - 10500' CEMENT 1110 sx

6030 - 6042' PERFS

6092 - 6136' PERFS (GLRT) 2/77

9140 - 9143' CIBP W/ 7 sx

9594 - 9597' CIBP W/ 7 sx

0 - 10500' 7 " OD PROD CSG

0 - 337' 17.5 " OD HOLE

337 - 4774' 12.25 " OD HOLE

2130 FSL & 660 FWL

SEC 31 , T14N 17 S, RANGE 35 E

ELEVATION: 3992 DF

SPUD DATE: 12-07-63

COMPLETION DATE: 01-30-64

COMPLETION INTERVAL: 10006 - 10016 (WFMP)

SECOND CMPL INTRVL: 9162 - 9300 (ABO)

THIRD CMPL INTRVL: 6030 - 6042 (GLRT)

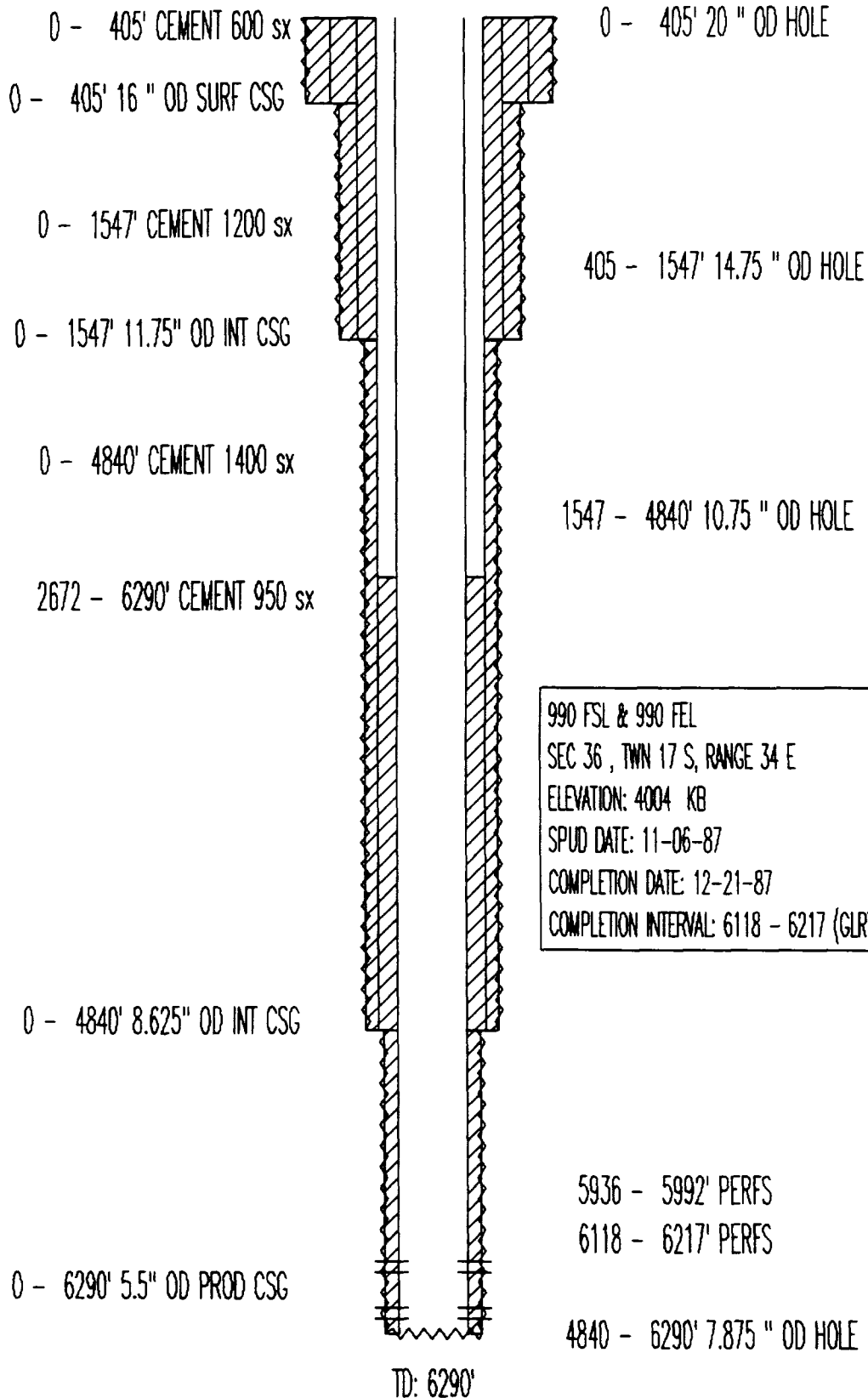
9162 - 9300' PERFS (ABO)

10006 - 10016' PERFS (WLFMP)

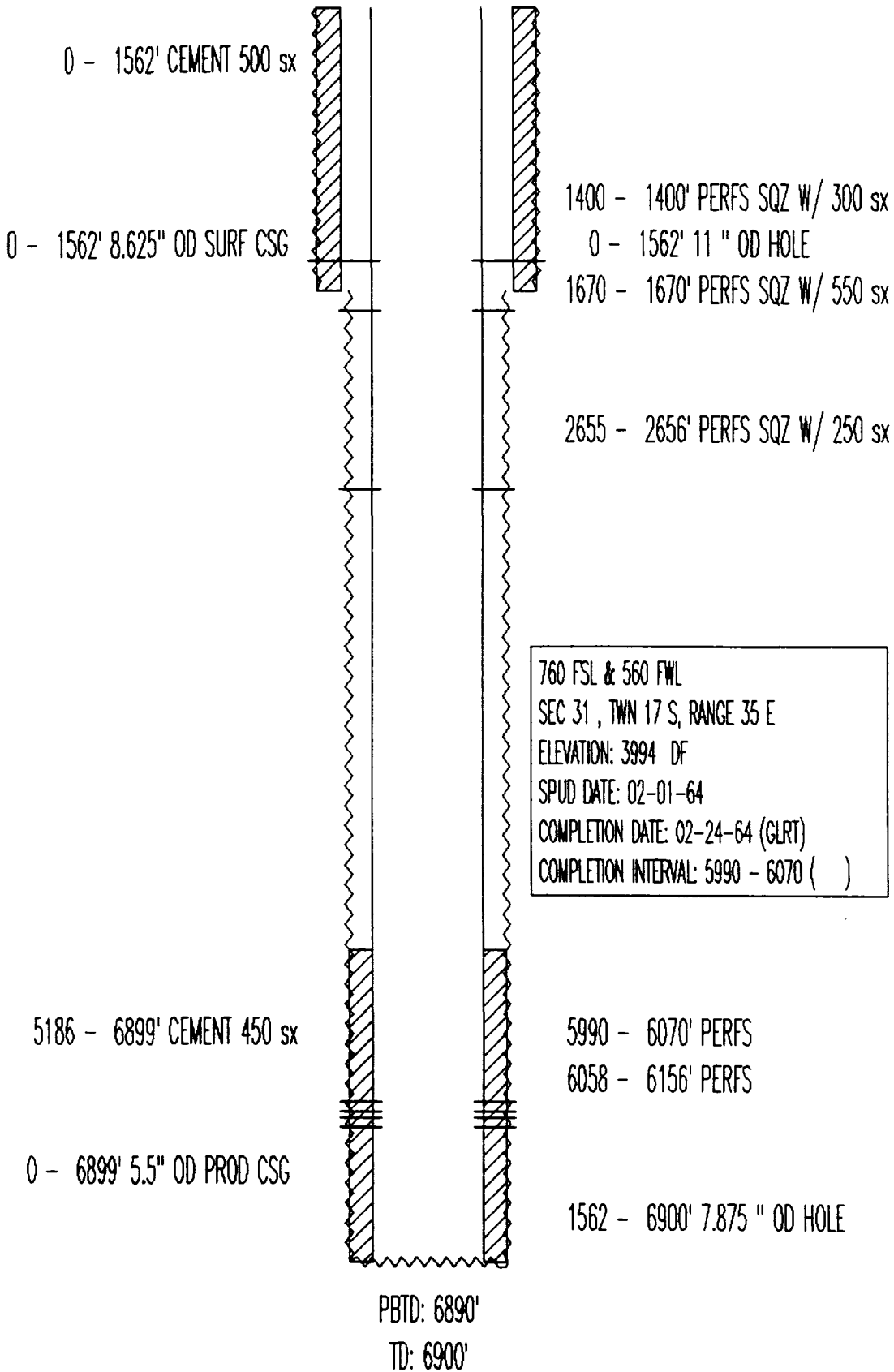
4774 - 10500' 8.5 " OD HOLE

TD: 10500'

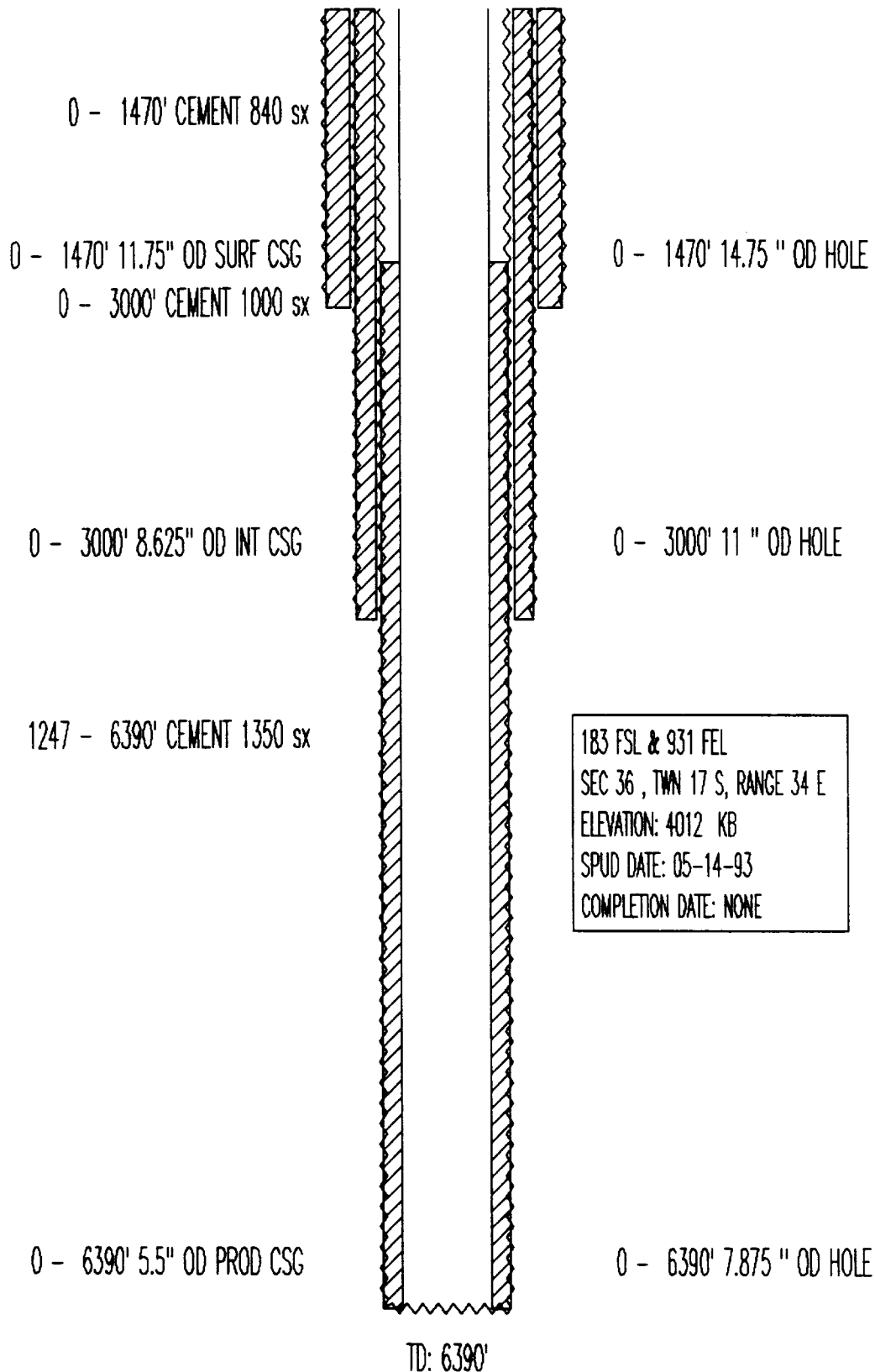
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 102
API# 3002530126



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 103
API# 3002520339



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 107
API# 3002531884



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 115
API# 3002531131

0 - 40' 16" OD SURF CSG

0 - 40' CEMENT 0 sx

0 - 1550' CEMENT 1400 sx

0 - 1550' 11.75" OD INT CSG

0 - 3000' CEMENT 1050 sx

0 - 3000' 8.625" OD INT CSG

0 - 6300' CEMENT 1375 sx

0 - 6300' 5.5" OD PROD CSG

0 - 40' 20" OD HOLE

40 - 1550' 14.75" OD HOLE

1550 - 3000' 11.00" OD HOLE

604 FNL & 856 FEL
SEC 1, TWN 18 S, RANGE 34 E
ELEVATION: 4001 KB
SPUD DATE: 03-28-91
COMPLETION DATE: 06-28-91
COMPLETION INTERVAL: 5956 - 6192 (GLRT)

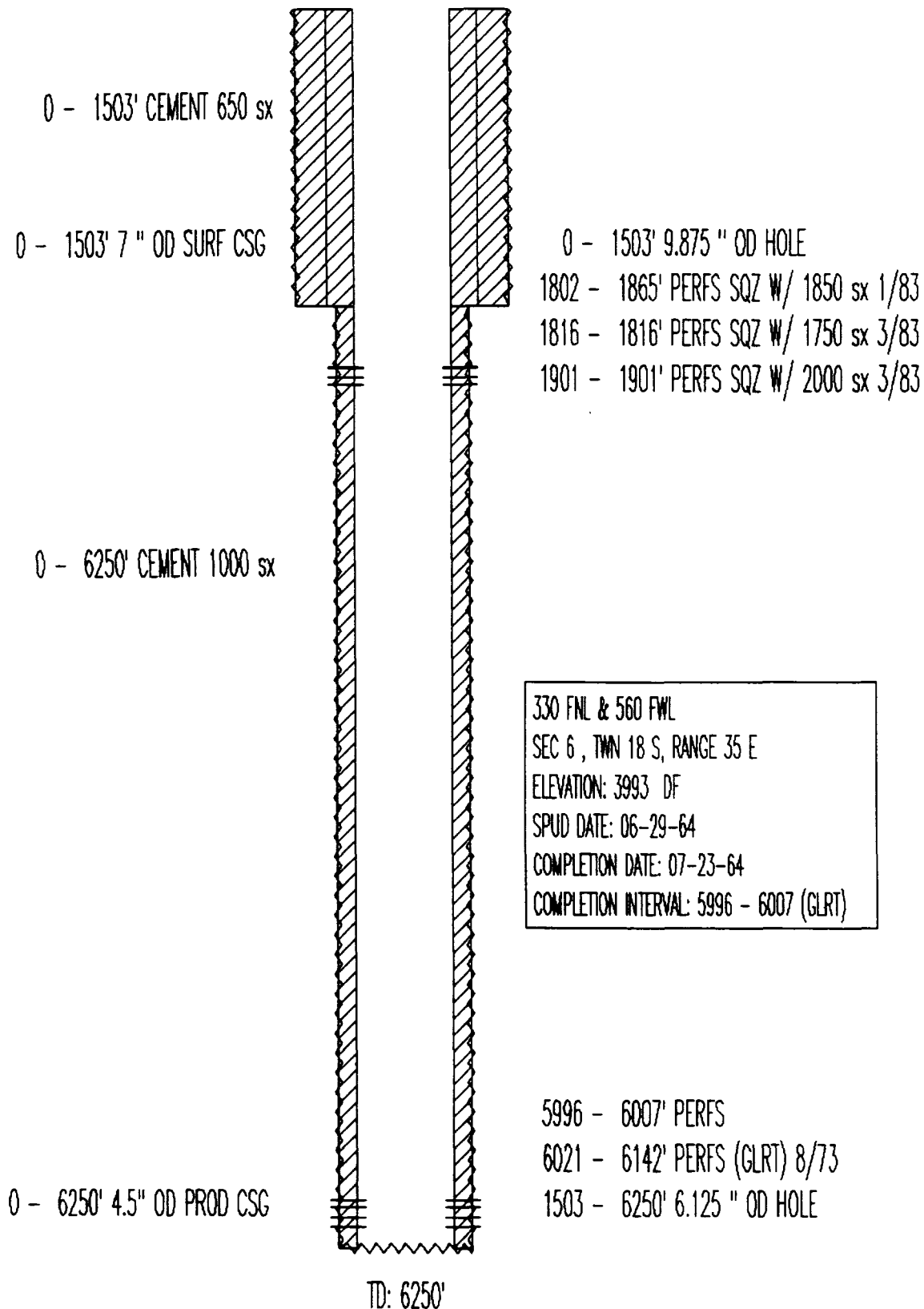
5956 - 6192' PERFS

3000 - 6300' 7.875" OD HOLE

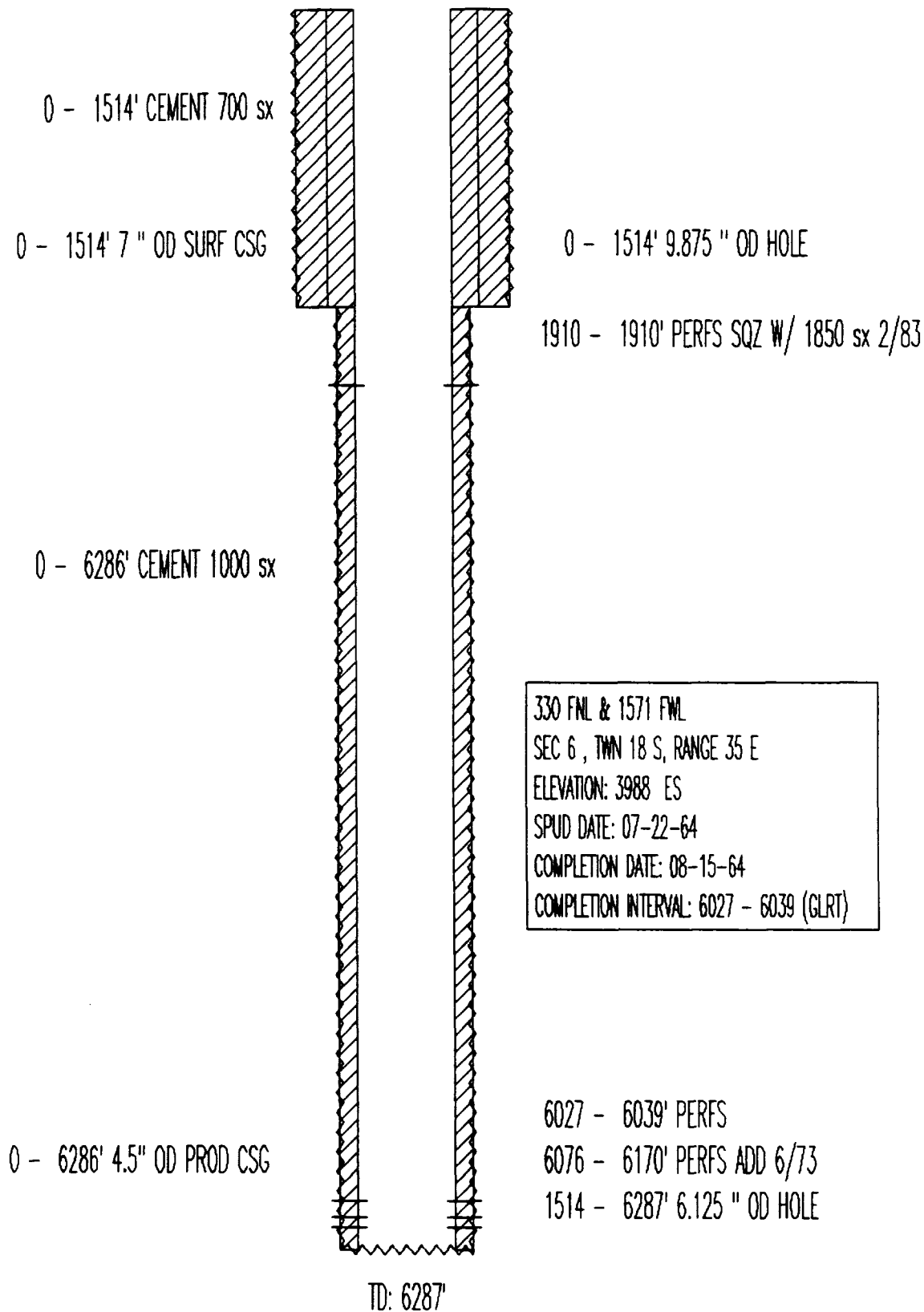
PBTD: 6250'

TD: 6300'

TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 116
API# 3002520753



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 117
API# 3002520754



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 118
API# 3002531129

0 - 40' 16" OD SURF CSG

0 - 40' CEMENT 0 sx

0 - 1547' CEMENT 1400 sx

0 - 1547' 11.75" OD INT CSG

0 - 3000' CEMENT 950 sx

0 - 3000' 8.625" OD INT CSG

1139 - 6205' CEMENT 1330 sx

0 - 6205' 5.5" OD PROD CSG

0 - 40' 20" OD HOLE

40 - 1547' 14.75" OD HOLE

1547 - 3000' 11.00" OD HOLE

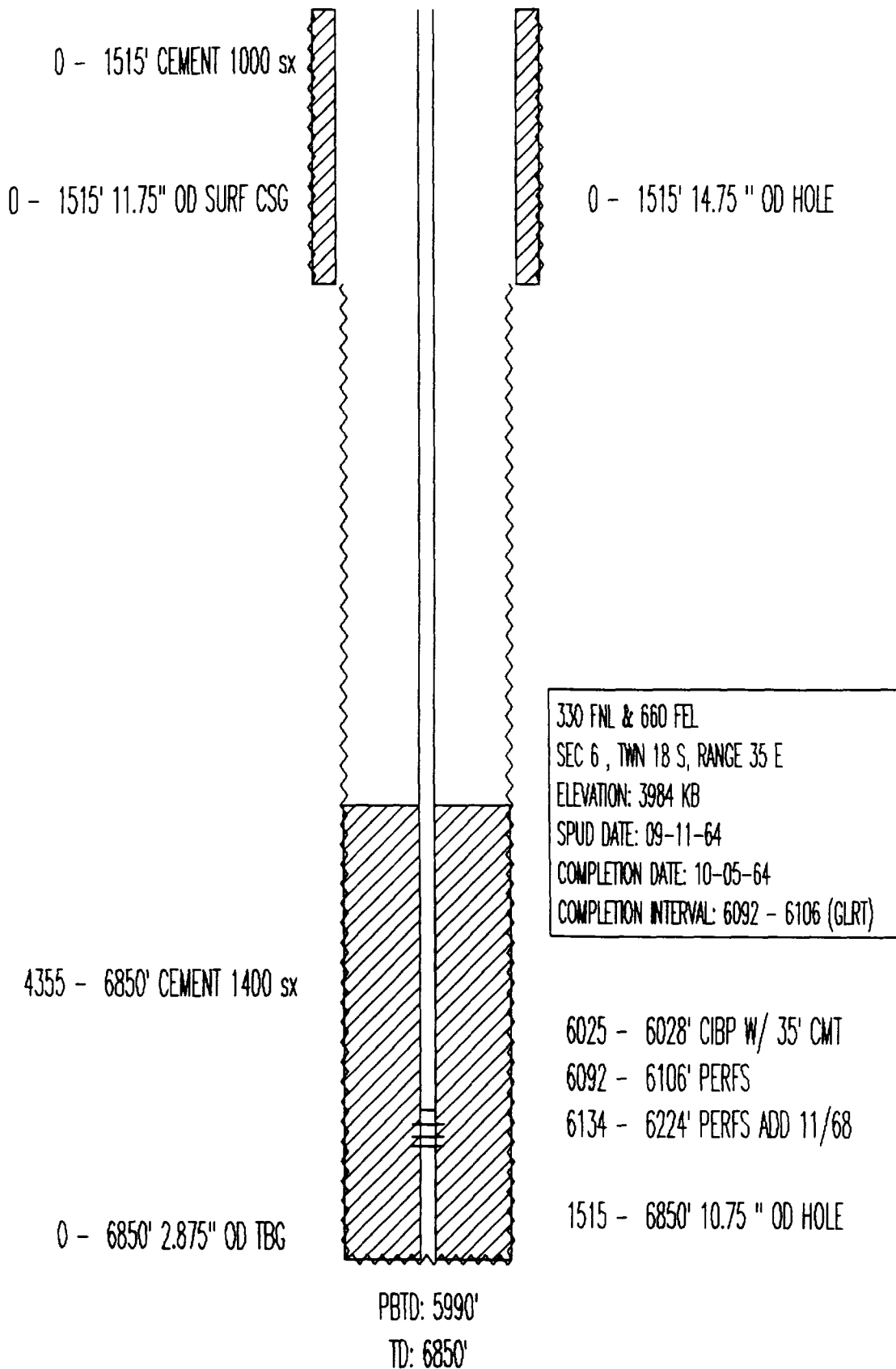
660 FNL & 2135 FEL
SEC 6 , TWN 18 S, RANGE 35 E
ELEVATION: 3983 KB
SPUD DATE: 02-17-91
COMPLETION DATE: 07-01-91
COMPLETION INTERVAL: 5884 - 5908 (GLRT)

5884 - 5908' PERFS

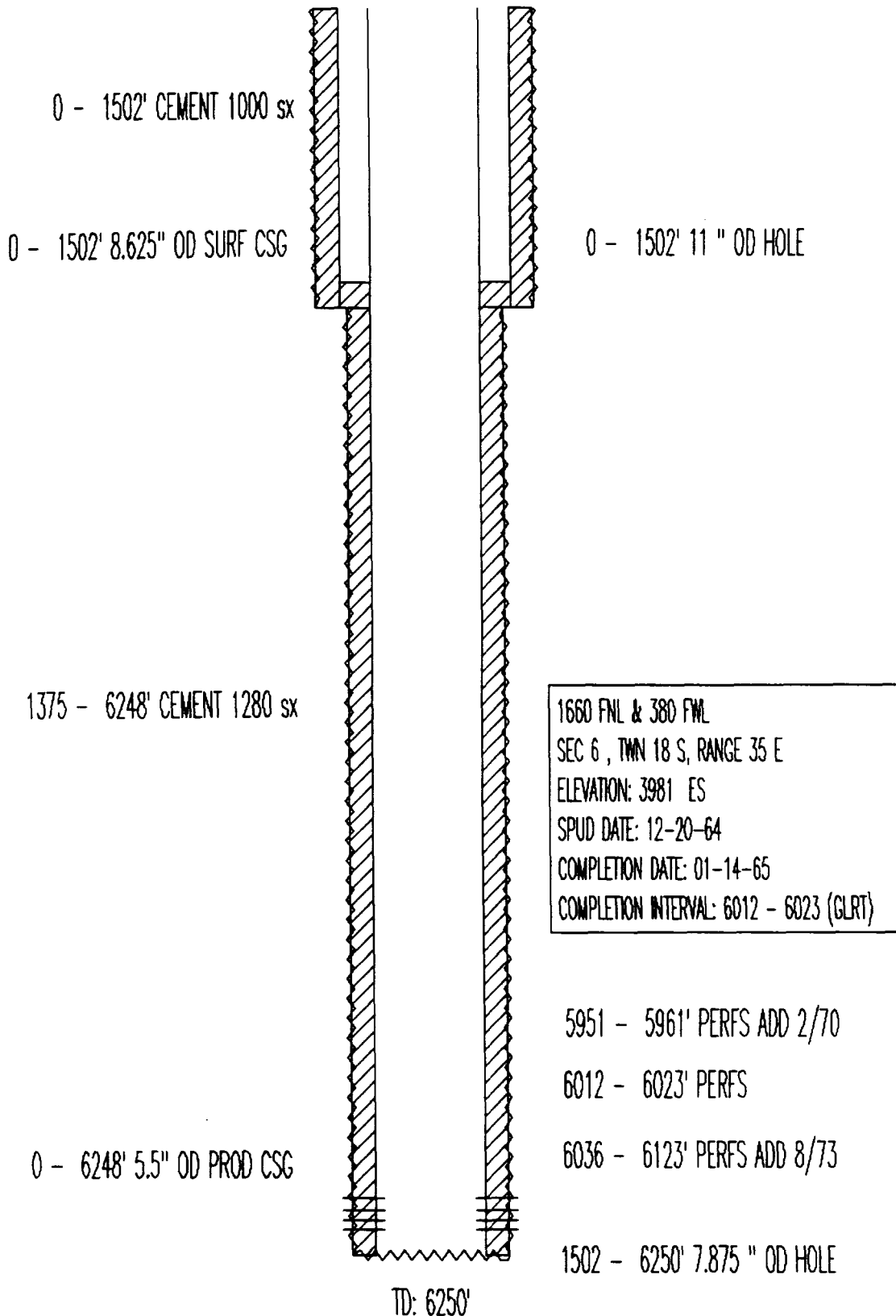
3000 - 6205' 7.875" OD HOLE

TD: 6205'

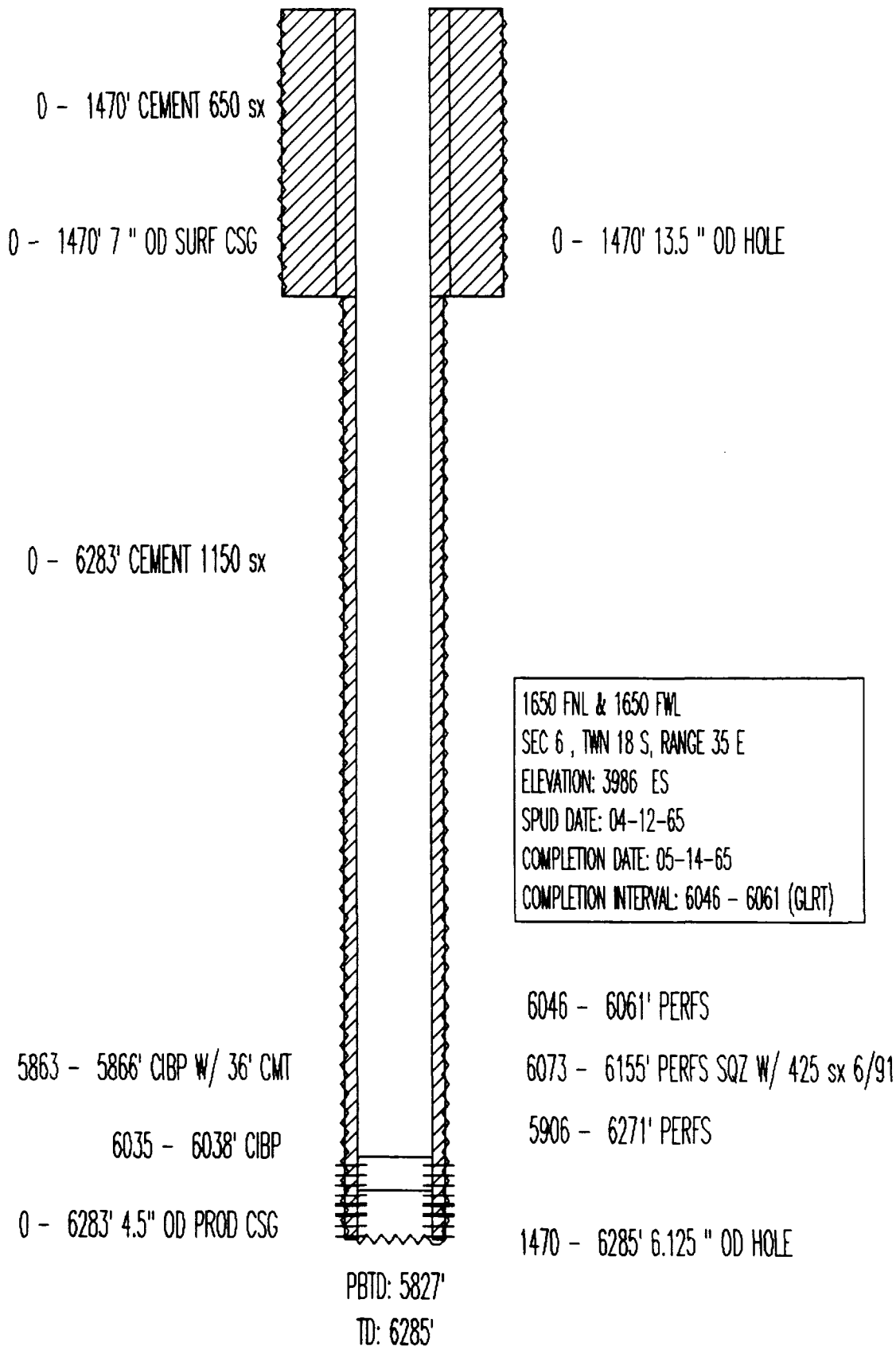
TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 119
API# 3002521108



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 126
API# 3002521031



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 127
API# 3002521292



TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 128
API# 3002521054

0 - 1500' CEMENT 900 sx

0 - 1500' 11.75" OD SURF CSG

0 - 1500' 13.75" OD HOLE

0 - 6320' 2.875" OD TBG

1650 FNL & 1980 FEL
SEC 6 , T14N 18 S, RANGE 35 E
ELEVATION: 3983 DF
SPUD DATE: 01-08-65
COMPLETION DATE: 02-02-65
COMPLETION INTERVAL: 6054 - 6068 (GLRT)

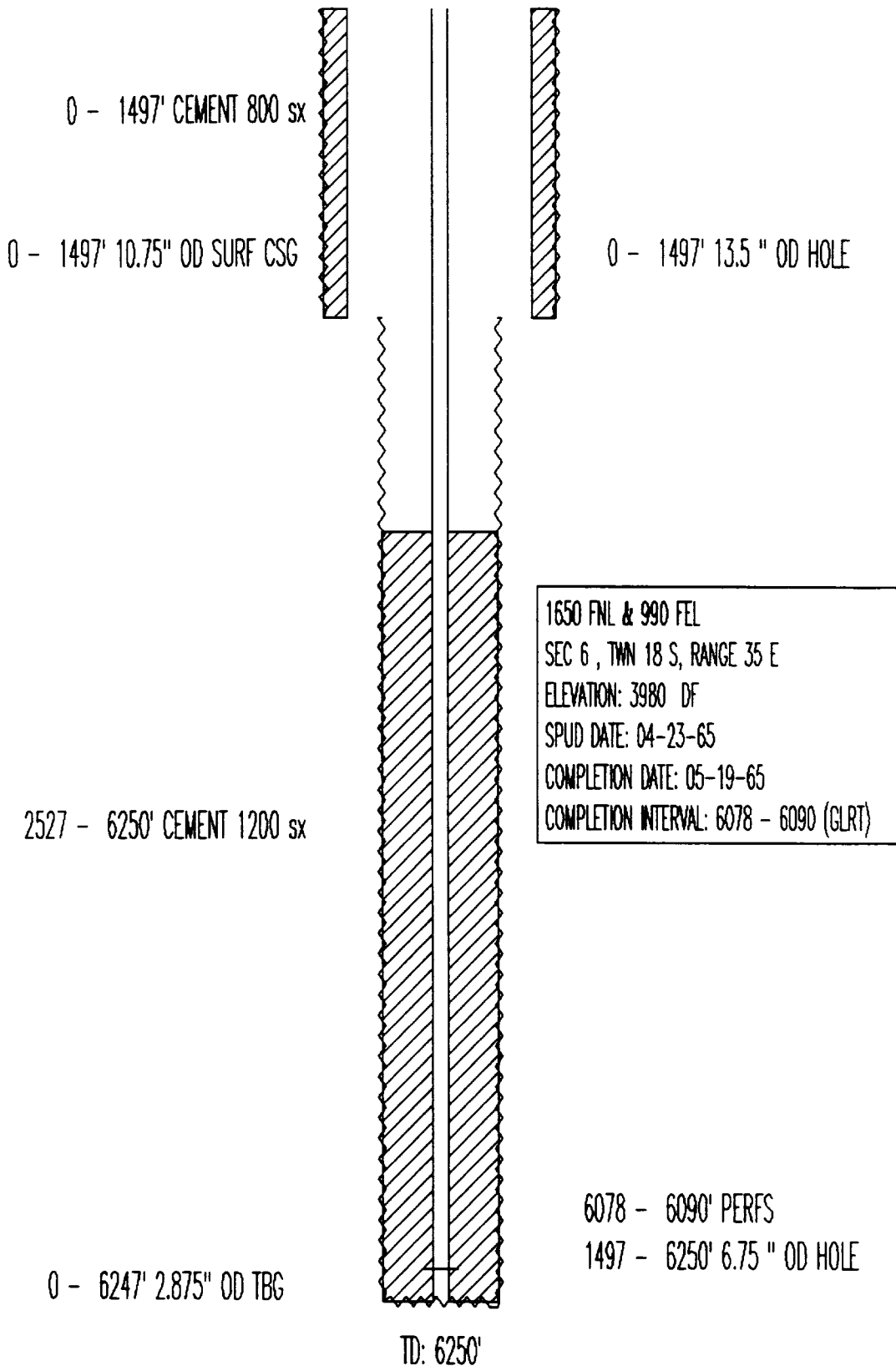
5213 - 6322' CEMENT 800 sx

6054 - 6068' PERFS
6142 - 6184' PERFS ADD 7/71
1500 - 6322' 9.875" OD HOLE

PBTD: 6312'

TD: 6322'

TEXACO EXPL & PROD
VAC GLOR WEST UNIT NO. 129
API# 3002521425



MARATHON
WARN-STATE AC1 NO. 3
API# 3002520748

0 - 356' 13.375" OD SURF CSG

0 - 356' CEMENT 375 sx

0 - 356' 17.5 " OD HOLE

0 - 5002' CEMENT 2650 sx

0 - 5002' 9.625" OD INT CSG

356 - 5002' 12.25 " OD HOLE

2965 - 10301' CEMENT 1400 sx

2080 FNL & 1908 FWL

SEC 31 , TWN 17 S, RANGE 35 E

ELEVATION: 3988 DF

SPUD DATE: 07-02-64

COMPLETION DATE: 07-01-64

COMPLETION INTERVAL: 9122 - 9279 (ABO)

SECOND CMPL INTRVL: 9975 - 10031 (WFCMP)

THIRD CMPL INTRVL: 10124 - 10146 (PSLV)

0 - 10245' 2.875" OD TBG

0 - 10241' 2.875" OD TBG

0 - 10241' 2.875" OD TBG

9122 - 9279' PERFS (ABO)

9400 - 9403' CIBP

9975 - 10031' PERFS (WFCMP)

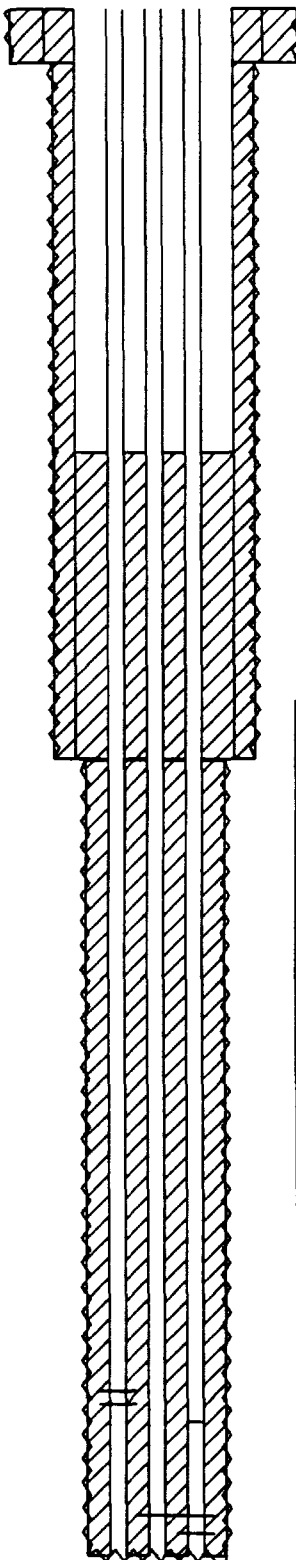
10124 - 10146' PERFS (PENN)

10005 - 10029' PERFS (UPP PENN) 6/84

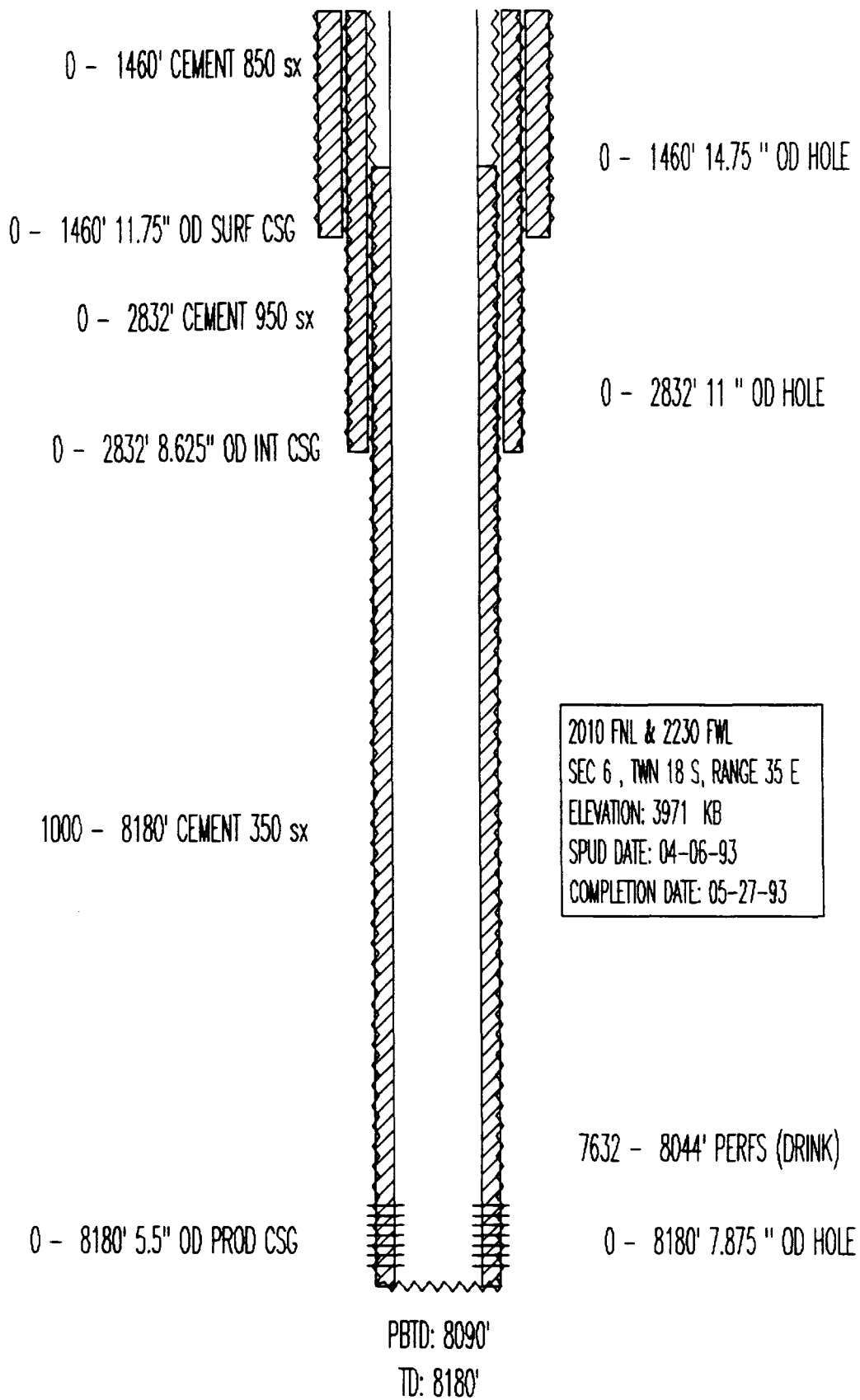
5002 - 10301' 8.5 " OD HOLE

PBTD: 10245'

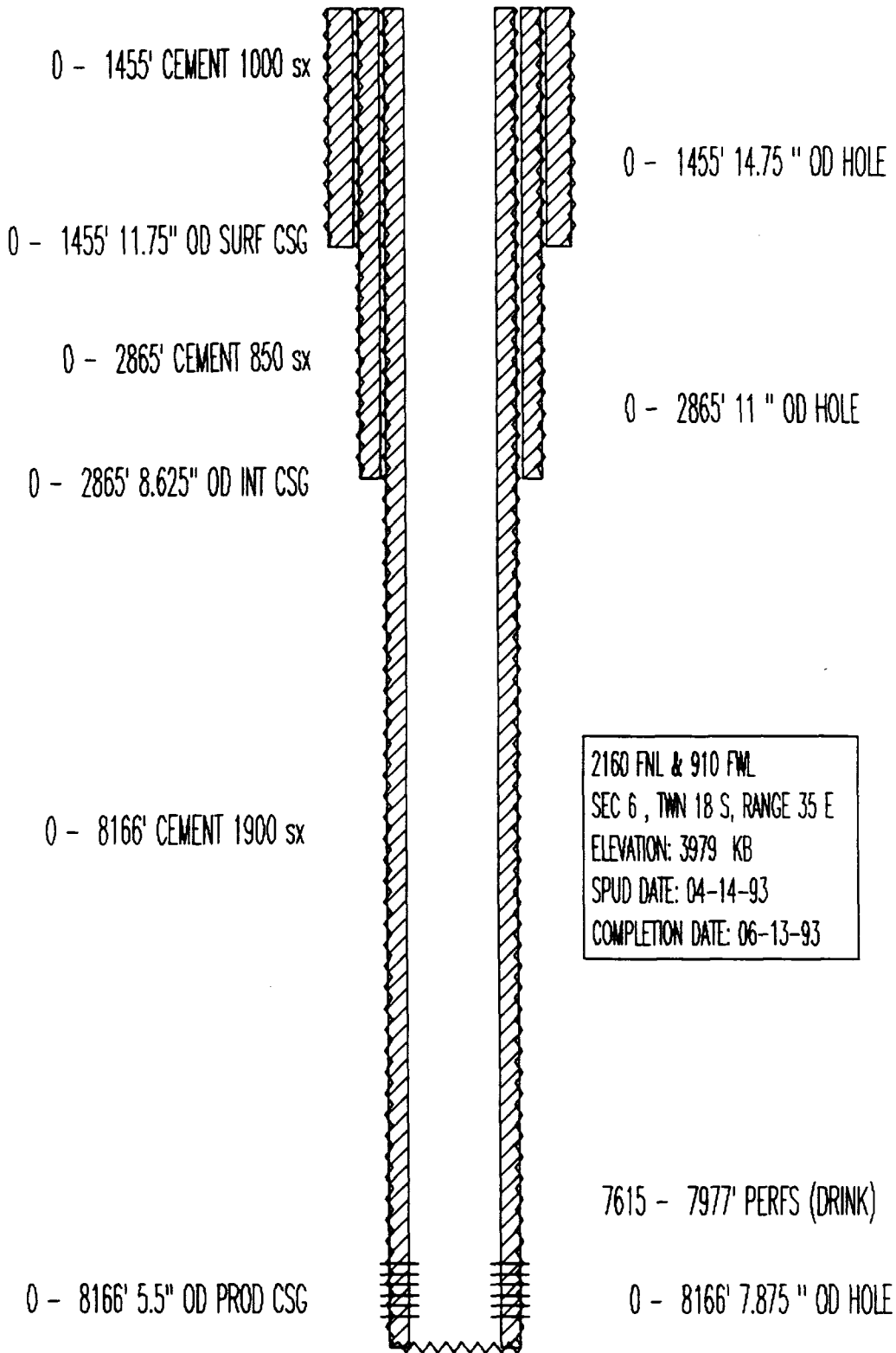
TD: 10301'



MARATHON
WARN ST. AC2 NO. 19
API# 3002531927



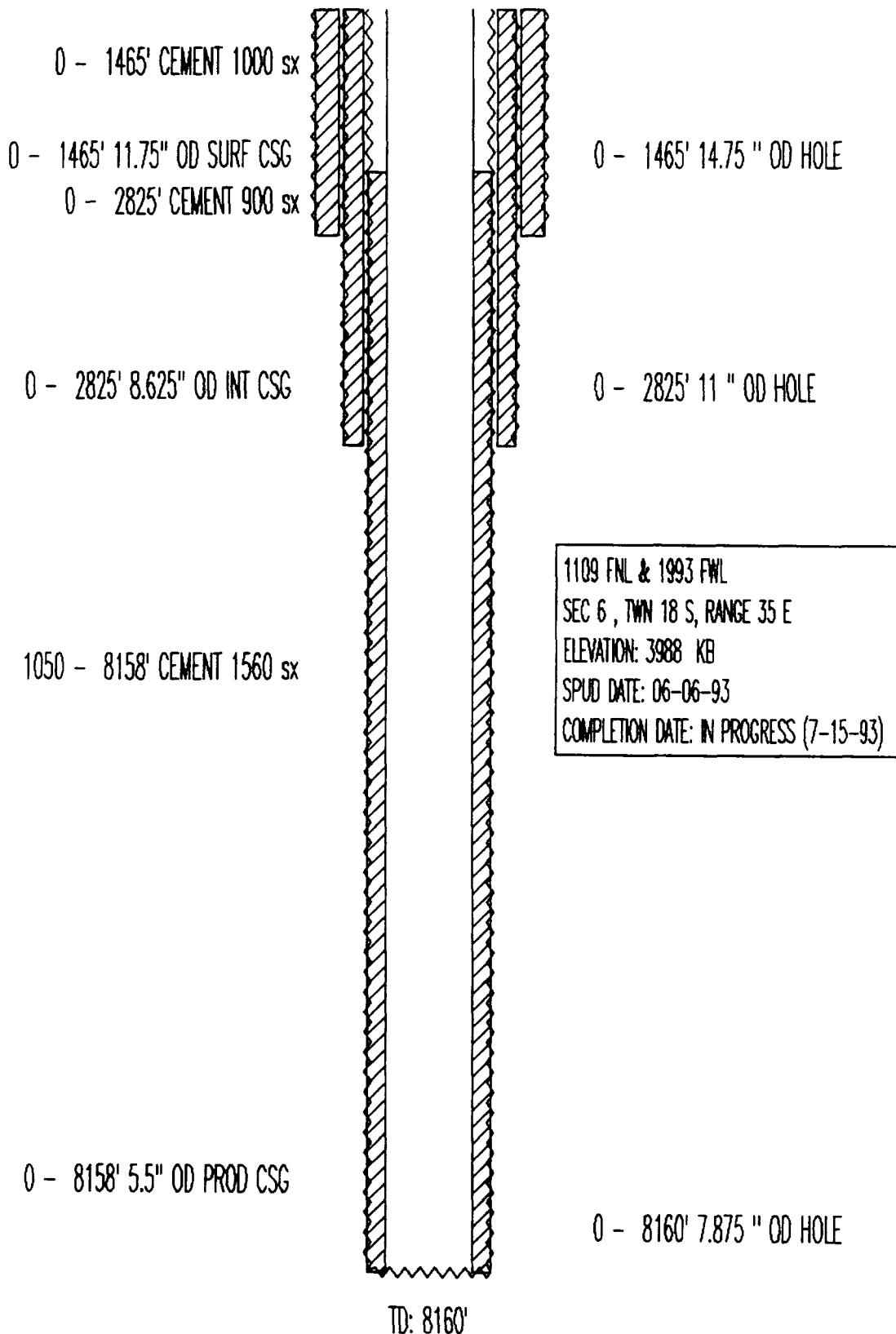
MARATHON
WARN ST. AC2 NO. 20
API# 3002531934



2160 FNL & 910 FWL
SEC 6 , T11N 18 S, RANGE 35 E
ELEVATION: 3979 KB
SPUD DATE: 04-14-93
COMPLETION DATE: 06-13-93

PBTD: 8074'
TD: 8166'

MARATHON
WARN ST. AC2 NO. 21
API# 3002531969



P&A WELLS
OUTSIDE UNIT

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

PLUGGED AND ABANDONED WELLS OUTSIDE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

Operator	Lease Name	Well No.	API Number	Type	TOC *	Construction	Date Drilled	Record of Completion	Depth	Plugging Detail	Unit	Location
Mobil	Bridges St	115	3002522850	P&A	1570' M	See Diagram	11-20-68	See Diagram	6242'	See Diagram	A	25 17S 34E 900 FN, 900 FE
Phillips	EVGSAU	2271-007	3002520870	P&A	Surface	.	05-26-64	.	6300'	.	P	22 17S 35E 330 FS, 660 FE
Texaco	NM AB State	05	3002520163	P&A	2598' C	.	01-18-63	.	8851'	.	J	6 18S 35E 1800 FS, 1650 FE
Exxon	NM J State	03	3002520708	P&A	3937' C	.	08-05-64	.	6280'	.	M	19 17S 35E 330 FS, 330 FW
Texaco	NM N State	05	3002520941	P&A	3711' C	.	03-24-64	.	6863'	.	M	30 17S 35E 560 FS, 560 FW
Texaco	NM N State	09	3002523854	P&A	2675' M	.	08-27-71	.	6250'	.	D	30 17S 35E 980 FN, 913 FW
Texaco	NM O State NCT1	24	3002520946	P&A	4443' C	.	03-23-64	.	10300'	.	P	36 17S 34E 860 FS, 660 FE
Texaco	NM R State NCT1	07	3002520503	P&A	5371' C	.	06-24-63	.	8850'	.	J	6 18S 35E 2310 FN, 1650 FE
Texaco	NM R State NCT1	10	3002521109	P&A	3100' C	.	02-26-65	.	6150'	.	B	6 18S 35E 330 FN, 2136 FE
Shell	State I	03	3002520827	P&A	5141' C	.	04-20-64	.	6300'	.	A	30 17S 35E 660 FN, 660 FE
Phillips	Vac Abo Un	10-07	3002503013	P&A	2960' M	.	08-01-61	.	9100'	.	K	34 17S 35E 1980 FS, 1650 FW

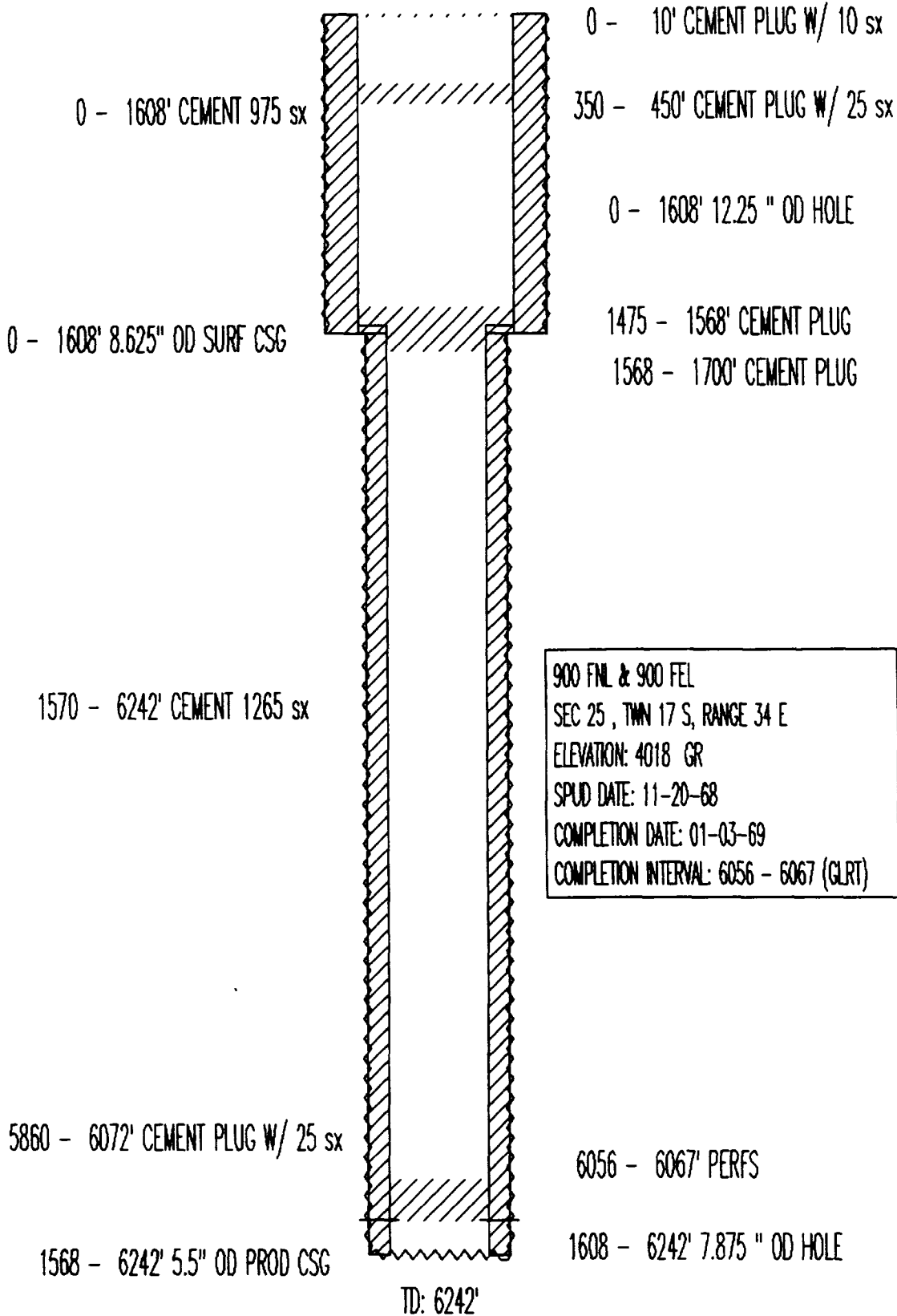
* Top of Cement

M - Measured by Temp. Survey or Cement Band Log

E - Estimated

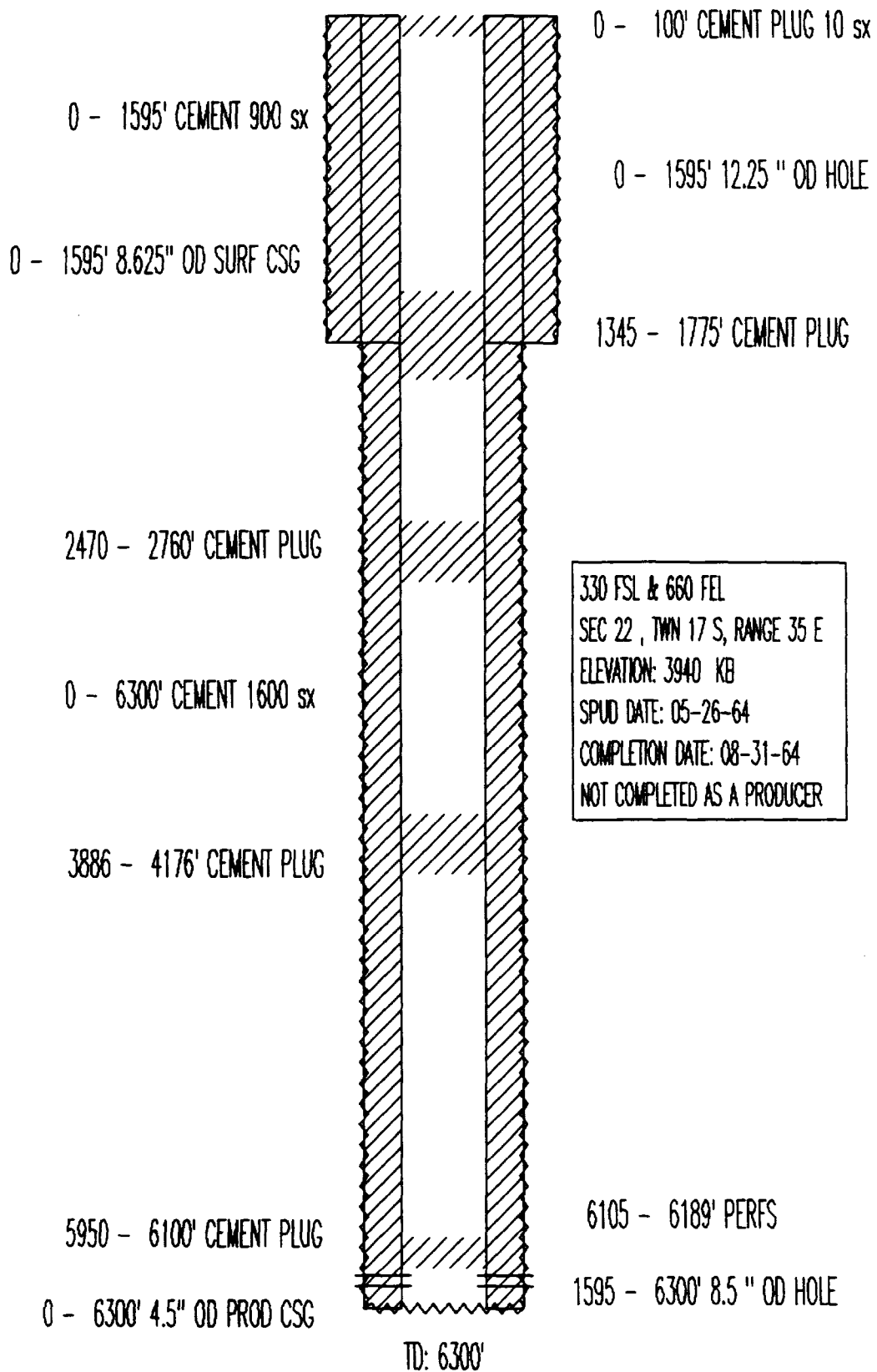
C - Calculated using a cement yield of 1.32 cu. ft./sack
and assuming 50 % excess

MOBIL PROD TX & NM
BRIDGES STATE NO. 115
API# 3002522850



900 FNL & 900 FEL
SEC 25 , T14N 17 S, RANGE 34 E
ELEVATION: 4018 GR
SPUD DATE: 11-20-68
COMPLETION DATE: 01-03-69
COMPLETION INTERVAL: 6056 - 6067 (GLRT)

PHILLIPS PET
EVGSAU NO. 2271-007
API# 3002520870



TEXACO EXPL & PROD
NEW MEXICO AB STATE NO. 5
API# 3002520163

0 - 340' 11.75" OD SURF CSG

0 - 340' CEMENT 300 sx

0 - 3070' CEMENT 1400 sx

0 - 3070' 8.625" OD INT CSG

2598 - 8851' CEMENT 1500 sx

1800 FSL & 1650 FEL
SEC 6, TWN 18 S, RANGE 35 E
ELEVATION: 3982 DF
SPUD DATE: 01-18-63
COMPLETION DATE: 03-14-63
COMPLETION INTERVAL: 8694 - 8794 (ABO)

0 - 8850' 2.875" OD TBG

0 - 8849' 2.875" OD TBG

TD: 8851'

0 - 340' 13.75 " OD HOLE

0 - 320' CEMENT PLUG

0 - 320' CEMENT PLUG

320 - 323' CIBP

320 - 323' CIBP

1500 - 1503' CIBP W/ 35' CEMENT

1500 - 1503' CIBP W/ 35' CEMENT

340 - 3070' 9.875 " OD HOLE

2205 - 6588' CEMENT PLUG

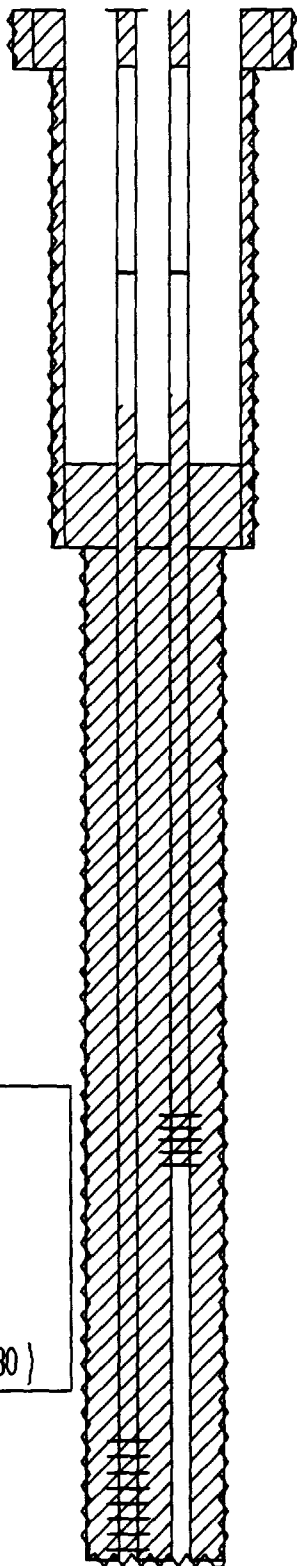
2260 - 8794' CEMENT PLUG

6300 - 6588' PERFS (DRNK)

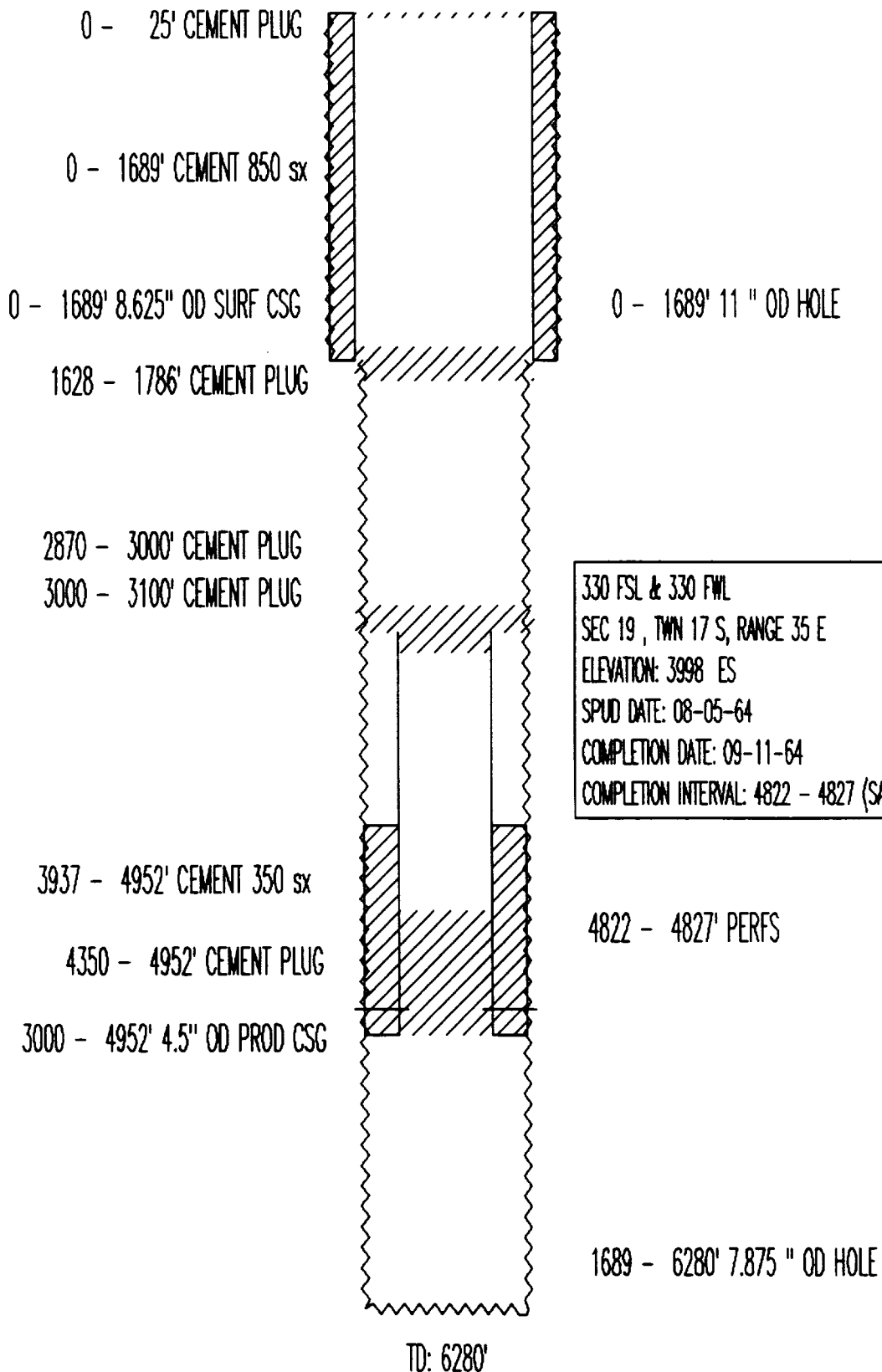
8172 - 8794' PERFS (ABO)

8790 - 8794' (COMMINGLED)

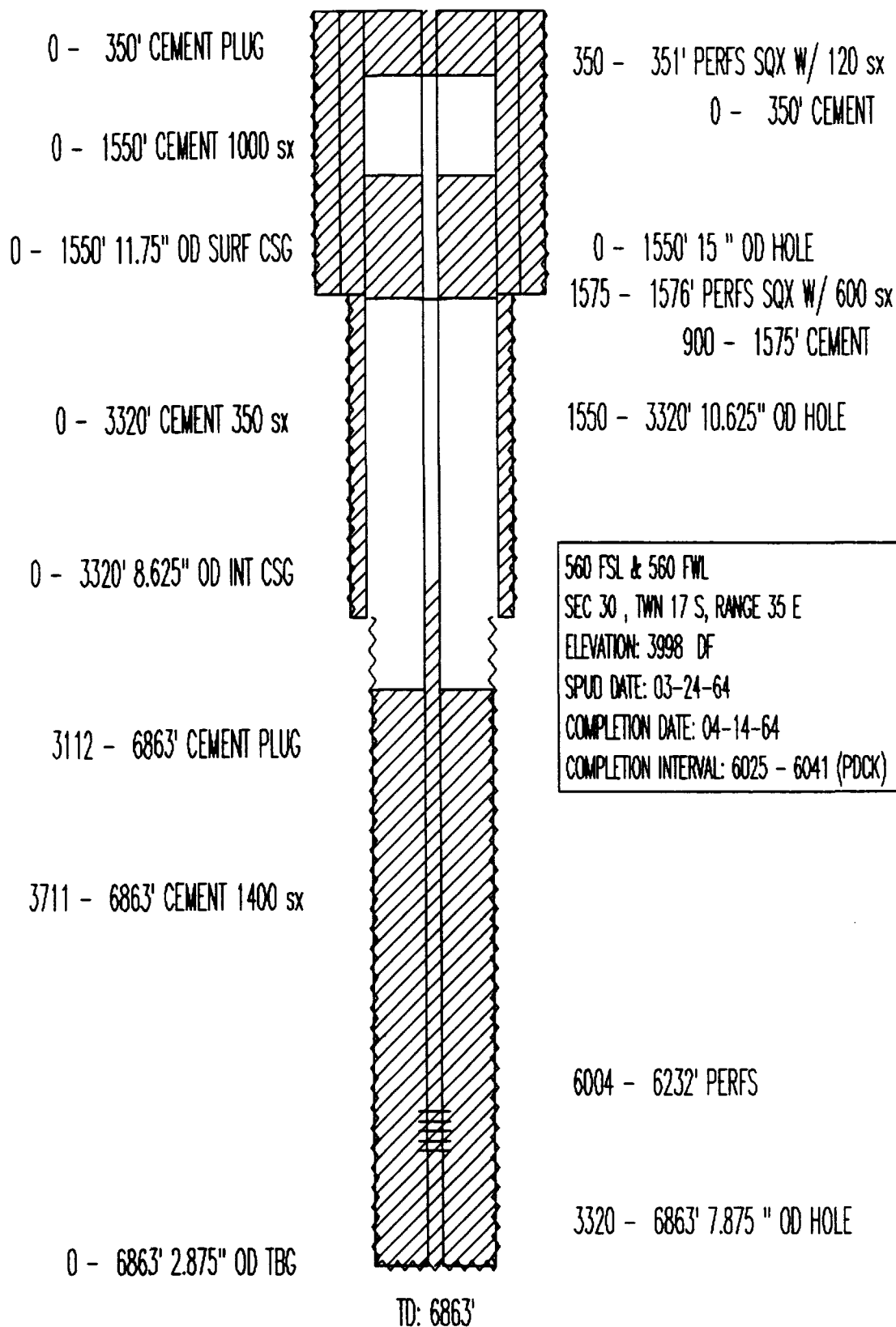
3070 - 8851' 6.75 " OD HOLE



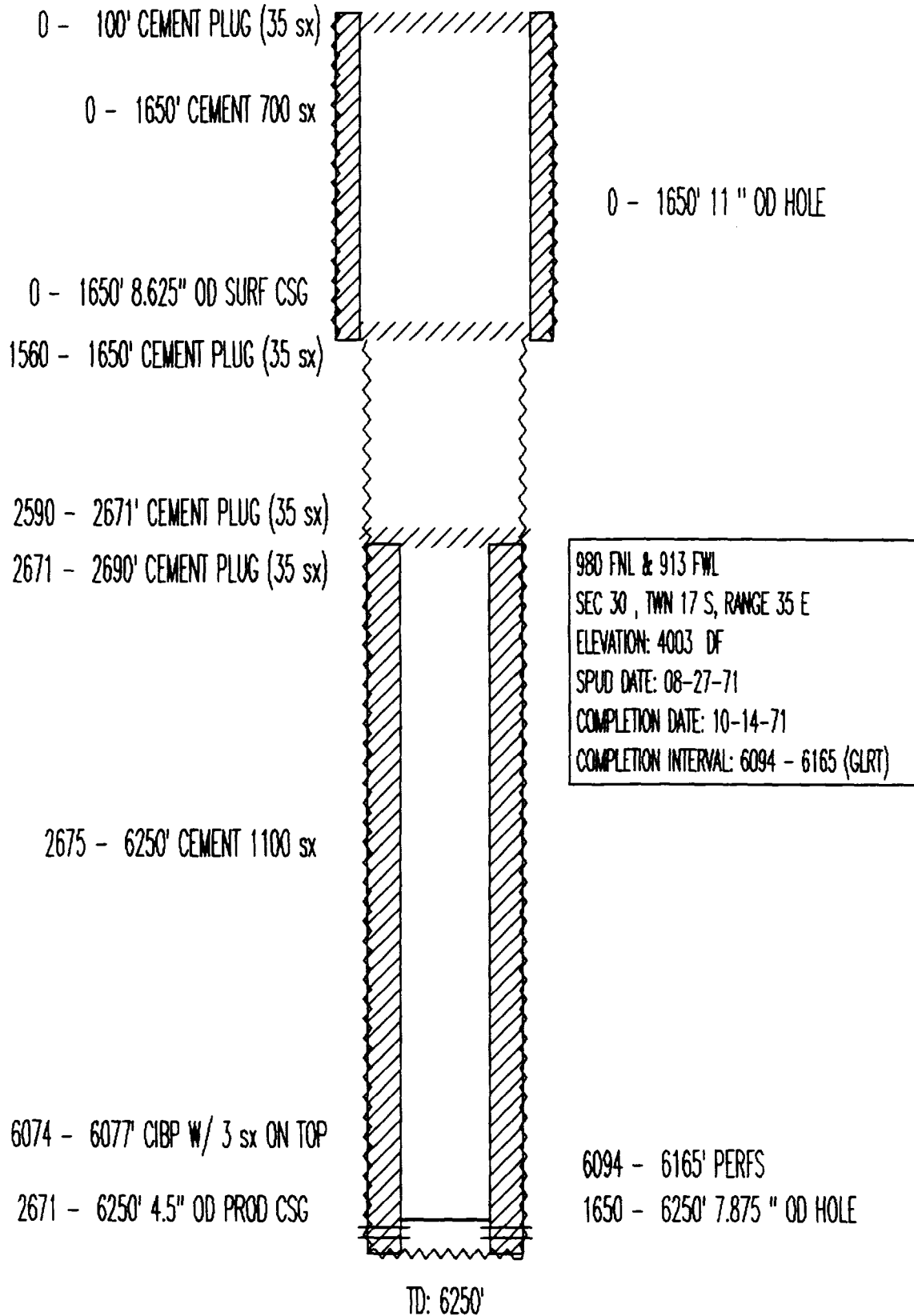
EXXON
NEW MEXICO J STATE NO. 3
API# 3002520708



TEXACO EXPL & PROD
NEW MEXICO N STATE NO. 5
API# 3002520941



TEXACO EXPL & PROD
NEW MEXICO N STATE NO. 9
API# 3002523854



TEXACO EXPL & PROD
NEW MEXICO O ST. NCT-1 NO. 24
API# 3002520946

0 - 1534' CEMENT 850 sx
0 - 1534' 13.375" OD SURF CSG

0 - 4418' CEMENT 1500 sx
1534 - 4418' 12.25 " OD HOLE
0 - 4418' 9.625" OD INT CSG

4443 - 10300' CEMENT 2400 sx

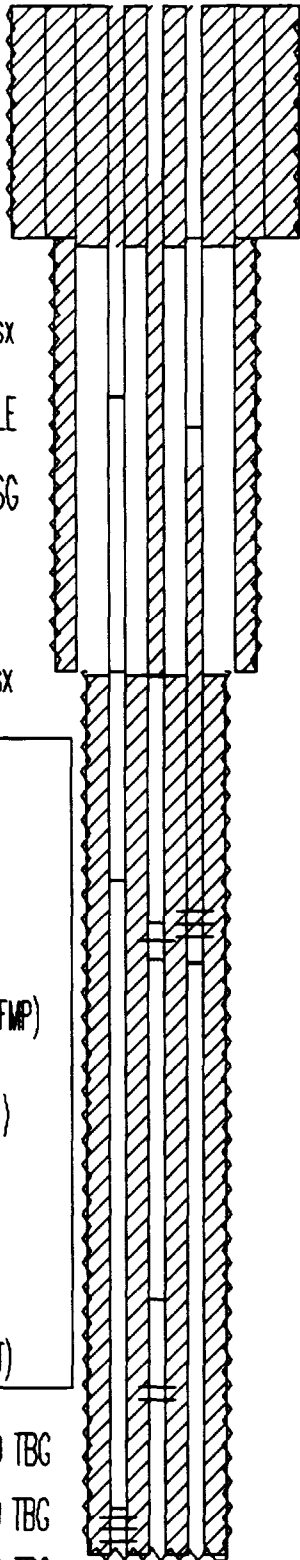
860 FSL & 660 FEL
SEC 36 , TWN 17 S, RANGE 34 E
ELEVATION: 3995 KB
spud date: 03-23-64
COMPLETION DATE: 07-04-64
COMPLETION INTERVAL: 10042 - 10062 (WFMP)

SECOND CMPL INTRVL: 9133 - 9263 (ABO)

THIRD CMPL INTRVL: 5942 - 5954 (GLRT)

COMPLETION DATE: 08-01-72
COMPLETION INTERVAL: 5942 - 6102 (GLRT)

0 - 10229' 2.875" OD TBG
0 - 10294' 2.875" OD TBG
0 - 10300' 2.875" OD TBG



TD: 10300'

0 - 1534' 17.5 " OD HOLE

0 - 1597' CEMENT

0 - 50' CEMENT PLUG (Glt)
1534 - 1537' CIBP W/35' CMT (Glt)
2800 - 2803' CIBP W/35' CMT (Glt)
3065 - 6173' CEMENT PLUG (Glt)
6350 - 6353' CIBP W/30' CMT (Glt)

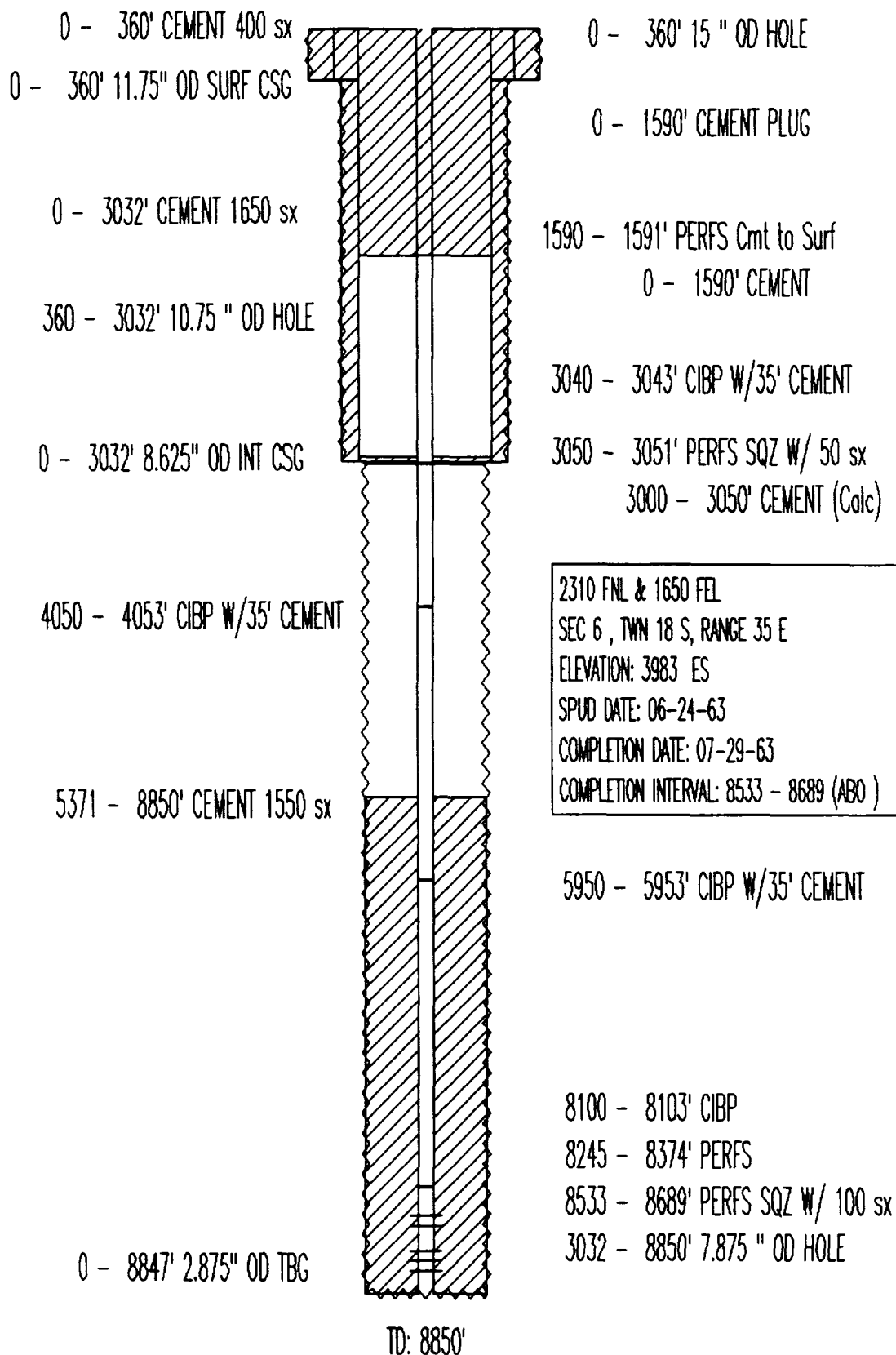
0 - 50' CEMENT PLUG (Abo)
1113 - 4450' CEMENT PLUG (Abo)
4450 - 4453' CIBP (Abo)
6080 - 6083' CIBP W/35' CMT (Abo)
6330 - 6333' CIBP W/30' CMT (Abo)
8590 - 8593' CIBP W/30' CMT (Abo)

0 - 1597' CEMENT PLUG (Wolf)
1957 - 1597' PERFS Cmt to Surf
2600 - 2603' CIBP W/35' CMT (Wolf)
4418 - 4421' CIBP W/35' CMT (Wolf)
5800 - 5803' CIBP W/35' CMT (Wolf)
9990 - 9993' CIBP W/35' CMT (Wolf)

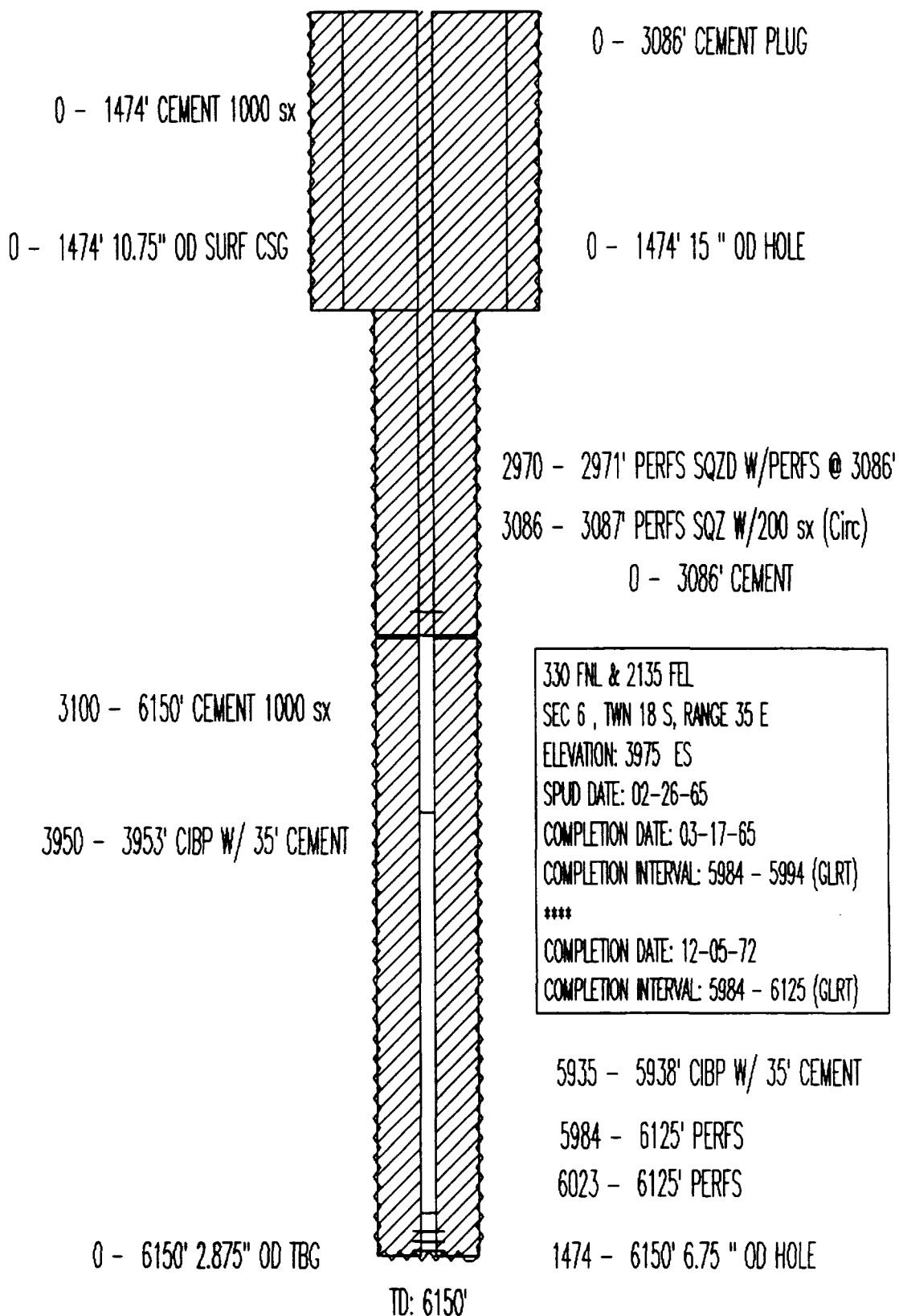
5942 - 6173' PERFS (Glt)
6191 - 6200' PERFS (Glt)
9133 - 9263' PERFS (Abo)
10042 - 10212' PERFS (Wolf)

4418 - 10300' 8.5 " OD HOLE

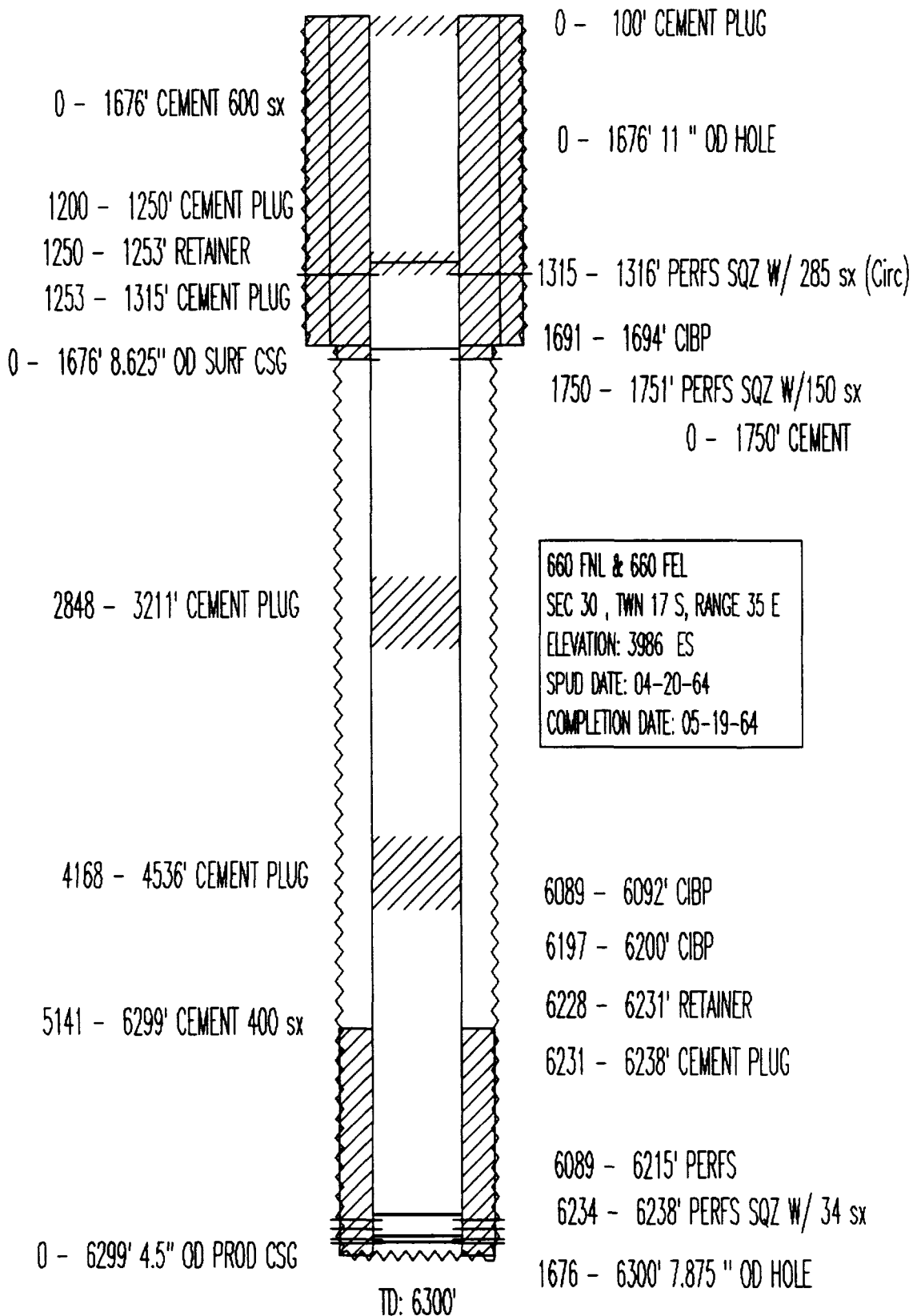
TEXACO EXPL & PROD
NEW MEXICO R ST. NCT-1 NO. 7
API# 3002520503



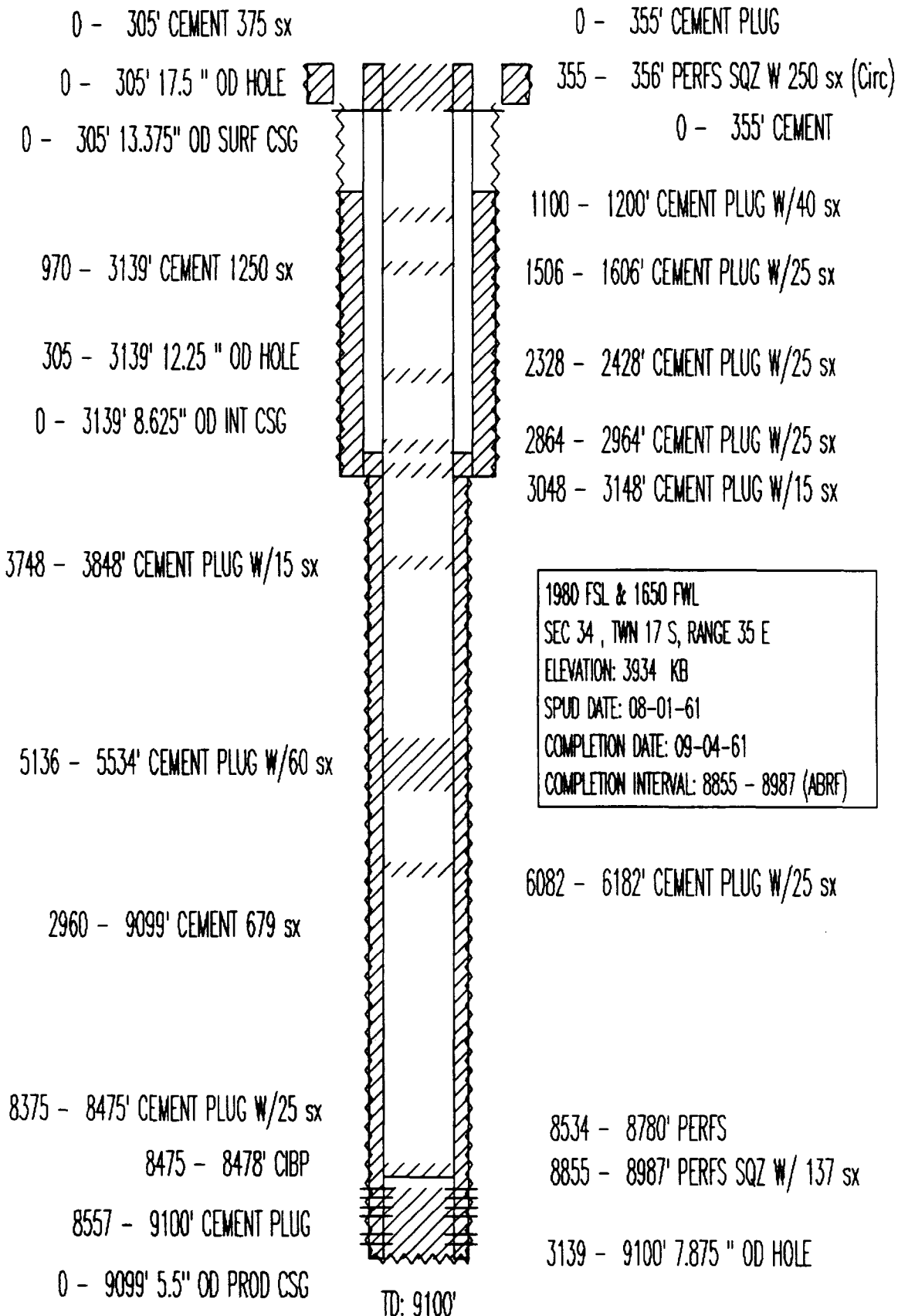
TEXACO EXPL & PROD
NEW MEXICO R ST. NCT-1 NO.10
API# 3002521109



SHELL
STATE I NO. 3
API# 3002520827



PHILLIPS PET
VAC ABO UNIT TR10 NO. 7
API# 3002503013



**PERMITTED WELLS IN
AREA OF REVIEW**

VACUUM GLORIETA EAST UNIT

ATTACHMENT IV TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

WELLS WITHIN 1/2 MILE RADIUS OF REVIEW

PERMITTED WELLS OR CURRENTLY BEING DRILLED OUTSIDE THE VACUUM GLORIETA EAST UNIT

WELL DATA TABLE

<u>Operator</u>	<u>Lease Name</u>	<u>Well No.</u>	<u>API Number</u>	<u>Proposed Depth</u>	<u>Unit</u>	<u>Location</u>
Texaco	NM AB State	10	3002531991	8200'	J	6 18S 35E 2085 FS, 1872 FE
Texaco	NM L State	12	3002531992	7950'	H	1 18S 34E 1880 FN, 660 FE
Texaco	NM L State	15	3002532009	7950'	A	1 18S 34E 660 FN, 510 FE
Texaco	NM R State NCT1	13	3002531990	8150'	G	6 18S 35E 1905 FN, 2130 FE
Texaco	NM R State NCT1	14	3002532018	8150'	B	6 18S 35E 860 FN, 2000 FE
Texaco	NM R State NCT1	15	3002532019	8150'	A	6 18S 35E 510 FN, 640 FE
Texaco	VGWU	108	3002531875	8150'	P	36 17S 34E 213 FS, 351 FE
Texaco	VGWU	121	3002531876	6343'	A	1 18S 34E 964 FN, 90 FE
Texaco	VGWU	122	3002531877	6373'	D	6 18S 35E 845 FN, 1061 FW
Texaco	VGWU	123	3002531878	6389'	C	6 18S 35E 1005 FN, 2244 FW
Texaco	VGWU	124	3002531879	6408'	B	6 18S 35E 1020 FN, 1519 FE

**VACUUM GLORIETA EAST UNIT
ATTACHMENT VII TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER**

**DATA ON THE PROPOSED OPERATION
OF THE
VACUUM GLORIETA EAST UNIT**

The proposed average and maximum daily Unit water injection rates are:

Average daily rate 25,000 BWPD
Maximum daily rate 35,000 BWPD

The injection system will be closed.

The proposed average and maximum surface injection pressures are:

Average injection pressure 950 PSIG
Maximum* injection pressure 1220 PSIG

* Maximum injection pressure is based on 0.2 psi/foot gradient until actual fracture gradients are determined.

There are four sources of injection water makeup. These sources are Glorieta/Paddock produced water from the Vacuum Glorieta East Unit, San Andres produced water from Phillips operated East Vacuum Grayburg San Andres Unit, Abo produced water from the Mobil operated North Vacuum Abo Unit, and Ogallala fresh water from the EVGSAU water supply wells. Included in this section is a tabular forecast of the volumes of injection water used from each source. Also included are the chemical analyses of each water source, water compatibility analyses, and scale tendency reports of various injection water mixtures. In addition, are the results of a Vacuum Glorieta core flood test conducted by Texaco, and a geologic report prepared by Phillips discussing the effect waterflooding will have on the reservoir.

Water compatibility of various mathematical mixtures of the four sources of makeup water were analyzed using the Stiff-Davis Method. These laboratory analyses confirm that the water sources are compatible, but will require chemical treatment. The calcium carbonate (CaCO_3) scaling tendency of all four water sources are similar. Mixing these waters does not significantly increase CaCO_3 scaling. All of the waters are undersaturated with respect to calcium sulfate (CaSO_4) and their mixtures are capable of carrying more CaSO_4 . This condition is expected to change as the waterflood matures. Scale deposition will be controlled with liquid phosphate scale inhibitors. The formation of iron sulfide or barium sulfate do not appear to be a significant problem as iron and barium content is low. The produced water contains H_2S and CO_2 contaminants and will be treated with corrosion inhibitors.

A geologic study of 10 cores in the Vacuum Glorieta field indicates little presence of swelling clays or soluble salts that will harm the reservoir by the proposed injection program. This conclusion is detailed in the attached report. In addition, Texaco had Core Laboratories of Western Atlas International perform a core flood study to document the effect of water injection on Vacuum Glorieta core. The core sample was taken Texaco's New Mexico State "O" NCT-1 No. 26. This well is located in Section 36 of Texaco's Vacuum Glorieta West Unit, approximately one and a half miles west of the proposed Vacuum Glorieta East Unit. The core taken from this well is geologically identical to the Vacuum Glorieta East Unit reservoir. The Core Laboratories' study concluded that the "Injection of the Ogallala waters appears to have no significant negative effect on these samples". These conclusions were included in Texaco's Application for Authorization to Inject Water for Secondary Recovery, Form C-108, for the Vacuum Glorieta West Unit, dated July 23, 1992 and submitted before the NMOCD on that date. The core flood results have been reproduced and are included herein.

VACUUM GLORIETA EAST UNIT

LEA COUNTY, NEW MEXICO

PRODUCED AND INJECTED WATER FORECAST

DATE	AVERAGE WATER INJECTED (BWPM)	AVG VGEU WATER PRODUCED (BWPM)	AVERAGE WATER MAKE-UP (BWPM)	AVG EVGSAU WATER AVAILABLE (BWPM)	AVERAGE FRESH WATER W/O MOBIL ABO (BWPM)	AVG MOBIL ABO WATER AVAILABLE (BWPM)	AVERAGE FRESH WATER MAKE-UP REQ'D (BWPM)
1993	0	62,750	0	0	0	0	0
1994	87,445	66,000	54,445	152,083	0	0	0
1995	369,059	73,250	295,809	152,083	143,725	0	0
1996	652,715	112,000	540,715	228,125	312,590	212,917	99,673
1997	939,867	206,667	733,200	228,125	505,075	212,917	292,159
1998	930,135	340,500	589,635	228,125	361,510	212,917	148,593
1999	906,899	456,917	449,982	228,125	221,857	212,917	8,940
2000	870,466	515,917	354,549	228,125	126,424	212,917	0
2001	839,683	555,000	284,683	228,125	56,558	212,917	0
2002	819,662	583,417	236,245	228,125	8,120	212,917	0
2003	795,578	607,250	188,328	228,125	0	0	0
2004	766,524	623,583	142,941	152,083	0	0	0
2005	748,274	637,167	111,107	152,083	0	0	0
2006	739,998	648,333	91,664	152,083	0	0	0
2007	735,937	657,583	78,354	152,083	0	0	0
2008	733,932	665,500	68,432	152,083	0	0	0
2009	732,976	672,333	60,642	152,083	0	0	0
2010	732,534	678,083	54,451	76,042	0	0	0
2011	732,362	683,083	49,279	76,042	0	0	0
2012	732,291	687,500	44,791	76,042	0	0	0
2013	732,291	691,417	40,875	76,042	0	0	0
2014	732,291	694,750	37,541	76,042	0	0	0
2015	732,291	697,833	34,458	76,042	0	0	0
2016	732,291	700,583	31,708	76,042	0	0	0
2017	732,291	703,000	29,291	76,042	0	0	0
2018	732,291	705,250	27,041	76,042	0	0	0
2019	732,291	707,250	25,041	76,042	0	0	0
2020	732,291	709,083	23,208	76,042	0	0	0

UNICHEM INTERNATIONAL
707 NORTH LEECH P. O. BOX 1499
HOBBS, NEW MEXICO

RESULTS OF WATER ANALYSIS

TO: Mr. Scott Malone
 Phillips Petroleum Company
 4001 Penbrook, Odessa, Texas 79762

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

No. 1	EVGSAU Supply #2060-S01, 1886' FS & 2083' FE, Sec 20-17S-35E, Lea Co. NM	05-28-1993
No. 2	EVGSAU Supply #2864-S02, 1900' FN & 600' FW, Sec 28-17S-35E, Lea Co. NM	05-28-1993
No. 3	EVGSAU Supply #2721-S04, 550' FS & 1850' FW, Sec 27-17S-35E, Lea Co. NM	05-28-1993
No. 4	EVGSAU Supply #3366-S06, 2100' FN & 550' FW, Sec 33-17S-35E, Lea Co. NM	05-28-1993
No. 5	EVGSAU Supply #3202-S07, 600' FS & 1650' FE, Sec 32-17S-35E, Lea Co. NM	05-28-1993

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5
Specific Gravity	1.000	1.000	1.000	1.000	1.000
Total Dissolved Solids	408	493	278	371	433
pH	6.8	6.9	6.8	6.9	6.8
Ionic Strength	0.009	0.01	0.006	0.009	0.009
CATIONS: (mg/liter)					
Calcium (Ca+2)	80	80	44	74	90
Magnesium (Mg+2)	18.2	18.2	29.2	17.0	12.2
Sodium (Na+1)	11.2	38.2	26.6	9.51	19.4
Iron (Fe+2)	0.3	0.2	0.2	0.3	0.4
Barium (Ba+2)	0.2	0.0	0.0	0.0	0.0
ANIONS: (mg/liter)					
Bicarbonate (HCO3-1)	171	220	134	146	207
Carbonate (CO3-2)	0	0	0	0	0
Hydroxide (OH-1)	0	0	0	0	0
Sulfate (SO4-2)	55.5	41	0	52	38.5
Chloride (Cl-1)	72	96	44	72	76.0
SCALING INDEX (+ Indicates Scale)					
Calcium Carbonate @ 86 F	-0.56	-0.35	-0.90	-0.55	1.8
Calcium Carbonate @ 110 F	0.17	0.38	-0.17	0.18	2.7
Calcium Carbonate @ 130 F	0.52	0.72	0.17	0.52	3.5
Calcium Carbonate @ 140 F	0.71	0.91	0.36	0.71	4.0
Calcium Carbonate @ 160 F	1.1	1.3	0.76	1.1	4.8
Calcium Sulfate @ 86 F	-17	-18	-19	-18	-17
Calcium Sulfate @ 110 F	-17	-18	-19	-18	-17
Calcium Sulfate @ 130 F	-17	-18	-19	-18	-17
Calcium Sulfate @ 140 F	-17	-18	-19	-18	-17
Calcium Sulfate @ 160 F	-17	-18	-19	-18	-17
Sample for EVGSAU Well No. 2941-S05 not available					

UNICHEM INTERNATIONAL
707 NORTH LEECH P. O. BOX 1499
HOBBS, NEW MEXICO

RESULTS OF WATER ANALYSIS

TO: Mr. Scott Malone
 Phillips Petroleum Company
 4001 Penbrook, Odessa, Texas 79762

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

No. 1	San Andres produced water from East Vacuum Grayburg Unit IPD, Lea County, NM	taken 05-28-1993
No. 2	San Andres produced water from East Vacuum Grayburg Unit IPD, Lea County, NM	taken 06-28-1993
No. 3	Glorieta/Paddock produced water from the Santa Fe #17 Battery, Lea Co. NM	taken 05-28-1993
No. 4	Glorieta/Paddock produced water from the Santa Fe #17 Battery, Lea Co. NM	taken 06-28-1993
No. 5	Abo produced water from Mobil's North Vacuum Abo Unit SWD System, Lea Co. NM	taken 06-28-1993

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5
Specific Gravity	1.096	1.055	1.066	1.137	1.039
Total Dissolved Solids	133,794	77,650	92,617	191,883	55,028
pH	6.0	6.25	6.2	6.9	6.98
Ionic Strength	2.440	1.430	1.722	3.40	1.04
CATIONS: (mg/liter)					
Calcium (Ca+2)	2560	2365	2640	1964	2005
Magnesium (Mg+2)	1260	704	875	899	680
Sodium (Na+1)	47,300	26,364	31,800	71,619	18,188
Iron (Fe+2)	2.60	0.0	1.10	0.1	0.5
Barium (Ba+2)	0.800	0.0	0.400	0.0	N/R
Manganese (Mn+2)	0.0	N/R	N/R	N/R	N/R
ANIONS: (mg/liter)					
Bicarbonate (HCO3-1)	1770	1817	488	561	463
Carbonate (CO3-2)	0	0	0	0	0
Hydroxide (OH-1)	0	0	0	0	0
Sulfate (SO4-2)	2900	2398	2780	2839	1691
Chloride (Cl-1)	78,000	44,000	54,000	114,000	32,000
DISSOLVED GASES:					
Carbon Dioxide (CO2)	300	592	30	N/R	43
Hydrogen Sulfide (H2S)	68.0	49.0	102	94	56
Oxygen (O2)	0.100	0.0	0.0	0.0	0.0
SCALING INDEX (+ Indicates Scale)					
Calcium Carbonate @ 86 F	0.11	0.20	-0.40	0.72	0.27
Calcium Carbonate @ 110 F	0.84	0.43	0.33	0.95	0.50
Calcium Carbonate @ 130 F	1.2	0.69	0.68	1.2	0.76
Calcium Carbonate @ 140 F	1.4	0.98	0.87	1.5	1.05
Calcium Carbonate @ 160 F	1.8	1.3	1.3	1.85	1.37
Calcium Sulfate @ 86 F	-20	N/R	-14	N/R	N/R
Calcium Sulfate @ 110 F	-20	N/R	-14	N/R	N/R
Calcium Sulfate @ 130 F	-20	N/R	-14	N/R	N/R
Calcium Sulfate @ 140 F	-20	N/R	-14	N/R	N/R
Calcium Sulfate @ 160 F	-17	N/R	-9.5	N/R	N/R
N/R - Not Recorded					

UNICHEM INTERNATIONAL
707 NORTH LEECH P. O. BOX 1499
HOBBS, NEW MEXICO

RESULTS OF WATER ANALYSIS

TO: Mr. Scott Malone
 Phillips Petroleum Company
 4001 Penbrook, Odessa, Texas 79762

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

No. 1 Mixture of 50% Paddock and 50% San Andres taken 06-03-1993

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5
Specific Gravity	1.081				
Total Dissolved Solids	113,206				
pH	6.10				
Ionic Strength	2.081				
CATIONS: (mg/liter)					
Calcium (Ca+2)	2600				
Magnesium (Mg+2)	61,070				
Sodium (Na+1)	36,900				
Iron (Fe+2)	1.85				
Barium (Ba+2)	0.600				
Manganese (Mn++)	N/R				
ANIONS: (mg/liter)					
Bicarbonate (HCO ₃ -1)	18.5				
Carbonate (CO ₃ -2)	0				
Hydroxide (OH-1)	0				
Sulfate (SO ₄ -2)	2840				
Chloride (Cl-1)	66,000				
SCALING INDEX (+ Indicates Scale)					
Calcium Carbonate @ 86 F	-0.08				
Calcium Carbonate @ 110 F	0.65				
Calcium Carbonate @ 130 F	0.99				
Calcium Carbonate @ 140 F	1.2				
Calcium Carbonate @ 160 F	1.6				
Calcium Sulfate @ 86 F	-18				
Calcium Sulfate @ 110 F	-18				
Calcium Sulfate @ 130 F	-18				
Calcium Sulfate @ 140 F	-18				
Calcium Sulfate @ 160 F	-14				

CHAMPION TECHNOLOGIES, INC.
P. O. BOX 2187
HOBBS, NEW MEXICO

RESULTS OF WATER ANALYSIS

TO: Mr. Scott Malone
 Phillips Petroleum Company
 4001 Penbrook, Odessa, Texas 79762

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

No. 1 Mixture of 50 % fresh water from EVGSAU 2060-S01 and Mobil Abo SWD water taken 07-12-1993
 No. 2 Mixture of equal portions of Abo produced, San Andres produced and Paddock produced 07-12-1993
 No. 3 Mixture of 17 % fresh, 17 % Abo prod., 33 % San Andres prod., and 33 % Paddock prod 07-12-1993

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5
Specific Gravity	1.019	1.070	1.060		
Total Dissolved Solids	27,800	108,079	99,011		
pH	6.889	6.80	6.80		
Ionic Strength	0.53	1.960	1.78		
CATIONS: (mg/liter)					
Calcium (Ca+2)	1042	2109	1788		
Magnesium (Mg+2)	349	760	650		
Sodium (Na+1)	9132	38,686	35,670		
Iron (Fe+2)	0.0	0.0	0.0		
Barium (Ba+2)	N/R	N/R	N/R		
Manganese (Mn++)	N/R	N/R	N/R		
ANIONS: (mg/liter)					
Bicarbonate (HCO ₃ -1)	316	946	897		
Carbonate (CO ₃ -2)	0	0	0		
Hydroxide (OH-1)	0	0	0		
Sulfate (SO ₄ -2)	873	2307	2034		
Chloride (Cl-1)	16,085	63,270	57,970		
DISSOLVED GASES:					
Carbon Dioxide (CO ₂)	317	211	302		
Hydrogen Sulfide (H ₂ S)	28	66	56		
SCALING INDEX (+ Indicates Scale)					
STIFF-DAVIS (CaCO ₃)					
STABILITY INDEX					
SI = pH - pCa - pAlk - K					
Calcium Carbonate @ 86 F	-0.10	0.47	0.35		
Calcium Carbonate @ 110 F	0.13	0.70	0.58		
Calcium Carbonate @ 130 F	0.39	0.96	0.84		
Calcium Carbonate @ 140 F	0.68	1.25	1.13		
Calcium Carbonate @ 160 F	0.99	1.57	1.45		
Reported By: Moses G. Jimenez, Laboratory Technician					

VACUUM GLORIETA EAST UNIT

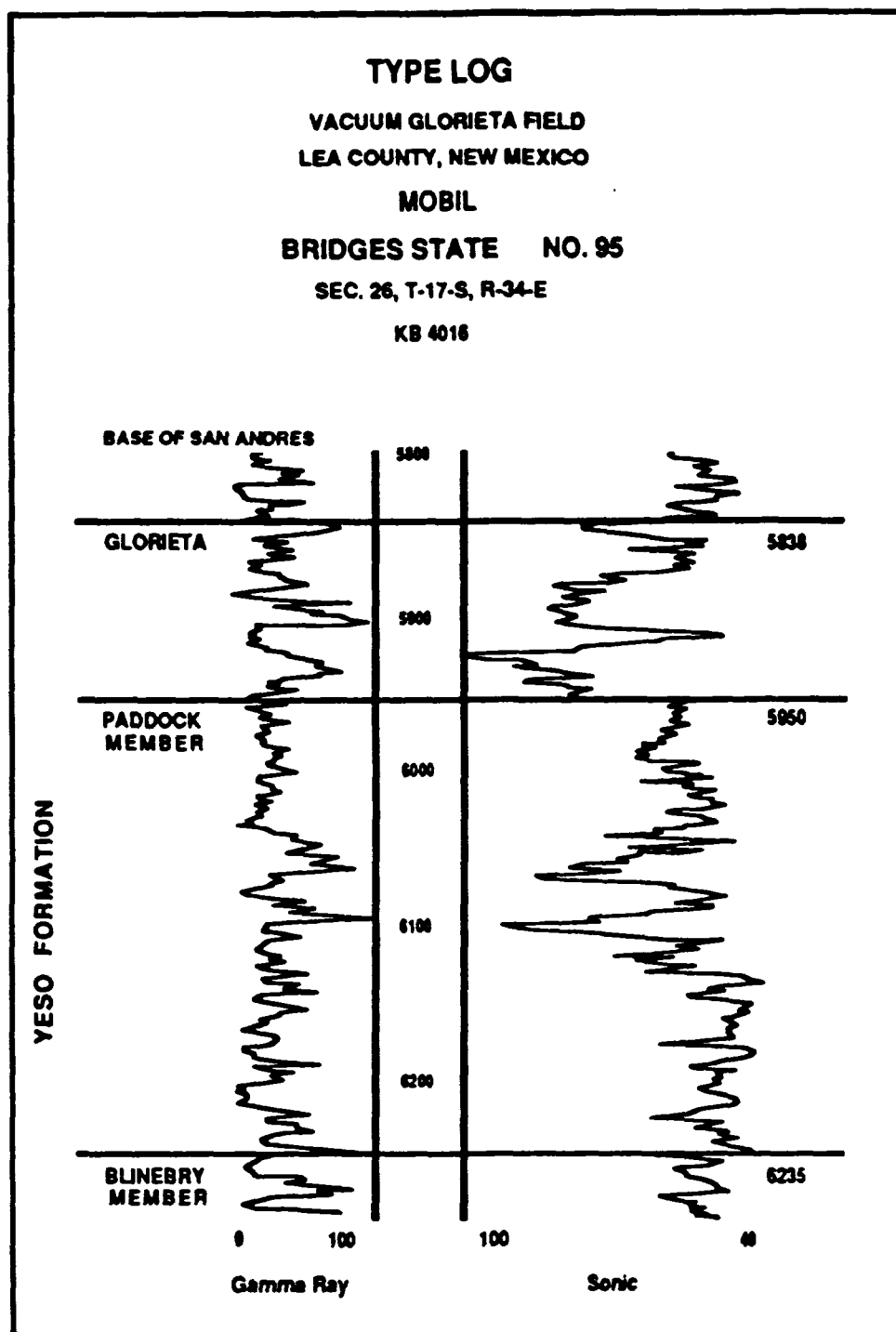
RESERVOIR ANALYSIS FOR SWELLING CLAYS **AND SOLUBLE SALTS**

The proposed Vacuum Glorieta East Unit stratigraphic interval extends from the top of the Glorieta formation to the top of the Blinebry member of the Yeso formation (**Figure 1**). The hydrocarbon productive interval which will be waterflooded is the Paddock member of the Yeso formation which is Leonardian in age (**Figure 2**).

Detailed lithologic description of the Paddock was presented by Burnham 1991 in his unpublished MS thesis entitled "Depositional Environments and Facies Distribution of the Permian Paddock member of the Yeso Formation, Vacuum (Glorieta) Field, Lea County, New Mexico." Burnham 1991 described ten Glorieta/Paddock cores taken by Exxon, Texaco, Shell, and Phillips to identify lithologies and facies relationships across the Vacuum field area. **Figure 3** displays the Paddock structure in the Vacuum field and the location of cores used by Burnham 1991. Four primary lithofacies were identified in the Paddock by Burnham 1991 and they are: 1) fine-grained quartz sandstone-siltstone facies, 2) pelletoidal mudstone facies, 3) skeletal packstone-wackestone facies and 4) oolitic-pelletoidal grainstone facies. The quartz sandstone-siltstone facies are not reservoir units and are tightly cemented with calcite, dolomite and anhydrite. The carbonate facies vary considerably in mineralogy across the unit. They may occur as limestones, interbedded limestones and dolomites or all dolomite depending upon location.

The Phillips Santa Fe #92 well was selected as a representative well to display the log signature, lithofacies, porosity and permeability of the Glorieta and Paddock intervals in the Vacuum Glorieta East Unit. **Figure 4** shows gamma ray and sonic log signatures of the Glorieta and Paddock intervals. A detailed lithologic description of the cored Glorieta and Paddock intervals is shown in **Figure 5 and 5A**. Note the four primary carbonate lithologies shown on **Figure 5 and 5A** as well as the presence of dolomite and limestone within the Paddock interval. The average porosity of the Paddock reservoir interval is 10% while the geometric average permeability is 3.1 millidarcys. **Figure 6** provides core analysis data from the cored interval in the Phillips Santa Fe #92 well.

The Paddock carbonate reservoir units contain void-filling, fracture-filling and nodular anhydrite. Halite is not present in the Paddock reservoir units. In addition, the Paddock reservoir facies do not contain swelling clays. This conclusion is supported by Burnham's detailed core descriptions discussed previously. Phillips is not aware of any data suggesting that water-sensitive minerals are present in the Paddock reservoir. Furthermore, Phillips waterflooding experience in Southeastern New Mexico suggests that permeability is enhanced by the removal of anhydrite with fresh water. Based on the geologic data available the Paddock reservoir lithologies will not be adversely affected by waterflooding.



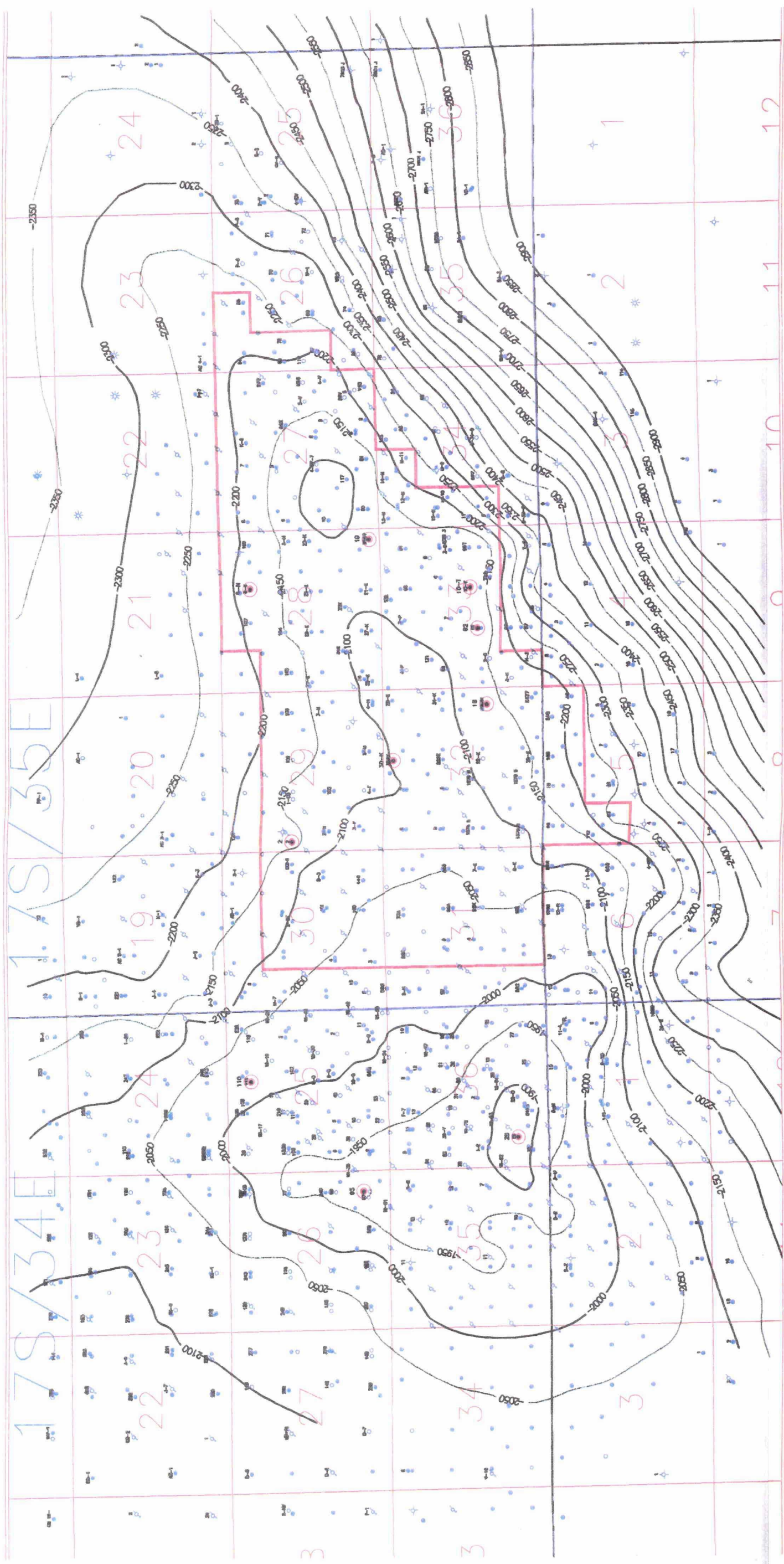
Type log for the Vacuum (Glorieta) Field.

Figure 1

SYSTEM	SERIES	CENTRAL NEW MEXICO 1	SOUTHEAST NEW MEXICO 2	WEST TEXAS 3
PERMIAN	GUADALUPE	SAN ANDRES	SAN ANDRES	SAN ANDRES
	LEONARD	GLORIETA	GLORIETA	SAN ANGELO GLORIETA
		YESO	PADOCK	UPPER CLEARFORK
			BLINEBRY	MIDDLE CLEARFORK
			TUBB	TUBB
			DRINKARD	LOWER CLEARFORK
	WOLFCAMP	ABO	ABO	WICHITA

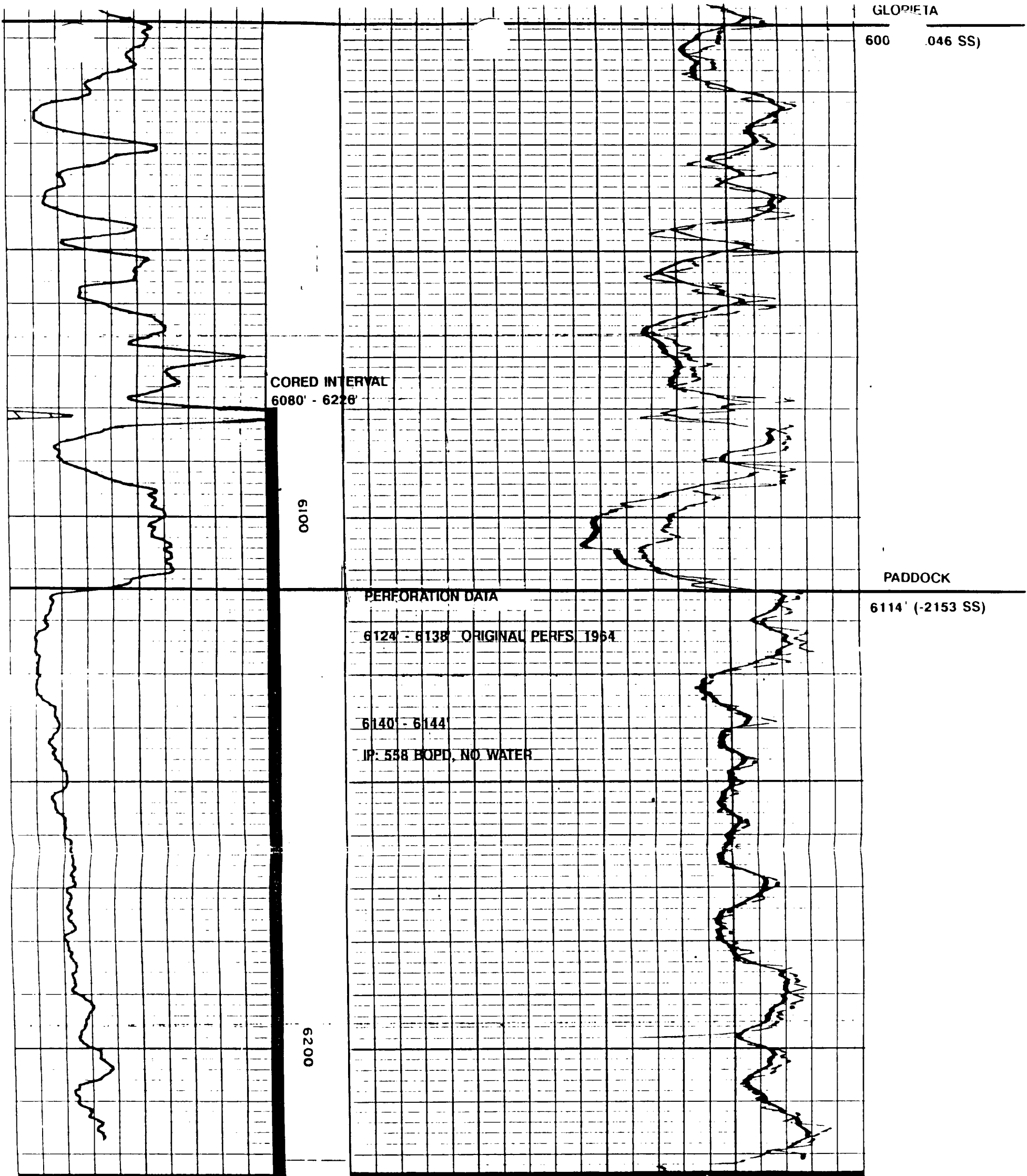
Stratigraphic correlation chart (adapted from Mazzullo, 1982).

Figure 2



Scale 1:42000.

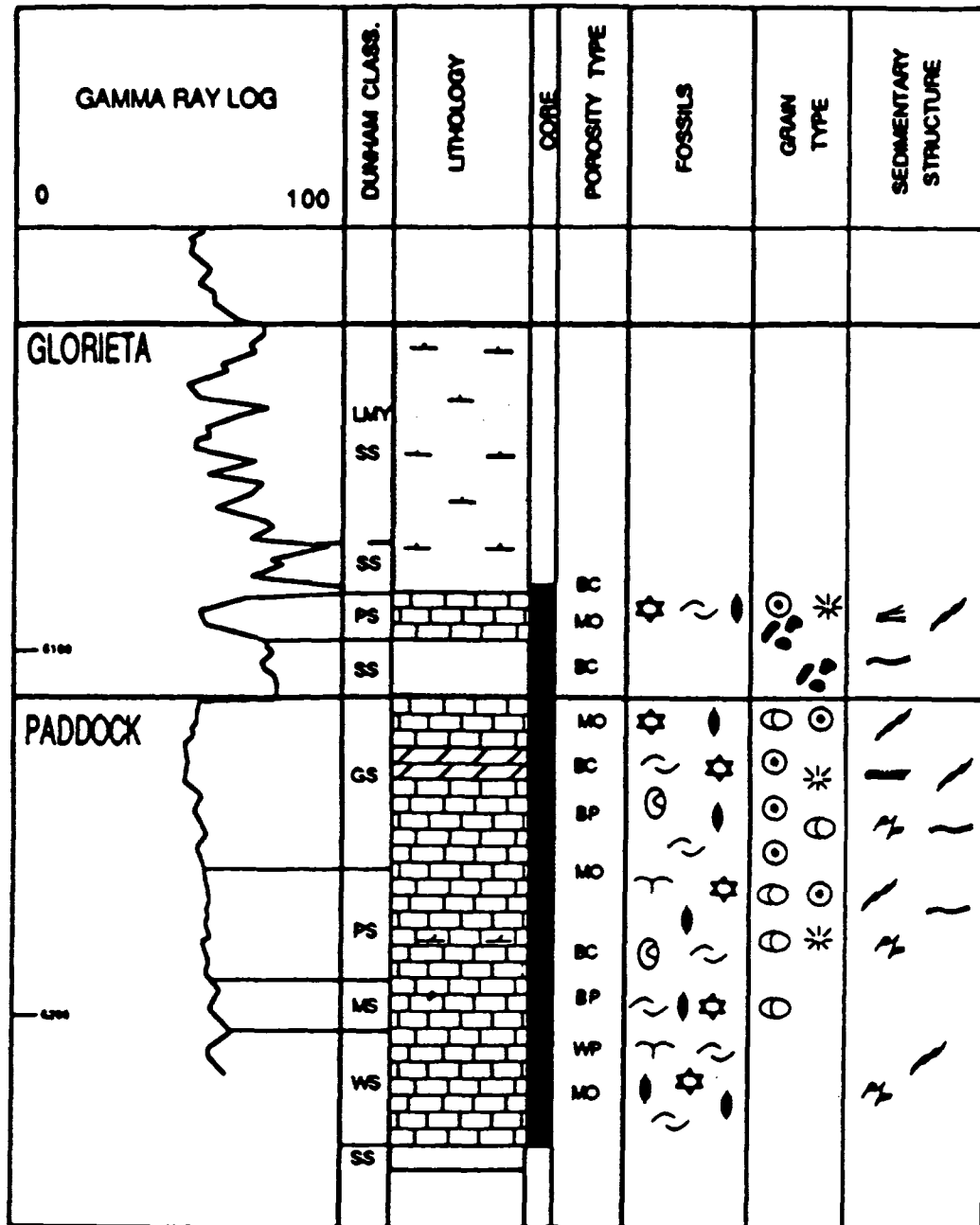
Phillips Petroleum			
Vacuum Glorieta East Unit Structure - Subsea Paddock Top C.I. = 50 ft / Cored wells in red			
Geology by :	Unit outline in red	7/14/93	FIGURE 3
R. McCallum	Scale 1:42000.		



0 API 100 API 10 API/CD 7 9 11 13 15 HOLE SIZE INCHES Millivolts		1' SPACING — — — — 3' SPACING — — — — 100 85 70 55 40 Micro Seconds Per Foot SPECIFIC ACOUSTIC TIME	
S.P. or G/R & Caliper	DEPTH	ACOUSTILOG T 3 R, 1 R, 3 R	
Company	PHILLIPS PETROLEUM COMPANY	Drillers T.D.	6226'
Well	SANTA FE NO. 92	Lane-Wells F.R.	6221'
Field	VACUUM	Lane-Wells T.D.	6227'
County	LEA	Elevations:	
State	NEW MEXICO	K.B. 3960.5' D.F. 3959' G.L. 3947'	

Figure 4

PHILLIPS SF - 92



CARBONATE LITHOLOGIES:

- GS - GRAINSTONE
- PS - PACKSTONE
- WS - WACKESTONE
- MS - MUDSTONE

Figure 5

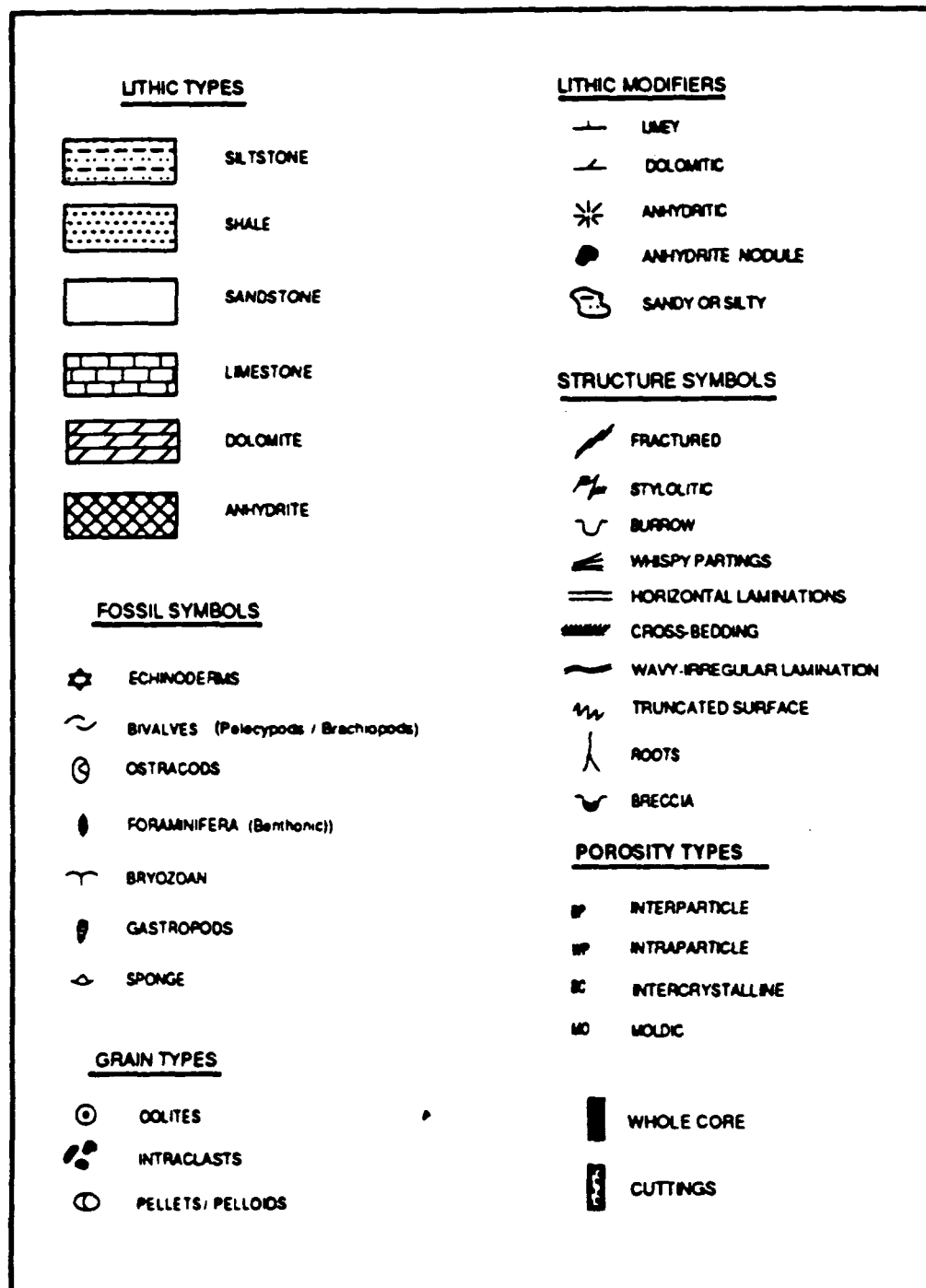


Figure 5A

CORE ANALYSIS

Sample No.	Core No.	DEPTH IN FEET		PERMEABILITY MILLIDARCYs		POROSITY PER CENT		SATURATION PER CENT			CHLORIDE CONTENT OF WATER P.P.M.P. °	COMBUSTIBLE GAS			GRAIN DENSITY
		From	To	Perpen- dicular	Parallel	On Perm. Sample	On Sat. Sample	Oil	Water	Total		Methane Plus	Pro- pane Plus	Bu- tane Plus	
	1	CORED FROM		6080' TO 6130' RECOVERED 50'		100%									
1		6080	6081		<.05	4.4								2.67	
2		6081	6082		<.05	0.8	7.2	14	45	59				2.73	
3		6082	6083		<.05	4.2								2.73	
4		6083	6084		<.05	4.0	6.2	22	55	77				2.71	
5		6084	6085		<.05	9.0	7.8	9	55	64				2.85	
6		6085	6086		<.05	0.7								2.77	
7		6086	6087		<.05	0.9	1.8	40	20	60				2.67	
8		6087	6088		<.05	2.7	3.8	14	14	28				2.71	
9		6088	6089		<.05	4.9								2.70	
10		6089	6090		4.6	13.8	13.6	12	8	20				2.72	
11		6090	6091		<.05	1.8	3.7	19	10	29				2.70	
12		6091	6092		<.05	1.24								2.70	
13		6092	6093		<.05	1.38								2.70	
14		6093	6094		<.05	4.0								2.69	
15		6094	6095		<.05	.19								2.70	
16		6095	6096		<.05	6.4	8.2	0	73	73				2.69	
17		6096	6097		<.05	5.8								2.72	
18		6097	6098		<.05	6.6	8.2	0	75	75				2.72	
19		6098	6099		<.05	7.0	8.8	0	71	71				2.72	
20		6099	6100		<.05	6.8								2.71	
21		6100	6101		<.05	7.8	8.7	0	88	88				2.72	
22		6101	6102		<.05	7.5	8.5	0	78	78				2.70	
23		6102	6103		<.05	7.7	9.3	0	82	82				2.71	
24		6103	6104		<.05	7.4	8.6	0	78	78				2.70	
25		6104	6105		<.05	6.7	7.6	0	85	85				2.68	
26		6105	6106		.05	7.0	8.7	0	81	81				2.68	
27		6106	6107		<.05	6.9	8.5	0	75	75				2.69	
28		6107	6108		<.05	6.7	8.2	0	86	86				2.67	
29		6108	6109		<.05	7.3	8.8	0	79	79				2.65	
30		6109	6110		.05	7.4	8.4	0	82	82				2.66	
31		6110	6111		<.05	8.0	8.8	0	81	81				2.69	
32		6111	6112		<.05	4.6	6.4	0	70	70				2.69	
33		6112	6113		<.05	1.4	5.2	0	93	93		0	0	0	2.63
34		6113	6114		<.05	2.3						0	0	0	2.66
35		6114	6115		<.05	0.8									2.75
36		6115	6116		<.05	0.5									2.75
37		6116	6117		<.05	0.9									2.69
38		6117	6118		<.05	0.1									2.69

Figure 6

CORE ANALYSIS

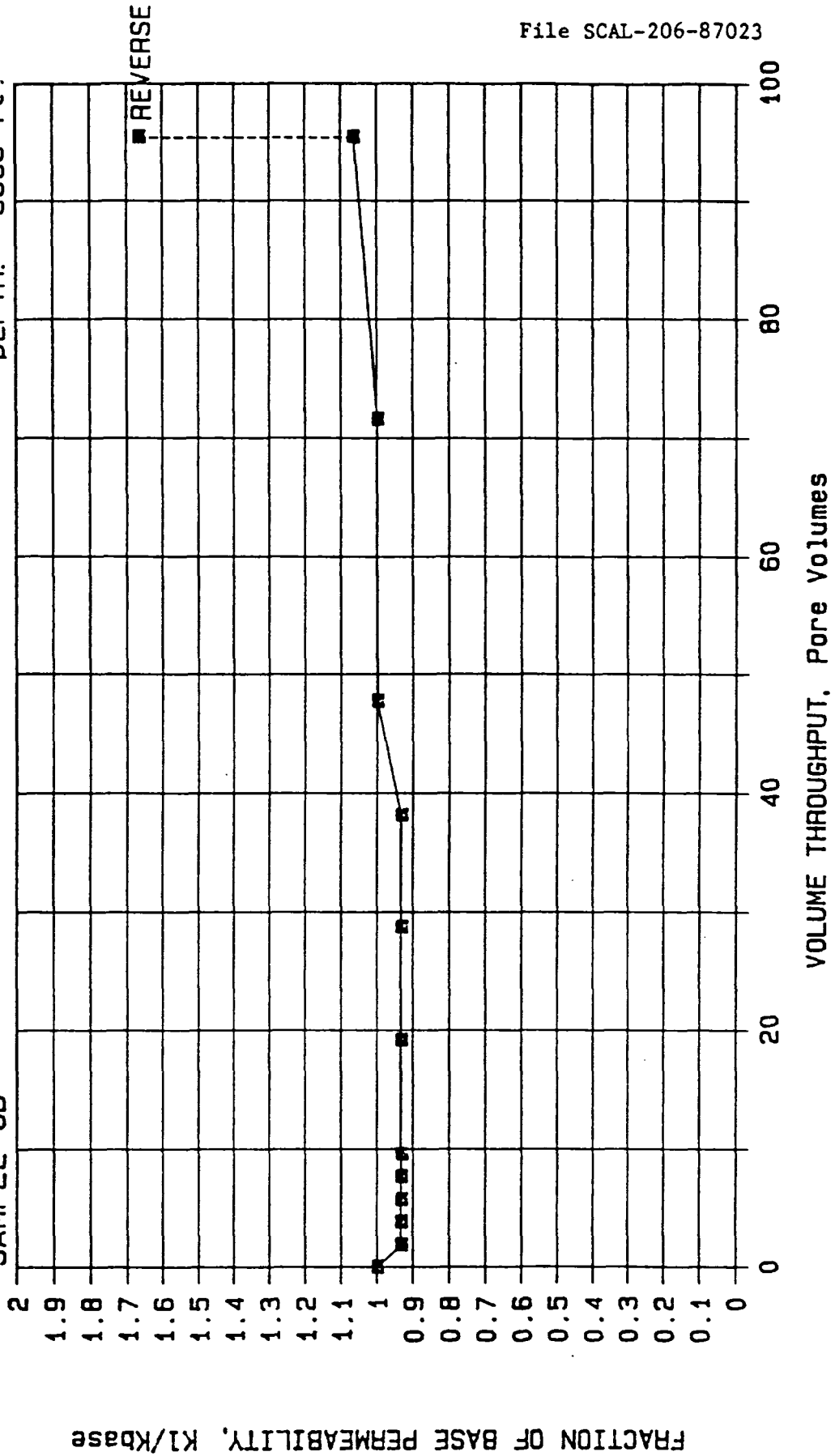
Sample No.	Core No.	DEPTH IN FEET		PERMEABILITY MILLIDARCS		POROSITY PER CENT		SATURATION PER CENT			CHLORIDE CONTENT OF WATER P.P.M.P. °	COMBUSTIBLE GAS			GRAIN DENSITY
		From	To	Perpen- dicular	Parallel	On Perm. Sample	On Sat. Sample	Oil	Water	Total		Methane Plus	Propane Plus	Butane Plus	
39	1	6118	6119		<.05	0.1									2.72
40		6119	6120		<.05	1.2									2.74
41		6120	6121		<.05	5.7	4.6	0	52	52					2.65
42		6121	6122		<.05	8.4	7.1	5	44	49					2.75
43		6122	6123		<.05	3.7	6.2	9	9	18					2.82
44		6123	6124		.11	5.2	6.1	6	15	21					2.84
45		6124	6125		.18	5.5	6.1	6	15	21					2.83
46		6125	6126		.60	7.8	6.6	9	16	25					2.83
47		6126	6127		<.05	4.5	6.1	6	29	35					2.86
48		6127	6128		<.05	5.0	4.9	11	26	37					2.81
49		6128	6129		9.2	8.7	6.9	13	18	31					2.81
50		6129	6130		.35	6.4	12.4	19	21	40					2.77
	2	CORED FROM 6130' TO 6177' RECOVERED 47'-100%													
51		6130	6131		.35	10.3	11.2	10	12	24					2.73
52		6131	6132		.21	13.0	12.8	6	10	16					2.73
53		6132	6133		.25	12.0	12.9	9	10	19					2.71
54		6133	6134		.96	11.5	10.9	12	12	24					2.71
55		6134	6135		.33	12.2	12.3	9	9	18					2.74
56		6135	6136		.18	10.2	10.1	9	12	21					2.72
57		6136	6137		.07	9.2	7.3	10	20	30					2.72
58		6137	6138		.13	8.8	9.2	8	22	30					2.72
59		6138	6139		<.05	7.2	7.1	10	21	31					2.72
60		6139	6140		<.05	6.8	6.8	6	26	32					2.69
61		6140	6141		.43	10.4	8.1	13	19	32					2.75
62		6141	6142		.18	8.4	9.8	9	20	29					2.74
63		6142	6143		.21	9.5	8.6	12	14	26					2.73
64		6143	6144		2.4	10.7	9.7	10	21	31					2.73
65		6144	6145		.13	8.4	7.5	10	16	26					2.73
66		6145	6146		.05	8.6	7.8	8	20	28					2.72
67		6146	6147		<.05	4.8	5.9	3	44	47					2.72
68		6147	6148		.09	6.3	6.4	11	27	38					2.75
69		6148	6149		.23	8.4	9.7	11	22	33					2.73
70		6149	6150		.37	9.1	8.3	13	15	28					2.73
71		6150	6151		.05	5.7	6.1	11	40	51					2.73
72		6151	6152		.09	9.8	10.1	5	20	25					2.72
73		6152	6153		.78	7.8	8.6	8	25	33					2.73
74		6153	6154		.90	9.6	7.8	12	23	35					2.73
75		6154	6155		.34	9.1	9.7	14	21	35					2.73
76		6155	6156		.12	9.0	10.3	8	15	23					2.74

CORE ANALYSIS

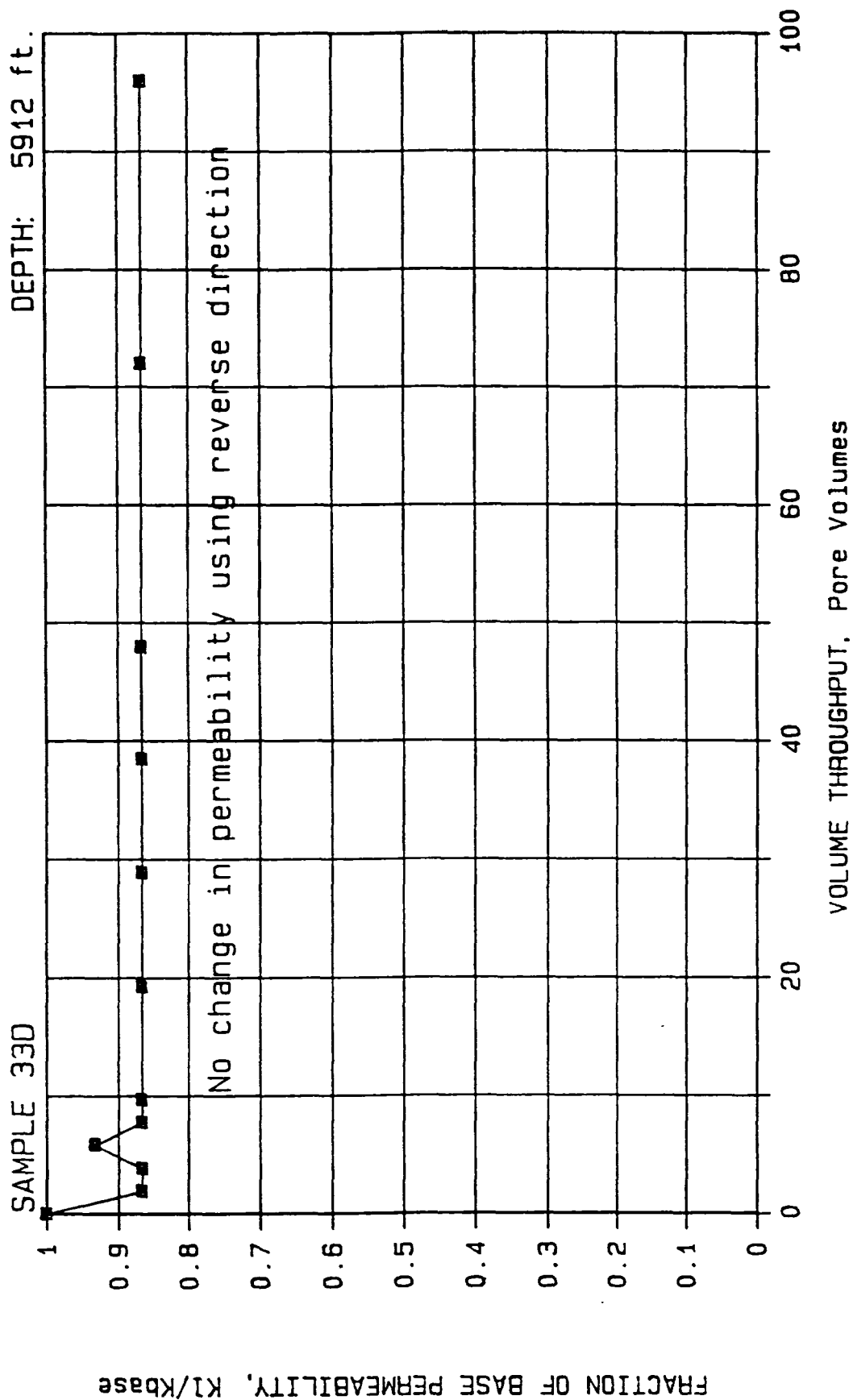
Sample No.	Core No.	DEPTH IN FEET		PERMEABILITY MILLIDARCY'S		POROSITY PER CENT		SATURATION PER CENT			CHLORIDE CONTENT OF WATER P.P.M.P. °	COMBUSTIBLE GAS			GRAIN DENSITY
		From	To	Perpen- dicular	Parallel	On Perm. Sample	On Sat. Sample	Oil	Water	Total		Methane Plus	Propane Plus	Butane Plus	
77	2	6156	6157		.12	9.6	10.4	11	21	32					2.72
78		6157	6158		.55	8.6	9.6	9	24	33					2.73
79		6158	6159		<.05	3.4	4.3	10	68	78					2.67
80		6159	6160		<.05	5.7	7.1	10	92	102					2.71
81		6160	6161		.25	10.3	9.4	12	25	37					2.74
82		6161	6162		.22	8.1	9.8	15	25	41					2.75
83		6162	6163		.13	8.4	8.0	12	32	44					2.74
84		6163	6164		.13	8.7	8.2	14	32	46					2.74
85		6164	6165		.23	10.0	10.2	11	23	34					2.71
86		6165	6166		.09	7.7	10.1	9	24	33					2.71
87		6166	6167		.08	7.1	9.6	12	27	39					2.70
88		6167	6168		.10	8.0	7.8	13	27	40					2.71
89		6168	6169		.06	6.8	7.0	9	32	41					2.72
90		6169	6170		.78	2.5	3.2	0	77	77					2.69
91		6170	6171		<.05	1.9									2.65
92		6171	6172		<.05	6.3									2.71
93		6172	6173		<.05	4.5									2.71
94		6173	6174		<.05	6.0	7.2	7	33	40					2.70
95		6174	6175		.09	17.3	10.8	6	22	28					2.70
96		6175	6176		.17	6.7	8.1	12	28	40					2.74
97		6176	6177		.10	7.1	7.3	13	29	42					2.72
	3	CORED FROM		6177'		TO	6226'	RECOVERED 49'			100%				
98		6177	6178		.22	7.7	8.5	16	30	46					2.73
99		6178	6179		.20	8.0	9.5	13	25	38					2.71
100		6179	6180		.22	8.2	6.7	17	33	50					2.72
101		6180	6181		.16	4.5	8.2	15	33	48					2.81
102		6181	6182		<.05	4.4	9.2	8	24	32					2.81
103		6182	6183		<.05	3.1	4.4	4	35	39					2.84
104		6183	6184		.37	10.2	10.7	10	15	25					2.85
105		6184	6185		.15	6.8	7.3	6	22	28					2.85
106		6185	6186		.22	1.1									2.76
107		6186	6187		<.05	3.3									2.77
108		6187	6188		<.05	2.7									2.78
109		6188	6189		<.05	2.4									2.78
110		6189	6190		<.05	0.6									2.69
111		6190	6191		<.05	3.8									2.73
112		6191	6192		<.05	4.0									2.73
113		6192	6193		<.05	1.5									2.65
114		6193	6194		<.05	2.0									2.70

DEPTH: 5885 ft.

SAMPLE 6D

[illegible]

PERMEABILITY VS VOLUME THROUGHPUT



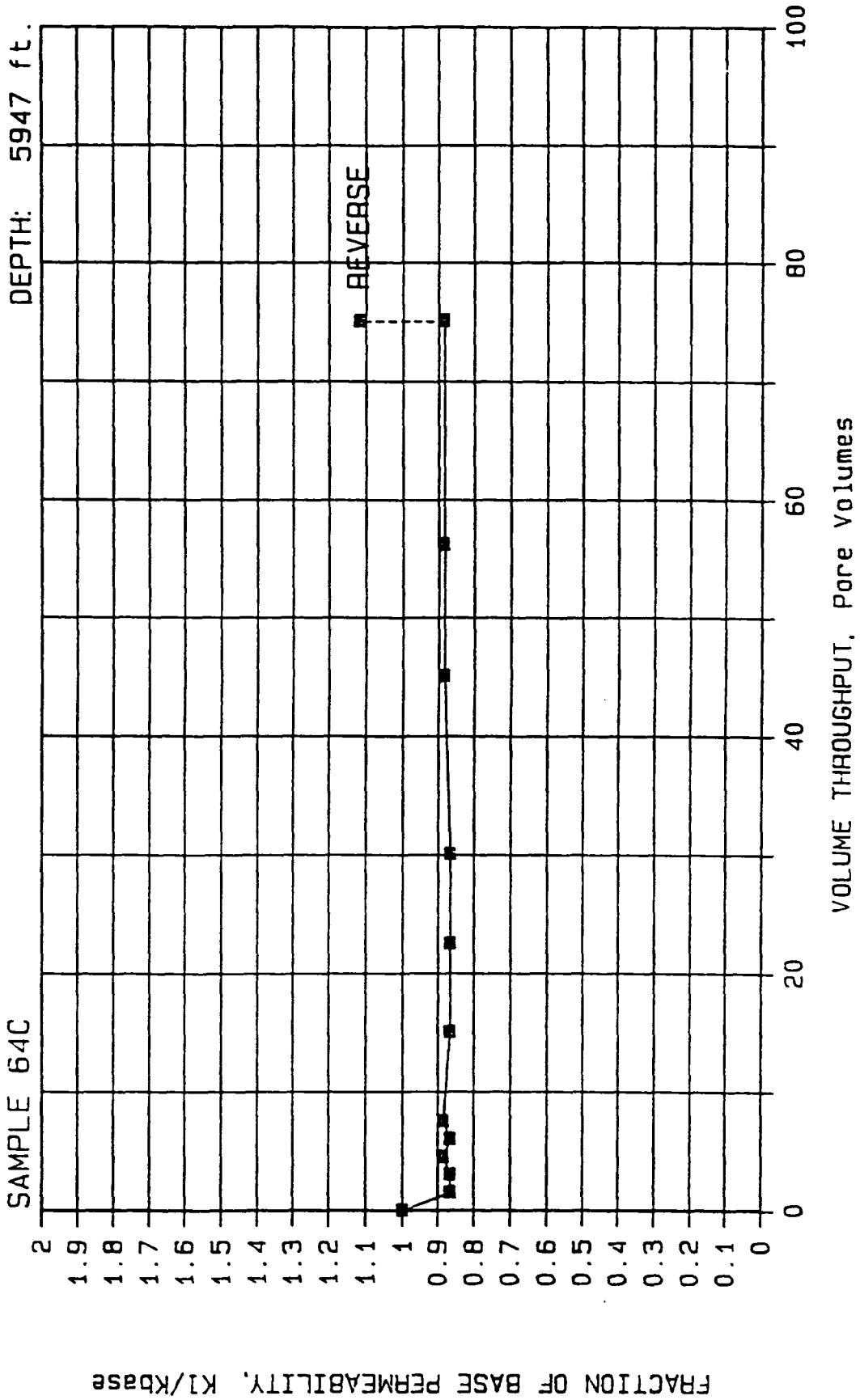
FRACTION OF BASE PERMEABILITY, K_1/K_{base}



Western Atlas
International
A LECO/ONSER Company

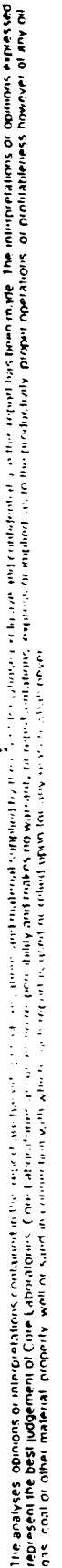
CORE LABORATORIES

PERMEABILITY VS VOLUME THROUGHPUT





Western Atlas International
A Lorton/Dresser Company



**VACUUM GLORIETA EAST UNIT
ATTACHMENT VIII TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER**

**GEOLOGICAL DATA
THE INJECTION ZONES**

The proposed Vacuum Glorieta East Unit stratigraphic interval extends from the top of the Glorieta formation to the top of the Blinebry member of the Yeso formation. The hydrocarbon productive interval which will be waterflooded is the Paddock member of the Yeso formation which is Permian (Leonardian) in age.

The Paddock interval can be subdivided into Upper and Lower zones. The Upper Paddock zone is the sole producible (floodable) interval of the Paddock member in the proposed East Unit area. The Upper Paddock top in the East Unit area ranges from 6000 (-2000) to 6150 (-2250) feet. The Upper Paddock zone ranges in thickness from 100 to 150 feet. The Upper Paddock reservoir consists of the following three carbonate lithofacies: 1) pelletoidal mudstone facies, 2) skeletal packstone-wackestone facies and 3) oolitic-pelletoidal grainstone facies. The Paddock reservoir lithofacies occur as limestone, interbedded limestone and dolomite or all dolomite depending upon location in the field.

The Paddock does not contain faults or fractures that act as conduits for gas, oil, or injection fluids to seep into fresh water aquifers above the injection zone within the proposed East Unit boundaries. There are water and CO₂ injection projects in the San Andres formation which occurs above the Glorieta and Paddock formations in the proposed East Unit area. The Phillips East Vacuum Grayburg San Andres Unit overlies most of the proposed Vacuum Glorieta East Unit area. No contamination of the Ogallala Aquifer through faults or fracture zones in the Grayburg-San Andres interval has been observed.

**VACUUM GLORIETA EAST UNIT
ATTACHMENT IX TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER**

**PROPOSED STIMULATION PROGRAM
FOR A
TYPICAL GLORIETA INJECTION WELL**

All injection wells will be cased hole completions selective perforated within the unitized interval. Initial stimulation will be small to medium sized matrix Hydrochloric acid treatments. Acid concentrations will typically range from 7 1/2% to 20 % depending on anticipated completion damage. As the waterflood matures additional matrix acid treatments may be preceded by an oil soluble surfactant, and the acid mixture may contain commercial mutual solvents.

**VACUUM GLORIETA EAST UNIT
ATTACHMENT X TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER**

**PROPOSED INJECTION WELL CONVERSIONS
LOGGING AND TEST DATA**

There are nine current producing wells scheduled for conversion to water injection. These nine wells are listed below with their initial completion interval, completion date, and test data. Logs for all nine wells were previously filed with the Division. In addition there are six infill wells that will be drilled as producers initially but converted to injectors later in the waterflood development. These six wells are also listed below. Logs and completion data will be filed as these wells are drilled.

Logs on all new injection wells will be filed with the Division as they are drilled.

Wells Scheduled for conversion to injection:

Exxon New Mexico K State No. 34, (VGEU No. 01-05), API No. 3002530436, 1286' FS and 1333' FW, Sec 28-17S-35E. Completed 12-30-88, perforated in the Paddock from 6043' to 6181', pumped 93 BOPD and 48 BWPD.

Exxon New Mexico K State No. 35, (VGEU No. 01-06), API No. 3002530437, 1195' FS and 2518' FE, Sec 28-17S-35E. Completed 12-29-88, perforated in the Paddock from 6014' to 6152', pumped 172 BOPD and 37 BWPD.

Shell State T No. 10, (VGEU No. 06-01), API No. 3002520232, 2310' FS and 1980' FE, Sec 33-17S-35E. Completed 12-18-63, perforated in the Paddock from 6191' to 6202', flowed 73 BOPD and 29 BWPD.

Phillips Santa Fe No. 109, (VGEU No. 14-01), API No. 3002520802, 2323' FN and 2213' FE, Sec 29-17S-35E. Completed 11-25-64, perforated in the Paddock from 6152' to 6174', flowed 164 BOPD and 5 BWPD.

Marathon Warn State Account 3 No. 8, (VGEU No. 24-01), API No. 3002524806, 1650' FN and 990' FE, Sec 33-17S-35E. Completed 12-17-74, perforated in the Paddock from 6099' to 6122', pumped 26 BOPD and 60 BWPD.

Chevron State 4-27 No. 10, (VGEU No. 27-01), API No. 3002520880, 1650' FS and 330' FW, Sec 27-17S-35E. Completed 05-24-64, perforated in the Paddock from 6102' to 6138', flowed 75 BOPD and 0 BWPD.

Wells Scheduled for conversion to injection (cont.):

Phillips Santa Fe No. 106, (VGEU No. 32-01), API No. 3002520799, 2323' FN and 660' FE, Sec 29-17S-35E. Completed 09-24-64, perforated in the Paddock from 6148' to 6168', flowed 176 BOPD and 2 BWPD.

Phillips Santa Fe No. 105, (VGEU No. 41-02), API No. 3002521080, 2322' FN and 660' FW, Sec 28-17S-35E. Completed 10-10-64, perforated in the Paddock from 6140' to 6159', flowed 312 BOPD and 4 BWPD.

Phillips Santa Fe No. 92, (VGEU No. 43-01), API No. 3002520786, 2105' FS and 1980' FW, Sec 28-17S-35E. Completed 05-24-64, perforated in the Paddock from 6124' to 6144', pumped 558 BOPD and 0 BWPD.

Wells to be drilled initially for production, then converted to injection:

Phillips VGEU 01-13, Unit P, Sec 28-17S-35E, Approximate location 1320' FS and 1320' FE.

Phillips VGEU 02-11, Unit A, Sec 32-17S-35E, Approximate location 1200' FN and 1320' FE.

Phillips VGEU 05-06, Unit O, Sec 29-17S-35E, Approximate location 1330' FS and 1330' FE.

Phillips VGEU 24-06, Unit K, Sec 33-17S-35E, Approximate location 1330' FN and 2460' FW.

Phillips VGEU 26-06, Unit F, Sec 27-17S-35E, Approximate location 1500' FN and 1320' FW.

Phillips VGEU 29-02, Unit K, Sec 29-17S-35E, Approximate location 1320' FS and 1330' FW.

**VACUUM GLORIETA EAST UNIT
ATTACHMENT XI TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER**

**CHEMICAL ANALYSIS OF FRESH WATER WITHIN
A ONE MILE RADIUS OF INJECTION WELLS**

The attached plat shows the location of eleven (11) fresh water wells within a one mile radius of the proposed Vacuum Glorieta East Unit waterflood. Following the plat are the respective water analyses of fresh water samples taken from the eleven wells in May and July of 1993. These wells are sampled quarterly as part of the ongoing Vacuum Field Waterflow Study.



T 17 S / R 34 E

T 17 S / R 35 E

T 18 S / R 35 E

T 18 S / R 34 E

LEGEND

- 1- NEW MEXICO POTASH CORP. 8
- 2- WINDMILL 33/17S/35E
- 3- LEE PLANT 1
- 4- LEE PLANT 3
- 5- FORKLIFT ENTERPRISES
- 6- CVU WELL #2
- 7- EVGSAU 2060-S01
- 8- EVGSAU 2864-S02
- 9- EVGSAU 2721-S04
- 10- EVGSAU 3366-S06
- 11- EVGSAU 3202-S07

PHILLIPS PETROLEUM COMPANY

VACUUM GLORIETA EAST UNIT
LEA COUNTY, NEW MEXICO
FRESH WATER WELL LOCATIONS

J. S. McCOLLUM

7/12/83

Scale 1:75000.

UNICHEM INTERNATIONAL
707 NORTH LEECH P. O. BOX 1499
HOBBS, NEW MEXICO

RESULTS OF WATER ANALYSIS

TO: Mr. Scott Malone
 Phillips Petroleum Company
 4001 Penbrook, Odessa, Texas 79762

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

No. 1 New Mexico Potash Corporation #8, 1320' FS & 400' FW, Sec 31-17S-35E, Lea Co. NM	07-01-1993
No. 2 Windmill, 1100' FN & 1400' FW, Sec 33-17S-35E, Lea Co. NM	07-01-1993
No. 3 Lee Plant Supply #1, 75' FS & 2425' FE, Sec 30-17S-35E, Lea Co. NM	07-01-1993
No. 4 Lee Plant Supply #3, 825' FN & 2310' FE, Sec 31-17S-35E, Lea Co. NM	07-01-1993
No. 5 Forklift Enterprises, 940' FN & 380' FW, Sec 30-17S-35E, Lea Co. NM	07-01-1993

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5
Specific Gravity	1.000	1.000	1.000	1.001	1.002
Total Dissolved Solids	144	354	467	873	2213
pH	6.80	6.8	6.7	7.8	6.9
Ionic Strength	0.042	0.008	0.01	0.019	0.047
CATIONS: (mg/liter)					
Calcium (Ca+2)	136	80	96	136	267
Magnesium (Mg+2)	676	21.1	22.7	43.7	68.0
Sodium (Na+1)	0.0	0.0	0.0	89.5	439
Iron (Fe+2)	0.100	0.0	0.1	0.0	0.1
ANIONS: (mg/liter)					
Bicarbonate (HCO3-1)	207	232	268	232	220
Carbonate (CO3-2)	0	0	0	0	0
Hydroxide (OH-1)	0	0	0	0	0
Sulfate (SO4-2)	0	0	0	0	0
Chloride (Cl-1)	292	40	80	372	1220
SCALING INDEX (+ Indicates Scale)					
Calcium Carbonate @ 86 F	-0.38	-0.42	-0.38	0.76	0.01
Calcium Carbonate @ 110 F	0.35	0.31	0.35	1.5	0.74
Calcium Carbonate @ 130 F	0.69	0.66	0.69	1.8	1.1
Calcium Carbonate @ 140 F	0.88	0.85	0.88	2.0	1.3
Calcium Carbonate @ 160 F	1.3	1.2	1.3	2.4	1.7
Calcium Sulfate @ 86 F	-17	-18	-18	-17	-14
Calcium Sulfate @ 110 F	-17	-18	-18	-17	-14
Calcium Sulfate @ 130 F	-17	-18	-18	-17	-14
Calcium Sulfate @ 140 F	-17	-18	-18	-17	-14
Calcium Sulfate @ 160 F	-17	-18	-18	-17	-14

UNICHEM INTERNATIONAL
707 NORTH LEECH P. O. BOX 1499
HOBBS, NEW MEXICO

RESULTS OF WATER ANALYSIS

TO: Mr. Scott Malone
 Phillips Petroleum Company
 4001 Penbrook, Odessa, Texas 79762

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

No. 6	Central Vacuum Unit Supply #2, 330' FN & 1980' FW, Sec 06-17S-35E, Lea Co. NM	07-01-1993
No. 7	EVGSAU Supply #2060-S01, 1886' FS & 2083' FE, Sec 20-17S-35E, Lea Co. NM	05-28-1993
No. 8	EVGSAU Supply #2864-S02, 1900' FN & 600' FW, Sec 28-17S-35E, Lea Co. NM	05-28-1993
No. 9	EVGSAU Supply #2721-S04, 550' FS & 1850' FW, Sec 27-17S-35E, Lea Co. NM	05-28-1993
No. 10	EVGSAU Supply #3366-S06, 2100' FN & 550' FW, Sec 33-17S-35E, Lea Co. NM	05-28-1993

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10
Specific Gravity	1.000	1.000	1.000	1.000	1.000
Total Dissolved Solids	482	408	493	278	371
pH	6.8	6.8	6.9	6.8	6.9
Ionic Strength	0.01	0.009	0.01	0.006	0.009
CATIONS: (mg/liter)					
Calcium (Ca+2)	96	80	80	44	74
Magnesium (Mg+2)	19.4	18.2	18.2	29.2	17.0
Sodium (Na+1)	18.6	11.2	38.2	26.6	9.51
Iron (Fe+2)	0.4	0.3	0.2	0.2	0.3
Barium (Ba+2)	0.0	0.2	0.0	0.0	0.0
ANIONS: (mg/liter)					
Bicarbonate (HCO3-1)	220	171	220	134	146
Carbonate (CO3-2)	0	0	0	0	0
Hydroxide (OH-1)	0	0	0	0	0
Sulfate (SO4-2)	0	55.5	41	0	52
Chloride (Cl-1)	128	72	96	44	72
SCALING INDEX (+ Indicates Scale)					
Calcium Carbonate @ 86 F	-0.37	-0.56	-0.35	-0.90	-0.55
Calcium Carbonate @ 110 F	0.36	0.17	0.38	-0.17	0.18
Calcium Carbonate @ 130 F	0.70	0.52	0.72	0.17	0.52
Calcium Carbonate @ 140 F	0.89	0.71	0.91	0.36	0.71
Calcium Carbonate @ 160 F	1.3	1.1	1.3	0.76	1.1
Calcium Sulfate @ 86 F	-18	-17	-18	-19	-18
Calcium Sulfate @ 110 F	-18	-17	-18	-19	-18
Calcium Sulfate @ 130 F	-18	-17	-18	-19	-18
Calcium Sulfate @ 140 F	-18	-17	-18	-19	-18
Calcium Sulfate @ 160 F	-18	-17	-18	-19	-18

RESULTS OF WATER ANALYSIS

SOURCE OF SAMPLE, LOCATION, AND DATE TAKEN:

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 11				
Specific Gravity	1.000				
Total Dissolved Solids	433				
pH	6.8				
Ionic Strength	0.009				
CATIONS: (mg/liter)					
Calcium (Ca+2)	90				
Magnesium (Mg+2)	12.2				
Sodium (Na+1)	19.4				
Iron (Fe+2)	0.4				
ANIONS: (mg/liter)					
Bicarbonate (HCO ₃ -1)	207				
Carbonate (CO ₃ -2)	0				
Hydroxide (OH-1)	0				
Sulfate (SO ₄ -2)	38.5				
Chloride (Cl-1)	76.0				
SCALING INDEX (+ Indicates Scale)					
Calcium Carbonate @ 86 F	1.8				
Calcium Carbonate @ 110 F	2.7				
Calcium Carbonate @ 130 F	3.5				
Calcium Carbonate @ 140 F	4.0				
Calcium Carbonate @ 160 F	4.8				
Calcium Sulfate @ 86 F	-17				
Calcium Sulfate @ 110 F	-17				
Calcium Sulfate @ 130 F	-17				
Calcium Sulfate @ 140 F	-17				
Calcium Sulfate @ 160 F	-17				

**VACUUM GLORIETA EAST UNIT
ATTACHMENT XII TO FORM C-108
APPLICATION FOR AUTHORIZATION TO INJECT WATER**

STATEMENT OF HYDRAULIC INTEGRITY

Phillips Petroleum Company has examined available geological and engineering data and finds no evidence of open faults nor any other hydraulic connection between the injection zone and any underground source of drinking water.