

DATE IN 06/02/14	SUSPENSE	ENGINEER PAG	LOGGED IN 06/06/14	TYPE WFX SD	APP NO DEH1415752500
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☒ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify R-3134

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Robbie A Grigg

Print or Type Name

Robbie A. Grigg
Signature

Reg Compliance

Title

6/2/2014

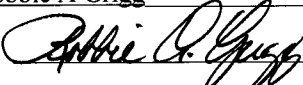
Date

rgrigg@mspartners.com

e-mail Address

CrossTimbers Energy LLC
 Southeast Majamar
 (GB-SA) Unit
 # 105
 30-025-26512
 # 617
 30-025-37897
 # 906
 30-025-31444

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ Yes ☐ No
- II. OPERATOR: Cross Timbers Energy, LLC
ADDRESS: 400 W. 7th St, Fort Worth, TX 76102
CONTACT PARTY: Robbie Grigg PHONE: (817) 334-7800
- 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: R-3134
- 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 plugged 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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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 sources 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: Robbie A Grigg TITLE: Regulatory Compliance
SIGNATURE:  DATE: 05/13/2014
E-MAIL ADDRESS: rgrigg@mspartners.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances 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 the 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, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, 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.

Item VII

Additional Operational Data

1. Proposed average daily rate – 200 BWPD (per well).
Proposed maximum daily rate – 400 BWPD (per well).
2. Closed system.
3. Proposed average and maximum pressure:

	Well	Avg Press (psig)	Max Press (psig)
30-025-26512	SEMGS AU #105	1900	1948
30-025-37897	SEMGS AU #617	1900	1989
30-025-31444	SEMGS AU #906	1900	2135

4. Injection fluid is primarily produced water from within the SEMGS AU augmented with fresh water purchased from ConocoPhillips and is used extensively in this area for secondary recovery purposes.
5. Injection is not for disposal purposes.

Item VIII

Geologic Data

Formation Name: Grayburg/San Andres
Lithology: Sandstone/Limestone
Thickness: 640' (gross), 70' (net)
Depth: 3,884' (shallowest)

Drinking Water Sources: There are no drinking water sources within 1 mile of the project area. ✓

Item IX

Stimulation Program

Acidize each well with ~ 5,000 gallons 15% NEFE HCl if necessary.

Item X

Logging and Test Data

Log have been previously submitted with well completion reports. No tests have been conducted.

Item XI

Fresh Water Data

There are no fresh water wells within 1 mile of the project area.

Item XII

Disposal Data

Injection is for secondary recovery purposes and not disposal purposes.

Historical Orders for SEMGS AU

Prior WFX orders

WFX-361

WFX-731

WFX-820

WFX-761
WFX-820

IPI (in Area)

IPI-204 Well #106

IPI-157 Well #908

IPI-143 Well #400 yes 908

940

1300

1000

Southeast Maljamar (Grayburg-San Andres) Unit
Form C-108 Section IIIA Well Data

Well No.	105	617 *	906
Sec	30	29	32
TWP	17S	17S	17S
RGE	33E	33E	33E
Unit Ltr	I	K	A
Footage 1	2,490' FSL	1,704' FSL	1,200' FNL
Footage 2	1,595' FWL	1,998' FWL	950' FEL
Surf Csg Size (inches)	8.625"	8.625"	* 8.625"
Surf Csg Depth (ft)	1,300'	1,225'	306'
Surf Csg Cmt (sx)	660	630	250
Surf Hole Size (inches)	12.25"	12.25"	12.25"
TOC	Surf	Surf	Surf
Determination	Circ	Circ	Circ
Prod Csg Size (inches)	5.5"	5.5"	5.5"
Prod Csg Depth (feet)	4,233'	4,450'	4,546'
Prod Csg Cmt (sx)	1,960'	770	1,300
Prod Hole Size (inches)	7.875"	7.875"	7.875"
TOC	Surf	Surf	Surf
Determination	Circ	Circ	Circ
Tubing Size (inches)	2.375"	2.375"	2.375
Tubing Lining Material	Powder-Epoxy	Powder-Epoxy	Powder-Epoxy
Setting Depth	3,800'	4,155'	4,170'
Packer Make	Baker	Baker	Baker
Packer Model	Lok-Set (or Eq)	Lok-Set (or Eq)	Lok-Set (or Eq)
Packer Depth	3,800'	4,155'	4,170'

NMOSE Info

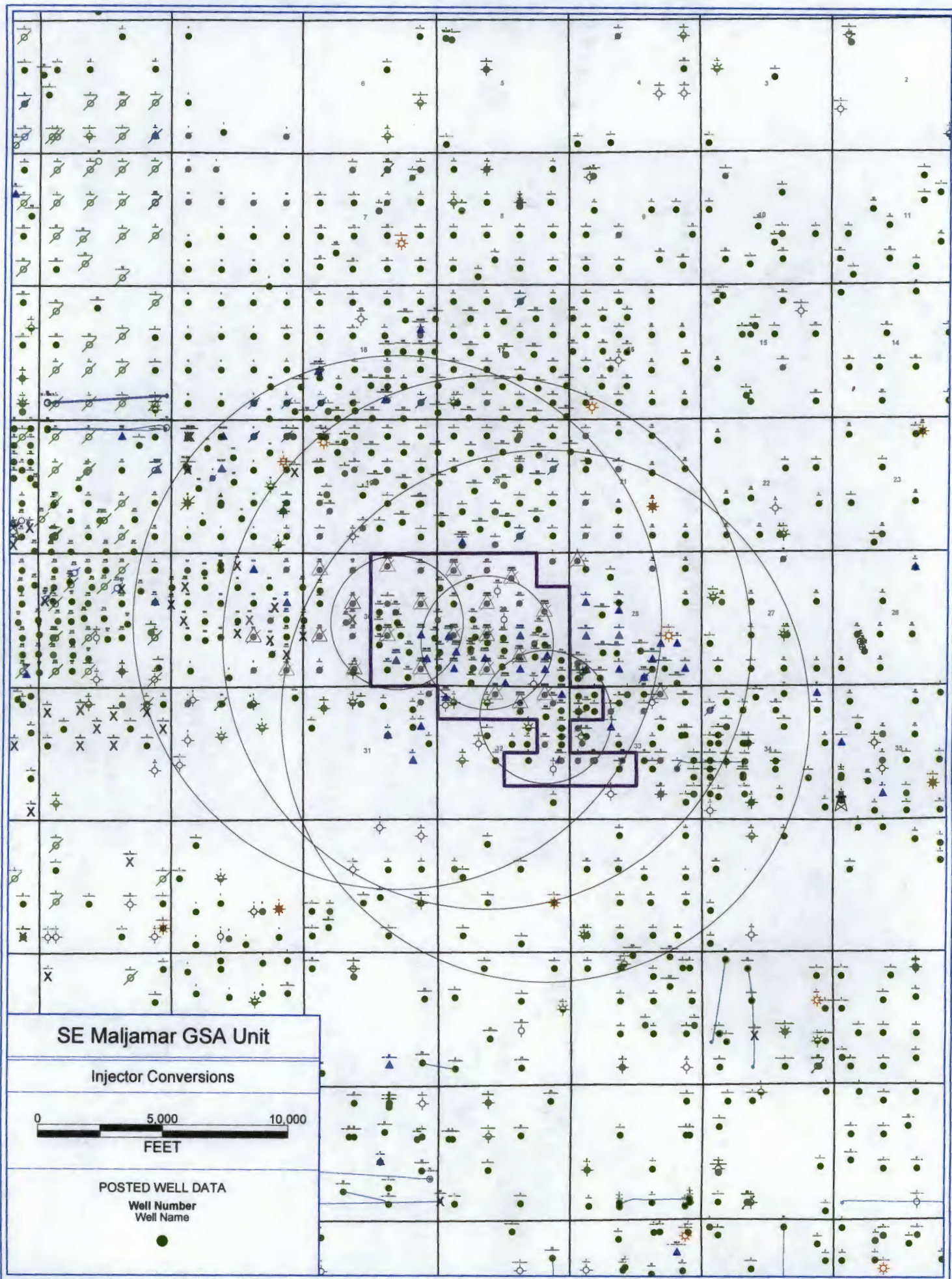
SW 1/4 / Sec. 4 / 18S / 33W
Exploratory TD at 256'; no water
1991

Misc. 2-2-58
El Paso NG [East Maljamar Plant]
NE 1/4 / NE 1/4 / NE 1/4 of Sec. 29
1958 Compl. - DTW. 204'
Perf. 168' to 244' / 228' to 244'
Sand & red clay

Southeast Maljamar (Grayburg-San Andres) Unit

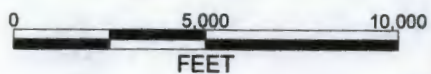
Form C-108 Section IIIB Well Data

Well No.	105	617	906
Injection Formation	Grayburg/San Andres	Grayburg/San Andres	Grayburg/San Andres
Injection Interval	3,897'-4,308'	3,978'-4,368'	4,270'-4,460'
Perforated?	yes	yes	yes
Open Hole	no	no	no
Original Purpose	Oil	Oil	Oil
Other Perforated Intervals	None	None	None
Other oil or gas zones?	None	None	None



SE Maljamar GSA Unit

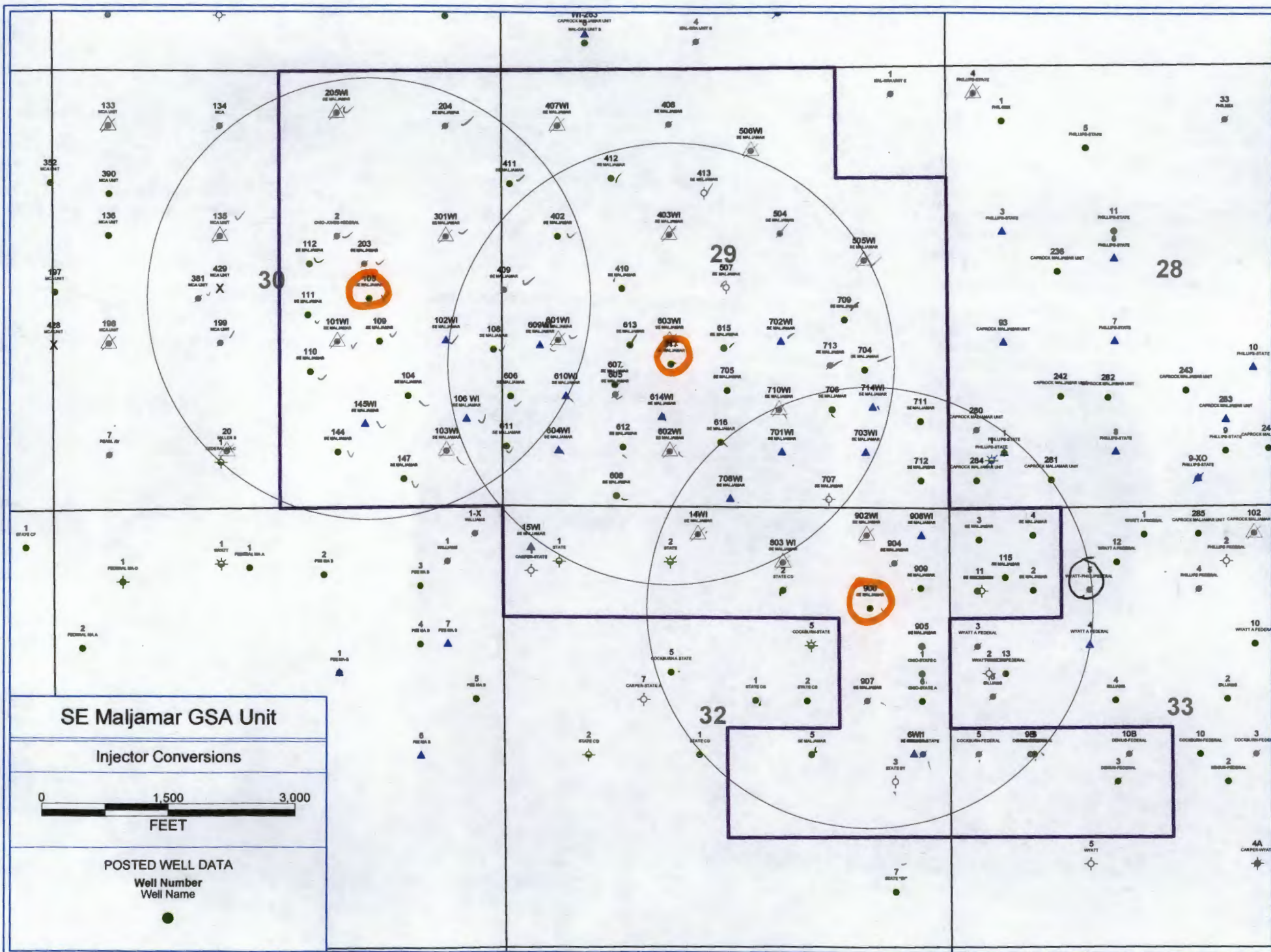
Injector Conversions



POSTED WELL DATA

Well Number
Well Name





Southeast Maljamar Grayburg/SanAndres Unit
Waterflood Expansion Wells within 2 Mile Area of Review

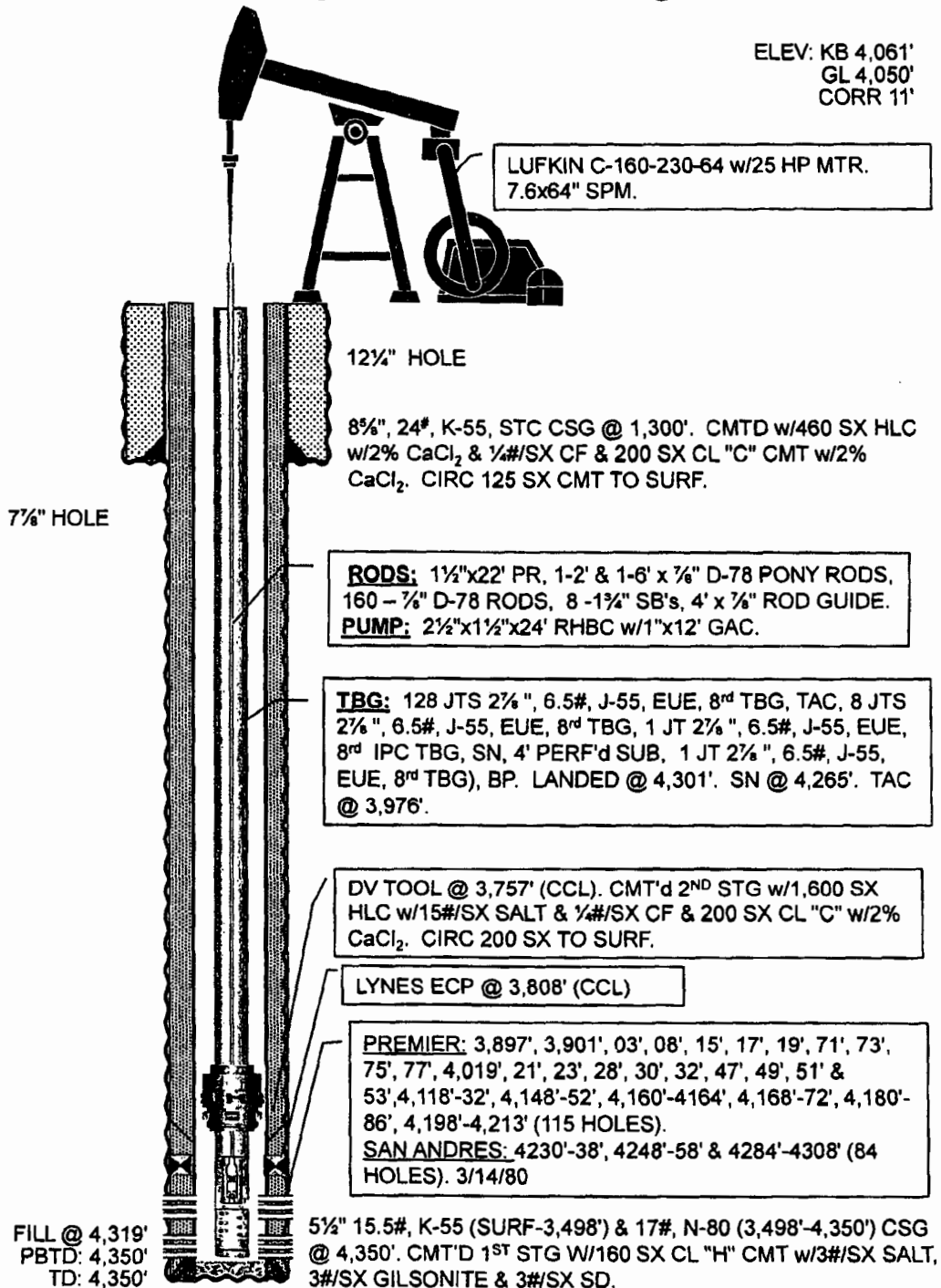
UWI/API	WELLNAME	WELLNO	OPER	LOCATION	STATUS	COMP DATE	TD	SURF CSG	SURF CSG	SURF CSG	PROD CSG	PROD CSG	PROD CSG	PERFORATIONS	COMMENTS
30025013480000	COCKBURN STATE	2	BARNEY COCKBURN	660' FNL, 1980' FWL, C, SEC 32, T175, R33E	DHSO&G	9/1/1950		5200	1,280 8-5/8"	50 SX	4,663 7"	50 SX	OH 4,663'-5,200'		RE-PLUGGED 4/80
30025013510000	COCKBURN-STATE	5	BARNEY COCKBURN	1650' FNL, 1650' FEL, G, SEC 32, T175, R33E	DHSO&G	8/1950		4500	205 13"	0 SX	3,912 7"	100sx	OH 3,912'-4,200'		RE-PLUGGED 2/80
30025015590000	SE MALJAMAR UNIT	202	CITIES SERVICE	1980' FNL, 1980' FEL, G, SEC 30, T175, R33E	PAQW	10/14/1944		4303	1,175 8-5/8"	50 sx	3,937 7"	100 sx	OH 3,937'-4,303'		
30025242500000	SE MALJAMAR UNIT	707	CITIES SERVICE	100' FSL, 1430' FEL, O, SEC 29, T175, R33E	DRY	3/12/1973		4430	810 8-5/8"	350 sx	4,429 5-1/2"	435 sx	4,272'-4,284'		
30025013490000	SE MALJAMAR UNIT	803WI	CITIES SERVICE	660' FNL, 1980' FEL, 8, SEC 32, T175, R33E	PLUGINJ	5/12/1944		4325	1,280 8-5/8"	50 sx	4,045 7"	100 sx	OH 4,045'-4,300'		
30025212090000	STATE CB	2	CITIES SERVICE	2310' FNL, 1700' FEL, G, SEC 32, T175, R33E	PAOW	10/18/1965		8780	333 13-3/8"	250 sx	8,779 4-1/2"	850 sx	8,750'-8,758'		
30025013830000	ELLIAMS	6	CONOCOPHILLIPS	2310' FNL, 659' FWL, E, SEC 33, T175, R33E	PAGW	7/3/1961		8788	332 13-3/8"	350 SX	8,787 5-1/2"	361 SX	8,562'-8,734'		
30025015640000	MCA UNIT	135	CONOCOPHILLIPS	1980' FNL, 1980' FWL, F, SEC 30, T175, R33E	PLUGINJ	9/11/1943		4287	30 10"	20 sx	3,947 7"	200 sx	OH 4,111'-4,287'		
30025015630000	MCA UNIT	199	CONOCOPHILLIPS	1980' FSL, 1980' FWL, K, SEC 30, T175, R33E	PAQW	6/30/1943		4265	20 10-3/4"	20 sx	3,950 7"	200 sx	OH 3,950'-4,265'		
30025303480000	MCA UNIT	381	CONOCOPHILLIPS	2515' FSL, 1720' FWL, K, SEC 30, T175, R33E	PAOW	8/29/1988		4400	1,210 13-3/8"	750 sx	4,400 5-1/2"	2500 sx	4,081'-4,332'		
30025083380000	PEARL B	3	CONOCOPHILLIPS	685' FSL, 2050' FWL, N, SEC 30, T175, R33E	PLUGINJ	8/4/1948		4860	20 10"	15 sx	3,986 7"	200 sx	OH 3,986'-4,857'		
30025013670000	WYATT A FEDERAL	4	CONOCOPHILLIPS	1650' FNL, 1650' FWL, F, SEC 33, T175, R33E	INJ	12/21/1952		4750	1,350 8"	50 sx	4,750 4-1/2"	450 sx	4,492'-4,542'		
30025013630000	WYATT A FEDERAL	13	CONOCOPHILLIPS	1980' FNL, 660' FWL, E, SEC 33, T175, R33E	OIL	8/26/1947		4582	26 10"	25 sx	3,995 7"	150 sx	OH 3,995'-4,582'		
30025013580000	SE MALJAMAR UNIT	1	CROSS TIMBERS ENERGY	990' FNL, 330' FWL, D, SEC 33, T175, R33E	OIL	9/5/1953		4303	1,427 7"	0 sx	4,278 5-1/2"	100 sx	OH 4,278'-4,448'		
30025013590000	SE MALJAMAR UNIT	2	CROSS TIMBERS ENERGY	990' FNL, 990' FWL, D, SEC 33, T175, R33E	OIL	7/22/1953		4302	1,306 8-5/8"	50 sx	4,104 7"	100 sx	OH 4,104'-4,447'		
30025332200000	SE MALJAMAR UNIT	3	CROSS TIMBERS ENERGY	380' FNL, 350' FWL, D, SEC 33, T175, R33E	OIL	5/3/1996		4480	394 8-5/8"	250 sx	4,470 5-1/2"	950 sx	4,258'-4,399'		
30025339210000	SE MALJAMAR UNIT	4	CROSS TIMBERS ENERGY	330' FNL, 990' FWL, D, SEC 33, T175, R33E	OIL	6/8/1997		4505	428 8-5/8"	250 sx	4,505 5-1/2"	850 sx	4,308'-4,381'		
30025013410000	SE MALJAMAR UNIT	5	CROSS TIMBERS ENERGY	2310' FSL, 1650' FEL, J, SEC 32, T175, R33E	OIL	1/20/1954		4705	1,372 8-5/8"	50 sx	3,793 7"	100 sx	4,568'-4,680'		
30025013780000	SE MALJAMAR UNIT	9	CROSS TIMBERS ENERGY	2310' FSL, 940' FWL, L, SEC 33, T175, R33E	PAQW	9/19/1961		4750	324 8-5/8"	200 sx	4,750 4-1/2"	850 sx	4,612'-4,630'		
30025253190000	SE MALJAMAR UNIT	104	CROSS TIMBERS ENERGY	1355' FSL, 1135' FEL, I, SEC 30, T175, R33E	OIL	1/16/1977		4350	1,305 8-5/8"	650 sx	4,350 5-1/2"	550 sx	4,184'-4,306'		
30025265120000	SE MALJAMAR UNIT	105	CROSS TIMBERS ENERGY	2490' FSL, 1595' FEL, J, SEC 30, T175, R33E	OIL	4/17/1980		4350	1,300 8-5/8"	660 sx	4,350 5-1/2"	1960 sx	3,897'-4,308'		
30025334080000	SE MALJAMAR UNIT	108	CROSS TIMBERS ENERGY	1900' FSL, 104' FEL, I, SEC 30, T175, R33E	OIL	6/20/1996		4405	395 8-5/8"	250 sx	4,303 5-1/2"	850 sx	4,223'-4,282'		
30025336540000	SE MALJAMAR UNIT	109	CROSS TIMBERS ENERGY	1980' FSL, 1470' FEL, J, SEC 30, T175, R33E	OIL	12/17/1996		4355	416 8-5/8"	275 sx	4,355 5-1/2"	700 sx	4,181'-4,218'		
30025339050000	SE MALJAMAR UNIT	110	CROSS TIMBERS ENERGY	1650' FSL, 2310' FEL, J, SEC 30, T175, R33E	OIL	5/14/1997		4377	394 8-5/8"	250 sx	4,377 5-1/2"	950 sx	4,210'-4,266'		
30025375730000	SE MALJAMAR UNIT	111	CROSS TIMBERS ENERGY	2304' FSL, 2330' FEL, J, SEC 30, T175, R33E	OIL	4/6/2006		4345	1,219 8-5/8"	630 sx	4,345 5-1/2"	635 sx	4,194'-4,280'		
30025403010000	SE MALJAMAR UNIT	112	CROSS TIMBERS ENERGY	2310' FNL, 2310' FEL, G, SEC 30, T175, R33E	OIL	1/25/2012		4351	1,260 8-5/8"	625 sx	4,351 5-1/2"	575 sx	4,140'-4,196'		
30025375740000	SE MALJAMAR UNIT	115	CROSS TIMBERS ENERGY	832' FNL, 660' FWL, D, SEC 33, T175, R33E	OIL	2/28/2006		4510	1,210 8-5/8"	670 sx	4,510 5-1/2"	800 sx	4,334'-4,420'		
30025228740000	SE MALJAMAR UNIT	144	CROSS TIMBERS ENERGY	660' FSL, 1980' FEL, O, SEC 30, T175, R33E	OIL	2/22/1969		4381	355 9-5/8"	350 sx	4,381 4-1/2"	125 sx	4,250'-4,350'		
30025386130000	SE MALJAMAR UNIT	147	CROSS TIMBERS ENERGY	334' FSL, 1180' FEL, P, SEC 30, T175, R33E	OIL	6/13/2009		4420	1,171 8-5/8"	600 sx	4,420 5-1/2"	800 sx	4,272'-4,353'		
30025015570000	SE MALJAMAR UNIT	203	CROSS TIMBERS ENERGY	2310' FNL, 1650' FEL, G, SEC 30, T175, R33E	PAQW	7/29/1953		4278	1,195 8"	50 sx	3,931 7"	100 sx	4,132'-4,189'		
30025015550000	SE MALJAMAR UNIT	204	CROSS TIMBERS ENERGY	660' FNL, 660' FEL, A, SEC 30, T175, R33E	PAQW	1/1/1957		4407	1,241 8-5/8"	50 sx	4,039 5-1/2"	100 sx	4,194'-4,252'		
30025015440000	SE MALJAMAR UNIT	402	CROSS TIMBERS ENERGY	1980' FNL, 660' FWL, E, SEC 29, T175, R33E	OIL	10/12/1943		4320	1,122 9-5/8"	650 sx	4,290 5"	200 sx	3,944'-4,240'		5" liner top @ 3,766', tied into 7" int.
30025260250000	SE MALJAMAR UNIT	409	CROSS TIMBERS ENERGY	2615' FNL, 25' FWL, L, SEC 29, T175, R33E	PAQW	10/14/1978		4359	1,300 8-5/8"	650 sx	4,359 5-1/2"	3350 sx	4,296'-4,326'		
30025260260000	SE MALJAMAR UNIT	410	CROSS TIMBERS ENERGY	2615' FNL, 1420' FWL, K, SEC 29, T175, R33E	OIL	12/6/1978		4377	1,316 8-5/8"	650 sx	4,343 5-1/2"	2350 sx	3,948'-4,340'		
30025275700000	SE MALJAMAR UNIT	411	CROSS TIMBERS ENERGY	1345' FNL, 100' FWL, E, SEC 29, T175, R33E	OIL	2/20/1982		4073	1,299 8-5/8"	900 sx	3,900 7-7/8"	1200 sx	OH 3,900'-4,073'		
30025275710000	SE MALJAMAR UNIT	412	CROSS TIMBERS ENERGY	1295' FNL, 1295' FWL, D, SEC 29, T175, R33E	OIL	2/3/1982		4425	1,305 8-5/8"	800 sx	4,424 4"	75 sx	4,081'-4,088'		4" liner top @ 3,654, tied into 5-1/2"
30025275650000	SE MALJAMAR UNIT	413	CROSS TIMBERS ENERGY	1485' FNL, 2400' FWL, F, SEC 29, T175, R33E	TA	2/2/1982		4450	1,312 8-5/8"	800 sx	3,907 5-1/2"	1000 sx	4,118'-4,236'		
30025015520000	SE MALJAMAR UNIT	504	CROSS TIMBERS ENERGY	1980' FNL, 1980' FEL, G, SEC 29, T175, R33E	PAQW	9/25/1944		4440	1,290 9-5/8"	400 sx	4,356 5-1/2"	90 sx	4,200'-4,306'		
30025264620000	SE MALJAMAR UNIT	507	CROSS TIMBERS ENERGY	2615' FNL, 2615' FEL, G, SEC 29, T175, R33E	TA	3/4/1980		4380	1,300 8-5/8"	660 sx	3,888 5-1/2"	800 sx	4,305'-4,354'		Premier sqzd (4,172'-4,278')
30025015430000	SE MALJAMAR UNIT	605	CROSS TIMBERS ENERGY	1335' FSL, 1335' FWL, K, SEC 29, T175, R33E	PAQW	11/14/1947		4276	20 10"	15 sx	4,035 7"	240 sx	4,189'-4,370'		
30025243420000	SE MALJAMAR UNIT	606	CROSS TIMBERS ENERGY	1310' FSL, 100' FWL, L, SEC 29, T175, R33E	OIL	2/5/1973		4292	833 8-5/8"	400 sx	4,292 5-1/2"	435 sx	4,170'-4,268'		
30025269570000	SE MALJAMAR UNIT	607	CROSS TIMBERS ENERGY	1455' FSL, 1330' FWL, K, SEC 29, T175, R33E	OIL	10/28/1980		4360	1,302 8-5/8"	660 sx	3,900 5-1/2"	800 sx	4,177'-4,326'		
30025314710000	SE MALJAMAR UNIT	608	CROSS TIMBERS ENERGY	125' FSL, 1345' FWL, N, SEC 29, T175, R33E	OIL	1/4/1992		4550	309 8-5/8"	250 sx	4,550 5-1/2"	1170 sx	4,257'-4,382'		
30025328890000	SE MALJAMAR UNIT	611	CROSS TIMBERS ENERGY	710' FSL, 50' FWL, M, SEC 29, T175, R33E	OIL	5/29/1995		4463	357 8-5/8"	250 sx	4,463 5-1/2"	800 sx	4,234'-4,324'		
30025328900000	SE MALJAMAR UNIT	612	CROSS TIMBERS ENERGY	710' FSL, 1425' FWL, N, SEC 29, T175, R33E	OIL	6/4/1995		4473	333 8-5/8"	250 sx	4,473 5-1/2"	1000 sx	4,228'-4,339'		
30025333660000	SE MALJAMAR UNIT	613	CROSS TIMBERS ENERGY	1930' FSL, 1516' FWL, K, SEC 29, T175, R33E	OIL	6/3/1996		4325	394 8-5/8"	250 sx	4,324 5-1/2"	850 sx	3,956'-4,285'		
30025335910000	SE MALJAMAR UNIT	615	CROSS TIMBERS ENERGY	1900' FSL, 2630' FWL, K, SEC 29, T175, R33E	OIL	12/12/1996		4400	418 8-5/8"	275 sx	4,400 5-1/2"	950 sx	4,278'-4,296'		
30025338650000	SE MALJAMAR UNIT	616	CROSS TIMBERS ENERGY	775' FSL, 2590' FWL, N, SEC 29, T175, R33E	OIL	5/3/1997		4359	394 8-5/8"	250 sx	4,358 5-1/2"	950 sx	4,254'-4,300'		
30025378970000	SE MALJAMAR UNIT	617	CROSS TIMBERS ENERGY	1704' FSL, 1998' FWL, K, SEC 29, T175, R33E	OIL	9/12/2006		4451	1,225 8-5/8"	630 sx	4,450 5-1/2"	770 sx	4,255'-4,368'		
30025015500000	SE MALJAMAR UNIT	704	CROSS TIMBERS ENERGY	1650' FSL, 990' FEL, I, SEC 29, T175, R33E	OIL	11/1/1954		4360	297 8-5/8"	300 sx	4,246 5-1/2"	800 sx	4,021'-4,045', 4,246'-4,360' OH		
30025238900000	SE MALJAMAR UNIT	705	CROSS TIMBERS ENERGY	1395' FSL, 2615' FEL, J, SEC 29, T175, R33E	OIL	12/12/1971		4450	369 8-5/8"	300 sx	4,448 5-1/2"	355 sx	4,178'-4,300'		

37164

UWI/API	WELLNAME	WELLNO	OPER	LOCATION	STATUS	COMP DATE	TD	SURF CSG DEPTH	SURF CSG SIZE	SURF CSG CMT	PROD CSG DEPTH	PROD CSG SIZE	PROD CSG CMT	PERFORATIONS	COMMENTS
30025314450000	SE MALJAMAR UNIT	907	CROSS TIMBERS ENERGY	2310' FNL, 990' FEL, H, SEC 32, T17S, R33E	PAOW	1/9/1992		4600	338 8-5/8"	200 sx	4,600 5-1/2"	1450 sx	4,316'-4,457'		
30025373860000	SE MALJAMAR UNIT	909	CROSS TIMBERS ENERGY	944' FNL, 330' FEL, A, SEC 32, T17S, R33E	OIL	3/10/2006		4540	1,150 8-5/8"	630 sx	4,540 5-1/2"	725 sx	4,308'-4,408'		
30025083390000	SE MALJAMAR UNIT	101WI	CROSS TIMBERS ENERGY	1980' FSL, 1980' FEL, J, SEC 30, T17S, R33E	PLUGINJ	12/22/1943		4282	1,200 8-5/8"	600 sx	3,927 5-1/2"	300 sx	4,179'-4,249'		
30025083370000	SE MALJAMAR UNIT	102WI	CROSS TIMBERS ENERGY	1980' FSL, 660' FEL, I, SEC 30, T17S, R33E	INJ	2/13/1944		4267	1,235 8-5/8"	550 sx	4,363 4"	350 sx	4,114'-4,226'		4" liner top @ 3,626', tied into 5-1/2"
30025083350000	SE MALJAMAR UNIT	103WI	CROSS TIMBERS ENERGY	660' FSL, 660' FEL, P, SEC 30, T17S, R33E	PLUGINJ	3/25/1944		4355	1,235 8"	550 sx	3,965 5-1/2"	250 sx	4,220'-4,324'		
30025333530000	SE MALJAMAR UNIT	106WI	CROSS TIMBERS ENERGY	1040' FSL, 420' FEL, P, SEC 30, T17S, R33E	INJ	5/15/1996		4418	392 8-5/8"	250 sx	4,417 5-1/2"	950 sx	4,218'-4,279'		
30025266680000	SE MALJAMAR UNIT	145WI	CROSS TIMBERS ENERGY	990' FSL, 1650' FEL, O, SEC 30, T17S, R33E	INJ	4/28/1980		4500	1,265 8-5/8"	570 sx	4,449 5-1/2"	950 sx	4,226'-4,425'		
30025013500000	SE MALJAMAR UNIT	14WI	CROSS TIMBERS ENERGY	330' FNL, 2310' FWL, C, SEC 32, T17S, R33E	PLUGINJ	11/12/1951		4298	1,223 7"	50 sx	4,102 5-1/2"	100 sx	4,096'-4,298'		
30025220930000	SE MALJAMAR UNIT	205WI	CROSS TIMBERS ENERGY	500' FNL, 1980' FEL, B, SEC 30, T17S, R33E	PLUGINJ	5/1/1967		4300	353 8-5/8"	350 sx	4,300 4-1/2"	300 sx	4,166'-4,182'		
30025015580000	SE MALJAMAR UNIT	301WI	CROSS TIMBERS ENERGY	1980' FNL, 660' FEL, H, SEC 30, T17S, R33E	PLUGINJ	3/29/1944		4291	1,163 8-5/8"	100 sx	3,950 7"	150 sx	4,114'-4,192'		
30025015450000	SE MALJAMAR UNIT	403WI	CROSS TIMBERS ENERGY	1980' FNL, 1980' FWL, F, SEC 29, T17S, R33E	PLUGINJ	7/28/1944		4300	1,210 8"	550 sx	4,015 5-1/2"	300 sx	4,185'-4,277'		
30025015530000	SE MALJAMAR UNIT	505WI	CROSS TIMBERS ENERGY	2310' FNL, 990' FEL, H, SEC 29, T17S, R33E	PLUGINJ	2/9/1959		4490	254 8-5/8"	100 sx	4,490 5-1/2"	125 sx	4,137'-4,472'		
30025015390000	SE MALJAMAR UNIT	601WI	CROSS TIMBERS ENERGY	1980' FSL, 660' FWL, L, SEC 29, T17S, R33E	PLUGINJ	10/31/1943		4272	1,265 8"	50 sx	3,969 7"	75 sx	4,253'-4,272'		4" Liner 3,809'-4,253'.
30025015400000	SE MALJAMAR UNIT	602WI	CROSS TIMBERS ENERGY	660' FSL, 1980' FWL, N, SEC 29, T17S, R33E	PLUGINJ	7/31/1943		4319	1,300 8"	25 sx	4,060 7"	100 sx	OH 4,060'-4,312'		
30025015410000	SE MALJAMAR UNIT	603WI	CROSS TIMBERS ENERGY	1980' FSL, 1980' FWL, K, SEC 29, T17S, R33E	PLUGINJ	11/4/1943		4300	1,265 8-5/8"	100 sx	3,950 7"	75 sx	4,115'-4,300'		4-1/2" Liner 3,742'-4,115'.
30025015420000	SE MALJAMAR UNIT	604WI	CROSS TIMBERS ENERGY	660' FSL, 660' FWL, M, SEC 29, T17S, R33E	INJ	12/14/1943		4302	1,260 8-5/8"	50 sx	3,963 5"	215 sx	4,236'-4,326'		5" liner top @ 3,759', tied into 7"
30025314460000	SE MALJAMAR UNIT	609WI	CROSS TIMBERS ENERGY	1920' FSL, 450' FWL, L, SEC 29, T17S, R33E	INJ	1/15/1992		4420	1,248 9-5/8"	650 sx	4,420 5-1/2"	1375 sx	4,153'-4,278'		
30025328880000	SE MALJAMAR UNIT	610WI	CROSS TIMBERS ENERGY	1310' FSL, 750' FWL, L, SEC 29, T17S, R33E	INJ	5/30/1995		4397	348 8-5/8"	250 sx	4,397 5-1/2"	900 sx	4,252'-4,278'		
30025333370000	SE MALJAMAR UNIT	614WI	CROSS TIMBERS ENERGY	1070' FSL, 1888' FWL, N, SEC 29, T17S, R33E	INJ	6/16/1996		4395	357 8-5/8"	250 sx	4,390 5-1/2"	850 sx	4,250'-4,308'		
30025013420000	SE MALJAMAR UNIT	6WI	CROSS TIMBERS ENERGY	2310' FSL, 430' FEL, I, SEC 32, T17S, R33E	INJ	12/4/1961		4748	325 8-5/8"	300 sx	4,744 4-1/2"	250 sx	4,602'-4,645'		
30025015480000	SE MALJAMAR UNIT	701WI	CROSS TIMBERS ENERGY	660' FSL, 1980' FEL, O, SEC 29, T17S, R33E	INJ	3/11/1944		4440	1,286 10-3/4"	500 sx	4,439 5"	100 sx	4,222'-4,343'		5" liner top @ 3,736', tied into 7"
30025083340000	SE MALJAMAR UNIT	702WI	CROSS TIMBERS ENERGY	1980' FSL, 1980' FEL, J, SEC 29, T17S, R33E	INJ	3/11/1944		4400	1,246 8-5/8"	400 sx	4,399 5"	80 sx	4,192'-4,302'		5" liner top @ 3,709', tied into 7"
30025015490000	SE MALJAMAR UNIT	703WI	CROSS TIMBERS ENERGY	660' FSL, 990' FEL, P, SEC 29, T17S, R33E	INJ	2/1/1953		4340	1,260 8-5/8"	550 sx	4,290 5-1/2"	300 sx	4,280'-4,290', 4,290'-4,340' OH		
30025243910000	SE MALJAMAR UNIT	708WI	CROSS TIMBERS ENERGY	100' FSL, 2590' FEL, O, SEC 29, T17S, R33E	INJ	4/10/1973		4316	819 8-5/8"	500 sx	4,316 5-1/2"	435 sx	4,255'-4,292'		
30025333380000	SE MALJAMAR UNIT	710WI	CROSS TIMBERS ENERGY	1165' FSL, 2010' FEL, O, SEC 29, T17S, R33E	PLUGINJ	6/20/1996		4400	404 8-5/8"	250 sx	4,394 5-1/2"	850 sx	4,272'-4,324'		
30025338690000	SE MALJAMAR UNIT	714WI	CROSS TIMBERS ENERGY	1200' FSL, 900' FEL, P, SEC 29, T17S, R33E	INJ	5/17/1997		4450	383 8-5/8"	250 sx	4,450 5-1/2"	900 sx	4,282'-4,332'		
30025013530000	SE MALJAMAR UNIT	902WI	CROSS TIMBERS ENERGY	330' FNL, 990' FEL, A, SEC 32, T17S, R33E	PLUGINJ	5/10/1951		4314	1,257 8-5/8"	50 sx	4,050 5-1/2"	100 sx	OH 4,050'-4,500'		
30025335930000	SE MALJAMAR UNIT	908WI	CROSS TIMBERS ENERGY	330' FNL, 330' FEL, A, SEC 32, T17S, R33E	INJ	12/13/1996		4450	415 8-5/8"	275 sx	4,417 5-1/2"	900 sx	4,261'-4,399'		
30025013610000	COCKBURN-FEDERAL	5	DENIUS, HR ET AL	2310' FSL, 330' FWL, L, SEC 33, T17S, R33E	PAOW	1/10/1954		3880	1,380 8-5/8"	50 sx	3,880 5-1/2"	250 sx	3,840'-3,862'		P&A Queen only
30025013680000	WYATT-PHILLIPS FEDERAL	5	DENIUS, HR ET AL	990' FNL, 1650' FWL, C, SEC 33, T17S, R33E	PAOW	1/28/1955		4305	1,200 8"	100 sx	4,305 4"	100 sx	OH 4,258'-4,305'		
30025013660000	WYATT A FEDERAL	3	DUNAGAN	1650' FNL, 330' FWL, E, SEC 33, T17S, R33E	PAOW	6/18/1952		4432	1,318 7"	50 sx	3,718 5-1/2"	50 sx	4,300'-4,325'		4" Liner 3,509'-4,430'
30025013730000	COCKBURN	1	DUNIGAN, JAMES P	990' FNL, 380' FWL, D, SEC 33, T17S, R33E	DRY	4/5/1961		8940	308 13-3/8"	340 sx	4,557 8-5/8"	1950 sx	None		Re-plugged 1/85.
													6,846'-6,866'		
30025013550000	GIFFORD A STATE	1	LATIGO PETROLEUM	2310' FSL, 330' FEL, I, SEC 32, T17S, R33E	PAOW	9/22/1961		8829	314 11-3/4"	225 sx	8,823 4-1/2"	1500 sx	8,561'-8,644'		
30025341940000	CAPROCK MALJAMAR UNIT	284	LINN	330' FSL, 330' FWL, M, SEC 28, T17S, R33E	OIL	1/7/1998		4550	396 8-5/8"	300 sx	4,550 4-1/2"	1350 sx	4,268'-4,344'		
30025015250000	PHILLIPS-STATE	1	LINN	660' FSL, 660' FWL, M, SEC 28, T17S, R33E	INJ	12/21/1957		4440	354 8-5/8"	250 sx	4,635 4-1/2"	150 sx	4,302'-4,605'		CTI
30025013770000	DENIUS-FEDERAL	6	LRE	2310' FSL, 990' FWL, L, SEC 33, T17S, R33E	OIL	3/25/1961		8809	315 13-3/8"	325 sx	8,809 4-1/2"	1650 sx	8,605'-8,660'		
30025252860000	COCKBURN A STATE	5	MACK	1980' FNL, 1980' FWL, F, SEC 32, T17S, R33E	OIL	9/12/1976		13705	456 13-3/8"	475 sx	10,817 5-1/2"	2235 sx	8,645'-8,615'		
30025013450000	STATE CD	3	MACK	2310' FNL, 2310' FEL, G, SEC 32, T17S, R33E	PAOW	1/7/1962		4810	329 8-5/8"	300 sx	4,810 4-1/2"	250 sx	4,345'-4,492'		
30025216620000	STATE CD	2	MACK	990' FNL, 1980' FEL, B, SEC 32, T17S, R33E	PAOW	3/28/1966		8820	334 13-3/8"	320 sx	8,819 4-1/2"	700 sx	8,600'-8,695'		
30025013560000	OHIO-STATE C	1	OXY USA INC	1980' FNL, 330' FEL, H, SEC 32, T17S, R33E	OIL	11/24/1960		8825	311 13-3/8"	340 sx	8,825 4-1/2"	1600 sx	8,626'-8,661'		
													4,830'-5,210'		
													5,944'-5,982'		
30025239880000	PHILMEX	14	PHILLIPS PETROLEUM	569' FSL, 507' FWL, M, SEC 28, T17S, R33E	PASWD	3/2/1972		12752	376 11-3/4"	480 sx	6,600 5-1/2"	1650 sx	6,132'-6,450'		
30025337730000	CAPROCK MALJAMAR UNIT	280	WISER	932' FSL, 330' FWL, M, SEC 28, T17S, R33E	PAOW	4/5/1997		4827	444 8-5/8"	325	4,827 5-1/2"	850 sx	4,200'-4,649'		P&A'd 6/10/02
30025013400000	STATE BY	3	XTO ENERGY	1980' FSL, 660' FEL, I, SEC 32, T17S, R33E	PAOW	12/17/1952		4715	1,370 8-5/8"	50 sx	3,813 7"	100 sx	3,813'-3,936' OH		Drilled to 4715, set cmt plug and produced Queen

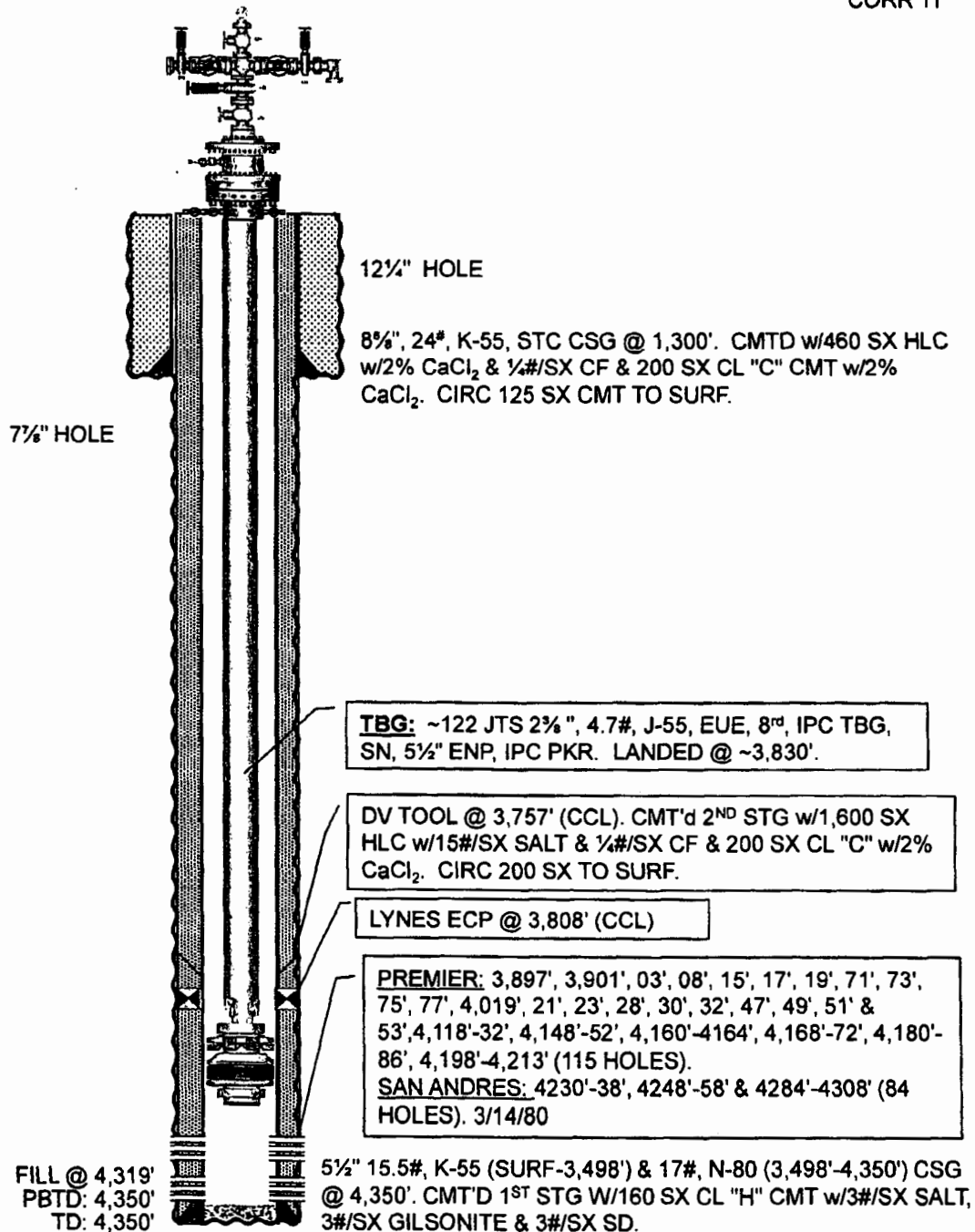
59
2/1/43

SEMGS AU #105 Existing Wellbore Diagram

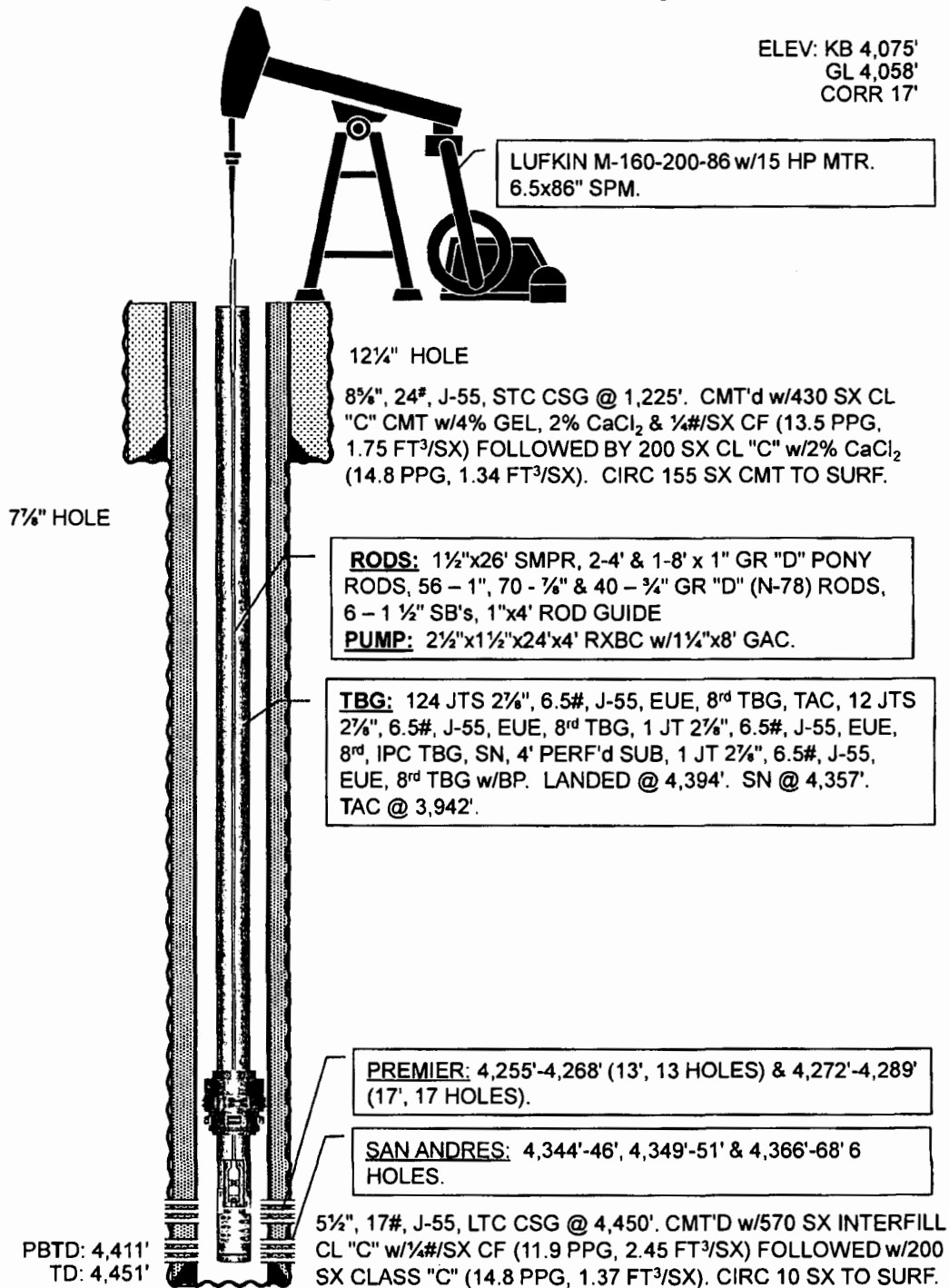


SEMGSAU #105 Proposed Wellbore Diagram

ELEV: KB 4,061'
GL 4,050'
CORR 11'

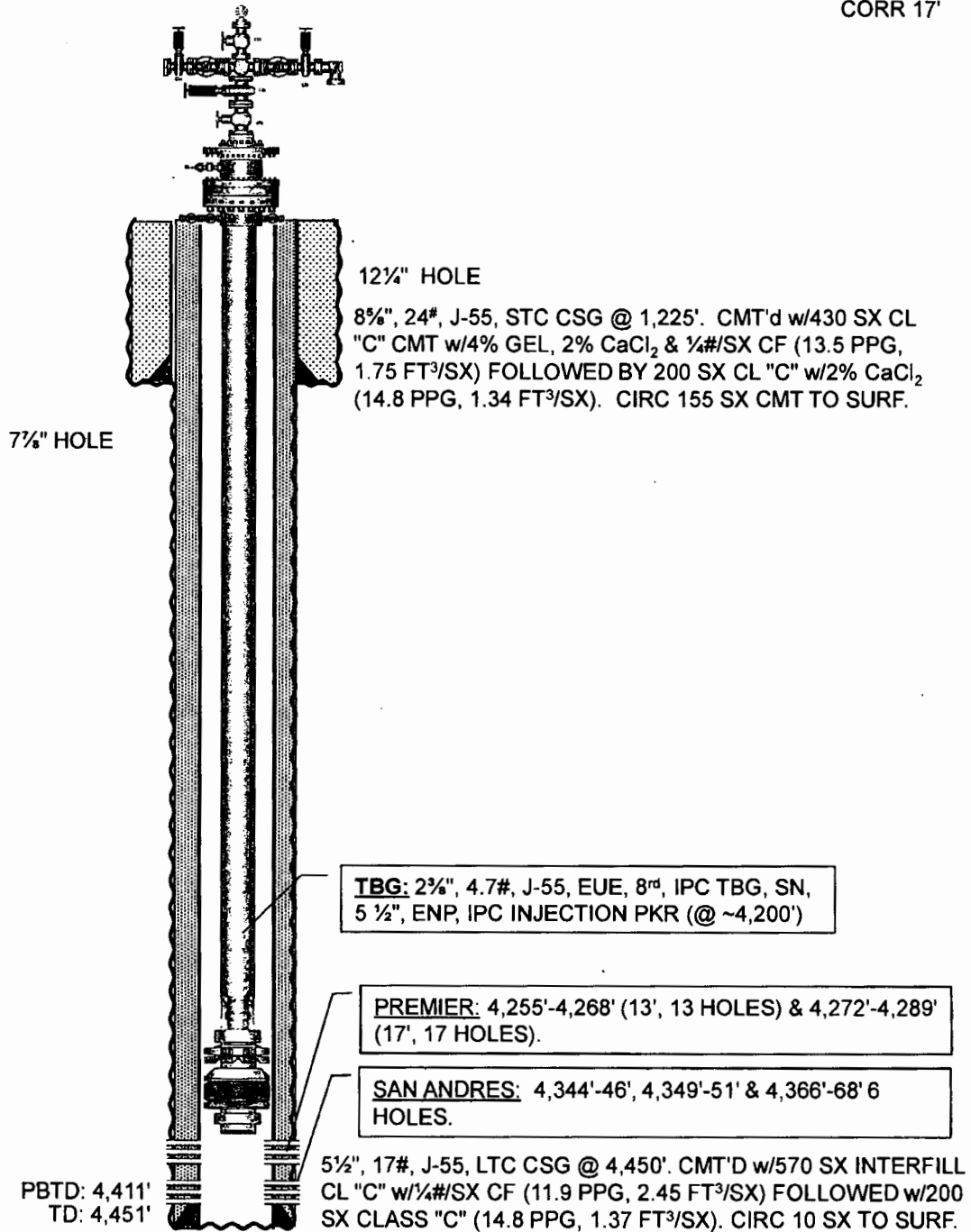


SEMGSAU #617 Existing Wellbore Diagram

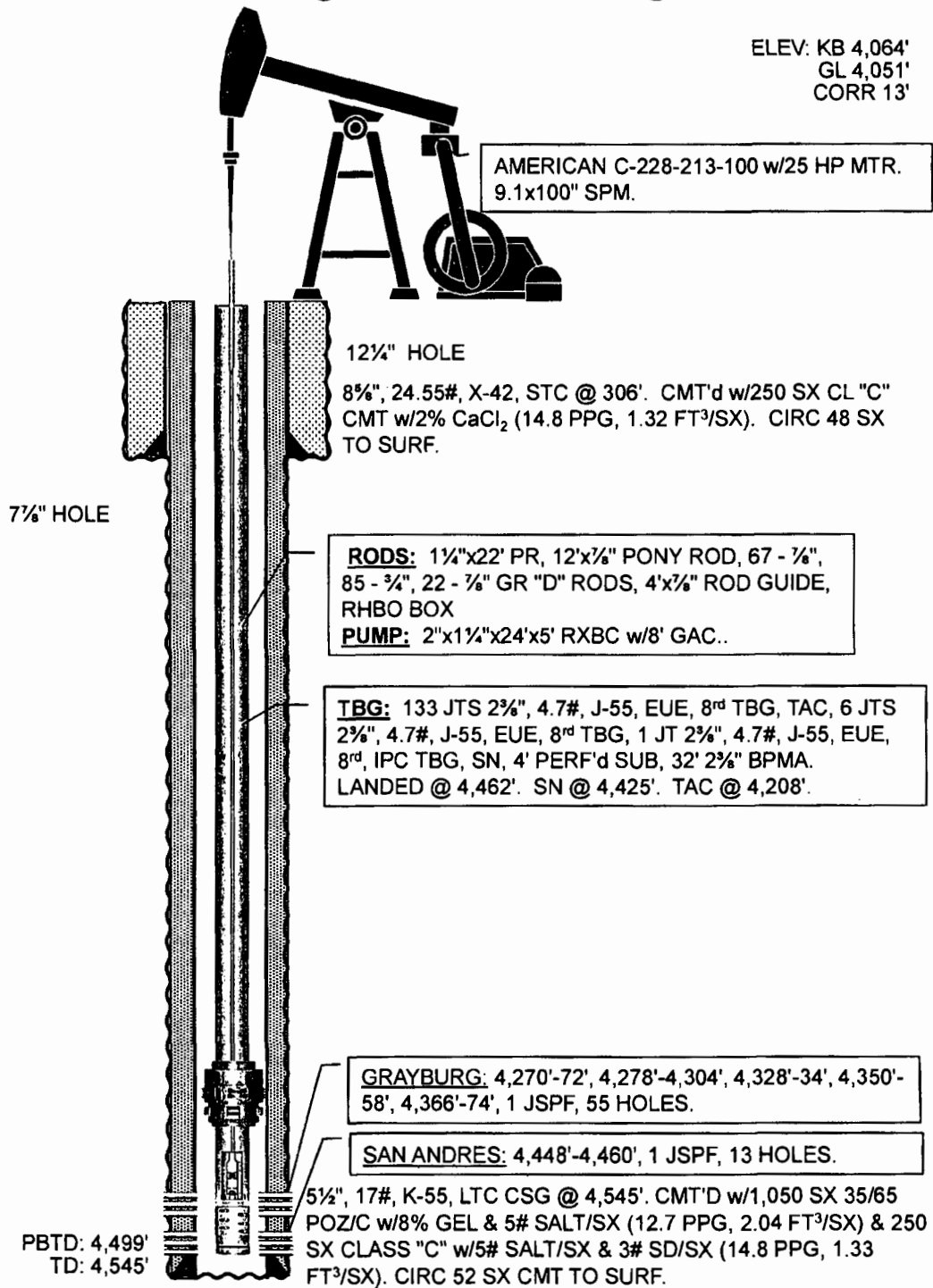


SEMGSAU #617 Proposed Wellbore Diagram

ELEV: KB 4,075'
GL 4,058'
CORR 17'

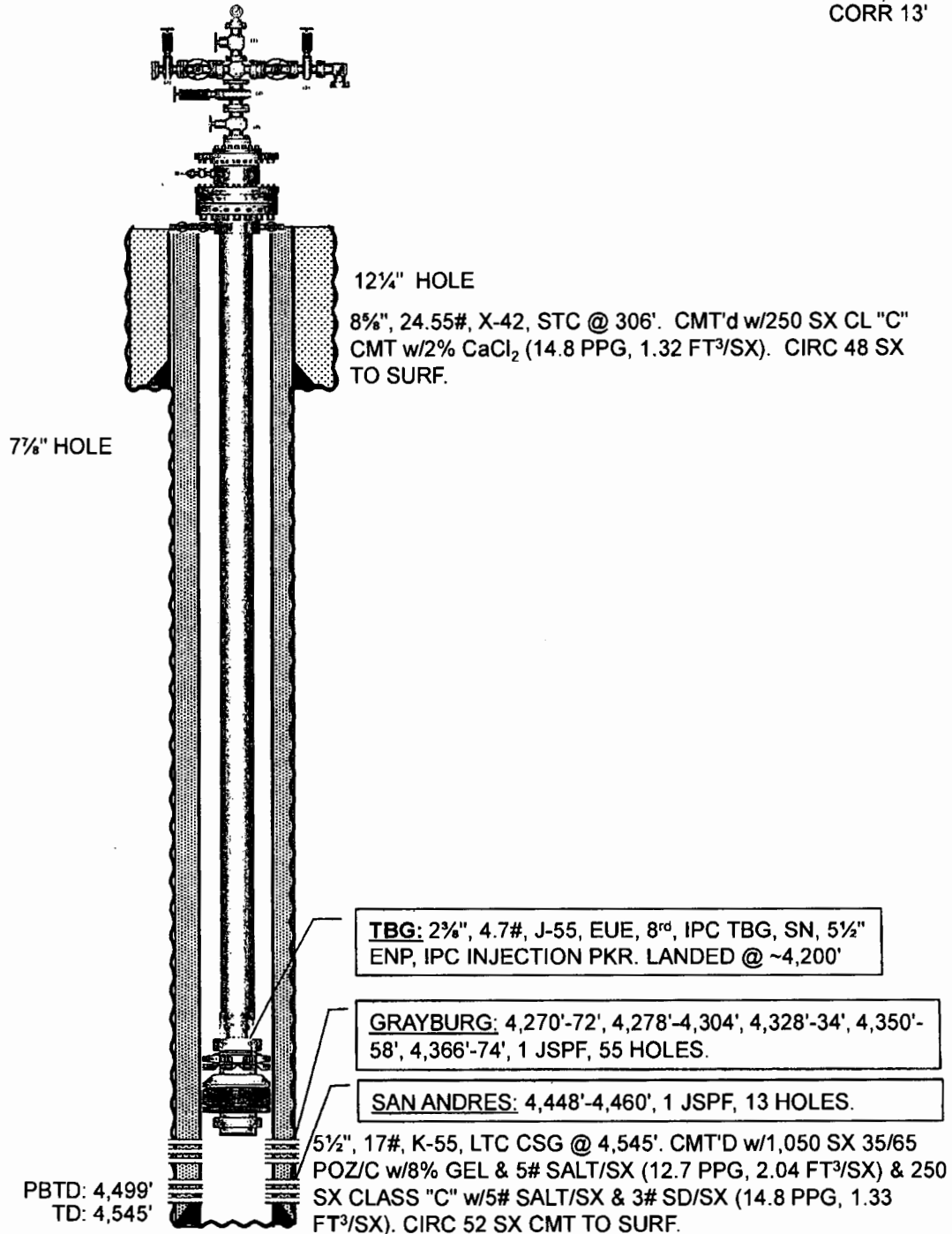


SEMGSAU #906 Existing Wellbore Diagram



SEMGSAU #906 Proposed Wellbore Diagram

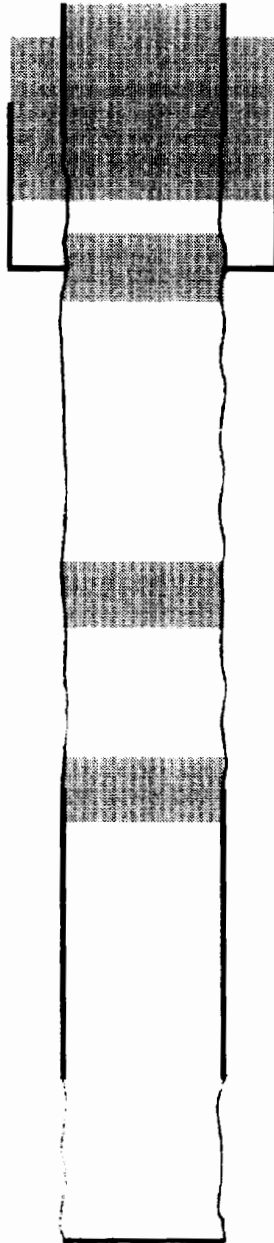
ELEV: KB 4,064'
GL 4,051'
CORR 13'



WELL: Cockburn State #2
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 1980' FEL, UNIT C, SEC 32, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. 3211 - 5200 W/MUD
2. 3211 CMT W/10 SXS.
3. MUD TO 2450.
4. 2450 CMT W/10 SXS.
5. MUD TO 1270.
6. 1270 CMT W/10 SXS.
7. 7" CSG RUN TO 207
8. 0 - 653 W/200 SXS.



7" @ 207', CMT W/175 SXS.
TOC @ 23'

TOP OF 8 5/8" @ 210'.

SURFACE CASING:
8 5/8" @ 1262', CMT W/50 SX

7" CSG CUT AND PULLED 3211'

PRODUCTION CASING:
7" @ 4663', CMT W/50 SX

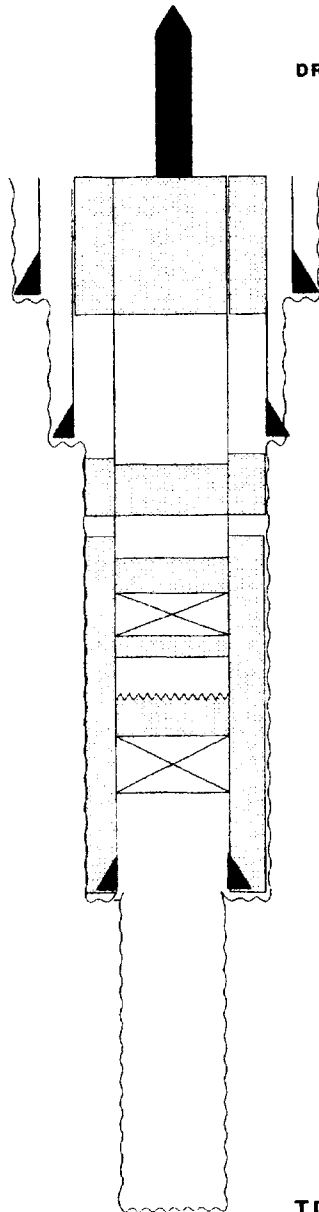
TD:5200

**CITIES SERVICE
STATE "CB" #5**

(P&A 2/80)

AKA Cockburn-5 State #5

DRY HOLE MARKER



13 3/8" • 205' W/ 0 SX.
PERF • 250'. 8QZ W/ 375 SX.
CIRC. 5 SX TO SURF.

10 3/4" 34# CSG • 855' W/ 0 SX.
TOC 925'

PERF • 1150'. 8QZ W/ 600 SX.
DISPLACE TO 1050'
TOC 1250'

RETAINER • 1305'. 8QZ W/ 600 SX.

CIBP • 3475' W/ 7 SX.

8QZ • 3275' W/ 15 SX.
PERF 3555'-3700'

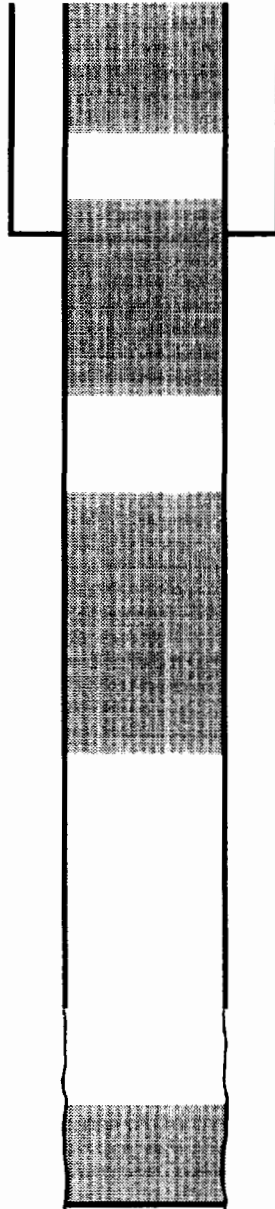
7" 20# CSG • 3912' W/ 100 SX.

TD 4500'

1650' FNL, 1650' FEL, SEC 32, T17S, R33E

OHIO JONES FEDERAL #2
WELL: SEMGSAU #202
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FNL, 1980' FEL, UNIT G, SEC 30, T17S, R33E, LEA COUNTY, NM

23
SCHEMATICS
CHECK O.K.



SURFACE CASING:
8 5/8" @ 1175', CMT W/275 SX

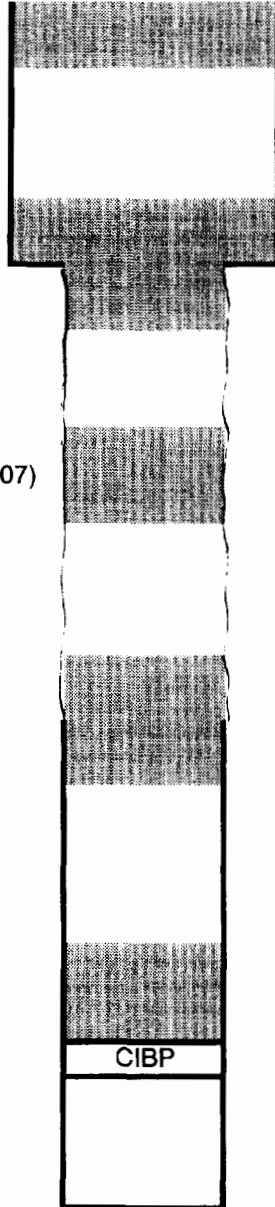
PLUGS SET AS FOLLOWS:

1. 4253 - 4303 W/10 SX.
2. 2209 - 2453 W/100 SX.
3. 1000 - 1270 W/100 SX
4. 0 - 346 W/120 SX.

PRODUCTION CASING:
7" @ 3937', CMT W/100 SX

TD:4303

WELL: SEMGSAU #707
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 100' FSL, 1430' FEL, UNIT O, SEC 29, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:

8 5/8" @ 810', CMT W/350 SX

PLUGS SET AS FOLLOWS:

1. CIBP @ 4207 W/5 SXS (4167-4207)
2. PULLED 1738 OF 5 1/2".
3. 1688 - 1788 W/25 SXS
4. 1280 - 1380 W/40 SXS
5. 740 - 840 W/ 30 SXS
6. 0 - 30 W/10 SXS

PRODUCTION CASING:

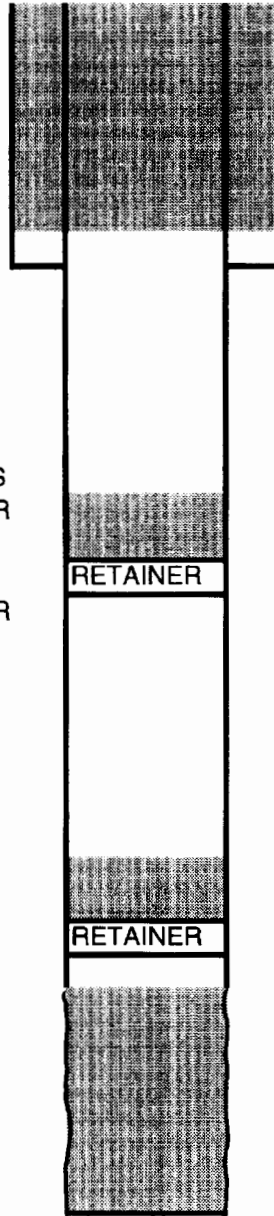
5 1/2" @ 4429', CMT W/435 SX

TD:4430

WELL: SEMGSAU #803
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 1980' FEL, UNIT B, SEC 32, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. SQZ OH 4045 - 4300 W/150 SXS
2. DUMPED 37 SXS ON RETAINER @ 3947.
3. SQZ PERF @ 2800 W/500 SXS
4. DUMPED 37 SXS ON RETAINER @ 2697.
5. SQZ PERF @ 1200 W/250 SXS
6. 0 - 50 W/15 SXS

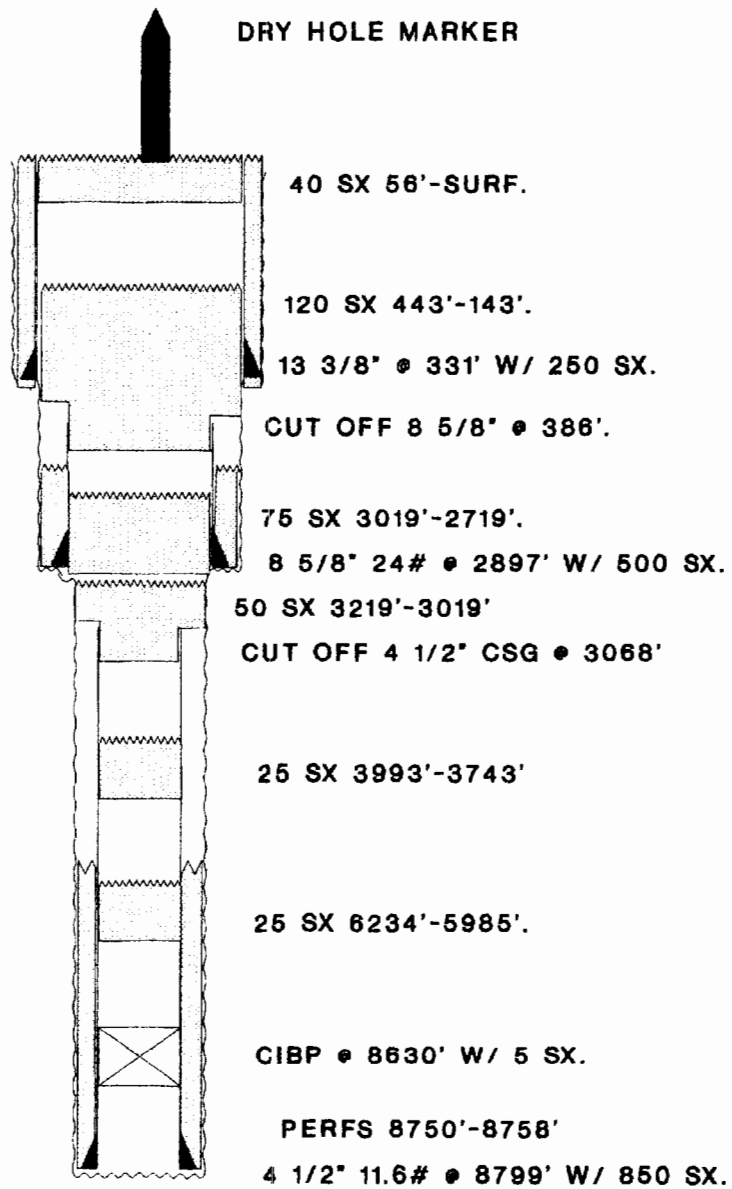


SURFACE CASING:
8 5/8" @ 1280', CMT W/50 SX

PRODUCTION CASING:
7" @ 4045', CMT W/102 SX

TD:4325

**CITIES SERVICE
STATE "CB" #2**

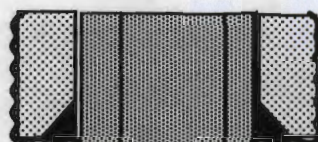


2310' FNL, 1700' FEL, SEC 32, T17S, R33E

EILLIAMS #6
2,311' FNL, 659' FWL
UNIT E, SEC 33 T17S R33E
LEA CO., NM
API #30-025-01383
P & A'd

ELEV: KB 4,071'
GL 4,058'
CORR 13'

17½" HOLE



13⅜", 48#, H-40 @ 332'.
CMT'D w/350 SX.
CIRC 25 SX TO SURF.

PERFORATIONS 580'. SQZ'd w/400 SX.
CIRC CMT TO SURF.

450 SX CMT PLUG 592'-2,100'

CICR @ 2,100'.
SQZ'd w/450 SX

8⅝", 24# & 32#, J-55 & H-40 @ 4,589'
(DV TOOL @ 1,212').
CMT'D w/972 SX

7⅞" HOLE

FISH: 7' CUT OFF JT 2⅜" TBG,
TAC, 186' 2⅜" TBG

PERFORATED INTERVAL: 8,562'-8,734'

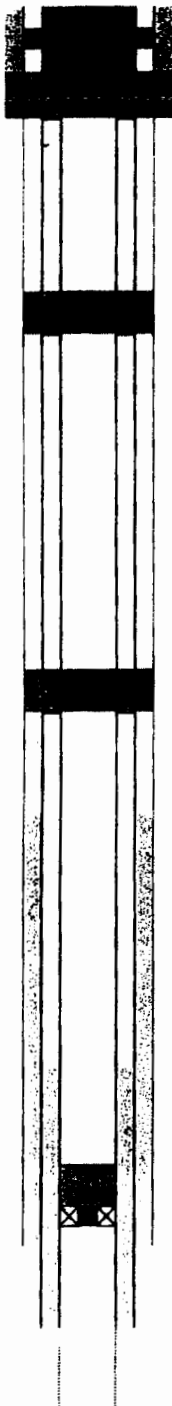
5½", 17#, 15.5# & 14# J-55 & N-80 @ 8,787'.
CMT'D w/361 SX.

TD: 8,788'

PLUGGED WELLBORE SKETCH ConocoPhillips Company - Permian Basin Business Unit

Date: September 28, 2004

RKB @ _____
 DF @ _____
 GL @ 406Z



30 sx C cmt 70' to surface, perf/sqz
 10" OD csg @ 20' cmt'd w/ 24 sx to surface
 70 sx C cmt 250 - 130', perf/sqz, TAGGED
 45 sx C cmt 400 - 250', perf/sqz, TAGGED

45 sx C cmt 1,440 - 1,335', perf/sqz, TAGGED
 Top of Salt @ 1,440'

Base of Salt @ 2,170'

45 sx C cmt 2,270 - 2,125', perf/sqz, TAGGED

TOC 7" csg @ 2,784' (Est.)

TOC 4-1/2" @ 3,500'

25 sx C cmt on CIRC 3,881 - 3,518'
 on top of CIRC @ 3,881' (unable to pump under CIRC @ 1,500 psi)

7" OD 22# casing @ 3,954'
 Cmt'd w/250 sx; TOC @ 2,784' (Est.)

4-1/2" 9.5# J-55 @ 4,111'
 Cmt w/35 sx; TOC @ 3,500'

OH 4,111' - 4,260'
 Cmt plug 4,260 - 4,287'

PBTD: 4260'
 TD: 4287'

Subarea: Maljamar
 Lease & Well No.: MCA Unit No. 136
 Legal Description: 1880' FNL & 1880' FWL, SE/4 NW/4 Sec. 30, T-17-S, R-33-E
 County: Lea State: _____
 Field: Maljamar (Grayburg-San Andres)
 Date Spudded: July 18, 1943 IPP: _____
 API Number: 30-025-01564
 Status: PLUGGED 09/13/04
 Drilled as Pearl Miller B No. 18

Stimulation History:

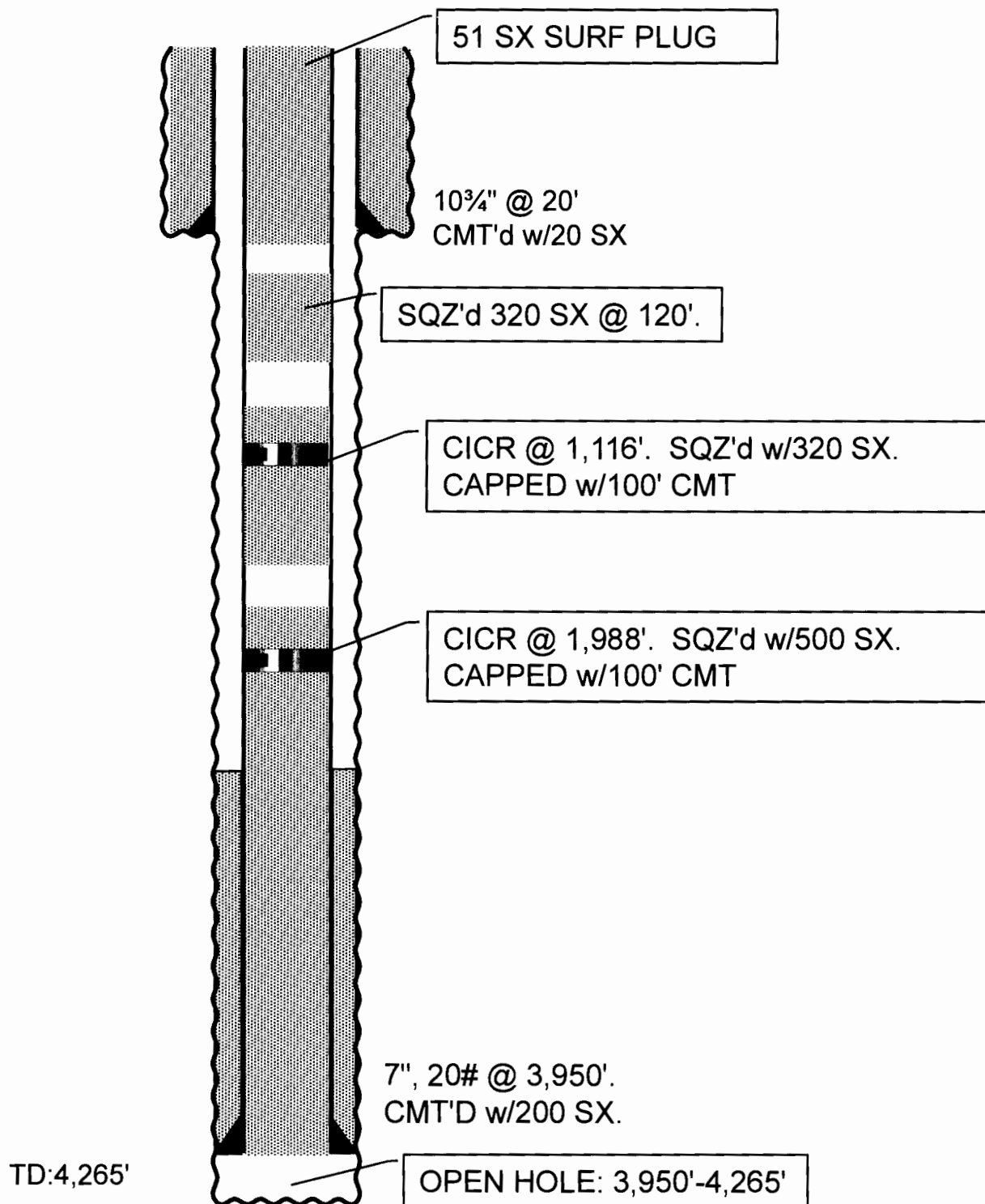
Interval	Date	Type	Gels	Lbs. Sand	Max Press	ISIP	Max Rate	Max Down
4150-4250	9/8/43	Nitro	200 Quarts					
4250-4287	9/8/43	Nitro	140 Quarts					
	5/1/63	Effective w/unitization renumbered MCA No. 135.						
	5/28/64			13,700	6400			
4020-4190	6/2/64	Crude	7,500	1500# beads				
				5500# sand	4800	2500	15.0	
Hole in csg 2" below wellhead; repair								
5/30/67 convert to water injection @ 200 BWPD								
9/9/67 holes in 7" csg 706' and 737' from surface and 61' and 92' from surface								
9/23/67 Free point 7" csg stuck @ 354', free @ 340'								
9/28/67 4-1/2" 9.5# J-55 @ 4,111' cmt'd w/35 sx; TOC 3500'								
7/14/68 SI due to high surface injection pressure								
12/5/68 placed back on injection								
5/23/91 CO to 4255', Otis Interlock packer @ 3880'; test OK.								
8/12/91 Ran tracer and temperature survey. Losses 4,114 - 4,165', no indication of channel or packer leak.								
12/1/92 Flowline leaks - shut-in								
1/12/94 Returned to injection								
8/1/98 Status change inactive								
BLM Sundry Notice expires 11/4/04.								
8/1/04 Prepare Application for Abandonment of Well.								

ACTUAL PLUGS



- 1) 25 sx C cmt on CIRC 3,881 - 3,518'
- 2) 45 sx C cmt 2,270 - 2,125', perf/sqz, TAGGED
- 3) 45 sx C cmt 1,440 - 1,335', perf/sqz, TAGGED
- 4) 45 sx C cmt 400 - 250', perf/sqz, TAGGED
- 5) 70 sx C cmt 250 - 130', perf/sqz, TAGGED
- 6) 30 sx C cmt 70' to surface, perf/sqz

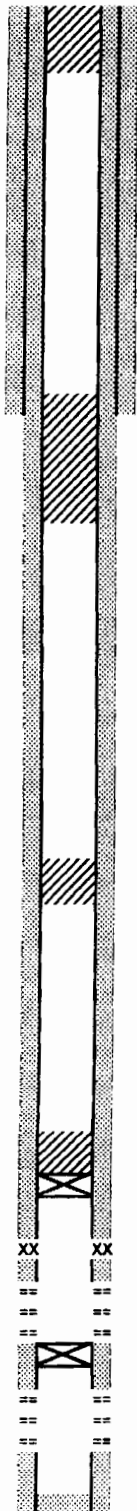
MCA UNIT #199
1,980' FSL, 1,980' FWL
UNIT K, SEC 30 T17S R33E
LEA CO., NM
API #30-025-01563
P & A'd



PLUGGED WELLBORE SKETCH **ConocoPhillips Company -- Permian Basin Business Unit**

Date: January 15, 2007

RKB @ 4064'
 DF @ 4063'
 GL @ 4050.4'



25 sx C cmt 100' to surface, circulated

17-1/2" Hole

13-3/8" 61# @ 1,210' w/ 750 sx, circ 320 sx

Top Salt @ 1,300' estimated

55 sx C cmt 1,555 - 1,140', TAGGED

Base Salt @ 2,600' estimated

25 sx C cmt 2,603 - 2,349' TAGGED

25 sx C cmt 4,127 - 3,837' TAGGED

5-1/2" RBP @ 4110'

Grayburg 5th Zone

4081 4083 4085 4087 - Sqz'd w/150 sx

Grayburg 6th

4172-4174 4178-4180

4199-4201 4203-4218

4222-4240 4244-4256

CIBP @ 4280'

San Andres 7th

4302-4308 - 14 holes

4315-4324 - 20 holes

4328-4332 - 10 holes

7-7/8" Hole

5-1/2" 17# K-55 @ 4400'

Cmt'd w/2500 sx CI C & H, circ 335 sx

TOC @ Surface

PBTD @ 4110'
 TD @ 4400'

Subarea: Hobbs
 Lease & Well No.: MCA Unit No. 381
 Legal Description: 2515' FSL & 1720' FWL, Sec. 30, T-17-S, R-33-E
 County: Lea State: New Mexico
 Field: Mallamar (Grayburg-San Andres)
 Date Spudded: May 30, 1988 Rig Released: June 8, 1988
 API Number: 30-025-30348
 Status: PLUGGED 01/03/07 Lease Serial No. LC-058697-B
 Agreement No. 8920003410

Stimulation History:

Interval	Date	Type	Gate	Lbs. Sand	Max Press	ISIP	Max Rate	Max Down
	6/30/88	Perforate 4302-4332' (select fire)						
	7/6/88	Set 5-1/2" CIBP @ 4280'						
	7/6/88	Perforate 4081-4256 (select fire)						
	7/7/88	Squeeze 40801-4087 w/150 sx cmt						
4172-4256	7/14/88	15% NEFE HCl	59 Bbls	46 BS	2450	1586		
	8/9/88	Set 5-1/2" Lok-Set RBP @ 4110'						
	3/27/90	Set packer @ 4104', press 500 psi for 30 min, OK.						



PLUGS SET 12/29/06 thru 01/03/07

- 1) 25 sx C cmt 4,127 - 3,837' TAGGED
- 2) 25 sx C cmt 2,603 - 2,349' TAGGED
- 3) 55 sx C cmt 1,555 - 1,140', TAGGED
- 4) 25 sx C cmt 100' to surface, circulated

Capacities

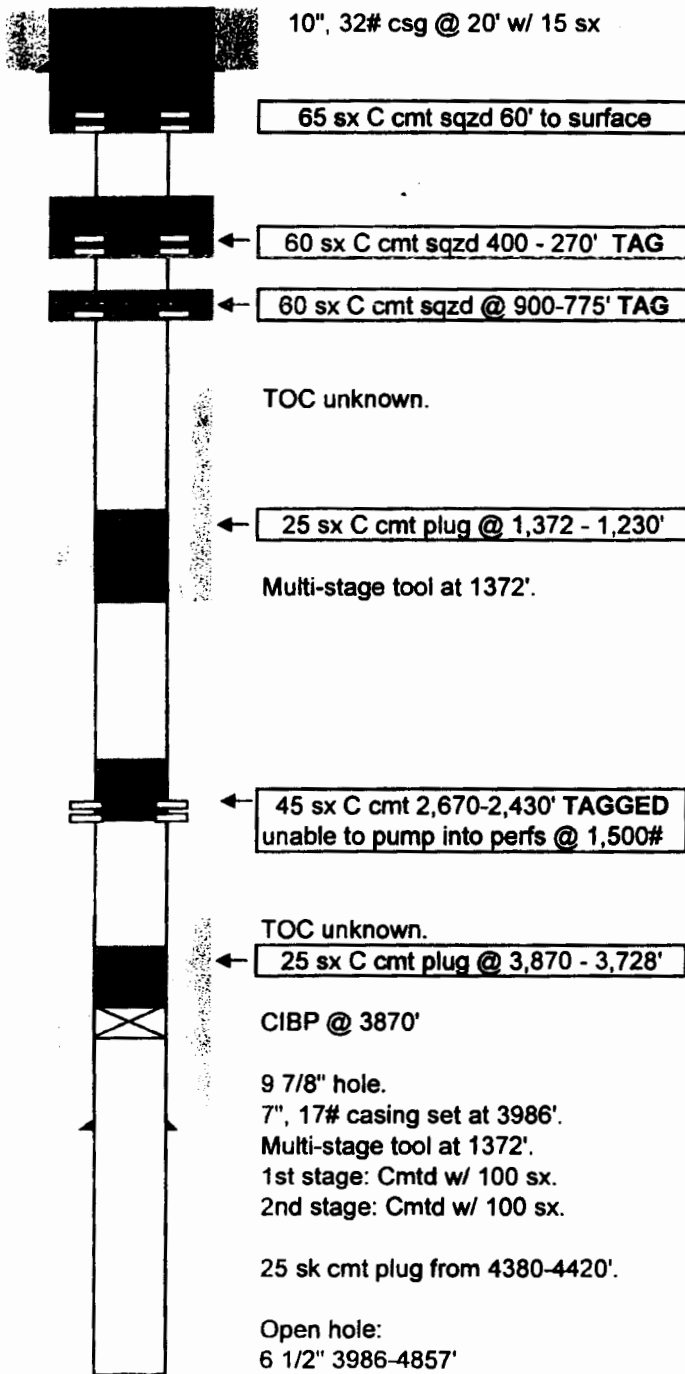
5 1/4" 17# csg:	7.663 ft/ft	0.1305 ft/ft
7-7/8" openhole:	2.9565 ft/ft	0.3382 ft/ft
8 1/4" 20# csg:	2.733 ft/ft	0.3659 ft/ft
8 1/4" 24# csg:	2.797 ft/ft	0.3575 ft/ft
13 1/4" 61# csg:	1.711 ft/ft	0.8542 ft/ft

NOTE: Hit water flow at 4157' while drilling.

Formation Tops:

Rustler	1290'
Top Salt	
Tansill	2490'
Yates	2653'
Seven Rivers	3076'
Queen	3540'
Grayburg	3720'
Grayburg 6th	4167'
San Andres	4306'

ConocoPhillips - Permian Basin
February 4, 2004
Plugged Wellbore Diagram



PBTD: 4380'
 TD: 4857'

Lease & Well No.: **Pearl B #3 (Originally Miller B #20)**

Well Category: **One** Status: **TA'd**

Area: **New Mexico**

Subarea: **Maljamar** Field: **Maljamar G-SA**

API Number: **30-025-08338**

Legal Description: **685' FSL & 2050' FWL
 Sec. 30, T-17-S, R-33-E
 Lea County, New Mexico**

Spudded: **07/17/1947**

Completed: **10/29/1947**

Well History:

9/47 Drilled OH 3986-4857' w/ cable tool. Encountered water flow at 4265-4300'. TD reached on 10/29/47.

11/47 Lost drilling tools in hole. Unable to recover tools. Plugged back w/ plastic plug at 4260-4300' to shut off water flow.

8/48 Temporarily abandoned on 8/4/48.

1/70 Ran 6 1/4" cable tool bit. CO from 4212-4260'. Ran imp block. Block ind it was going down beside fish in hole. Ran 6 1/4" cable tool bit. CO to 4270'. Ran wash pipe & 4 DC's on 2 7/8" tbg. Milled on junk from 4271-81'. Ran junk mill. Tagged junk at 4267'. Milled to 4277'. Fell through at 4277' & washed down to 4304'. Rec wire rope & iron pieces. CO to 4431'. Ran 6 1/4" flat btm mill. Tagged fill at 4420'. CO to 4431'. Ran GR-N log from 4424-3686'. Spotted 25 sk cmt plug from 4420-4370'. Ran Lynes OH pkr. Spotted 175 gal 15% LSTNE HCl from 4355-4250'. Set pkr at 4202'. Frac'd OH 4202-4380' w/ 30,000 gal 40# gelled wtr & 45,000# 20-40 mesh sand in two equal stages using 2000# rock salt. Tagged top of cmt plug at 4380' w/ sinker bar on wireline. IPP 58 bo & 216 bw / 24 hrs on 4/15/70.

8/73 CO to 4380'. Acddz OH 3986-4380' w/ 1200 gal 28% NE HCl. Ran 7" Baker AD-1 tension pkr on 2 3/8" cement lined tbg. Set pkr at 3508'. SI pending completion of water inj line.

11/73 Placed on water injection on 11/26/73.

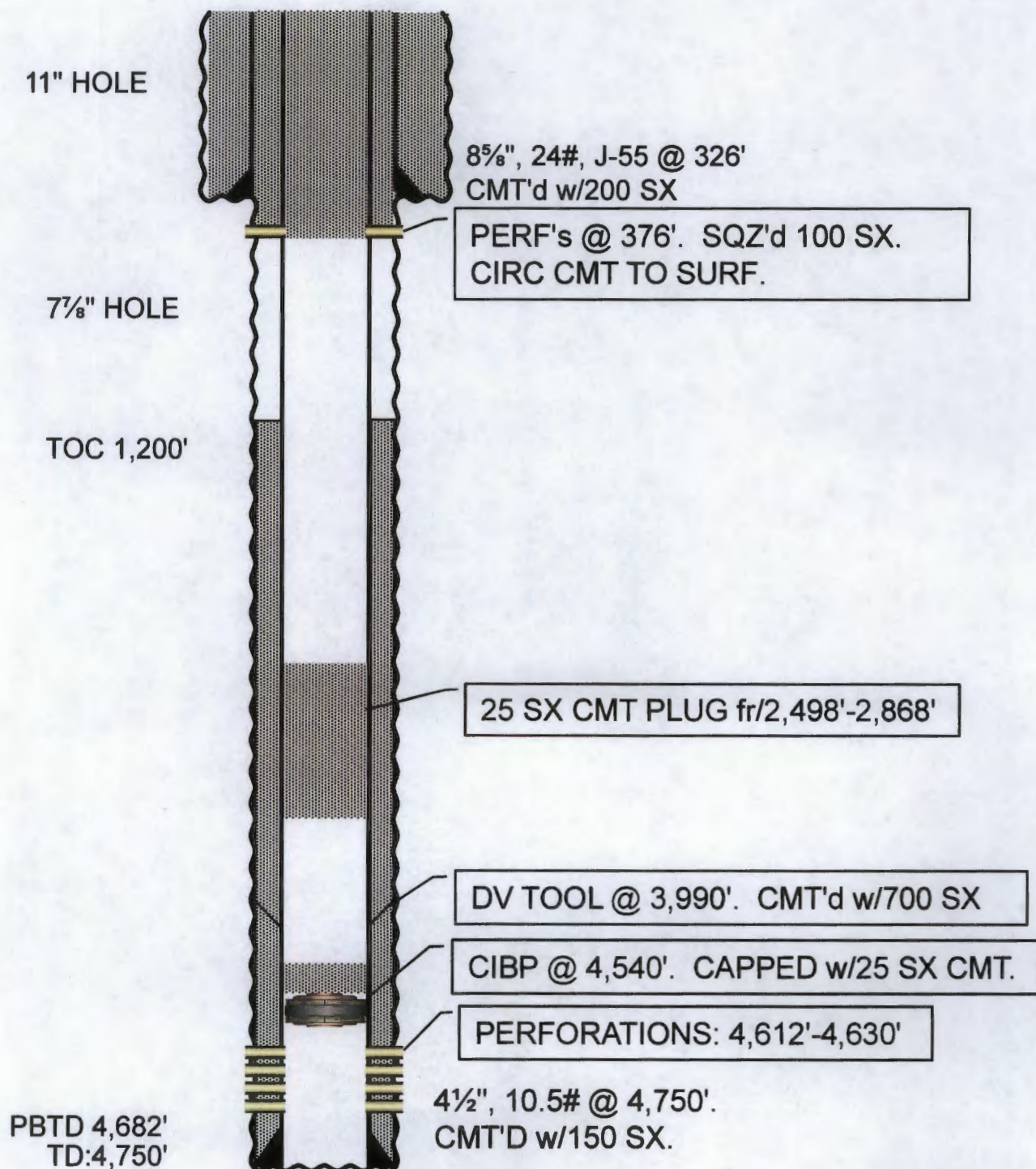
12/89 Set CIBP at 3870'. Circ well w/ 10# brine & pkr fluid. Tested csg to 500 psig for 15 min. Held. TA'd on 12/13/89.

10/95 Performed MIT on 10/25/95. Tested to 550# for 30 min. Held.

8/97 Performed MIT on 8/27/97. Tested to 600# for 30 min. Held.

8/02 Performed MIT on 8/28/02. Tested to 500# for 30 min. Held.

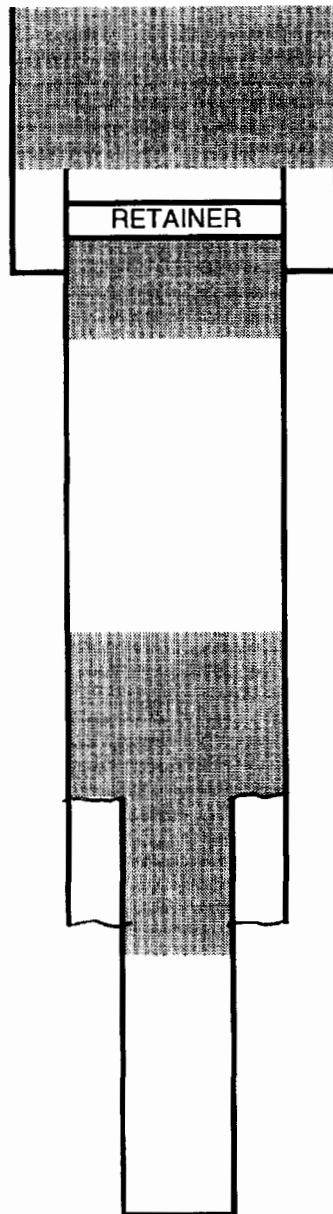
SEMGS AU #9
2,310' FSL, 940' FWL
UNIT L, SEC 33 T17S R33E
LEA CO., NM
API #30-025-01378
P & A'd



WELL: SEMGSAU #203
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 2310' FNL, 1650' FEL, UNIT G, SEC 30, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. CMT PLUG @ 3800
2. 3660 - 3800 W/100 SXS
3. RETAINER @ 1096 W/100 SXS
4. SQZ PERF @ 1185 W/350 SXS
5. CUT CSG @ 872'
6. 0 - 880 W/260 SXS



SURFACE CASING:

8 5/8" @ 1181', CMT W/50 SX

PRODUCTION CASING:

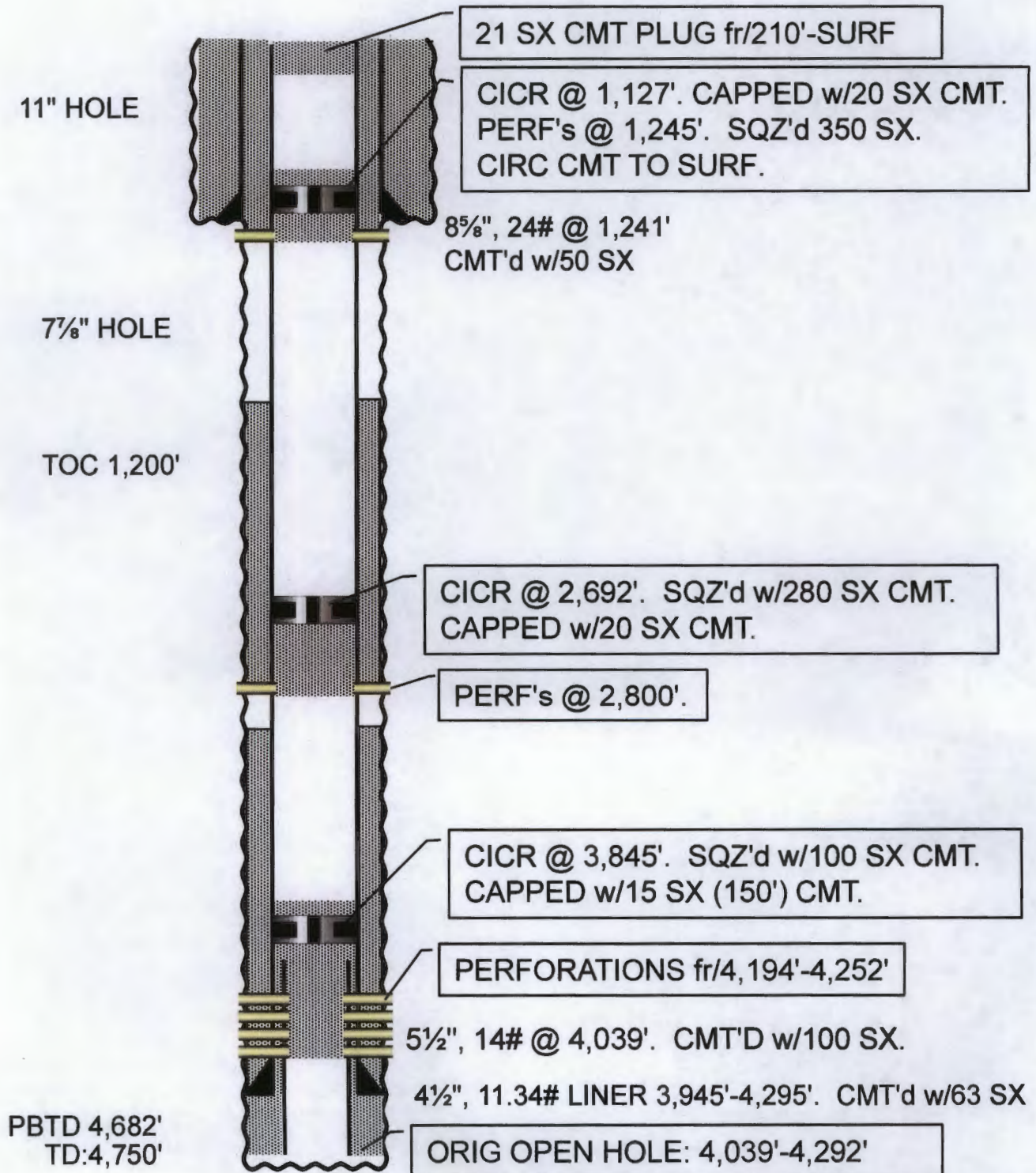
7" @ 3927', CMT W/100 SX

LINER CASING:

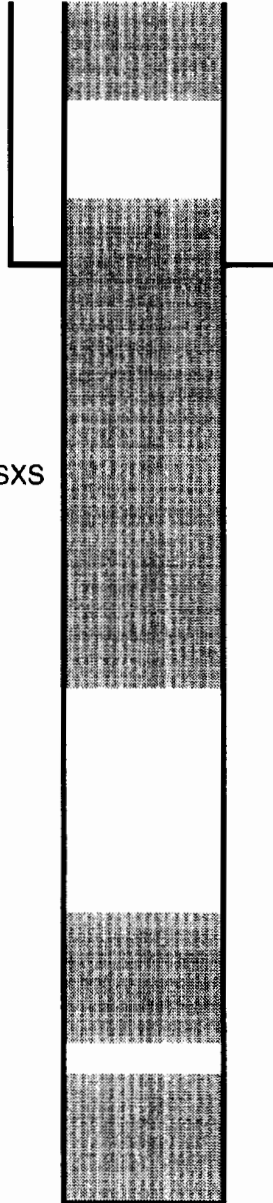
5" @ 3798 - 4227, CMT W/40 SXS

TD:4278

SEMGSAU #204
660' FNL, 660' FEL
UNIT A, SEC 30 T17S R33E
LEA CO., NM
API #30-025-01555
P & A'd



WELL: SEMGSAU #409
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 2615' FNL, 25' FWL, UNIT E, SEC 29, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
8 5/8" @ 1300', CMT W/650 SX

PLUGS SET AS FOLLOWS:

1. SQZ PERFS 4296 - 4326 W200 SXS
2. 3693 - 4163 W/47 SXS
3. SQZ PERF 2650 W/565 SXS
4. 1100 - 2232 W/115 SXS
5. 0 -200 W/20 SXS

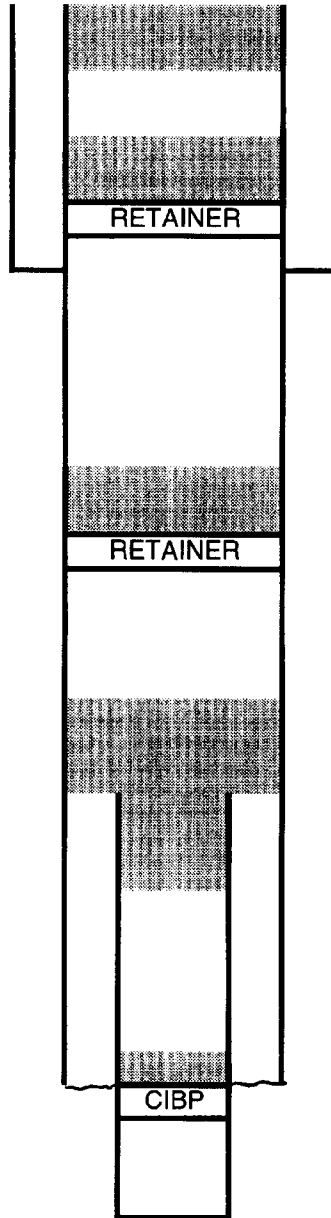
PRODUCTION CASING:
5 1/2" @ 4359', CMT W/3350 SX

TD:4359

WELL: SEMGSAU #504
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FNL, 1980' FEL, UNIT G, SEC 29, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. CIBP @ 4130 W/10 SXS
2. 3600 - 3900 W/25 SXS
3. SQZ PERF 2900 W/300 SXS
4. RETAINER @ 2863 W/16 SXS
5. RETAINER @ 1189 W/15 SXS
6. 0 - 282 W/ 30 SXS.



SURFACE CASING:

8 5/8" @ 1270', CMT W/400 SX

LINER CASING:

4" @ 3742 - 4439, CMT W/150 SXS

PRODUCTION CASING:

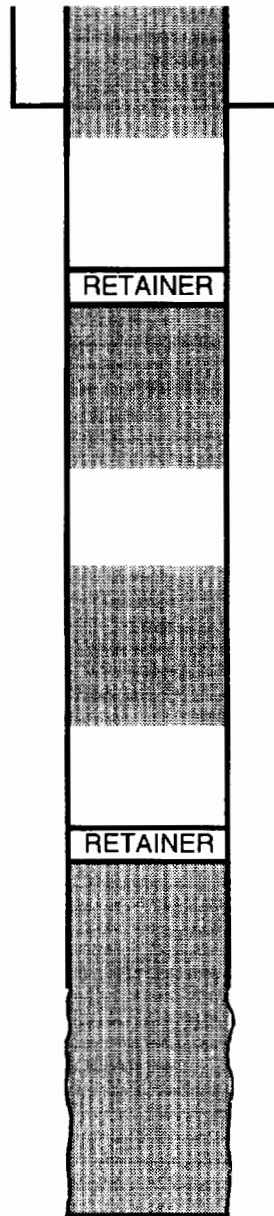
5 1/2" @ 4356', CMT W/85 SX

TD:4440

WELL: SEMGSAU #605
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1330' FSL, 1330' FWL, UNIT K, SEC 29, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. RETAINER @ 3809 W/100 SXS
2. PUT 500 SXS BELOW RET.
3. 2043 - 3148 W/125 SXS
4. RETAINER @ 961
5. PUT 500 SXS BELOW RET.
6. 0 - 30 W/10 SXS

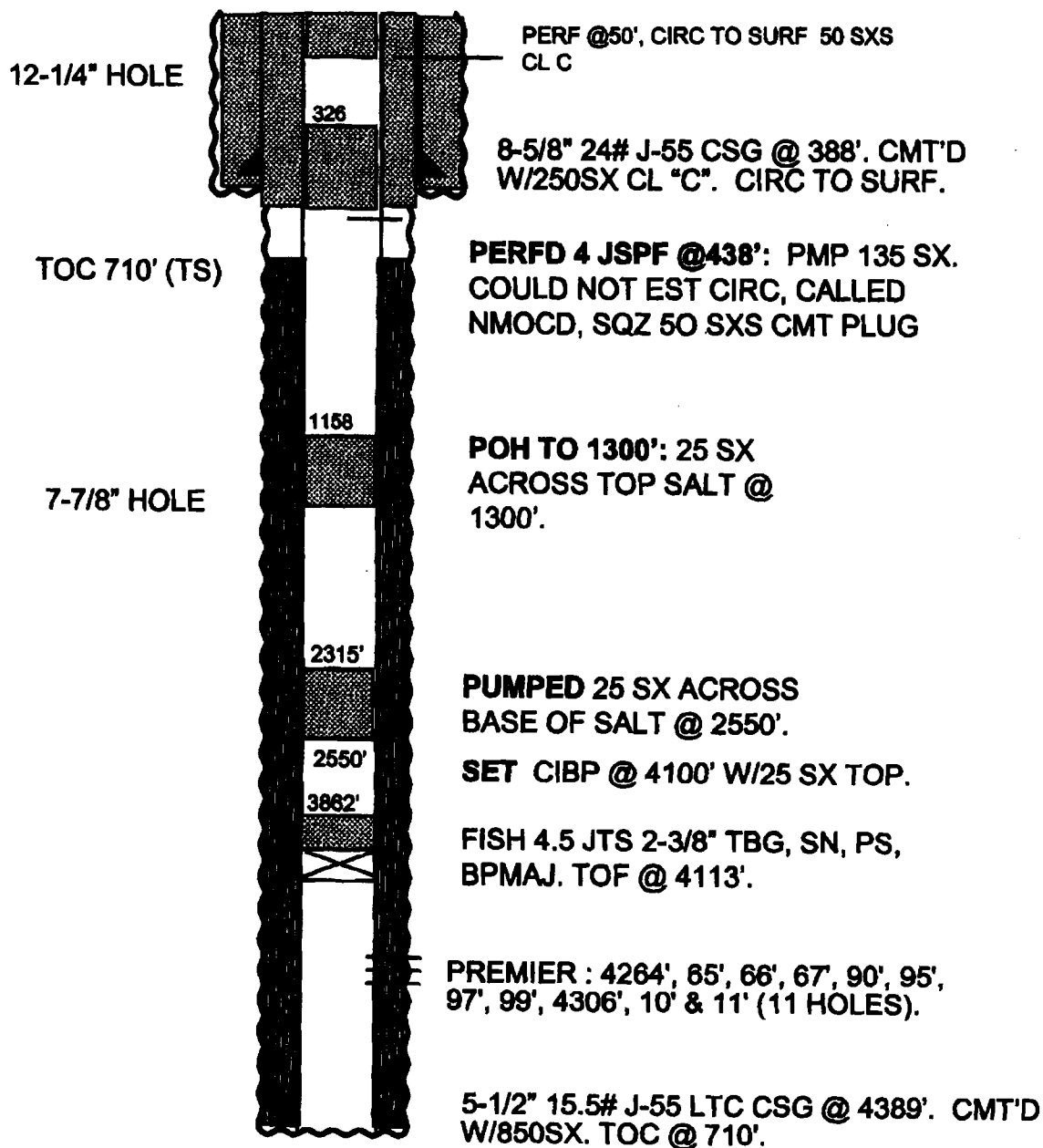


SURFACE CASING:
10" @ 20', CMT W/150 SX

PRODUCTION CASING:
7" @ 4008', CMT W/90 SX

TD:4320

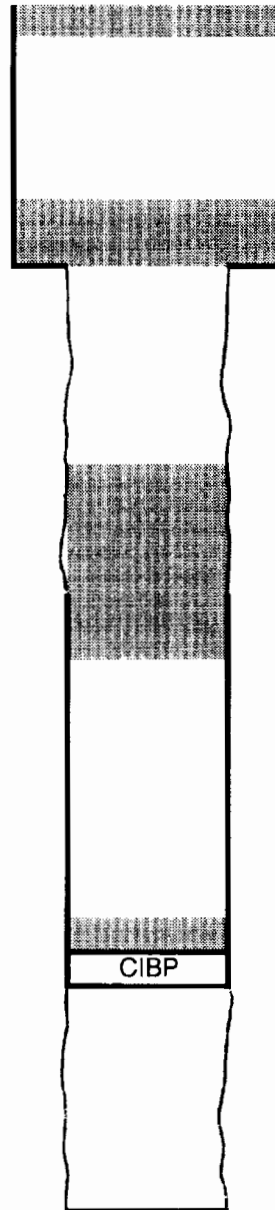
SOUTHEAST MALJAMAR GRAYBURG SAN ANDRES UNIT #713 **P & A**



WELL: SEMGSAU #904
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 660' FEL, UNIT A, SEC 32, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. SET CIBP @ 3891 W/7 SXS
3846 - 3891
2. PULLED 2215' OF 7"
3. 2165 - 2265 W/45 SXS
4. 1250 - 1350 W/45 SXS
5. 0 - 30 W/15 SXS



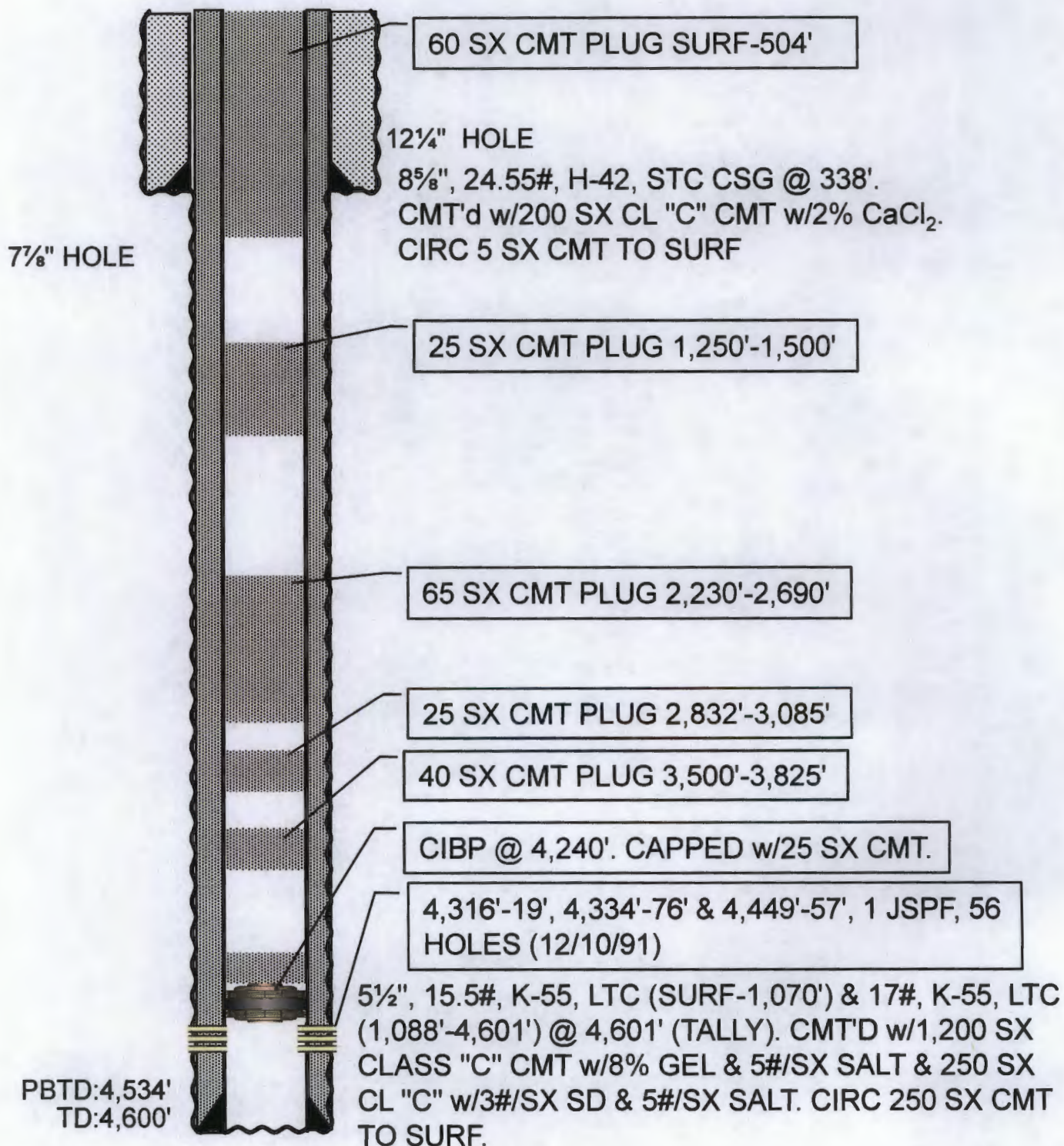
SURFACE CASING:
9 5/8" @ 1350', CMT W/50 SX

PRODUCTION CASING:
7" @ 3943', CMT W/100 SX

TD:4312

SEMGS AU #907
 2,310' FNL, 990' FEL
 UNIT H, SEC 32 T17S R33E
 LEA CO., NM
 API #30-025-31445
 P & A'd

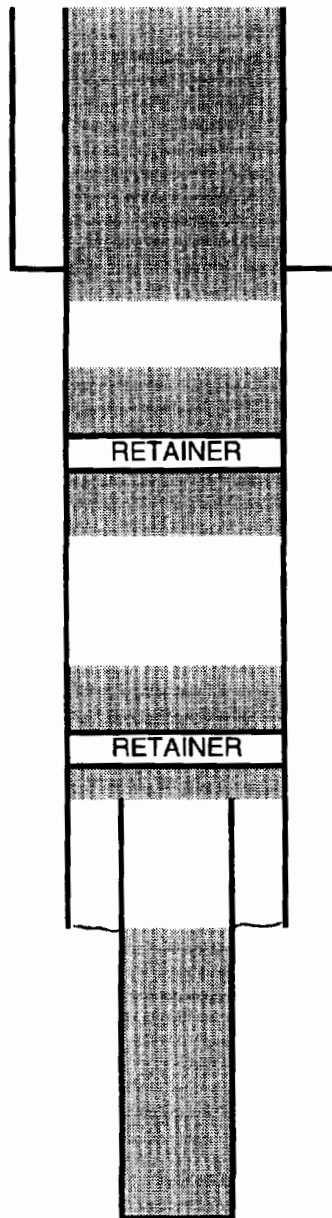
ELEV: KB 4,051'
 GL 4,038'
 CORR 13'



WELL: SEMGSAU #101
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FSL, 1980' FEL, UNIT J, SEC 30, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. RETAINER @ 3708 W/26 SXS
SQZ PERFS W/300 SXS.
2. SQZ PERF @ 2700 W/300 SXS
RETAINER @ 2593 W/20 SXS
3. 0 - 1303 W/135 SXS



SURFACE CASING:

8 5/8" @ 1215', CMT W/600 SX

PRODUCTION CASING:

5 1/2" @ 3927', CMT W/300 SX

LINER CASING:

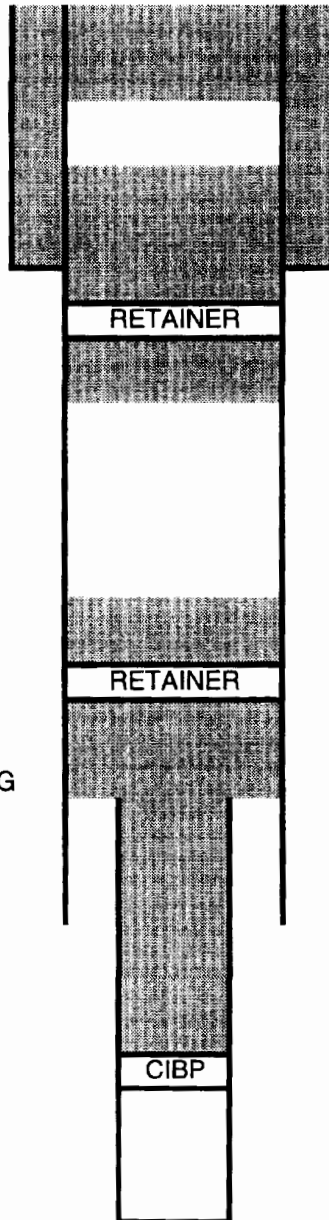
4" @ 3740 - 4281, CMT W/200 SXS

TD:4281

WELL: SEMGSAU #103
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FSL, 660' FEL, UNIT P, SEC 30, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. CIBP @ 4125 W/25 SXS
3635 - 4125
2. RETAINER @ 3605 W/25 SXS
3421 - 3605
3. RETAINER @ 1308
4. SQZ CSG LEAK 1393 - 1422
W/450 SXS
5. SQZ SURF CSG @ 1235 - 1237
W/150 SXS
6. PMP 250 SXS DOWN SURF CSG
@ SURF.
7. 0 - 313 W/ 37 SXS



SURFACE CASING:

8 5/8" @ 1235', CMT W/550 SX

PRODUCTION CASING:

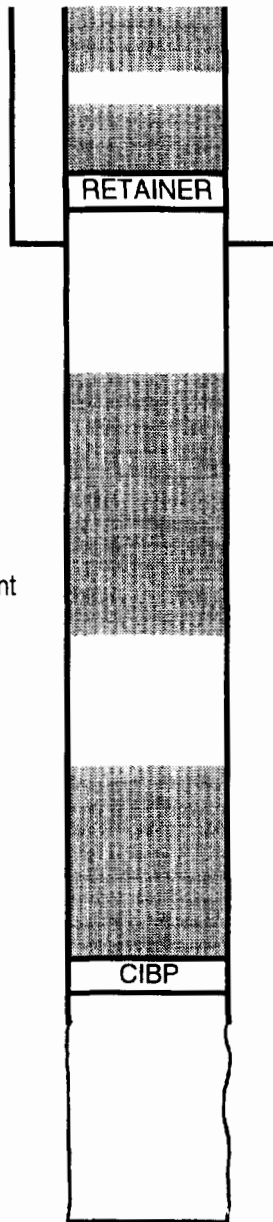
5 1/2" @ 3951', CMT W/300 SX

LINER CASING:

4" @ 3666 - 4355, CMT W/100 SXS

TD:4355

WELL: SEMGSAU 10-04 *AKA #14 WI*
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 330' FNL, 2310' FWL, UNIT C, SEC 32, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
7" @ 1231', CMT W/50 SX

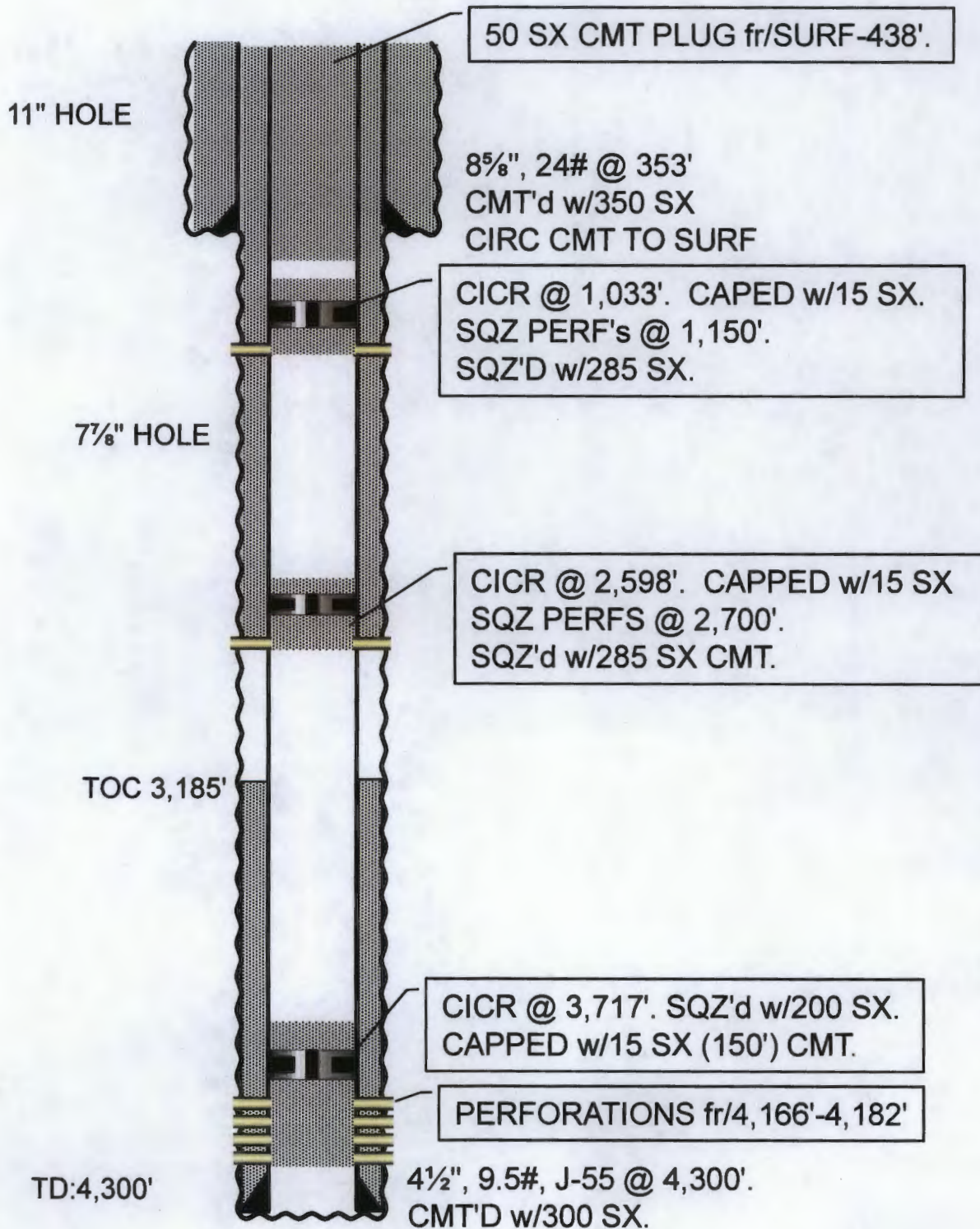
PLUGS SET AS FOLLOWS:

1. CIBP @ 4039 W/50 SXS CMT,
Top of plug @ 3426,
2. 1986 - 2599 W/50 SXS.
3. Perf 1230 & pmp 150 sxs, circ cmt
4. Retainer @ 1091.
5. 785 - 1091 W/25 SXS.
6. 0 - 214 W/15 SXS.

PRODUCTION CASING:
5 1/2" @ 4096', CMT W/120 SX

TD:4298

SEMGSAU #205
500' FNL, 1,980' FEL
UNIT B, SEC 30 T17S R33E
LEA CO., NM
API #30-025-22093
P & A'd

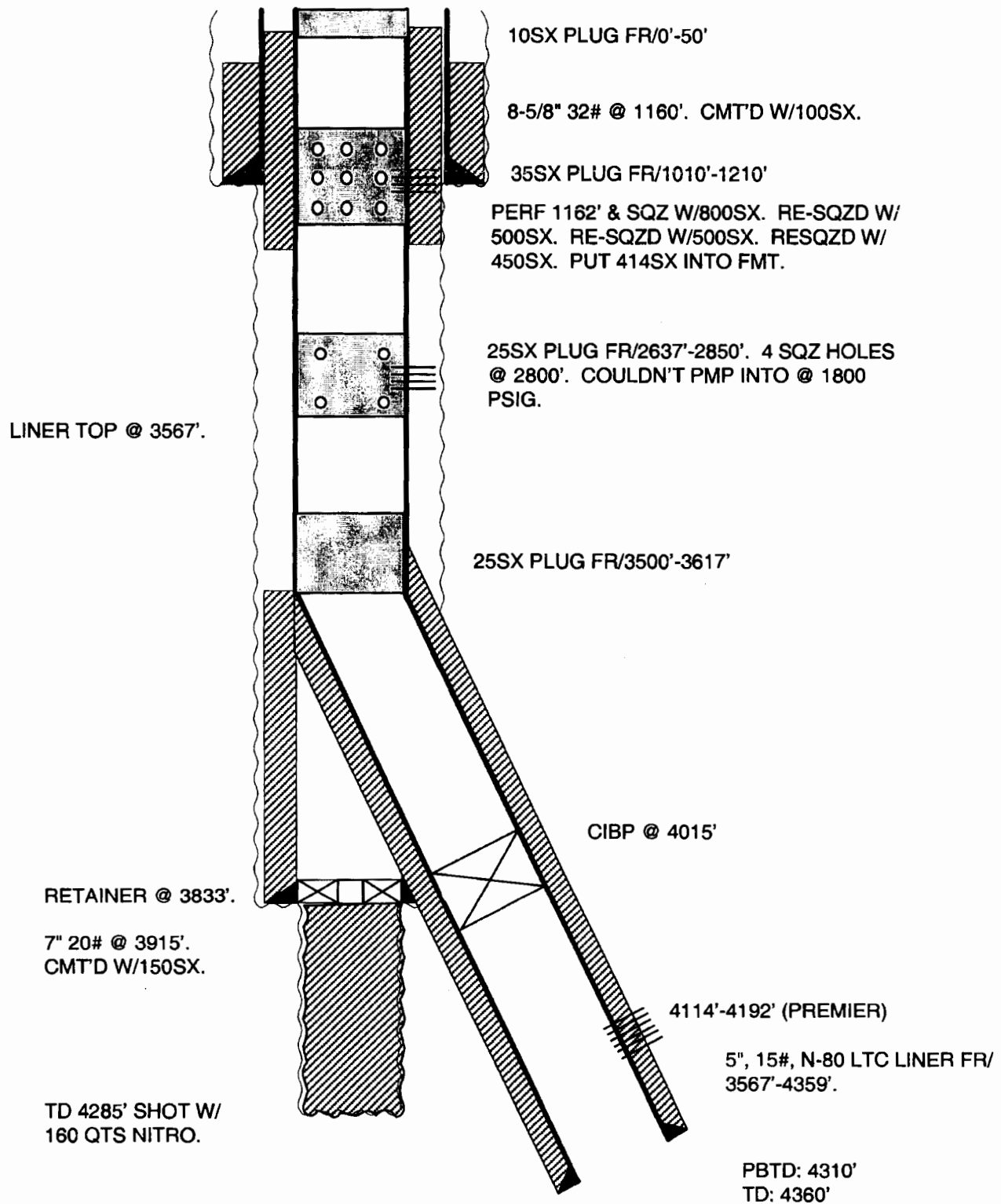


WELL: SEMGSAU #301

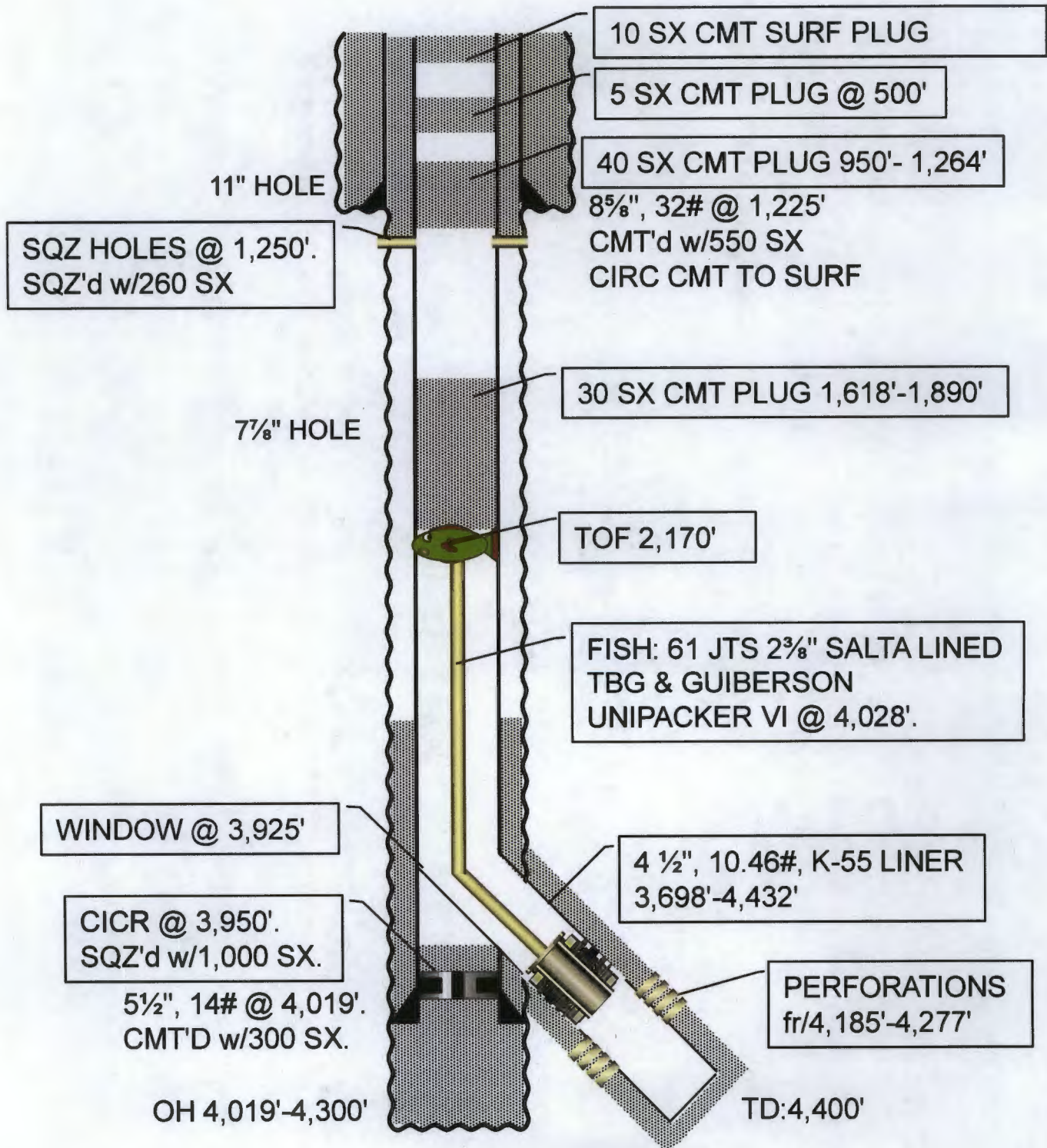
ELEV: 4071'

FIELD: MALJAMAR GRAYBURG SAN ANDRES

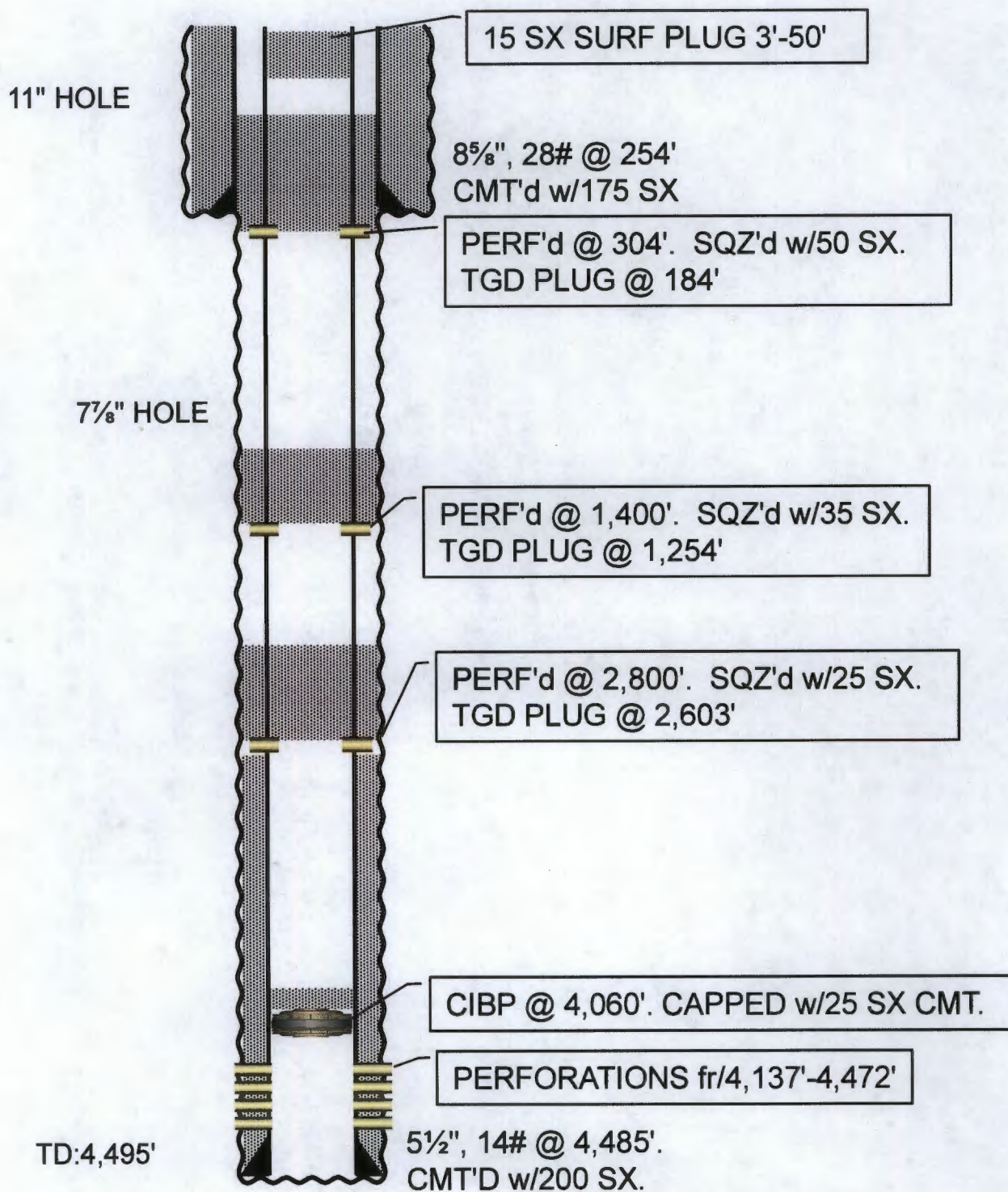
**LOCATION: 1980' FNL, 660' FEL, UNIT H, SEC 30, T-17S,
R-33E**



SEMGS AU #403
 1,980' FNL, 1,980' FWL
 UNIT F, SEC 29 T17S R33E
 LEA CO., NM
 API #30-025-05145
 P & A'd



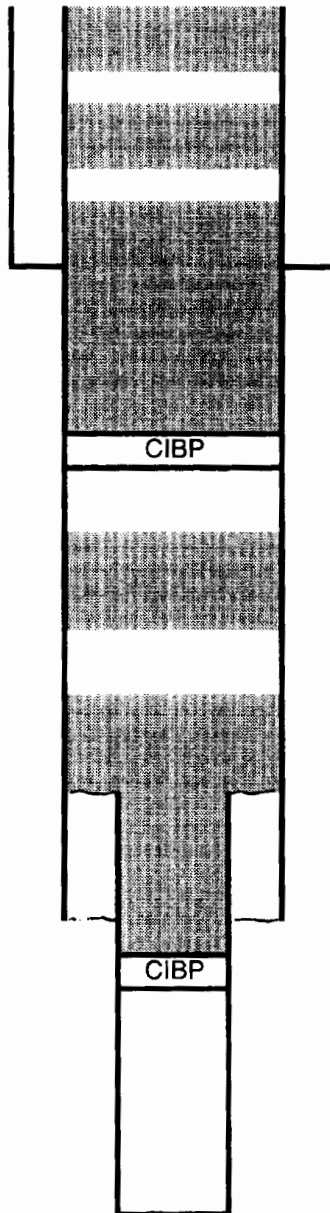
SEMGS AU #505
2,310' FNL, 990' FEL
UNIT H, SEC 29 T17S R33E
LEA CO., NM
API #30-025-01553
P & A'd



WELL: SEMGSAU #601
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FSL, 660' FWL, UNIT L, SEC 29, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. CIBP @ 4019
2. 3705 - 4019 W/30 SXS
3. 2420 - 3104 W/100 SXS
4. CIBP @ 2204
5. 897 - 2204 W/220 SXS
6. 657 - 806 W/25 SXS
7. 0 - 122 W/25 SXS



SURFACE CASING:
8 5/8" @ 1265', CMT W/50 SX

PRODUCTION CASING:
7" @ 3960', CMT W/75 SX

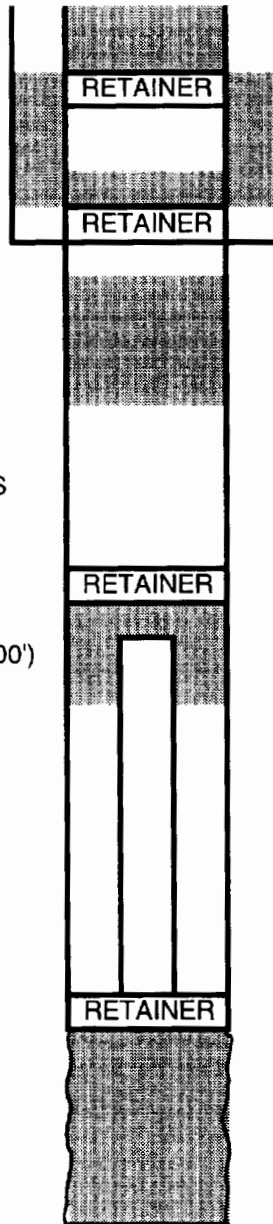
LINER CASING:
4" @ 3809 - 4253, CMT W/200 SXS

TD:4253

WELL: SEMGSAU #602
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FSL, 1980' FWL, UNIT N, SEC 29, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. SQZ OH 4060 - 4312 W/500 SXS
7" CSG COLLAPSED @ 2162.
2. CUT TBG @ 2110.
3. SQZ 7" CSG LEAK @ 208 - 240
W/550 SXS.
4. RETAINER @ 2000 W/4 SXS (100')
5. SQZ PERF @ 2100 W/300 SXS
6. RETAINER @ 1265 W/25 SXS
7. SQZ PERF @ 1300 W/200 SXS
8. RETAINER @ 425 W/75 SXS
9. SQZ PERF @ 500 W/100 SXS



SURFACE CASING:

8 1/4" @ 1300', CMT W/25 SX

PRODUCTION CASING:

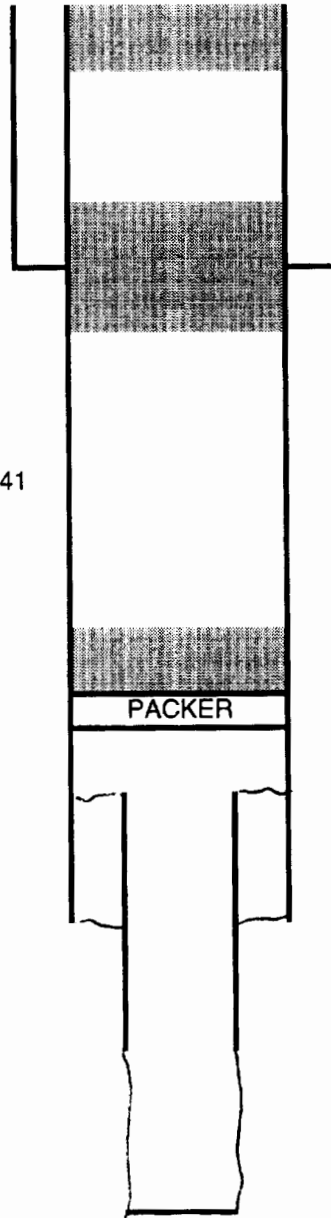
7" @ 4060', CMT W/200 SX

TD:4312

WELL: SEMGSAU #603
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FSL, 1980' FWL, UNIT K, SEC 29, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. SPOTTED 25 SX ON PKR @ 3641
2. SPOTTED 25 SX @ 1300
3. SPOTTED 10 SX @ SURF



SURFACE CASING:

8 5/8" @ 1260', CMT W/50 SX

LINER CASING:

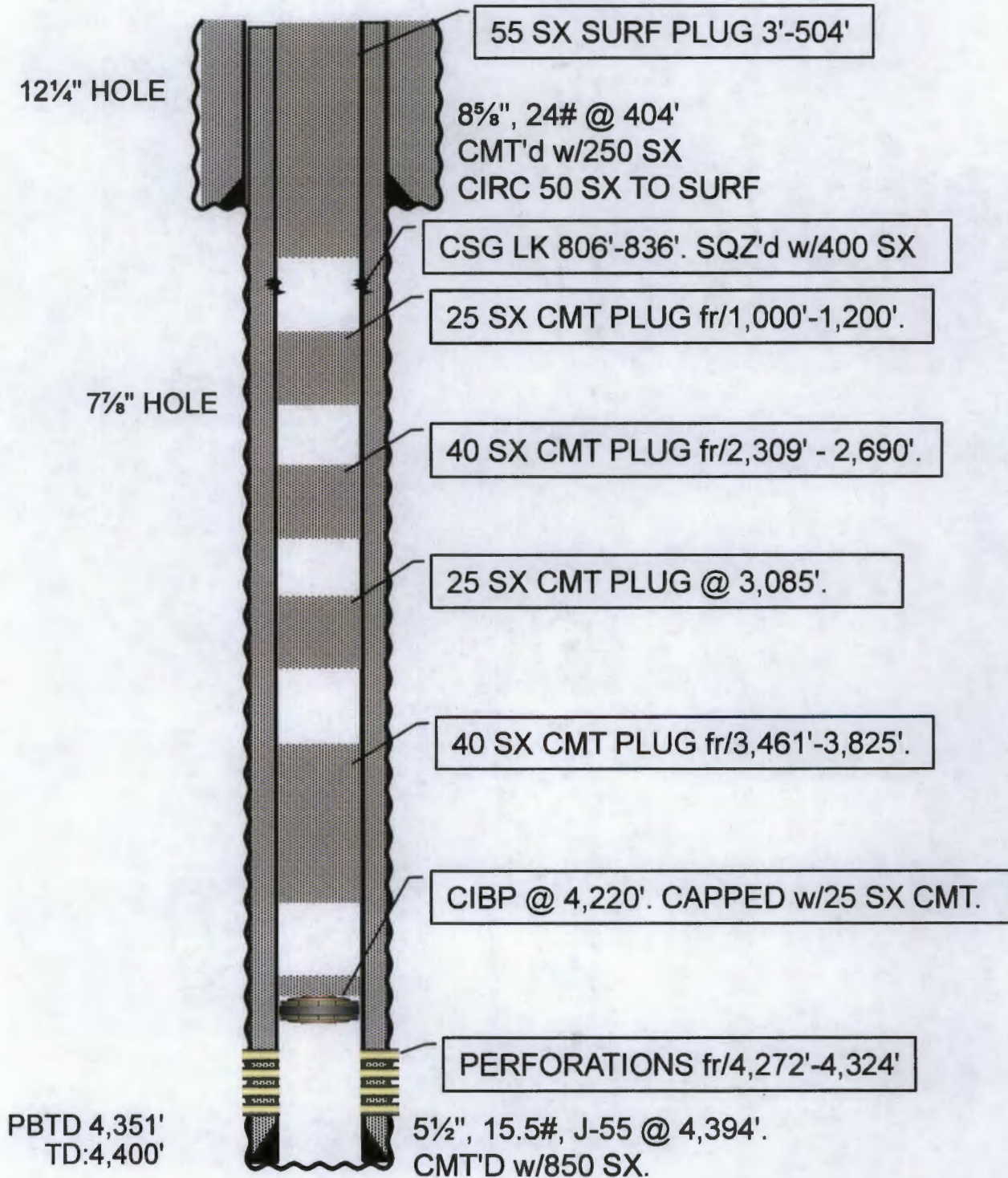
4 1/2" @ 3742 - 4115, CMT W/400 SXS

PRODUCTION CASING:

7" @ 3950', CMT W/75 SX

TD:4300

SEMGS AU #710
1,165' FSL, 2,010' FEL
UNIT O, SEC 29 T17S R33E
LEA CO., NM
API #30-025-33338
P & A'd



SEMGSAU #902 WIW WELLBORE DIAGRAM

ELEV: KB: 4076' (EST)

GL: 4086'

CORR: 10' (EST)

SQZ'D HOLES @ 60'. CIRC CMT TO
SURF & FILLED CSG W/CMT.

CSG LK FR/O'-1040'.

SQZ'D HOLES @ 1200'. SQZ'D W/50SX.

TAGGED @ 1060'.

8-5/8" 24# J-55 CSG @ 1257'. CMT'D W/
50SX CMT.

30SX CMT FR/2650'-2850'.

SQZ'D HOLES @ 2800'. UNABLE TO EIR
@ 1800 PSIG. 25SX CMT FR/3675'-3920'.

CIBP @ 3920'.

5-1/2" 14# J-55 CSG @ 4060'. CMT'D W/100SX.

PBTD @ 4500'
TD @ 4500'

DATA

LOCATION: 3300' FNL & 990' FEL, SEC 32, T-17-S, R-33-E

COUNTY/STATE: LEA COUNTY, NEW MEXICO

FIELD: MALJAMAR (GRAYBURG/SAN ANDRES)

FORMATION: GRAYBURG/SAN ANDRES

SPUD DATE: 2/13/51 COMPLETION DATE: 5/10/51

IP:

NMOC LEASE #: 003355 API #: 30-025- CTOC WELL #: 450

PRODUCTION METHOD: PA'D

30-025-01353

WFX-614

HISTORY

02/13/51: SPURRED WELL.

05/10/51: COMPLETED WELL. SHOT 4280'-4313' W/85 QTS NITRO-JPP. 50 BOPD.

08/28/77: SET CIBP @ 4005' & DMP 4SX CMT.

08/27/77: RAN RODS, PMP & TBG BACK IN WELL. TA.

03/06/81: RE-ENTERED. TST CSG TO 500 PSIG. HELD OK. DO CIBP. WASH TO 4313' (OTD). DRL NEW
4-3/4" HOLE TO 4500'. SWAB 10 BWPH. NO SHOWS. TA W/1 JT TBG IN WELLHEAD.

11/20/81: CONVERT TO WIW.

08/21/82: RAN FALLOFF TEST.

08/28/84: RAN STEP RATE TEST. (TIGHT SPOTS @ 2703' & 3544').

10/05/84: NMOC INCR MAX PRES TO 1825 PSIG.

08/21/86: A. W/1000 GALS 15% PENTOL - 150 @ 2.2 BPM & 2600 PSIG. ISIP 2010 PSIG. 15" SIP 1260
PSIG. BEFORE: INJ 220 BWPD @ 1350 PSIG. AFTER: INJ 285 BWPD @ 1300 PSIG.

10/10/86: TP 1200 PSIG. EIR INTO TCA @ 1.0 BPM & 300 PSIG. NMOC WITNESSED. RWTI.

11/22/86: SWI PER NMOC.

08/06/01: SITP 450 PSIG. SICP 0 PSIG. DN. FLWG .75 BPM.

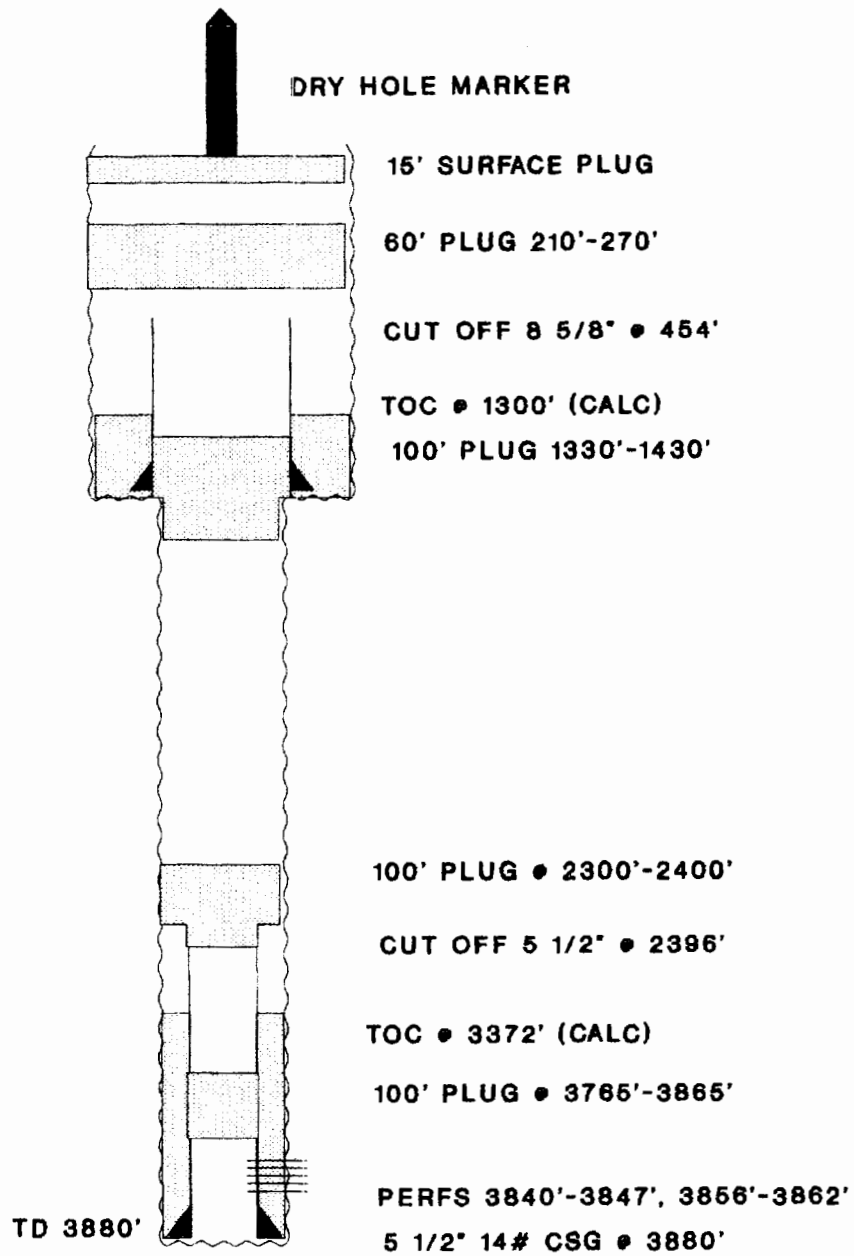
08/06/01: POH W/INJ EQUIP. SET CIBP @ 3920'. PPD 25SX CMT FR/3675'-3920'. CSG LKS ISOLATED
FR/O'-1040'. CSG TSTD FR/1040'-3673'. PERFD SQZ HOLES @ 2800'. UNABLE TO EIR @
1800 PSIG. PPD 30SX CMT FR/2650'-2850'.

09/07/01: TAGGED @ 2650'. PERFD & SQZ'D HOLES @ 1200'. SQZ'D 50SX INTO SQZ HOLES.

TAGGED @ 1060'. PERFD SQZ HOLES @ 60'. CIRC 35SX CMT FR/60' TO SURF. FILLED CSG
W/CMT TO SURF.

09/11/01: CUT OFF WH & WELDED CAP 3' BELOW GL. INST P & A MARKER. BF PIT & CLEARED LOC.
WELL IS PA'D.

**H.R. DENIUS
COCKBURN FEDERAL #5
(P&A 6/16/61)**

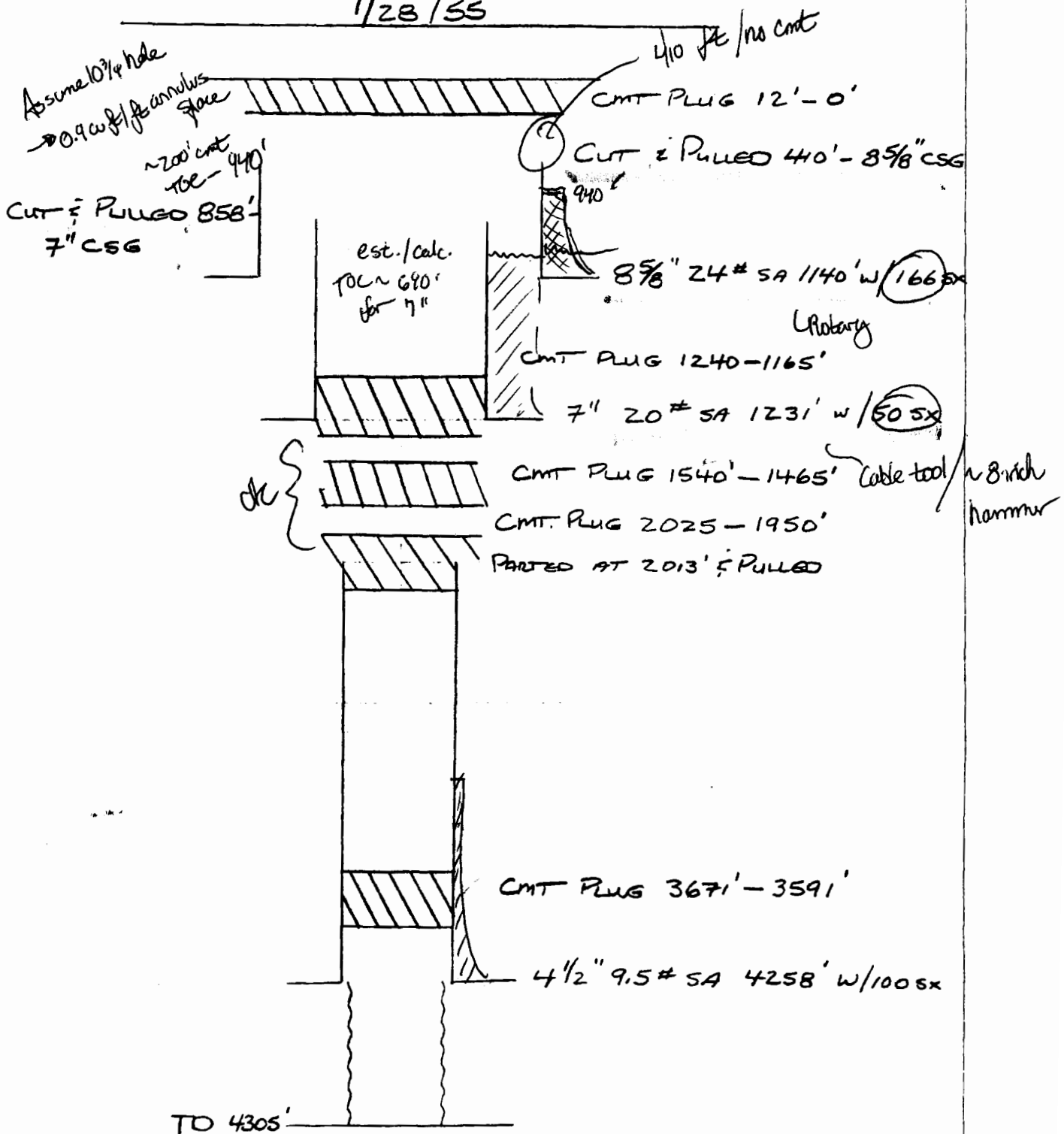


2310' FSL, 330' FWL, SEC 33, T17S, R33E, NMPM

DENNIS WYATT PHILLIPS FED #5

33C"-175-33E

1/28/55



P&A 11/24/59

H 7/5/94

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company GARNO & COMPANY Address P.O. Box 105, Artesia, New Mexico
 Lessor or Tract Wyatt-Phillips Field Maljamar State New Mexico
 Well No. 5 Sec. 33 T. 12 R. 33E Meridian NMPM County Lea
 Location 900 ft. [S.] of M. Line and 165 ft. [E.] of M. Line of Sec. 33-12-33E Elevation 4250
(Show line relative to sec line)

The information given herewith is a complete and correct record of the well and all work done thereon
 so far as can be determined from all available records.

Signed _____

Date February 17, 1955 Title Agent

The summary on this page is for the condition of the well at above date.

Commenced drilling May 20, 1953, 19____ Finished drilling January 26, 1955, 19____

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 426 to 4298 No. 4, from _____ to _____
 No. 2, from _____ to _____ No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Pipe casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
8-5/8"	24			1140	Water				
7"									
4-1/2"									

MUDDING AND CEMENTING RECORD

Pipe casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	1140	66	Halliburton		
7"	1231	50	Denton		
4-1/2"	4258	100	Denton		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
 Adapters—Material _____ Size _____

SHOOTING RECORD

No.	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
Well was given Halliburton Hydrafrac process, using 7500 gallons gas oil and 10,000 pounds sand.						

TOOLS USED

Rotary tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Put to producing February 1, 19____ 55

The production for the first 24 hours was _____ 35 barrels of fluid of which _____ % was oil; _____ %
 emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____ 35

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

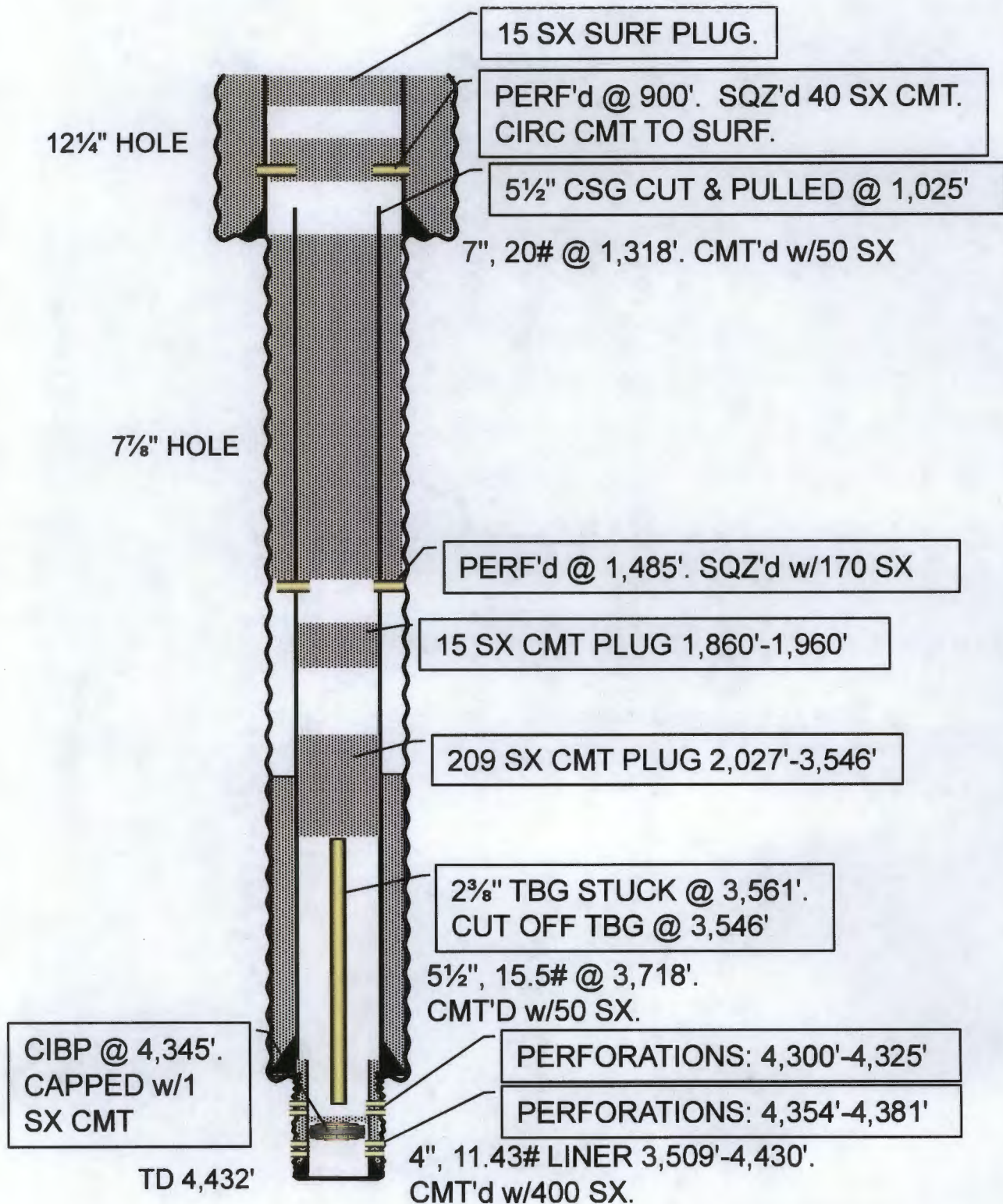
EMPLOYEES

Leo Daniel, Driller F. D. McDaniel, Driller
F. D. McDaniel, Driller _____, Driller

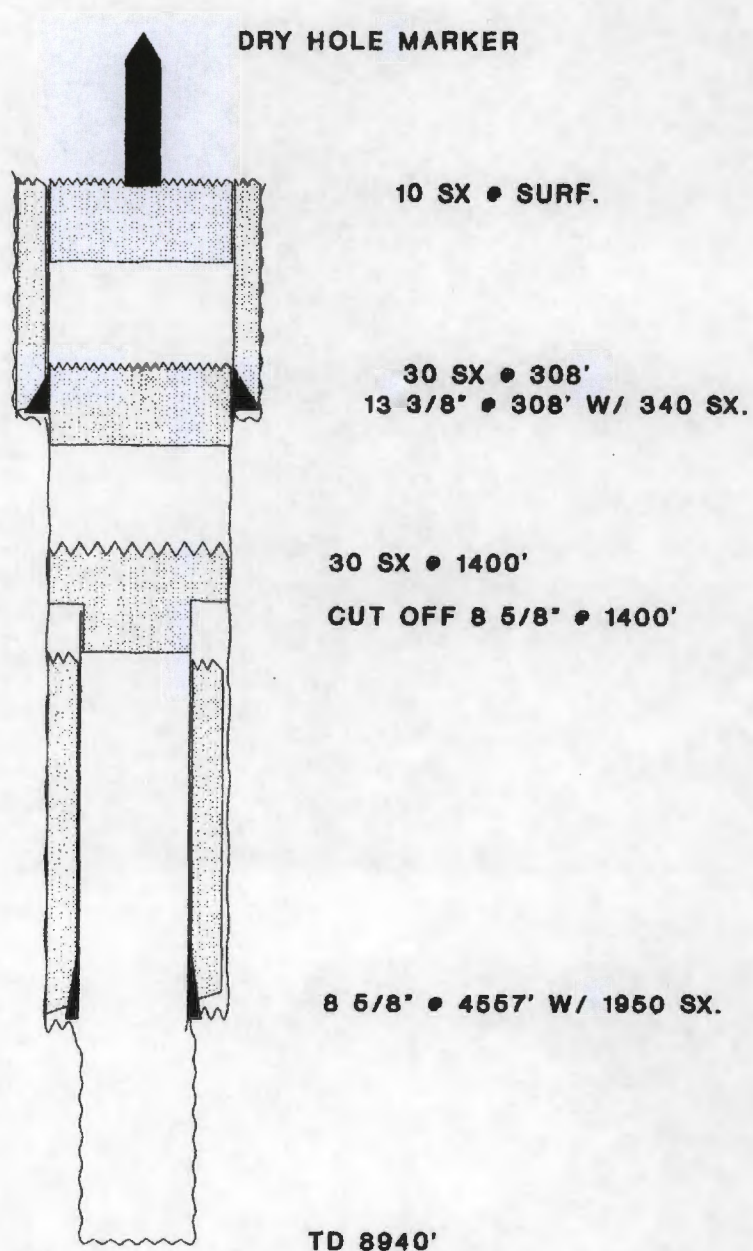
FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	116	116	Sand and Shell
116	121	5	Gravel, Water
121	788	667	Red Bed, Shale
788	906	118	Red Bed, Shale, Shell
906	1092	186	Red Bed, Shell
1092	1244	152	Anhydrite
1244	1315	71	Red Bed
1315	1430	165	Anhydrite
1430	1540	60	Anhydrite, Red Bed, Salt
1540	1740	200	Salt
1740	1860	120	Salt, Potash
1860	2005	145	Salt, Red Bed
2005	2360	355	Salt, Potash
2360	2410	50	Salt, Potash, Gypsum
2410	2515	105	Salt & Potash
2515	2750	235	Anhydrite
2750	2770	20	Red Shale
2770	2840	70	Anhydrite Broken
2840	3110	270	Anhydrite
3110	3185	75	Anhydrite, Lime
3185	3595	410	Anhydrite
3595	3690	95	Anhydrite, Lime
3690	3681	51	Anhydrite
3681	3690	9	Red Sand
3690	3695	5	Gray Lime
3695	3700	5	Sand, Lime

WYATT A FEDERAL #3
1,650' FNL, 330' FWL
UNIT A, SEC 33 T17S R33E
LEA CO., NM
API #30-025-01366
P & A'd

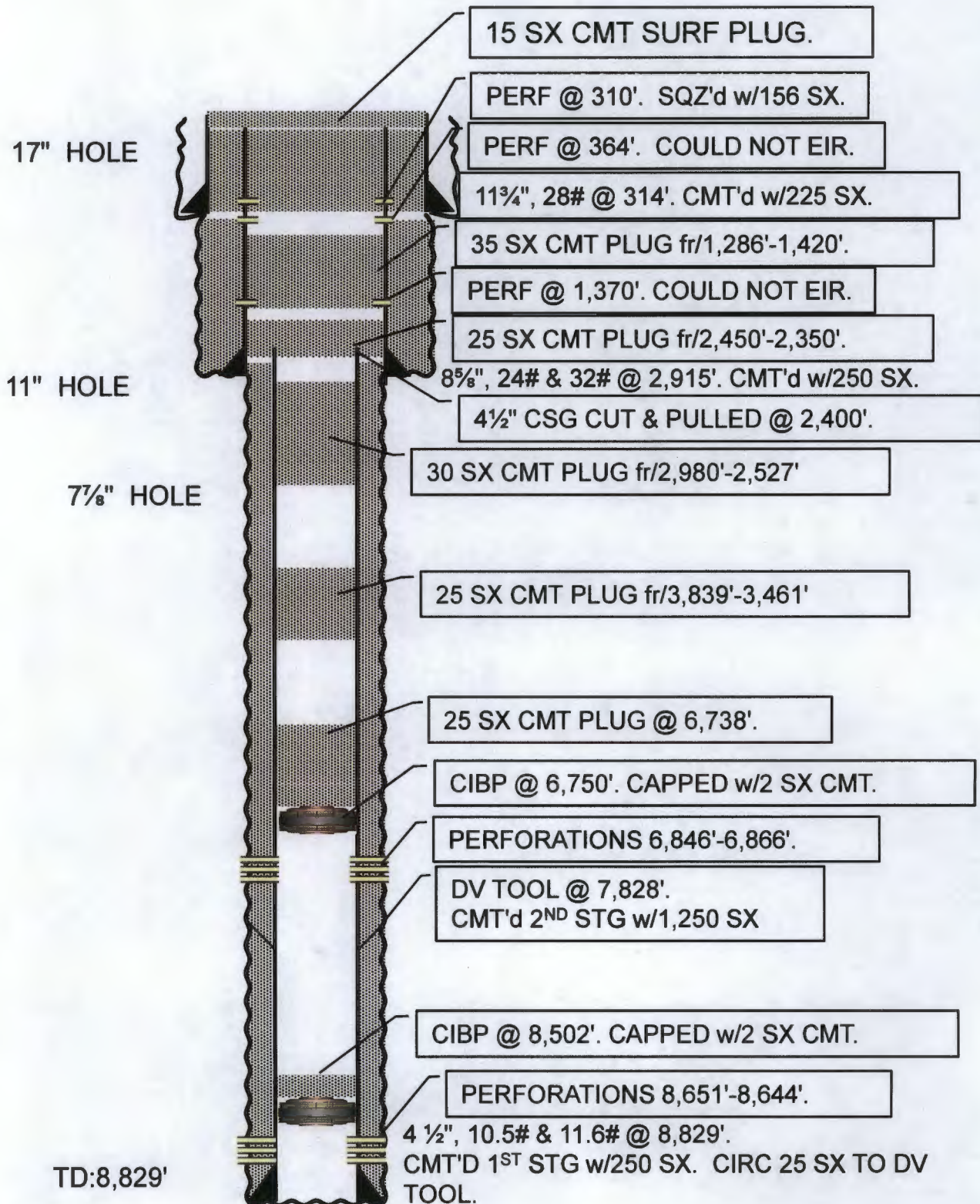


**JAMES P. DUNIGAN
COCKBURN #1**

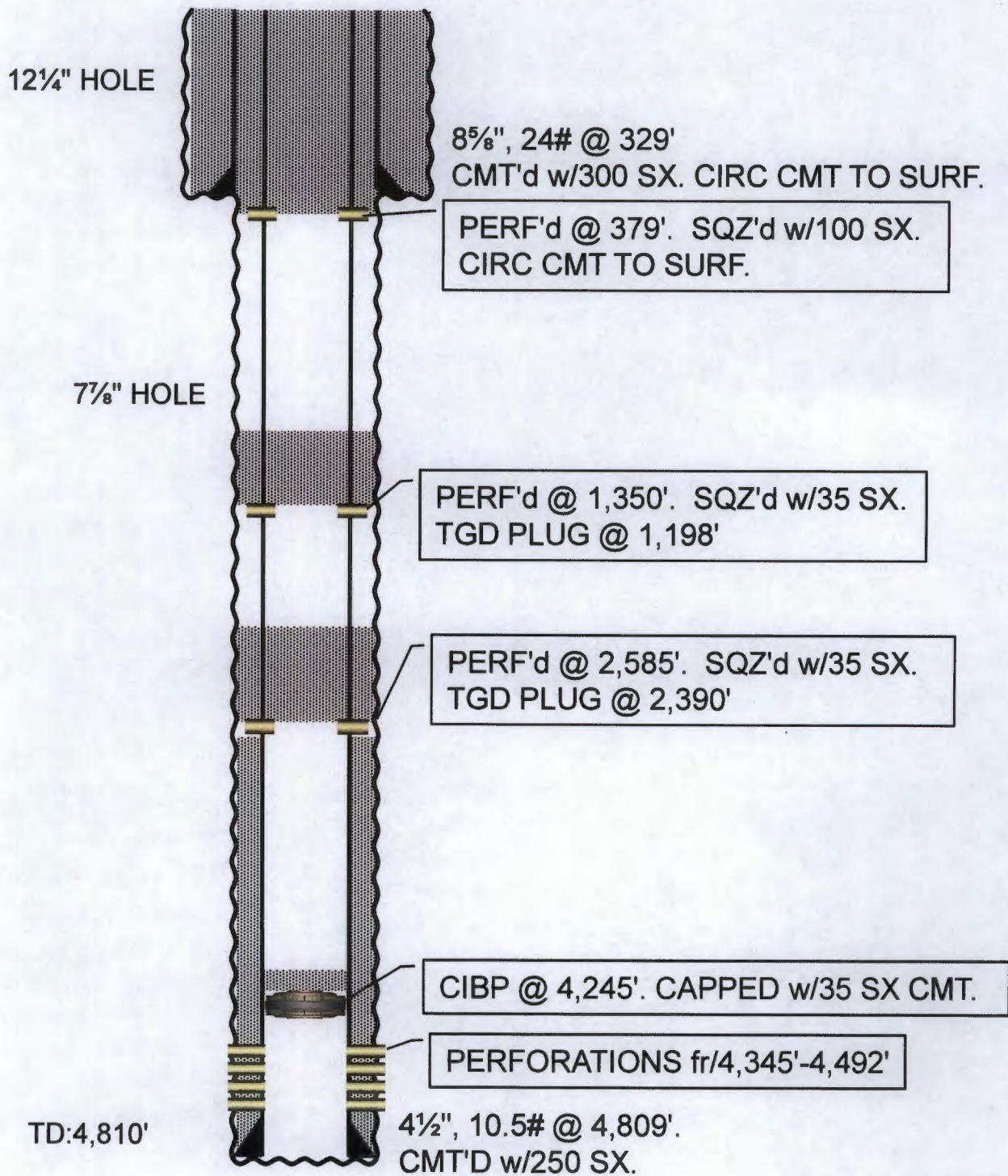


990' FNL, 430' FWL, SEC 33, T17S, R33E

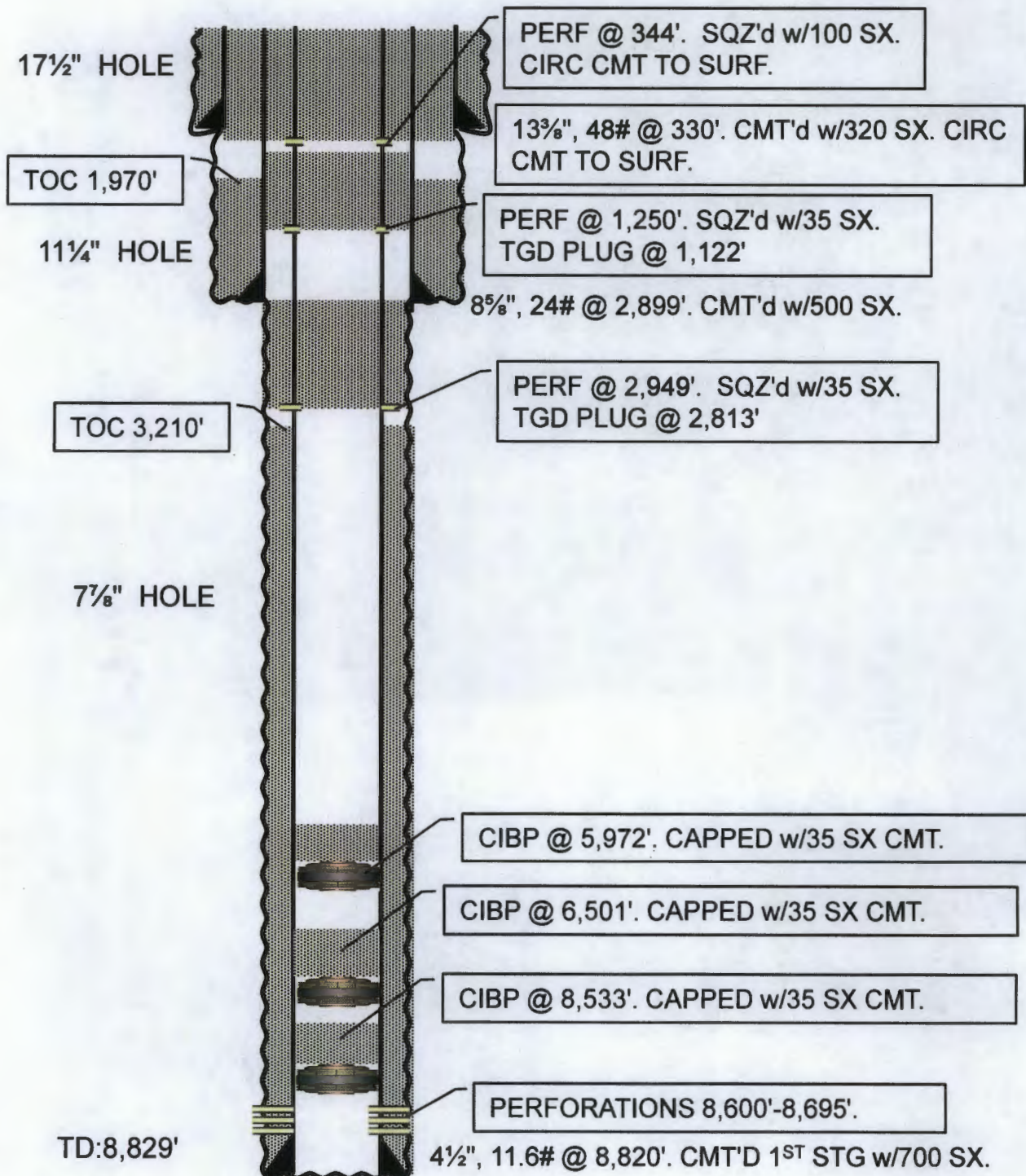
GIFFORD A STATE #1
 2,310' FSL, 330' FEL
 UNIT I, SEC 32 T17S R33E
 LEA CO., NM
 API #30-025-01355
 P & A'd



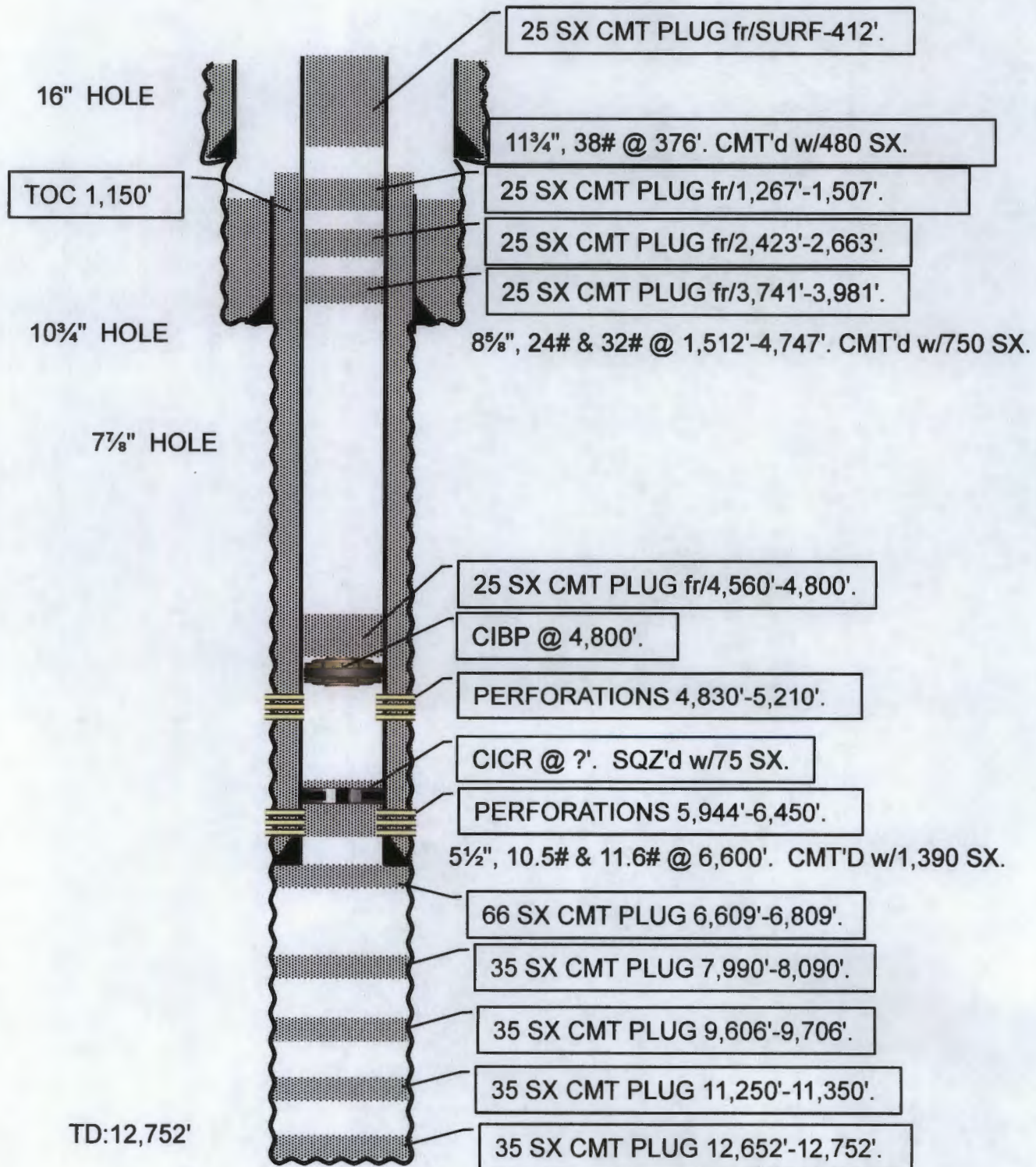
STATE CD #3
2,310' FNL, 2,310' FEL
UNIT G, SEC 29 T17S R33E
LEA CO., NM
API #30-025-01345
P & A'd



STATE CD #2
990' FNL, 1,980' FEL
UNIT B, SEC 32 T17S R33E
LEA CO., NM
API #30-025-21662
P & A'd



PHILMEX #14
 (AKA PHILLIPS STATE #1)
 560' FWL, 660' FSL
 UNIT M, SEC 28 T17S R33E
 LEA CO., NM
 API #30-025-23988
 P & A'd



CAPROCK MALJAMAR UNIT #280

932' FSL, 330' FWL

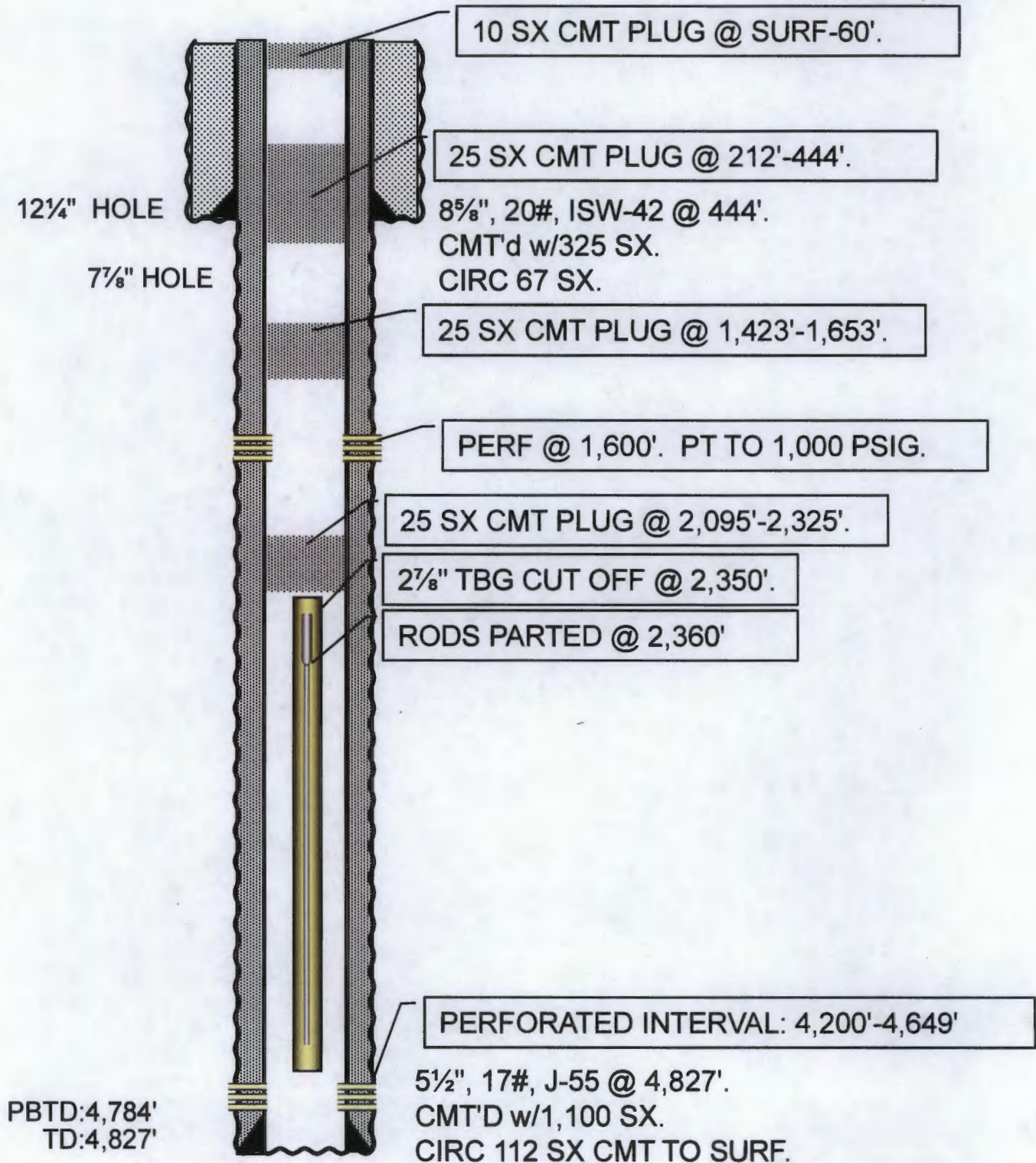
UNIT M, SEC 28 T17S R33E

LEA CO., NM

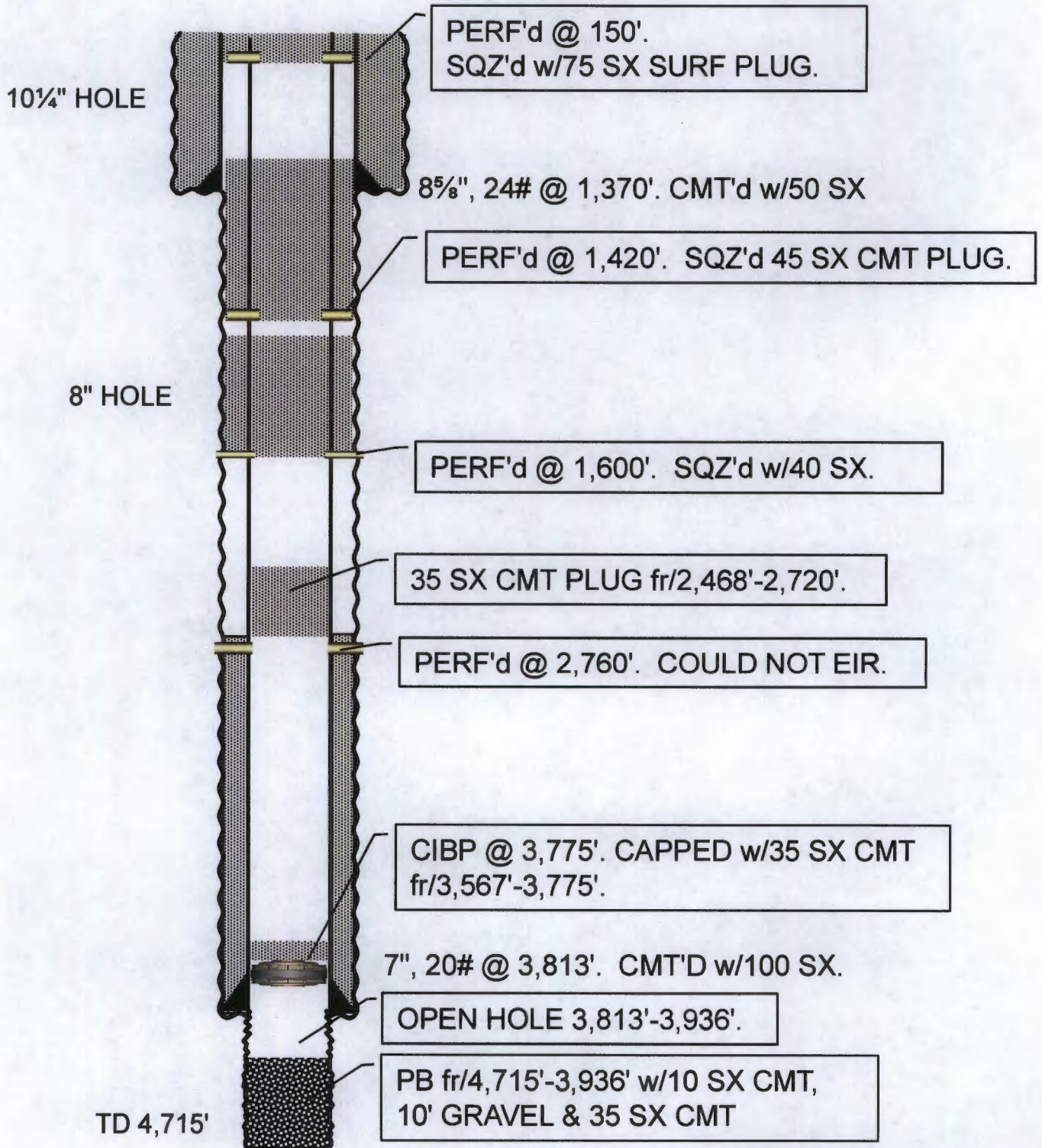
API #30-025-33773

P & A'd

ELEV: 4,088'



STATE BY #3
1,980' FSL, 660' FEL
UNIT I, SEC 32 T17S R33E
LEA CO., NM
API #30-025-01340
P & A'd



Item VII

Additional Operational Data

1. Proposed average daily rate – 200 BWPD (per well).
Proposed maximum daily rate – 400 BWPD (per well).
2. Closed system.
3. Proposed average and maximum pressure:

Well	Avg Press (psig)	Max Press (psig)
SEMGS AU #105	1900	1948
SEMGS AU #617	1900	1989
SEMGS AU #906	1900	2135

4. Injection fluid is primarily produced water from within the SEMGS AU augmented with fresh water purchased from ConocoPhillips and is used extensively in this area for secondary recovery purposes.
5. Injection is not for disposal purposes.

Item VIII

Geologic Data

Formation Name: Grayburg/San Andres
Lithology: Sandstone/Limestone
Thickness: 640' (gross), 70' (net)
Depth: 3,884' (shallowest)

Drinking Water Sources: There are no drinking water sources within 1 mile of the project area.

Item IX

Stimulation Program

Acidize each well with ~ 5,000 gallons 15% NEFE HCl if necessary.

Item X

Logging and Test Data

Log have been previously submitted with well completion reports. No tests have been conducted.

Item XI

Fresh Water Data

There are no fresh water wells within 1 mile of the project area.

Item XII

Disposal Data

Injection is for secondary recovery purposes and not disposal purposes.

Notification List

ConocoPhillips Company ✓
4001 Penbrook St.
Odessa, TX, 79762

Lin Operating, Inc. ✓ - Linn
600 Travis St.
Suite 5100
Houston, TX 77002

LRE Operating, LLC ✓
111 Bagby
Suite 4600
Houston TX 77002

Mack Energy Corp ✓
PO Box 960
Artesia, NM 88211-0960

Oxy USA Inc. ✓
PO Box 4294
Houston, TX 77210

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FORT WORTH TX 76102-4701

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FIRST CLASS
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Flats Rate



endicia.com

071S00777793

USPS CERTIFIED MAIL**9407 1102 0088 1187 2165 54**

Mack Energy Corp.
Regulatory Compliance
PO Box 960
ARTESIA NM 88211-0960

Label Reference: **RGRIGG**USPS Tracking Label Number: **9407110200881187216554**

<u>USPS Tracking History</u>	<u>Postal Facility</u>	<u>ZIP</u>	<u>Date</u>	<u>Time</u>
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ACCEPT OR PICKUP	FORT WORTH, TX	76102	5/15/2014	12:45PM
DEPART POST OFFICE	FORT WORTH, TX	76102	5/15/2014	6:52PM
PROCESSED THROUGH USPS SORT FACILITY	COPPELL, TX	75099	5/15/2014	10:30PM
DEPART USPS SORT FACILITY	COPPELL, TX	75099	5/16/2014	1:12AM
PROCESSED THROUGH USPS SORT FACILITY	LUBBOCK, TX	79402	5/16/2014	6:47PM
DEPART USPS SORT FACILITY	LUBBOCK, TX	79402	5/16/2014	10:36PM
PROCESSED THROUGH USPS SORT FACILITY	LUBBOCK, TX	79402	5/17/2014	12:48AM
AVAILABLE FOR PICKUP	ARTESIA, NM	88211	5/17/2014	9:24AM
DELIVERED	ARTESIA, NM	88210	5/19/2014	11:34AM

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071S0077793

USPS CERTIFIED MAIL**9407 1102 0079 3122 3687 57**

Lin Operating, Inc.
Regulatory Compliance
Suite 5100
600 Travis St
HOUSTON TX 77002-3092

**Label Reference: RGRIGG****USPS Tracking Label Number: 9407110200793122368757**

<u>USPS Tracking History</u>	<u>Postal Facility</u>	<u>ZIP</u>	<u>Date</u>	<u>Time</u>
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ACCEPT OR PICKUP	FORT WORTH,TX	76102	5/15/2014	12:45PM
DEPART POST OFFICE	FORT WORTH,TX	76102	5/15/2014	6:52PM
PROCESSED THROUGH USPS SORT FACILITY	COPPELL,TX	75099	5/15/2014	9:37PM
DEPART USPS SORT FACILITY	COPPELL,TX	75099	5/16/2014	1:12AM
PROCESSED THROUGH USPS SORT FACILITY	HOUSTON,TX	77201	5/16/2014	6:45PM
PROCESSED THROUGH USPS SORT FACILITY	HOUSTON,TX	77201	5/17/2014	3:47AM
DEPART USPS SORT FACILITY	HOUSTON,TX	77201	5/17/2014	4:10AM
SORTING/PROCESSING COMPLETE	HOUSTON,TX	77002	5/17/2014	9:01AM
ARRIVAL AT UNIT	HOUSTON,TX	77002	5/17/2014	4:03AM
OUT FOR DELIVERY	HOUSTON,TX	77002	5/17/2014	9:11AM
BUSINESS CLOSED	HOUSTON,TX	77002	5/17/2014	1:42PM
DELIVERED	HOUSTON,TX	77002	5/19/2014	1:15PM

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USPS CERTIFIED MAIL**9407 1102 0088 3210 5258 48**

Oxy USA, Inc.
Regulatory Compliance
PO Box 4294
HOUSTON TX 77210-4294

Label Reference: **RGRIGG**USPS Tracking Label Number: **9407110200883210525848**

<u>USPS Tracking History</u>	<u>Postal Facility</u>	<u>ZIP</u>	<u>Date</u>	<u>Time</u>
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DEPART POST OFFICE	FORT WORTH, TX	76102	5/15/2014	6:52PM
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DEPART USPS SORT FACILITY	COPPELL, TX	75099	5/16/2014	1:12AM
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DELIVERED	HOUSTON, TX	77210	5/19/2014	5:08AM

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Addressed To:

Name LRE Operating, Inc.
Addressed To: Regulatory Compliance
Address 1 1111 Bagby St
Address 2 LRE Operating, Inc.
City, ST ZIP Houston TX 77002-
Your Reference RGRIGG
Info:

USPS Delivery Confirmation

Mail Class Certified with Electronic Delivery Confirmation
USPS 9407110200881187205671
Certified Mail
Article #
Last Status DEPART USPS SORT FACILITY
Post Office HOUSTON,TX 77201
Date: 5/17/2014
Time: 4:10AM
USPS 77002
Destination ZIP
USPS Facility Type EF
USPS Dest Zip4 2559
Recorded 5/17/2014
Postage Paid Date: 5/15/2014
Has signature been returned by USPS yet? No
Postage Label Archive <http://a4b90601d0fae76da63d-e4b28caa2a7af29719e3e9b86e8235cd.r45.cf2.rackcdn.com/9407110200881187205671-20140515.png>
Electronic Delivery Confirmation
Return Receipt Signature

Addressed To:

Name ConocoPhillips Company
Addressed To: Regulatory Compliance
Address 1 4001 Penbrook St
Address 2 ConocoPhillips Company
City, ST ZIP Odessa TX 79762-
Your Reference RGRIGG
Info:

USPS Delivery Confirmation

Mail Class Certified with Electronic Delivery Confirmation

USPS 9407110200882187274483
Certified Mail
Article #

Last Status DEPART POST OFFICE
Post Office FORT 76102
WORTH,TX

Date: 5/15/2014

Time: 6:52PM

USPS 79762

Destination
ZIP

USPS Facility SF
Type

USPS Dest 5976
Zip4

Recorded 5/15/2014

Postage Paid 5/15/2014
Date:

Has signature been returned
by USPS yet? No

Postage [http://a4b90601d0fae76da63d-](http://a4b90601d0fae76da63d-e4b28caa2a7af29719e3e9b86e8235cd.r45.cf2.rackcdn.com/9407110200882187274483-20140515.png)
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Electronic
Delivery
Confirmation

Return
Receipt
Signature

Notification List

ConocoPhillips Company
4001 Penbrook St.
Odessa, TX, 79762

Lin Operating, Inc.
600 Travis St.
Suite 5100
Houston, TX 77002

LRE Operating, LLC
111 Bagby
Suite 4600
Houston TX 77002

Mack Energy Corp
PO Box 960
Artesia, NM 88211-0960

Oxy USA Inc.
PO Box 4294
Houston, TX 77210

Affidavit of Publication

State of New Mexico,
County of Lea.

I, DANIEL RUSSELL
PUBLISHER

of the Hobbs News-Sun, a
newspaper published at Hobbs, New
Mexico, do solemnly swear that the
clipping attached hereto was
published in the regular and entire
issue of said newspaper, and not a
supplement thereof for a period

of 1 issue(s).
Beginning with the issue dated
May 08, 2014
and ending with the issue dated
May 08, 2014



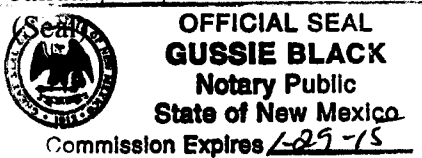
PUBLISHER

Sworn and subscribed to before me
this 8th day of
May, 2014



Notary Public

My commission expires
January 29, 2015



This newspaper is duly qualified to
publish legal notices or
advertisements within the meaning of
Section 3, Chapter 167, Laws of
1937 and payment of fees for said
publication has been made.

LEGAL NOTICE May 8, 2014

Cross Timbers Energy, LLC
400 W. 7th Street, Fort
Worth, TX 76102 (817)
334-7800 (Robbie Grigg) is
hereby giving notice of
intent to inject produced
and/or fresh water for the
purpose of secondary
recovery into the
Grayburg/San Andres
formation in the SEMGSAU
#100 located 2,490' FSL &
1,595' FWL (Unit Itr I) Sec
30, T17S, R33E at a depth
from 3,897' to 4,308' at an
expected rate of 250 BWPD
and 1,948 psig; the
SEMGSAU #617 located
1,704' FSL & 1,998' FWL
(Unit Itr K) Sec 29, T17S,
R33E at a depth from 3,978'
to 4,368' at an expected rate
of 250 BWPD and 1,989
psig; and the SEMGSAU
#906 located 1,200' FNL &
950' FEL (Unit Itr A) Sec 32,
T17S, R33E at a depth from
4,270' to 4,460' at an
expected rate of 250 BWPD
and 2,135 psig. Interested
persons objecting to this
application must file a
request for hearing with the
Oil Conservation Division
1220 South Francis Dr.,
Santa Fe, NM 87505 within
15 days of this notice
#29014

67111631

00135919

ROBBIE GRIGG
CROSS TIMBERS ENERGY
400 W. 7TH ST
FORT WORTH, TX 76102



C-108 Review Checklist: Received _____ Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 13]

PERMIT TYPE: (WFX) PMX / SWD Number: _____ Permit Date: _____ Legacy Permits/Orders: _____

Well No. 105 Well Name(s): SEM GSA4

API: 30-0 25-26512 Spud Date: 12-17-79 New or Old: old (UIC Class II Primacy 03/07/1982)

Footages 2490 FSL & 1545 FEL Lot _____ or Unit I Sec 30 Tsp 17S Rge 33E County Lee

General Location: MALJAMAR, Lee Co. Pool: GRAYBURG-SA Pool No.: 43329

BLM 100K Map: _____ Operator: CROSS TIMBERS ENERGY, LLC OGRID: 305793 Contact: Robbie Grigg

COMPLIANCE RULE 5.9: Total Wells: _____ Inactive: _____ Fincl Assur: _____ Compl. Order? _____ IS 5.9 OK? y Date: 7-30-14

WELL FILE REVIEWED ☐ Current Status: _____

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: _____

Planned Rehab Work to Well: _____

Well Construction Details:		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface		<u>12 1/4" / 8.625"</u>	<u>660'</u>	<u>660</u>	<u>Surface / Circ</u>
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Prod/Liner		<u>7 7/8" 5 1/2"</u>	<u>4233'</u>	<u>1960</u>	<u>Surface / Circ</u>
Planned ___ or Existing ___ Liner		<u>2 3/4"</u>	<u>3800'</u>		
Planned ___ or Existing ___ OH / <u>PERF</u>					
				Inj Length <u>411</u>	
Injection Stratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.					Drilled TD <u>4350</u> PBTD <u>4349</u>
Confining Unit: Litho. Struc. Por.					NEW TD _____ NEW PBTD _____
Proposed Inj Interval TOP: <u>3897</u>			<u>GRAYBURG</u>		NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>
Proposed Inj Interval BOTTOM: <u>4308</u>			<u>SAN ANTONIO</u>		Tubing Size <u>2 3/4</u> in. Inter Coated? <u>y</u>
Confining Unit: Litho. Struc. <u>(Por)</u>					Proposed Packer Depth <u>3800</u> ft
Adjacent Unit: Litho. Struc. <u>(Por)</u>					Min. Packer Depth <u>3800</u> (100-ft limit)
					Proposed Max. Surface Press. <u>1948</u> psi
					Admin. Inj. Press. <u>760</u> (0.2 psi per ft)
AOR: Hydrologic and Geologic Information					
POTASH: R-111-P <input type="radio"/> Noticed? _____ BLM Sec Ord <input type="radio"/> WIPP <input type="radio"/> Noticed? _____ SALT/SALADO T: _____ B: _____ CLIFF HOUSE _____					
FRESH WATER: Aquifer _____ Max Depth <u>190</u> HYDRO AFFIRM STATEMENT By Qualified Person <input type="radio"/>					
NMOSE Basin: <u>Lee</u> CAPITAN REEF: thru <input type="radio"/> adj <input type="radio"/> NAD <input checked="" type="radio"/> No. Wells within 1-Mile Radius? _____ FW Analysis <input type="radio"/>					
Disposal Fluid: Formation Source(s) <u>GRAYBURG-SA</u> Analysis? _____ On Lease <input checked="" type="radio"/> Operator Only <input type="radio"/> or Commercial <input type="radio"/>					
Disposal Int: Inject Rate (Avg/Max BWPD): <u>200/400</u> Protectable Waters? _____ Source: _____ System: Closed <input type="radio"/> or Open <input type="radio"/>					
HC Potential: Producing Interval? <u>x</u> Formerly Producing? _____ Method: Logs/DST/P&A/Other _____ 2-Mile Radius Pool Map <u>0</u>					
AOR Wells: 1/2-M Radius Map? _____ Well List? _____ Total No. Wells Penetrating Interval: _____ Horizontals? <u>0</u>					
Penetrating Wells: No. Active Wells <u>54</u> Num Repairs? _____ on which well(s)? _____ Diagrams? _____					
Penetrating Wells: No. P&A Wells <u>48</u> Num Repairs? _____ on which well(s)? _____ Diagrams? _____					
NOTICE: Newspaper Date <u>MAY 8</u> Mineral Owner <u>Bum/state</u> Surface Owner _____ N. Date _____					
RULE 26.7(A): Identified Tracts? _____ Affected Persons: <u>LEE OPERATING, MAJOR ENERGY</u> N. Date <u>MAY 19</u>					

Permit Conditions: Issues: NEEDS RT

Add Permit Cond: _____



C-108 Review Checklist: Received _____ Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 13]

PERMIT TYPE: WFX PMX / SWD Number: _____ Permit Date: _____ Legacy Permits/Orders: _____

Well No. 617 Well Name(s): SEMGSA4

API: 30-0 25-3789 Spud Date: _____ New or Old (UIC Class II Primacy 03/07/1982)

Footages 1704 FSL & 1998 FUL Lot _____ or Unit K Sec 29 Tsp 17S Rge 33E County LEC

General Location: MALJAMAR Pool: GRAYBURG-SA Pool No.: 43329

BLM 100K Map: _____ Operator: CROSS TIMBERS ENERGY, LLC OGRID: 305793 Contact: Rubbi e Griggs

COMPLIANCE RULE 5.9: Total Wells: _____ Inactive: _____ Fincl Assur: _____ Compl. Order? _____ IS 5.9 OK? X Date: 7-31-14

WELL FILE REVIEWED ☐ Current Status: _____

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☒ After Conv. ☐ Logs in Imaging: _____

Planned Rehab Work to Well: _____

Well Construction Details:		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface		<u>12.25 / 5 1/8</u>	<u>1225</u>	<u>630</u>	<u>Sur / Circ</u>
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Prod/Liner		<u>7 7/8 / 5 1/2</u>	<u>4450</u>	<u>770</u>	<u>Sur / Circ</u>
Planned ___ or Existing ___ Liner		<u>2 3/8</u>	<u>4155</u>		
Planned ___ or Existing ___ OH / <u>PERF</u>				<u>Inj Length</u> <u>390</u>	

Injection Stratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. <u>Por.</u>				
Confining Unit: Litho. Struc. <u>Por.</u>				
Proposed Inj Interval TOP:	<u>3978</u>	<u>Grayburg</u>		
Proposed Inj Interval BOTTOM:	<u>4368</u>	<u>SAN ANTONIO</u>		
Confining Unit: Litho. Struc. <u>Por.</u>				
Adjacent Unit: Litho. Struc. <u>Por.</u>				

Completion/Operation Details:	
Drilled TD _____	PBTD _____
NEW TD _____	NEW PBTD _____
NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>	
Tubing Size <u>2 3/8</u> in.	Inter Coated? <u>X</u>
Proposed Packer Depth _____ ft	
Min. Packer Depth <u>4155</u> (100-ft limit)	
Proposed Max. Surface Press. <u>1900</u> psi	
Admin. Inj. Press. <u>795</u> (0.2 psi per ft)	

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ☐ Noticed? _____ BLM Sec Ord ☐ WIPP ☐ Noticed? _____ SALT/SALADO T: _____ B: _____ CLIFF HOUSE _____

FRESH WATER: Aquifer _____ Max Depth _____ HYDRO AFFIRM STATEMENT By Qualified Person ☐

NMOSE Basin: LEC CAPITAN REEF: thru ☐ adj ☐ NA ☒ No. Wells within 1-Mile Radius? _____ FW Analysis ☐

Disposal Fluid: Formation Source(s) MALJAMAR GRAYBURG-SA Analysis? _____ On Lease ☒ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 200/400 Protectable Waters? _____ Source: _____ System: Closed ☐ or Open ☐

HC Potential: Producing Interval? X Formerly Producing? _____ Method: Logs/DST/P&A/Other _____ 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? _____ Well List? _____ Total No. Wells Penetrating Interval: _____ Horizontals? _____

Penetrating Wells: No. Active Wells 54 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

Penetrating Wells: No. P&A Wells 48 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

NOTICE: Newspaper Date MAY 8 Mineral Owner Bunstate Surface Owner _____ N. Date MAY 8

RULE 26.7(A): Identified Tracts? _____ Affected Persons: CONOCO Phillips, LINN OPERATING, LNE OPERATING, MACK ENERGY N. Date MAY 15

Permit Conditions: Issues: Packer depth below Perforated interval SRT

Add Permit Cond: _____



C-108 Review Checklist: Received _____ Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 13]

PERMIT TYPE: WFX / PMX / SWD Number: _____ Permit Date: _____ Legacy Permits/Orders: _____

Well No. 906 Well Name(s): SEMGBSA4

API: 30-0 25-31444 Spud Date: NOVEMBER 15 1991 New or Old: ☒ (UIC Class II Primacy 03/07/1982)

Footages 1200 FNL 950 E Lot _____ or Unit A Sec 32 Tsp 17S Rge 33E County LEA

General Location: MALJAMAR Pool: GRAYBUNG-SA Pool No.: 43329

BLM 100K Map: _____ Operator: CROSS TIMBERS ENERGY, LLC OGRID: 305753 Contact: RUBBIE GRIGGS

COMPLIANCE RULE 5.9: Total Wells: _____ Inactive: _____ Fincl Assur: _____ Compl. Order? _____ IS 5.9 OK? _____ Date: 7-31-14

WELL FILE REVIEWED ☐ Current Status: _____

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: _____

Planned Rehab Work to Well: _____

Well Construction Details:		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface		<u>12 1/4" / 9 5/8"</u>	<u>306</u>	<u>250</u>	<u>SURF/CINC</u>
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Prod/Liner		<u>7 7/8" / 6 1/2"</u>	<u>4546</u>	<u>1300</u>	<u>SURF/CINC</u>
Planned ___ or Existing ___ Liner		<u>2.375"</u>	<u>4170</u>		
Planned ___ or Existing ___ OH / <u>PERF</u>				<u>Inj Length 190</u>	

Injection Stratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. <u>(Por.)</u>					Drilled TD <u>4541</u> PBTD <u>4499</u>
Confining Unit: Litho. Struc. Por.					NEW TD _____ NEW PBTD _____
Proposed Inj Interval TOP:	<u>4270</u>				NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>
Proposed Inj Interval BOTTOM:	<u>4460</u>				Tubing Size <u>2 3/4</u> in. Inter Coated? <u>X</u>
Confining Unit: Litho. Struc. Por.					Proposed Packer Depth <u>4170</u> ft
Adjacent Unit: Litho. Struc. Por.					Min. Packer Depth <u>4170</u> (100-ft limit)
					Proposed Max. Surface Press. <u>1900</u> psi
					Admin. Inj. Press. <u>834</u> (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ☐ Noticed? _____ BLM Sec Ord ☐ WIPP ☐ Noticed? _____ SALT/SALADO T: _____ B: _____ CLIFF HOUSE

FRESH WATER: Aquifer _____ Max Depth _____ HYDRO AFFIRM STATEMENT By Qualified Person ☐

NMOSE Basin: LEA CAPITAN REEF: thru ☐ adj ☐ NA ☒ No. Wells within 1-Mile Radius? _____ FW Analysis ☐

Disposal Fluid: Formation Source(s) MALJAMAR GRAYBUNG-SA Analysis? _____ On Lease ☒ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 260/400 Protectable Waters? _____ Source: _____ System: Closed ☐ or Open ☐

HC Potential: Producing Interval? X Formerly Producing? _____ Method: Logs/DST/P&A/Other _____ 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? _____ Well List? _____ Total No. Wells Penetrating Interval: _____ Horizontals? _____

Penetrating Wells: No. Active Wells 5 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

Penetrating Wells: No. P&A Wells 48 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

NOTICE: Newspaper Date MAY 8 Mineral Owner BLM NMSLO Surface Owner CONOCOPHILLIPS LINN ENERGY N. Date MAY 8

RULE 26.7(A): Identified Tracts? _____ Affected Persons: LEA OPERATING, MALENCY N. Date MAY 16

Permit Conditions: Issues: NEED SRT

Add Permit Cond: _____

McMillan, Michael, EMNRD

From: Ian Petersen <ipetersen@mspartners.com>
Sent: Thursday, July 31, 2014 4:09 PM
To: McMillan, Michael, EMNRD
Cc: Robbie Grigg
Subject: RE: Cross Timbers SEMGSAU WFX application

Michael,

Per our phone conversation:

The SEMGSAU #617 top perf depth listed in the C-108 (3978') is a typo. The wellbore schematic and all other records indicate the top perf to be 4255', and the pkr setting depth will be within 100' (4155').

We agree to not inject over 0.2 psi/ft, but intend to perform a step-rate injection test and submit an IPI request immediately after approval of the WFX.

If I/we can help y'all with anything else, don't hesitate to ask! You'll probably find the same injection pressure issue with our WFX request in the North Vacuum Abo Unit. We can proceed the same there if that is agreeable to y'all (agree to inject at lower psi, then immediately submit IPI request w step-rate tests).

Thank you for your help, Michael and everyone at the Division. We know you're all hooked up like the rest of us.

Ian

Ian Petersen
MorningStar Partners, Cross Timbers Energy
Operations Engineer
O: 817-334-7708
C: 432-634-4922



From: McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]
Sent: Thursday, July 31, 2014 12:11 PM
To: Robbie Grigg
Subject: Cross Timbers SEMGSAU WFX application

Robbie:

I have looked at your WFX application for the SEMGSAU in Lea County.

I have a couple of concerns with your application.

First, the SEMBSAU #617 has a packer depth of 4155 feet and a perf interval of 3978-4368. The packer must be at a maximum of 100 feet above the top of the perforated interval.

Next, you applied for injection pressure of 1900 psi. However, the maximum pressure that can be administratively approved is .2psi/ft. or 779 psi for the #105; 792 psi for the 617; 854 psi for the #906. Therefore. You must apply for an IPI for these wells. You would be allowed to use the data from previous IPI in your analysis; however, the OCD cannot approve a blanket pressure for the wells without more data.
Thank You

Michael A. McMillan

Engineering and Geological Services Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe NM 87505
O: 505.476.3448 F. 505.476.3462