DATE IN	SUSPENSE	ENGINEER Warnell	LOGGED IN 7/24/09	TYPE PMX	APP NO. PTGW 0920554504

ABOVE THIS LINE FOR DIVISION USE ONLY

MCA 386

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

RECEIVED
2009 JUL 24 PM 1 26

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]

217817

[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

PMX 153 / PMX 164 / R-6157

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

[D] Other: Specify _____

[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.

JALYN N. FISKE	Jalyn N. Fiske	REGULATORY SPECIALIST	7/6/09
Print or Type Name	Signature	Title	Date

jalyn.fiske@conocophillips.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: X Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: CONOCOPHILLIPS COMPANY

ADDRESS: 3300 N. "A" ST. BLDG. 6, MIDLAND, TX 79705

CONTACT PARTY: JALYN N. FISKE PHONE: (432) 688-6813

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? X Yes _____ No
If yes, give the Division order number authorizing the project: PMX 164 / R-6157

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: SEE PROCEDURE

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: JALYN N. FISKE TITLE: REGULATORY SPECIALIST

SIGNATURE: Jalyn N. Fiske DATE: 7/6/09

E-MAIL ADDRESS: jalyn.fiske@conocophillips.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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 1

INJECTION WELL DATA SHEET

OPERATOR: CONOCOPHILLIPS COMPANY

WELL NAME & NUMBER: MCA UNIT 386

WELL LOCATION: 1921' FNL & 1995' FWL "F" 29 T17S R32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing SEE PROCEDURE

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Determined: _____

Total Depth: _____

Injection Interval

4102' feet to 4290'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: _____

Type of Packer: WEATHERFORD 1-X PACKER (5 1/2 17#)

Packer Setting Depth: 3650'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____ Yes X No

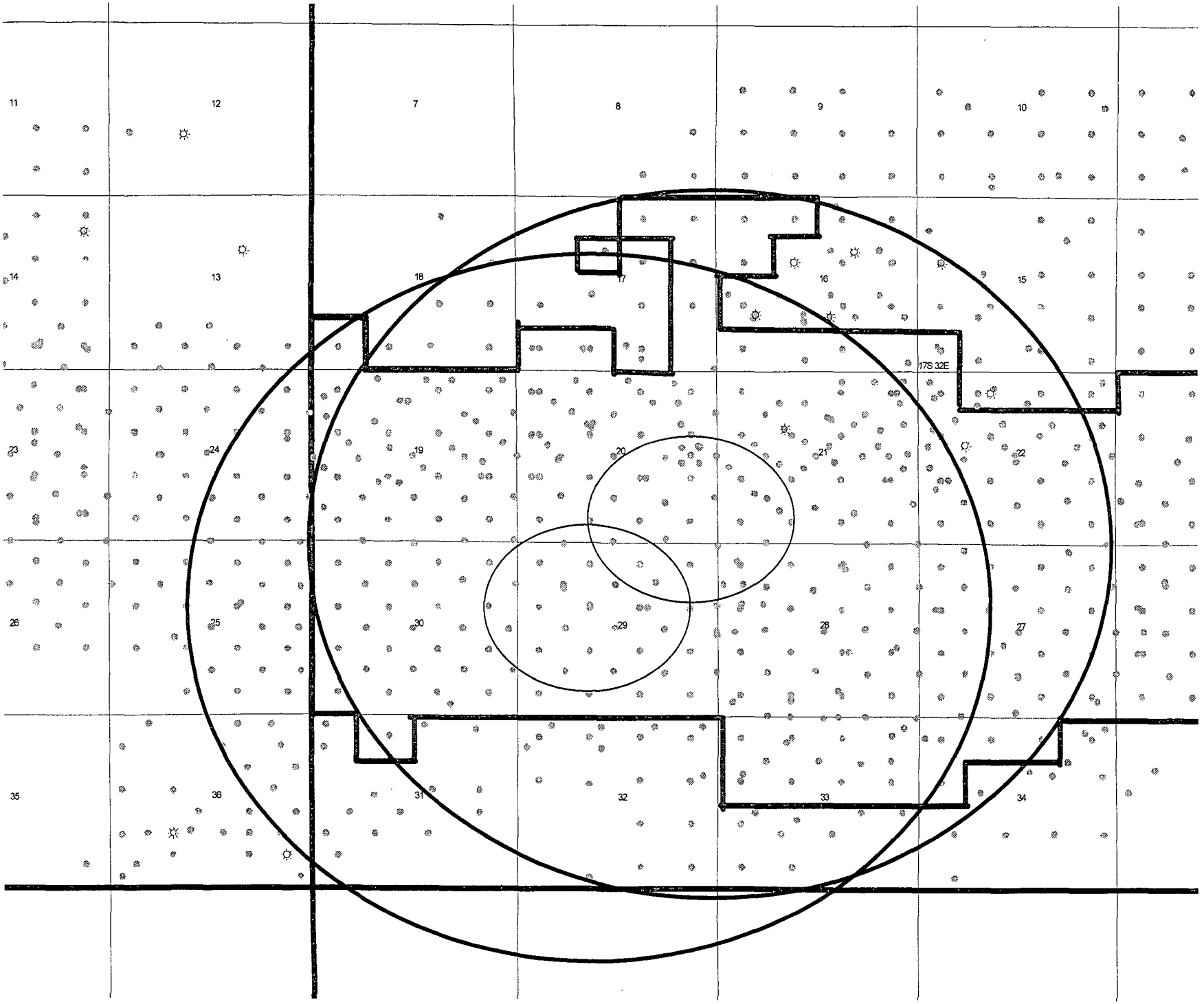
   If no, for what purpose was the well originally drilled? INJECTION

2. Name of the Injection Formation: GRAYBURG - SAN ANDRES

3. Name of Field or Pool (if applicable): SAME

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____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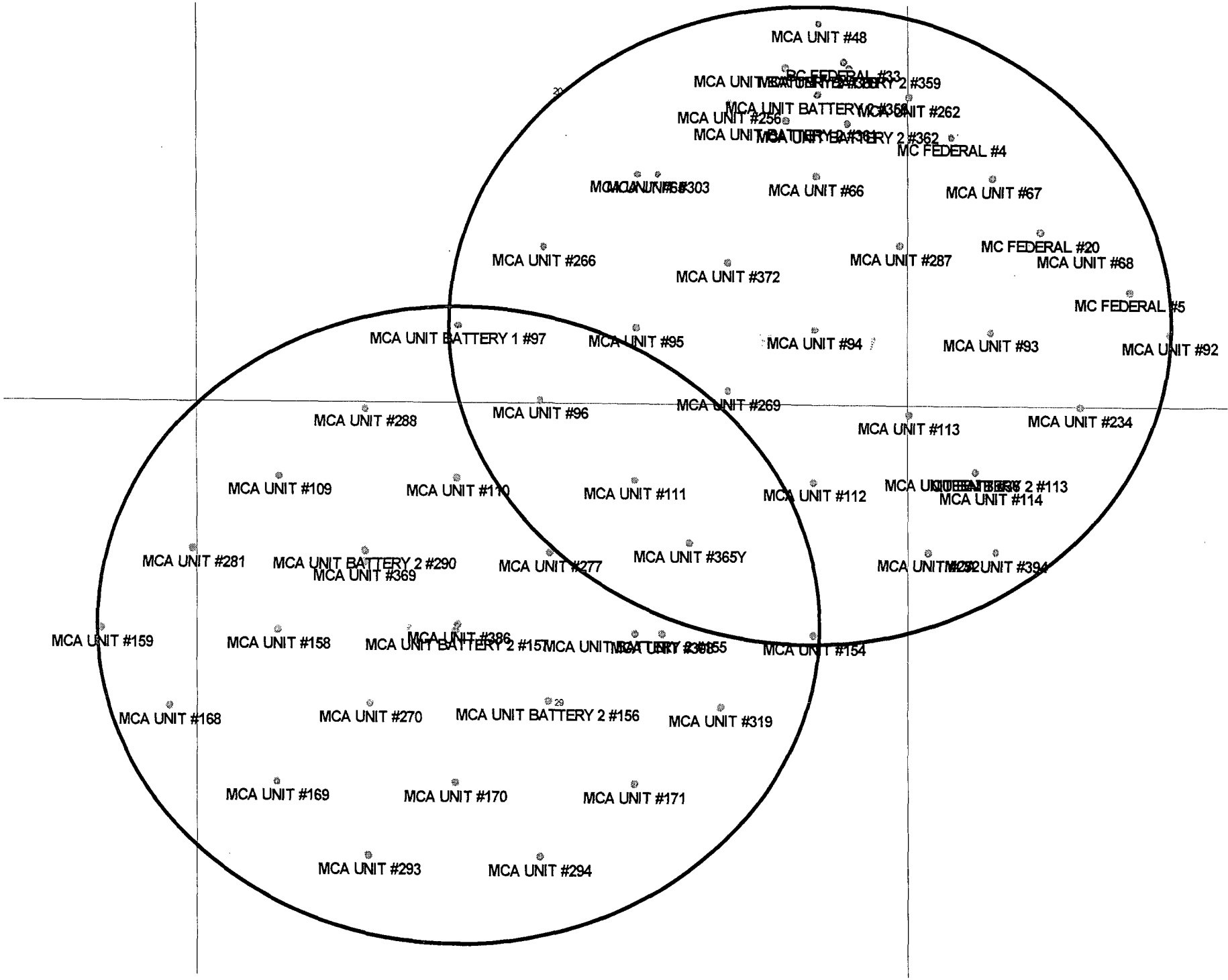
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MCA UNIT #68
MCA UNIT #266
MCA UNIT #372
MCA UNIT #287
MC FEDERAL #5
MCA UNIT BATTERY 1 #97
MCA UNIT #95
MCA UNIT #94
MCA UNIT #93
MCA UNIT #92
MCA UNIT #269
MCA UNIT #288
MCA UNIT #96
MCA UNIT #113
MCA UNIT #234
MCA UNIT #109
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MCA UNIT #111
MCA UNIT #112
MCA UNIT #114
MCA UNIT #281
MCA UNIT BATTERY 2 #290
MCA UNIT #369
MCA UNIT #277
MCA UNIT #365Y
MCA UNIT #159
MCA UNIT #158
MCA UNIT #154
MCA UNIT #168
MCA UNIT #270
MCA UNIT BATTERY 2 #156
MCA UNIT #319
MCA UNIT #169
MCA UNIT #170
MCA UNIT #171
MCA UNIT #293
MCA UNIT #294

													SURFACE					INTERMEDIATE					PRODUCTION					LINER			
API	LEASE NAME	WELL #	SPUD DATE	TD DEPTH	STATUS	SEC	TWP	RANGE	DOTAG	N/S	FOOTAGE	E/W	SIZE	SET DEPTH	SKS CEMENT	CEMENT TOP	METHOD	SIZE	SET DEPTH	SKS CEMENT	CEMENT TOP	METHOD	SIZE	SET DEPTH	SKS CEMENT	CEMENT TOP	METHOD	SIZE	SET DEPTH	SKS CEMENT	CEMENT TOP	METHOD
30025006080000	MCA UNIT	93	5/12/1940	4018	ACT	21	17S	32E		660	FSL	660	FWL	8 1/4 IN	889	UNKOWN	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3560	150	1950	EST	5-1/2 IN	4078	150	3229	TOP OF LINER
30025006090000	MCA UNIT	92	9/30/1940	4062	ACT	21	17S	32E		660	FSL	1980	FWL	8 5/8 IN	888		50	SURFACE	CIRC	NA	NA	NA	NA	7 IN	3552	100	2000	EST	NA	NA	NA	NA	NA
30025006100000	MCA UNIT	67	1/31/1941	4125	ACT	21	17S	32E		1980	FSL	660	FWL	12 1/2 IN	40		15	SURFACE	CIRC	7 IN	3594	830	2000	EST	5-1/2 IN	3842	300	3500	EST	NA	NA	NA	NA	NA
30025006150001	MCA UNIT	68	8/30/1956	4098	PA	21	17S	32E		1395	FSL	1347	FWL	10-3/4 IN	95		50	SURFACE	CIRC	8-5/8 IN	887	NA	NA	NA	7 IN	3741	310	1710	TEMP	NA	NA	NA	NA	NA
30025007330001	MCA UNIT	114	11/18/1980	4071	ACT	28	17S	32E		660	FNL	660	FWL	12-1/2"	20		23	SURFACE	CIRC	5-1/2"	3551	150	2400	TEMP	4"	4075	200	SURFACE	CIRC	NA	NA	NA	NA	
30025007510001	MCA UNIT	113	11/16/1946	10747	ACT	28	17S	32E		554	FNL	554	FWL	13 IN	825		175	SURFACE	CIRC	8-5/8 IN	4183	200	3391	TEMP	5-1/2 IN	10745	1100	5890	TEMP	NA	NA	NA	NA	NA
30025007520000	MCA UNIT	112	3/21/1939	3759	PA	29	17S	32E		660	FNL	660	FEL	8-5/8 IN	950		50	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3560	100	2000	EST	5-1/2 IN	4067	150	3332	TOP OF LINER
30025007530000	MCA UNIT	154	6/8/1940	3810	ACT	29	17S	32E		1980	FNL	660	FEL	5-5/8"	985		50	SURFACE	CIRC	7"	3560	100	NR	NR	4-1/2"	3703	300	2400	TEMP	NA	NA	NA	NA	NA
30025007540000	MCA UNIT	170	12/10/1940	3964	ACT	29	17S	32E		1980	FSL	1980	FWL	8 1/4 IN	990		50	SURFACE	EST	NA	NA	NA	NA	NA	7 IN	3482	100	2000	EST	5-1/2 IN	4157	150	3263	TOP OF LINER
30025007550000	MCA UNIT	169	2/11/1941	3935	ACT	29	17S	32E		1980	FSL	660	FWL	8 5/8 IN	1006		50	630	TEMP	7"	3488	100	2270	TEMP	4-1/2"	3735	325	SURFACE	CIRC	NA	NA	NA	NA	NA
30025007580000	MCA UNIT	110	7/6/1940	3747	PA	29	17S	32E		660	FNL	1980	FWL	8-5/8 IN	920		50	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3479	100	2000	EST	5-1/2 IN	4071	125	3221	TOP OF LINER
30025007590000	MCA UNIT	109	8/4/1940	3716	ACT	29	17S	32E		660	FNL	660	FWL	8 1/4 IN	873		75	SURFACE	CIRC	7"	3493	100	2830	CALC	4-1/2"	3631	175	1100	CALC	NA	NA	NA	NA	NA
30025007600000	MCA UNIT	157	8/13/1940	3789	PA	29	17S	32E		1980	FNL	1980	FWL	8 1/4 IN	910		50	SURFACE	CIRC	7"	3492	100	2192	TEMP	4-1/2"	4020	65	3377	TEMP	NA	NA	NA	NA	NA
30025007610000	MCA UNIT	158	10/8/1940	3779	PA	29	17S	32E		1980	FNL	660	FWL	8-5/8 IN	903		50	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3447	100	2147	SURVEY	5-1/2 IN	3970	200	3195	TOP OF LINER
30025007640000	MCA UNIT	171	2/21/1941	3940	ACT	29	17S	32E		1980	FSL	1980	FEL	8 1/4 IN	1010		50	SURFACE	CIRC	7"	3505	100	2500	TEMP	4-1/2"	3784	300	500	CALC	NA	NA	NA	NA	NA
30025007670001	MCA UNIT	111	3/19/1949	4020	ACT	29	17S	32E		660	FNL	1980	FEL	8-5/8"	1922		100	SURFACE	CIRC	7"	3541	150	2540	CALC	4-1/2"	3660	300	1600	CALC	NA	NA	NA	NA	NA
30025007680000	MCA UNIT	155	2/24/1940	3782	PA	29	17S	32E		1980	FNL	1980	FEL	8-5/8 IN	880		50	640	EST	NA	NA	NA	NA	NA	7 IN	3539	150	2000	EST	NA	NA	NA	NA	NA
30025007840000	MCA UNIT	159	8/2/1940	3757	PA	30	17S	32E		1980	FNL	660	FEL	8 5/8 IN	912		50	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3405	150	2000	EST	4-1/2 IN	3647	325	800	SURVEY
30025080530000	MCA UNIT	303	3/13/1959	13965	PA	20	17S	32E		1980	FSL	1830	FEL	13-3/8 IN	444		350	SURFACE	CIRC	NA	NA	NA	NA	NA	9-5/8 IN	4740	2300	SURFACE	CIRC	7 IN	5578	110	4595	TOP OF LINER
30025080540001	MCA UNIT	48	6/29/1956	4070	PA	20	17S	32E		1980	FNL	660	FEL	10 IN	794		25	SURFACE	CIRC	NA	NA	NA	NA	NA	6-5/8 IN	3670	150	1720	EST	NA	NA	NA	NA	NA
30025080620000	MCA UNIT	66	12/7/1938	3721	ACT	20	17S	32E		1980	FSL	660	FEL	12 1/2 IN	21		16	SURFACE	CIRC	NA	NA	NA	NA	NA	7 IN	3561	1285	2000	EST	NA	NA	NA	NA	NA
30025080630000	MCA UNIT	94	7/29/1939	3760	ACT	20	17S	32E		660	FSL	660	FEL	12 1/2 IN	20	NA		NA	NA	NA	NA	NA	NA	7 IN	3600	360	NR	NR	5-1/2"	4050	350	3110	TOP OF LINER
30025080640000	MCA UNIT	65	10/28/1939	3723	PA	20	17S	32E		1980	FSL	1980	FEL	12-3/4 IN	40		32	SURFACE	CIRC	NA	NA	NA	NA	NA	7 IN	3565	375	2200	EST	4 IN	3780	125	2148	TOP OF LINER
30025080650000	MCA UNIT	95	5/7/1940	3744	ACT	20	17S	32E		660	FSL	1980	FEL	8-5/8 IN	880	UNKOWN	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3550	150	2500	EST	5-1/2 IN	4055	135	3318	TOP OF LINER
30025080670000	MCA UNIT	97	1/7/1941	3848	PA	20	17S	32E		660	FSL	1980	FWL	8 5/8 IN	770		50	UNKOWN	UNKOWN	NA	NA	NA	NA	NA	7 IN	3528	150	UNKNOWN	UNKNOWN	NA	NA	NA	NA	NA
30025127550001	MCA UNIT	96	8/10/1969	4048	ACT	20	17S	32E		25	FSL	2590	FWL	10-3/4 IN	60		22	SURFACE	CIRC	NA	NA	NA	NA	NA	5-1/2 IN	3653	110	1850	EST	NA	NA	NA	NA	NA
30025127560003	MCA UNIT	156	8/1/1988	4136	PA	29	17S	32E		2580	FNL	2595	FWL	10-3/4 IN	59		50	SURFACE	CIRC	8-5/8 IN	939		50	SURFACE	CIRC	7 IN	3698	240	2000	SURVEY	5-1/2 IN	4136	240	3369	TOP OF LINER
30025127980001	MCA UNIT	168	4/23/1970	3995	ACT	30	17S	32E		2615	FSL	140	FEL	8-5/8 IN	973		50	SURFACE	EST	NA	NA	NA	NA	NA	7 IN	3676	350	1800	EST	5-1/2 IN	4059	135	3379	TOP OF LINER
30025205220000	MCA UNIT	234	6/10/1963	4100	ACT	21	17S	32E		25	FSL	1325	FWL	8 5/8 IN	846		680	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	3721	350	1800	SURVEY	NA	NA	NA	NA	NA
30025234820000	MCA UNIT	252	4/11/1970	4080	ACT	28	17S	32E		1250	FNL	200	FWL	8 5/8 IN	825		500	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4080	250	2670	SURVEY	NA	NA	NA	NA	NA
30025235090002	MCA UNIT	256	1/1/1971	4145	PA	20	17S	32E		2590	FSL	1310	FEL	8-5/8 IN	748		300	28	SURVEY	NA	NA	NA	NA	NA	5-1/2 IN	4145	300	2400	SURVEY	NA	NA	NA	NA	NA
30025236600000	MCA UNIT	262	12/30/1970	4145	PA	21	17S	32E		2615	FNL	25	FWL	8 5/8 IN	780		350	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4145	250	2900	SURVEY	NA	NA	NA	NA	NA
30025236870000	MCA UNIT	266	3/8/1971	4110	ACT	20	17S	32E		1345	FSL	2615	FWL	8 5/8 IN	700		325	SURFACE	CIRC	NA	NA	NA	NA	NA	4 1/2 IN	4110	250	2100	EST	NA	NA	NA	NA	NA
30025237060000	MCA UNIT	269	3/4/1971	4130	ACT	20	17S	32E		125	FSL	1295	FEL	8 5/8 IN	770		400	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4130	300	2700	EST	NA	NA	NA	NA	NA
30025237070000	MCA UNIT	270	2/13/1971	4130	ACT	29	17S	32E		2615	FNL	1345	FWL	8 5/8 IN	740		375	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4130	350	2100	EST	NA	NA	NA	NA	NA
30025237330000	MCA UNIT	277	3/27/1971	4083	PA	29	17S	32E		1295	FNL	2615	FEL	8 5/8 IN	750		375	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4083	300	2450	EST	NA	NA	NA	NA	NA
30025237410000	MCA UNIT	281	4/17/1971	4025	ACT	29	17S	32E		1295	FNL	25	FWL	8 5/8 IN	750		375	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4025	420	2100	EST	NA	NA	NA	NA	NA
30025237670000	MCA UNIT	293	5/8/1971	4185	PA	29	17S	32E		1345	FSL	1345	FWL	8 5/8 IN	825		400	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4185	300	2231	SURVEY	NA	NA	NA	NA	NA
30025237780001	MCA UNIT	288	1/15/1972	4080	PA	29	17S	32E		65	FNL	1295	FWL	8-5/8 IN	700		400	SURFACE	CIRC	NA	NA	NA	NA	NA	5-1/2 IN	4080	300	2100	SURVEY	NA	NA	NA	NA	NA
30025237970000	MCA UNIT	294	7/21/1971	4150	ACT	29	17S	32E		1345	FSL	2615	FWL	8 5/8 IN	900		500	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4147	300	2200	EST	NA	NA	NA	NA	NA
30025237980000	MCA UNIT	290	7/5/1971	4080	PA	29	17S	32E		1295	FNL	1295	FWL	8 5/8 IN	770		425	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4080	400	3500	SURVEY	NA	NA	NA	NA	NA
30025238070000	MCA UNIT	287	6/27/1971	4120	ACT	20	17S	32E		1395	FSL	25	FEL	8 5/8 IN	800		450	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4120	300	2126	EST	NA	NA	NA	NA	NA
30025240760000	MCA UNIT	308	4/13/1972	4100	ACT	29	17S	32E		1980	FNL	1780	FEL	8 5/8 IN	784		400	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4100	300	2540	EST	NA	NA	NA	NA	NA
30025242130000	MCA UNIT	319	7/30/1972	4125	ACT	29	17S	32E		2615	FNL	1345	FEL	8 5/8 IN	800		400	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4125	350	2100	EST	NA	NA	NA	NA	NA
30025266060000	MCA UNIT	358	1/16/1980	4150	PA	20	17S	32E		2600	FNL	660	FEL	16 IN	749		755	SURFACE	CIRC	NA	NA	NA	NA	NA	10 3/4 IN	3635	3030	SURFACE	CIRC	7 5/8 IN	4148	100	3545	TOP OF LINER
30025270630001	MCA UNIT	360	8/1/1983	4150	PA	20	17S	32E		2371	FNL	899	FEL	13 3/8 IN	750		455	SURFACE	CIRC	NA	NA	NA	NA	NA	8 5/8 IN	4150	2300	SURFACE	CIRC	NA	NA	NA	NA	NA
30025270640000	MCA UNIT	361	12/21/1980	4150	PA	20	17S	32E		2449	FSL	891	FEL	13 3/8 IN	750		460	SURFACE	CIRC	NA	NA	NA	NA	NA	8 5/8 IN	4150	2900	SURFACE	CIRC	NA	NA	NA	NA	NA
30025270650000	MCA UNIT	362	1/14/1981	4150	PA	20	17S	32E		2442	FSL	432	FEL	13 3/8 IN	750		675	SURFACE	CIRC	NA	NA	NA	NA	NA	8 5/8 IN	4150	2870	SURFACE	CIRC	NA	NA	NA	NA	NA
30025270760000	MCA UNIT	359	10/25/1980	4150	PA	20	17S	32E		2365	FNL	425	FEL	13 3/8 IN	762		651	SURFACE	CIRC	NA	NA	NA	NA	NA	8 5/8 IN	4150	2295	SURFACE	CIRC	NA	NA	NA	NA	NA
30025291020000	MCA UNIT	365Y	12/19/1984	827	ACT	29	17S	32E		1220	FNL	1580	FEL	16 IN	810		625	SURFACE	CIRC	10-3/4 IN	2150		1124	SURFACE	CIRC	8-5/8 IN	4020	525	SURFACE	CIRC	NA	NA	NA	NA	NA
30025298530000	MCA UNIT	369	2/14/1987	4160	ACT	29	17S	32E		1395	FNL	1295	FWL	17-1/2 IN	603		520	SURFACE	CIRC	NA	NA	NA	NA	NA	7 IN	4166	1350	SURFACE	CIRC	NA	NA	NA	NA	NA
30025299560000	MCA UNIT	372	8/27/1987	4300	ACT	20	17S	32E		1225	FSL	1310	FEL	17-1/2 IN	785		680	SURFACE	CIRC	11 3/4 IN	2000		945	SURFACE	CIRC	7 IN	4300	2145	466	UNKNOWN	NA	NA	NA	NA
30025311000000	MCA UNIT	386	1/7/1991	4350	ACT	29	17S	32E		1921	FNL	1995	FWL	13 3/8 IN	960		850	SURFACE	CIRC	8-5/8 IN	3652		2580	SURFACE	CIRC	5 1/2 IN	4350	650	SURFACE	CIRC	NA	NA	NA	NA
30025349330000	MC FEDERAL	4	2/17/2000	5982	ACT	21	17S	32E		2310	FSL	330	FWL	13 3/8 IN	308		325	SURFACE	CIRC	8 5/8 IN	2202		750	SURFACE	CIRC	5 1/2 IN	5982	1030	SURFACE	CIRC	NA	NA	NA	NA
30025349730000	MC FEDERAL	5	9/24/2000	6010	ACT	21	17S	32E		990	FSL	1650	FWL	13 3/8 IN	773		650	SURFACE	CIRC	9 5/8 IN	2208		600	SURFACE	CIRC	7 IN	6004	950	SURFACE	CIRC	NA	NA	NA	NA
30025379310000	MCA UNIT	394	10/16/2006	4445	ACT	28	17S	32E		1295	FNL	675	FWL	8 5/8 IN	855		540	SURFACE	CIRC	NA	NA	NA	NA	NA	5 1/2 IN	4436	1050	SURFACE	CIRC	NA	NA	NA	NA	NA
30025387030000	MC FEDERAL	20	3/15/2008	7027	ACT	21	17S	32E		1500	FSL	990	FWL	13 3/8 IN	836		1000	SURFACE	CIRC	8 5/8 IN	2129		1100	SURFACE	CIRC	5 1/2 IN	7005	1100	SURFACE	CIRC	NA	NA	NA	NA
30025387140000	BC FEDERAL	33	3/16/2008	7027	ACT	20	17S	32E		2310	FNL	480	FEL	13 3/8 IN	642		700	SURFACE	CIRC	8 5/8 IN	2110		900	SURFACE	CIRC	5 1/2 IN	7027	1100	SURFACE	CIRC	NA	NA	NA	NA

0

11 wells in AOR

Proposed P & A Wellbore

MCA No. 290

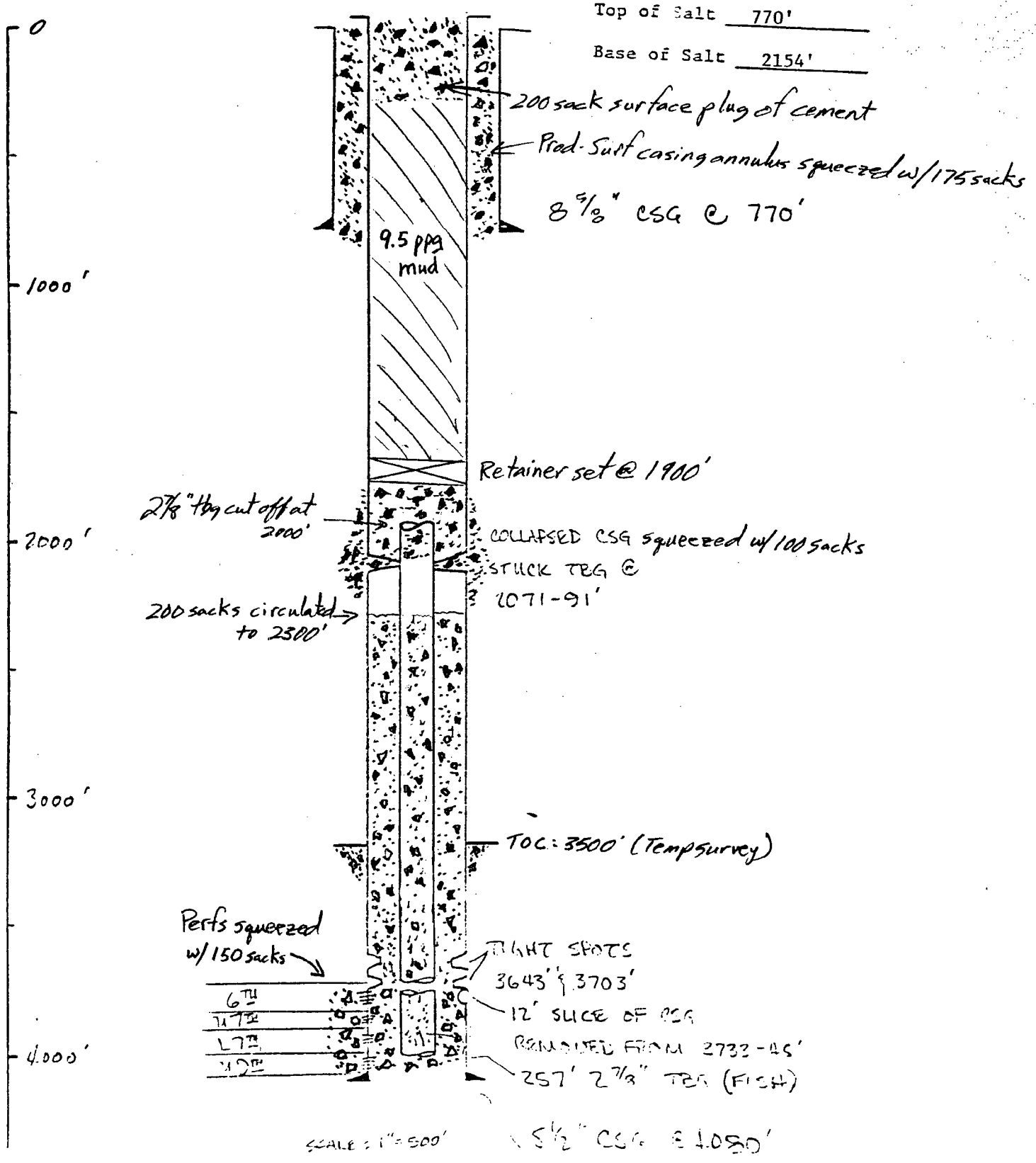
Location: 1295 'F NL & 1295 'F WL Sec. 29

T-17S R-32E ; Elevation 3948'

Measuring Datum 11' AGL

Top of Salt 770'

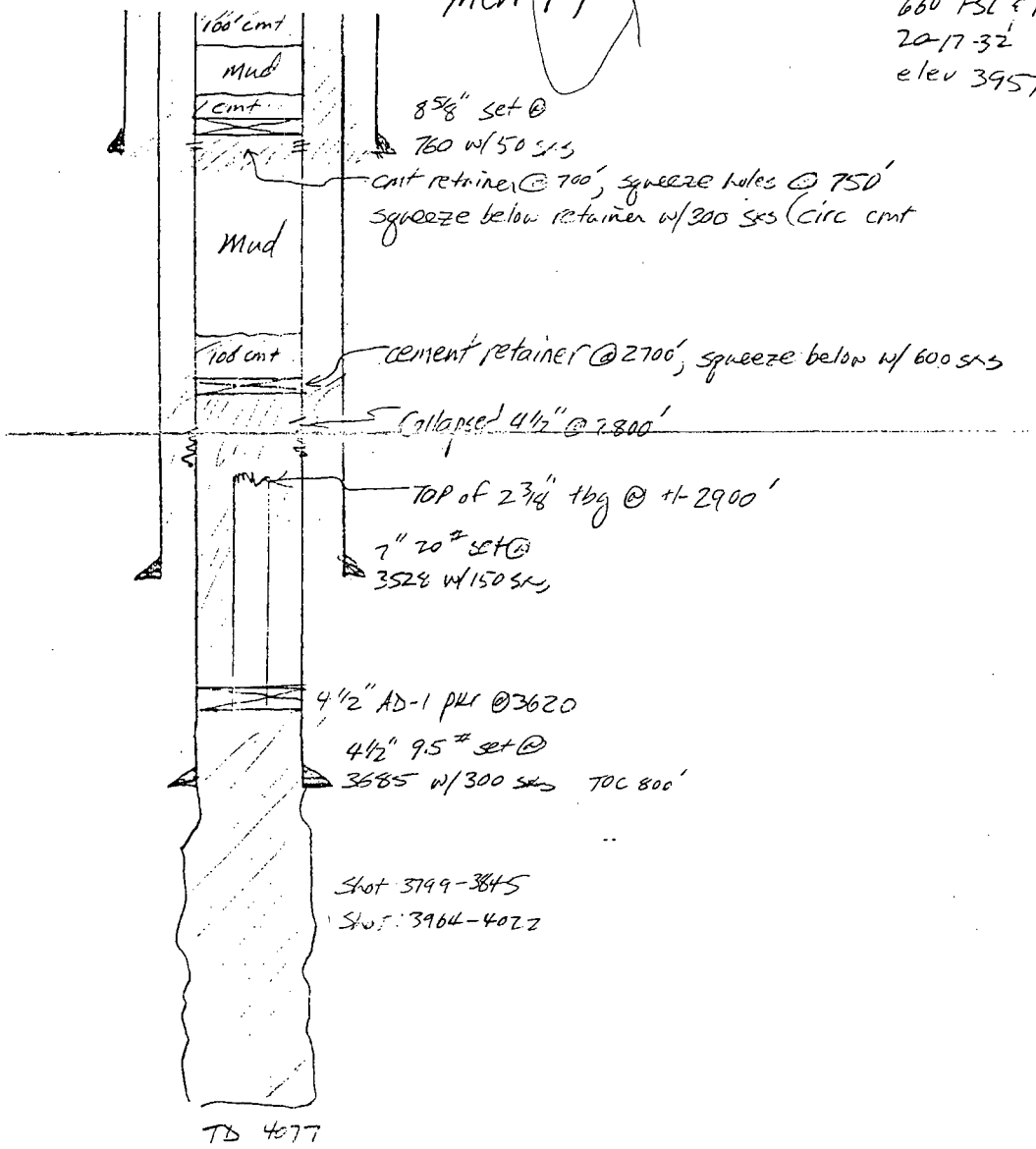
Base of Salt 2154'



SCALE: 1" = 500'

MCA 97

660' FSL & 1980' FWL
20-17-32
elev 3957



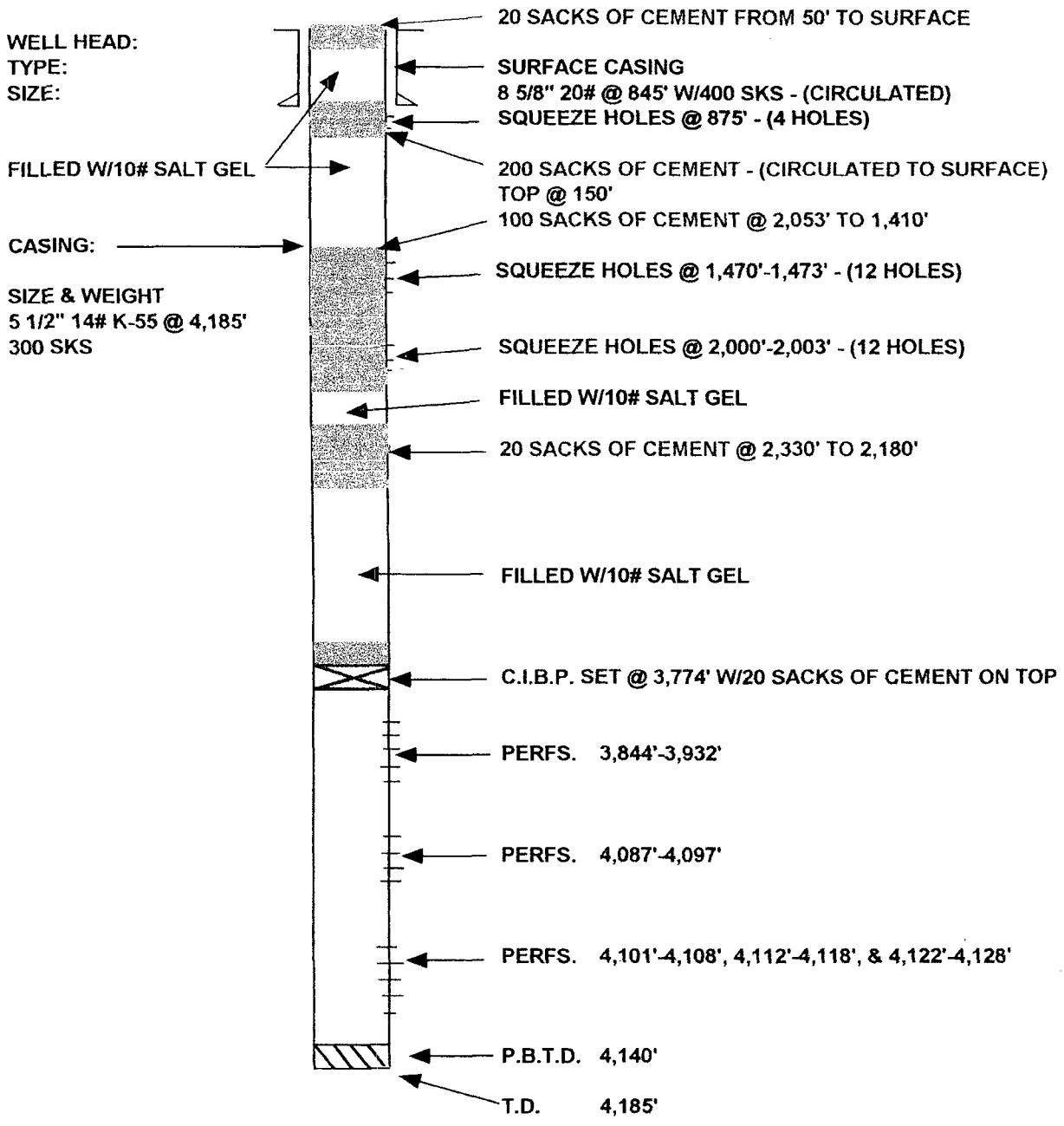
Proposed P&A wellbore

PDB

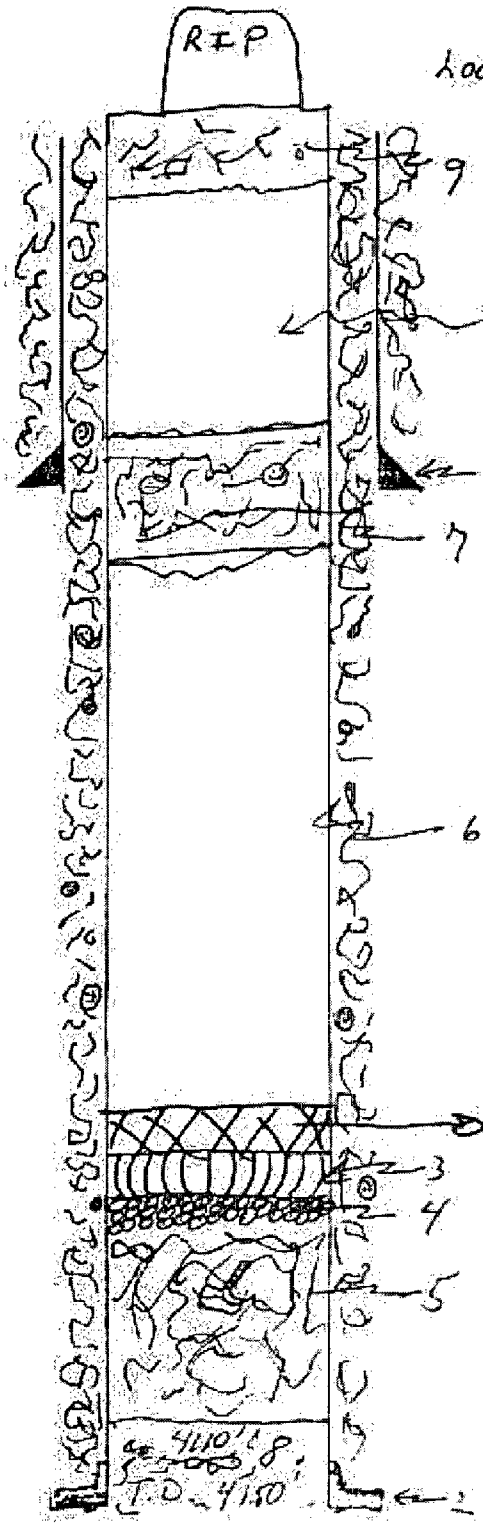
9/20/88

LEASE & WELL #:	MCA #293	DATE:	01-22-98
LOCATION:	1,345' FSL & 1,345' FEL SEC. #29 T-17S R-32E		
ELEVATION:	3,915'	KB:	11'

P&A



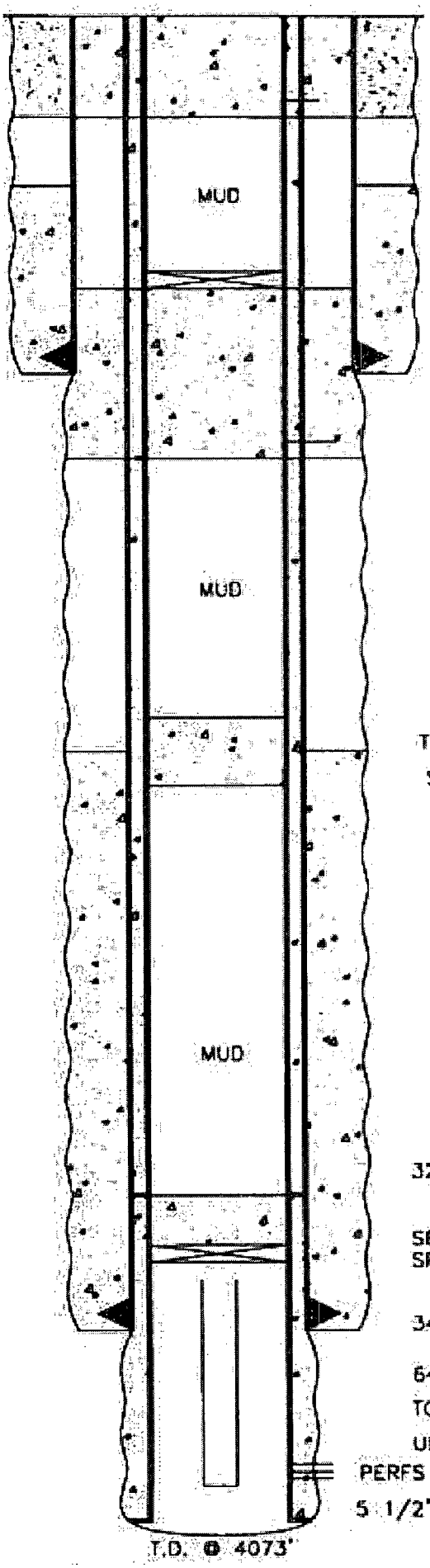
MCA 361 P&A



location – 900 FEL & 2447 FSL, Sec 20, T-17S, R-32

1.) 13 3/8", 54# @ 250' cmt circ
2.) 8 5/8", 32#, K-55 @ 4150' cmt circ
3.) CIBP @ 3315'
4.) Pea gravel 3320' to 3330'
5.) 150 sxs class "C" cement from 4110' to 3330'.
6.) 10 Lb/gal mud 3315' to 800'
7.) Cement plug from 800' to 700'
8.) 10 Lb/gal mud 700' to 50'
9.) 50' cement plug w/ dry hole marker

MCA 110 P&A



Cut & Pull 5 1/2" Casing @ ±300'±

PERFORATE THE ~~5 1/2"~~ 8 5/8" AND 7" AT 300'
CIRCULATE ~~80~~ 300 SXS CEMENT THRU PERFS AT 300'

SET A CEMENT RETAINER AT 870'
SQUEEZE 40 SXS CEMENT THRU PERFS AT 970'

920' – 8 5/8" Casing, Cemented w/50 sxs.

PERFORATE THE 5 1/2" AND 7" AT 970'

T.O.C. @ 2000' (EST.)
SPOT 25 SXS CEMENT 1900'–2150' (250' PLUG)

3221'–5 1/2" TieBack Casing String Cemented w/195 sxs to surface.

SET A C.I.B.P. AT 3300'
SPOT 25 SXS CEMENT 3050'–3300' (250' PLUG)

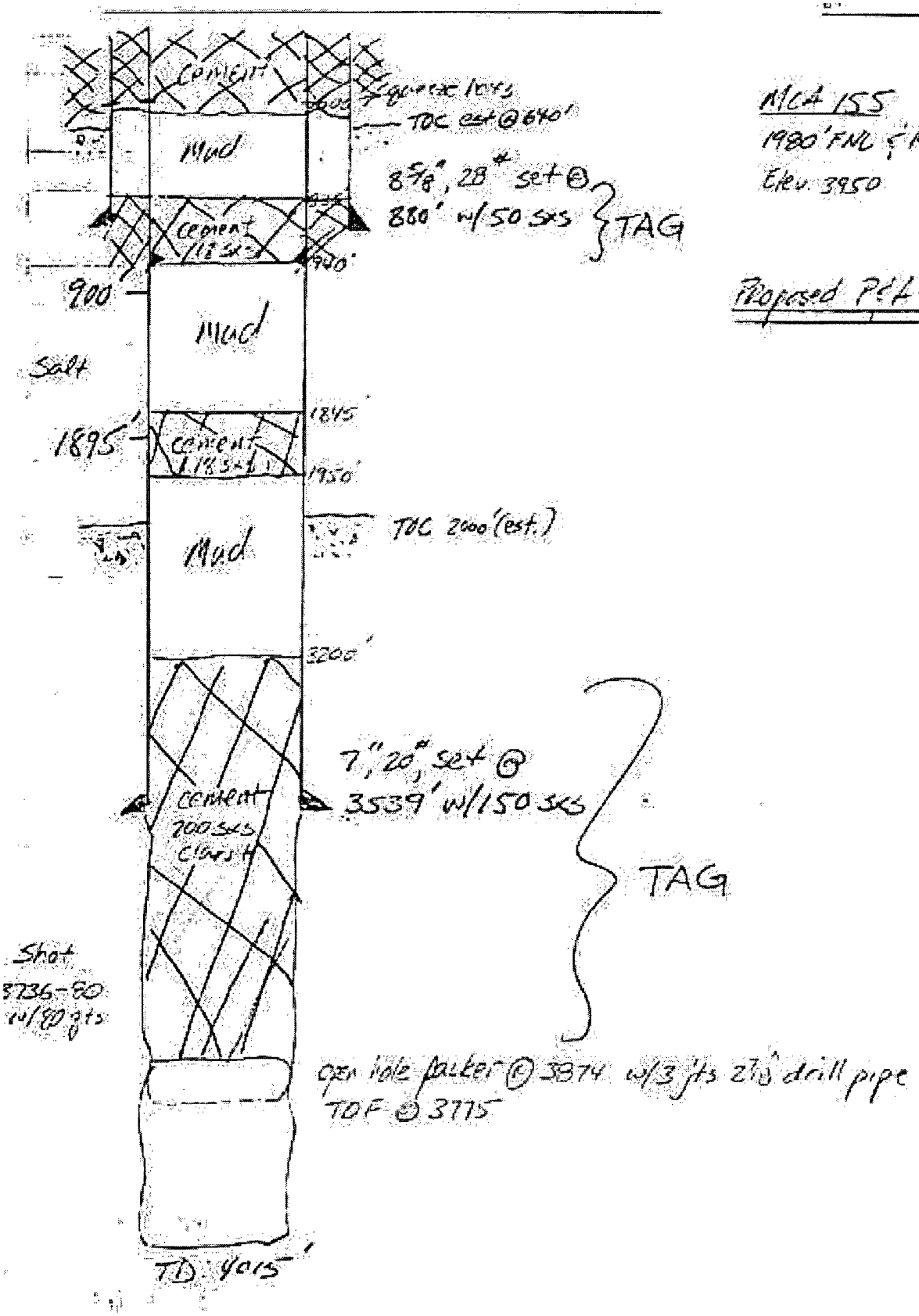
3479' – 7", 20# Casing, Cemented w/100 Sxs

640' OF 2 7/8" TUBING FISH
TOP OF FISH @ 3370'
UNABLE TO RECOVER FISH

PERFS 3704'–4030'

5 1/2" LINER 3221'–4071' CEMENTED W/125 SXS

CONOCO, INC.
M.C.A. Unit #110
660' FNL & 1980' FWL
Sec. 29, T-17S, R-32E
Lea County, NM



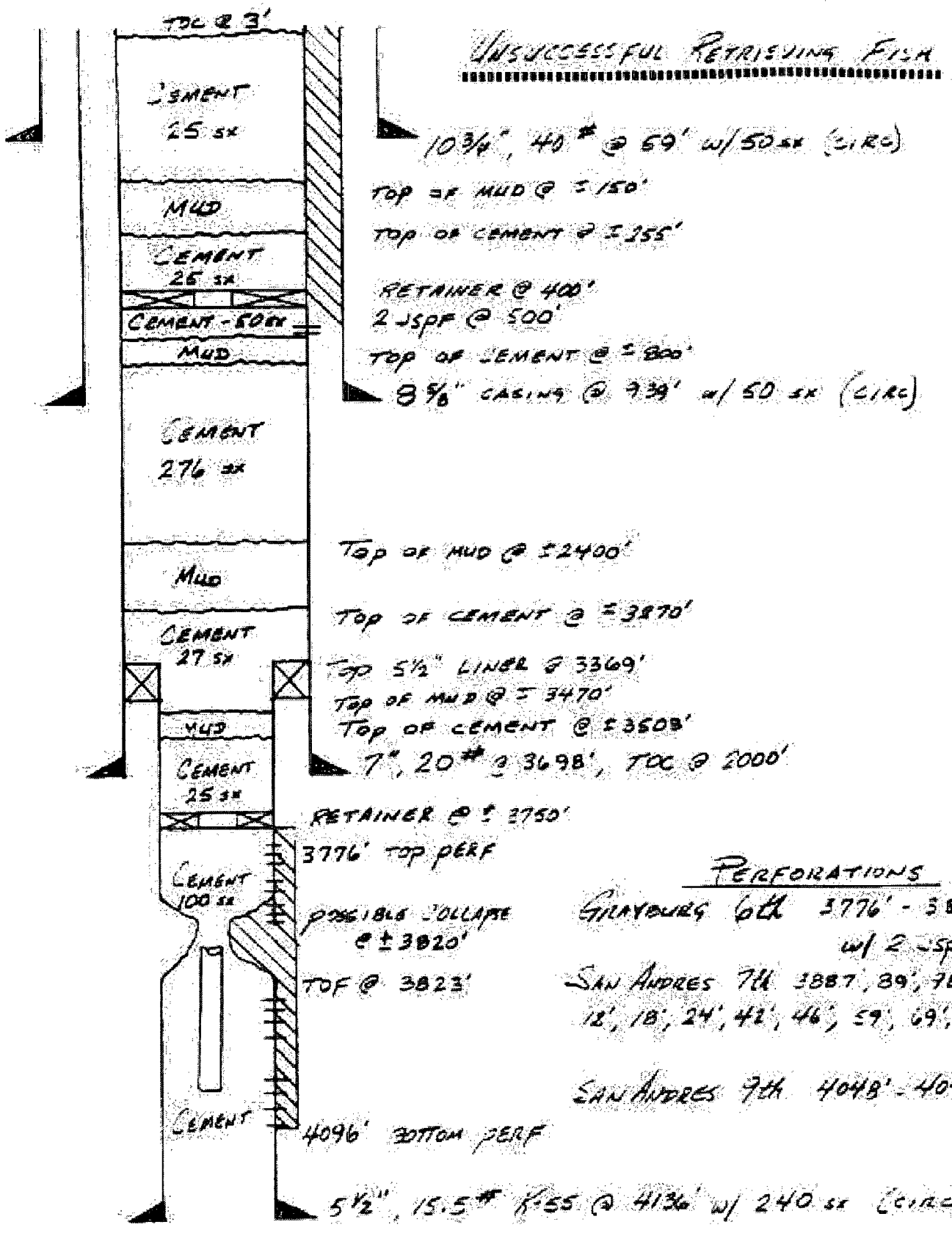
NICA 155 P&A

1980' FNL & 1980' FEL Sec 29 T17S R32E

Elev. 3950

Proposed P&A wellbore

MCA UNIT NO. 156 P3A



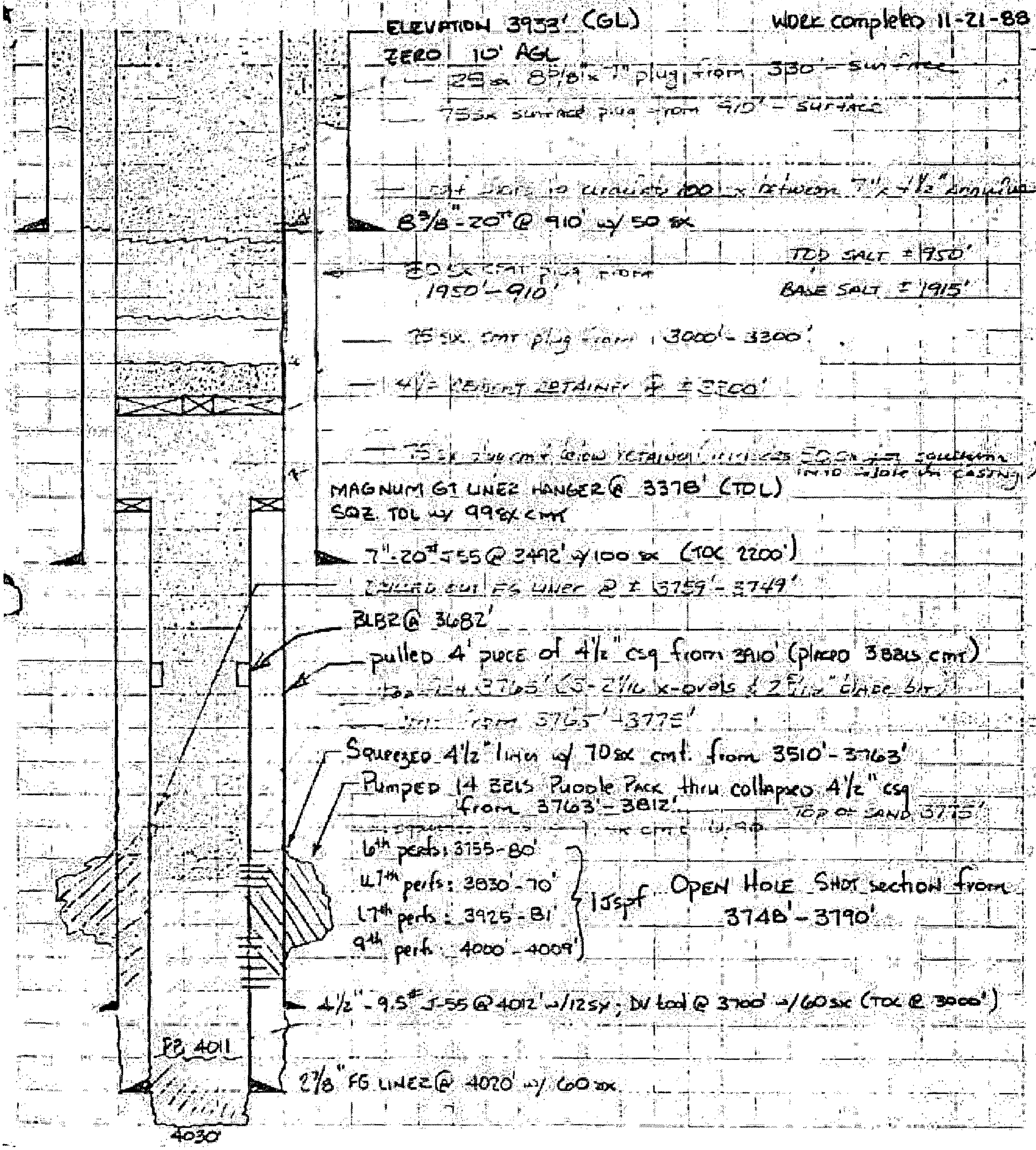
PERFORATIONS

GLAYBURG 6th 3776' - 3810', 3818' - 34' w/ 2 JSPF

SAN ANDRES 7th 3887', 89', 98', 3900', 04', 12', 18', 24', 42', 46', 59', 69', 78', 85', 89'

SAN ANDRES 9th 4048' - 4096'

MCA 157 #3A

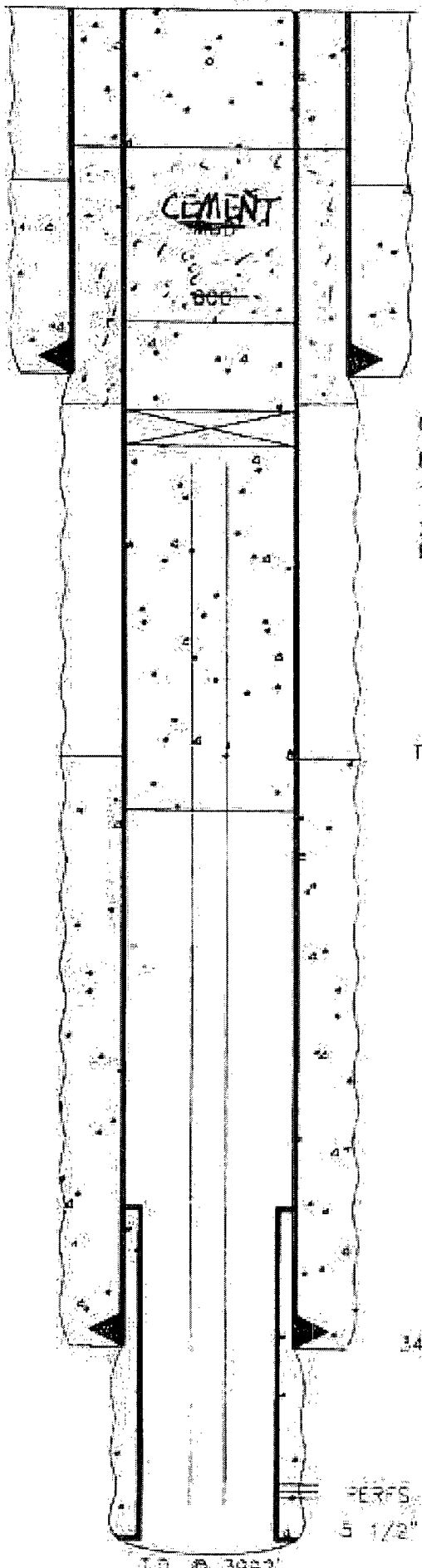


ELEVATION 3933' (GL)
WORK completed 11-21-88
ZERO 10' AGL
25 sx 8 5/8" x 7" plug from 330' - surface
75 sx surface plug from 910' - surface
100 sx between 7" x 4 1/2" annulus
8 5/8" - 20# @ 910' w/ 50 sx
TOP SALT ± 950'
BASE SALT ± 1915'
1950' - 910'
75 sx cmt plug from 3000' - 3300'
MAGNUM GT LINER HANGER @ 3378' (TOL)
SQZ TOL w/ 99 sx cmt
7" - 20# J55 @ 3492' w/ 100 sx (TOC 2200')
BLBZ @ 3682'
pulled 4' piece of 4 1/2" csg from 3910' (placed 3 BBLS cmt)
Squeezed 4 1/2" liner w/ 70 sx cmt. from 3510' - 3763'
Pumped 14 BBLS Puddle Pack thru collapsed 4 1/2" csg from 3763' - 3812'
TOP OF SAND 3775'
6th perfs: 3755-80'
6th perfs: 3830'-70'
6th perfs: 3925'-81'
9th perfs: 4000'-4009'
13spf
OPEN HOLE SHOT section from 3748' - 3790'
4 1/2" - 9.5# J-55 @ 4012' w/ 125 sx; DV tool @ 3700' w/ 60 sx (TOC @ 3000')
PB 4011
2 7/8" FG LINER @ 4020' w/ 60 sx
4030'

Elev. = 3925'

7/23/96

MCA 158 P&A



PERFORATE 7" @ ~~800~~ 980' CIRCULATE CEMENT TO SURFACE

903' – 8 5/8" Casing Cemented w/50 sxs.

CEMENT RETAINER @ 1000'

PUMP 200 SXS THRU RETAINER ~~W/35 SXS ON TOP~~

TOP OF FISH @ 1002'

2 7/8" TUBING STUCK IN HOLE
EFFORTS TO RECOVER FISH UNSUCCESSFUL

T.O.C. @ 2147'

3447' – 7" 20# Casing Cemented w/100 Sxs

PERFS 3747'-3967'

5 1/2" LINER 3195'-3970' CEMENTED W/200 SXS

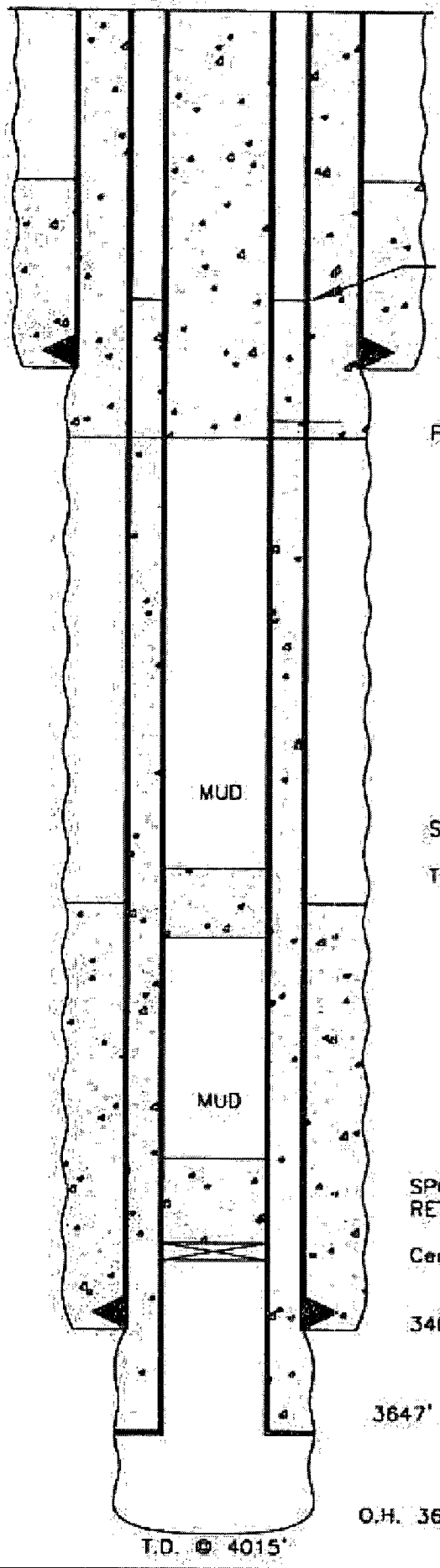
T.D @ 3992'

CONOCO, INC.
M.C.A. Unit #158
1980' FNL & 660' FWL
Sec. 29, T-17S, R-32E
Lea County, NM

Elev. = 3919'

3/28/00

MCA 159 P&A



PUMP 115 SXS CEMENT THRU PERFS AT 965' AND CIRCULATE CEMENT TO SURFACE

T.O.C. @ 800'

912' – 8 5/8" Casing, Cemented w/505xs.

PERFORATE THE 4 1/2" AND 7" CASING AT 965'

SPOT 25 SXS CEMENT 1740'–2100'

T.O.C. @ 2000' (EST.)

SPOT 25 SXS CEMENT ON TOP OF RETAINER 3005'–3365'

Cement Retainer at 3365'

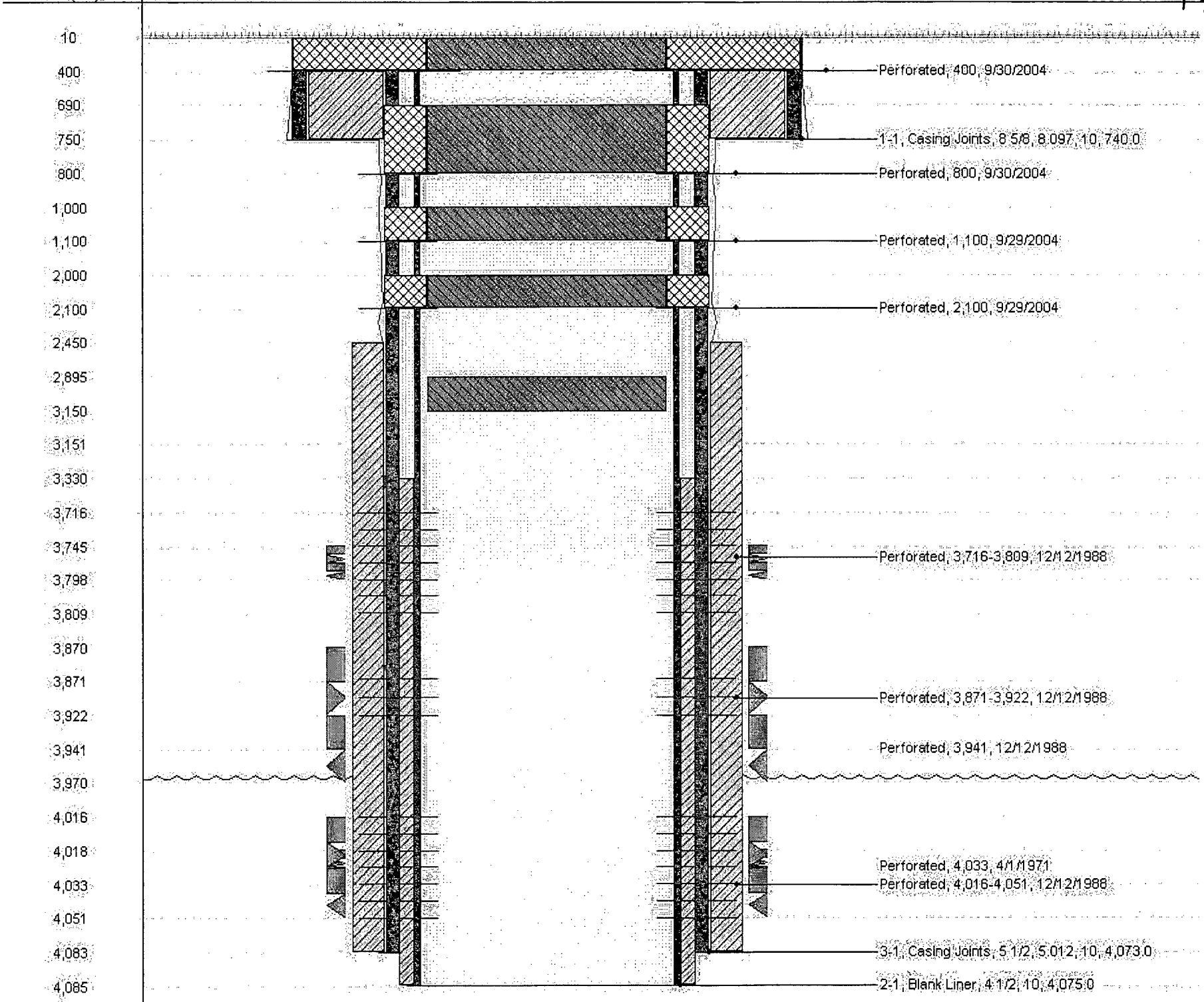
3405' – 7", 20#, Casing, Cemented w/150 sxs

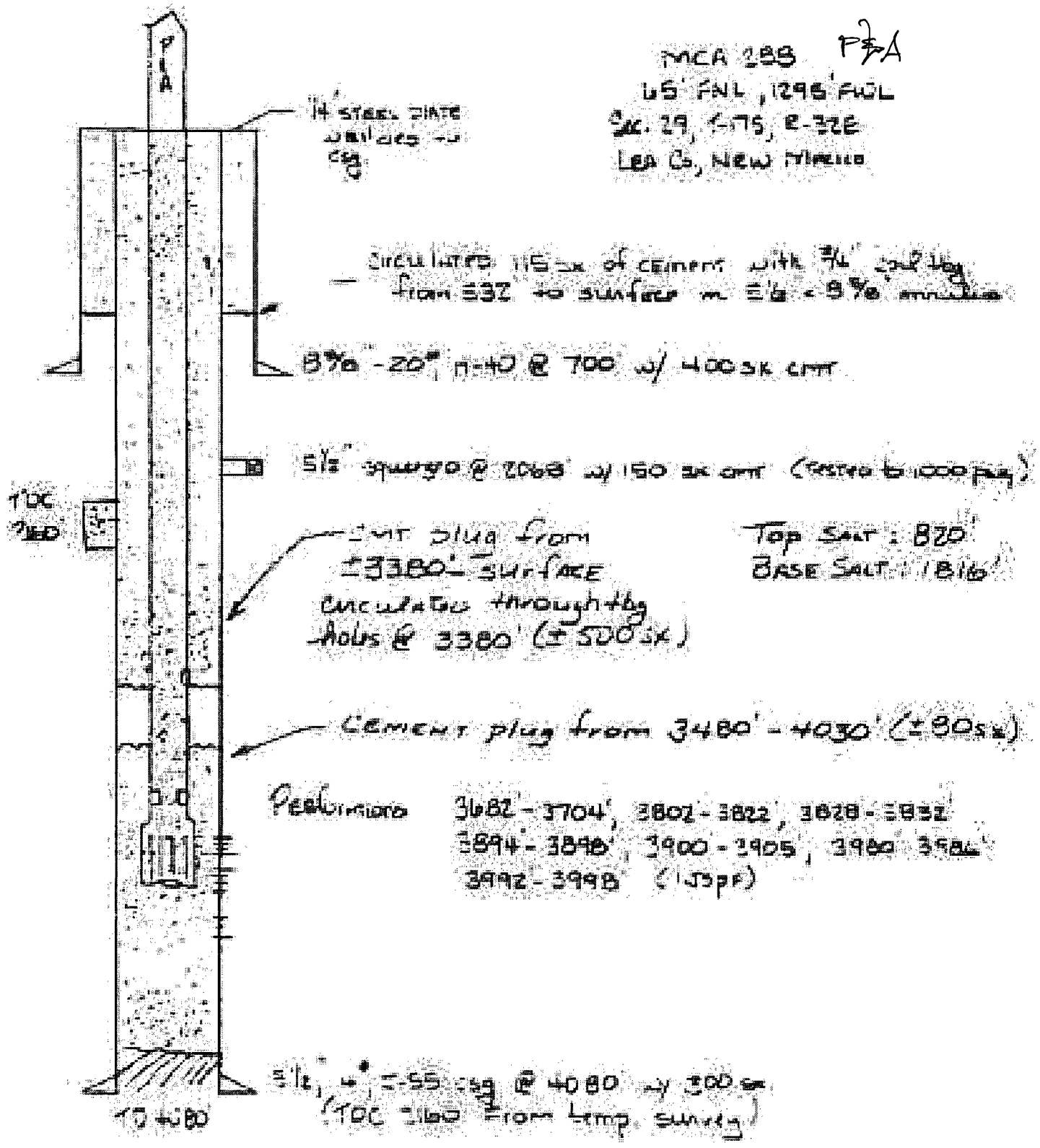
3647' – 4 1/2", 9.5#, CEMENTED W/325 SXS

O.H. 3647'–4015'

T.D. @ 4015'

CONOCO, INC.
M.C.A. Unit #159
1980' FNL & 660' FEL
Sec. 30, T-17S, R-32E
Lea County, NM


ftKB (MD)
10
400
690
750
800
1,000
1,100
2,000
2,100
2,450
2,895
3,150
3,151
3,330
3,716
3,745
3,798
3,809
3,870
3,871
3,922
3,941
3,970
4,016
4,018
4,033
4,051
4,083
4,085
Perforated, 400, 9/30/2004
1-1, Casing Joints, 8 5/8, 8.097, 10, 740.0
Perforated, 800, 9/30/2004
Perforated, 1,100, 9/29/2004
Perforated, 2,100, 9/29/2004
Perforated, 3,716-3,809, 12/12/1988
Perforated, 3,871-3,922, 12/12/1988
Perforated, 3,941, 12/12/1988
Perforated, 4,033, 4/1/1971
Perforated, 4,016-4,051, 12/12/1988
3-1, Casing Joints, 5 1/2, 5.012, 10, 4,073.0
2-1, Blank Liner, 4 1/2, 10, 4,075.0



MCA 288
65' FNL, 1298' FWL
Sec. 29, T-17S, R-32E
Lea Co, New Mexico

PROCEDURE

1. MI well service unit. NU BOPE w/ stripper head. Pump 35 bbl 10# brine down tbg (capacity to bottom perforation: 23.5 bbl). Un-set PKR. Circ annulus w/ 75 bbl 10# brine (2-3/8" x 5-1/2", 17# annular capacity: 64.8 bbl). POOH.

   If deemed necessary, circulate well w/ 13 ppg kill mud

   The following is a WellView-sourced summary of current downhole configuration:

		Depth (RKB) (KB - GL: 18 ft.)		
		top	btm	
	13-3/8", 54.5#, K-55 csg	18	960	Cmt w/ 250 sx. Circ 180 sx.
	8-5/8", 32#, K-55 csg	18	3652	DVT @ 2976. ECP @ 3103
				1st Stg: cmt w/ 380 sx. Circ 80 sx.
				2nd Stg: cmt w/ 2200 sx. Circ 190 sx.
	5-1/2", 17#, K-55 csg	18	4350	DVT @ 3363. 1st Stg: circ 76 sx.
				2nd Stg: circ 78 sx.
116 jts	2-3/8", 4.7#, J-55 IPC tbg	18	3643	
1	Weatherford 1-X PKR (5-1/2, 17#)	3643	3650	PKR run w/o on-off tool
	Completion Intervals:			
	Grayburg-6	3760	3798	
	San Andres-7	3862	3892	
		3926	3936	
		3954	3968	
	San Andres-9	4018	4026	
		4032	4056	
	PBD (top)/TD (btm)	4295	4350	

2. PU 2-7/8", 6.5#, J-55 workstring. RIH w/ 4-1/2" bit & 6: 3-1/2" DC (5-1/2", 17# csg ID: 4.892 in.; drift ID: 4.767 in.). RU reverse unit. CO to PBD @ 4295. Condition well w/ 10# brine. POOH.

3. RU Schlumberger. Install lubricator & pack-off.

   Perforate following San Andres intervals @ 3 spf – 60 degree phasing w/ 3-1/2" PowerJet Omega (EHD: 0.44 in. penetration: 44.2"):

	Interval	feet	perforations	
Grayburg	3755-3758	3	9	re-perf
Grayburg	3772-3776	4	12	re-perf
Grayburg	3784-3808	24	72	re-perf
Upr SA7	3856-3890	34	102	re-perf
Upr SA9	4020-4024	4	12	re-perf
Upr SA9	4032-4058	26	78	re-perf
Lwr SA9	4102-4108	6	18	
Lwr SA9	4146-4162	16	48	
Lwr SA9	4167-4173	6	18	
Lwr SA9	4182-4196	14	42	
Lwr SA9	4220-4236	18	54	
Lwr SA9	4246-4262	16	48	
Lwr SA9	4280-4290	10	30	
	TOTAL	181	543	

Casing collars @:

Collars	Comment
3618	
3661	
3703.5	
3746.5	
3788	Existing perforated interval; possible bad collar signature
3831	
3873	Existing perforated interval; possible bad collar signature
3916	
3959.5	Existing perforated interval; possible bad collar signature
4003	
4043	
4086	
4127.5	
4170	
4213.5	
4256.5	Logger PBD (03.08.91): 4294

RD Schlumberger.

4. RIH w/ 2-7/8" tbg w/ PKR & RBP. Test tbg below slips @ 5000# (2-7/8", 6.5#, J-55 burst: 7260# @100%). Acidize the following perforated intervals @ 5+ BPM (single pump truck). Anticipated treating pressure: 2500-3000#:

PKR Depth	RBP Depth	Perforation Interval	15% HCl: gal	10# Flush: bbl	
4270	4292	4280-4290	500	50	Lwr SA9
4240	4270	4246-4262	800	50	Lwr SA9
4210	4240	4220-4236	800	50	Lwr SA9
4178	4210	4182-4196	700	50	Lwr SA9
4120	4178	4146-4162 & 4167-4173	1100	50	Lwr SA9
4080	4120	4102-4108	300	50	Lwr SA9
3980	4080	4020-4024 & 4032-4058	3000	50	Upr SA9: re-perf
3820	3910	3856-3890	1700	50	Upr SA7: re-perf
3720	3820	3755-58, 3772-76 & 3784-3808	1500	50	Grayburg: re-perf
		TOTAL	10400	450	

Note: Due to historical injection, casing interval between 3643 (current injection PKR depth: 3643-3650) and 4056 (base of current gross completion interval: 3760-4056), may not provide suitable PKR (RBP) seats.

POOH & LD 2-7/8" workstring, PKR & RBP.

5. RIH w/ following:

	RKB	
	(KB-GL: 18 ft.)	
2-3/8", 4.7#, J-55 IPC (TK99) tbg	3634	
On-Off Tool w/ 1.71" profile nipple	3634	
5-1/2", 17# PKR	3635	5-1/2" csg collars: 3618 est & 3661

Install 3500# pump-out plug in bottom of PKR. Set PKR @ 3635 (Note: previous PKR set depth 3643). Release from on-off tool. Circ 2-3/8" x 5-1/2", 17# annulus w/ PKR fluid (annular capacity: 65 bbl). Engage on-off tool. Test annulus @ 500# for 30 min.

Pressure test tbg @ 2500#. Pressure tbg to 3500# to shear pump-out plug. Note pump-out pressure. Return well to injection.

	Maximum Internal pressure: psi				Internal Diameter: in.			Capacity	
	100%	85%	80%		Nominal	Drift		bbl/ft.	gal/ft.
2-3/8", 4.7#, J-55 tbg	7700	6545	6160		1.995	1.901		0.00387	0.1624
5-1/2", 17#, J-55 csg	5320	4522	4256		4.892	4.767		0.0232	0.9764
2-7/8", 6.5#, J-55 tbg	7260	6171	5808		2.441	2.347		0.00579	0.2431
2-3/8", 4.7# x 5-1/2", 17#								0.0178	0.7463
2-7/8", 6.5# x 5-1/2", 17#								0.0152	0.6392

PROPOSAL

The proposed workover consists of pulling MCA 386 for the purpose of perforating the Lower San Andres-9 over the gross interval: 4102-4290 (-146/-334 RMSL) to increase injection/disposal capacity. The additional injection capacity is required to accommodate the additional water production associated with the current 25-well development drilling program. The Grayburg-San Andres section in MCA 386 was drilled w/ a 17.1 ppg mud followed by a modest acid stimulation limited to treating rates less than 2 BPM...the relatively acid insoluble Grayburg sands were limited to a treating pressure of 1900# resulting in a treating rate of 1-1/2 BPM. The well has not been frac-treated. Due to the potential formation damage resulting from possible mud losses as suggested by the open-hole caliper log, the proposed Lower San Andres-9 intervals will be perforated w/ deep penetrating charges.

WELL HISTORY

MCA 386 (surface location: 1921 FNL & 1995 FWL, 29F-17S-32E) was drilled in January 1991 to a TD of 4350 ft. (-394 RMSL) as a replacement well to injection well MCA 157, abandoned in June 1990. The surface location of MCA 386 is located 59 ft. N & 15 ft. E....60.9 ft. N14.3 E....of the surface location of MCA 157 (surface location: 1980 FNL & 1980 FWL, 29F-17S-32E). The San Andres intervals in MCA 386 were encountered at:

	RKB	RMSL
San Andres-7	3822	134
San Andres-8	3977	-21
Upr San Andres-9	3991	-35
Lwr San Andres-9 (9M)	4096	-140
PBD	4295	-339

During drilling MCA 386, a water flow was encountered at 3190 ft. Reported 30 min. SIDP was 500# w/ a standing column of 10# brine indicating a required kill weight of 13 ppg. During SI, it was reported that a surface water flow developed at the MCA 157 P&A marker. The water flow in MCA 386 was controlled w/ a 13.5 ppg mud. The water flow continued at the MCA 157 surface location at 6 BPH. Prior to the resumption of drilling, the 13.5 ppg mud was displaced w/ 10# brine and the well drilled in an under-balanced condition to the 8-5/8" casing point @ 3653 w/ reported flow checks at: 3349 (53.5 BPH) & 3650 (55 BPH). An 8-5/8" casing string w/ ECP @ 3106 and DVT @ 2976 was run and cemented to surface. It was reported that upon setting the ECP, the water flow stopped in MCA 386. Following cementing the 8-5/8" casing, the surface water flow at MCA 157 stopped. On drilling out the 8-5/8", 5 ft. of formation was drilled and a LOT conducted (17.5 ppg). Prior to resumption of drilling, the hole was displaced w/ 17# mud in anticipation of encountering high pressure. MCA 386 was drilled in an over-balanced condition to TD. The following is a brief drilling summary:

Date		MW:ppg
01.07.91	MI & RU. Spud well	9.3
01.08.91	TD 966. Prep to run csg.	10.2
01.09.91	TD 966. Run 13-3/8", 54.5#, K-55 @ 960. Cmt w/ 850 sx. Circ 180 sx.	
01.10.91	Drlg 2035	10.1
01.11.91	Drlg 2750	10.1
01.12.91	Drlg 3190. **Took kick @ 3190. SIDPP: 500#. SICP: 700#**	10.1
	NOTE: Reported water flow out of ground @ MCA 157 P&A marker	
01.13.91	Depth 3190. Condition well w/ 13.5 ppg kill mud. Well dead.	
	NOTE: Reported 6 BPH flow (9.9 ppg) out of ground @ MCA 157 P&A marker	
01.14.91	Drlg 3282 w/ 9.7 ppg brine w/ 3" to 4" water flow.	9.7
	NOTE: Ran temp survey (log recorded MW: 13 ppg). Circ out 13.5 ppg kill mud w/ 10 ppg brine.	
01.15.91	Drlg 3557. Flow check @ 3349: 53.5 BPH	9.9
01.16.91	TD 3653. Flow check @ 3650: 55 BPH. Run 8-5/8", 32#, K-55 @ 3652. DVT @ 2976. ECP @ 3103	9.9
	Cmt 1st Stg: 380 sx. Circ 80 sx.	
	NOTE: Water flow stopped when ECP was set.	
01.17.91	Cmt 2nd Stg: 2200 sx. Circ 196 sx.	
	NOTE: Water flow @ MCA 157 stopped after cementing 8-5/8" csg.	
01.18.91	Drlg 3840. Drl out csg shoe & 5 ft formation. LOT: 17.1 ppg @ 3658. Load hole w/ 17 ppg mud	16.7+
01.19.91	Drlg 4135	17+
01.20.91	TD 4350	17.1+
01.21.91	TD 4350. Run OH logs (log recorded MW: 17.1 ppg)	17.1
01.22.91	TD 4350. run 5-1/2", 17#, K-55 @ 4350 w/ DVT @ 3363	
	Cmt 1st Stg: 225 sx.	
	Cmt 2nd Stg: 425 sx. Circ 78 sx.	

The following is a well file-sourced summary of the initial completion and post-completion well work. The Grayburg-San Andres section in MCA 386 was drilled w/ a 17.1 ppg mud followed by a modest acid stimulation limited to treating rates less than 2 BPM...the relatively acid insoluble Grayburg sands were limited to a treating pressure of 1900# resulting in a treating rate of 1-1/2 BPM. Due to the proximity of MCA 386 to the abandoned MCA 157, the completion intervals in MCA 386 have not been prop-frac treated. Based on the following initial completion summary, it is questionable as to the necessity of drilling the section below the 8-5/8" csg shoe to TD w/ 17.1 ppg mud.

Date	
03.12.91	Perforate SA9 @ 2 spf: 4018-4026 & 4032-4056
	SA7 @ 2 spf: 3862-3892, 3926-3936 & 3954-3968
	RIH w/ tbg, PKR & RBP. Set RBP @ 4100. Set PKR @ 4006. Acd SA9 gross interval: 4018-4056
	w/ 30 bbl 15% HCl. AIR:1.75 BPM. AIP: 2000#. Flush w/ 20 BPW @ 1.5 BPM - 1850#. ISIP: 1650#.
	Flow back well...well gassy. Pump 16 bbl 9# brine. Well on vac. Re-set RBP: 4000. Re-set PKR: 3914.
03.13.91	Acid SA7 gross interval: 3926-3968 w/ 25 bbl 15% HCl. AIR: 2 BPM. AIP: 2950#. Flush w/ 18 BPW @ 2 BPM -2750#.
	ISIP: 1750#. Open well: instant bleed-off to pit w/ small flow. Re-set RBP: 3914. Re-Set PKR: 3822.
	Re-set RBP: 3914. Re-set PKR: 3822. Attempt to pump-in SA7: 3862-3892 @ 4000#. Spot 3 bbl 15% HCl.
	Attempt to pump-in @ 4000#. POOH w/ PKR. Prep to re-perf.

03.14.91	Re-perf SA7: 3862-3892 @ 1 spf. RIH w/ PKR @ 3729. Acd SA7: 3862-3892 w/ 37 bbl 15% HCl. AIR: 2 BPM.
	AIP: 2000#. Flow back well. Rec acd wtr & CO2. Kill well w/ 13 ppg mud. Re-Set RBP: 3822. Circ out 13 ppg mud.
03.15.91	Circ well clean. Test RBP: 800#. Spot 3 bbl 15% HCl. POOH w/ PKR. Perforate Grayburg @ 2 spf: 3760-3777 & 3784-3798.
	RIH w/ tbg & PKR. Set PKR @ 3729. Could not pump-in @1900#. SI 40 mins w/ 1900# SITP. Establish PIR: 0.75-1 BPM @ 1900#.
	Acd Grayburg: 3760-3798 w/ 30 bbl 15% HCl. AIR: 1-1.25 BPM @ max. allowable surface treating prs: 1900#.
	Flush w/ 18 bbl brine wtr. ISIP: 1750#. Prep to run injection equipment.
03.18.91	Open PKR by-pass. Circ well w/13# kill mud. POOH w/ tbg, PKR & RBP. RIH w/ 2-3/8" tbg w/ on-off tool & PKR w/ 1.71" profile in PKR
	Set PKR @ 3707. Circ out 13# kill mud w/ PKR fluid. Test annulus 30 min. @ 500#. Test tbg & on-off tool @ 2000#.
	ND BOP. NU well.
03.19.91	Retrieve tbg plug. Flow well to pit. Flow 20 bbl & died. SI. Prep to run BHP survey.
03.20.91-04.20.91	Lay CO2 injection line
04.11.91-04.18.91	168 hr SI BHP @ 3706 ft. Start BHP: 846# (04.11.01). End BHP: 985# (04.18.01...168 hrs SI)...building ARO 0.3 psi/hr. BHT: 85F
04.20.91	Place on CO2 injection @ reported rate: 120 MCFPD @ 2150#
Post-Completion	
05.30.91	RIH w/ 1-1/4" CT. Hydro-blast perforated intervals...4 times. Recovered drilling mud in returns.
05.31.91	Acd down CT w/ 83 bbl 15% HCl. Flush w/ 16 BFW. AIR: 0.5 to 0.75 BPM @ 1850#.

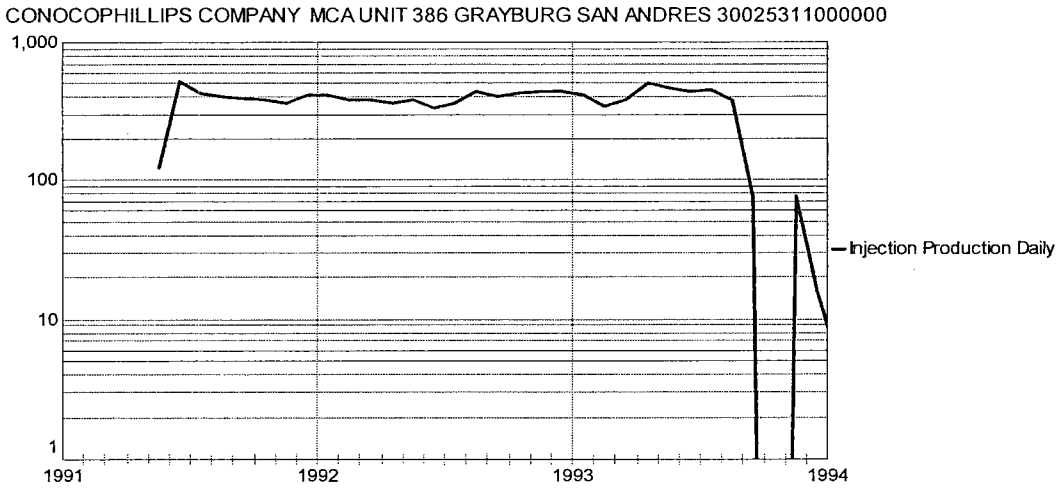
The following is a summary of the injection surveys:

Date	04.10.91	10.21.91	12.07.91
Injectant	CO2	CO2	CO2
Injection Prs: psi	2150	2100	2500
Injection Rate			
CO2: MSCFPD	420	445	1155
Water equivalent: BPD	152	161	418
PBD	4295	4295	4295
Logger TD	4273	4271	4258
Fill	22	24	37

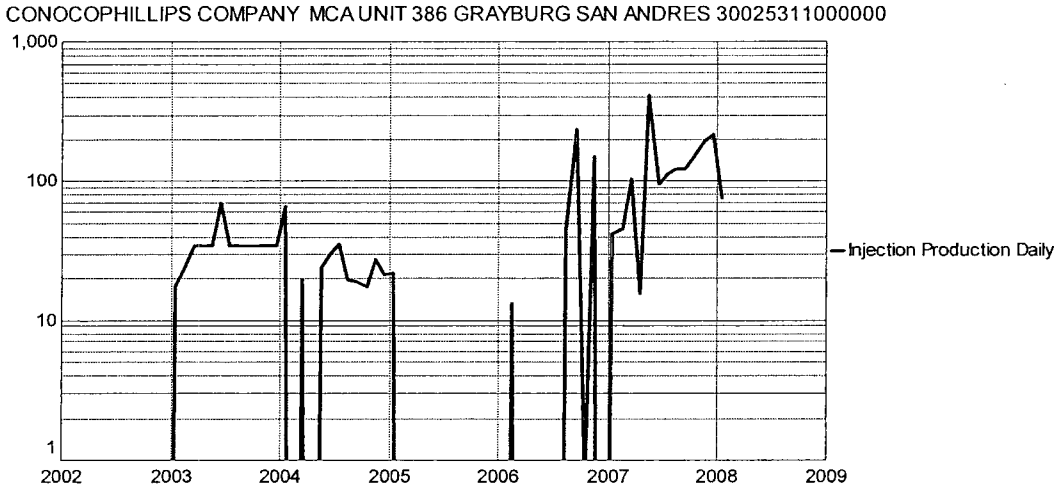
Completion Zone	Injection Profile: Percent		
Grayburg-6 (perforated gross interval: 3760-3798)	27	23	15
Upr SA7 (perforated gross interval: 3862-3892)	9	0	8
Lwr SA7 (perforated gross interval: 3926-3968)	7	18	77
Upr SA9 (perforated gross interval: 4018-4056)	57	59	0
TOTAL	100	100	100

Note: survey of 04.10.91, recovered drilling mud on tools.

MCA 386 was on CO2 injection at a rate of approximately 400 MCFPD from April 1991 to September 1993 when CO2 injection was terminated.



The well was return to water injection in January 2003 w/ injection occurring on an intermittent basis. Current injection is approximately 100-200 BWIPD.



The anticipated high pressure that prompted the drilling of the 5-1/2" casing section in MCA 386 w/ 17 ppg drilling mud was based on the abandonment of MCA 157 which required 16.8 ppg to control CO2. MCA 157, located 59 ft. S & 15 ft. W of the surface location of MCA 386, was abandoned in June 1990 following unsuccessful efforts to modify the existing CO2 injection profile. An injection profile survey of 10.31.89 in MCA 157 indicated a major upward channel from the Grayburg perforated gross interval: 3748-3778 to 3720 w/ possible channeling up to 3520.... (MCA 157 was drilled in 1940 w/ 7" , 20# casing set @ 3492; Cmt w/ 100 sx.). MCA 157 had a history of collapse casing intervals prompting the running of a 4" string and later a 2-7/8" FG liner:

Date	MCA 157 (formerly Carper Drilling Co. Simon 3-N
08.1940	8-5/8", 28# csg @ 910. Cmt w/ 50 sx.
	7", 20# csg @ 3492. Cmt w/ 100 sx.
	TD: 3789 (RGL). Nitro-shot 5" OH interval: 3725-3755 (Grbg-6) w/ 140 qts.
11.1945	Deepen well from base of Grbg (top of SA) @ 3789 RGL (+145 RMSL) to 4031 (-97 RMSL)...SA9.
	on bailing test, recovered 6 gallons water/minute (144 BWPD).
	PB OH from 4031 (-97 RMSL) to 4021 (-87 RMSL). Test. Recovered no water....possible SA9 water contact @ -87 RMSL
05.01.63	MCA Unitization: Carper Drilling Co. Simon 3-N re-named MCA 157
03.1967	Convert MCA 157 to WIW
05.1967	7" csg collapse interval: 3372-3413. Swage csg. Run 4-1/2", 9.5# csg to 4012 w/ DVT @ 3700. Cmt w/ 72 sx
04.1988	4-1/2" csg collapse interval: 3820-3868. Mill out. Run 2-7/8" FG liner: 3378-4020. Cmt w/ 90 sx.
01.1989	Convert to CO2 injection
03.30.89	Run injection survey: 86% losses out Grayburg perforation interval: 3755-3780 w/ major channeling to 3720...possible channeling to 3450
10.31.89	Run injection survey: 89% losses out Grayburg perforation interval: 3755-3780 w/ major channeling to 3720...possible channeling to 3520
02.1990	Convert from CO2 injection to water injection in preparation for step-rate test followed by injection profile modification.
04.04.90	Run step rate test. Formation Parting Prs: 3758# @ 3860 ft., equiv to: 18.7 ppg, gradient: 0.974 psi/ft.
04.16.90	SI
06.1990	Attempt to CO well. Kill SI well w/ 16.8 ppg mud. Drld out of 2-7/8" liner: 3749-3759....(1945 shot-hole interval: 3725-3755)
	Lost dyna dril motor & bit. RIH w/ workstring. Twisted-off. Left x-over subs & blade bit in well. TOF: 3765. Junked hole.
07.1990	P&A....prep to drill replacement well, MCA 386 (drilled 01.1991)

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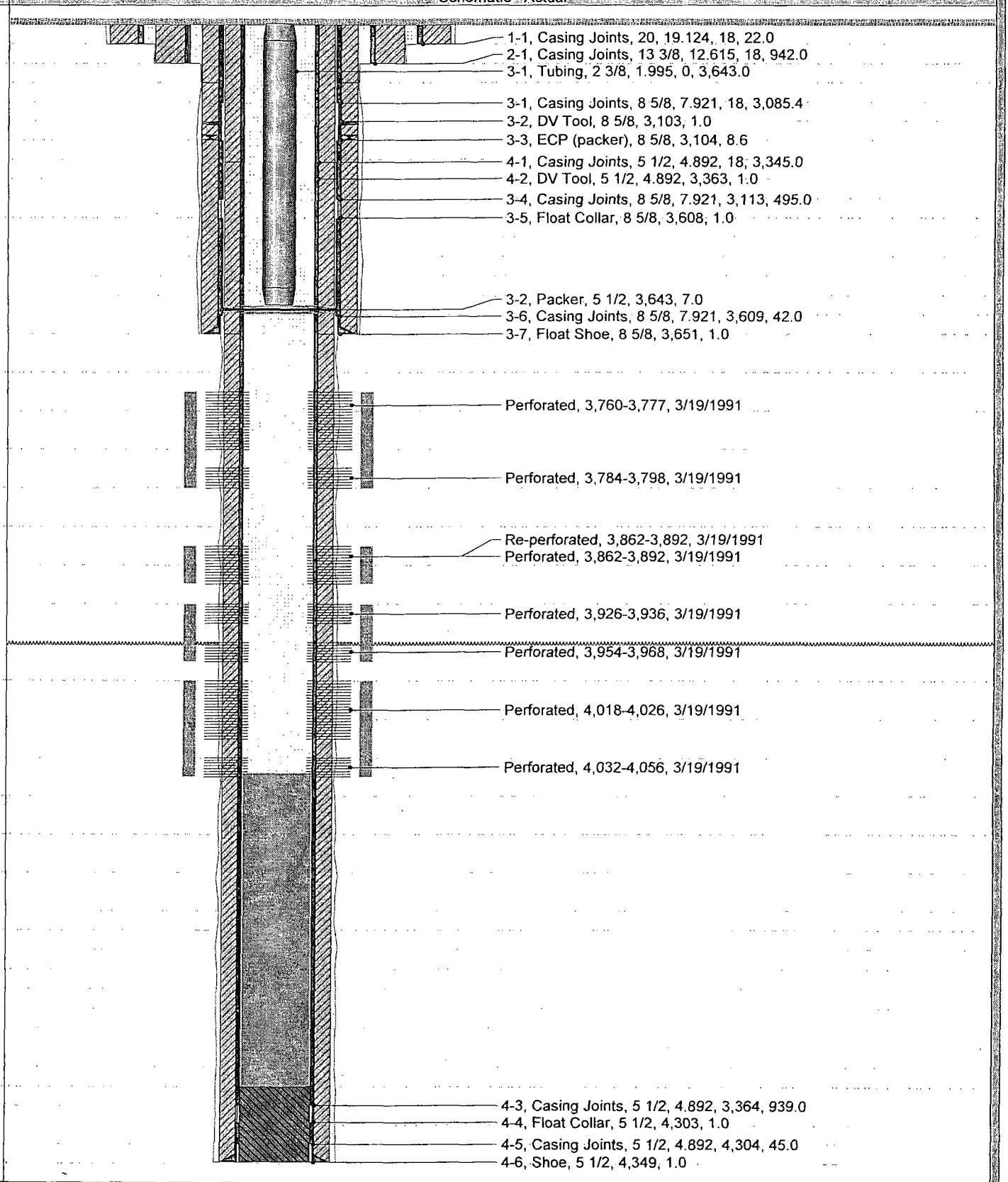
Schematic - Current

MCA 386W

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
WELL INTERVENTION	REPAIR DOWNHOLE		8/14/2006	8/18/2006

Well Config: Vertical - Main Hole, 1/23/2009 1:34:32 PM



Report Printed: 1/23/2009

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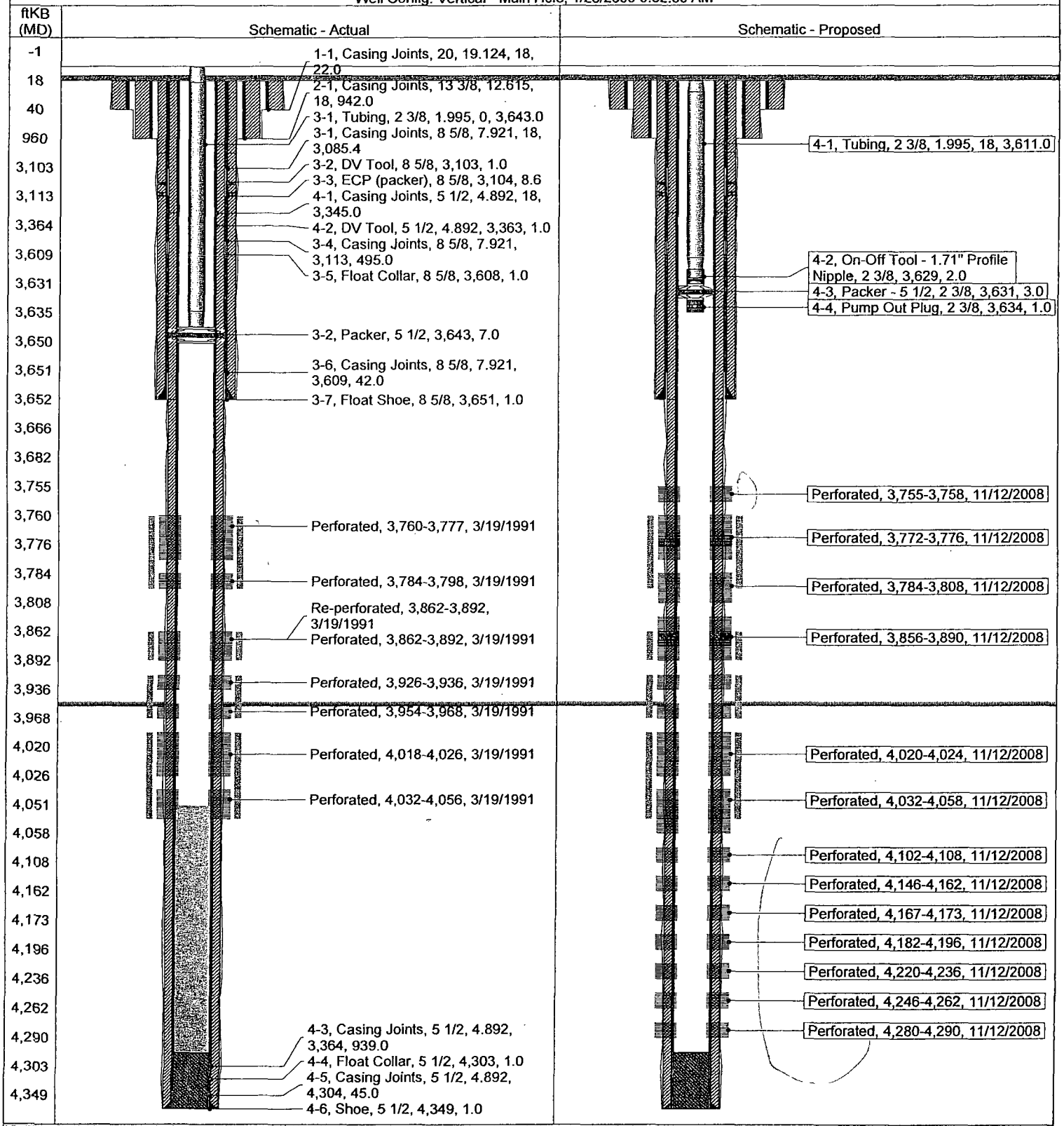
Schematic - Current

MCA 386W

District	Field Name	API / UWI	County	State/Province
PERMIAN		3002531100	LEA	NEW MEXICO

Original Spud Date	Surface Legal Location	East/West Distance (ft)	East/West Reference	North/South Distance (ft)	North/South Reference
1/7/1991	Sec. 29, T-17S, R-32E	1,995.00	W	1,921.00	N

Well Config: Vertical - Main Hole, 1/26/2009 9:32:30 AM



Report Printed: 1/26/2009

Water Analysis Report

4/14/2009

Address:

Customer: Conoco Phillips
Attention: Dennis Ross
CC:

Lease: MCA
Formation:
Salesman: Corey Hodnett

Target Name: MCA 238
Sample Point: MCA 238

Sample Date: 04/13/2009 **Test Date:** 04/14/2009

Water Analysis(mg/L)

Calcium	128
Magnesium	34
Barium	
Strontium	
Sodium(calc.)	89
Bicarbonate Alkalinity	
Sulfate	52
Chloride	424
Resistivity	

Appended Data(mg/L)

CO2	
H2S	
Iron	0
Oxygen	

Physical Properties

Ionic Strength(calc.	0.02
pH(calc.)	
Temperature(°F)	70
Pressure(psia)	200
Density	

Additional Data

Specific Gravity	
Total Dissolved Solids(Mg/L)	
Total Hardness(CaCO3 Eq Mg/	459

Dew Poin	
Lead	
Zinc	

Calcite Calculation Information

Calculation Method	Value
CO2 in Brine(mg/L)	

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)		
Gypsum (Calcium Sulfate)	-2.47	
Hemihydrate (Calcium Sulfate)	-2.17	
Anhydrite (Calcium Sulfate)	-2.86	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		