Form 3160-5 June 1990)	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No.		
	BUREAU OF LAND M SUNDRY NOTICES AND R rm for proposals to drill or to se "APPLICATION FOR PERM	EPORTS ON WELLS deepen or reentry to a different reservoir.	LC 029410A 6. If Indian. Allottee or Tribe Name
<u></u>	SUBMIT IN TRI	PLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well Quit Gas Well Well	Cuher		8. Well Name and No. Bty 2. MCA Unity No. 156
2. Name of Operator Conoco, Inco 3. Address and Telephone N			9 API Well No. 3002512756
10 Desta Dr	o. • Ste 100W, Midland, TX e. Sec., T., R., M., or Survey Description)	79705	10. Field and Pool, or Exploratory Area Maljamar Grayburg-SA
2580′ FNL & Sec. 29, T-	2595 FWL Unit 175, R-32E		11. County or Parish. State Lea, NM
		NDICATE NATURE OF NOTICE, REPOR	IT, OR OTHER DATA
	SUBMISSION		Change of Plans
-	r intent	Abandonment Recompletion Plugging Back Casing Repair	New Construction Non-Routine Fracturing Water Shut-Off
🗌 Final At	andonmeni Notice	Altering Casing Other	Conversion to Injection Dispose Water Note: Report results of multiple completion on Well Completion or Report and Log form 1
It is propose Please note t DIAGRAM 1	d to plug and abandon t he inclusion of 3 disti Existing Wellbore	rall markers and zones pertinent to this work.)* this well according to the attac inct wellbore diagrams in this p F FISH IS SUCCESSFULLY RETRIEVE F FISH IS NOT RETRIEVED	lan.
Signed and	foregoing is true appropriate Horocon or State office use)	Tide Sr. Conservation Coordina	
Approved by ORIG.	SGD.) DAVID R. GLASS	Tide	Date
Title 18 U.S.C. Section 100		and willfully to make to any department or agency of the United	States any faise, fictutious or fraudulent statement

"See Instruction on Reverse Side

MCA Unit No. 156 Recommendation to Plug and Abandon

Well Data:

Location:	2580' FNL & 2595' FW	L, Section 29, T-17S, R-32E, Lea County, NM
TD: 4136'	GLE: 3924'	Salt Top: 985'
PBTD: 4136'	MD: 10' AGL	Salt Base: 2225'
API No.	30-025-12756	
Production:	TSI	

Tubular Data:

OD (in.)	Wt. (ppf)	Grade	Top of Cement	Drift ID (in.)	interval (ft.)	Collapse @80% (psi)	Burst @80% (psi)	Capacity (bbl/ft)
10-3/4"	40	?	Circ		0- 59	-	-	
8-5/8"	24?	?	Circ	-	0-9 39	-	-	-
7 •	20	K-55?	2000'	6.331	0-3698	1816	29 92	.0404
5-1/2 °	15.5	K-55	Circ	4.825	336 9-4136	3232	3848	.0238
2-7/8"	6.5	J-55		2.347		6144	5808	.0058

Annular Volumes:

Alliular Volution.		
	bpf	_ <u>qpf</u>
2-7/8" tubing x 5-1/2", 15.5# casing	.0158	0.6625
2-7/8" tubing x 7", 20# casing	.0325	1.3633

....

Perforations:

GB 6th:	3776-3810', 3818-3834' w/2 JSPF
SA U 7th:	3878', 3889', 3898', 3900', 3904', 3912', 3918', 3924' w/2 JSPF
SA L 7th:	3942', 3946', 3959', 3969', 3978', 3985', 3994' w/2 JSPF
SA U 9th:	4048-4096' w/1 JSPF

Shot Sections:

GB 6th:	3808-3828'	Greater than 28" hole
SA U7th:	3875-3921'	20ª hole

Fluid Specifications:

Cement:	Class "C" neat with 2% CaCl ₂ Yield 1.32 CF/sk		
	Mix weight 14.8 ppg Water requirement 6.3 gal/sk		

Mud: Salt gel mud consisting of 10 ppg brine with 25 pounds of gel per barrel.

MCA No. 156 Recommendation to Plug and Abandon

A. Wellbore Preparation

1. MIRU. POOH with any production equipment. Install BOP.

B. Attempt to Fish Junk

- 1. RIH with lead impression block.
- 2. Swedge out casing if necessary.
- 3. Attempt to fish tubing and rods using overshot.
- 4. Trip for washover pipe if needed. Attempt to recover fish.

C. Plug and Abandonment

- 1. RIH with 4" hollow carrier casing gun and shoot 2 JSPF @ + 500'. Note that 8-5/8" casing is set across this interval.
- 2. a) If successful fishing junk, RIH with open ended workstring to PBTD @ 4136'. Spot a cement plug from PBTD to <u>+</u> 3676' (100' above top perf). Volume is 47 sx.
 - b) If unsuccessful fishing junk, RIH with retainer and set @ + 3750'. Pump 100 sx Class *C* neat cement with 2% CaCl₂. Sting out of retainer. Spot 25 sx cement on top of retainer, the minimum as required by the BLM. Top of cement plug should be @ + 3503'.
- 3. Circulate hole with salt gel mud. Capacity of hole from 3676' to surface is 87.5 barrels from 3503' to surface is 83.4 barrels.
- 4. Tag cement plug @ 3676' (or 3503') to verify top.
- 5. Pull up to \pm 3470'. Spot 27 sx cement from \pm 3470' up to \pm 3270'. Minimum plug size is 25 sx. These volumes are calculated to give \pm 100' above and below the 5-1/2" liner top.
- 6. Tag cement plug to verify top.
- 7. Pull up to \pm 2400'. Spot a cement plug inside the 7^e production casing up to \pm 800' using 276 sx. This plug is to help protect the casing from the salt section.
- 8. Trip for packer. Set packer @ + 400'. Establish pump rate using fresh water or mud.
- 9. Trip for retainer. Set retainer @ <u>+</u> 400'. Attempt to circulate cement by pumping 50 sx of Class "C" neat with 2% CaCl₂.
- 10. Sting out of retainer and spot 25 sx of cement on top of retainer; top of cement estimated @ 255'.

- 11. a) If cement was circulated, spot a cement plug using 25 sx from + 150' up to 3' for the surface cap.
 - b) If cement was not circulated,
 - 1) perforate the 7" casing $@\pm 150'$.
 - 2) pump 15 sx of cement and attempt to circulate.
 - 3) spot a cement plug from \pm 150' up to 3' using 25 sx cement for the surface cap.
- 12. Cut off casing 3' below final restored ground level. Cap wellbore with a metal plate (minimum thickness 1/4") and weld in place.
- 13. Install abandonment marker. The marker must be at least 4" pipe and 10' long with 4' above ground and embedded in cement. The marker should be as close to the wellbore as possible and must have the well indentity and location permanently inscribed.

ach 1 404/93

Mark E. Kratzer **Production Engineer**



HED

DIAGRAM

2



TOC @ 3' SUCCESSFUL RETRIEVING FISH CEMENT 10 3/4", 40 # @ 59' w/ 50 sx (circ) 25 sx TOP OF MUD @ 1/50' MUD TOP OF CEMENT @ ± 255' CEMENT 25 5x RETAINER @ 400' CEMENT - 50sx 2 JSPF @ 500' MUD TOP OF CEMENT @ 1 800' 848" : ASING @ 939' w/ 50 5x (CIRC) CEMENT 276 sx TOP OF MUD @ 12400' MUD TOP OF CEMENT @ 13270' CEMENT 27 sx Top 51/2" LINER @ 3369' Top of MUD @ = 3470' 7", 20 # @ 3698', TOC @ 2000' MUD TOC @ 1 3676' PERFORATIONS 3776' TOP PERF GRAYBURG 6th 3776-3810', 3818-34' w/ 2 JSPF POSSIBLE COLLAPSE SAN ANDRES 7th 3887', 89', 98', 3900', 04', 12' @ ± 3820' 18', 24', 42', 46', 59', 69', 78', 85', 99' CEMENT 47 sx SAN ANDRES 9th 4048 - 96' 4096' BOTTOM PERF 542", 15.5 # K-55 @ 4136' w/ 240 sx (EIRC)

M.E. KRATZER MCA UNIT No. 156 BAKH - MALJAMAR - PEARSALL FEB 22, 1993 NM

DIAGRAM З TROPOSED WELLBORE DIAGRAM MCA UNIT No. 156 TOC 2 3' UNSUCCESSFUL RETRIEVING FISM SEMENT 25 sx 10 3/4", 40 # @ 59' w/ 50 5x (circ) TOP OF MUD @ = 150' MUD TOP OF CEMENT @ I 155' CEMENT 25 s× RETAINER @ 400' 2 JSPF @ 500' CEMENT - 505X TOP OF L'EMENT @ 5 800' M4D ► 8 5/8" CASING @ 939' W/ 50 SX (CIRC) GEMENT 276 sx Top of MUD @ 12400' Muo TOP OF CEMENT @ # 3270' CEMENT Top 51/2" LINER @ 3369' 27 sx TOP OF MUD @ = 3470' TOP OF CEMENT @ \$3503' MUD 7", 20 # € 3698', TOC @ 2000' CEMENT 25 5× RETAINER @ \$ 3750' 3776' TOP PERF TERFORATIONS CEMENT GRAYBURG 6th 3776' - 3810', 3818'- 34' 100 SX OSSIBLE COLLAPSE e±3820' w/ 2 JSPF SAN ANDRES 7th 3887', 89', 98', 3900', 04', TOF @ 3823' 12', 18', 24', 42', 46', 59', 69', 78', 85', 79' SAN ANDRES 9th 4048'- 4096' CEMENT \$ 4096' BOTTOM PERF 512", 15.5# K-55 @ 4136 w/ 240 sx (circ)

M.E. KRATZER MCA UNIT No. 156 BAISH · MALJAMAR - PEARSALL FEB 19, 1993 NM

RECEIVED

MAR 2 5 1990

ord Hobas Arte