Form 3160-5 (November 1983) (Formerly 9-331)	UNITO ST DEPARTMEN. JF T BUREAU OF LAND M	HE INTERIOR Verse	MIT IN TRIPLICTE. ter instructions re- side)	Form approved. Budget Bureau No. 1 Expires August 31. 5. LEASE DESIGNATION AND LC - 0603	1985
(Do not use thi	NDRY NOTICES AND s form for proposals to drill or to Use "APPLICATION FOR PERM	deepen or plug back to a di		6. IF INDIAN, ALLOTTEE OR	TRIBE NAME
1. OIL CAS WELL WELL 2. NAME OF OPERATOR	D OTHER INject	ion		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERAT	Inc.	Noul 1		9. WBLL NO.	
See also space 17 be At surface			'N'105	H 246	DCAT
Unit P	- 660'FSL 4	660' FEL		11. BBC., 2, B., M., OR BLE. A SURVEY OR ARMA	1110 1110
14. PERMIT NO. 30-025 -	15. ELEVATIONS	(Show whether DF, RT, GR, etc.)	200. [']- [T] - 2 12. COUNTY OR PARISE 13. 200	SQE BTATE
16.	Check Appropriate Box	To Indicate Nature of	Notice, Report, or O		
	NOTICE OF INTENTION TO :	}		BNT REPORT OF :	
TEST WATER SHUT- FRACTURE TREAT RHOOT OR ACIDIZE REPAIR WELL (Other)	OFF PCLL OR ALTER CA MULTIPLE COMPLE ABANDON* CHANGE PLANS		Completion or Recomple	BEPAIRING WELL ALTERING CASING ABANDONMENT [®] of multiple completion on W tion Report and Log form.)	
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·				Jul 20 11 22 AM 190 CAR AREA HILLIAN ANDRE	RECEIVED
18. I bereby certify the signed Jush Co	ustins flag c e the foregoing is the and correct and for gud WAND-	Ell Crandy Fr	rauso (913) afre Augeniss) 686-6540 DATE 7-18-90	
(This space for Fed	eral or State office use)		<u> </u>		
APPROVED BY CONDITIONS OF A	PPROVAL, IF ANY :	TITLEPETROLOUX	transfer 	X Ca	46

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any faise, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

MCA UNIT NO. 246 PLUG AND ABANDON

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Summary: Aus o 8 44 AM	The following procedure is recommended to permanently plug and abandon MCA Unit No. 246.		
CANA AREA	 Retrieve RBP at 3579'. Set cement retainer @ 3570' and pump 127 sacks of cement into open hole. Spot 17 sack cement plug on top of retainer. Spot 18 sack cement plug across base of salt. Perforate at 880' and spot 55 sack cement plug across top of salt and surface casing shoe. Perforate at 145' and circulate 50 sacks of cement to set surface plug. 		
<u>Location</u> :	660' FSL & 660' FEL, Unit P, Sec. 17, T–17S, R–32E Lea County, NM		
Elevation:	4048' GL (4' AGL)		
<u>Completion</u> :	Grayburg-San Andres TD: 5462' PBTD: 4210' Perfs: 4102'-4135'		

Casing/Tubing Specifications:

0.D.	Weight	Grade	Depth	Drift	Collapse	Burst		Capaçity
<u>(in)</u>	<u>(lbs/ft)</u>	<u> </u>	<u>(ft)</u>	<u>(in)</u>	<u>(psi)</u>	(psi)	<u>(bb]/ft)</u>	(ft^3/ft)
8-5/8"	28.0	H-40	830	7.892	1,640	2,470	.0624	.3506
7"	20.0	H-40	3628	6.381	1,980	2,720	.0405	.2273
2-7/8"	6.5	N-80		2.347	11,160	10,570	.00579	.03250

8-5/8" casing set @ 830' with 50 sx cement circulated to surface. 7" casing set @ 3628' with 100 sx cement. Use safety factor of 70% for collapse and burst pressures. Assume 2-7/8" workstring will be used.

<u>Notes</u>: 1. All cement slurry used in this procedure shall be Class "C" neat mixed @ 14.8 ppg.

- 2. All mud shall be 9.5 ppg with 25 lbs gel/bbl brine.
- 3. Notify BLM and NMOCD prior to commencing any work.

Recommended Procedure:

- 1. Prepare well for P&A:
 - A. MIRU. Bleed well pressure down. Kill well with 9.5 ppg mud if needed.
 - B. ND wellhead and NU BOP.
 - C. PU and TIH w/retrieving head and WS. Retrieve RBP @ 3579'. POOH.

MCA Unit No. 246 Plug and Abandon Page 2

- 2. Set cement retainer and abandon open hole:
 - A. GIH with 7" cement retainer and WS. Set cement retainer @ 3570'.
 - MIRU cement services. Pump 127 sacks cement through retainer. Β. Maximum surface pressure is 1000 psi.
 - C. Sting out of cement retainer and spot 17 sacks cement from 3480'-3570' and displace with 20 bbls mud.
 - D. PU to 3475' and circulate hole with 120 bbls mud.
 - E. POOH laying down WS to 2000'.
- 3. Spot cement plug across base of salt:
 - A. Load hole with mud.
 - B. Spot 18 sacks cement from 1895'-2000' and displace with 11 bbls mud.
 - C. POOH with WS.
- 4. Spot cement plug across top of salt and surface casing shoe:
 - A. MIRU wireline services.
 - B. RIH with a 4" casing gun loaded 4 JSPF (120° phase, .4" EHD, centralized and CCL.
 - Perforate 7" production casing @ 880'. POOH. С.
 - GIH with WS to 1035'. Close BOP. Pump 15 bbls mud to load hole D. and establish circulation up $8-5/8" \times 7"$ annulus.
 - Pump 55 sacks of cement and displace with 4 bbls mud to spot Ε. plug from 780'-1035' inside and outside 7" casing. POOH with WS. WOC. GIH with WS and tag top of cement.
 - F.
 - G. POOH laying down WS.
- 5. Circulate cement up surface casing and set surface plug:
 - A. RIH with a 4" casing gun loaded 4 JSPF and CCL.
 - Perforate 7" production casing @ 145'. POOH. Β.
 - GIH w/1 joint 2-7/8" tubing. Close BOP. Pump 5 bbls mud to С. load hole and establish circulation up 8-5/8" x 7" annulus.
 - Pump 50 sacks of cement (16 sacks excess) to fill up 8-5/8" x 7" D. annulus and set surface plug in 7" casing.

Note: If cement does not circulate to surface, pump 25 sacks down 8-5/8" X 7" annulus.

- Ε. POOH with tubing.
- Ε. RD wireline and cement services.
- 6. Prepare surface location for abandonment:
 - ND BOP and cut off all casing strings at the base of the cellar Α. or 3' below the final restored ground level (whichever is deeper). RDMO pulling unit.
 - Fill the casing strings (if necessary) from the cement plug to Β. surface with cement.
 - С. Cover the wellbore with a metal plate at least 1/4" thick, welded in place, or a cement cap extending radially at least 12" beyond the 8-5/8" casing and at least 4" thick.

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- D. Erect an abandonment marker according to the following specifications:
 - 1. Marker must be at least 4" diameter pipe, 10' long with 4' above restored ground level, and embedded in cement.
 - 2. Marker must be capped and inscribed with the following well information:

MCA Unit No. 246 Unit P, Sec. 17, T-17S, R-32E Lea County, NM Date

- Note: 1/4" metal plate can be welded to marker and then to the casing after the marker is set in cement.
- E. Cut off dead-man anchors below ground level and remove markers. Fill in cellar and workover pit.
- F. Remove all equipment, concrete bases, and pipe not in use.
- G. Clean and restore location to its natural state. Reseed according to BLM requirements.
- 7. Send a copy of the well service report to Kandy Lawson in the Hobbs. Office so the proper forms can be filed.

Approved: Production Speci

Enginee

Supervising Production Engineer

Division Enginéering Manager

Production Superintendent

23-90

-26-90

90

3/90 Date

STB:dw MCA#246.PRO

* PROPOSED PEAX MCA Unit No. 246 660'FSL \$ 660'FEL Unit P, Ser. 17, T-175, R-32E Elevation: 4048' 4' AGL 4"P&A MARKER CELLAR RESTORED GL 1.1.4.4 BACKFILL CELLAR W 31 CUT CASING OFF AT BASE OF CELLAR OR 3' BELOW GL <u>د</u> PERF etts' _ 50 5x Class "C" cement 7 ٥. from surface -145 55 5x Cluss "C" cement -8 8 28# HI40 @ 830 W/505x A: A: A From 780'-1035' (dire PETTAJSPE @ BBO! Salt top: 985 18 sx class "C" coment -Salt base: 1950 . 0 . 0 . 0. 2 From 1895-2000' EST TOC C 2328 <u>, 4</u> 175x Class C Cement 31.3 from 3480-3570 Cement Retainer e 3570' 51 4. 7",20# C 3628" W/ 100 5X 127 5x Class "C" coment-À PERF: 4102'-4135 String shot Δ PBTD. 4210' ٦L 5462 Concico Inc. Made By Calculation Sheet Job No Checked By Title Fle!d

Date
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State _____