State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division

		Sundry Notices and R		
			API	# (assigned by OCD) 30-045-25432
. Type of GAS	Well		5.	Lease Number Fee
			6.	State Oil&Gas Leas
Name of			7.	Lease Name/Unit Na
MER	IDIAN OIL	8.	Pierce A Well No .	
Address	& Phone No. of Opera	tor	a	4 Pool Name or Wildo
PO Box	4289, Farmington, NM	87499 (505) 326-9700	<i>y</i> .	Blanco Mesaverde/ Armenta Gallup
Location	n of Well, Footage, S	ec., T, R, M		Elevation:
1180'FN	L, 930'FWL, Sec.34, T	-29-N, R-10-W, NMPM, Sar	n Juan County	
Throat	Submission	Type of Act	ion	
X X		Abandonment	Change of Pl	
—·· -		X Recompletion	New Construc	tion
	Subsequent Report	Plugging Back	Non-Routine	Fracturing
	7	Casing Repair Altering Casing	Water Shut o	
	Final Abandonment	Other -	conversion c	0 111,0001011
	economics.			idge plug due to
				idge plug due to
				idge plug due to
				SEIVED 7 1995
				eived)

District I PO Hox 1980, Hubbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd., Axtec, NM 87410 District IV State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Revised February 21, 199
Instructions on bac.
Submit as Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie

AMENDED REPOR

								4 T	
			LL LO			EAGE DEDIC	ATION PL	A I me	
· A	Pl Numbe	r		· Pool Code	i			-11	
30-045-2	25432		72319	9/02290		nco Mesaverde	Armenta G	allup	· Well Number
' Property C					¹ Property	Name		ŀ	4
7200			F	Pierce	Α				
7389 'OGND N	10.				' Operator	Name		Ì	Elevation
14538			Me	ridian	Oil Inc.	_			5560
					10 Surface				
		T	I Barra	Lot Ide	Feet from the	North/South line	Feet from the	East/West line	County
UL or lot so.	Section	Towaship	Range	Lat ion		North	930	East	San Jua
A	34	29 N	10 W	<u> </u>	1180	f Different Er		1	
			11 Bot	tom Hol		f Different Fro	Feet from the	East/West line	County
UL or lot so.	Section	Township	Range	Lot ids	Feet from the	North/South line	1 Sec 110 m cae		, ,
			1					<u> </u>	
11 Dedicated Acr	- la foint	or infill 14	Consolidation	on Code 15 C	Order No.				
	1			Ì					
E/320-40					201101 571	ON LINETH ALL	INTERESTS F	IAVE BEEN	CONSOLIDATE
NO ALLOY	WABLE	WILL BE	ASSIGNE	ED TO TH	IS COMPLETI	ON UNTIL ALL	NO THE DIV	VISION	00,.00
110 11220		OR A	NON-ST	'ANDARD	UNIT HAS B	EEN APPROVED			ERTIFICATIO
by Jame	es F.	neese							
	and the second of the second o					930	Signature Pegg Printed Na Regu Title 2-6- Date	y Bradfie	fairs
DECI	- 7 19	9p —				930	Signature Pegg Printed Na Regu Title 2-6- Date 18 SUR I hereby comes plotted or under no correct to	y Bradfie y Bradfie latory Af 95 VEYOR Correly that the well a from field notes the best of my bell whe best of my bell	fairs CERTIFICATIO location shown on this p of actual surveys made b at that the same is true as inf.
DECI N FEB OUL C	- 7 19	9p —				930	Signature Pegg Printed Na Regu Title 2-6- Date 18 SUR I hereby co was plotted or under N correct to	y Bradfie y Bradfie latory Af 95 VEYOR C ernfy that the well a from field notes ny supervision, and the best of my best strong field notes y supervision, and the best of my best 100 100 100 100 100 100 100 1	Terrification shows on this of actual surveys made at that the same is true of icf.

PIERCE A #4

Recommend Recompletion Procedure Unit A Section 34 T29N R10W

- 1. Test rig anchors and repair if necessary. Install 11-400 bbl frac tanks on location and fill with 1% KCl water for fracture treatment. Filter all water to 25 microns. Heat water as required by weather.
- 2. MOL and RU. Comply to all NMOCD, BLM and MOI rules and regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
- 3. TOOH with 5369' of 2-3/8" tubing. Visually inspect for and replace all bad jts.
- 4. TIH on 2-3/8" tubing with 7-5/8" casing scraper and 6-1/8" bit. Clean out to top of liner hanger at 5234'. TOOH.
- 5. TIH with 2-3/8" tubing with 5-1/2" casing scraper and 3-7/8" bit. Clean out 5-1/2" liner from 5234' to PBTD at 6092' with air.
- 6. Blow to pit until sand production is minimal to absent. When well is clean, take 15, 30, 45 and 60 minute pitot gauges. TOOH.
- 7. Wireline set 7-5/8" CIBP at 4600'. Load hole with fresh water. TOOH.
- 8. RU wireline and run CBL/CCL/GR from PBTD 4600' to 2600' under 1000 psi surface pressure. TIH with 7-5/8" full-bore packer and 60' of 2-7/8" tubing and pressure test casing to 3300 psi. If pressure test does not hold, TIH with packer and tubing and locate failure. Contact Production Engineering and a repair procedure will be provided. Release packer and TOOH.

Point Lookout

9. Perforate with 4" Select-Fire HSC with centralizers and charges meeting requirements for average penetration in Berea of 12.0" and average perf diameter of 0.30". Perforate the following Point Lookout intervals with 1 spf.

4164'	4211'	4272'	4363'
4170'	4214'	4279'	4390'
4182'	4233'	4320'	4420'
4188'	4247'	4329'	
4207'	4254'	4357'	

Total: 18 holes.

10. TIH with 7-5/8" full bore packer on 2-7/8" tubing and set at 60'. RU stimulation company and prepare to breakdown and balloff with acid. Pump 1800 gal. of 15% HCl at 18-20 bbls/min. Drop a total of 36 7/8" 1.3 sp. gr. RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum pressure is 3300 psi.** Acid should contain clay stabilizer, corrosion inhibitor, and iron sequestering agent. TOOH with tubing and packer.

Pierce A #4 Recommend Recompletion Procedure Unit A Section 34 T29N R10W Page 2

- 11. RU wireline. RIH with junk basket and retrieve ball sealers. Record number of hits and balls recovered.
- 12. TIH with 7-5/8" full-bore packer on 2-7/8" tubing and set at 60'. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4300 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). Maximum treating pressure is 3300 psi. Fracture Point Lookout according to attached procedure. Stimulation will be limited entry (approximately 2.5 bpm/perf), slickwater, 175,000 lbs. of 20/40 Arizona sand with maximum sand concentration of 2.0 ppg and 25% pad volume. Flush to the top perf. Shut-in well immediately after stimulating well to keep in static condition. Release packer and TOOH.
- RU wireline. Set 7-5/8" RBP at 4150'. Run dump bailer and dump 2 sxs sand on BP. TIH with 7-5/8" full-bore packer on 2-7/8" tubing and set at 60'. Test bridge plug and casing to 3300 psi for 15 minutes. Release packer and TOOH.

Menefee

14. Perforate with 4" Select-Fire HSC with centralizers and charges meeting requirements for average penetration in Berea of 12.0" and average perf diameter of 0.30". Perf the following Menefee intervals with 1 spf.

3708'	3851'	3979'
3770'	3861'	4052'
3784'	3898'	4063'
3794'	3943'	4106'
3826'	3973'	

Total: 14 holes.

- 15. TIH with 7-5/8" full bore packer on 2-7/8" tubing and set at 60'. RU stimulation company and prepare to breakdown and balloff with acid. Pump 1400 gal. of 15% HCl at 18-20 bbls/min. Drop a total of 28 7/8" 1.3 sp. gr. RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum pressure is 3300 psi.** Acid should contain clay stabilizer, corrosion inhibitor, and iron sequestering agent. Release packer and TOOH.
- 16. RU wireline. RIH with junk basket and retrieve ball sealers. Record number of hits and balls recovered.
- 17. TIH with 7-5/8" full-bore packer on 2-7/8" tubing and set at 60'. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4300 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). Maximum treating pressure is 3300 psi. Fracture Menefee according to attached procedure. Stimulation will be limited entry (approximately 2.5 bpm/perf), slickwater, 175,000 lbs. of 20/40 Arizona sand with maximum sand concentration of 2.0 ppg and 25% pad volume. Flush to the top perf. Release packer and TOOH.

Pierce A #4 Recommend Recompletion Procedure Unit A Section 34 T29N R10W Page 3

- 18. Flow back well (if needed) until returns diminish. TIH with retrieving head and 2-3/8" tubing and clean out to RBP at 4150' until sand returns and water production are minimal. Obtain pitot gauges. Release bridge plug and TOOH.
- 19. TIH with notched collar on 2-3/8" tubing and clean out to CIBP at 4600' until sand returns and water production are minimal. Obtain pitot gauges. TOOH.
- 20. TIH with 4420' of 2-3/8" tubing with standard seating nipple one joint off bottom and expendable check on bottom. Tag fill and do final cleanout if necessary. Land tubing string.
- 21. ND BOP and NU independent wellhead. Pump off check. Take final Pitot gauge and gas, oil and water samples.
- 22. Test bottom hole pump for pump action on surface.
- 23. TIH with approximately 4400' of 3/4" and 5/8" rods with new rebuilt pump. Seat pump and pressure test to 500 psi. Rig down and release rig.
- 24. Will move back on location and drill CIBP set at 4600' when appropriate regulatory approval is received.

Approve:	Regional Engineer	Approve:	Drilling Superintendent

VENDORS:

Wireline:	Petro	326-6669
Fracturing:	Western	327-6222
Down Hole Pump	Service Pump	326-5564
Production Engineer:	Office	326-9703
1104404011 ===8=====	Home	326-2381

LJB:lib

Pertinent Data Sheet - Pierce A #4

Location: 1180' FNL, 930' FEL, Unit A, Section 34, T29N, R10W; San Juan County, New Mexico

TD: 6115' Elevation: 5555' GL Field: Armenta Gallup

PBTD: 6092'

DP #: 32445A 01-08-83 Spud Date: 02-08-83 Completed:

Casing Record:

Hole Size 14 3/4" 9 7/8" 6 3/4"	Csg Size 10 3/4" 7 5/8" 5 1/2"	Wt. & Grade 40.5# K-55 26.4# K-55 15.5# K-55 DV Tool @	<u>Depth Set</u> 318' 5440' 5234' - 6090 2079'	Cement 325 cu. ft. 2303 cu. ft. 150 cu. ft.	Top/Cement Circ/Surface Circ/Surface TOC @ 5234'
--	---	--	--	--	---

Tubing Record:

Tbg Size	Wt. & Grade	Depth Set	
2 3/8"	4.7# EUE	5369'	

Formation Tops:

Cliff House: 3475' 775' Oio Alamo: Point Lookout: 4125' 835' Kirtland: 5335' Gallup: Pictured Cliffs: 1818'

Logging Record: Dual Ind Laterolog, Temp, Comp Density, Neutron, FDC-CNL

Stimulation:

Logging tool left in open hole. Contains 2 curries of cesium 137. Placed 59 gal cement dyed red from 6112' to 6092'.

Upper Gallup

Perf'd: 5346', 5349', 5352', 5356', 5362', 5369', 5378', 5382', 5391', 5396', 5400', 5407', 5417', 5424', 5434', 5442', 5446', 5450', 5456', 5464', 5467', 5471', 5473', 5479', 5484', 5488', 5491', 5494' & 5500', Total of 29 holes

Frac'd: Acidize w/1,500 gal 15% HCl & ball sealers. Frac'd w/109,000# 20/40 sand & 75Q foam. Pumped 590 bbls 2% KCl water & 1,860,900 SCF nitrogen. Pumped 4,000 gal paraffin inhibitor ahead of frac.

Middle Gallup

Perf'd: 5536', 5542', 5548', 5554', 5562', 5568', 5571', 5576', 5580', 5583', 5590', 5591', 5599', 5602', 5611', 5614', 5620', 5624', 5628', 5634', 5638', 5641', 5645', 5649', 5654', 5660', 5666', 5672', 5680' & 5684'. Total of 30 holes.

Frac'd: Acidize w/1,300 gal 15% HCl & ball sealers. Frac'd w/109,000# 20/40 sand & 75Q foam. Pumped 590 bbls 2% KCl water & 1,852,100 SCF nitrogen. Pumped 4,000 gal paraffin inhibitor ahead of frac.

Lower Gallup

Perf'd: 5720', 5726', 5735', 5742', 5747', 5754', 5762', 5770', 5776', 5783', 5790', 5799', 5808', 5820', 5828', 5835', 5845', 5957', 5865', 5870', 5877', 5887', 5895', 5904', 5911', 5916', 5924', 5934', 5939', 5948'. Total of 30 holes

Frac'd: Acidize w/1,300 gal 15% HCl & ball sealers. Frac'd w/149,000# 20/40 sand & 75Q foam. Pumped 831 bbls 2% KCl water & 2,375,786 SCF nitrogen. Pumped 4,000 gal paraffin inhibitor ahead of frac.

Workover History:

Transporter: EPNG

32445A PIERCE A #4

ARMENTA GALLUP UNIT A, SEC 34,T29N, R10W, SAN JUAN COUNTY, NM

