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April 4, 2006

New Mexico Oil Conservation Division Underground Injection Control 1220 S. St. Francis Dr. Santa Fe, New Mexico 87505

Attn: Mr. David Catanach

Mr. Catanach,

This is the second phase of injection wells that we are requesting for reactivation. This field was unitized by Order No. R-9028 in October 1989 and granted a waterflood project status by Order No. R-9029 also in October 1989. This unit has had continuous injection in it since it was established as a waterflood. As we fix the physical plant in the unit the need for water injection grows with each well that goes back on production. There are 18 wells that have been permitted for water injection in the CATO San Andres Unit.

I am requesting the below captioned wells be reactivated and authorized to inject water into the San Andres Formation according to their original application and authorization by the NMOCD. A list of data for 6 of the original 18 wells authorized for injection is provided below and is attached to this letter.

- 1. List of wells for reactivation
- 2. Wells API Nos.
- 3. Well Locations
- 4. WBD's
- 5. Tubing, Packer and Perforation Details
- 6. NMOCD Order No Authorizing Injection for each well
- 7. Map w/ ½ mile radius of each well
- 8. Description of Activity within each wells ½ mile radius area of review that has occurred since 1989.

I am requesting that the CATO San Andres Unit Wells #21, #23, #26, #32, 51 and #54 be reacting the for water injection as mentioned earlier I have attached the requested data to this letter. If you any questions or need for additional data please call me at 432-686-0475 or 432-686-2458 or e-mail me at <u>iklawson@lothian.us</u>

Sincerely,

Farmer

Jesse Lawson Petroleum Engineer Lothian Oil, Inc.

# CONDITION OF HOLE

# 3/24/06 FIELD: Cato San Andres LEASE: Cato San Andres Unit WELL NO: 21 LEGAL: 660' FNL & 1980' FWL, Unit C, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM API No.: 30-005-20069 SPUD DATE: 05/04/67 STATE LEASE No.: COMPLETION DATE: 05/17/67

**REASON FOR WORK:** To increase water injection.

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**INJECTION WELL** 

#### CONDITION OF HOLE:

TOTAL DEPTH: 3,532' PBTD: 3,508' KB DATUM: \_\_\_11' Above: 4,130'-GL, 4,141'-KB

#### CASING RECORD:

17 jts (454') of 8-5/8", 24#, J-55, 8rd, ST&C Surf Csg. Set Csg at 461'.

90 jts (3,536') of 4-1/2", 9.5#, J-55, 8rd, L.S., ST&C Prod Csg. Set Csg @ 3,532'.

PERFORATIONS: 3,383'-92', 3,403-26', 54-77' w/ 2-JSPF. A total of 54' Net Perfs & 108 Holes. P-1

TUBING DETAIL: No Tbg in Well

Wellhead Model, Type & Rating:

**Pumping Unit:** 

ROD & PUMP DETAIL: Rod Pump: Polish Rod:

**Pol Rod Liner:** 

#### **REGULATORY REQUIREMENTS:**

## WELL HISTORY:

5/4/67	Spud Well for Pan American Petrol. Corp. w/ Chico Drilling with 12-1/4" hole to 461'.
	Orignal Well Name: Basket B # 2
	Ran 17 jts (454') of 8-5/8", 24#, J-55, 8rd, ST&C Surf Csg. Set Csg at 461'.
	Cmt'd w/ 300 sxs of CI "C" Incor + 2% CaCI. Circ Cmt to Surf.

5/11/67 Drilled 7-7/8" Hole to TD @ 3,532'. Ran 90 jts (3,536') of 4-1/2", 9.5#, J-55, 8rd, L.S., ST&C Prod Csg. Set Csg @ 3,532'. Cmt'd w/ 300 sxs of Cl "C" Incor +12% Gel & Tailed w/ 300 sxs of Incor Neat. TOC @ Unknown 5/16/67 Perf'd the P-1 f/ 3,383'-92', 3,403-26', 54-77' w/ 2-JSPE A total of 54' Net Perfs & 108 Holes. Acidized the P-3 f/ 3,383-3,477' w/ 6,000 gals of 28% LSTNE Acid in 2 Eq Stgs. Drp'd 150# MB f/ divert. Pmax: 3200#, Pmin: 2100#, ISIP: 2100#, AIR: 6 BPM.

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- 5/17/67 I P 'd: 120 BOPD, 20 BWPD, 0 MCFPD
- 9/24/72 Well was Converted f/ Production to Water Injection. POOH w/ Rod Pump, Rods & Tbg. Ran 108 jts(3,350') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston PC Ten Pkr. SPA 3,350'. Load Annulus w/ 58 bbls of Pkr Fluid. Start Wtr Inj on 9/23/72 in accordance with NMOCD Order # 3867-B, Dated: 8/7/72. Well Name has changed to CATO Baskett Pressure Maintence Project # 5
- 5/17/83 Change of Ownership: Apollo Energy of Hobbs, NM bought the well.
- 2/2/88 Change of Ownership: Kelt Oil & Gas of Roswell, NM bought the well.
- 03/08/90 Well Name has changed to CATO San Andres Unit # 21
- 05/14/90 Well is Reclassified as a SWD by NMOCD Order # R-9029
- 11/01/95 Change of Ownership: Secondary Oil Corp. of Marble Falls, TX bought the well.
- 12/01/97 Change of Ownership: Seirra Blanca Operating Co. of Cleburne, TX bought the well.
- 06/01/99 Change of Ownership: UHC New Mexico Corp. of Cleburne, TX bought the well.
- 10/2/02 Checked Well Found Sand Line in Well
- 12/27/05 Lothian Oil Bought the Well.

LOTHIAN OIL, INC.	
CATO SAN ANDRES UNIT # 21	
CATO FIELD	Spudded: 5/4/1967
INJECTION WELL	Completed: 5/17/1967
Location: 660' FNL & 1980' FWL, Unit C, Sec.11, T-8-S, R-30-E,	API # : 30-005-20069
NMPM, Chaves County, NM	
	12-1/4" Hole
Elevation: 4,130'-GL, 4,141'-KB, KB: 11'	
	Casing:
TREATMENT HISTORY	17 jts(454') of 8 5/8", 24#, J-55, 8rd, ST&C Csg.
Date Description	Set @ 461'.
	Cmt'd w/ 300 sxs of Cl "C" Incor + 2% CaCl.
10/2/02 Checked Well Found Sand Line in Well	Circ Cmt to surf.
9/24/72 Well was Converted f/ Production to Water Injection	
POOH w/ Rod Pump, Rods & Tbg. Ran 108 jts	
(3,350') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg	Tubing;
w/ Johnston PC Ten Pkr. SPA 3,350'. Load	NONE
Annulus w/ 58 bbls of Pkr Fluid. Start Wtr Inj on	
9/23/72 in accordance with NMOCD Order #3867-B	
Dated: 8/7/72. Well Name has changed to CATO	TOC @ Unknown
Baskett Pressure Maintence Project # 5	
5/16/67 Perfd the P-1 f/ 3,383'-92', 3,403-26', 54-77' w/	
2-JSPF. A total of 54' Net Perfs & 108 Holes.	7-7/8" Hole
Acidized the P-3 f/ 3,383-3,477' w/ 6,000 gals of	
28% LSTNE Acid in 2 Eq Stgs. Drp'd 150# MB f/	Rods:
divert. Pmax: 3200#, Pmin: 2100#, ISIP: 2100#,	······································
AIR: 6 BPM.	
	PUMP:
	Perforations: San Andres San Andres: P-1 3,383'-92', 3,403-26', 54-77' w/ 2-JSPF. A total of 54' Net Perfs & 108 Holes.
	90 jts(3,536') of 4-1/2", 9.5#, J-55, 8rd, L.S., ST&C Csg.
PBTD: <u>3,508'</u> TD: 3,532'	Set @ 3,532'. Cmt'd w/ 300 sxs of Cl "C" Incor Cmt +
TD: <u>3,532'</u>	12% Gel & Tailed w/ 300 sxs of Incor Neat.

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TOC @ Unknown

 Remarks:
 State Lease No.:

 Polish Rod:
 Polish Rod Liner:

 Pumping Unit:
 Well Head:

## CONDITION OF HOLE

# 3/27/06 FIELD: Cato San Andres LEASE: Cato San Andres Unit WELL NO: 23 LEGAL: 660' FNL & 660' FEL, Unit A, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM API No.: 30-005-10523 SPUD DATE: 09/28/66 STATE LEASE No.: COMPLETION DATE: 10/22/66

**REASON FOR WORK:** To increase water injection.

**INJECTION WELL** 

#### CONDITION OF HOLE:

 TOTAL DEPTH:
 3,576'
 PBTD:
 3,508'
 KB DATUM:
 Above:
 4,181'-KB

CASING RECORD: 16 jts (447') of 8-5/8", 24#, J-55, 8rd, ST&C Surf Csg. Set Csg at 455'. 112 jts (3,584') of 4-1/2", 9.5#, J-55, 8rd, ST&C Prod Csg. Set Csg @ 3,576'.

#### **PERFORATIONS:**

3,478'-82', 3,499-3,518', 44-68', 73-76' w/ 2-JSPF. A total of 50' Net Perfs & 100 Holes. P-2

TUBING DETAIL: No Tbg in Well

Wellhead Model, Type & Rating:

**Pumping Unit:** 

ROD & PUMP DETAIL: Rod Pump: Polish Rod:

**Pol Rod Liner:** 

#### **REGULATORY REQUIREMENTS:**

## WELL HISTORY:

9/29/66 Spud Well for Pan American Petrol. Corp. w/ Chico Drilling with 12-1/4" hole to 454'.
Orignal Well Name: Basket D # 2
Ran 16 jts (447') of 8-5/8", 24#, J-55, 8rd, ST&C Surf Csg. Set Csg at 455'.
Cmt'd w/ 300 sxs of Cl "C" Incor + 2% CaCl. Circ Cmt to Surf.

10/7/66 Drilled 7-7/8" Hole to TD @ 3,576'. Ran 112 jts (3,584') of 4-1/2", 9.5#, J-55, 8rd, ST&C Prod Csg. Set Csg @ 3,576'. Cmt'd w/ 500 sxs of Cl "C" Incor +12% Gel & Tailed w/ 300 sxs of Incor Neat. TOC @ Unknown

- 10/11/66 Perf'd the P-2 f/ 3,478'-82', 3,499-3,518', 44-68', 73-76' w/ 2-JSPF. A total of 50' Net Perfs & 100 Holes. Acidized the P-2 f/ 3,478-3,576' w/ 2,000 gals of 15% NE Pentol Acid. Drp'd 110 RCN BS f/ divert. FRMBRKDWN: 1600#, Pmax: 2100#, Pmin: 1600#, ISIP: 1200#, AIR: 4 BPM.
- 10/14/66 Frac the P-2 f/ 3,478-3,576 w/ 30,000 gals of LO + 40,500# 20-40 Sd + 3,000# 12-20 Beads Sd Conc: 1-1/2 ppg, Bead Conc: 1 ppg. FRMBRKDWN: 2200#, Pmax; 4000#, Pmin: 3500# ISIP: 2000# AIR: 33 BPM

10/22/66 I P'd: 212 BOPD, 5 BWPD, 108 MCFPD

- 2/12/71 Well was Converted f/ Production to Water Injection. POOH w/ Rod Pump, Rods & Tbg.
   Ran 111 jts(3,409') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston PC Ten Pkr. SPA 3,400'.
   Load Annulus w/ 58 bbls of Pkr Fluid. Start Wtr Inj on 9/23/72 in accordance with NMOCD Order # 3867-B,
   Dated: 8/7/72. Well Name has changed to CATO Baskett Pressure Maintence Project # 2
- 5/17/83 Change of Ownership: Apollo Eneregy of Hobbs, NM bought the well.
- 2/2/88 Change of Ownership: Kelt Oil & Gas of Roswell, NM bought the well.
- 03/08/90 Well Name has changed to CATO San Andres Unit # 23
- 05/14/90 Well is Reclassified as a SWD by NMOCD Order # R-9029
- 11/01/95 Change of Ownership: Secondary Oil Corp. of Marble Falls, TX bought the well.
- 12/01/97 Change of Ownership: Seirra Blanca Operating Co. of Cleburne, TX bought the well.
- 06/01/99 Change of Ownership: UHC New Mexico Corp. of Cleburne, TX bought the well.
- 10/2/02 Checked Well Swab will not go below 800' (Scale & Rust).
- 12/27/05 Lothian Oil Bought the Well.

LOTH	IAN OIL, INC.	
CATO SAN ANDRES UNIT # 3	•	
CATO FIELD		Spudded: 9/28/1966
INJECTION WELL		Completed: 10/22/1966
Location: 660' FNL & 660' FEL, Unit A, Sec.11	. T-8-S. R-30-E.	API # : 30-005-10523
NMPM, Chaves County, NM	<u>, , , , , , , , , , , , , , , , , , , </u>	
		12-1/4" Hole
Elevation: 4,181'-KB, KB:		
-		Casing:
TREATMENT HISTORY		16 jts(447') of 8 5/8", 24#, J-55, 8rd, ST&C Csg.
Date Description		Set @ 455'.
		Cmt'd w/ 300 sxs of CI "C" Incor + 2% CaCl.
		Circ Cmt to surf.
······································		
		Tubing;
		NONE
· · · · · · · · · · · · · · · · · · ·		TOC @ Unknown
		7-7/8" Hole
		Rods:
		· · · · · · · · · · · · · · · · · · ·
		PUMP:
<u></u>		
······		Perforations: San Andres
		San Andres: P-2
······································		
		3,478'-82', 3,499-3,518', 44-68', 73-76' w/ 2-JSPI P-2
		A total of 50' Net Perfs & 100 Holes.
		Casing:
	A N	112 jts(3,584') of 4-1/2", 9.5#, J-55, 8rd, ST&C Csg.
PBTD:	<u>3,508'</u>	Set @ 3,576'. Cmt'd w/ 500 sxs of Cl "C" Incor Cmt +
TD:	<u>3,576'</u>	12% Gel & Tailed w/ 300 sxs of Incor Neat.

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TOC @ Unknown

Remarks:	State Lease No.:			
	Polish Rod:			
	Polish Rod Liner:			 
	Pumping Unit:			 ·
	Well Head:			 *
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# CONDITION OF HOLE

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	<b>INJECTIOI</b>	N WELL	••••••					
							3/28/06	
FIELD:	Cato San Andres	·	LEASE:	Cato San	Andres Unit	WELL NO:	26	-
LEGAL:	1980' FNL & 198	0' FEL, Unit G	6, Sec. 11, T-	-8-S, R-30-E	E, NMPM, Chave	es County, NN	1	
API No.:		30-005-1051	4		SPUD DATE	:	09/07/66	
STATE LE	EASE No.:				COMPLETIC	ON DATE:	09/18/66	
REASON	FOR WORK:	To increase	water injectio	on.				
CONDITIC	ON OF HOLE:	-						
	TOTAL DEPTH:	3,605'	РВТС	<b>):</b> 3,582'		9.5'	Above:	4,167'
c	ASING RECORD:	16 jts (447')			ST&C Surf Csg 8rd, ST&C Prod			
Ĩ	PERFORATIONS				. A total of 28' N 2-JSPF. A total			P-1 €P-2
	TUBING DETAIL	: No Tbg in W	/ell					
w	ellhead Model, Ty	vpe & Rating:	:					
	Ρ	umping Unit:		<u></u>	·			
	& PUMP DETAIL: Rod Pump: Polish Rod: TORY REQUIREM	ENTS:			Pol Rod Lin	er:		
			WELL HI	STORY:				
9/7/66	Spud Well for Pa <b>Orignal Well Na</b> Ran 16 jts (447') Cmt'd w/ 300 sxs	me: Basket of 8-5/8", 24#	<b>D # 1</b> ≰, J-55, 8rd, \$	ST&C Surf (	Csg. Set Csg at			
9/15/66	Drilled 7-7/8" Ho Ran 114 jts (3,61 Cmt'd w/ 500 sxs <b>TOC @ Unknow</b>	2') of 4-1/2", of CI "C" Inc	9.5#, J-55, 8		-	• •		

- 9/17/66 Perf'd the P-1 f/ 3,456'-68', 78-80', 83-97' w/ 2-JSPF. A total of 28' Net Perfs & 56 Holes.
  Perf'd the P-2 f/ 3,534-48', 52-60', 67-69', 73-75' w/ 2-JSPF. A total of 26' Net Perfs & 52 Holes.
  Acidized the P-1 & P-2 f/ 3,456-3,575' w/ 2,000 gals of 15% LST-NE Acid. Drp'd 115 7/8" RCN BS f/ divert.
  Pmax: 2100#, Pmin: 1200#, ISIP: 1100#, 8min: Vac AIR: 6.8 BPM.
- 9/18/66 I P 'd: 360 BOPD, 0 BWPD, 240 MCFPD
- 2/13/71 Well was Converted f/ Production to Water Injection. POOH w/ Rod Pump, Rods & Tbg.
   Ran 111 jts(3,400') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston PC Ten Pkr. SPA 3,391'.
   Load Annulus w/ 37 bbls of Pkr Fluid. Start Wtr Inj on 9/23/72 in accordance with NMOCD Order # 3867-B,
   Dated: 8/7/72. Well Name has changed to CATO Baskett Pressure Maintence Project # 1
- 12/12/71 Acidize P-1 & P-2 as Follows: Set Pkr @ 3,514'(Between 2 Zones), Acidize P-1 Dwn Annulus w/ 1,500 gals & 1,125# Benzoic Acid Flakes. Flake Concen: 1/2 1 ppg. Pmax: 2500#, Acidize P-2 Dwn Tbg w/ 3,000 gals of 15% Suspending Acid. Pmax: 2400#, Pmin: 2000#, ISIP: 1500#, AIR: 3.1 BPM
- 5/17/83 Change of Ownership: Apollo Eneregy of Hobbs, NM bought the well.
- 2/2/88 Change of Ownership: Kelt Oil & Gas of Roswell, NM bought the well.
- 03/08/90 Well Name has changed to CATO San Andres Unit # 26
- 05/14/90 Well is Reclassified as a SWD by NMOCD Order # R-9029
- 05/18/95 Hole in Csg +/-600'. POH & LD Pkr & Tbg.
- 11/01/95 Change of Ownership: Secondary Oil Corp. of Marble Falls, TX bought the well.
- 12/01/97 Change of Ownership: Seirra Blanca Operating Co. of Cleburne, TX bought the well.
- 06/01/99 Change of Ownership: UHC New Mexico Corp. of Cleburne, TX bought the well.

12/27/05 Lothian Oil Bought the Well.

	LOTHIAN OIL,	NC.	
CA <sup>-</sup>	TO SAN ANDRES UNIT # 26		
	CATO FIELD	<b>Spudded</b> : 9/7/1966	
	INJECTION WELL	Completed: 9/18/1966	
Location	1980' FNL &1980' FEL, Unit G, Sec.11, T-8-S, R-30-	•	
Location.	NMPM, Chaves County, NM		
		12-1/4" Hole	
Elevation:	4,167'-KB, KB: 9.5'		
Lievation	<u></u>	Casing:	
Т	REATMENT HISTORY	16 jts(447') of 8 5/8", 24#, J-55, 8rd, 5	T&C Csg.
Date	Description	Set @ 453'.	
		Cmt'd w/ 300 sxs of Cl "C" Incor + 2	6 CaCl.
12/12/71	Acidize P-1 & P-2 as Follows: Set Pkr @ 3,514'	Circ Cmt to surf.	
	(Between 2 Zones), Acidize P-1 Dwn Annulus w/	HOLE in Csg: +/-600'	<u></u>
	1,500 gals & 1,125# Benzoic Acid Flakes. Flake		
	Concen: 1/2 - 1 ppg. Pmax: 2500#, Acidize P-2	Tubing;	
	Dwn Tbg w/ 3,000 gals of 15% Suspending Acid.	NONE	
	Pmax:2400#, Pmin:2000#, ISIP:1500#, AIR:3 BPM		
2/13/71	Well was Converted f/ Production to Water Injection		
	POOH w/ Rod Pump, Rods & Tbg. Ran 111 jts		
	(3,400') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg	TOC @ Unknown	
	w/ Johnston PC Ten Pkr. SPA 3,391'. Load		
	Annulus w/ 37 bbls of Pkr Fluid. Start Wtr Inj on	7-7/8" Hole	
	9/23/72 in accordance with NMOCD Order #3867-B		
	Dated: 8/7/72. Well Name has changed to CATO	Rods:	
	Baskett Pressure Maintence Project # 1		
9/17/66	Perf'd the P-1 f/ 3,456'-68', 78-80', 83-97' w/ 2-JSPF		
	A total of 28' Net Perfs & 56 Holes. Perf'd the P-2 f/	PUMP:	
	3,534-48', 52-60', 67-69', 73-75' w/ 2-JSPF. A total		
	of 26' Net Perfs & 52 Holes. Acidized the P-1 & P-2		
,	f/ 3,456-3,575' w/ 2,000 gals of 15% LST-NE Acid.		
	Drp'd 115 - 7/8" RCN BS f/ divert. Pmax: 2100#,		
	Pmin: 1200#, ISIP: 1100#, 8min: Vac, AIR: 7 BPM		
		Perforations: San Andres	
		San Andres: P-1 & P-2	
		3,456'-68', 78-80', 83-97' - 2-JSPF. A 1	otal of 28' Net Perfs & 56 Holes.
		3,534-48', 52-60', 67-69', 73-75' w/ 2	ISPF.
		A total of 26' Net Perfs	
		Casing:	
		1142 jts(3,612') of 4-1/2", 9.5#, J-55, 1	rd. ST&C Csg.
	PBTD: <u>3,582'</u>	Set @ 3,605'. Cmt'd w/ 500 sxs of Cl	
	TD: <u>3,605'</u>	12% Gel & Tailed w/ 300 sxs of Incor	and the second

TOC @ Unknown

Remarks:	State Lease No.:	
	Polish Rod:	
	Polish Rod Liner:	
	Pumping Unit:	
	Well Head:	

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# CONDITION OF HOLE

CONDITION OF HOLE								
	INJECTION	WELL					3/28/06	
FIELD: C	ato San Andres		LEASE:	Cato San A	ndres Unit	WELL NO:	32	
LEGAL: 19	980' FNL & 660'	FWL, Unit E	, Sec. 10, T-	-8-S, R-30-E, I	NMPM, Chave	s County, NM		
API No.:		30-005-1052	22		SPUD DATE	:	09/26/66	
STATE LEAS	SE No.:				COMPLETIC	ON DATE:	10/17/66	
REASON FO	R WORK:	To increase	water injecti	ion.				
CONDITION	OF HOLE:							
Т	OTAL DEPTH:	3,410'	_ PBTI	D: <u>3,388'</u>	KB DATUM:	9.5'	Above:	4,071'-KB
CAS	SING RECORD:				Surf Csg. Set C Prod Csg. Se		0'.	
PE	PERFORATIONS: 3,261'-88', 3,331-36', 42-46', 53-80' w/ 2-JSPF. A total of 43' Net Perfs & 86 Holes.							loles.
τι	JBING DETAIL:	No Tbg in W	/ell					
Well	head Model, Ty	pe & Rating	:					
	P	umping Unit	:					
	UMP DETAIL: Rod Pump: Polish Rod:	ENTS:			Pol Rod Lin	er:		
REGULATO								
	WELL HISTORY:							
<ul> <li>9/26/66 Spud Well for Pan American Petrol. Corp. w/ Cactus Drilling with 12-1/4" hole to 458'.</li> <li>Orignal Well Name: Queen # 2</li> <li>Ran 14 jts of 8-5/8", 24#, J-55, 8rd, ST&amp;C Surf Csg. Set Csg at 458'.</li> <li>Cmt'd w/ 300 sxs of Cl "C" Incor + 2% CaCl. Circ Cmt to Surf.</li> </ul>								

 10/3/66
 Drilled 7-7/8" Hole to TD @ 3,410'.

 Ran 108 jts of 4-1/2", 9.5#, J-55, 8rd, ST&C Prod Csg. Set Csg @ 3,410'.

 Cmt'd w/ 500 sxs of Cl "C" Incor +12% Gel & Tailed w/ 300 sxs of Incor Neat.

 TOC @ Unknown

- 10/7/66 Perf'd the P-2 f/ 3,261'-88', 3,331-36', 42-46', 53-80' w/ 2-JSPF. A total of 43' Net Perfs & 86 Holes. Acidized the P-2 f/ 3,261-3,380' w/ 2,000 gals of 15% LST-NE Acid. Drp'd 130 RCN BS f/ divert. Pmax: 2650#, Pmin: 1500#, ISIP: 2000#, AIR: 4 BPM.
- 10/9/66 Frac the P-2 f/ 3,261-3,380 w/ 30,000 gals of LO + 40,500# Sd + 3,000# Glass Beads Sd Conc: 1-1/2 ppg, Bead Conc: 1 ppg. Pmax: 4000#, Pmin: 3800#, ISIP: 2850#
- 10/17/66 I P 'd: 95 BOPD, 1 BWPD, 20 MCFPD
- 5/17/83 Change of Ownership: Apollo Energy of Hobbs, NM bought the well.
- 6/27/83 Pump chemical Sqz w/ HOWCO's C-Dex.Pump 295 gals of C-Dex Dwn Csg + 500 gals of 28% Acid + 3 gals of marflo + 2 gals of Musol.
- 2/2/88 Change of Ownership: Kelt Oil & Gas of Roswell, NM bought the well.
- 03/08/90 Well Name has changed to CATO San Andres Unit # 32
- 8/10/90 Well was Converted f/ Production to Water Injection. POOH w/ Rod Pump, Rods & Tbg.
  Ran 104 jts of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston PC Ten Pkr. SPA 3,212'.
  Load Annulus w/ 31 bbls of Pkr Fluid. Start Wtr Inj on 8/11/90 in accordance with NMOCD Order # 9029, Dated: 10/30/89.
- 5/9/95 Unset Pkr. POOH & LD Pkr & Tbg. Close well In.
- 11/01/95 Change of Ownership: Secondary Oil Corp. of Marble Falls, TX bought the well.
- 12/01/97 Change of Ownership: Seirra Blanca Operating Co. of Cleburne, TX bought the well.
- 06/01/99 Change of Ownership: UHC New Mexico Corp. of Cleburne, TX bought the well.
- 10/02/02 Lose Fluid coming OOH w/ Swab. Possible Hole in Csg.
- 12/27/05 Lothian Oil Bought the Well.

	LOTHIAN OIL, I	NC.	
CA.	TO SAN ANDRES UNIT # 32		
04	CATO FIELD		Spudded: 9/26/1966
	INJECTION WELL		Completed: 10/17/1966
Leastion	1980' FNL & 660' FWL, Unit E, Sec.10, T-8-S, R-30-E,		API # : 30-005-10522
Location:	NMPM, Chaves County, NM		
	NMPM, Chaves County, NM		12-1/4" Hole
Flovation	4,071'-KB, KB: 9.5'		
Elevation.	4,071-4(0), 1(0), 0.0		Casing:
T	REATMENT HISTORY		14 jts of 8 5/8", 24#, J-55, 8rd, ST&C Csg.
Date	Description		Set @ 458'.
			Cmt'd w/ 300 sxs of CI "C" incor + 2% CaCl.
10/02/02	Lose Fluid coming OOH w/ Swab. Possible Hole		Circ Cmt to surf.
	in Csg.		
8/10/90	Well was Converted f/ Production to Water Injection		
··· · ·	POOH w/ Rod Pump, Rods & Tbg. Ran 104 jts of		Tubing;
	2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston		NONE
	PC Ten Pkr. SPA 3,212'. Load Annulus w/ 31 bbls		
	of Pkr Fluid. Start Wtr Inj on 8/11/90 in accordance		
	with NMOCD Order # 9029, Dated: 10/30/89.		TOC @ Unknown
6/27/83	Pump chemical Sqz w/HOWCO's C-Dex.Pump 295		
	gals of C-Dex Dwn Csg + 500 gals of 28% Acid +		
	3 gals of marfio + 2 gals of Musol.		7-7/8" Hole
10/9/66	Frac the P-2 f/ 3,261-3,380 w/ 30,000 gals of LO +		
	40,500# Sd + 3,000# Glass Beads. Sd Conc: 1-1/2		Rods:
	ppg, Bead Conc: 1 ppg. Pmax: 4000#,		
	Pmín: 3800#, ISIP: 2850#		
10/7/66	Perf'd the P-2 f/ 3,261'-88', 3,331-36', 42-46', 53-80'		PUMP:
	w/ 2-JSPF. A total of 43' Net Perfs & 86 Holes.		
	Acidized the P-2 f/ 3,261-3,380' w/ 2,000 gals of		
	15% LST-NE Acid. Drp'd 130 RCN BS f/ divert.		
	Pmax: 2650#, Pmin: 1500#, ISIP: 2000#,		
	AIR: 4 BPM.		
			Perforations: San Andres
			San Andres: P-2
<u>.,</u>			3,261'-88', 3,331-36', 42-46', 53-80' w/ 2-JSPF. P-2
			A total of 43' Net Perfs & 86 Holes.
			Casing:
		1 N	108 jts of 4-1/2", 9.5#, J-55, 8rd, ST&C Csg.
	PBTD: <u>3,388'</u>		Set @ 3,410'. Cmt'd w/ 500 sxs of Cl "C" Incor Cmt +
	TD: <u>3,410'</u>		12% Gel & Tailed w/ 300 sxs of Incor Neat.

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TOC @ Unknown

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Remarks:	State Lease No.:	
	Polish Rod:	
	Polish Rod Liner:	
	Pumping Unit:	
	Well Head:	

# CONDITION OF HOLE

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	INJECTIOI	<u>N WELL</u>						
							3/27/06	i
FIELD:	Cato San Andres	LEA	<b>.SE</b> : <u>(</u>	Cato San A	ndres Unit	WELL NO:	51	_
LEGAL:	1980' FSL & 700'	FEL, Unit I, Sec. 1	11, T-8-S,	R-30-E, N	MPM, Chaves	County, NM		
API No.:		30-005-10539				<b>:</b> :	11/02/66	
STATE LE	EASE No.:				COMPLETI	ON DATE:	11/24/66	
REASON	FOR WORK:	To increase water	r injection.					
CONDITIC	ON OF HOLE:							
	TOTAL DEPTH:	3,668'	PBTD: _	3,647'		:	Above:	4,168'-KB
С	ASING RECORD:	16 jts (451') of 8-{ 116 jts (3,676') of						
	PERFORATIONS:	3,514'-57' w/ 2-JS 3,584'-3,628' w/ 2						P-1 P-2
	TUBING DETAIL:	No Tbg in Well						
W	eilhead Model, Ty	vpe & Rating:						
	P	umping Unit:						
	Rod Pump: Rod Pump: Polish Rod:				Pol Rod Lir	ner:		
REGULA	ORY REQUIREM	ENTS:	<del></del>					
WELL HISTORY:								
11/2/66	<b>Orignal Well Na</b> Ran 16 jts (451')	n American Petrol. <b>me: Basket D # 4</b> of 8-5/8", 24#, J-5: s of Cl "C" Incor + 2	5, 8rd, ST8	&C Surf Cs	g. Set Csg at			
11/14/66		'6') of 4-1/2", 9.5#, of CI "C" Incor +1:						

- 11/17/66 Perfd the P-2 f/ 3,584'-3,628' w/ 2-JSPF. A total of 44' Net Perfs & 88 Holes. Acidized the P-2 f/ 3,584-3,628' w/ 2,000 gals of 15% DS-30 Acid. Drp'd 100 7/8" RCN BS f/ divert. Pmax: 3300#, Pmin: 2700#, ISIP: 2600#, AIR: 2.2 BPM.
- 11/21/66 Frac the P-2 f/ 3,584-3,628' w/ 30,000 gals of Gelled Brine + 15,000# Sd + 3,000# Glass Beads. Sd Concen: 1/2 ppg. Pmax: 3900#, Pmin: 3500#, ISIP: 2200#, AIR: 43 BPM
- 11/28/66 I P'd: 56 BOPD, 42 BWPD, 0 MCFPD
- 12/1/66 Perf'd the P-1 f/ 3,514'-57' w/ 2-JSPF. A total of 43' Net Perfs & 86 Holes. Acidized the P-1 f/ 3,514-57' w/ 3,000 gals of 28% DS-30 Acid. Pmax: 4200#, Pmin: 1000#, ISIP: 1800#, 15min: Vac AIR: 7.6 BPM.
- 11/17/69 Well was Converted f/ Production to Water Injection. POOH w/ Rod Pump, Rods & Tbg. Ran 114 jts(3,509') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston PC Ten Pkr. SPA 3,400'. Load Annulus w/ 58 bbls of Pkr Fluid. Start Wtr Inj on 9/23/72 in accordance with NMOCD Order # 3867-B, Dated: 8/7/72. Well Name has changed to CATO Baskett Pressure Maintence Project # 4
- 2/19/70 Acidize the P-1 & P-2 w/ 1,000 gals of 15% Suspending Acid. Pmax: 1850#, Pmin: 1700#, ISIP: 1800#, AIR: 1 BPM.
- 5/17/83 Change of Ownership: Apollo Energy of Hobbs, NM bought the well.
- 2/2/88 Change of Ownership: Kelt Oil & Gas of Roswell, NM bought the well.
- 03/08/90 Well Name has changed to CATO San Andres Unit # 51
- 05/14/90 Well is Reclassified as a SWD by NMOCD Order # R-9029
- 11/01/95 Change of Ownership: Secondary Oil Corp. of Marble Falls, TX bought the well.
- 12/01/97 Change of Ownership: Seirra Blanca Operating Co. of Cleburne, TX bought the well.
- 06/01/99 Change of Ownership: UHC New Mexico Corp. of Cleburne, TX bought the well.

12/27/05 Lothian Oil Bought the Well.

	LOTHIAN OIL, I	NC.	
CA.	TO SAN ANDRES UNIT # 51		
•//	CATO FIELD		Spudded: 11/2/1966
			Completed: 11/24/1966
Locations	INJECTION WELL		•
Location:	1980' FSL & 700' FEL, Unit I, Sec.11, T-8-S, R-30-E,		<b>API #</b> : <u>30-005-105</u> 39
	NMPM, Chaves County, NM		12-1/4" Hole
Elevation			
Elevation:	<u>4,168'-KB, KB:</u>		Casing:
T	REATMENT HISTORY		16 jts(451') of 8 5/8", 24#, J-55, 8rd, ST&C Csg.
Date	Description		Set @ 458'.
	· ·		Cmt'd w/ 300 sxs of CI "C" Incor + 2% CaCI.
2/19/70	Acidize the P-1 & P-2 w/ 1,000 gals of 15%		Circ Cmt to surf.
	Suspending Acid. Pmax: 1850#, Pmin: 1700#,		
	ISIP: 1800#, AIR: 1 BPM.		
11/17/69	Well was Converted f/ Production to Water Injection		Tubing;
	POOH w/ Rod Pump, Rods & Tbg. Ran 114 jts		NONE
	(3,509') of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg		
	w/ Johnston PC Ten Pkr. SPA 3,400'. Load		
	Annulus w/ 58 bbls of Pkr Fluid. Start Wtr Inj on		TOC @ Unknown
	9/23/72 in accordance with NMOCD Order #3867-B		
	Dated: 8/7/72. Well Name has changed to CATO		
	Baskett Pressure Maintence Project # 4		7-7/8" Hole
12/1/66	Perfd the P-1 f/ 3,514'-57' w/ 2-JSPF. A total of 43'		
	Net Perfs & 86 Holes. Acidized the P-1 f/ 3,514-57'		Rods:
	w/ 3,000 gals of 28% DS-30 Acid. Pmax: 4200#,		• • • • • • • • • • • • • • • • • • •
<u></u>	Pmin:1000#, ISIP:1800#, 15min:Vac, AIR:7.6 BPM		· · · · · · · · · · · · · · · · · · ·
11/21/66	Frac the P-2 f/ 3,584-3,628' w/30,000 gals of Gelled		PUMP:
	Brine + 15,000# Sd + 3,000# Glass Beads. Sd		
	Concen: 1/2 ppg. Pmax: 3900#, Pmin: 3500#,		
	ISIP: 2200#, AIR: 43 BPM		
11/17/66	Perf'd the P-2 f/ 3,584'-3,628' w/ 2-JSPF. A total of		
	44' Net Perfs & 88 Holes. Acidized the P-2 f/		
·	3,584-3,628' w/ 2,000 gals of 15% DS-30 Acid.		
	Drp'd 100 7/8" RCN BS f/ divert. Pmax: 3300#,		Perforations: San Andres
	Pmin: 2700#, ISIP: 2600#, AIR: 2.2 BPM.		San Andres: P-1 & P-2
<del>.</del>			
			3,514'-57' w/ 2-JSPF. A total of 43' Net Perfs & 86 Holes. P-1
			3,584'-3,628' w/ 2-JSPF. A total of 44' Net Perfs & 88 Hole: P-2
			Casing:
		ZN	116 jts(3,676') of 4-1/2", 9.5#, J-55, 8rd, ST&C Csg.
	PBTD: <u>3,647'</u>		Set @ 3,668'. Cmt'd w/ 500 sxs of CI "C" Incor Cmt +
	TD: <u>3,668'</u>		12% Gel & Tailed w/ 300 sxs of Incor Neat.

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TOC @ Unknown

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Remarks:	State Lease No.:	
	Polish Rod:	
	Polish Rod Liner:	
	Pumping Unit:	
	Well Head:	
	weii neau.	

# CONDITION OF HOLE

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	INJECTION							
	MJLCHO	<u> </u>					3/27/06	
FIELD:	Cato San Andres	L	EASE:	Cato San /	Andres Unit	_ WELL NO:	54	
LEGAL:	660' FSL & 1980'	FEL, Unit O, S	ec. 11, T-8-S	5, R-30-E, I	NMPM, Chave	s County, NM		
API No.:		30-005-10528			SPUD DATE	<b>:</b> :	10/09/66	
STATE LEASE No.: COMPLETION DATE:							10/23/66	
						-		
REASON	FOR WORK:	To increase wa	ater injection.					
	ON OF HOLE:	-						
	TOTAL DEPTH:	3,644'	PBTD:	3,616'		: 	Above:	4,150'-KB
С	ASING RECORD:	16 jts (452') of 114 jts (3,652')						
	PERFORATIONS:	3,500'-06', 3,5 3,564'-3,610' w					& 48 Holes	.P-1 P-2
	TUBING DETAIL:	No Tbg in Wel	l					
W	ellhead Model, Ty	pe & Rating:						
	P	umping Unit:						
-	PUMP DETAIL: Rod Pump: Polish Rod: FORY REQUIREM	ENTS:			Pol Rod Lin	ier:		
			VELL HIS					
10/9/66	• • • • • • • • • • • • • • • • • • • •		•	Chico Dril	ing with 12-1/4	1" hole to 459'.		
	Orignal Well Nat Ran 16 jts (452')			&C Surf C	sg. Set Csa at	459'.		
	Cmt'd w/ 300 sxs				• •			
10/19/66	Drilled 7-7/8" Hol	e to TD @ 3,64	4'.					
	Ran 114 jts (3,65	2') of 4-1/2", 9.5	5#, J-55, 8rd,					
	Cmt'd w/ 500 sxs TOC @ Unknow		+12% Gel &	Tailed w/ 3	300 sxs of Inco	or Neat.		

- 10/21/66 Perf'd the P-2 f/ 3,564'-3,610' w/ 2-JSPF. A total of 46' Net Perfs & 92 Holes. Acidized the P-2 f/ 3,564-3,610' w/ 2,000 gals of 15% LST-NE Acid. Drp'd 100 7/8" RCN BS f/ divert. Pmax: 2700#, Pmin: 1800#, ISIP: 1300#, 15min: Vac, AIR: 5.6 BPM.
- 10/21/66 I P'd: 280 BOPD, 0 BWPD, 174 MCFPD
- 9/24/72 Perf'd the P-1 f/ 3,500'-06', 3,510-16', 3,518-30' w/ 2-JSPF. A total of 24' Net Perfs & 48 Holes. Perf'd w/ 3-1/8", 0.49" Dia, 2-JSPF Csg Guns. Acidized the P-1 f/ 3,500-30' w/ 1,000 gals of 15% LST-NE Acid. FRMBRKDWN: 550#, Pmax: 2400#, Pavg: 2250#, ISIP: 700#, 1min: Vac AIR: 5.6 BPM.
- 9/25/72 Well was Converted f/ Production to Water Injection. POOH w/ Rod Pump, Rods & Tbg. Ran 114 jts of 2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston PC Ten Pkr. SPA 3,450'. Load Annulus w/ 58 bbls of Pkr Fluid. Start Wtr Inj on 9/23/72 in accordance with NMOCD Order # 3867-B, Dated: 8/7/72. Well Name has changed to CATO Baskett Pressure Maintence Project # 3
- 11/22/76 HIT. Pkr Coupling Broke. Push Johnston Ten Pkr to PBTD. Ran new 4-1/2" Johnston Ten Pkr to 3,426'.
- 5/17/83 Change of Ownership: Apollo Eneregy of Hobbs, NM bought the well.
- 2/2/88 Change of Ownership: Kelt Oil & Gas of Roswell, NM bought the well.
- 03/08/90 Well Name has changed to CATO San Andres Unit # 54
- 05/14/90 Well is Reclassified as a SWD by NMOCD Order # R-9029
- 11/01/95 Change of Ownership: Secondary Oil Corp. of Marble Falls, TX bought the well.
- 12/01/97 Change of Ownership: Seirra Blanca Operating Co. of Cleburne, TX bought the well.
- 06/01/99 Change of Ownership: UHC New Mexico Corp. of Cleburne, TX bought the well.

12/27/05 Lothian Oil Bought the Well.

LOTHIAN OIL, INC.	
CATO SAN ANDRES UNIT # 54	
CATO FIELD	Spudded: 10/9/1966
INJECTION WELL	Completed: 10/23/1966
Location: 660' FSL & 1980' FEL, Unit O, Sec.11, T-8-S, R-30-E,	API # : 30-005-10528
NMPM, Chaves County, NM	
	12-1/4" Hole
Elevation: 4,150'-KB, KB:	
	Casing:
TREATMENT HISTORY	16 jts(452') of 8 5/8", 24#, J-55, 8rd, ST&C Csg.
Date Description	
11/22/76 HIT. Pkr Coupling Broke. Push Johnston Ten Pkr	Cmt'd w/ 300 sxs of Cl "C" Incor + 2% CaCl. Circ Cmt to surf.
to PBTD. Ran new 4-1/2" Johnston Ten Pkr to 3,426'	
9/25/72 Well was Converted f/ Production to Water Injection	
POOH w/ Rod Pump, Rods & Tbg. Ran 114 jts of	Tubing;
2-3/8", 4.7#, J-55, EUE, 8rd, PCID Tbg w/ Johnston	NONE
PC Ten Pkr. SPA 3,450'. Load Annulus w/ 58	
bbls of Pkr Fluid. Start Wtr Inj on 9/23/72 in	
accordance with NMOCD Order # 3867-B, Dated:	TOC @ Unknown
8/7/72. Well Name has changed to CATO Baskett	
Pressure Maintence Project # 3	
9/24/72 Perfd the P-1 f/ 3,500'-06', 3,510-16', 3,518-30' w/	7-7/8" Hole
2-JSPF. A total of 24' Net Perfs & 48 Holes. Perfd	
w/ 3-1/8", 0.49" Dia, 2-JSPF Csg Guns. Acidized	Rods:
the P-1 f/ 3,500-30' w/ 1,000 gals of 15% LST-NE	
Acid. FRMBRKDWN: 550#, Pmax: 2400#, Pavg:	
2250#, ISIP: 700#, 1min: Vac AIR: 5.6 BPM 10/21/66 Perfd the P-2 f/ 3,564'-3,610' w/ 2-JSPF. A total of	PUMP:
46' Net Perfs & 92 Holes. Acidized the P-2 f/	
3,564-3,610' w/ 2,000 gals of 15% LST-NE Acid.	
Drp'd 100 7/8" RCN BS f/ divert. Pmax: 2700#,	
Pmin: 1800#, ISIP: 1300#, 15min: Vac,	
AIR: 5.6 BPM.	
	Perforations: San Andres
	San Andres: P-1 & P-2
	3,500'-06', 10-16', 18-30' w/ 2-JSPF. A total of 24' Net Perfs & 48 Holes. P-1
III	3,564'-3,610' w/ 2-JSPF. A total of 46' Net Perfs & 92 Hole: P-2
	Casing:
	114 jts(3,652') of 4-1/2", 9.5#, J-55, 8rd, ST&C Csg.
PBTD: <u>3,616'</u> TD: <u>2,644'</u>	Set @ 3,644'. Cmt'd w/ 500 sxs of CI "C" Incor Cmt +
TD: <u>3,644'</u>	12% Gel & Tailed w/ 300 sxs of Incor Neat.

TOC @ Unknown

Remarks:	State Lease No.:	
	Polish Rod:	
	Polish Rod Liner:	
	Pumping Unit:	 
	Well Head:	

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# CATO SAN ANDRES UNIT

## WELLS WITHIN A 1/2 MILE CIRCLE OF CAPTIONED INJECTION WELL

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21	P & A'd WELLS:	3	2/13/1975
	INACTIVE WELLS:	22, 25, 27,	, 28, 29, 49, 50 - NO PROD. SINCE 2003
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	INJECT. WELLS:	23, 26	
23	P & A'd WELLS:	3	2/13/1975
	INACTIVE WELLS:	22, 24, 25,	27, 50 - NO PROD. SINCE 2003
	PROD. WELLS:	6	
	INJECT. WELLS:	21, 26, 51	
26	P & A'd WELLS:	3	2/13/1975
			27, 28, 49, 50, 55 - NO PROD. SINCE 2004
	PROD. WELLS:	6, 20	
	INJECT. WELLS:	21, 23, 51,	54
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32	P & A'd WELLS:		
	INACTIVE WELLS:	15, 17, 18,	30, 31, 34, 45, 46, 47, 59, 60, 61 - NO PROD. SINCE 2003
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P & A'd WELLS:

INACTIVE WELLS: 22, 24, 25, 27, 50, 52, 53, 55, 80, 82 - NO PROD. SINCE 2004 PROD. WELLS: INJECT. WELLS: 23, 26, 54, 81 P & A'd WELLS:

INACTIVE WELLS: 27, 49, 50, 52, 53, 55, 56, 78, 80, 82, 84, 85, 86 - NO PROD. SINCE 2004 PROD. WELLS: INJECT. WELLS: 26, 51, 79, 81

54

LOTHIAN OIL, INC.	
CATO SAN ANDRES UNIT #330	
CATO FIELD	Spudded: 12/12/2000
	Completed: 3/14/2001
Location: 1340' FSL & 1308' FEL, Unit I, Sec.9, T-8-S, R-30-E	API # : 30-005-21165
NMPM, Chaves County, NM	
	12-1/4" Hole
Elevation: 4,074'-GL, 4,080'-KB, KB: 6'	<b>.</b> .
TREATMENT HISTORY	12 jts(515') of 8 5/8", 24#, J-55, 8rd, ST&C Csg.
Date Description	
2/26/01 Perf'd the P-2 f/ 3,305 - 56' w/ 2-JSPF. A Total of	Cmt'd w/ 254 sxs of Cl "C" + 2% CaCl Circ Cmt to surf.
2/26/01 Perfd the P-2 f/ 3,305 - 56' w/ 2-JSPF. A Total of 51' Net Perfs & 102 Holes. Acidized the P-2 f/	
3,305 - 56' w/ 6,000 gals of 15% NEFE HCL Acid.	
	Tubing;
2570#, Pavg: 2490#, ISIP: 1430#,	105 jts of 2-3/8", 4.7#, J-55, 8rd. EUE
AIR: 3.8 BPM, FRMBRKDWN: 1670#	EOT @ 3,425', SN @ 3,425', BTM-MA @ 3,463'
12/18/00 Drilled 7-7/8" Hole to TD @ 3,560'.	
Ran 85 jts of 5-1/2", 17#, J-55, 8rd, ST&C Prod	TOC @ 1,180' by Calc.
Csg. Set Csg @ 3,560'. Cmt'd w/ 275 sxs of Cl "C"	
Cmt + 6% Bentonite + 1/4#/sx Flocele + 5% CaCl	
& Tailed w/ 378 sxs of Cl "C" + 0.6% FL-2 + 0.2%	7-7/8" Hole
NaCl + 1/4#/sx Flocele. TOC @ 1,180' by Calc.	P. 4
12/12/00 Spud Well for UHC New Mexico Corp. w/ United Drilling, Inc. with 12-1/4" hole to 522'. Ran 12 its	Rods: 136 - 3/4" KD, 2 - 3/4" X 2' KD - Pony Rods
of 8-5/8", 24#, J-55, 8rd, ST&C Surf Csg. Set Csg	136-3/4 KD, 2-3/4 K2 KD - Folly Rous
at 515'. Cmt'd w/ 254 sxs of Cl "C" + 2% CaCl.	PUMP: 2" x 1-1/2" x 12' RWBC D.V., T.P.
Circ Cmt to Surf.	
	Perforations:
	San Andres: P-2
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	3,305 - 56' w/ 2-JSPF. A Total of 51' Net Perfs & 102 Holes.
PBTD: <u>3,520'</u>	Casing:
TD: <u>3,560'</u>	85 jts(3,560') of 5-1/2", 17#, J-55, 8rd, ST&C Csg.
	Set @ 3,560'. Cmt'd w/ 275 sxs of Cl "C" Cmt + 6%
	Bentonite + 5% CaCl + 1/4#/sx Flocele & Tailed w/ 378 sxs.

of CI "C" + 0.6% FL-2 + 0.2% NaCI + 1/4#/sx Flocele.

TOC @ 1,180' by Calc.

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# **CATO SAN ANDRES UNIT**

# INJECTION WELLS

WELL #	API#	NMOCD ORDER #	LEGAL DESCRIPTION	P.4	PERFS P-2	P-3	PKR. DEPTH	TUBING DETAILS
21	30-005-20069	R-3867-B	R-3867-B 660' FNL & 1980' FWL, Unit C, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM	3,383'-92', 3,403-26', 54-77'			NONE	NO TUBING IN WELL
23	30-005-10523	R-3867-B	R-3867-B 660' FNL & 660' FEL, Unit A, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM	3,478'-82', 3,499-3,518', 44-68', 73-76'			NONE	NO TUBING IN WELL
26	30-005-10514	R-3867-B	1980' FNL & 1980' FEL, Unit G, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM	3,456'-68', 78-80', 83-97'	3,534-48', 52-60', 67-69', 73-75'		NONE	NO TUBING IN WELL
32	30-005-10522	R-9029	1980' FNL & 660' FWL, Unit E, Sec. 10, T-8-S, R-30-E, NMPM, Chaves County, NM	3,261'-88', 3,331-36', 42-46', 53-80'			NONE	NO TUBING IN WELL
51	30-005-10539	R-3867-B	1980' FSL & 700' FEL, Unit I, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM	3,514'-57'	3,584'-3,628'		NONE	NO TUBING IN WELL
54	30-005-10528	R-3867-B	R-3867-B 660' FSL & 1980' FEL, Unit O, Sec. 11, T-8-S, R-30-E, NMPM, Chaves County, NM	3,500'-06', 3,510-16', 3,518-30'	3,564'-3,610'		NONE	NO TUBING IN WELL