

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico

Minerals and Natural Resources

Form C-101

May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Chesapeake Operating, Inc. P.O. Box 18496 Oklahoma City, OK 73154-0496		² OGRID Number 147179
³ Property Code 300164		⁴ Property Name Hornet State
⁵ Proposed Pool 1 Wildcat; San Andres Oil		⁶ Well No 1
⁷ Surface Location		⁸ Proposed Pool 2

Surface Location

UL or lot no D	Section 3	Township 19S	Range 34E	Lot Idn	Feet from the 760'	North/South line North	Feet from the 660'	East/Westline West	County Lea
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Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
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Additional Well Information

¹¹ Work Type Code E P	¹² Well Type Code O	¹³ Cable/Rotary C	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4002'
¹⁶ Multiple No	¹⁷ Proposed Depth 7000'	¹⁸ Formation San Andres	¹⁹ Contractor TBA	²⁰ Spud Date 05/26/2008
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit. Liner Synthetic <input type="checkbox"/> milstuck Clay <input type="checkbox"/> Pit Volume _____ bbls Drilling Method _____ Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48#	911'	800 sxs.	Surface
12 1/4"	8 5/8"	32#	5174'	2150 sxs.	Surface
7 7/8"	5 1/2"	17.5#	13,800'	1950 sxs.	1970'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Chesapeake Operating, Inc. respectfully request recompleting this well bore per the attached procedure. Please find the recompletion procedure, NMOCD's form C-102, well bore diagram, log section for the proposed perf intervals in the San Andres and site map.

Steel working pits will be used in the re-completion of this well.

NMOCD Form C-144 is also attached.

Permit Expires 2 Years From Approval

Date Unless Drilling Underway

Plugback

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name. Linda Weeks

Title. Reg Compliance Specialist

E-mail Address linda.weeks@chk.com

Date: 05/22/2008

Phone. (405)879-6854

OIL CONSERVATION DIVISION

Approved by

Title. OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date

MAY 28 2008

Expiration Date

Conditions of Approval Attached ☐

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-36391		Pool Code	Pool Name Wildcat; San Andres Oil
Property Code 300164	Property Name Hornet State		Well Number 1
OGRID No. 147179	Operator Name Chesapeake Operating, Inc.		Elevation 4002'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	3	19S	34E		760'	North	660'	West	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40		Joint or Infill		Consolidation Code		Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

					<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division</p> <p><i>Linda Weeks</i> 05/23/2008 Signature Date</p> <p>Linda Weeks-Reg. Compliance Specialist Printed Name</p>
					<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</p>
					<p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>Please refer to original plat</p> <p>Certificate Number</p>



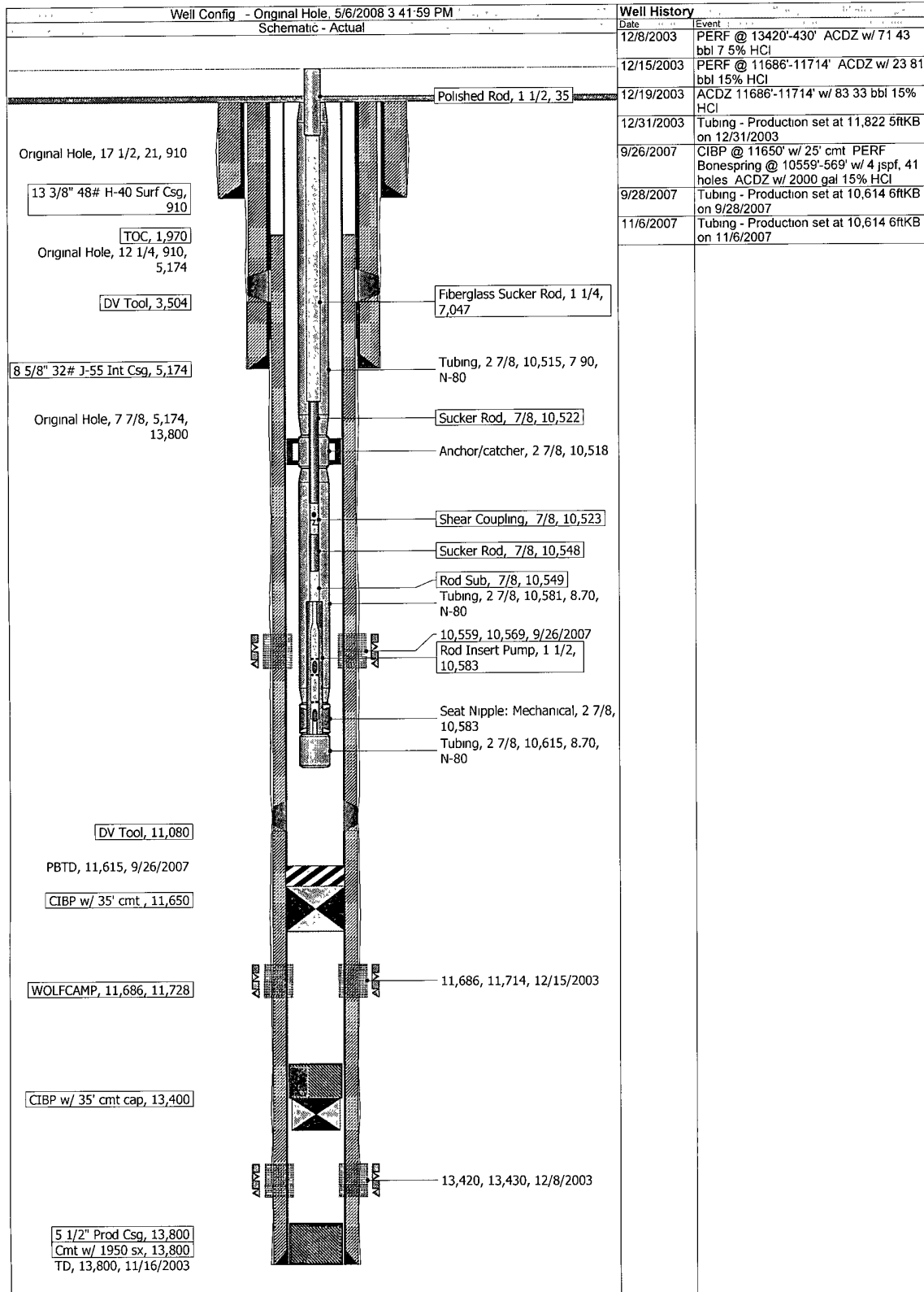
Current Wellbore Schematic

HORNET STATE 1

Field: LARICA MORROW EAST
County: LEA
State: NEW MEXICO
Elevation: GL 4,002.00 KB 4,023.00
KB Height: 21.00

Location: SEC 3, 19S-34E, 760 FNL & 660 FWL

Spud Date: 9/13/2003
Initial Compl. Date:
API #: 3002536391
CHK Property #: 890673
1st Prod Date: 1/7/2004
PBTD: Original Hole - 11615.0
TD: 13,800.0





**Hornet State 1
San Andres Re-Completion
Lea County, New Mexico**

Well Information

Location: 760' FNL & 660' FWL Sec. 3-T19S-R34E

Prod. Casing: 5-1/2", 17.5# casing 0-13,800', ID-4.892", Drift-4.767", Burst-7,740#, DV tool a 11,080', TOC @ 1,970'

Tubing: 2-7/8", N-80 production tubing with TAC set at 10,518' and SN at 10,583'
1-1/2" insert pump with 7/8" rod string

PBTD/TD: 11,650' / 13,800'

Existing Perfs: 10,559' – 10,569' Bone Springs
11,686' – 11,714' Wolfcamp (below CIBP & 35' cmt at 11,650')
13,420' – 13,430' Morrow (below CIBP & 35' cmt at 13,400')

Procedure

1. Safety meetings are to be held prior to each day as well as prior to each major operation.
2. Prepare location. MIRU workover rig. TOH with 7/8" rod string and 1-1/2" insert pump, LD.
3. ND WH. NU BOP. Unset TAC set at 11,518' and TOH with 2-7/8" production tubing (EOT at 10,615').
4. MIRU wireline unit. PU and RIH with 5-1/2" CIBP and set at 10,520', POH. RIH with dump bailer and dump 35' cement on top of CIBP set at 10,520', POH. RIH and set 5-1/2" CIBP at ~7,000', POH. RIH with dump bailer and dump 35' cement on top of CIBP set at 7,000', POH. Pressure test plugs to ensure they are set and holding.
5. RIH and perforate San Andres as follows:

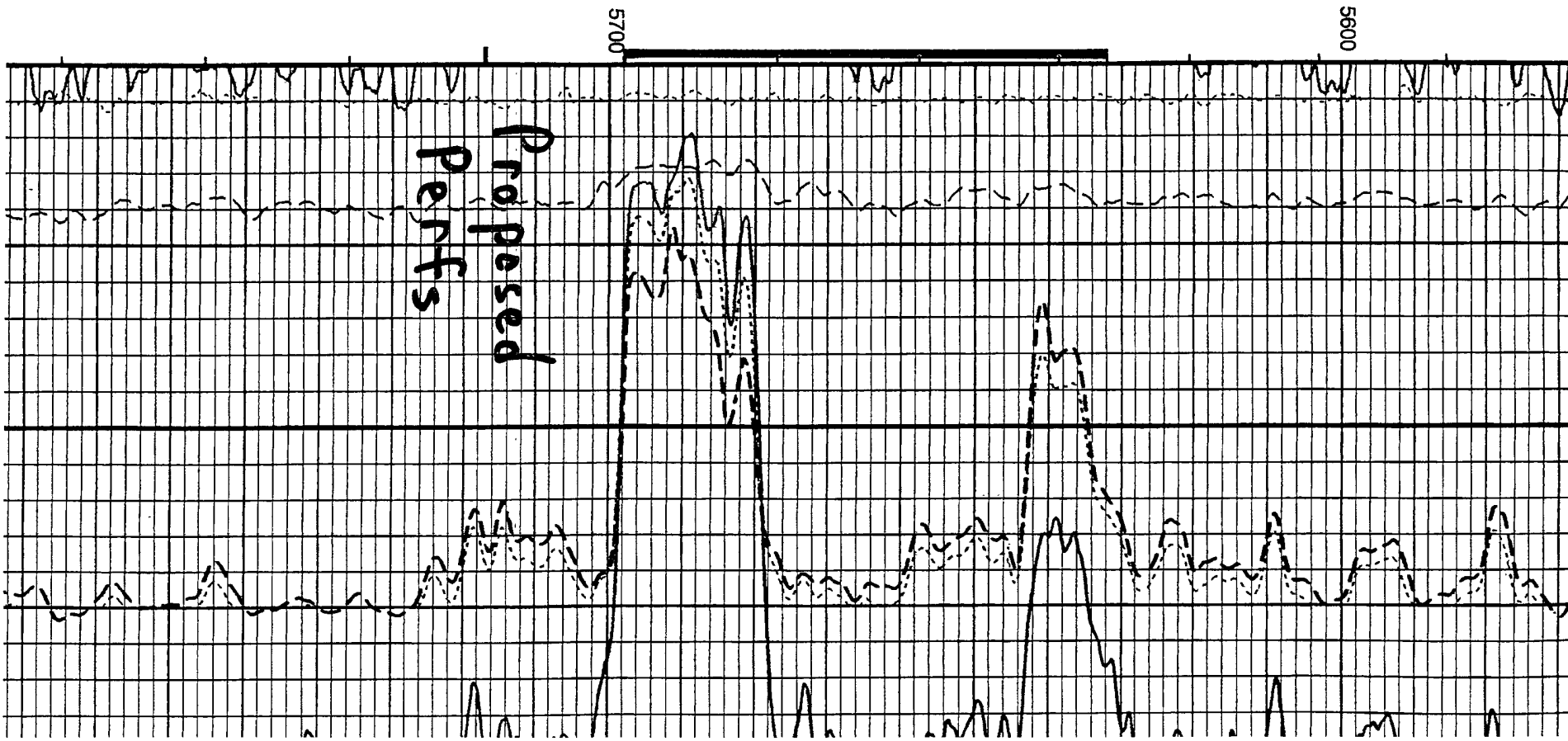
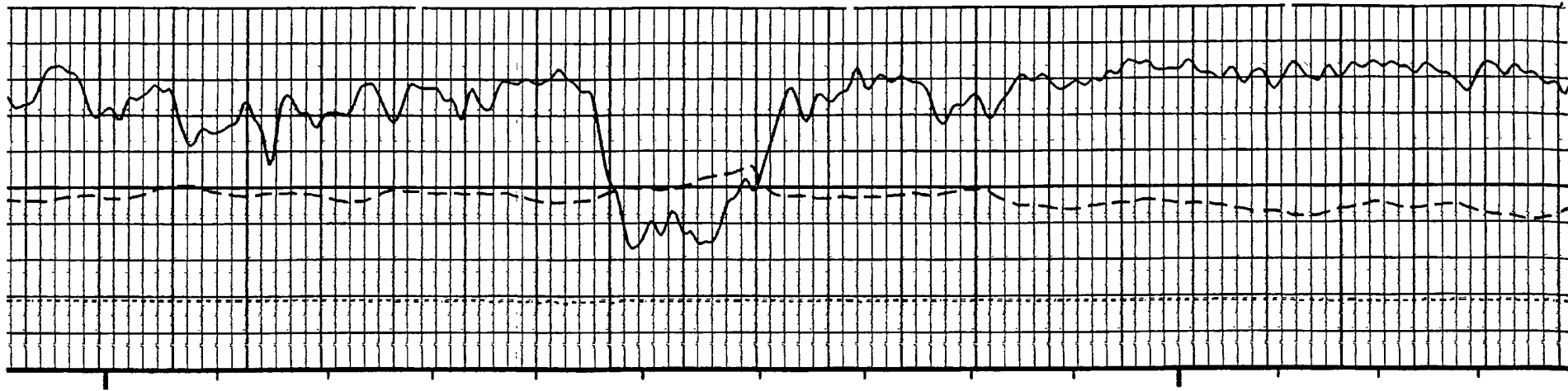
San Andres	5,680' – 5,698'	18'	4 SPF	72 holes
San Andres	5,632' – 5,642'	10'	4 SPF	40 holes
	5,632' – 5,698'	28'	4 SPF	112 holes

Correlate to original OH logs run in 2003. RDMO wireline unit.

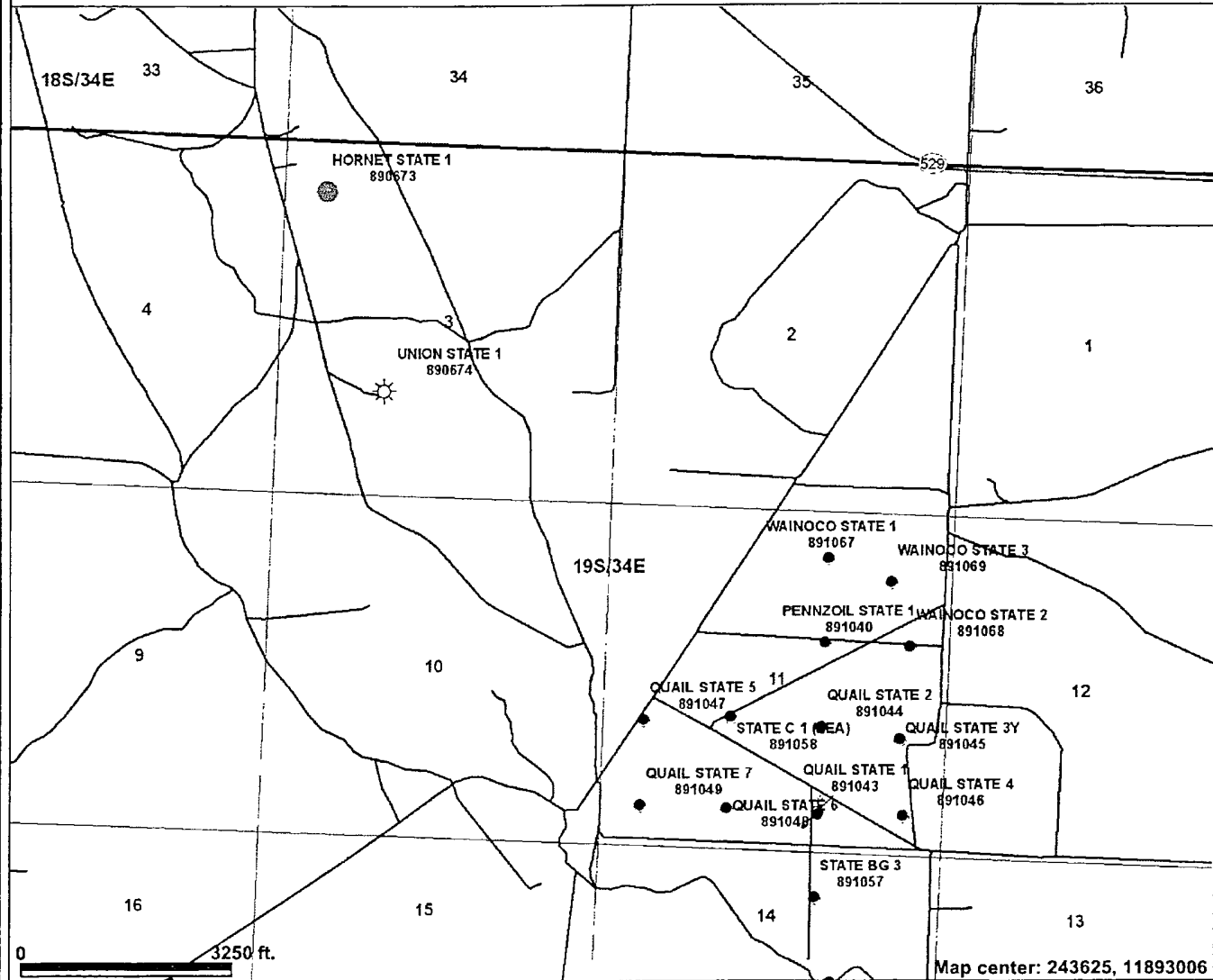
6. TIH w/ 2-7/8" work string and 5-1/2" treating packer to bottom perf 5,698' and spot 15% HCl acid across San Andres perms (5,632' – 5,698'). PUH and set packer at 5,550'.
7. RU frac service. NU frac valve, test lines and backside. Spearhead with acid and frac San Andres (5,632' – 5,698') with 30,000# 16/30 sand (tail in with resin coated sand to prevent flowback) and frac gel via 2-7/8" tubing as per frac design. Frac design/schedule will be sent separate from this procedure once finalized with service company. SI well and record ISIP-5 min-10 min-15 min pressures.
8. Close frac valve. RDMO frac service equipment. Open well and flow back to open top tank until dead – monitor fluid volumes recovered. SI well.
9. Unset 5-1/2" treating packer and TOH with packer and 2-7/8" tubing. LD packer.
10. PU BHA, SN, 2-7/8" tubing and TAC and RIH to 5,600' and set.
11. ND BOP. NU WH. RIH with rod string and 1-1/2" pump and land in SN set at 5,600'. *NOTE: rod design will be sent separate from this procedure and once a better estimate of production volumes is obtained.*
12. Load and test well. Turn well over to production.
13. RDMO workover rig. Clean location.

SchlumbergerCompany **CONCHO RESOURCES INC.**Well **Hornet State No. 1**Field **Larica, East (Morrow) Field**County **Lea** State **New Mexico**

County: Lea Field: Larica, East (Morrow) Field Location: 760' FNL & 660' FWL Well: Hornet State No. 1 Company: CONCHO RESOURCES INC.	PLATFORM EXPRESS Three Detector Litho Density Compensated Neutron / Gamma Ray			
	760' FNL & 660' FWL Section 3, Township 19 S, Range 34 E		Elev.: K.B. 4023 ft G.L. 4002 ft D.F. 4022 ft	
	Permanent Datum: <u>GROUND LEVEL</u> Log Measured From: <u>KELLY BUSHING</u> Drilling Measured From: <u>KELLY BUSHING</u>		Elev.: <u>4002 ft</u> 21.0 ft above Perm. Datum	
	API Serial No. 30-025-36391	Section 3	Township 19 S	Range 34 E
MUD	Logging Date		16-Nov-2003	
	Run Number		ONE	
	Depth Driller		13796 ft	
	Schlumberger Depth		13810 ft	
	Bottom Log Interval		13790 ft	
	Top Log Interval		5150 ft	
	Casing Driller Size @ Depth		8.625 in @ 5164 ft	
	Casing Schlumberger		5150 ft	
	Bit Size		7.875 in	
	Type Fluid In Hole		Brine - Polymer	
	Density	Viscosity	10.7 lbm/gal	42 s
	Fluid Loss	PH	6.8 cm3	10
	Source Of Sample		Circulation Tank	
	RM @ Measured Temperature		0.072 ohm.m @ 62 degF	
	RMF @ Measured Temperature		0.072 ohm.m @ 62 degF	
	RMC @ Measured Temperature		@	
	Source RMF RMC		Rmf=Rm (Calculated)	
RM @ MRT RMF @ MRT		0.028 @ 169 0.028 @ 169		
Maximum Recorded Temperatures		169 degF		
Circulation Stopped Time		15-Nov-2003 18:00		
Logger On Bottom Time		16-Nov-2003 7:01		
Unit Number Location		3125 Hobbs, New Mexico		
Recorded By		Miguel Martinez		
Witnessed By		Jim Linsley, Ted Gawloski, Dale Lubinski		



Chesapeake Mapping



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.



Scale: 1:28,460

