

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  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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NMOCD ARTESIA

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**

<sup>1</sup> Operator Name and Address Kaiser-Francis Oil Company, P. O. Box 21468, Tulsa, OK 74121-1468		<sup>2</sup> OGRID Number 012361
<sup>3</sup> Property Code 23070	<sup>4</sup> Property Name Malaga 36 State	<sup>5</sup> API Number 30-015-26564
<sup>6</sup> Well No 1		
<sup>9</sup> Proposed Pool 1 Culebra Bluff South (Bone Springs) ✓		<sup>10</sup> Proposed Pool 2

**<sup>7</sup> Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	23S	28E	-	1980	South	1980	East	Eddy

**<sup>8</sup> Proposed Bottom Hole Location If Different From Surface**

n/a

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

**Additional Well Information**

<sup>11</sup> Work Type Code P	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 2974
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 12150	<sup>18</sup> Formation 2nd Bone Springs	<sup>19</sup> Contractor Unknown	<sup>20</sup> Spud Date 1/1/91
Depth to Groundwater n/a		Distance from nearest fresh water well n/a		Distance from nearest surface water n/a
Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: _____ Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
n/a	13 3/8	48	625	775	Surf
n/a	9 5/8	36	2565	1450	Surf
n/a	7	26	10573	1325	3200
n/a	4 1/2	15.1	10224 - 12150	324	10224

<sup>22</sup> 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.

See attached program.

<sup>23</sup> 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: Charlotte Van Valkenburg

Title: Technical Coordinator

E-mail Address: Charlottv@kfoc.net

Date: 1/6/10

Phone: 918-491-4314

**OIL CONSERVATION DIVISION**

Approved by:

Title:

Approval Date: 1/19/2010

Expiration Date:

Conditions of Approval Attached ☐

# Kaiser-Francis Oil Company

## Recompletion Procedure

### Malaga 36 State #1

1980' FSL, 1980' FEL  
Section 36, T23S, R28E  
Eddy County, New Mexico  
API # 015-26564

## WELL DATA

TD: 12,150'  
PBSD: 11,545'

Elevation: GL Elev. = 2973.6'  
KB Elev. = 2991.1'

Surface Casing: 13-3/8" 48#, H-40 @ 625', cemented w/ 775 sx, circ.

Intermediate Csg: 9-5/8" 36#, K-55 @ 2654' cemented w/ 1450 sx, circ.

Intermediate Csg: 7" 26# N80 / S95, @ 10,573' cemented w/ 1325 sx,

Production Liner: 4-1/2" 15.1# P-110 FL4S @ from 10,224' - 12,150',  
cemented w/ 324 sx (circ to top of liner).

Proposed Perfs: 2<sup>nd</sup> Bone Springs: 8814' - 8846'

## Tubular Specs:

Item	ID	Drift	Bbl/ft	Gal/ft	100% Burst	80% Burst
7" 26# N-80/S95	6.276	6.151	.0382	0.6223	7240	5790
3-1/2" 39.0# N-80	6.625	6.500	.04264	1.7907	9180	7344
2-7/8" 6.4# N-80	2.441	2.347	.00579	0.2431	10570	8450

## PROCEDURE

- 1) MIRU PU POOH and LD rods and pump. ND WH, NU BOP. Release anchor and POOH. Scanalog tbg while pulling.
- 2) TIH w/ 6-1/4" rock bit and casing scraper. Tag TOL and attempt to establish reverse circ w/ 4% KCl. CHC if possible. POOH laying down tbg.
- 3) RU WL. RIH w/ gauge ring to 10,800'. RIH w/ 4-1/2" CIBP and set at 10,770'. Dump 20' cmt on top of plug. Run CBL from TOL and correlate to Schlumberger CNL/LDL log dated 2/07/91. RIH w/ 7" CIBP and set at 9100'. Dump 20' cmt on top of plug. Note fluid level while running plug. If

necessary, dump enough 4% KCl down casing to bring fluid level to +/- 7000'. (tst casing??). PU 4" casing gun and perforate 2<sup>nd</sup> BS from 8814' – 8846' at 4 spf, .43" EHD (total 32', 128 holes). Monitor well for blow after perforating, and check for fluid level rise with perf guns before POOH. POOH and RD WL.

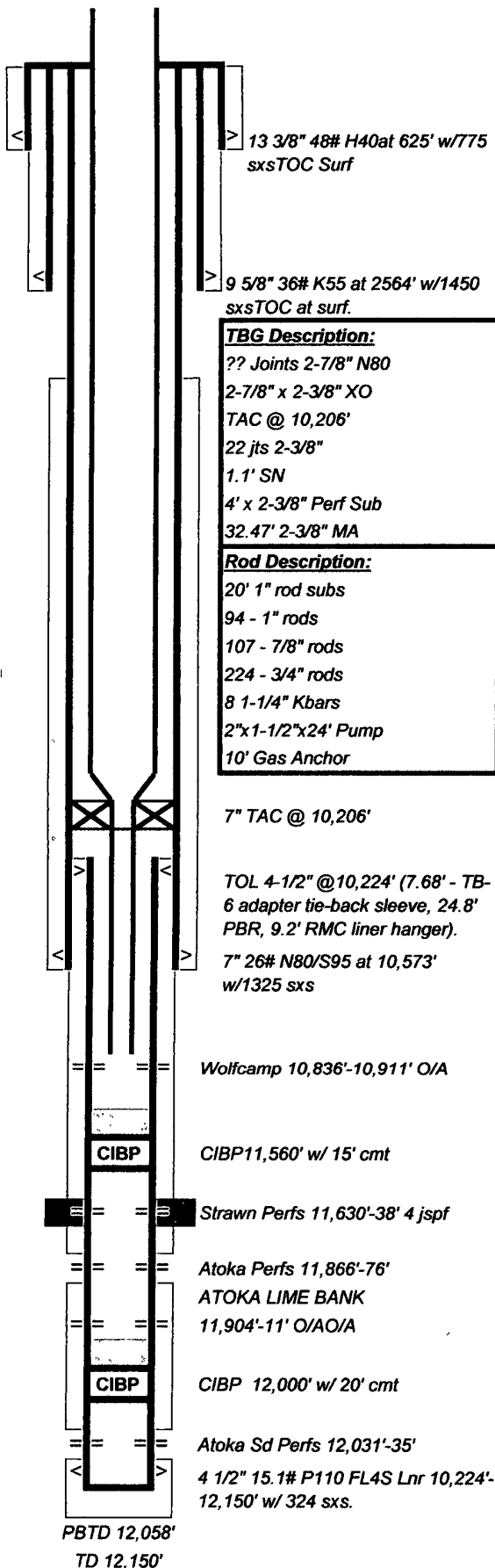
- 4) Take delivery of 3-1/2" frac string. PU 2 jts tailpipe, treating packer and TIH w/ 3-1/2" tbg. Set pkr @ 8700' and load backside. Test backside to 500# if possible. Set frac tanks and load with filtered 2% KCl (do not use KCl substitute). RU frac crew. Frac down 3-1/2" tbg as per the attached pump schedule. Maximum allowable treating pressure = ???? psi.
- 5) Flow back well until dead. Release pkr and run tailpipe through perms to verify they are clear. POOH and LD 3-1/2" frac string. PU mud anchor, perf sub, 3 jts tbg, SN, TAC and 2-7/8" production string. TIH and set TAC @ +/- 8770', and land perf sub below bottom perf. Swab well to determine productivity.
- 6) Run rods and pump to fit swab results. Set BPU and put well on production.

## MALAGA 36-1

SECTION 36-23S-28E

1980' FSL &amp; 1980' FEL

EDDY COUNTY, NM



13 3/8" 48# H40at 625' w/775  
sxsTOC Surf

9 5/8" 36# K55 at 2564' w/1450  
sxsTOC at surf.

**TBG Description:**

?? Joints 2-7/8" N80

2-7/8" x 2-3/8" XO

TAC @ 10,206'

22 jts 2-3/8"

1.1' SN

4' x 2-3/8" Perf Sub

32.47' 2-3/8" MA

**Rod Description:**

20' 1" rod subs

94 - 1" rods

107 - 7/8" rods

224 - 3/4" rods

8 1-1/4" Kbars

2"x1-1/2"x24" Pump

10' Gas Anchor

7" TAC @ 10,206'

TOL 4-1/2" @ 10,224' (7.68' - TB-  
6 adapter tie-back sleeve, 24.8'  
PBR, 9.2' RMC liner hanger).

7" 26# N80/S95 at 10,573'  
w/1325 sxs

Wolfcamp 10,836'-10,911' O/A

CIBP 11,560' w/ 15' cmt

Strawn Perfs 11,630'-38' 4 jspf

Atoka Perfs 11,866'-76'

ATOKA LIME BANK

11,904'-11' O/AO/A

CIBP 12,000' w/ 20' cmt

Atoka Sd Perfs 12,031'-35'

4 1/2" 15.1# P110 FL4S Lnr 10,224'-  
12,150' w/ 324 sxs.

PBTD 12,058'

TD 12,150'

**COMPLETION** - Spud 1/10/91, Completed 3/15/91 Lindsey liner hanger w/ PBR @ 10,224'. Spot 4% KCl, sting into PBT w/ 2-7/8" tbg. PF: ATOKA: 12031-35' w/4jspf. No treatment. IP 4011 MCFD, 2550# FTP. Ran static grad after 6 hrs flow, SIBHP = 8349#.

**WORKOVER** - 5/5/93 - PF: ATOKA: 11866'-76' w/4 jspf. No treatment. 5082 MCFD, 4 BC, 0 BW, 3600#TP. Commingled with lower perfs.

**WORKOVER** - 10/96 - Tst'd 11866-76. Dry w/ light blow. Pull & LD 2-7/8" tbg. Set RBP at 11,750'. PF: STRAWN: 11630'-38' w/4 jspf. Could not break down. REPF: 11630-38' w/4jspf. A/2000 g 15% NEFE, 1.8 BPM at 5030#. Pull RBP. Run tbg. Swab 570 BW in 7 days. Swb dry. SI. 48 hr SITP 0#. CP 120#

**WORKOVER** - 08/98 - Tag TD 12,057'. Set Pkr 11,789'. A/1500 g 7 1/2% NEFE + Meth + N2. 2 BPM at 1500#. ISIP 1100#. Swab. RIH w/tbg & TAC. TAC stopped at 10,200'. POH. Try Pkr. Stuck. Lost parts in hole. Fish out. GIH w/tbg. Set TAC at 10,000'. Put on pump. Had trouble with rubber and gravel in gas anchor. Cleaned out. 396 MCF, 0 BF- Pumping

**WELL SERVICE** - 11/98 - Rubber/Black tape in gas anchor

**WS: 07/01** - Pump change. A/1000 g 7 1/2% NEFE + meth. Tbg Lk. 18 jts abv SN

**WS: 09/01** - Pump Change - A/1000 g 15% NEFE + soap

**WS: 10/01** - Circulate with N2

**WORKOVER** - 03/02 - Had to fish rods/tbg. Set pkr 11,791'. - A/1500 g 7 1/2% NEFE + Meth + N2

**WS: 11/02** - Dump Acid - 2000 g 20% Acetic w/N2

**WS: 02/04** - Pull pmp. TAC stuck. Cut 2 3/8" tbg 10,225'. SOH. Stopped 8298'.

Lowered to 10,205'. Try to back off. No good. Lower TAC to top of liner.

Backoff at 10,221'. POH. RIH w/310 jts 2 3/8" + SN. LEFT FISH IN HOLE!

**WO: 07/04** - Recover fish. Run tbg to 12,032'. Noted poss scale BU on 7" csg.

Acid w/1000 g 7 1/2% HCL + N2. Swab. POL.

**WS: 04/05** - Raise tbg to 11,850'

**WO: 02/07** - TEST ATOKA LIME BANK and WOLFCAMP - Set CIBP 12,000' w/20' cmt on top. PF: ATOKA LIME BANK: 11,904'-14'. A/1000 g 15% NEFE. Tbg Lk. Rpr Tbg Lk. A/1000 g 15% NEFE. Tbg Lk. Abandon ALB. Set CIBP 11,560' w/15' cmt on top. PFL WOLFCAMP: 10836'-86'; 10,898'-911' (1spf). SICP 3100#. After perfg, had tbg problems & recovered LCM. Killed well, w/ mud, set 7" w/ WL @ 10,209'. Run tbg, sting into pkr. Ran bailer, tagged mud @ 11,465'. Flw well several days recov < 100 mcfpd w/ oil shows. Ran BHP grad, BHP = 4805#, BHT = 187 deg @ 10,973'. Acdz w/5000 gal 20% Hcl. Frac w/ 39,478 gals slick water + 16,000 100 m sand. IPF 176 mcf, 5 bo, 25 bwpd.

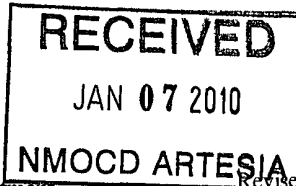
**WS: 8/07** - Run rods & put well on pump

**WS: 11/07** - Pump repair

**WS: 3/08** - POOH w/rods & pump, found split cage in pump, run rep pump & place on production

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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**

<sup>1</sup> API Number 015-26564	<sup>1</sup> Pool Code 15011	<sup>1</sup> Pool Name Culebra Bluff South (Bone Springs)
<sup>4</sup> Property Code 23070	<sup>4</sup> Property Name Malaga 36 State	<sup>4</sup> Well Number 1
<sup>7</sup> OGRID No. 042361	<sup>7</sup> Operator Name Kaiser-Francis Oil Company	<sup>7</sup> Elevation 2974 GR

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	23S	28E	-	1980	South	1980	East	Eddy

<sup>11</sup> Bottom Hole Location If Different From Surface n/a

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 40	<sup>12</sup> Joint or Infill N	<sup>12</sup> Consolidation Code -	<sup>12</sup> Order No. -
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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.

<div style="position: relative; height: 300px;"> <span style="position: absolute; top: 10%; left: 10%;">16</span> <div style="position: absolute; top: 60%; left: 30%; border: 1px dashed black; padding: 5px; text-align: center;"> 36 NW SE </div> </div>	<sup>17</sup> <b>OPERATOR CERTIFICATION</b> 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.	
	Signature: <i>Charlotte Van Valkenburg</i> Date: _____ Printed Name: Charlotte Van Valkenburg	
	<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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.	
	Date of Survey: _____ Signature and Seal of Professional Surveyor: _____  Certificate Number: _____	