

CITIES SERVICE OIL AND GAS CORPORATION

P.O.BOX 50250 MIDLAND, TEXAS 79710 (915) 685-5600

March 25, 1988

Mr. Jerry Sexton Energy, Minerals, and Natural Resources Department Oil Conservation Division P.O. Box 1980 Hobbs, New Mexico 88241-1980

Dear Mr. Sexton:

In response to your letter dated March 18, 1988 requesting additional information on the circumstances surrounding our proposed P&A of the Elkan A #2, I have attached the workover chronological report. This report begins on the day following the pumper's report that the Elkan A #2 was off production.

You may note that on January 27 and 28, we pressured the casing to 1000 psi. The pressure bled off at approximately 200 psi/hr. Also, please note that we continued our efforts to swage through the collapse and recover the fish until no further progress could be made.

If any additional information is needed, please contact me at (915) 685-5897.

Sincerely,

Fileca A. Egy

Rebecca A. Egg Staff Engineer

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MAY 2 3 1988 OCD HOBBS OFFICE STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

Marcn 18, 1988



GARREY CARRUTHERS

COST OFFICE BOX 1980 HOBBS. NEW MEXICO 88241-1980 1505J 393-6161

Cities Service Oil & Gas Corporation P.O. Box 50250 Midland, TX 79710

Re: P&A of Elkan A #2-E Section 25, Tl3S, R34E

Gentlemen:

We have received your intention to plug the above-referenced well. However, I will be unable to approve it without some additional information. I need to see your daily drilling report while workover was in progress and I need to know if the well will still take fluid before I can make a decision whether you will have to go back into it or not.

Very truly yours,

OIL CONSERVATION DIVISION

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Jerry Sexton Supervisor, District I

JS/ed

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- 1/14/88 TD 10,600', 5-1/2" @ 10,600'. MIRU Diamond. Unseated pump. POOH w/108 - 1.2" FG. (Pump stuck @ 6200') RU Hot oiler. Pmpd 3 BO dn 2-7/8" tbg. Could not rel pump. Pmpd dn csg. w/15 BFW to 2000#. Could not PI. ND WH. NU BOP. Wkg. tbg. Jt is stuck. Repress csg to 1500#. SIW. SDON.
- 1/15/88 14 hr SICP 1500#. Bled off press. PUlled on tbg 120,000# for 2 hrs stuck. Pulled rods 45,000# for 2 hrs stuck. Attempted to BO rods w/o success. RU to make manual BO of tbg. BO @ 1500'. Screwed back into tbg. SDON. CMIC: BUssell. CTD: \$1336/4041/Exp.
- 1/16/88 RU Rotary WL. RIH w/string shot. BO 2 7/8" tbg @ 528.99'. POOH w/17 jts 2 7/8" N-80 tbg. RIH w/4 11/16" OD, 3 9/16" ID Kelo socket (4.75') on 17 jts 2 7/8" tbg to 528'. Latched onto 7/8" rod. Pulled 40000#. Broke Kelo socket. POOH. Left Kelo slip in hole (3 9/16" L & 3 1/4" W x 1 3/8" thick). RIH W/4 11/16" OD mouse trap on 17 jts 2 7/8" tbg. Latched onto 7/8" rod. Pulled 55000# w/o success. Pulled 20 pts on tbg & did manual BO on rods. POOH w/9-1.2" FG rods, 64-7/8" st rods. Top rod fish @ 1937' 7/8" pin lkg up. POOH w/tbg & mouse trap. RIH w/4 1/2" OD magnet on 2 7/8" tbg to 528'. Rec Kelo socket slip. RIH w/17 jts 2 7/8" tbq. SIW. SDON. CMIC: Zuniga CTD: \$2526/\$6567/Exp.
- 1/17/88 Fin RIH w/2-7/8" tbg. Tagged @ 528' (Top 2-7/8" tbg). SI 2-7/8" tbg. RU Rotary WL. RIH w/WL string shot to 1935'. BO 2-7/8" tbg. POOH w/61 jts 2-7/8" N-80 tbg (1892').RIH w/4-5/8" OD OS w/3-21/32" grapples (2.63') x-over 3-3/8" OD x 1-13/16" ID (1.20') BS (3-3/4" OD x 1-1/2" ID) (4.38') 1 set Johnson jars 3-11/16" OD x 1-9/16" ID (7.65') 4 - 3-1/2" OD DC'S (ID 1-9/16")(117.86') x-over (3-3/4" x 1-1/2")(1.09') Total BHA 134.81'. Ran on 57 jts 2-7/8" N-80 tbg. Total 1757.19'. Tagged @ 1892'. Latched onto 2-7/8" tbg. Wrkd w/jars 5 hrs w/no movement. Press csg 1000# no bleed off. Left press on csq. SIW. SDON. CMIC: Zuniga. CTD: \$3627/10,194.
- 1/18/88 15 hr SICP 1000#. Bled off press. Pulled 90,000# on tbg w/no movement. Rel OS & POOH w/2-7/8" tbg & BHA. RIH w/3-5/8" OD x 2-7/16" ID part sub (3.81') on 61 jts 2-7/8" tbg. Tagged @ 1892'. SI 2-7/8" tbg. RU Rotary WL. RIH w/string shot out port sub & dn csg 200' & BO tbg. POOH w/61 jts 2-7/8" tbgh & port sub. Rec. 6 extra jts 2-7/8" tbg 9186.20'). Total tbg rec 67 jts (2074.39') TOF (tbg) 2-7/5" collar @ 2074.39'. RIH w/4-1/2" OD mouse trap (2.71') on 67 jts 2-7/8" tbg to

- 1/18/88 2060'. Latched onto 7/8" rod. Jarred for 45 min w/no cont. B.O. rods. POOH w/2-7/8" tbg & mouse trap. Rec 64 - 7/8" rods (1600'). Top rods @ 3537', 7/8" box lkg up. Fish left in hole rods 76 - 7/8" & 15 - 1". CMIC: Zuniga. CTD: \$2577/12,771.
- RIH w/67 jts 2-7/8" tbg to 2074'. 1/19/88 Tagged to tbg screwed into tbg. RU Rotary WL. RIH WL to 3575', 2' above 7/8" rods. BO tbg & POOH w/113 jts 2-7/8" tbg (3514.14') 2-7/8" collar lkg up. RIH w/3-5/8" OD x 3-7/16" ID (3.81') ported sub on 113 jts 2-7/8" tbg. Tagged @ 3514'. SI to tbg. RIH w/WL string. Shot dn tbg, out port sub & dn csg 60'. B.O. Tbg. POOH w/113 jts & ported sub. Rec 1 jt (31.60') Top 2-7/8" tbg @ 3550' w/2-7/8" clr lkg, up. RIH w/4-11/16" OD x 3-7/16" ID (5.59') Kilo socket on 114 jts 2-7/8" tbg to 3545'. Latched onto 7/8" rods. Jarred on rods 30 mins w/o success. BO rods. POOH w/tbg & kilo socket. Rec. 59 -7/8" rods (1475') Top rods 5012'. 7/8" Box lkg up. SDON. CMIC: Zuniga. CTD: \$3488/16,259.
- 1/20/88 RIH w/4 5/8" OS w/3 21/32" grapple, x-over 3 3/8" x 1 13/16" BS (4.38') jars (7.65') 4-3 1/2" OD DC's BHA (134.81') on 108 jts 2 7/8" tbg (3415.54'). Latched onto 2 7/8" tbg @ 3550'. Wrkd tbg for 2 hrs w/no movement. Rel OS. POOH. RIH w/114 jts 2 7/8" tbg to 3550'. Screwed into tbg. RU rotary WL. Ran FP 3550'-5012' (tbg free). POOH w/WL PU 10 stds. SDON. CTD: \$3840/\$20099 CMIC: Zuniga
- 1/21/88 FIn POOH w/160 jts 2-7/8" tbg. Top tbg 4987.23'. 2-7/8" clr lkg up. Top rods @ 5012'. RIH w/3-5/8" OD X 2-7/16" ID port sub (3.81') on 160 jts 2-7/8" tbg. Tagged @ 4987'. Caught 2-7/8" tbg. Wrkd tbg 1 hr w/no movement. RU Rotary WL. RIH w/string shot dn tbg & out port sub to 5680'. PU to 5650' torqued tbg & BO tbg. POOH w/180 jts 2-7/8" tbg. Top 2-7/8" tbg @ 5617.21' 2-7/8" clr lkg up. SDON. CTD: 2429. CMIC: Zuniga.
- 1/22/88 RIH w/4-11/16" OD x 3-9/16" ID (4.75') Kilo socket on 180 jts 2-7/8" tbg. Went over rods @ 5012'. RIH to 5617' w/2-7/8" tbg. Latched onto 1" rods. Wrkd w/rods stuck would not move. RU to BO rods. Indicated rods BO. POOH & Rec 165 jts 2-7/8" tbg (5152') tbg had BO. Left 15 jts 2-7/8" clr lkg up. RIH w/4-5/8" OD x (2.63') OS w/3-21/32 grapple on 165 jts 2-7/8" tbg. Latched onto tbg @ 5112'. PU to 59,000# (16,000# over wt). Torqued tbg to BO rods w/no success. PU 15' on tbg & hanging every 25' moving up (ind kilo slipping on each rod cplg). RU Hot oiler. Loaded csg 3 bbls FW. Press to 500# (csg full). Bled off press. SOOH w/tbg (hanging every 25' (rod boxes). Pulled 12 std & stopped dragging. SDON. CMIC: Zuniga. CTD: \$1846/-24,374/Exp.

- 1/23/88 Fin POOH w/tbg & kilo socket. Slip on kilo socket indicated 1" rod box slipped thru. RIH w/4 5/8" OD (2.63) OS w/2" grapple (CR on top of grapple), jars (4.75" OD x 2.375" ID) (7.00) on 180 jts 2 7/8" tbg. Tag rods @ 5012'. Went over rods to top of tbg @ 5617'. Caught 1" rods w/OS. Worked tbg jars 2 hrs. Bmpd rods up 140'. Pump stuck. Wrkd jars 1 hr. Rods came free. POOH w/160 jts 2 7/8" tbg to top of rods. Stripped OOH w/rods. Rec 17-7/8" rods, 15-1" rods. Stripped off 3/4" pin on pull rod on pump. Left pull rod & pump in hole. Fin POOH w/tbg, jars & OS. Top of pump @ 5672'. Top of pull rod @ 5650'. Btm pump @ 5702'. Top of 2 7/8" tbg @ 5617' (collar lkg up). SION. CTD: \$2443/\$24971
- 1/24/88 RIH w/post sub (3 5/8" OD x 2 7/16" ID) (3.81) on 180
 jts 2 7/8" tbg. Tagged tbg @ 5617'. SI tbg. RU
 Rotary WL. RIH w/SS. Ran SS out post sub dn csg
 annulus to 5650'. Could not get deeper. POOH w/WL.
 Backed off tbg @ 5617'. POOH w/tbg & post sub. RIH
 w/4 5/8" OD OS (2.63') w 3 21/32" grapple, XO sub
 (1.00) BS (4.38), Johnson jars (7.65), 4-3 1/2" DC's.
 Total BHA 134.61' on 176 jts 2 7/8" tbg. Caught tbg
 5617'. Wrkd jars 4 hrs w/o success. No movement of
 tbg. Wrkd tbg to 120,000#. Still no movement of tbg
 fish. SION. CTD: \$2982/\$27953
- 1/25/88 Wrkd tbg & jars 2 hrs w/o success. Rel OS. POOH w/2 7/8" tbg & BHA. SION. CTD: \$1911/\$29864
- RIH w/4 3/4" OD CR shoe x 3 13/16" smooth ID w/CR on 1/26/88 btm of shoe (3.75') 3 jts 4 1/2" OD washpipe (3 13/16" ID x 86.65') XO bushing $(4 \ 1/2" \ OD, \ 3 \ 5/8" \ ID \ x \ 0.80')$ XO sub (4 1/4" OD x 2 1/2" ID x 1.40'), XO sub (3 1/2" OD x 1 3/4" ID x 1.00'), jars (3 11/16" OD x 1 9/16" ID x 7.65'), 4-3 1/2" OD DC's (117.86'). Total BHA 220.21' on 173 jts 2 7/8" N80 tbg (5404.60). Tag TOF (2 7/8" tbg) @ 5617'. Washed down to 5646'. Tagged solid @ 5646'. RU rev unit. Broke circ w/3 bbls prod Washed down 5646-5664' (18'/30 mins). water. Had paraffin in returns. Lost circ @ 5664'. Regained circ RIH to 5670'. w/35 bbls prod water. Tag solid @ 5670'. Tbg strtd torquing. Wrkd 15 mins on tite spot. P.U. 2' off btm. Circ btms up. Rec metal shaving (handful) in returns. POOH w/tbg & BHA. SION. CTD: \$3018/\$32882
- 1/27/88 RIH w/OS 4-5/8" OD (2.63') w/3-21/32" grapple, x-over sub (3-3/8" OD x 1-3/16" ID)(1.20') jars (3-3/4" OD x 1-1/2" ID)(8.17') 6 - 3-1/2" OD DC's (1-9/16" ID)(176.78 accel. sub (3-3/4" OD x 1-1/2" ID)(9.92'), x-over (3-3/4" x 1-1/2" ID)(1.9') total BHA (199.59') on 174 jt

<u>Elkan A #2</u>

- 1/27/88 2-7/8" N-80 tbg (5417.41') Latched onto 2-7/8" tbg @
 5617' w/OS. Wrkd w/jars & tbg for 7 hrs. Rotated tbg
 10 rds to rt & 6 rds back w/no free movement on pipe.
 Pmpd wtr dn csg w/5 bbls & loaded up (Would not take
 fluid). PU to 80000# & press csg 1000# & SIW. SDON.
 CMIC: Zuniga. CTD: \$3151/36033/Exp.
- 14 hr SICP 100#. Bled off 900# over night (80000# wt 1/28/88 on tbg the same). Repress csg 1000#. Took 7 bbls prod wtr. Bled off 100#/30 mins. Wrkd tbg for 30 mins w/no Rel OS (Had trouble releasing). POOH w/tbg movement. RIH w/180 jts 2-7/8" tbg. Tagged @ 5617'. & BHA. (Top tbg). Screwed into 2-7/8" tbg. RIH w/SB (1-1/2" OD x 22') Rod jars 91-5/8" OD x 3.5') on SL. Tagged @ 5639' (solid) Could not move down @ 5639'. POOH w/SL BO tbg @ 5617'. POOH w/180 jts SIW. SDON. CMIC: Zuniga. CTD: \$2041/38074/Exp.
- 1/29/88 RIH w/4-1/2" x 4-3/4" smooth OD CR shoe (ID 3-13/16")-(3.75') on 2 jts (4-1/2" OD x 3-13/16" ID) WP (59.51') x-over (4-1/2" x 3-5/8")(.80') x-over sub (4-1/4" x 2-1/2")(1.41') x-over (3-1/2" x 1-3/4")(1') jars (3-3/4" x 1-1/2" (8.17') 4 - 3-1/2" DC's (117.86') x-over (3-3/4" x 1-1/2")(1.8') Total BAH (193.59') on 174 jts 2-7/8" tbg (5436.30') to 5629'. RU pwr swivel. Broke circ w/3 bbls prod wtr. RIH to 5670'. Milled on csg for 5 hrs. Made 10". Rec. metal cuttings. Mill POOH w/2-7/8" tbg & BHA. stopped. C&CH. CR on shoe worn 90%. 10" inside shoe, markings ind sliver of csq. Outside shoe, 6" off btm up to 27" indicated wear. (shiny). CMIC: Zuniga. CTD: \$6055/45679/Exp.
- 1/30/88 RIH w/4-3/4" smooth OD x 3-13/16" smooth ID, CR shoe
 (3.75') on same BHA on 174 jts 2-7/8" tbg. Tagged @
 5670.85'. RU pwr swivel. Broke circ. Milled (5670.85'
 5673.28')(29") per 7 hrs. Rec. metal cuttings..
 C&CH. POOH w/5 stds. SIW. SDON. CMIC: Zuniga. CTD:
 \$2589/43,268/Exp.
- 1/31/88 RIH w/stds 2-7/8" tbg. Tagged 5673.28'. PU pwr swivel. Broke circ w/9 bbls prod wtr. Milled 5673.28'-5674.61', 16"/7.5 hrs. Rec. metal cuttings & small amts form in returns. Mill quit, no progress for 1.5 hrs. C&CH. POOH w/2-7/8" tbg & BHA. CR shoe worn 90% (inside shoe & WP had spiral markings for 54")(outside shoe had shiny spot - no markings or scars) SDON. & Sunday. CMIC: Zuniga. CTD: \$2591/45,859/Exp.

2/1/88 SD Sunday.

- 2/2/88 RIH w/4-3/4" smooth OD CR shoe (3.86') 3 jts 4-1/2" OD WP (86.65') jars (8.17') 4 - 3-1/2" DC's (117.86') BAH (320.84') on 174 jts 2-7/8" tbg. RIH to 5674.61'. Ru Pwr swieval. Drld (5674.61'-5677.50') (33.5/6 hrs) Rec. metal, fm. At 5677.50'. Rec. some brass metal cuttings (BH pump). C&CH. PU 5 stds. SDON. CTD: \$2696/48,555/Exp.
- 2/3/88 RIH w/5 std 2-7/8" tbg. Tagged @ 5677.50'. Broke circ. Milled 5677.50' - 5679.50', 2 /5 hrs. Milled torqued C&CH. POOH w/2-7/8" tbg. Mill worn out. Rec. metal & Fm (brass cuttings). CMIC: Zuniga. CTD: \$2618/51,173.
- 2/4/88 RIH w/4-3/4" smooth OD & ID CR shoe (3.89') on same BHA. Tagged @ 5670' (Top sliver) Wrkd dn to 5676'. Re-drill 5676'-5679.50'. Milled 5679.5 - 5682', 30"/7.5 hrs. Rec. metal & fm (not much brass). CMIC: Zuniga. CTD: \$2791/53,964/Exp.
- 2/5/88 RIH w/5 stds tbg. Tagged @ 5682'. Milled 3" fell free to 5695'. Milled 6"/5 hrs. C&CH. POOH. Shoe 90% worn. CMIC: Zuniga. CTD: \$2496/56,440/Exp.
- 2/6/88 SD due to weather.
- 2/7/88 SD due to weather.
- 2/8/88 SD weather.
- 2/9/88 RIH w/4-3/4" CR shoe, smooth ID (3.90') 4 jts 4-1/2" OD WP (118.19') jars (7.65') 4 - 3-1/2" OD DC's (117.86') Total BHA (251.90') on 2-7/8" tbg. Tagged @ 5679.78'. Wrkd dn to 5695'. Milled for 30 mins. Fell to 5722'. Milled 5722'-5731'/7 hrs. Rec. metal & fm. C&CH. PU 5 stds. SDON. CMIC: Zuniga. CTD: \$2939/59,399/Exp.
 - 2/10/88 Fin POOH w/tbg & WP. Rec 2 jts 2-7/8" tbg inside WP. 1st jt (31') 2nd jt (30.90') Cut like muleshoe 5' up from btm of jt. Total rec (61.90') Top fish 2-7/8" clr lkg up @ 5679'. Also recovered sliver of csg or tbg (2" x 4.5' long). Wedged between tbg & WP. RIH w/4-3/4" CR shoe (smooth OD & ID).(3.90') 3 jts 4.5" OD WP (90.49') jars (7.65') 4 - 3-1/2" OD DC's (117.86') Total BHA (220.30') on 2-7/8" tbg. Tagged @ 5679' WO top of fish. RIH to 5729'. Milled 4729'-5733' 4'/3 hrs. Rec metal & small amt formation. C.R. shoe plugging. POOH w/no rec. in WP. Rec 2" x 2" pc metal in tbg @ 4343'. SDON. CMIC: Zuniga. CTD: \$2665/62064/ Exp.

Elkan A #2

- 2/11/88 RIH w/4-1/2" lead IB w/2 stds 2-7/8" tbg on SL. Tagged @ 5679', POOH w/IB. Indicated 3-3/4" long x 1/4" deep mark & 1" long x 1-1/2" deep on opposite sides. Looked like a sliced 2-7/8" collar. RIH w/4-3/4" CR shoe w/smooth OD & ID (2.90') 3 jts 4-1/2" OD WP (90.49') jarts (7.65') 4 - 3-1/2" OD DC's (117.86') Total BHA (219.36') on 2-7/8" tbg. Tagged @ 5679' (TOF) Wrkd over fish to 5695'. Milled 5695'-5713' fell free. RIH 5723'. (Pushing on something). RIH to 5728'. C&CH. PU 5 stds. SDON. CMIC: Zuniga. CTD: \$2846/64910.
- 2/12/88 RIH w/4 3/4" CR shoe & tagged @ 5679'. Rot over fish. Wrkd dn to 5728'. POOH. RIH w/4 3/4" CR shoe smooth OD & ID (2.90'). Ext tbg cutter 4 11/16" OD x 3 7/8" ID (4.70') 3 jts 4 1/2" OD WP (90.49') jars (7.65') 3 1/2" OD DC's (117.86') total BHA (223.53') 2 7/8" tbg. Tagged @ 5679'. Wrkd over fish to 5695'. RIH to 5728'. PU to 5710' (tbg collar) set dn to 5712' to shear tbg cutter. Rotated 10 mins. Ind tbg was cut. POOH w/no recovery. No sign of anything entered cutters. SDON. CMIC: Bussell CTD: \$2625/\$65735
- RIH w/4 3/4" smooth OD CR show w/kick tip on lip quide 2/13/88 3 13/16" smooth ID (3.90') 4 1/2" OD ext (6.83') w/D.O. mill jars (7.65') 4-3 1/2" OD DC's (117.86') total BHA (138.04') on 2 7/8" tbg. Tagged @ 5679'. Rotated over fish. RIH to 5703'. Did not btm out in ext. Attempted to get over fish @ 5679' for 4 hrs w/o success. RIH & tagged @ 5731' (solid). Drld to 5736'. Pump press incr to 1000#. Ind shoe plugged. Rec metal & form 5731'-5736'. POOH w/2 7/8" tbg & BHA. Did not rec anything in CR shoe. No markings inside shoe indicating going over fish. Outside shoe shiney. (No deep marks SDON. CMIC: or scratches.) Bussell CTD: \$3431/\$70966/Exp.
- 2/14/88 RIH w/4 3/4" smooth OD CR shoe w/kick tip x 3 13/16" smooth ID (3.65') 4 1/2" OD ext (6.83'). Dress off mill on 181 jts 2 7/8" tbg to 5658'. Rot tbg dn to 5728'. Wrkd tbg @ 5679' for 5.5 hrs w/o success. Tag @ 5679' but could not get over fish. POOH w/CR shoe. CR shoe had no markings. SDON. CMIC: Zuniga CTD: \$1950/\$72916/Exp.
- 2/15/88 RIH w/4 5/8" concave mill. SD high wind.
- 2/16/88 RIH w/4 5/8" concave mill w/rough OD (1.95') 4 3/4" stab (1.76') 1-3 1/2" OD DC (7.75') stab 4 3/4" (3.09') jars (7.65') 6-3 1/2" OD DC's (176.58') total BHA (199.98') on 2 7/8" tbg. RU pwr swivel @ 5668'. Wrkd dn to 5680' w/o tagging anything or any torque. Wrkd & rotated 5668'-5680' for 3 hrs w/o tagging. RIH to

- 2/16/88 5681' stab torquing when rot. Wrkd addl 2 hr w/o any (Cont.) progress. PU 5 stds. SDON. CMIC: Zuniga CTD: \$3086/\$76002/Exp.
- 2/17/88 Fin. POOH w/tbg & BHA, concave mill showed no indication of drlg on metal. LD BHA. RIH w/SN & 130 jts 2-7/8" tbg to 4050' & 15 - 1" st rods. LD 1" st. rods in singles. RIH w/204 - 7/8" rods, LD 7/8" rods in singles. RIH w/83 - 1.2" FG rods, LD 1.2" FG rods in singles (44 - 1.2" FG to lay down). CMIC: Zuniga. CTD: \$1693/77695/Exp.
- 2/18/88 Fin LD 44-1.2" FG rods. Total rods 127-1.2" FG rods, 204-7/8" st rods, 15-1" st rods. ND BOP. NU WH. SIW w/2" ball valve. Rel all equip. Tbg left in hole 148 jts 2 7/8" EUE 8rd 6.5 N-80 (4631.74') SIW WO AFE. CMIC: Zuniga CTD: \$1408/\$79103/Exp.