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OIL CONSERVATION DIVISION
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SANTA FE, NEW MEXICO 87501

APR 30 1981

O. C. D.
ARTESIA, OFFICEForm C-103
Revised 10-1-78

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	OTHER- <input type="checkbox"/>	5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
Name of Operator ARCO Oil & Gas Company Division of Atlantic Richfield Co. ✓			5. State Oil & Gas Lease No. 647-320 647-363 647-368
Address of Operator P.O. Box 1710, Hobbs, NM 88240			7. Unit Agreement Name Empire Abo Pressure Maintenance Project
Location of Well UNIT LETTER <u>H</u> <u>1950</u> FEET FROM THE <u>North</u> LINE AND <u>660</u> FEET FROM THE <u>East</u> LINE, SECTION <u>6</u> TOWNSHIP <u>18S</u> RANGE <u>28E</u> NMPM.			8. Farm or Lease Name Empire Abo Unit "J"
15. Elevation (Show whether DF, RT, GR, etc.) 3657.2' GR			9. Well No. 241
			10. Field and Pool, or Wildcat Empire Abo
			12. County Eddy

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐PLUG AND ABANDON ☐
CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☐
CASING TEST AND CEMENT JOB ☒ Production
OTHER Log, DST, drill drainhole ☒
acidize, test & comp

11. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Commenced drlg 8-3/4" hole @ 980' 7:45 p.m. 1-6-81. Had small wtr flow @ 1100'. Water flow stopped. Finished drlg 8-3/4" hole to 6200' on 1-29-81. RIH w/6" bit, drlg 6" hole to 6325' @ 11:15 a.m. 1-30-81. Ran DLL, MLL, CNL-FCL w/GR Caliper. Reamed hole 6200-6228' to 8-3/4". DST #1, 6080-6172', test failed. DST #2 6080-6105', attempted to OT, no indication tools opened. POH w/tools, rec 12' mud & filtrate. Chart indicated TO 30 mins. IHP 2992, IFP 42, FFP 42, FHP 2992, teleflow indicated no press. DST #3, 6060-6085', TO @ 10:43 A.M. 2-5-81 for 14 mins flow period. Max P 1/2 PSIG, tool closed @ 10:57 a.m. IHP 2996, FFP 0, FHP 2996. DST #4, 6145-6170'. TO @ 12:32 p.m. for 16 mins. flow period. 0 PSIG, tool closed @ 12:48 p.m., IHP 3038, FFP no build, FHP 3038. DST #5, 6165-6190', TO @ 1:25 p.m. for 15 min Flow period, tool closed @ 1:40 p.m., 0 PSIG, IHP 3038, FFP 42, no build, FHP 3038, rec 34' of drlg mud. POH w/test tools. RIH w/7" OD 23# K-55 csg set @ 6228', DV tool @ 4009'. Cmtd 1st stage w/420 gals SAM-5 mud flush; 250 sx HOWCO light cont'g 6# salt/sk, 6# gilsonite/sk, 1/4# flocele/sk followed by 300 sx Class "C" 50/50 Pozmix cont'g 2% gel, 6# salt, 0.6 of 1% Halad-9. PD @ 4:45 p.m. 2-7-81. Opened DV tool circ 70 sx cmt to surf. Cmtd 2nd stage thru DV tool @ 4009' w/825 sx HOWCO light cont'g 6#/sk salt, 6# gilsonite/sk, 1/4# flocele/sk followed by 100 sx C1 C cmt cont'g 6# salt/sk. PD @ 8:50 p.m. 2-7-81. Circ 110 sx cmt to surf. WOC. RIH w/bit, drld DV tool @ 4009'. Press tested 7" csg to 1500# for 30 mins. OK. CO 6" hole 6220-6325'. Ran GR-CBL/Collar log 0-6306'. TOC @ surface. Ran DP OE to 6325', spotted 35 sx C1 H cmt cont'g 0.3 of 1% CFR-2 & 3# salt/sk. RO 2.5 bbls cmt. RIH w/6" bit to TOC @ 6199', (over)

16. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED W.D. Daniel & J.W. Schmidt TITLE Dist. Drlg. Supt. DATE 4-29-81APPROVED BY W.A. Gressett TITLE SUPERVISOR DISTRICT 11 DATE MAY 01 1981

CONDITIONS OF APPROVAL, IF ANY:

drld cmt to 6257', good cmt, circ hole clean. PBD 6257'. RIH w/anchor pipe, whip-stock assy, sheath pipe, hold down & lan g sub w/ setting tool. Oriente whipstock to N78°E. Whipstock Zenith set @ 6224.45' SLM, 6216.65' TVD. Commenced drlg 4-3/4" drainhole 2-28-81. Drld 4-3/4" hole 6224'-6242'. Ran survey single shot @ 6240' SLM 34°(N7°E), N61°E true. SLM 6240 TVD 6231.68' North + 8.28 (278.05), East -5.1 (-47.22) Closure 281.98 @ N9.64W. RIH w/bit, drld 6242'-6257'. POH w/bit. Ran WL survey @ 6255.5' 38°N58°E, true 38°N69°E, depth 6255.5, TVD 6243.68' North 276.44, East -39.67, closure 279.27 @ N8°W. RIH w/4-3/4" bit, drld 6257-6276.5'. POH w/bit. Survey @ 6274.5', 15°N11°E true, TVD 6260.57' E-34.49 N282.62 Closure 284.72 N7°W on 3-6-81. WIH w/retr tool, latched into landing sub, relsd whipstock & oriented to 270°W. Reset whipstock. POH w/setting tool. Run bit into Drainhole #1 N78°E to TD @ 6276.5'. POH w/bit. Ran retr hd, POH w/whipstock. Ran 6" bit to 6257', circ hole clean. POH w/bit. RIH w/ anchor pipe, whipstock, sheath pipe, hold down landing sub on setting tool. Oriented whipstock to N80°W, set whipstock & POH w/setting tool. Whipstock Zenith set @ 6224.45 SLM. Commenced drlg Drainhole #2 on 3-13-81. Ran 4-3/4" bit to 6224.45' SLM, 270° true west, drld to 6246.45'. POH w/bit. Ran survey @ 6244.45' TVD 6234.15', 48°S61°W true, E-W60.80 N-S267.67, closure 274.49' N12.8°W. Drld 4-3/4" hole 6246.45'-6261.45'. POH w/bit. Ran survey @ 6259.5', TVD 6241.13', 76°S76°W, true E-W73.00', N-S262.98' closure 272.92' N15.5°W. Drld 4-3/4" hole 6261.45'-6267.95'. POH w/bit. Ran survey @ 6266' 85.5° N89°W-79.36, N-S 262.31, TVD 6242.17, closure 274.05' N 16.8°W. Drld 4-3/4" hole 6267.95'-6293'. POH w/bit. Ran survey @ 6291' 89°N81°W, 266.49' North, 104.21 West, TVD 6243.37', closure 286.13 N21W. Drld 4-3/4" hole 6293-6328'. POH w/bit. Ran single shot survey @ 6326', 89.5° N85°W, 270.75' North, 138.94' West, TVD 6243.83'. Drld 4-3/4" hole 6238-6386'. POH w/bit. Ran survey @ 6384', TVD 6243.58' 91°N83°W, E-W 196.62, N-S 276.81. Closure 339.53' @ 35°NW. Extended to TD @ 6386', 90°N83°W, E-W 198.60, N-S 277.06, TVD 6243.54', closure 340.89 @ N35.6°W. Total departure to west from vertical hole (146.27') total drainhole drld 162'. Displ hole w/fm wtr, spotted 500 gals 15% HCL-LST NE-FE acid @ 6376'. Rev out @ 6224'. RIH w/2-3/8" TP, 7" model R pkr on 150 jts 2-3/8" tbg, set pkr @ 6076'. In 10 hrs swbd 0 BO, 3 BLW. RIH w/1" coil tbg to 6386', spot 250 gals 15% HCL-LSTNE-FE Db1 inhibited acid. POH w/coil tbg. Pressured tbg/csg annulus to 1200#, loaded tbg w/19.6 bbls acid 60/40-60% 15% HCL-LSTNE-FE, db1 inhibited & 40% Xylene, pmpd 2.2 bbls acid @ .01 BPM @ 1200 psi, Fm holding @ 1100 psi when SI. Treated Abo fm 6224-6386' w/3000 gals 60/40, 60% 15% HCL-LSTNE-FE db1 inhibited & 40% Xylene, flushed w/23.5 bbls 2% KCL wtr. Swbd Abo 6224-6386' 8 hrs, rec trace of oil, 22.5 BLW, show of gas. RIH w/1" coil tbg to 6386'. Acidized Abo fm 6224-6386' w/20 BO, 500 gals mod 303 (29% HCL) & 714 gals PAD acid 60/40 mod 303 Xylene, unable to move acid @ 5000 psi. POH w/coil tbg. RIH w/ loaded tbg w/546 gals PAD acid, treated Abo fmn w/total of 5500 gals, flushed w/23 BO. In 8 hrs swbbd Abo Fmn 6224-6386', 26 BLO, 43 BLW. On 4-17-81 swbd Abo Fmn 6224-6386', 46 BO, 31 BLW. SITP 45 psi. POH w/pkr & tbg. RIH w/comp assy, set SN @ 6127'. RIH w/rod pump. On 24 hr potential 4-28-81, pmpd 34 BO, 30 BW, 36 MCFG, GOR 1059:1. FINAL REPORT

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OIL CONSERVATION DIVISION

P. O. BOX 2083

SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

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JAN 13 1981

O. C. O.
ARTESIA OFFICE5a. Indicate Type of Lease
State ☒ Fee ☐5. State Oil & Gas Lease No.
647-320 647-368
647-3637. Unit Agreement Name
Empire Abo Pressure
Maintenance Project8. Farm or Lease Name
Empire Abo Unit "J"9. Well No.
24110. Field and Pool, or Wildcat
Empire Abo12. County
Eddy

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)OIL
WELL ☒GAS
WELL ☐OTHER- ☐Name of Operator ARCO Oil & Gas Company
Division of Atlantic Richfield Co. ✓
Address of Operator P.O. Box 1710, Hobbs, New Mexico 88240Location of Well
UNIT LETTER H 1950 FEET FROM THE North LINE AND 660 FEET FROM
THE East LINE, SECTION 6 TOWNSHIP 18S RANGE 28E NMPM.15. Elevation (Show whether DF, RT, GR, etc.)
3657.2' GR

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐PLUG AND ABANDON ☐
CHANGE PLANS ☐OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☒
CASING TEST AND CEMENT JOBS ☒ SurfaceALTERING CASING ☐
PLUG AND ABANDONMENT ☐OTHER ☐

7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Spudded 12-1/4" hole @ 10:30 a.m. 1-3-81. Finished drlg 12 1/4" hole to 981' @ 10:30 a.m. 1-5-81. RIH w/9-5/8" OD 36# K-55 csg set @ 980'. FC set @ 937'. Cmtd 9-5/8" OD csg w/300 sx BJ Lite cmt cone'g 1/4# cello flake/sk, 5# Gilsonite/sk, 2% CaCl₂ followed by 100 sx Cl C cmt w/2% CaCl₂ no cmt circ to surf. Ran Kobe tbg to TOC behind 9-5/8" csg @ 135'. Cmtd 9-5/8" csg to surf thru Kobe tbg w/50 sx Cl C Cmt w/2% CaCl₂. WOC 20 1/2 hrs. Pressure test casing to 1000# for 30 mins. OK.

8. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED George W. SchmidtTITLE Dist. Drlg. Supt.DATE 1-8-81APPROVED BY Mike WilliamsTITLE OIL AND GAS INSPECTIONDATE JAN 14 1981

CONDITIONS OF APPROVAL, IF ANY: