State of New Mexico Form C-103 Submit 3 Copie: Energy, Minerals and Natural Resources Department Revised 1-1-89 to Appropriate District Office **OIL CONSERVATION DIVISION** DISTRICT WELL API NO. P.O. Box 1980, Hobbs, NM 88240 P.O. Box 2088 **DISTRICT II** Santa Fe. New Mexico 87504-2088 5. Indicate Type of Lease P.O. Drawer DD, Artesia, NM 88210 FEE X STATE DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 6. State Oil & Gas Lease No. NM N5 277210 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.) Type of Well: Snake Eyes WELL X WELL OTHER 8. Well No. 2. Name of Oper #2 Merrion Oil & Gas Corporation 9. Pool name or Wildcat 3. Address of Operator P. O. Box 840, Farmington, NM Snake Eyes Dakota Well Location South 1980' West Unit Letter K : 1980 Feet From The Line and Feet From The Line San Juan 20 21N **NMPM** County Township Section 10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6560' GL 6565' KB Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data SUBSEQUENT REPORT OF: NOTICE OF INTENTION TO: **ALTERING CASING** PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK COMMENCE DRILLING OPNS. PLUG AND ABANDONMENT TEMPORARILY ABANDON **CHANGE PLANS** CASING TEST AND CEMENT JOB **PULL OR ALTER CASING** X **Drilling History** OTHER: OTHER: 12. 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. Attached please find the well history for the above mentioned well. OIL CON. DIV. I hereby certify that the information at 2-7-91 Engineer DATE SKINATURE -Sharpe TELEPHONE NO. 325-8284 George F. TYPE OR PRINT NAME (This space for State Use)

APPROVED BY

CONDITIONS OF AFFROVAL IF ANY:

cc: 3 OCD, Azteo 1 Well File

SUPERVISOR DISTRICT # 3



On Report SNAKE EYES NO. 2

Day No. 1 December 9, 1990

OIL CON. DIV.'

Detail: Cut off dry hole marker, installed 4' of 8-5/8" csg stub. MIRU Ram Service Co. NU 12" BOP stack. SDOWE. (CCM)

> AFE Number 90075: Cumulative Costs: \$

Day No. 2 December 10, 1990

Summary: Rigging Up

Detail: Finished rigging up Ram Service Company. MI 300 bbl wtr

tank, hauled water.

AFE Number 90075: Daily Cost: \$ Cumulative Costs:

December 12, 1990 Day No. 3

Summary: Drilled cement.

Detail: Drilled cement from surface to 190' KB w/ rock bit on

4-3/4" collars. POH w/ collars and bit. SDON. (CCM)

AFE Number 90075: Daily Cost: \$ \$ Cumulative Costs:

Day No. 4 December 13, 1990

Summary: Drilled cement.

Detail: Mixed mud to 35-40 viscosity. TIH. Cleaned out 15' of fill. Drilled spotty cement from 190'-335' KB. Circ clean. POH

w/ tbg and collars. SWI. SDON. (CCM)

AFE Number 90075: Daily Cost: Cumulative Costs: \$

December 14, 1990 Day No. 5

Summary: Drilled cement.

Detail: Drilled cement from 335'-375' KB. Very hard cement.

(CCM)

AFE Number 90075: Daily Cost: \$ Cumulative Costs:

December 15, 1990 Day No. 6

Summary: Drill cement.

Detail: TIH. Drill cement from 375' to 450'. Fell out of

cement. Washed dn to 650'. Circ hole clean. POH. (CCM)

Daily Cost: \$ AFE Number 90075: \$

Cumulative Costs: \$

December 16, 1990 Day No. 7

Summary: Clean out to csg top.

Detail: TIH. Tag fill @ 646'. Had 4' fill wash dn to 892' Tagged soft cement. Drilled out cement to 950'. Tagged top of 5-

1/2". Circ hole clean. POH. SDON. (ARM)

(Note: Mud 35 vis)

Daily Cost: \$ AFE Number 90075: \$

Cumulative Costs: \$

December 18, 1990 Day No. 8

Summary: Ran impression block.

Detail: TIH 7-7/8" bit on 4-3/4" collars and 2-7/8" tbg. Cleaned out 28' of fill. Circulated to condition mud. POH w/ bit. TIH w/ 7" impression block on 2-7/8" tbg. Circ dn. Tagged fish. POH w/ impression block packed w/ cuttings and mud, no imprint. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

Cumulative Costs. 3

December 19, 1990 Day No. 9

Summary: Milled 3' of 5.5" csq.

Detail: TIH w/ 7-7/8" cut-rite mill on 8 4-3/4" collars and 2-7/8" EUE tbg. Milled 3' of 5.5" csg from 950' KB to 953' KB. POH w/ mill. SDON. (CCM)

December 20, 1990 Day No. 10

Summary: Washed over 5.5" csg.

Detail: TIH w/ washover shoe 6-5/8" ID capable of washing over 3.5' of csg. Tagged fish top @ 953.06'. Washed over 1' and could not washover any farther. POH w/ washover shoe, 4-3/4" collars and 2-7/8" tbg. Cut-rite wore out on shoe. Evidence that something had been inside washover shoe. Ran impression block on 2-7/8" EUE tbg. Could not get washed dn to csg top. POH w/ impression block. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: Cumulative Costs:

December 21, 1990 Day No. 11

Summary: Ran Impression Block.

Detail: Ran 7" Impression Block on collars and 7-7/8" tbg. Tagged 951.29'. POH w/ Impression Block. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

December 22, 1990 Day No. 12

Summary: Ran washover shoe with cut-lip guide & mill inside. Milled 6".

Detail: TIH with 8 - 4-3/4" collars & 2-7/8" EUE tbg, washover shoe with cut-lip guide on bottom and mill inside. Tgd fish at 951.86' went over fish with bottom of guide at 954.01' and mill at 951.86', started milling. Made 6" to stop with mill at 952.36'. Fine metal cuttings in returns. TOH with shoe, evidence on mill that we were cutting iron. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

<u>December 23, 1990</u> <u>Day No. 13</u>

Summary: Ran 7.5" cut-lip guide washover shoe with mill inside.

Detail: Ran same guide and mill as yesterday. Cut-lip guide shoe with mill 2.15' inside on 8-4-3/4" collars and 2-7/8" EUE tbg. Tgd with guide at 954.01', wash fill and started milling. Finish with guide at 957.56' & mill at 955.41'. TOH with mill and washover. SD for weekend. (CCM)

January 3, 1991 Day No. 14

Summary: Hauled and mixed mud. Preparing to PU Impression Block.

(CCM)

Daily Cost: \$ AFE Number 90075: \$

Cumulative Costs: \$

January 4, 1991 Day No. 15

Summary: Cleaned out and ran Impression block. Note: All depths from slip top 8' above GL.

Detail: TIH w/ 7-7/8" bit w/ 8 4-3/4" drill collars and 2-7/8" EUE tbg. Cleaned out 5' of fill. Tagged fish @ 955.51'. Circulated clean. POH w/ bit. TIH w/ 7" lead Impression block on collars and tbg. POH w/ Impression block. Faint 5.5" Impression and same bulges and cuts on outside edge as Impression block ran on Day #11. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 5, 1991 Day No. 16

Summary: Ran 5.5" csg and csg patch.

Detail: Rigged up csg crew and ran Bowen lead seal csg patch on 21 jts of 5.5' 15.5#/ft K-55 used Lone Star csg. Circulated csg dn and latched onto csg top @ 955.41'. Pulled 30,000 lbs over string wt to set seals pressure. Tested to 1,000 psi, held good. Rigged dn 10" BOPs. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 6, 1991 Day No. 17

Summary: NU wellheads. Ran bit on tbg. Tagged @ 955'. Drilled 20' cement.

Detail: RD all rental equipment. Installed used 8-5/8" x 5.5" csg head. Set 5.5" csg in slips. Cut off csg, welded on 5.5" bell nipple. Installed 5.5" x 2-7/8" csg head. NU Ram 6" BOPs. Ran and layed dn 4-3/4" collars. TIH w/ 3-7/8" bit on 2-7/8" tbg. Tagged cement @ 955.41'. Drilled 20' of soft cement. POH w/ tbg and bit. SDON. (CCM)

January 8, 1991 Day No. 18

Summary: Drilled cement to 1245' and pressure test.

Detail: TIH w/ 4-3/4" bit w/ bit sub and 2-7/8" EUE yellow band tbg. Started drilling cement @ 975'. Fell through @ 1245'. Pressure test csg: pumped in @ 650 psi approx 2.5 BPM w/ mud. No communication to surface. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$

Cumulative Costs: \$

January 9, 1991 Day No. 19

Summary: Clean out fill to 3520'.

Detail: Tagged fill @ 1350'. Drilled fill out to 2,000'. Ran pipe freely to 2700'. Had to drill cement and formation cuttings to shut down @ 3118'. Circulated clean. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 10, 1991 Day No. 20

Summary: Clean out from 3118' - 3380'.

Detail: Cleaned out from 3118' to tagged solid @ 3380'. Drilling rubber, O rings, rubber packing elements and iron fell through and cleaned out to 4320' pushing junk and cleaning out heavy mud, fine cuttings and iron. POH w/ 4-3/4" bit and 2-7/8" EUE tbg. SDON. (CCM)

Daily Cost: \$ ' AFE Number 90075: \$ Cumulative Costs: \$"

January 11, 1991 Day No. 21

Sumary: Clean out from 3380' - 4540' KB.

Detail: TIH w/ 4-3/4" bit and csg scraper on 2-7/8" tbg. Cleaned out iron, cement and cuttings from 3380' to 4540' KB. Circ clean. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 12, 1991 Day No. 22

Summary: Cleaned out to PBTD @ 4630'. Ran BP and packer to find csg leaks. Water flow coming from below Dakota perfs.

Detail: Drilled iron & cement from 4540' KB to 4560'. Iron cleaned up. Drilled cement to 4608' KB. Fell through and well started flowing. Tagged @ 4630' KB. POH w/ tbg, bit and scraper. Tbg and csg flowing hot water. TIH w/ model "C" BP and fullbore packer. Set BP @ 4620' KB. Water flow cut by 80%. Set packer @ 4614' KB. Plug did not test. Csg flow zero, tbg flowing. Determined water flow coming from below all Dakota perfs. Pulled plug to 4480' KB and set again. Plug slowed flow but did not seal completely. Put flow to tank through tbg overnight. SDON. (CCM)

# January 13, 1991 Day No. 23

Summary: Set drillable cement retainer/ BP @ 4620' KB. Located holes in csg.

Detail: POH w/ BP & packer. TIH w/ drillable cement retainer on 2-7/8" tbg. Set plug @ 4620' KB to stop water flow. POH w/ setting tool. TIH w/ AD-2 tension packer to located csg leak. Bttm hole between 3052' & 3084' KB. Top hole between 1911' - 1942'. Anywhere between these two holes tbg & csg communicate while pumping @ 650 psi. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

# \January 15, 1991 Day No. 24

Summary: Logged and perforated 1st stage Dakota.

Detail: RU Petro wireline. Ran Gamma-ray Correlation Collar log from 5619' KB to 3400' KB. Ran guns to perforate and tagged fill @ 4605' KB. RD wireline. TIH w/ 4-3/4" bit and csg scraper. Cleaned out fill to 4620' KB. POH. RU Petro Wireline. Perforated per OH Induction log 4605'-4608' KB, 4580'-4584' KB. RD perforators. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

#### January 16, 1991 Day No. 25

Summary: Tested lower Dakota.

Detail: TIH w/ Model R packer on 2-7/8" EUE tbg. Set @ 4492' KB. Initial FL @ surface. Made 4 runs, last run pulled from 2200'. Well started flowing gas w/ heavy water mist. Moved separator from Santa Fe 20 No. 4 and hooked up test. Flowed 36 Bbls in 40 min. Avg gas rate 980 MCFD. SWI 30 min. Pressure built to 1050 psi. Blew dn tbg to 200 psi. Loaded tbg w/ water. Unset Model R pkr. Tbg and csg both flowing. Reverse circulated to kill well. Tbg and csg still flowing solid column water. No gas 45 min. Left tbg and csg flowing, each through 3/8" positive flow chokes to pit. SDON. (CCM)

# January 17, 1991 Day No. 26

Summary: Determined water flow coming through cement retainer @ 4620'. No communication to Dakota perfs.

Detail: Well flowing overnight. Still making 100% water, no gas. POH w/ Model "R" packer on 2-7/8" tbg. TIH w/ AD-1 tension packer on tbg. Tagged retainer @ 4620' KB. Set packer @ 4618' KB. Csg died, tbg flowing. Determined all flow coming through retainer. Pumped dn tbg w/ pkr. Set. Pressure up to 1900 psi @ approx 1/8 BPM. Unset pkr. POH w/ pkr and tbg. TIH w/ retainer stinger on tbg. Flow would slow on csg while stung in and tbg increased, could not shut off flow. POH w/ tbg and stinger. SWI. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$.

# January 18, 1991 Day No. 27

Summary: Shut off water flow w/ drillable BP. Isolated csg leaks.

Detail: TIH w/ drillable BP on tbg and set @ 4617.5' KB and shut off water flow. POH. TIH w/ another drillable BP and set @ 4574' KB. POH w/ setting tool. TIH w/ retrievable BP and pkr. Set BP @ 3052' KB. Set packer @ 1942' KB. Pressure test tbg to 1000 psi, held good. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

# January 19, 1991 Day No. 28

Summary: Squeeze cement holes in casing.

Detail: TIH w/ 2-7/8" EUE tbg. Set cement retainer @ 2994.45' KB. Could never get full circulation behind csg. Then lost all circ before starting cement pumping @ .5 BPM @ 1000 psi. Stung out of retainer mix 25 sx and pumped w/ 9 Bbls displacement choking csg. Stung in and finished displacement of 17 Bbls total stung out and POH w/ tbg and stinger. TIH w/ fullbore pkr and set @ 1795' KB. Established circ through hole in csg 1911' - 1942' KB to surface csg head. Mixed and pumped 225 sx Cl "G" cement w/ 2% gel, 1.315 cm ft/SR 15#/gal. Lost circ w/ 18 Bbls outside pipe. Finished mixing and displacement w/ no circ 1 BPM, 1000 psi. Shut down w/ cement 1.63' below pkr. WOC 30 min. Pumped .50 Bbls @ 500 psi. WOC 30 min. Pump .25 Bbls @ 300 psi. Opened tbg, no flow. SI tbg. WOC 30 min. No flow back. POH w/ fullbore pkr. SDOWE. (CCM)

January 21, 1991 Day No. 29

Summary: Drilled and tested upper squeeze.

Detail: TIH w/ 4-3/4" bit on 2-7/8" EUE tbg. Tagged cement @ 1820' KB. Fell through cement 2003' KB. Pressure tested 2,000 psi, held good. TIH w/ bit. Tagged retainer @ 2995' KB. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 23, 1991 Day No. 30

Summary: Drilled out retainer and cement.

Detail: Drilled out retainer @ 2995'. Continued drilling cement to 3330'. Pressure tested 1,000 psi, held good. Still drilling cement. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 23, 1991 Day No. 31

Summary: Drilled out cement. Tested csg.

Detail: Drilled cement from 3330' KB to 3712' KB. Fell out of cement. Pressure tested to 1,000 psi, held good. Tagged BP @ 4574' KB. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

January 25, 1991 Day No. 32

Summary: Drilled BP. Swabbed on lower Dakota.

Detail: Drilled out BP @ 4574' KB. Pushed it to bottom. POH w/bit. TIH w/ 2-7/8" EUE tbg and SN to 4550' KB. Swabbed 80 Bbls in 7 runs. Ending FL 1800' KB. Csg slight blow. Left csg SI. Tbg dead, left open to res pit. SDON. (CCM)

#### January 26, 1991 Day No. 33

Summary: Swabbed and flow tested lower Dakota.

Detail: Tbg and Csg dead. FL 100' KB. Swabbed 6 hrs, made 39 runs. Total swabbed 240 Bbls water. FL dn to 2700' after 130 Bbls swabbed, then stayed @ approx. 1600' KB, but very gas cut. Well started flowing, csg pressure: 240 psi.

First hr by-passed the separator, tbg flowing, csg 425 psi. Made 20 Bbls water.

Put flow through separator. 425 psi csg; 120 psi tbg; 20 psi on 3/4" plate = 398 MCFD. Left flowing overnight. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

#### January 27, 1991 Day No. 34

Summary: Flow tested lower Dakota.

Detail: Sat a.m., well flowing through separator overnight. Avg 25 psi on 3/4" plate = 460 MCFD, csg 680 psi, tbg 140 psi.

3 hr water production test made avg of 20 Bbls/hr. Avg gas rate 700 MCFD. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

### January 28, 1991 Day No. 35

Summary: Flow testing lower Dakota.

Detail: Tbg 300 psi, Csg 680 psi. Separator pressure 200 psi, Avg 38 psi on 3/4" plate = 617 MCFD. SWI. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

#### January 29, 1991 Day No. 36

Summary: Shot FL on lower Dakota.

Detail: Well SI 24 hrs. 1180 psi tbg, 960 psi csg. Shot FL @ 1950' KB. Blew well dn through 6" Blooey line, loaded tbg w/ water. POH w/ tbg. RU Petro and lubricated retrievable BP in the hole. Plug stopped @ 1940' KB. RD Petro. Ran string float w/ 4-3/4" bit and csg scraper. Worked through rough spot @ 1940' KB. Tripped to bttm. POH w/ bit and scraper. tried plug again. Still stopped @ 1940' KB. RD Petro. SWI. SDON. (CCM)

January 30, 1991 Day No. 37

Summary: Milled through obstruction @1940' KB.

Detail: Opened well and bled dn through Blooey line. TIH w/ 4-3/4" tapered mill. Drilled through obstruction @ 1940'-1943' KB. POH w/ mill. TIH w/ AD-1 tension pkr to 1980' KB. Pressure tested csg to 1,000 psi. POH w/ pkr. SDON. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

## January 31, 1991 Day No. 38

Summary: Set BP above lower Dakota. Perforated upper Dakota.

Detail: RU Petro Wireline. Ran wireline. Set retrievable Bridge Plug. Had to w ork through t ight spot @ 1940' KB. Set @ 4574' KB. Well would not blow dn. TIH w/ AD-1 tension pkr w/ string float. Set pkr above BP and below old perfs. Did not change flow up csg. Set pkr above old perfs and stopped flow up csg. Determined BP holding and gas coming from old perfs 4555'-4560' KB. POH w/ tbg and pkr. Ran 5' gun and re-perforated old perfs 4555'-4560' KB. RD wireline. TIH w/ 2-7/8" tbg and SN. Tried to put well on test separator. Controls froze up. Csg SI, tbg flowing. Choked overnight. (CCM)

Daily Cost: \$ AFE Number 90075: \$ Cumulative Costs: \$

#### February 1, 1991 Day No. 39

Summary: Flow test upper Dakota.

Detail: Tested upper Dakota through separator.

1st hr: tbg: 420 psi; csg: 740 psi; 30 psi on 1-1/4' plate; 1612 MCFD.

2nd hr: tbg: 350 psi; csg: 660 psi; Avg 50 psi on 1" plate; 1379 MCFD.

Released rig crew. Pumper checked well after 3 hrs: tbg: 340 psi; csg: 640 psi; 105 psi on sep. Avg rate 40 psi on 1" plate; 1162 MCFD; 14 Bbls/hr. (CCM)

## SNAKE EYES NO. 2 Off Report

## February 2, 1991 Day No. 40

Summary: Pulled BP. Co-mingled Dakota. Landed tbg. SWI. Prepare to RDMO.

Detail: Well flowing. Testing upper Dakota overnight. Tbg 320 psi, Csg 620 psi. 120 psi back pressure on separator. 50 psi on 1" plate = 1379 MCFD. 336 BWPD.

Blew well dn through Blooey line. POH w/ tbg. TIH w/ retrieving head on 2-7/8" tbg. Pumped 30 Bbls dn tbg and pulled plug @ 1940' KB. POH w/ BP. TIH and landed tbg @ 4534' KB w/ SN 1 jt off bttm. Landed donut in head. Installed 2-7/8" EUE master valve. Pumped dn tbg and pumped out pumpout plug. Flowed wtr back through tbg. SWI. SDON. Prepare to RDMO. (CCM)

Daily Cost: \$

AFE Number 90075: \$

Cumulative Costs: \$