

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088

Santa Fe, New Mexico 87508

RECEIVED

JUN 5 1991

WELL API NO. 30-045-28512
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Santa Fe 20
8. Well No. 5
9. Pool name or Wildcat Wildcat
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6,576' KB

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 PLUG BACK"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
OIL WELL ☒ GAS WELL ☐ OTHER ☐
2. Name of Operator
Merrion Oil & Gas Corporation
3. Address of Operator
P. O. Box 840, Farmington, NM 87499

4. Well Location
Unit Letter A : 1150 Feet From The North Line and 720 Feet From The East Line
Section 20 Township 21N Range 8W NMPM San Juan County

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

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.

We are currently testing the Gallup zone in the subject well. Attached is a well history for your review. The Gallup is not economic. Therefore, we plan to continue the completion by setting a CIBP above the Gallup and testing the Mesaverde sands. If the sands are unproductive, we plan to cap the Gallup CIBP with cement, squeeze off the sands, and test some Menefee coals. If the coals are unproductive, we will then plug out the well. Attached for your approval is a procedure to complete the plugging if necessary.

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

SIGNATURE George F. Sharpe TITLE Engineer DATE 6/3/91
TYPE OR PRINT NAME George F. Sharpe TELEPHONE NO. 327-9801

(This space for State Use)

APPROVED BY Original Signed by FRANK T. CHAVEZ TITLE SUBCOMMISSIONER DATE JUN 06 1991
CONDITIONS OF APPROVAL, IF ANY: cc: 3 OCD, Aztec
1 Well File

SANTA FE 20-5

Mesaverde Completion Procedure

Prepared By: George F. Sharpe

Date: 5-23-91

-
- 1.) MIRU. POH w/ rods and pump. ND WH. NU BOPs. POH w/ 2-3/8" tbg, SN, perfed pup, and MA.
 - 2.) RIH w/ CIBP on tbg. Set CIBP above Gallup perfs @ \pm 3400'. Press test to 3000 psi. Swab well dn to 1500'. POH.
 - 3.) RU Wireline. Perf 1902'-1912' w/ 2 SPF (per Density Log). Swab test well. Breakdown if necessary.
 - 4.) POH. RIH w/ RBP and set @ \pm 1880'. Swab well dn to \pm 1550'. POH.
 - 5.) RU Wireline. Perf 1852'-1860' w/ 2 SPF (per Density Log). Swab test well.
 - 6.) Depending on test results, put 1 or both zones on pump test. If not productive, pull RBP. RIH w/ tbg open ended and spot cmt plug on top of CIBP w/ 25 sx class "B". Pull to 1962'. Spot plug across open perfs (1852'-1912') from 1962' to 1750' w/ 25 sx "B" w/ 2% CaCl. WOC. Tag top. Press test csg to 3000 psi.
 - 7.) Swab well dn to \pm 1000'. RU Wireline. Perf coals @ 1574'-1582' and 1288'-1294' w/ 2 SPF (per Dual Induction Log). Swab test. Frac if necessary w/ small frac. If zones productive, put on pump. If no zones productive, proceed w/ P&A.
 - 8.) RIH w/ tbg to 1632'. Spot cmt plug across perfs (1288'-1582') w/ 60 sx class "B" w/ 2% CaCl from 1632' to 1100'. WOC. Tag cmt.
 - 9.) Pull to 308'. Spot cmt plug across csg shoe from 308' to 100' w/ 25 sx class "B".
 - 10.) Pull to 50'. Spot cmt plug to surf w/ 6 sx class "B".
 - 11.) RDMO. Install dry hole marker. Reclaim location.

Approved _____

Date _____

cc: J. Greg Merrion
Alan Moses
Tim Merilatt

WELL: SANTA FE 20-5

WELLBORE SCHEMATIC MERRION OIL AND GAS CORP.

ENG: G.F.S DRFT: M.E.G.
DATE: 4-17-91

LOCATION:

1150' FNL & 720' FEL
SEC. 20, T21N, R8W
SAN JUAN COUNTY, N.M.

ARTIFICIAL LIFT:

PUMPING UNIT:
ENGINE:
SPM: SL: "
BH PUMP:
RODS:
TBG: " #/FT.
PUMP DEPTH:

ELEVATION

GL: '
KB: 6576'

FORMATION TOPS:

PICTURED CLIFFS - SURFACE
PT LOOKOUT - 2456'
MANCOS - 2583'
GALLUP - 3223'
DAKOTA - 4630'
MORRISON - 4710'
TODILTO - 5641'
ENTRADA - 5622'

PERFORATIONS

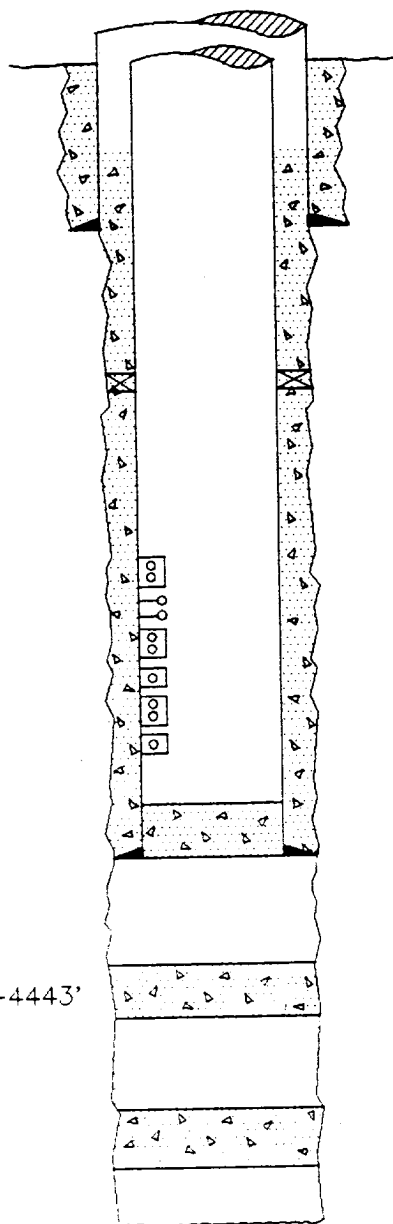
3464-68, 3597.5, 3601.5,
3610-15, 3670.73, 3687-89,
3718-22, 3742-44

STIMULATION

FRAC GALLUP W/33500 GAL
70% N₂ FOAM & 50,000#
20/40 SAND

OPEN HOLE PLUGS

135 SX G W/2% CaCl 4781'-4443'
ACROSS MORRISON-DAKOTA
50 SX NEAT G 5672'-5572'
ACROSS ENTRADA



SURFACE CASING:

HOLE SIZE: 12 1/4"
CSG SIZE: 9 5/8", 40#/FT.
DEPTH: 258'
CMT DETAILS: 150 SX G W/2%
CaCl, 1/4#/SK CELLOFLAKE

TOC: SURFACE
BY: CIRCULATE

PRODUCTION CASING:

HOLE SIZE: 8 3/4"
CSG SIZE: 5 1/2", 14 #/FT
DEPTH: 3800'
CMT DETAILS:

1ST STAGE: 355 SX 50% B &
50% LITE Poz-6 W/2% D-20,
10% D-44, 0.7% D112
2ND STAGE: DV TOOL @ 2578'
270 SX G W/2% D-79, 175
SX G W/50/50 Poz, 85 SX
NEAT G

TOC: 100'
BY: TEMP SURVEY

DEPTHS

PBTD: 3754'
PROPOSED PBTD: 3780'
TD: 5720'

CAPACITIES:

CSG:

BBL/FT

.0244

FT/BBL

40.98

FT3/FT

.1370

SANTA FE 20 NO. 5 On Report

April 20, 1991 Day No. 1

Summary: MIRU. Drill out DVT.

Detail: Move Ram on location and rig up. NU BOP and rig up floor. Tally and pickup 4-3/4" bit, 5-1/2" casing scraper, 78 jts 2-3/8" tbg. Tag cement @ 2533'. RU swivel. Drill out cement to DVT at 2578'. Drill DVT out. Circ hole clean. (ARM)

Daily Cost: \$2,145

Cumulative Costs: \$4,374

On Report

April 21, 1991 Day No. 2

Summary: Clean out to PBTD.

Detail: TIH to float collar @ 3754'. Drill float collar. Drill out cement to 3780'. Circ hole clean. Pressure test csg to 3500 psi for 10 min, ok. RUTS. Swab fluid level down to 2500'. SDON. (ARM)

Daily Cost: \$2,090

Cumulative Costs: \$6,464

April 24, 1991

Summary: Waiting for rig to be repaired. (ARM)

Daily Cost: \$0

Cumulative Costs: \$6,464

April 25, 1991

Summary: Waiting for rig to be repaired. (ARM)

Daily Cost: \$0

Cumulative Costs: \$6,464

April 26, 1991 Day No. 3

Summary: TOOH. (ARM)

Detail: Swab fluid level down to 3000'. TOOH with 2-3/8" tbg. SDFN.

Daily Cost: \$1,075

Cumulative Costs: \$7,539

SANTA FE 20 NO. 5

April 28, 1991

Day No. 4

Summary: Perforate, breakdown and frac the Gallup Formation.

Detail: MIRU Petro. Run GR correllation log from 3780' PBDT to 1200'. Perforate 3464'-68', 3597.5', 3601.5', 3610'-15', 3670'-73', 3687'-89', 3718'-22', 3742'-44' w/ 2 CJPF (per density log).

RU Western to 5-1/2" csg. Pump 30 Bbls Entrada water to partially load hole. Pump 500 gal 15% HCl w/ corrosion inhibitor, iron control, clay control and nonemulsifier. Drop 75 balls 1.1 S.G. through acid. Displace w/ 106 Bbls Entrada water (21 Bbls over displace). Saw some ball action but did not ball off. (All Entrada water contained 2% KCl, clay control, and nonemulsifier.) Flow back to release balls. Run ball catcher and retrieve 64 balls.

Spot in clean frac tank and load w/ 370 Bbls fresh water. Frac well w/ 50,000# 40/70 sand w/ 33,500 gal 70% N₂ foam at 30 BPM. All fluid contained 2% KCl, clay control, and nonemulsifier. Max press = 2060 psig. Avg press = 1900 psig. ISIP = 1730 psig, 15 min SIP = 1593 psig.

Leave well SI for 3 hrs. Still ± 1600 psi on csg. Open well to flow on 1/4" choke. Leave flowing to pit over night. (GFS)

Daily Cost: \$35,700

Cumulative Costs: \$43,239

April 29, 1991

Day No. 5

Summary: Check well. Well dead. Leave open to pit. (GFS)

Daily Cost: \$160

Cumulative Costs: \$43,399

April 30, 1991

Day No. 6

Summary: Clean out and swab test.

Detail: Check well, not flowing. RD, flowback manifold. TIH w/ sawtooth collar and seating nipple. Hit a sand bridge @ 3140', circ through bridge. TIH. Tag sand @ 3600', clean out sand to PBDT 3780', circ hole clean. Pull off bttm w/ tbq. Wait 1 hr. TIH. Tagged 10' fill, clean out sand. Pull tbq to 3720'. RUTS. Swab test. 1st run FL @ surface. Made 20 swab runs, recovered 87 Bbls fluid. FL dropped to 1100', oil/water cut 1%. Fluid starting to become gas cut bringing back small amounts of sand. SWI. SDON. (ARM)

Daily Cost: \$2,250

Cumulative Costs: \$45,649

SANTA FE 20 NO. 5

May 1, 1991

Day No. 7

Summary: Swab test.

Detail: Check pressures: 100 psi csg; 50 psi tbq. First run
FL 600'. Swab well. FL dropping from 600' to 2500'.

3:00 pm Recovered 112 Bbls.
3:00-4:00 pm Swabbed 18 Bbls, FL 2500'-2800', Oil cut 3-5%.
4:00-5:00 pm Swabbed 17 Bbls, FL 2500'-2800', Oil cut 5-7%
5:00-6:00 pm Swabbed 14 Bbls, FL 2500'-2800', Oil cut 7-10%
Recovered 161 Bbls fluid for day. Total fluid recovered 248 Bbls.

Csg pressure started building.

1:00 pm 200 psi
3:00 pm 275 psi
4:00 pm 320 psi
5:00 pm 350 psi
6:00 pm 400 psi

Well started blowing @ 5 min after each run. Shut tbq in. SDON.
(ARM)

Daily Cost: \$1,725

Cumulative Costs: \$47,374